SECTION 7

PRELIMINARY SITE CHARACTERIZATION SOILS TECHNICAL MEMORANDUM

MOLYCORP MINE RI/FS

REVISION 0

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SECTIONSEVEN Soils

A total of 1,485 soil samples were collected during the RI from September 2002 to May 2004. Soil samples were collected in the vicinity of the mine site, tailings facility, and riparian areas along the Red River. Soil sample locations were selected to provide the necessary data to evaluate potential exposure to human and ecological receptors. Samples were also collected in reference areas in order to characterize the range of physical and geochemical conditions that exist in areas exclusive of mining impacts.

Sample locations were selected using both systematic random and biased methodology. In areas with no point sources, random locations were selected by overlaying a numbered grid on the sample area and selecting a grid square using a random number generator. In areas with potential point sources, samples were collected at locations biased to the independent source. The two types of samples are discussed in more detail in the Molycorp RI/FS Final QAPP/ FSP (URS 2002c). The FSP provided maps showing the gridded sampling areas and selected sample locations.

Soil samples were collected from several different depths. At most sampling locations, soils were collected from a depth of 0 to 6 inches and 0 to 24 inches. The shallower depth samples will be used to assess risk to humans via incidental ingestion, dermal contact, or inhalation. These samples are compared to the EPA Region 6 human heath residential soil SLC. The 0 to 24 inch samples will be used to evaluate risk to ecological receptors and were compared to the EPA Region 6 ecological SLC.

At select locations, soils were collected at 0 to 6 inch depths only. This was done in areas where there was specific concern for human receptors, such as at campgrounds, cabins, and near residential areas south of the tailings facility.

Samples collected around the tailings facility for assessing the impact of windblown tailings on the off-site soils were collected at depths of 0 to 2 inches and 2 to 6 inches. At each location, the deeper sample was used as reference for the overlying 0 to 2 inch sample. An additional reference area for comparison with windblown particulate soil samples was the Cater Ranch. Cater Ranch is located 10 miles north of Questa and the tailings facility, in the area west of the Sangre de Cristo mountain, in a topographic area similar to the tailings facility. Soil samples collected at Cater Ranch for comparison with windblown samples were also collected from 0 to 2 inches depth.

Soils were sieved using a 10 um sieve and the finer material saved for analysis. Samples were sieved in the field except where the soils were too wet to be sieved efficiently. In these cases, the bulk samples were sent to the laboratory where they were dried and sieved prior to analysis.

All soil samples were analyzed for metal concentrations and inorganic parameters (chloride, fluoride, nitrate, pH, phosphorus, percent solids, specific conductance, sulfate, TKN, and TOC. The exceptions were the explosive storage areas, historic fueling areas, and transformer locations. Samples from these areas were analyzed for explosives, fuels, or PCBs, respectively, and not for metals.

Metal concentrations were determined by Inductively Coupled Plasma – Mass Spectrometery (ICP-MS), Inductively Coupled Plasma – Atomic Emissions Spectrometry (ICP-AES), and Cold

Vapor – Atomic Absorption (CV-AA). For ICP-MS and ICP-AES, samples were prepared using an EPA 3050B digestion that employs nitric acid and peroxide to dissolve the sample.

Selected samples were also analyzed for dioxins-dibenzofurans, pesticides-PCBs, volatile organics, semivolatile organics, and/or explosives, and organic soils. Percent solids were determined on all samples. A second category of analysis in the tables is listed as "Solids percent, VOCs only." These values were obtained when samples were submitted separately for analysis for VOCs, and as such had separate percent solids measurements. Details of the rationale for each of the selected sampling locations, sampling frequency, analyte list, and analyte methods are provided in the Molycorp RI/FS Draft Final Work Plan (URS 2002b).

All soil data were reviewed as part of the data validation process. Some data was rejected but most were accepted. Rejected soil data are noted in the sections below. There were also multiple analyses of some parameters for certain samples. The most common analyte to have multiple analyses was percent solids because percent solids was determined on every sample submitted for analysis, including re-analysis. Quality assurance of samples and analyses are discussed in Section 15.0 QA Summary.

Section 15.4 describes an evaluation of observed field or laboratory contaminants and provides a list by medium of analytes that are considered as attributable to laboratory or field contamination rather than being related to presence in the medium under evaluation. These compounds are not included in the summary results tables in this section, but results for analysis of these compounds are included in the printout of the RI sample analysis results in Appendix A7. In addition, there are compounds such as DDT that may be considered as ubiquitous to the region, or phenols whose presence might be attributable to forests. If such compounds were detected in the medium being presented in this section, then a discussion of their presence is included within this section.

Selected samples were analyzed using the SPLP, EPA Method 1312, to determine the geochemistry of the soluble component of the soil. Briefly, a 1 mg portion of a soil sample was mixed with an acidified solution and the resulting extraction liquid analyzed for metal analytes and inorganic parameters. The soil sample was usually taken from the minus 10 um fraction of the sample, except for samples taken from the rock piles, bulk (unsieved) samples were used. The soil sample was mixed with 20 times its weight (i.e., 2 liters) of reagent water acidified to a pH of 5.0 (+/- 0.5) using a mixture of sulfuric and nitric acids. After being agitated for 16 to 20 hours, the slurry was filtered and the resulting solution analyzed. The samples analyzed using the SPLP was conducted were outlined in the Molycorp RI/FS Final FSP (URS 2002c). In addition, three tailing samples and one additional riparian soil sample were analyzed to provide additional information on the soluble chemistry of these areas.

The validated analytical data for all soil samples collected during the RI is provided in Appendix A-7. The data are summarized in Tables 7-1 through 7-99, grouped into the different sampling and reference areas. These summary tables contain the number of samples collected, the percent detection of each analyte, and the minimum, maximum, mean, and median values. The summary tables also contain EPA Region 6 Risk-Based Screening Levels for human health and EPA Region 6 Tier 1-3 compound screening values for both organic and inorganic constituents. Soil

Data Quality Objectives (URS 2002e) require comparison of analyte concentrations to these SLC as a first step in the DQO process.

7.1 MINE SITE REFERENCE AREA SOILS

Reference data for mine site soils and scars were collected from soils and scars upstream of the mine site, and in the Cabresto Creek drainage located north of the mine site (Figure 7-1). Soil samples were collected at five random soil locations upstream of the mine site and at five random locations within the Cabresto Creek drainage. Scar samples were collected at 10 random locations upstream of the mine site. Samples were collected from October 6 to 9, 2002. Soil samples were collected from depths of 0 to 6 inches to evaluate potential exposure to humans and 0 to 24 inches to evaluate the potential exposure to ecological receptors.

7.1.1 Reference Soils for Mine Site

Reference soil samples upstream of the mine were collected at MRSS-1, MRSS-2, MRSS-3, MRSS-4, and MRSS-5. Reference soil samples collected in Cabresto Creek were located at MRSS-16, MRSS-17, MRSS-18, MRSS-19, and MRSS-20. Together, these 10 samples comprise the reference for soils collected at the mine site. Tables 7-1 and 7-2 contain summary statistics for analyte values and comparisons to SLC for the 0 to 6 inch soils and 0 to 24 inch soils, respectively.

All samples were analyzed for metal analytes and inorganic parameters. Samples collected at MRSS-1, MRSS-2, MRSS-16, and MRSS-17 were also analyzed for dioxins-dibenzofurans and pesticides-PCBs. Samples collected from both sample depths at MRSS-1, MRSS-3, MRSS-4, MRSS-17, and the 0 to 6 inch soil from MRSS-18 were analyzed for percentage of organic matter in soil (organic soil).

None of the 0 to 6 inch or 0 to 24 inch samples analyzed for dioxins-dibenzofurans had detectable concentrations of these compounds. One 0 to 6 inch sample from Cabesto Creek had detectable concentrations of DDT. Fluoride results were rejected in the data validation process for both samples collected at MRSS-3, MRSS-16, and MRSS-19, for the 0 to 6 inch soil sample collected at MRSS-1, and for the 0 to 24 inch sample collected at MRSS-18.

All inorganic parameters were detected in all 0 to 6 inch samples, with the exceptions of chloride, which was detected in 40 percent of samples, nitrate, which was detected in 30 percent of samples, and sulfate, which was detected in 90 percent of samples. SAR was determined for 80 percent of samples.

Eighteen metals were detected in all 0 to 6 inch samples. Of the metals that were not detected in all samples, boron was detected in 70 percent of samples, cadmium in 10 percent of samples, and mercury in 30 percent of samples. Selenium, silver, and sodium were detected in 50 percent, 40 percent, and 30 percent of samples, respectively. Antimony was not detected in any sample.

All inorganic parameters were detected in all 0 to 24 inch samples, with the exceptions of chloride, which was detected in 10 percent of samples, nitrate, which was detected in 20 percent

of samples, and sulfate, which was detected in 80 percent of samples. SAR was determined for 80 percent of samples.

Sixteen metals were detected in all 0 to 24 inch samples. Of the metals that were not detected in all samples, boron was detected in 80 percent of samples, cadmium in 20 percent of samples, and mercury in 30 percent of samples. Nickel and thallium were detected in 90 percent of samples. Selenium, silver, and sodium were detected in 50 percent, 40 percent, and 30 percent of samples, respectively. Antimony was not detected in any sample.

The SPLP was conducted on two reference 0 to 6 inch soil samples and three reference 0 to 24 inch soil samples. The procedure was conducted on the 0 to 6 inch soils from MRSS-16 and MRSS-17 and the 0 to 24 inch samples from MRSS-1, MRSS-2, and MRSS-17. The resulting leachate samples were analyzed for inorganic parameters and metal concentrations.

SPLP results of the 0 to 6 inch soils are summarized in Table 7-3. Chloride, phosphate, phosphorus, sulfate, and total alkalinity were detected in both leachate samples. Carbonate, cyanide, fluoride, hydroxide, nitrate, nitrite, and TKN were not detected in either leachate.

Aluminum, iron, lead, magnesium, manganese, nickel, vanadium, and zinc were detected in all leachates. Arsenic, barium, boron, calcium, molybdenum, and potassium were each detected in one leachate, and antimony, beryllium, cadmium, chromium, cobalt, copper, mercury, selenium, silver, and thallium were not detected in any leachate.

SPLP results of the 0 to 24 inch soils are summarized in Table 7-4. Fluoride, nitrite, phosphate, and phosphorus were detected in both leachates. Bicarbonate, carbonate chloride, sulfate, and total alkalinity were detected in two leachates, and nitrate and TKN were each detected in one leachate. Cyanide and hydroxide were not detected in either leachate.

Aluminum, calcium, iron, lead, magnesium, manganese, potassium, vanadium, and zinc were detected in all leachates. Arsenic, barium, beryllium boron, chromium, cobalt, copper, nickel, silver, and thallium were each detected in two leachates. Molybdenum and selenium were each detected in one leachate, and antimony, cadmium, mercury, and sodium were not detected in any leachate.

7.1.2 Reference Scars

Soil samples were collected from scars located upstream of the mine site from October 6 to 8, 2002. Samples collected in this area were MRSS-6, MRSS-7, MRSS-8, MRSS-9, MRSS-10, MRSS-11, MRSS-12, MRSS-13, MRSS-14, and MRSS-15 (Figure 7-1). Tables 7-5 and 7-6 summarize the results and provide a comparison to human health and ecological SLC.

All samples were analyzed for metal analytes and inorganic parameters. The fluoride results were rejected in the data validation process in both the 0 to 6 inch and 0 to 24 inch samples collected from MRSS-13, MRSS-14, and MRSS-15, and in the 0 to 24 inch sample collected from MRSS-10. Samples from nine sites were analyzed for percentage organic soils.

For the 0 to 6 inch soils, fluoride, phosphorus, and TKN were detected in all samples, and organic soils, pH, percent solids, and specific conductivity were determined on all samples.

Chloride was detected in 50 percent of the scar samples, TOC in 60 percent of samples, and sulfate in 90 percent of samples. Nitrate (2.10 mg/kg) was not detected in any sample.

For the 0 to 24 inch samples, nitrate was not detected in any sample, and chloride was detected in 20 percent of samples. TOC and sulfate were detected in 50 percent and 90 percent of samples, respectively.

Antimony and mercury were detected in 10 percent of both the 0 to 6 inch and 0 to 24 inch samples. Boron and cadmium were detected in 30 percent and 40 percent, respectively, of both sets of samples. Selenium, silver, and sodium were detected in 50 percent to 60 percent of the 0 to 6 inch samples, and in 30 percent to 60 percent of the 0 to 24 inch samples. Sodium absorption ratio was determined in 60 percent to 70 percent of both sets of samples.

7.2 MINE SITE SOILS

7.2.1 Soil Area - 1 Mill Area

Soil Area 1 comprises the mill area and extends east of the mill to include the storage yard ("boneyard") (Figure 7-2). Both random and biased soils were collected in this area. Samples were analyzed for metal concentrations, inorganic parameters, VOCs, SVOCs, and PCBs. The 0 to 6 inch random sample MSS1-1 was also analyzed for dioxin-dibenzofurans and a suite of pesticides-PCBs.

Molycorp conducted a risk assessment to determine worker exposure to the PCBs detected on the mine and mill site (McDaniel Lambert, 2004).

Random

The 10 random soil samples were collected at sites MSS1-1, MSS1-2, MSS1-3, MSS1-4, MSS1-5, MSS1-6, MSS1-7, MSS1-8, MSS1-9, and MSS1-10. Samples were collected October 13 through 15, 2002. No data from these samples were rejected in the data validation process.

Data for the random soils collected from 0 to 6 inches are summarized in Table 7-7. The sample analyzed for dioxins-dibenzofurans, MSS1-1, had a detectable concentration of one compound, 2,3,7,8-tetrachlorodibenzofuran.

All inorganic parameters were detected in all 0 to 6 inch samples except for chloride and nitrate which were detected in 60 percent and 50 percent of samples, respectively, TKN and TOC which were detected in 90 percent and 80 percent of samples, respectively, and SAR which was calculated for 90 percent of samples.

Nineteen metals were detected in all 0 to 6 inch samples. Of the metals that were not detected in all samples, sodium and mercury were detected in 20 percent and 30 percent of samples, respectively. Boron was detected in 60 percent of samples, cadmium was detected in 90 percent of samples, and selenium was detected in 70 percent of samples. Antimony was not detected in any sample.

The PCB Aroclor 1254 was detected in 60 percent of the 0 to 6 inch samples. No other pesticides-PCBs were detected. Seven SVOCs were detected in MSS1-8. These were benzo(a)anthracene, benzo(a)pyrene, benzo(b)fluoranthene, benzo(k)fluoranthene, chrysene, fluoranthene, and pyrene. Chrysene and pyrene were also detected in sample MSS1-9. No VOCs were detected in the 0 to 6 inch random samples.

Results for the 0 to 24 inch samples are summarized in Table 7-8. All inorganic parameters were detected in all samples, except for nitrate, which was detected in 50 percent of the samples.

Twenty metal analytes were detected in all 0 to 24 inch samples. Of the other metals, antimony was not detected in any 0 to 24 inch random samples. Boron, mercury, selenium, and sodium were detected in 50 percent, 40 percent, 70 percent, and 20 percent of samples, respectively.

Aroclor 1254 was detected in 70 percent of the 0 to 24 inch samples. No other PCBs were detected. Chrysene and fluoranthene were detected in MSS1-9. No other SVOCs were detected. One VOC (trichlorofluoromethane) was detected in MSS1-6.

Biased – Independent Sources

Biased soil samples were collected at a point of potential release defined as outside of every doorway or garage door in the mill area, and from any independent sources. Samples were collected at 101 biased locations. Samples were collected from October 16 through 24, 2002, from January 7 though 19, 2003, and on February 9 and April 8, 2003. Both 0 to 6 inch and 0 to 24 inch samples were collected at sites MSS1-11 through MSS1-113, skipping numbers MSS1-18, MSS1-24, and MSS1-25, which were not used. Sample MSS1-20 was lost in the laboratory after some of the analysis had been completed. The sample was recollected and analyzed for the entire suite of analyses. Data from both the original sample and the replacement sample is included with the data. Replacement samples were collected at two other locations, MSS1-17 and MSS1-27, for which the original samples were lost.

Some data from the biased samples were rejected in the data validation process. For the 0 to 6 inch samples, selenium in MSS1-49, and fluoride in MSS1-76 and MSS1-86 were rejected. For the 0 to 24 inch samples, fluoride was rejected in MSS1-84 and MSS1-86, and all the VOC data for the 0 to 24 inch sample collected at MSS1-97 were rejected.

Data for the 0 to 6 inch biased samples are summarized in Table 7-9. The total number of samples analyzed for each parameter varied. Fluoride analyses were obtained in 99 samples and two results were rejected in the data validation process. Percent solids were determined on 115 samples, and on 9 samples submitted separately to the laboratory for VOC analysis. Nitrate was detected in 60 percent of samples. Chloride, fluoride, TKN, and TOC were detected in 89 to 99 percent of samples. SAR was determined for 98 percent of samples. Values were obtained in all samples for all other inorganic parameters.

Metal concentrations were determined for 101 0 to 6 inch samples. Fifteen metals were detected in all samples. Of those metals not detected in all samples, arsenic, cadmium, cobalt, silver, and thallium were detected in greater than 94 percent of samples. Boron was detected in 41 percent

of samples, mercury in 35 percent of samples, selenium in 56 percent of samples, and sodium in 33 percent of samples. Antimony was detected in 5 percent of samples.

Ninety-four samples were analyzed for PCBs. There are two analyses of Aroclor 1248 for sample MSS1-41, and therefore, the number of analyses for this compound is 95. Aroclor 1248 was detected in 37 percent of samples. The compounds Aroclor 1254 and 1260 were detected in 71 percent and 13 percent of samples, respectively.

One hundred and one 0 to 6 inch samples were analyzed for most SVOCs. However, sample MSS1-56 was analyzed twice for n-nitrosodiphenylamine, so that there are 102 results for this compound. Sixteen SVOCs were detected in between 1 percent and 10 percent of samples. Five compounds were detected in 11 to 28 percent of samples.

One hundred 0 to 6 inch samples were analyzed for VOCs. Sample MSS1-75 was not analyzed for VOCs. Several compounds (1,1,1-trichloroethane, 4-methyl-2-pentanone, benzene, tetrachloroethene, and trichloroethene) were detected in less than 5 percent of samples. 2-Butonone was detected in 23 percent of samples, ethylbenzene was detected in 20 percent of samples, toluene was detected in 19 percent of samples, and total xylene was detected in 49 percent of samples.

Data from the 0 to 24 inch samples collected from the mill area are summarized in Table 7-10. Inorganic parameters were determined for 96 percent of samples. Exceptions were fluoride for which two samples had rejected data, percent solids for which duplicate analyses were determined on 12 samples, and percent solids determined on 9 VOC samples. Fluoride and TOC were detected in over 93 percent of samples, chloride was detected in 83 percent of samples, and nitrate was detected in 55 percent of samples. SAR was determined for 99 percent of samples.

Metal concentrations were determined on 96, 0 to 24 inch samples. Seventeen metals were detected in all samples. Of those metals that were not detected in all samples, cadmium, cobalt, and silver were detected in greater than 92 percent of samples. Boron, mercury, selenium, and sodium were detected in between 30 percent and 57 percent of samples. Antimony was not detected in any sample.

Eighty-nine samples were analyzed for most PCBs. Samples MSS1-22, MSS1-23, MSS1-26, MSS1-28, MSS1-30, MSS1-33, and one MSS1-20R sample were not analyzed for these compounds.

Ninety-six 0 to 24 inch samples were analyzed for SVOCs. Sample MSS1-57 was analyzed twice for benzo(b)fluorathene. Several compounds (1,1-biphenyl, 2-methylnaphthalene, acenaphthene, anthracene, benzo(g,h,i)perylene, carbazole, dibenz(a,h)anthracene, dibenzofuran, fluorene, indeno(1,2,3-cd)pyrene, naphthalene, and n-nitrosodiphenylamine) were detected in approximately 10 percent or fewer samples. Benzo(a)anthracene was detected in 16 percent of samples, chrysene in 19 percent of samples, fluoranthene in 20 percent of samples, phenanthrene in 23 percent of samples, and pyrene in 32 percent of samples.

Ninety-five samples 0 to 24 inch were analyzed for VOCs. Two samples, MSS1-75 and MSS1-97, were not analyzed for VOCs. One sample, MSS1-81 was analyzed twice for VOCs. Several compounds (1,1,1-trichloroethane, 4-methyl-2-pentanone, benzene, chloromethane, styrene, and

tetrachloroethene) were detected in fewer than 10 percent of samples. 2-Butanone, ethylbenzene, toluene, and total xylene were detected in 22 percent, 20 percent, 22 percent and 47 percent of samples, respectively.

Mill Tailings

Three samples of mill tailings were collected on November 2, 2003. The mill tailings were produced during the initial underground mining operation and were deposited in a small impoundment at the mill site (Figure 7-2). The three samples (MSS1-114, MSS1-115, and MSS1-116) were collected in a roadcut on the north side of the tailings. Samples were collected from below the 0-8 inch soil cover, to a depth of 6 inches. Weathered material from the tailings surface and the face of the roadcut were removed prior to sampling. The samples were analyzed for metals and inorganic parameters. The data is summarized in Table 7-11.

All inorganic parameters were detected except for nitrate, which was detected in one sample, and TOC, which was not detected in all samples. All metals were detected in all three tailings samples except for antimony and beryllium, which were not detected.

7.2.2 Soil Area 2 – Administrative and Maintenance and Electrical Area

Soil Area 2 consists of the area around the Molycorp administrative building and the mine maintenance area (Figure 7-3). The maintenance area includes the shaft, the warehouse, offices, oil storage facilities, and stored mining equipment. Both random and biased samples were collected in this area. Samples were analyzed for metal concentrations, inorganic parameters, VOCs, SVOCs, and PCBs. The 0 to 6 inch random sample MSS2-1 was also analyzed for dioxin-dibenzofurans and for a suite of pesticides-PCBs.

Random

The 10 random soil samples were collected at sites MSS2-1, MSS2-2, MSS2-3, MSS2-4, MSS2-5, MSS2-6, MSS2-7, MSS2-8, MSS2-9, and MSS2-10. Samples were collected October 13 through 27, 2002, January 12 through 17, 2003, and on April 8, 2003. No data from these samples were rejected in the data validation process.

Data for 0 to 6 inches soils collected from random locations are summarized in Table 7-11. No dioxins-dibenzofurans or pesticides-PCBs were detected in MSS2-1. Values were determined for all inorganic parameters in all 0 to 6 inch samples, with the exception of nitrate and TOC in MSS2-7.

Nineteen metals were detected in all 0 to 6 inch samples. Antimony was not detected in the 0 to 6 inch random soils. Mercury was detected in 20 percent of samples. Boron and selenium were detected in 70 percent of samples, and cadmium and sodium were detected in 50 percent of samples. No VOCs or SVOCs were detected in these soils.

Data for the 0 to 24 inch soils collected from random locations are summarized in Table 7-12. All inorganic parameters were detected in all samples except for TOC, which was detected in 90 percent of samples and nitrate, which was detected in 60 percent of samples.

Eighteen metals were detected in all 0 to 24 inch samples. Of those metals that were not detected in all samples, antimony was not detected in any of the 0 to 24 inch samples, and mercury was detected in one sample. Cadmium and sodium were detected in 50 percent of samples, and selenium and silver were detected in 80 percent of samples. Thallium was detected in all but one sample. Two SVOCs (fluoranthene and pyrene) were detected in one sample, MSS2-8. SVOCs were not detected in all other samples. VOCs were not detected in any of the samples.

Biased – Independent Sources

Results of analysis of the 0 to 6 inch samples collected from biased locations in Soil Area 2 are summarized in Table 7-13. The molybdenum result for the 0 to 6 inch sample collected at MSS2-59 was rejected in the data validation process. All VOC results were rejected for sample MSS2-78, except total xylene. Data for the SVOCs benzo(a)pyrene, benzo(b)fluoranthene, benzo(k)fluoranthene, dibenzo(a,h)anthracene, di-n-octyl phthalate, and indeno(1,2,3-cd)pyrene in the 0 to 24 inch sample collected at MSS2-62 were rejected.

All 65, 0 to 6 inch biased samples were analyzed for inorganic parameters. There were two additional analyses of chloride, nitrate, and sulfate for samples MSS2-57 and MSS2-58, and an additional analysis of organic soils for MSS2-59. These samples arrived at the laboratory after the acceptable holding time for some parameters. However, samples were within the holding times for chloride, nitrate, and sulfate and these analyses were completed. For percent solids, five samples were resubmitted for analyses and two percent solids analyses is reported for each. Five soil samples (MSS2-51, MSS2-56, MSS2-57, MSS2-62, and MSS2-63) were submitted for VOCs separately and have percent solids just for that analysis. Chloride and nitrate were detected in 88 percent and 72 percent of samples, respectively. Sulfate and TOC were detected in 94 percent and 85 percent of samples, respectively.

Metal concentrations were reported for 65, 0 to 6 inch samples, with the exception of MSS2-38 for which the molybdenum value was rejected in the data validation process. Seventeen metals were detected in all samples. Of those metals that were not detected in all samples, antimony was detected in 2 percent of samples. Boron was detected in 32 percent of samples, mercury in 9 percent of samples, selenium in 55 percent of samples, and sodium in 46 percent of samples. Cadmium and silver were detected in 86 percent of samples, and thallium was detected in 97 percent of samples.

Eight 0 to 6 inch samples (MSS2-56R, MSS2-57R, MSS2-60, MSS2-61A, MSS2-62, MSS2-63, MSS2-64, and MSS2-65) were analyzed for PCBs, and concentrations for all samples were non-detect. Chrysene was detected in 11 percent of samples and pyrene was detected in 17 percent of samples. Fifteen other SVOCs were detected in fewer than 10 percent of samples. Total xylene was detected in 45 percent of samples and 2-butanone was detected in 11 percent of samples. Seven other VOCs were detected in fewer than 10 percent of samples.

Results of analysis of the 0 to 24 inch samples collected from biased locations in Soil Area 2 are summarized in Table 7-14. As with the 0 to 6 inch biased soil samples, 65 samples were analyzed, and several samples were analyzed twice for some parameters. Four samples were resubmitted for analyses resulting in four additional percent solids analyses. Five soil samples were submitted for VOCs separately and have percent solids just for that analysis. The percentage of detected results was also similar to the surficial sample. Chloride and nitrate were detected in 84 percent and 64 percent of samples, respectively, and sulfate and TOC were detected in 94 percent and 88 percent of samples, respectively.

Metal concentrations were measured in 65, 0 to 24 inch samples. Seventeen metals were detected in all samples. Of those metals that were not detected in all samples, silver, cadmium, and selenium were detected in 88 percent, 75 percent, and 62 percent of samples, respectively. Boron and sodium were detected in 34 percent and 45 percent of samples, respectively. Antimony and mercury were detected in 5 percent and 9 percent of samples, respectively.

Eight 0 to 24 inch samples were analyzed for PCBs and all were non-detect. Pyrene was detected in 19 percent of samples. Nineteen other SVOCs were detected in fewer than 10 percent of samples. These were 1,1'-biphenyl (3 percent), 2-chlorophenol (2 percent), 2-methylnaphthalene (3 percent), 4-chloro-3-methylphenol (2 percent), acenaphthene (2 percent), benzo(a)anthracene (3 percent), benzo(a)pyrene (2 percent), benzo(b)fluoranthene (2 percent), benzo(g,h,i)perylene (2 percent), benzo(k)fluoranthene (2 percent), chrysene (8 percent), dibenzofuran (2 percent), fluoranthene (6 percent), indeno(1,2,3-cd)pyrene (2 percent), naphthalene (2 percent), n-nitrosodi-n-propylamine (2 percent), n-nitrosodiphenylamine (2 percent), phenanthrene (8 percent), and phenol (5 percent). VOCs were measured in 65 samples. Total xylene was detected in 42 percent of samples. Eight other compounds were detected in fewer than 10 percent of samples.

7.2.3 Soil Area 3 – Mine Site Soils

Ten random and two biased soil samples were collected from areas of the mine that are not part of the open pit, mine rock piles, or maintenance areas (Figure 7-4). Samples collected at both random and biased locations were analyzed for metal concentrations and inorganic parameters.

Random

Results of analysis of the 0 to 6 inch random mine site soils are summarized in Table 7-15. The samples were collected at locations MSS3-1, MSS3-2, MSS3-3, MSS3-4, MSS3-5, MSS3-6, MSS3-7, MSS3-8, MSS3-9, and MSS3-10. The fluoride data for several samples was rejected in the data validation process. These include both samples collected at MSS3-2, MSS3-4, and MSS3-6, the 0 to 6 inch sample collected at MSS3-3, and the 0 to 24 inch sample collected at MSS3-5.

The 0 to 6 inch soil samples collected at MSS3-1, MSS3-2, MSS3-5, MSS3-6, MSS3-7, and MSS3-10 were analyzed for organic soils. All 0 to 6 inch samples were analyzed for all other inorganic parameters. All inorganic parameters were detected in all samples except for chloride,

which was detected in one sample, nitrate, which was detected in two samples, sulfate, which was detected in six samples, and SAR, which was determined for seven samples.

Sixteen metals were detected in all samples. Of those metals that were not detected in all samples, chromium, nickel, and selenium were detected in nine samples, boron was detected in eight samples, and mercury and silver were detected in seven samples. Cadmium was detected in six samples, sodium in four samples, and antimony was detected in two samples.

Results of analysis of the 0 to 24 inch random mine site soils are summarized in Table 7-16. As with the 0 to 6 inch samples, six samples were analyzed for organic soils. Fluoride results were valid in six samples. All inorganic parameters were detected in all samples except for chloride and nitrate, which were detected in two samples, and sulfate, which was detected in six samples. SAR was determined in nine samples.

Sixteen metals were detected in all 0 to 24 inch samples. Of those metals that were not detected in all samples, chromium and nickel were detected in nine samples. Selenium was detected in eight samples and boron was detected in six samples. Cadmium and silver were detected in five samples, sodium was detected in four samples, and antimony and mercury were detected in three samples.

Biased

Two samples were collected from the drainages of Capulin Canyon and Goathill Gulch (MSS3-11 and MSS3-12, respectively). The samples were collected near the bottom of the drainages just upstream (north) of Highway 38. The Capulin Canyon sample (MSS3-11) was collected adjacent to a culvert that directs water under the highway. Goathill Gulch is intercepted by the subsidence zone and, further south along the drainage, by several catchment ponds. Therefore, the geochemistry of the sample collected at the bottom of this drainage (MSS3-12) reflects sediment from the lower section of the drainage only. These drainages are dry for most of the year only carrying water during high rainfall events. Because of this and their proximity to the highway, the risk that the material poses is more similar to that of soils than sediments. Therefore, soils were collected at depths of 0 to 6 inches and 0 to 24 inches.

Results of analysis of the 0 to 6 inch biased mine site soils are summarized in Table 7-17 and results of analysis of the 0 to 24 inch samples are summarized in Table 7-18. All inorganic parameters were detected in all samples except for chloride and nitrate, which were detected in both samples collected at MSS3-11 but not in the samples from MSS3-12.

Twenty-one metals were detected in all samples from both locations. Of those metals that were not detected in all samples, boron was detected in the 0 to 6 inch soil of sample MSS3-12 only. Antimony, cadmium, and mercury were not detected in any sample.

SPLP Data

The SPLP was conducted on eight samples from Soil Area 3. These samples were the 0 to 6 inch and 0 to 24 inch soils from locations MSS3-1, MSS3-2, MSS3-3, and MSS3-4. The results of analysis of the SPLP leachates are presented in Tables 7-19 and 7-20.

For the 0 to 6 inch leachate samples, bicarbonate, fluoride, nitrite, and total alkalinity were detected in all the SPLP leachates. Chloride, cyanide, hydroxide, nitrate, and sulfate were not detected in any of the 0 to 6 inch soil leachates. Phosphate was detected in three of the four leachates, carbonate in two leachates, and TKN in one leachate. Seventeen metals were detected in all leachates. Cadmium, cobalt, mercury, and selenium were not detected in any leachate. Boron was detected in two leachates, and antimony, nickel, and silver were each detected in one leachate.

For the 0 to 24 inch leachate samples, bicarbonate, carbonate, fluoride, phosphorus, total alkalinity, and TKN were detected in all the SPLP leachates. Cyanide and hydroxide were not detected in any leachate. Nitrate, nitrite, and phosphate were detected in three of the four leachates, and chloride and sulfate were each detected in one leachate. Eight metals were detected in all leachates. Of the remaining metals, antimony, barium, beryllium, cobalt, copper, mercury, nickel, silver, sodium, and thallium were not detected. Arsenic and potassium were detected in three of the leachate leachates, boron was detected in two leachates, and cadmium, chromium, molybdenum, and selenium were detected in one leachate.

7.2.4 Soil Area 4 - Rock Piles

The rock piles were grouped into three areas based on proximity. The groups are Soil Area 4A1 which is composed of the Capulin, Goathill North, and Goathill South rock piles; Soil Area 4A2 composed of Sugar Shack South, Sugar Shack West, Middle and Sulphur Gulch rock piles; and Soil Area 4A3 composed of Sulphur Gulch North and Blind Gulch rock piles (Figure 7-5). Random and biased samples were collected from each group. Random locations were spread over the surface of the rock piles. The biased locations were primarily located at the base (toes) of the piles in order to sample material that would be most effected by surface runoff from the pile. The FSP stated the samples would be collected every 200 feet along the toes of the piles. During the filed program, however, the EPA and Molycorp agreed that sampling at 400 foot spacing would be adequate. Samples were analyzed for metal concentrations and inorganic parameters.

7.2.4.1 Soil Area 4A1 – Capulin, Goathill North, and Goathill South Rock Piles

Soil Area 4A1 had ten random samples locations and eight biased sample locations collected at the base of the rock piles. Samples were collected September 27 through October 24, 2002. Samples were analyzed for metal concentrations and inorganic parameters.

Random

Random sample locations included MSS4A1-1, MSS4A1-2, MSS4A1-3, MSS4A1-4, MSS4A1-5, MSS4A1-6 MSS4A1-7, MSS4A1-8 MSS4A1-9, and MSS4A1-10. Data for the 0 to 6 inch soils from the random locations collected in Soil Area 4A1 are summarized in Table 7-21.

The fluoride results were rejected in the data validation process for the 0 to 6 inch soil samples collected from MSS4A1-1, MSS4A1-3, MSS4A1-4, MSS4A1-5, MSS4A1-8, MSS4A1-9, and

MSS4A1-10. All inorganic parameters were detected in all samples, with the following exceptions. The percent organic soil was not determined on samples MSS4A1-4, MSS4A1-5, and MSS4A1-9. Nitrate was not detected in any sample and chloride was detected in three samples. Sulfate and TKN were detected in nine samples, and TOC was detected in two samples. SAR was determined on four samples.

Seventeen metals were detected in all 0 to 6 inch samples. Of those metals that were not detected in all samples, boron was detected in one sample and cadmium in three samples. Cobalt, nickel, and selenium were detected in nine samples and sodium in eight samples. Antimony and mercury were not detected in any sample

Data for the 0 to 24 inch soils from Soil Area 4A1 are summarized in Table 7-22. The fluoride results were rejected in the data validation process for the 0 to 24 inch soil samples collected from MSS4A1-1, MSS4A1-3, MSS4A1-4, MSS4A1-5, MSS4A1-9, and MSS4A1-10. All inorganic parameters were detected in all samples, with the following exceptions. Percent organic soils were determined on six samples (MSS4A1-2, MSS4A1-3, MSS4A1-6, MSS4A1-7, MSS4A1-8, and MSS4A1-10). Nitrate was not detected in any sample and chloride was detected in two samples. TKN was detected in eight samples and TOC was detected in three samples. SAR was determined on three samples.

Nineteen metals samples were detected in all 0 to 24 inch samples. Of those metals that were not detected in all samples, antimony was detected in one sample, boron was detected in three samples, and cadmium in four samples. Selenium and sodium were detected in nine samples. Mercury was not detected in any sample.

Biased – Toes of Rock Piles

There were eight biased sample locations at the base of these rock piles: MSS4A1-11, MSS4A1-12, MSS4A1-13, MSS4A1-14, MSS4A1-15, MSS4A1-16, MSS4A1-17, and MSS4A1-18. The results of analysis of the 0 to 6 inch and 0 to 24 inch biased samples are summarized in Tables 7-23 and 7-24, respectively.

All inorganic parameters were detected in all 0 to 6 inch samples, with the following exceptions. Chloride was detected in 38 percent of samples and nitrate was detected in 13 percent of samples. Sulfate and TOC were detected in 88 percent and 63 percent of samples, respectively. SAR was determined for 88 percent of samples.

Seventeen metals were detected in all 0 to 6 inch samples. Of those metals that were not detected in all samples, mercury was detected in 13 percent of samples, boron and selenium were detected in 75 percent of samples, cadmium in 63 percent of samples, and sodium in 50 percent of samples. Molybdenum and silver were detected in 88 percent of samples and antimony was not detected in any sample.

For the 0 to 24 inch samples, the inorganic parameters were detected in all samples with the following exceptions. Chloride was detected in 38 percent of samples and nitrate in 25 percent of samples. Sulfate and TOC were detected in 88 percent and 75 percent of samples, respectively. SAR was determined for 88 percent of samples.

Seventeen metals were detected in all 0 to 24 inch samples. Of those metals that were not detected in all samples, mercury was detected in 13 percent of samples, boron was detected in 75 percent of samples, cadmium in 50 percent of samples, and sodium in 50 percent of samples. Molybdenum, selenium, and silver were detected in 88 percent of samples, and antimony was not detected in any sample.

7.2.4.2 Soil Area 4A2 – Sugar Shack South, Sugar Shack West, Middle and Sulphur Gulch Rock Piles

Twenty-four samples were collected in Soil Area 4A2. These included 10 random sites and 12 biased sites. Samples were collected from October 3 through 22, 2002.

Random

The 10 random sample sites were MSS4A2-1, MSS4A2-2, MSS4A2-3, MSS4A2-4, MSS4A2-5, MSS4A2-6, MSS4A2-7, MSS4A2-8, MSS4A2-9, and MSS4A2-10. Data from analysis of soils collected from these sample locations are summarized in Tables 7-25 and 7-26.

For the 0 to 6 inch random samples, all inorganic parameters were detected in all samples except for chloride and nitrate, which were detected in 50 percent and 30 percent of samples, respectively. Sulfate and TOC were detected in 90 percent and 40 percent of samples, respectively. SAR was determined for 20 percent of samples.

Eighteen metals were detected in all 0 to 6 inch samples. Of those metals that were not detected in all samples, boron was detected in 10 percent of samples and cadmium was detected in 20 percent of samples. Selenium and silver were detected in 90 percent of samples and sodium was detected in 80 percent of samples. Antimony and mercury were not detected in any samples.

For the 0 to 24 inch random soils, all inorganic parameters were detected in all samples except for chloride which was detected in 60 percent of samples, nitrate which was detected in 10 percent, phosphorus in 90 percent, and TOC which was in 50 percent of samples. SAR was determined for 30 percent of samples.

Eighteen metals were detected in all 0 to 24 inch samples. Of those metals that were not detected in all samples, boron was detected in 10 percent of samples and cadmium was detected in 20 percent of samples. Selenium and silver were detected in 90 percent of samples and sodium was detected in 80 percent of samples. Antimony and mercury were not detected in any samples.

Biased – Toes of Rock Piles

Sixteen biased samples were collected at the base of the rock piles in Soil Area 4A2. The locations were MSS4A2-11, MSS4A2-11A, MSS4A2-12, MSS4A2-12A, MSS4A2-13, MSS4A2-14, MSS4A2-15, MSS4A2-16, MSS4A2-17, MSS4A2-18, MSS4A2-19, MSS4A2-20, MSS4A2-21, MSS4A2-22, MSS4A2-23, and MSS4A2-24. Data from the 0 to 6 inch biased samples are presented in Table 7-27.

All inorganic parameters were detected in all 0 to 6 inch samples, with the following exceptions. Chloride and nitrate were detected in 50 percent and 19 percent of samples, respectively. TOC was detected in 63 percent of samples. SAR was determined in 94 percent of samples.

Nineteen metals were detected in all 0 to 6 inch samples. Of those metals that were not detected in all samples, cadmium was detected in 81 percent of samples, selenium in 63 percent of samples, and sodium in 25 percent of samples. Antimony, boron, and mercury were not detected in any samples.

Data from the 0 to 24 inch samples are summarized in Table 7-28. All inorganic parameters were detected in all samples, except for chloride, nitrate, and TOC, which were detected in 56 percent, 19 percent, and 44 percent of samples, respectively.

Eighteen metals were detected in all 0 to 24 inch samples. Of those metals that were not detected in all samples, cadmium and selenium were detected in 75 percent of samples and sodium was detected in 19 percent of samples. Thallium was detected in 94 percent of samples. Antimony, boron, and mercury were not detected in any samples.

7.2.4.3 Soil Area 4A3 – Sulphur Gulch North and Blind Gulch Rock Piles

Thirteen samples were collected in Soil Area 4A3. Three samples (MSS4A3 –12, MSS4A3-14, and MSS4A3-16) collected in this area were not analyzed. Samples were collected from September 26 through October 16, 2002.

Random

There were 10 random sample locations in this area: MSS4A3-1, MSS4A3-2, MSS4A3-3, MSS4A3-4, MSS4A3-5, MSS4A3-6, MSS4A3-7, MSS4A3-8, MSS4A3-9, and MSS4A3-10.

Data for the 0 to 6 inch random samples are presented in Table 7-29. For the 0 to 6 inch soils, the fluoride result for the soil sample collected at MSS4A3-2 was rejected in the data validation process. All inorganic parameters were detected for all samples with the following exceptions. The percentage of organic soils was determined on four samples. Chloride was detected in two samples and nitrate was not detected in any sample. TKN and TOC were both detected in seven samples. SAR was determined for four samples.

Of those metals that were not detected in all 0 to 6 inch samples, antimony and mercury were each detected in one sample. Boron was detected in two samples, cadmium in six samples, and sodium in five samples.

Data for the 0 to 24 inch random samples are presented in Table 7-30. All inorganic parameters were detected in all samples, except for the percentage of organic soils which was determined in four samples. Chloride and nitrate were not detected any samples, and TKN and TOC were detected in seven and four samples, respectively. SAR was determined for three samples.

Of those metals that were not detected in all 0 to 24 inch samples, antimony and boron were each detected in two samples, and mercury was detected in one sample. Cadmium was detected in five samples and silver was detected in seven samples.

Biased – Toes of Rock Piles

The three biased sample locations at the toes of these rock piles were MSS4A3-11, MSS4A3-13, and MSS4A3-15.

The results of analysis of the 0 to 6 inch samples are summarized in Table 7-31. All inorganic parameters were detected in all samples, except for chloride and TOC, which were each detected in one sample, and nitrate was not detected in any sample.

Twenty metals were detected in all 0 to 6 inch samples. Of those metals that were not detected in all samples, selenium and sodium were detected in one sample, and antimony, boron, and mercury were not detected in any sample.

Data for the 0 to 24 inch samples are summarized in Table 7-32. All inorganic parameters were detected in all samples except for chloride, which was detected in two samples, and nitrate and TOC which were each detected in one sample. SAR was determined in one sample.

Twenty-one metals were detected in all 0 to 24 inch samples. Of those metals that were not detected in all samples, sodium was detected in one sample. Antimony, boron, and mercury were not detected in any samples.

SPLP Data

The SPLP was conducted on four bulk (i.e., not sieved) samples collected from 0 to 6 inch depth from the rock piles. This procedure was conducted on samples collected from the random sample locations MSS4A1-1, MSS4A2-1, MSS4A2-2, and MSS4A3-1. Results are presented in Tables 7-33 through 7-35.

Table 7-33 presents the data from sample MSS4A1-1. Fluoride, phosphorus, and sulfate are the only inorganic parameters detected in the leachate. Aluminum, antimony, beryllium, cadmium, calcium, cobalt, copper, iron, lead, magnesium, manganese, nickel, and zinc were detected in the leachate.

Table 7-34 presents the leachate data from samples MSS4A21-1 and MSS4A2-2. Phosphorus and sulfate were detected in both leachates, and chloride and fluoride were each detected in one leachate. No other inorganic parameters were detected. Aluminum, barium, beryllium, cadmium, calcium, copper, iron, lead, magnesium, manganese, nickel, potassium, and zinc were detected in both leachates. Antimony, boron, chromium, cobalt, and vanadium were each detected in one leachate. All other metals were not detected in either leachate.

Table 7-35 presents the data from sample MSS4A3-1. Fluoride, phosphate, phosphorus, and sulfate were the only inorganic parameters detected in the sample. Aluminum, barium, beryllium, cadmium, calcium, chromium, cobalt, copper, iron, lead, magnesium, manganese, nickel, potassium, vanadium, and zinc were detected in the sample.

7.2.5 Soil Area 5 – Spring Gulch Rock Pile/Truck Shop Slice Area

Soil Area 5 consists of the Spring Gulch Rock Pile east of the open pit and the Truck Shop Slice, located on the south side of the open pit (Figure 7-4). Ten random and nine biased samples were collected in this area. All samples were analyzed for metal concentrations and inorganic parameters.

Random

Ten random samples were collected at sites MSS5-1, MSS5-2, MSS5-3, MSS5-4, MSS5-5, MSS5-6, MSS5-7, MSS5-8, MSS5-9, and MSS5-10. Fluoride analyses were rejected in the data validation process for both samples collected at MSS5-10.

Data from the 0 to 6 inch samples are summarized in Table 7-36. All inorganic parameters were detected in all samples with the following exceptions. Nine samples had valid fluoride results. Eight samples were analyzed for percentage organic soil. Nitrate was not detected in any sample and chloride was detected in two samples. TOC was detected in three samples and TKN was detected in nine samples. SAR was determined for three samples.

Eighteen metals were detected in all samples. Of those metals that were not detected in all samples, antimony was detected in one sample, boron and cadmium were detected in six samples, and selenium and thallium were detected in nine samples. Sodium was detected in three samples. Mercury was not detected in any sample.

Data for the 0 to 24 inch samples are summarized in Table 7-37. All inorganic parameters were detected in all samples with the following exceptions. Percentage of organic soil was determined on eight samples. Chloride was detected in two samples and nitrate was detected in one sample. TKN was detected in six samples and TOC was detected in four samples. SAR was determined on five samples.

Nineteen metals were detected in all 0 to 6 inch samples. Of those metals that were not detected in all samples, antimony was detected in one sample, boron and cadmium were detected in six samples, selenium was detected in nine samples, and sodium was detected in three samples. Mercury was not detected in any sample.

Biased

Biased samples were collected at MSS5-11, MSS5-12, MSS5-13, MSS5-14, MSS5-15, MSS5-16, MSS5-17, MSS5-18, and MSS5-19. Data for these samples are summarized in Table 7-38.

For the 0 to 6 inch samples, all inorganic parameters were detected in all samples, with the following exceptions. Chloride was detected in 67 percent of the samples and nitrate was detected in 22 percent of samples. TKN was detected in 78 percent of samples and TOC was detected in 56 percent of samples. SAR was determined for all but one sample.

Nineteen metals were detected in all 0 to 6 inch samples. Of those metals that were not detected in all samples, cadmium and selenium were detected in 67 percent of samples, boron was

detected in 33 percent of samples, and sodium was detected in 44 percent of samples. Antimony and mercury were not detected in any samples.

A 0 to 24 inch sample was not collected from location MSS5-15 because the samplers encountered bedrock at a depth of 6 inches. Therefore, Table 7-39 lists eight 0 to 24 inch samples rather than nine. For the inorganic results, all parameters were detected except for chloride and TOC which were detected in 63 percent of samples, nitrate which was detected in 38 percent of samples, and TKN which was detected in 75 percent of samples. SAR was determined for 88 percent of samples.

Nineteen metals were detected in all 0 to 24 inch samples. Of those metals that were not detected in all samples, cadmium and selenium were detected in 63 percent of samples and boron was detected in 38 percent of samples. Antimony, mercury, and sodium were not detected in any samples.

7.2.6 Soil Area 6 – Open Pit

Ten random soil samples were collected in the open pit. No biased soil samples were collected. Samples were collected at locations MSS6-1, MSS6-2, MSS6-3, MSS6-4, MSS6-5, MSS6-6, MSS6-7, MSS6-8, MSS6-9, and MSS6-10 (Figure 7-4). Soil samples were collected from two areas of this soil area: the pit bottom and on the rim of the pit adjacent to the Truck Shop Slice. These were the only portions of this exposure area accessible at the time of sampling. At each sample location, soils were collected at a depth of 0 to 6 inches and 0 to 24 inches and analyzed for metal concentrations and inorganic parameters.

Data for the 0 to 6 inch soils are summarized in Table 7-40. All inorganic parameters were detected in all samples with the following exceptions. Eight of the 10 samples were analyzed for percent organic soil. Nitrate was not detected in any sample and chloride was detected in two samples. TKN and TOC were detected in seven samples and sulfate was detected in nine samples. SAR was determined in three samples.

Seventeen metals were detected in all 0 to 6 inch samples. Of those metals that were not detected in all samples, sodium was detected in one sample, boron in four samples, selenium in five samples, and cadmium in seven samples. Silver and thallium were detected in eight and nine samples, respectively. Antimony and mercury were not detected in any 0 to 6 inch samples.

Data for the 0 to 24 inch samples are summarized in Table 7-41. All inorganic parameters were detected in all samples with the following exceptions. Eight of the samples were analyzed for percent organic soil. Sulfate, TKN, and TOC were detected in nine, eight, and seven samples, respectively. Nitrate was detected in one sample and chloride was detected in four samples. SAR was determined for four samples.

Seventeen metals were detected in all 0 to 24 inch samples. Of those metals that were not detected in all samples, boron was detected in four samples, selenium in five samples, and sodium in one sample. Silver and thallium were detected in eight samples and cadmium was detected in seven samples. Antimony and mercury were not detected in any samples.

7.2.7 Soil Area 7 - Mine Site Scars

Naturally occurring hydrothermal alteration exists throughout the Red River canyon, including the mine site. These areas result from natural geologic processes. They can be highly erodable and form the erosional features commonly called scars. Ten random samples were collected from the scars that are visible on the mine site.

The data from the scar soil samples are summarized in Tables 7-42 and 7-43. The percentage of organic soil was measured on all samples except those collected at Soil Area 7 – Mine Site Scars (MSS7)-9. Fluoride results for both samples collected at MSS7-3 and MSS7-5, and for the 0 to 6 inch sample collected from MSS7-4 were rejected in the data validation process. These rejected results are reflected in the tables by the lower number of analyses for fluoride than for other parameters.

For the 0 to 6 inch samples, all inorganic parameters were detected in all samples with the following exceptions. Fluoride was detected in seven samples. Fifty percent of all samples analyzed had detectable chloride, and 20 percent had detectable nitrate. Eight samples had detectable sulfate and TOC. SAR was determined for three samples.

Sixteen metals were detected in all 0 to 6 inch samples. Of those metals that were not detected in all samples, two samples had detectable cadmium, six had detectable nickel, and seven had detectable boron and sodium. Nine samples had detectable cobalt and thallium. None of the 0 to 6 inch samples had detectable antimony or mercury.

For the 0 to 24 inch samples, all inorganic parameters were detected in all samples with the following exceptions. Eight samples had valid results for fluoride. Three samples had detectable chloride and two samples had detectable nitrate. Nine samples had detectable sulfate and eight samples had detectable TOC. SAR was determined for four samples.

Seventeen metals were detected in all 0 to 24 inch samples. Of those metals that were not detected in all samples, cadmium was detected in one sample and nickel was detected in six samples. Boron was detected in seven samples, sodium in eight samples, and cobalt and thallium in nine samples. Antimony and mercury were not detected in any of the samples.

7.2.8 Soil Area 8 – Independent Sources

Soil Area 8 consists of six potential independent sources spread over the mine site. These consist of explosive storage areas, historic fueling areas, landfills, the old Truck Shop, transformers, and the Core Shack and Carpenter's Shop (Figure 7-4). The sampling locations in these areas are biased locations. Samples were analyzed for various parameters that are discussed in the sections below.

7.2.8.1 Soil Area 8A – Explosive Storage Areas

Soil samples were collected from explosive areas in October 2002 and January 2003. Soil samples were collected at MSS8-1, MSS8-2, MSS8-3, MSS8-4, MSS8-5, MSS8-6, MSS8-7, MSS8-8, MSS8-9, MSS8-10, MSS8-11, and MSS8-12 from October 9 though 27, 2002. On

January 17, 2003, samples were collected at MSS8-75 and MSS8-76. All samples were analyzed for inorganic parameters and SVOCs. Samples MSS8-1 though MSS8-12 were analyzed for explosives. Samples MSS8-75 and MSS8-76 were analyzed for pesticides-PCBs. The percentage of organic soils was determined in samples collected at MSS8-4, MSS8-5, MSS8-6, MSS8-7, MSS8-8, MSS8-9, MSS8-10, MSS8-11, MSS8-12, MSS8-75, and MSS8-76.

Data from the 0 to 6 inch soil samples from Soil Area 8A are summarized in Table 7-44. No explosives or PCBs were detected. Four SVOCs (fluoranthene, fluorene, phenanthrene, and pyrene) were detected in one sample, MSS8-7. All inorganic parameters were detected in all samples with the following exceptions. The fluoride result for the 0 to 6 inch sample MSS8-1 was rejected in the data validation process. Chloride and nitrate were detected in 38 percent of samples, and TOC was detected in 93 percent of samples. The CEC was determined in all samples and SAR was determined in 93 percent of samples.

Data from the 0 to 24 inch soil samples area summarized in Table 7-45. For 0 to 24 inch samples, one explosive compound, pentaerythritol tetranitrate, was detected in MSS8-7. The SVOC 1, 1-biphenyl was also detected in this sample. As with the 0 to 6 inch samples, fluoranthene, fluorene, phenanthrene, and pyrene were detected in the 0 to 24 inch sample. PCBs were not detected in any samples. All inorganic parameters were detected in all samples, with the following exceptions. Chloride and nitrate were detected in 43 percent and 36 percent of samples, respectively. TKN was detected in all but one sample. The CEC was determined in all samples and SAR was determined in 93 percent of samples.

7.2.8.2 Soil Area 8B –Historic Fueling Areas

The sample locations included in Soil Area 8B are MSS8-13, MSS8-14, and MSS8-15. Samples were collected on October 16, 2002. These samples were analyzed for SVOCs and percent solids, and the data is summarized in Tables 7-46 and 7-47. All analyses were conducted on all three samples. Sample MSS8-14 had detectable concentrations of eight SVOCs in the 0 to 6 inch sample and 10 SVOCs in the 0 to 24 inch samples. No SVOCs were detected in the other samples.

7.2.8.3 Soil Area 8C – Landfills

The sample locations included in Soil Area 8C are MSS8-16, MSS8-17, MSS8-18, MSS8-19, MSS8-20, and MSS8-21. Samples were collected on October 10 and 15, 2002 and were analyzed for metal concentrations, inorganic parameters, VOCs, and SVOCs.

Data for the 0 to 6 inch soils is summarized in Table 7-48. All inorganic parameters were detected in all samples except for chloride and nitrate which were detected in 50 percent of samples. SAR was determined for five samples.

Seventeen metals were detected in all 0 to 6 inch samples. Of those metals that were not detected in all samples, cadmium, cobalt, and selenium were detected in five of the six samples, and boron and silver were detected in four samples. Antimony was detected in one sample, mercury in two samples, and sodium in three samples.

Most VOCs and SVOCs were not detected in these samples. One SVOC (pyrene) was detected in MSS8-16. The VOCs, carbon tetrachloride and trichlorofloromethane, were each detected in two samples.

Data for the 0 to 24 inch soils is summarized in Table 7-49. All inorganic parameters were detected in all samples except for chloride and TOC which were detected in five of the six samples, and nitrate was detected in two samples. SAR was determined in five samples.

Eighteen metals were detected in all 0 to 24 inch samples. Of those metals that were not detected in all samples, cadmium, cobalt, selenium, and silver were detected in five samples. Boron was detected in four samples, sodium was detected in three samples, and antimony was detected in one sample.

Most SVOCs and VOCs were not detected in all 0 to 24 inch samples. Chrysene was detected in one sample and pyrene was detected in two samples. Three VOCs were each detected in two samples.

7.2.8.4 Soil Area 8D – Truck Shop

There were 30 sampling locations in the Truck Shop area. They are MSS8-28 through MSS8-55, MSS8-57, and MSS8-58. Samples were collected from this area on October 17 and 23, 2002, between January 13 and 15, 2003, and on July 20, 2003. Samples were collected from depths of 0 to 6 inches and 0 to 24 inches, and were analyzed for metal concentrations, inorganic parameters, SVOCs, and VOCs. Selected samples (MSS8-30, MSS8-31, MSS8-32, MSS8-33, MSS8-34, MSS8-41, and MSS8-42) were analyzed for PCBs.

Data from the 0 to 6 inch Truck Shop soils are summarized in Table 7-50. The table indicates that percent solids were determined on 41 samples, more than the number of analyses that were collected. This results in the fact that each time samples were submitted by the laboratory for re-analysis, the percent solids were re-determined. SAR was determined for 87 percent of samples.

All inorganic parameters were detected in all 0 to 6 inch samples except for chloride, which was detected in 74 percent of samples, nitrate in 16 percent of samples, and sulfate and TOC in 97 percent of samples.

Eighteen metals were detected in all 0 to 6 inch samples. Of those metals that were not detected in all samples, mercury was detected in 13 percent of samples, boron in 35 percent, and sodium in 39 percent. Cadmium was detected in 45 percent of samples, selenium in 74 percent, and silver in 90 percent of samples. Antimony was not detected in any of the 0 to 6 inch soils.

Most organic compounds were not detected in most 0 to 6 inch samples. Twelve samples had detectable concentrations of SVOCs. Chrysene, fluoranthene, phenanthrene, and pyrene were detected in 27 percent, 20 percent, 27 percent, and 17 percent of samples, respectively. Other SVOCs that were detected in fewer samples include 1,1, biphenyl (3 percent of samples), 2-methylnaphthalene (7 percent), acenaphthene (3 percent), anthracene (3 percent), dibenzofuran (3 percent), fluorene (3 percent), and naphthalene (3 percent). All VOC analyses for the 0 to 6 inch sample collected at MSS8-43 were rejected in the data validation process except for total xylene. VOCs that were detected in the samples included total xylene, detected in 69 percent of

samples, ethylbenzene, which was detected in 36 percent of samples, and 2-butanone which was detected in 21 percent of samples. 1,1,1,-Trichloroethane, 2-hexanone, and toluene were found in less than 8 percent of samples. PCBs were detected in three samples.

Data from the 0 to 24 inch samples is summarized in Table 7-51. All inorganic parameters were detected in all samples with the following exceptions. Chloride was detected in 74 percent of samples and nitrate was detected in 13 percent of samples. Sulfate and TOC were detected in 97 percent and 94 percent, respectively. SAR was calculated for 87 percent of samples.

Seventeen metals were detected in all 0 to 24 inch samples. Of those metals that were not detected in all samples, arsenic was detected in 97 percent of samples, silver in 90 percent, and selenium in 77 percent of samples. Cadmium was detected in 48 percent of samples, sodium in 39 percent, and boron in 23 percent of samples. Mercury was detected in 13 percent of samples and antimony was not detected in any sample.

Most organic compounds were not detected in any 0 to 24 inch sample. For the SVOCs, phenanthrene, pyrene, chrysene, and fluoranthene were detected in 27 percent, 23 percent, 20 percent, and 17 percent of samples, respectively. Other SVOCs that were detected in fewer samples include 1,1-biphenyl (7 percent of samples), 2-methylnaphthalene (7 percent), acenaphthene (7 percent), anthracene (3 percent), dibenzofuran (3 percent), fluorene (7 percent), and naphthalene (3 percent). The VOC total xylene was detected in 73 percent of samples, ethylbenzene in 27 percent of samples, and 2-Butanone in 23 percent of samples. 1,1,1,-Trichloroethane, 2-hexanone, dichlorodifluoromethane, toluene, and trichloroethene were found in less than 7 percent of samples. Two PCBs were detected in two samples.

7.2.8.5 Soil Area 8E – Transformers

Soils were collected adjacent to transformers and locations where transformers were known to have been stored in order to determine if PCBs were present. Soil samples were collected at the following six locations: MSS8-TF1, MSS8-TF2, MSS8-TF3, MSS8-TF4, MSS8-TF5, and MSS8-TF20. Samples were collected at 0 to 6 inch and 0 to 24 inch depth and analyzed for PCBs and percent solids.

Data for the 0 to 6 inch soils and 0 to 24 inch soils are summarized in Tables 7-52 and 7-53, respectively. The percent solids were determined for all samples. Most samples contained no detectable PCB concentrations. However, one sample, MSS8-TF4, had detectable PCB concentrations. The PCBs that were detected were Aroclors 1248 and 1254.

7.2.8.6 Soil Area 8F – Core Shack and Carpenter's Shop

There were 18 biased soil sampling locations at the Core Shack and Carpenter's Shop. Sampling of these areas were not originally a part of the FSP, but were added to the sampling as a part of EPA's request that soil samples be collected outside of every doorway of buildings on the mine. Soil samples were collected at MSS8-59, MSS8-60, MSS8-61, MSS8-62, MSS8-63, MSS8-64, MSS8-65, MSS8-66, MSS8-67, MSS8-68, MSS8-69, MSS8-70, MSS8-71, MSS8-72, MSS8-73,

and MSS8-74. Samples were collected on January 14, 2003, June 11, 2003, and July 20, 2003. Samples were analyzed for metal concentrations, inorganic parameters, SVOCs, and VOCs.

Table 7-54 summarizes the data from the 0 to 6 inch soils from Soil Area 8F. All inorganic parameters were detected in all samples, with the exception of 28 percent of samples had detectable nitrate.

Nineteen metals were detected in all 0 to 6 inch samples. Of those metals that were not detected in all samples, cadmium and mercury were detected in 89 percent and 78 percent of samples, respectively. Boron, selenium, and sodium were detected in 44 percent, 28 percent, and 17 percent of samples, respectively. Antimony was not detected in any sample.

Three 0 to 6 inch samples (MSS8-62, MSS8-63, and MSS8-64) were analyzed for SVOCs. None had detectable concentrations of these compounds. Four samples (MSS8-56, MSS8-62, MSS8-63, and MSS8-64) were analyzed for VOCs. Total xylene was detected in MSS8-62, MSS8-64, and MSS8-65, and 2-butanone was detected in MSS8-64.

Data for the 0 to 24 inch soils are summarized in Table 7-55. All inorganic parameters were detected in all samples except for chloride, which was detected in 94 percent of samples and nitrate which was detected in 39 percent of samples.

Nineteen metals were detected in all 0 to 24 inch samples. Of those metals that were not detected in all samples, cadmium and mercury were detected in 72 percent and 79 percent of samples, respectively. Boron, selenium, and sodium were detected in 39 percent, 39 percent, and 17 percent of samples, respectively. Antimony was not detected in any sample.

Most inorganic compounds were not detected in any 0 to 24 inch sample. Exceptions were sample MSS8-64, which had detectable chrysene concentrations. Sample MSS8-64 had detectable concentrations of 2-butanone, toluene, and total xylene. Sample MSS8-63 had detectable concentrations of 2-butanone and total xylene.

7.3 REFERENCE SOIL AT CATER RANCH

Cater Ranch is used as reference for soil samples collected at the tailings facility, for windblown tailings soils collected around the facility, and for the soils collected south of the tailings facility. Cater Ranch is located 10 miles due north of Questa and sample locations are shown in Figure 7-6. Samples were collected from June 9 to 11, 2003. The area was divided into 16 equal sized sections, and a sample location was selected randomly within each section. Soils were collected at three different depths at Cater Ranch. At each of the 16 sample locations, a soil sample was collected from a depth of 0 to 2 inches for use as reference for windblown particulate soil samples. The sample locations included CR-1, CR-2, CR-3, CR-4, CR-5, CR-6, CR-7, CR-8, CR-9, CR-10, CR-11, CR-12, CR-13, CR-14, CR-15, and CR-16. Sixteen samples were determined to be a statistically significant population for comparison to the windblown tailings soils, based on the predicted geochemical variability in the soils (URS 2002c).

Ten sites were determined to be the number of samples required for a statistically significant reference population for comparison with the 0 to 6 inch and 0 to 24 inch soils collected on the tailings facility and south of the tailings. Locations for collecting these samples were randomly

selected from the 16 sites, and included CR-2, CR-4, CR-5, CR-6, CR-7, CR-8, CR-10, CR-11, CR-13, and CR-14. Tables 7-56, 7-57, and 7-58 contain summary statistics for the data from the 0 to 6 inch samples, 0 to 24 inch samples, and 0 to 2 inch samples, respectively.

The 0 to 6 inch samples from CR-5 and CR-8 were analyzed for dioxins-dibenzofurans and pesticides-PCBs. Six dibenzodioxins-dibenzofurans were detected in CR-8 and one was detected in CR-5. Pesticides-PCBs were not detected in any sample. All samples were analyzed for metal concentrations and inorganic parameters, with the exception of TKN. TKN was determined on two 0 to 6 inch soils and 0 to 24 inch soils, and six 0 to 2 inch soils.

Values were determined for all inorganic parameters in all samples, with the exception of fluoride, which was detected in 75 percent of the 0 to 2 inch soils. SAR was determined for all but one sample.

Nineteen metals were detected in all 0 to 6 inch soil samples. Of those metals that were not detected in all samples, mercury was detected in 40 percent of samples; boron, molybdenum, and silver were detected in 60 percent of samples; and antimony and cadmium were not detected in all samples.

Seventeen metals were detected in all 0 to 24 inch soil samples. Of those metals that were not detected in all samples, mercury was detected in 20 percent of samples; and boron, molybdenum, silver, and thallium were detected in 50 percent to 80 percent of samples. Antimony, cadmium, and selenium were not detected in any samples.

Fifteen metals were detected in all 0 to 2 inch soil samples. Of those metals that were not detected in all samples, arsenic and sodium were detected in 94 percent of samples, boron on 75 percent, and thallium on 63 percent of samples. Molybdenum was detected in 50 percent of samples, silver on 38 percent, mercury on 25 percent, and cadmium on 6 percent of samples. SAR was determined on 81 percent of samples. Antimony and selenium were not detected in any of the 16 samples.

The SPLP was conducted on four 0 to 24 inch samples collected from Cater Ranch. These samples were collected at MSS3-1, MSS3-2, MSS3-3, and MSS3-4. Results of the SPLP tests are summarized in Table 7-59. For the inorganic parameters, cyanide and hydroxide were not detected in any sample. Carbonate and nitrate were detected in three samples. All other inorganic parameters were detected in all four samples.

Ten metals were detected in all of the SPLP leachates. Of those metals that were not detected in all samples, arsenic, chromium, copper, lead, molybdenum, and potassium were detected in three samples; and boron, cobalt, and nickel were detected in two samples. Beryllium and selenium were each detected in one sample. Antimony, cadmium, mercury, and silver were not detected in any leachates.

7.4 TAILINGS FACILITY SOILS

Soil samples were collected from five areas at the tailings facility. These include the dry/maintenance area (Soil Area 11), IX Plant (Soil Area 12), Pope Lake (Soil Area 13), the tailings (Soil Area 14), and the area around the tailings facility that may have been impacted by

windblown tailings (Soil Area 15). These areas and the samples collected in each are shown on Figure 7-1 and discussed below.

7.4.1 Soil Area 11 – Dry/Maintenance

Soil samples were collected from the dry/maintenance area from depths of 0 to 6 inch and 0 to 24 inch on October 28, 2002. The sample sites were biased, being located near areas where spills were most likely to have occurred. The sample locations were TSS11-1, TSS11-2, TSS11-3, TSS11-4, and TSS11-5. Tables 7-60 and 7-61 contain summary statistics for analyte values and comparisons to human health and ecological SLC. Samples were analyzed for metal analytes, inorganic parameters, VOCs, and SVOCs.

All inorganic parameters were detected the samples from both depths, except for chloride which was only detected in the soil samples collected at TSS11-4, and sulfate which was detected in these two samples and in the 0 to 24 inch sample collected at TSS11-3.

Twenty-one metals were detected in all samples from the dry/maintenance area. Silver and sodium were only detected in the samples collected at TSS11-4 and antimony and mercury were not detected in any samples.

Most SVOCs and VOCs were not detected in all samples. Sixteen SVOCs were detected in the 0 to 6 inch sample from TSS11-4 and 11 were detected in the 0 to 24 inch sample at this location. The only VOC detected was tetrachloroethene in the 0 to 24 inch sample at TSS11-5.

7.4.2 Soil Area 12 – IX Plant

Soil samples were collected from depths of 0 to 6 inch and 0 to 24 inch at four locations in the IX Plant area on October 10 and 11, 2002. The biased sample locations were TSS12-1, TSS12-2, TSS12-3, and TSS12-4 and were located on the four sides of the IX plant building. Samples were analyzed for metal analytes and inorganic parameters. Tables 7-62 and 7-63 contain summary statistics and the applicable human health and ecological SLC.

All inorganic parameters were detected in all samples, except chloride which was not detected in samples collected at TSS12-1.

Twenty metals were detected in the 0 to 6 inch soils collected from the IX Plant. Of those metals that were not detected in all samples, boron and molybdenum were detected in 75 percent of samples, mercury was detected in 50 percent of samples, and silver was detected in one sample. Antimony was not detected in any of the soil samples.

Twenty-one metals were detected in all the 0 to 24 inch samples. Of those metals that were not detected in all samples, boron and selenium were detected in 75 percent of samples, and mercury and silver were detected in 25 percent of samples.

7.4.3 Soil Area 13 – Pope Lake

One composite soil sample was collected from the bottom of Pope Lake. Pope Lake is a dry lake bed located south of tailings dam No. 4 and was built as a holding pond for tailings water that was to be treated in the IX plant prior to discharge to the Red River. The lake has not held water since 1980, when the IX plant was no longer used. The soils sample was collected on October 11, 2002. Tables 7-64 and 7-65 present the results of analysis of this sample, and compare them to human health and ecological SLC.

Values were determined for all inorganic parameters in both the 0 to 6 and 0 to 24 inch samples. Antimony, cadmium, silver, and sodium were not detected in either sample. All other metal analytes were detected in both samples.

7.4.4 Soil Area 14 – Tailings Facility Impoundments

Soil samples were collected at 10 randomly selected locations on the tailings facility on June 11, 2003. The locations were TSS14-1, TSS14-2, TSS14-3, TSS14-4, TSS14-5, TSS14-6, TSS14-7, TSS14-8, TSS14-9, and TSS14-10. Samples were collected at depths of 0 to 6 and 0 to 24 inches at each location and were analyzed for metal concentrations and inorganic parameters. Samples from both depths collected at TSS14-2, TSS14-5, TSS14-6, TSS14-7, TSS14-8, and TSS14-10 were analyzed for TKN. Tables 7-66 and 7-67 summarize the analytical results and compare them to human health and ecological SLC.

All inorganic parameters were detected in all 0 to 6 inch samples with the exception of chloride which was detected in 80 percent of samples and nitrate was detected in 60 percent of samples. SAR was determined for 80 percent of samples.

Nineteen metals were detected in all 0 to 6 inch samples. Of those metals that were not detected in all samples, cadmium was detected in 50 percent of samples and silver was detected in 30 percent of samples. Mercury was detected in one sample. Sodium and thallium were detected in 70 percent and 80 percent of samples, respectively, and antimony was not detected in any sample.

For the 0 to 24 inch samples, most inorganic parameters were detected in all samples. Exceptions included chloride and nitrate which were detected in 50 percent of samples, and TOC which was detected in 80 percent of samples.

Nineteen metals were detected in all 0 to 24 inch samples. Of those metals that were not detected in all samples, cadmium was detected in 70 percent of samples and silver was detected in 40 percent. Sodium and thallium were detected in 80 percent and 90 percent of samples, respectively, and antimony, mercury, and selenium were not detected in any sample.

The SPLP was conducted on the 0 to 24 inch soil samples at sites TSS14-1, TSS14-3, TSS14-4, and TSS14-4. The results are summarized in Table 7-68. For the inorganic parameters, carbonate, cyanide, and hydroxide were not detected in any of the four leachate samples. Bicarbonate and total alkalinity were detected in three samples. Chloride, nitrite, phosphate, and phosphorus were detected in two samples. Nitrate was detected in one sample.

Barium, calcium, copper, magnesium, molybdenum, and potassium were detected in all four leachates. Antimony, beryllium, cadmium, cobalt, iron, mercury, nickel, selenium, thallium, and zinc were not detected in any of the leachates. Lead and vanadium were detected in three samples, and aluminum and sodium were detected in two samples. Arsenic, boron, chromium, manganese, and silver were detected in one sample.

7.4.5 Soil Area 15 – Soils Potentially Affected by Windblown Particulates

Soil samples were collected along transects radiating out from the tailings facility in order to identify any effects on the soils from windblown tailings (Figure 7-1). The transects were oriented to the northwest, north, north-northeast, northeast, east, southeast, and south of the tailings facility. Samples were collected at locations TSS15-1 through TSS15-62. Samples were collected from October 11 through 31, 2002, January 7 and 10, 2003, and November 3 through 5, 2003. Soil samples were collected from depths of 0 to 2 inches and 2 to 6 inches at each location. Each soil sample collected from a depth of 2 to 6 inches is to be used as the reference for the overlying 0 to 2 inch soil sample. Tables 7-69 and 7-70 summarize the data.

All samples were analyzed for metal concentrations and inorganic parameters. Samples collected at both depths from TSS15-1 and TSS15-2 were also analyzed for dioxins-dibenzofurans and pesticides-PCBs. Fluoride results were rejected in the data validation process from samples collected at the 0 to 2 inch and 2 to 6 inch depths at TSS15-39, TSS15-40, TSS15-43, TSS15-44, and TSS15-46. Fluoride was also rejected in the 0 to 2 inch sample collected from TSS15-16, and in the 2 to 6 inch samples collected at TSS15-41 and TSS15-45. Antimony results were rejected in the 0 to 2 inch sample at TSS15-56 and the 2 to 6 inch sample at TSS15-60.

For the 0 to 2 inch soils, one dioxin-dibenzofuran (2,3,7,8-tetrachlorodibenzofuran) was detected in the sample collected at TSS15-1. No pesticides-PCBs were detected. All inorganic parameters were detected in all samples, except chloride which was detected in 63 percent of samples, fluoride which was detected in 73 percent, and TOC as detected in 98 percent of samples. SAR was determined for 70 percent of samples.

Sixteen metals were detected in all 0 to 2 inch samples. Of those that were not detected in all samples, arsenic and thallium were detected in 98 percent and 95 percent of samples, respectively, boron was detected in 82 percent of samples, and molybdenum was detected in 89 percent of samples. Mercury was detected in 34 percent of samples, cadmium in 50 percent, and selenium was detected in 52 percent of samples. Sodium and silver were detected in 18 percent and 7 percent of samples.

For the 2 to 6 inch samples, most inorganic parameters were detected in all samples. Exceptions were chloride which was detected in 57 percent of samples, fluoride which was detected in 80 percent of samples, nitrate which was detected in 86 percent of samples, sulfate which was detected in 81 percent of samples, and TOC which was detected in 98 percent of samples. SAR was determined for 90 percent of samples.

Seventeen metals were detected in all 2 to 6 inch samples. Of those that were not detected in all samples, boron and thallium were detected in 82 percent and 95 percent of samples, respectively. Molybdenum, mercury, and selenium were detected in 60 percent, 29 percent, and 48 percent of samples, respectively. Sodium and silver were detected in 19 percent and 7 percent of samples, respectively. Antimony was not detected in any sample.

Four 0 to 2 inch and 2 to 6 inch soil samples were subjected to the SPLP. These samples were collected at TSS15-1, TSS15-2, TSS15-3, and TSS15-4. Fluoride and nitrite were each detected in two leachates from both sample depths.

The results of the SPLP for the 0 to 2 inch samples are summarized in Table 7-71. Phosphate and phosphorus were detected in four samples; bicarbonate, carbonate, sulfate, and total alkalinity were detected in three samples; and nitrate and nitrite were detected in two samples. Chloride, cyanide, fluoride, and TKN were detected in one sample; and hydroxide was not detected in any sample. Antimony, cadmium, mercury, molybdenum, selenium, silver, thallium, and zinc were not detected in any of the leachates from the 0 to 2 inch samples. Beryllium, chromium, and nickel were detected in three samples; and boron was detected in two samples. Cobalt and copper were each detected in one sample. Concentrations of all other analytes were non-detect.

Results of the SPLP of the 2 to 6 inch samples are summarized in Table 7-72. Cyanide and hydroxide were not detected in any leachates. Bicarbonate, sulfate, and total alkalinity were each detected in three samples; and carbonate, chloride, and nitrite were detected in two samples. Antimony, cadmium, mercury, molybdenum, selenium, silver, and zinc were not detected in any of the four leachates. Nickel was detected in three samples, and boron and copper were detected in two samples. Cobalt and thallium were each detected in one sample. All other analytes were detected in all four samples.

7.5 MINE SITE REFERENCE RIPARIAN SOILS

Reference areas for riparian soils collected from the Red River along the mine site were located upstream of the mine along the Red River and along upper Cabresto Creek (Figure 7-1). Soil samples were collected at eight random locations within each of these reference areas. Edible riparian plants and associated soil samples were also to be collected in the fall of 2002. However, there were no edible plants available to be sampled in October of 2002 due to the late time of the year and drought conditions. Consequently, the plants and some of the associated soils were collected in August 2003. Some of the plants were collected adjacent to the area where soils were collected the previous year (RRS-3 and RRS-17). Plants and soils were also collected at three new locations. RIP-2 was collected in the Red River reference area upstream of RRS-6. RIP-11 and RIP-12 were collected along upper Cabresto Creek between RRS-13 and RRS-14.

Reference soil samples were also collected from the June Bug and Fawn Lakes campgrounds, both of which are located upstream of the mine, adjacent to the Red River (Figure 7-1). These samples serve as reference soils for soil samples collected from Goathill Gulch campground and

Eagle Rock Lake recreation area, which are located adjacent to and downstream of the mine, respectively. Samples were collected in the campgrounds to assess human health risks.

7.5.1 Reference for Mine Site Riparian

Random

Soil samples were collected at eight random locations above the mine site along the Red River and eight samples from upper Cabresto Creek. The locations along the Red River upstream of the mine were RRS-1, RRS-2, RRS-3, RRS-4, RRS-5, RRS-6, RRS-7, and RRS-8 and samples were collected at these locations between September 29 to October 10, 2002. The locations along upper Cabresto Creek included RRS-9, RRS-10, RRS-11, RRS-12, RRS-13, RRS-14, RRS-15, and RRS-16. These samples were collected October 13 through 15, 2002.

Data for the random 0 to 6 inch riparian soils collected from these areas are summarized in Table 7-73. All inorganic parameters were detected in all samples with the exception of chloride and SAR which were each detected in 87.5 percent of samples, and nitrate which was detected in 25 percent of samples.

Seventeen metals were detected in all 0 to 6 inch samples. Of those metals that were not detected in all samples, antimony was detected in 6 percent of samples, boron in 56 percent of samples, and cadmium in 81 percent of samples. Mercury was detected in 25 percent of samples, molybdenum in 69 percent of samples, selenium in 50 percent of samples, and thallium in 81 percent of samples. Silver and sodium were detected in 31 percent of samples.

Data for the random 0 to 24 inch riparian soils collected from these areas are summarized in Table 7-74. All inorganic parameters were detected in all samples with the exception of chloride which was detected in 94 percent of samples, nitrate which was detected in 19 percent of samples, and CEC which was detected in 88 percent of samples.

Sixteen metals were detected in all 0 to 24 inch samples. Of those metals that were not detected in all samples, antimony was not detected in any sample, boron in 38 percent of samples, and cadmium in 67 percent of samples. Mercury was detected in 19 percent of samples, molybdenum in 69 percent of samples, selenium in 38 percent of samples, and thallium in 69 percent of samples. Silver and sodium were detected in 25 percent of samples.

Non-Random

Table 7-75 summarizes the data from the 0 to 6 inch non-random soil samples, RIP-2, RIP-11, and RIP-12. All inorganic parameters were detected in all samples with the exception of fluoride which was detected in 33 percent of samples and nitrate which was detected in 67 percent of samples.

Sixteen metals were detected in all 0 to 6 inch samples. Of those metals that were not detected in all samples, arsenic, mercury, selenium were detected in 67 percent of samples; and

molybdenum, silver, sodium, and thallium were detected in 33 percent of samples. Antimony and cadmium were not detected in any samples.

Table 7-76 summarizes the data from the 0 to 24 inch non-random soil samples. All inorganic parameters were detected in all samples with the exception of chloride, fluoride, and nitrate which were detected in 67 percent of samples.

Sixteen metals were detected in all 0 to 24 inch samples. Of those metals that were not detected in all samples, arsenic, molybdenum, silver, sodium, and thallium were detected in 67 percent of samples; and cadmium, mercury, and selenium were detected in 33 percent of samples. Antimony was not detected in any samples.

SPLP Data

The SPLP was conducted on the 0 to 24 inch sample from RRS-1, RRS-2, RRS-9, and RRS-10. The data are summarized in Table 7-77. Bicarbonate, fluoride, phosphorus, and total alkalinity were detected in all four leachates. Chloride, phosphate, and sulfate were detected in three leachates; and carbonate was detected in two leachates. Nitrate, nitrite, and TKN were detected in one leachate and cyanide was not detected in any leachate.

Aluminum, barium, calcium, iron, lead, magnesium, manganese, potassium, sodium, vanadium, and zinc were detected in the four leachates. Arsenic and molybdenum were detected in three leachates; and boron, chromium, and nickel were detected in two leachates. Beryllium was detected in one leachate; and antimony, cadmium, cobalt, mercury, selenium, silver, and thallium were not detected in any of the leachates.

7.5.2 Reference - Campgrounds

Reference soils were collected from the June Bug campground and the Elephant Rock campground. The June Bug campground is located approximately 1.25 miles upstream from the eastern boundary of the mine, on the north side of Highway 38. Samples collected in this campground were used as reference for Eagle Rock Lake recreation area samples (Section 7.6.2). Elephant Rock campground is located approximately 0.75 miles upstream of the mine, and is situated south of Highway 38, adjacent to the Red River. This campground used to be Fawn Lakes campground but was renamed after the soil samples had been collected for the RI/FS. These soils were used as reference for soil samples from Goathill Gulch campground (Section 7.6.2). Soil samples at both campgrounds were collected from depths of 0 to 6 inches. No 0 to 24 inch samples were collected since sampling was being conducted to assess human health risks. The sample sites were located non-randomly.

Five 0 to 6 inch soil samples were collected from June Bug campground: CGBUG1, CGBUG2, CGBUG3, CGBUG4, and CGBUG5. These samples were collected on October 19, 2002. Five 0 to 6 inch soil samples were collected from the Elephant Rock campground on October 20, 2002. These were labeled CGUFL1, CGUFL2, CGUFL3, CGUFL4, and CGUFL5. Samples were analyzed for inorganic constituents and metal analytes.

June Bug Campground

The results of analysis of soil samples collected from June Bug campground are summarized in Table 7-78. All inorganic parameters were detected for all the 0 to 6 inch samples except that four of the five samples had detectable chloride concentrations and one sample had detectable nitrate concentrations.

Nineteen metals were detected in all samples. Of those metals that were not detected in all samples, boron, cadmium, and sodium were detected in one sample; and selenium was detected in eight samples. Antimony and mercury were not detected in any samples.

Fawn Lakes Campground (Elephant Rock Campground)

The results of analysis of soil samples collected from Fawn Lake campground are summarized in Table 7-79. All inorganic parameters were detected in all samples except for nitrate, which was detected in two samples.

Eighteen metals were detected in all samples. Mercury was detected in three samples, selenium in four samples, and silver in one sample. Antimony, boron, cadmium, and sodium were not detected in any samples.

7.6 MINE SITE RIPARIAN SOIL

Soils were collected in riparian areas of the Red River adjacent to and downstream of the mine site (Figure 7-1). These sample locations were selected randomly. In addition, samples were collected from the Goathill Gulch campground and the Eagle Rock Lake recreation area. The Goathill Gulch campground is located across Highway 38 from the mine entrance and situated on the northern bank of the Red River. The Eagle Rock Lake recreation area is located on the north, west, and south sides of Eagle Rock Lake. Sample locations for these areas were selected non-randomly. The results of samples from these three areas are discussed below.

7.6.1 Soil Area 9 – Red River Riparian Along Mine Site

Riparian soils were collected along the Red River adjacent to the mine site. Samples were collected at the following 10 locations: RS-1, RS-2, RS-3, RS-4, RS-5, RS-6, RS-7, RS-8, RS-9, and RS-10 (Figure 7-1). Samples were collected from October 10 through 22, 2002. In addition, four non-random riparian soils were collected on August 9, 2003 when the edible plants were collected. These non-random riparian soil locations are RIP-1, RIP-8, RIP-9, and RIP-10. All the riparian soils in this area were analyzed for metals concentrations and inorganics. RS-1 and RS-2 were also analyzed for pesticides-PCBs, SVOCs, and VOCs. RS-1 was analyzed for explosives.

Random

Table 7-80 summarizes the data from the 0 to 6 inch random soil samples collected from the riparian areas along the Red River. All inorganic parameters were detected in all samples except

for chloride which was detected in nine of 10 ten random soil samples, and nitrate which was detected in three of the samples.

Nineteen metals were detected in all 0 to 6 inch samples. Of those metals that were not detected in all samples, mercury was detected in two samples, and sodium in four samples. Cadmium and silver were detected in eight samples, and boron was detected in six samples. Antimony was not detected in any sample.

No PCBs, SVOCs, or VOCs were detected in the 0 to 6 inch samples. No explosives were detected in sample RS-1.

Table 7-81 summarizes the results from the 0 to 24 inch soil samples. All inorganic parameters were detected in all samples except for nitrate, which was detected in one sample.

Seventeen metals were detected in all 0 to 24 inch samples. Of those not detected in all samples, mercury was detected in two samples, and boron and sodium were detected in five and four samples, respectively. Cadmium, selenium, and silver were detected in eight samples. No explosives, PCBs, or VOCs were detected in RS-1 and RS-2. However, one SVOC (phenol) was detected in RS-2.

Non-Random

Data for the 0 to 6 inch non-random soil samples are summarized in Table 7-82. All inorganic parameters were detected in all samples except that two of the four samples contained detectable chloride concentrations and three had detectable fluoride concentrations.

All metals were detected in all 0 to 6 inch samples except for cadmium, which was detected in two samples; molybdenum, which was detected in three samples; and antimony which was not detected in any sample.

Table 7-83 summarizes the data for the 0 to 24 inch non-random samples. All inorganic parameters were detected in all samples except chloride, which was detected in one sample; and fluoride, which was detected in three samples.

All metals were detected in all 0 to 6 inch samples except for cadmium and mercury, which were each detected in one sample; molybdenum, which was detected in three samples; and antimony which was not detected in any sample.

SPLP Data

The SPLP was conducted on the 0 to 24 inch sample from RS-1 and RS-2. The results are summarized in Table 7-84. Carbonate, cyanide, hydroxide, nitrate, nitrite, and TKN were not detected in any leachate sample. Chloride was detected in one leachate.

Nine metals were detected in all leachates. Chromium, potassium, selenium, and vanadium were each detected in one leachate. Antimony, arsenic, barium, beryllium, boron, cadmium, cobalt, copper, mercury, silver, thallium, and zinc were not detected in any of the leachates.

Hunt's Pond

Four soil samples were collected around Hunt's Pond as part of the Historic Tailings Spill Investigation (URS 2004a). The samples collected were HUNT-SOL1, HUNT-SOL2, HUNT-SOL3, HUNT-SOL3, and HUNT-SOL4 (Figure 7-1). The samples were collected using an auger mounted on a backhoe and were collected between 3 and 4 foot depths. Samples were collected on May 11, 2004. The data is summarized in Table 7-86.

Values were measured for all inorganic parameters except nitrate, which was detected in three samples. The antimony value was rejected in one sample. Aluminum, arsenic, barium, beryllium, cadmium, calcium, chromium, cobalt, copper, iron, lead, magnesium, manganese, molybdenum, nickel, potassium, vanadium, and zinc were detected in all samples. Thallium was detected in three samples and silver was detected in one sample. Antimony, boron, mercury, selenium, and sodium were not detected in any sample.

Private Residences

Eleven 0-6 inch soil samples were collected at private residences located to the west-southwest of Hunt's Pond (Figure 7-1). These samples were collected as part of the Historic Tailings Spill Investigation. The objective of the sampling was to determine if there were spilled tailings on the properties. The sample names were PR3-1, PR3-2, PR4-1, PR4-2, PR5-1, PR5-2, PR5-3, PR5-4, PR5-5, PR5-6, and PR5-7. Samples were analyzed for metals and inorganic parameters and samples were collected on May 11, 2004. The data for these samples is summarized in Table 7-87.

All inorganic parameters were measured in all samples, except for SAR, which was measured in 10 of the eleven samples. Aluminum, antimony, arsenic, barium, beryllium, cadmium, calcium, chromium, cobalt, copper, iron, lead, magnesium, manganese, molybdenum, nickel, potassium, thallium, vanadium, and zinc were detected in all samples. Boron and mercury were each detected in one sample, and selenium was detected in three samples. Silver was detected in 64 percent of samples. Sodium was not detected in any sample.

Borehole Samples Collected from MMW-50A

Three samples were collected of alluvial material during the drilling of borehole MMW-50A (Figure 7-1). The samples were collected to determine the geochemistry of different lithologies in the Red River valley downstream of the mine site. The samples were named MMW-50A-T01N, MMW-50A-T02N, and MMW-50A-T03N and were collected at depths of 25 to 30 feet, 45 to 50 feet, and 50 to 55 feet, respectively. The samples were collected on February 25, 2004. These samples were analyzed for metals and fluoride, pH, percent solids, sulfate, and TOC. The data are summarized in Table 7-88.

Values were determined for all inorganic parameters, except for TOC, which was detected in one sample. Aluminum, barium, beryllium, cadmium, calcium, cobalt, copper, iron, lead, magnesium, manganese, molybdenum, nickel, potassium, vanadium, and zinc were detected in all three samples. Arsenic, chromium, and thallium, were each detected in two samples, and

boron was detected in one sample. Antimony, mercury, selenium, silver, and sodium were not detected in all samples.

7.6.2 Campgrounds

Soils were collected from the Goathill Gulch campground and the Eagle Rock Lake recreation area. The Goathill Gulch campground is located across from the mine entrance, south of Highway 38 and north of the river. Eagle Rock Lake recreation area is located approximately one mile east of the village of Questa, and is situated south of Highway 38, adjacent to the Red River. Soil samples were collected at depths of 0 to 6 inches only. No 0 to 24 inch samples were collected since sampling was being conducted to assess human health risks. Campground samples were located in areas where humans would have the greatest exposure to soils, such as eating areas and tent sites. Samples were analyzed for inorganic constituents and metal analytes.

Goathill Gulch Campground

Five 0 to 6 inch soil samples were collected from Goathill Gulch campground on October 19, 2002. The sample sites were named CGGTH1, CGGTH2, CGGTH3, CGGTH4, and CGGTH5. Results of analysis of the Goathill Gulch campground soils are summarized in Table 7-85. All inorganic parameters were detected in all samples except for nitrate which was not detected in any of the samples.

Nineteen metals were detected in all samples. Of those metals not detected in all samples, boron was detected in three samples and selenium in two samples. Antimony, cadmium, mercury, and sodium were not detected in any of the five samples.

Eagle Rock Lake Recreation Area

Five 0 to 6 inch samples were collected from the Eagle Rock Lake recreation area on October 20, 2002. These samples were labeled ERL-1, ERL-2, ERL-3, ERL-4, and ERL-5. Results of analysis of the Eagle Rock Lake soils are summarized in Table 7-86. All inorganic parameters were detected in all five samples.

All metals were detected in all samples, except for boron, mercury, selenium, and sodium which were each detected in two samples; and antimony which was not detected in any of the five samples.

7.7 REFERENCE LOWER CABRESTO CREEK RIPARIAN

Reference riparian soils for the soils collected along the tailings facility were collected in lower Cabresto Creek. Sixteen samples were collected at locations RRS-17, RRS-18, RRS-19, RRS-20 RRS-21, RRS-22 RRS-23, RRS-24, RRS-25, RRS-26, RRS-27, RRS-28, RRS-29, RRS-30, RRS-31, and RRS-32 (Figure 7-1). Samples were collected from October 11 through 19, 2002.

Random

Results of analyses of 0 to 6 inch soils collected from the random locations in the lower Cabresto Creek riparian soil reference area are summarized in Table 7-87. All inorganic parameters were detected in all samples except for chloride which was detected in 94 percent of samples and nitrate which was detected in 81 percent of samples.

Fifteen metals were detected in all 0 to 6 inch samples. Of those metals not detected in all samples, mercury was detected in 6 percent of samples and selenium in 18 percent of samples. Boron and silver were detected in 31 percent of samples, thallium in 75 percent of samples, and copper in 88 percent of samples. Cadmium and molybdenum were detected in 94 percent of samples. Antimony and sodium were not detected in any sample.

Data for the 0 to 24 inch soils are summarized in Table 7-88. All inorganic parameters were detected in all samples with the exception of nitrate which was detected in 75 percent of samples.

Fifteen metals were detected in all 0 to 24 inch samples. Of those not detected in all samples, boron, selenium, and silver were detected in 19 percent of samples; thallium in 56 percent of samples. Cadmium, copper, and molybdenum were detected in 81 percent, 88 percent, and 94 percent of samples, respectively. Antimony, mercury, and sodium were not detected in any sample.

SPLP Data

The SPLP was conducted on the 0 to 24 inch samples from RRS-17 and RRS-18. The results are summarized in Table 7-89. Cyanide, hydroxide, nitrate, nitrite, and TKN were not detected in any leachate sample. Carbonate and phosphate were each detected in one leachate.

Nine metals were detected in all leachates. Barium, chromium, and zinc were each detected in one leachate. Antimony, arsenic, beryllium, boron, cadmium, cobalt, copper, mercury, selenium, silver, and thallium were not detected in any of the leachates.

7.8 SOIL AREA 16 – RED RIVER RIPARIAN ALONG TAILINGS FACILITY

Soil samples were collected in the riparian zones of the Red River adjacent to the tailings facility. Sample stations start just below the overpass of Highway 38 over the Red River and end above the Red River State Fish Hatchery (Figure 7-1). Random samples were collected at locations RS-11 RS-12, RS-13, RS-14, RS-15, RS-16, RS-17, RS-18, RS-19, and RS-20. These samples were collected October 16 through 18, 2002. Soil samples were also collected in association with edible riparian plants from this area. Samples were collected at five locations (RIP-3, RIP-4, RIP-5, RIP-6, and RIP-7) on August 13, 2003. One biased location was added by EPA to provide spatial coverage. RS-13A was sampled on September 9, 2003.

Random

The results of analyses of the 0 to 6 inch random soils are summarized in Table 7-90. The random soils were analyzed for metal concentrations and inorganic parameters. One sample was also analyzed for PCBs, and two samples were analyzed for SVOCs and VOCs.

All inorganic parameters were detected in all 0 to 6 inch samples except for nitrate, which was detected in three samples. All metals were detected in all samples except for mercury, which was detected in one sample; boron, which was detected in three samples; and sodium which was detected in four samples. Cadmium and silver were detected in nine and eight samples, respectively, and antimony was not detected in any sample. PCBs and SVOCs were not detected. The VOC 2-butanone was detected in one sample.

Table 7-91 summarizes the data from the 0 to 24 inch random samples. All inorganic parameters were detected in all samples except for nitrate, which was detected in two samples.

Eighteen metals were detected in all 0 to 24 inch samples. Of those metals not detected in all samples, antimony and mercury were not detected in any sample; boron was detected in two samples; and sodium was detected in three samples. Selenium, silver, and cadmium were detected in six, eight, and nine samples, respectively. PCBs and SVOCs were not detected. The VOC 2-butanone was detected in one sample.

Biased

Data for the one biased 0 to 6 inch sample are summarized in Table 7-92. These samples were analyzed for metals concentrations and inorganic parameters. Values were obtained for all inorganic parameters. Antimony, mercury, silver, and sodium were not detected in any samples.

Data for the one biased 0 to 24 inch sample are summarized in Table 7-93. These samples were analyzed for metal concentrations and inorganic parameters. Values were obtained for all inorganic parameters. Antimony, mercury, and sodium were not detected in any samples.

Non-Random

Data for the five non-random 0 to 6 inch samples are summarized in Table 7-94. These samples were analyzed for metals concentrations and inorganic parameters. All inorganic parameters were detected in all samples except for chloride which was detected in 60 percent of samples.

Eighteen metals were detected in all 0 to 6 inch samples. Of those metals not detected in all samples, beryllium and mercury were detected in 80 percent of samples, silver and thallium were detected in 60 percent of samples, and selenium was detected in 40 percent of samples. Antimony and cadmium were not detected in any samples.

Data for the five non-random 0 to 24 inch samples are summarized in Table 7-95. All inorganic parameters were detected in all samples except for chloride, which was detected in 40 percent of samples. Mercury, selenium, and silver were detected in 80 percent of samples, and thallium was detected in 60 percent of samples.

SPLP Data

The SPLP was conducted on the 0 to 24 inch sample from RS-11 and RRS-12. The results are summarized in Table 7-96. Carbonate, cyanide, hydroxide, nitrate, nitrite, and TKN were not detected in any leachate sample. Phosphate was detected in one leachate.

Ten metals were detected in all leachates. Of those metals not detected in all samples, antimony, copper, and zinc were each detected in one leachate. Arsenic, barium, beryllium, boron, cadmium, chromium, cobalt, mercury, potassium, selenium, silver, and thallium were not detected in any of the leachates.

7.9 TAILINGS MATERIAL AT THE TAILINGS IMPOUNDMENT

Ten tailings samples were collected from the tailings facility (Figure 7-1). These samples were collected in the same locations as the soils that were collected on the facility (Section 7.4.4), with the exception that a sample was collected at TSS14-7A instead of TSS14-7. This is because location TSS14-7, which was randomly located, fell on a part of the tailings facility that did not have tailings. The sample was moved to the nearest point from the stake where tailings were present. The tailings sample locations were TSS14-1, TSS14-2, TSS14-3, TSS14-4, TSS14-5, TSS14-6, TSS14-7A, TSS14-8, TSS14-9, and TSS14-10. Whereas the soil samples were collected at distinct depths below the surface (i.e., 0 to 6 inches and 0 to 24 inches deep), the tailings samples were collected at varying depths in order to collect only tailings. Tailings were collected at the surface if they were exposed. To access tailings covered by the interim soil cover, an auger was used. All tailings samples were collected over a depth of 6 inches. Samples were collected on November 3, 2003. Tailings samples were analyzed for metal concentrations and inorganic parameters.

Random

Results of analyses of tailings samples are summarized in Table 7-97. All inorganic parameters were detected in all samples, except for chloride, which was detected in weight samples; nitrate which was detected in two samples; TKN which was detected in five samples; and TOC which was detected in three samples. SAR was determined for nine samples.

Twenty metals were detected in all samples. Antimony and arsenic were each detected in one sample, and thallium was detected in nine samples. Boron and mercury were not detected in any tailings samples.

SPLP Data

The SPLP was conducted on tailings material from TSS14-1, TSS14-5, and TSS14-7A. The results are summarized in Table 7-98. Of the inorganic parameters, fluoride and sulfate were detected in all three leachate samples, and nitrite was detected in one leachate sample. Concentrations of all other inorganic parameters were non-detect.

For the metals, barium, calcium, magnesium, molybdenum, and potassium were detected in all leachates. Aluminum cadmium, copper, manganese, and thallium were detected in two leachates. Nickel, sodium, and vanadium were each detected in one leachate. Concentrations of all other analytes were non-detect.

7.10 SOIL AREA 17 - SOILS SOUTH OF TAILINGS

Soil samples were collected south of the tailings facility. Samples were collected at biased locations TSS17-1 through TSS17-42 (Figure 7-1) from November 3 through December 10, 2003. Samples were analyzed for metals concentrations and inorganic parameters.

Data for the 0 to 6 inch soils collected south of the tailings facility are summarized in Table 7-99. All inorganic parameters were detected in all samples, except for chloride, which was detected in 93 percent of samples, fluoride which was detected in 86 percent of samples, nitrate which was detected in 67 percent of samples, and sulfate which was detected in 98 percent of samples. SAR was determined on 85 percent of samples.

Sixteen metals were detected in all 0 to 6 inch samples. Of those metals that were not detected in all samples, boron was detected in 55 percent of samples, thallium in 81 percent of samples, cadmium and molybdenum were detected in 83 percent of samples, and thallium in 77 percent of samples. Mercury, selenium, silver, and sodium were detected in 36 percent, 69 percent, 36 percent, and 41 percent of samples, respectively. Antimony was not detected in any samples.

7.11 SUMMARY

The following section discusses analytes that exceeded the SLC in random samples collected from each exposure area and the associated reference areas. Pesticides are not discussed because there are no SLC for these compounds. In addition, mean concentrations of metal analytes that exceeded the SLC are compared to the mean concentrations of these analytes in reference areas.

7.11.1 Mine Site and Reference Areas

Soils were collected from eight exposure areas on the mine site. This section compares the results of analysis of these soils to the reference soils collected above the mine site and from Cabresto Creek. Soil samples collected from scars are discussed in the following section.

No dioxins-dibenzofurans or PCBs were detected in the above the mine reference soils. One pesticide compound was detected in one Cabresto Creek soil sample. These reference samples were not analyzed for SVOCs or VOCs.

Organic compounds were detected in several mine site soils. Dibenzodioxin-dibenzofurans were analyzed in samples from Soil Area 1 – Mill Site and Soil Area 2 – Administrative Building and M&E. The concentration of the one compound detected in one soil sample from Soil Area 1 was below the 1,000 pg/g human health SLC. Samples from Soil Areas 1, 2, 8a, 8d, and 8e were analyzed for pesticides-PCBs. No pesticides were detected on the mine site. PCBs were detected in 13 samples and five of the results exceeded the 0.22 mg/kg SLC. Samples from Soil

Areas 1, 2, and 8 were analyzed for SVOCs and VOCs. Three samples had detectable concentrations of SVOCs. All concentrations were below the human health SLC. VOCs were detected in one sample and the concentration was below the 16.4 mg/kg SLC.

The table below lists the metal analytes that exceeded the human health SLC in at least one 0 to 6 inch random sample collected from the mine site and from the mine site reference areas. Note that Soil 7 and Soil 8 are not included in the table. Soil 7 scar samples are discussed in Section 7.11.2 and samples from Soil 8 have no reference area.

The table indicates that, in the 0 to 6 inch soil samples, arsenic exceeded the human health SLC of 0.39 mg/kg in both the mine area and the reference areas. Iron exceeded the 23,000 mg/kg SLC in all exposure areas on the mine site and in soils collected from above the mine site, but not in soils from the Cabresto Creek reference area. Molybdenum exceeded the SLC of 390 mg/kg in Soil 1, Soil 2, Soil 4A2, Soil 4A3, Soil 5, and Soil 6. Lead exceeded the 400 mg/kg SLC in Soil 4A1 and Soil 6. Soils from Soil 5 also had manganese (SLC = 3,200 mg/kg) and vanadium (78 mg/kg) concentrations that exceeded the SLC.

Figures 7-7 through 7-14 compare the mean concentrations of the metal analytes listed in the table above to mean concentrations from the reference areas. Figure 7-7 compares the mean concentrations of arsenic, iron, and molybdenum in soils from Soil Area 1 – Mill Area to those in the reference areas. The reference area above the mine site had the highest mean concentrations for arsenic and iron. Mill site soils had the highest mean value for molybdenum.

Figure 7-8 compares the mean concentrations of arsenic, iron, and molybdenum in soils collected in Soil Area 2 – Administrative Building and M&E. The reference area above the mine site had the highest mean concentrations of arsenic and iron. Soil Area 2 soils had the highest mean value for molybdenum.

Soil Exposure Area	Metal Analytes Exceeding Human Health SLC in Mine Site Soils and Reference Soils		
	Mine Site Soils (0 to 6 inch)	Above Mine Site Reference	Cabreato Creek Reference
Soil 1 – Mill Site	As, Fe, Mo	As, Fe	As
Soil 2 – Administrative Building, M&E	As, Fe, Mo		
Soil 3 – Mine Site Soils	As, Fe		
Soil 4A1 – Capulin, Goathill N and S Rock Piles	As, Fe, Pb		
Soil 4A2 – Sugar Shack S, W, Mid & Sulphur Gulch Rock Piles	As, Fe, Mo		
Soil 4A3 – Sulphur Gulch N & Blind Gulch Rock Piles	As, Fe, Mo		
Soil 5 – Spring Gulch Rock Pile & Truck Shop Slice	As, Fe, Mn, Mo, V		
Soil 6 – Open Pit	As, Fe, Pb, Mo		

Figure 7-9 compares the mean concentrations of arsenic and iron in Soil Area 3 – Mine Site Soils to those in the reference areas. The mean arsenic concentrations in the mine site soils and in the reference area above the mine site were 6.9 mg/kg. The mean arsenic concentration for the Cabresto Creek reference soils was 2.8 mg/kg. The above the mine site reference soils had the highest mean concentration for iron.

Figure 7-10 compares the mean concentrations of arsenic, iron, and lead in Soil Area 4A1 – Capulin and Goathill North and South rock piles to those in the reference areas. Mean arsenic concentrations in the rock pile samples was 6.6 mg/kg compared to 6.9 mg/kg in soils collected above the mine site. The reference area above the mine site had the highest mean iron concentration. The rock pile soils had the highest mean lead value.

Figure 7-11 compares the mean concentrations of arsenic, iron, and molybdenum in Soil Area 4A2 – Sugar Shack South, West, and Middle and Suphur Gulch rock piles to those in the reference areas. The reference area above the mine site had the highest mean concentration of arsenic. Mean iron concentrations from the rock piles (31,400 mg/kg) were similar to the mean concentration in soils collected above the mine site (35,400 mg/kg). Soils from the rock piles had the highest mean value for molybdenum.

Figure 7-12 compares the mean concentrations of arsenic, iron, and molybdenum in Soil Area 4A3 – Sulphur Gulch North and Blind Gulch rock piles to those in the reference areas. The reference area above the mine site had the highest mean concentration of arsenic. Mean iron concentrations from the rock piles (28,000 mg/kg) were similar to the mean concentration in soils collected above the mine site (35,400 mg/kg). Soils from the rock piles had the highest mean value for molybdenum.

Figure 7-13 compares the mean concentrations of arsenic, iron, manganese, molybdenum, and vanadium in Soil Area 5 – Spring Gulch rock pile and Truck Shop Slice to those in the reference areas. The reference area above the mine site had the highest mean concentrations for arsenic and iron. Mine site soils had the highest mean values for manganese, molybdenum, and vanadium.

Figure 7-14 compares the mean concentrations of arsenic, iron, lead, and molybdenum in Soil Area 6 – Open Pit to those in the reference areas. The reference area above the mine site had the highest mean concentrations for arsenic and iron. Open pit soils had the highest mean value for lead and molybdenum.

The table below lists analytes that exceeded the ecological SLC in the 0 to 24 inch soils collected from the mine site and reference areas. Concentrations of boron (SLC = 0.5 mg/kg), lead (15 mg/kg), manganese (152 mg/kg), molybdenum (2 mg/kg), and vanadium (2 mg/kg) exceeded the SLC in all areas of random soils on the mine site and in the reference areas. Chromium (7.9 mg/kg), selenium (1 mg/kg), and zinc (120 mg/kg) exceeded the SLC in all mine exposure areas and in soils from the above the mine site reference area, but not in the Cabresto Creek reference area. Concentrations of barium exceeded the SLC (330 mg/kg) in the above mine site soils and in Soil 2 – Administrative Building and M&E. Cadmium, cobalt, copper, mercury, nickel, silver, and thallium exceeded SLC in at least one of the mine exposure areas but not in the reference areas. Cadmium and copper concentrations were above the SLC (0.4 mg/kg and 54 mg/kg,

respectively) in all the mine exposure areas listed in the table except Soil Area 3. The ecological SLC for nickel (48 mg/kg) was exceeded in soils from all areas except soil areas 4A1 and 4A2. Silver concentrations exceeded the SLC (92 mg/kg) in soils from Soil 3, Soil 4A1, and Soil 5. Thallium concentrations exceeded the SLC (1 mg/kg) soils from Soil 4A2 and Soil 6, and mercury exceeded the SLC (0.1 mg/kg) in Soil 4A3.

Figures 7-15 through 7-22 compare the mean concentrations of the metal analytes listed in the table above for each area to mean concentrations from reference areas. Mean concentrations were not calculated for analytes for which 50 percent or more of the values were non-detect. In these cases, no bar was plotted.

Figure 7-15 shows the data for Soil Area 1. Mean concentrations of barium, boron, lead, and zinc were greatest in soils collected from the reference area above the mine site. Mean concentrations of all other metals were greatest in the mill area.

For Soil Area 2, mean concentrations of barium, boron, lead and zinc were greatest in soils collected from the above the mine site reference area (Figure 7-16). Greater than 50 percent of samples in each area had cadmium concentrations that were non-detect. Mean manganese, nickel, and selenium concentrations were similar in Soil Area 2 and the reference areas. Mean concentrations of chromium, copper, molybdenum, and vanadium were greatest in the mill area.

Figure 7-17 shows data for Soil Area 3. Half or more of the mine site and reference area soils had antimony concentrations non-detect. For the same reason, mean silver concentrations could not be calculated for mine site soils or Cabresto Creek soils. For other metals, mean concentrations were greatest in soils collected from the above the mine site reference area than in the mine site soils or the Cabresto Creek soils.

For Soil Area 4A1, mean concentrations of barium, boron, chromium, cobalt, selenium, and vanadium were greatest in soils collected from the above the mine site reference area (Figure 7-18). Zinc concentrations in the rock pile soils and in the above the mine soils were similar (108 mg/kg compared to 117 mg/kg, respectively). Copper and molybdenum concentrations were also similar in these two areas. Mean copper, lead, manganese, and silver concentrations were greatest in the Soil 4A1 soils.

Figure 7-19 compares the mean concentrations for Soil Area 4A2 to those in the reference areas. Mean concentrations of barium, boron, manganese, and zinc were greatest in soils collected from the above the mine site reference area. Mean chromium, copper, lead, molybdenum, thallium, and vanadium concentrations were greatest in the samples from the rock piles. Mean selenium concentrations were similar in all three areas.

Figure 7-20 compares the mean concentrations for Soil Area 4A3 to those in the reference areas. Soil Area 4A3 soils had mean concentrations of barium, boron, lead, selenium, and zinc and were greatest in soils collected from the above the mine site reference area. Mean chromium, copper, molybdenum, and vanadium concentrations were greatest in soils from the rock piles. Mean concentrations of manganese and nickel in the rock pile soils and the above the mine site reference were similar.

Soils Exposure Area	Metal Analytes Exceeding Ecological SLC in Mine Site Soils and Reference Soils		
	Mine Site Soils (0 to 24 inch)	Above Mine Site Reference	Cabresto Creek Reference
Soil 1 – Mill Site	B, Pb, Mn, Mo, V, Cd, Cr, Cu, Ni, Se, Zn	B, Pb, Mn, Mo, V Ba, Cr, Se, Zn	B, Pb, Mn, Mo, V
Soil 2 – Administrative Building, M&E	B, Pb, Mn, Mo, V, Ba, Cd, Cr, Cu, Ni, Se, Zn		
Soil 3 – Mine Site Soils	B, Pb, Mn, Mo, V, Sb, Cr, Ni, Se, Ag, Zn		
Soil 4A1 – Capulin, Goathill N and S Rock Piles	B, Pb, Mn, Mo, V, Cd, Cr, Cu, Se, Ag, Zn		
Soil 4A2 – Sugar Shack S, W, Mid & Sulphur Gulch Rock Piles	B, Pb, Mn, Mo, V Cd, Cr, Cu, Se, Th, Zn		
Soil 4A3 – Sulphur Gulch N & Blind Gulch Rock Piles	B, Pb, Mn, Mo, V Cd, Cr, Cu, Hg, Ni, Se, Zn		
Soil 5 – Spring Gulch Rock Pile & Truck Shop Slice	B, Pb, Mn, Mo, V, Cd, Cr, Co, Cu, Ni, Se, Ag, Zn		
Soil 6 – Open Pit	B, Pb, Mn, Mo V, Cd, Cr, Cu, Ni, Se, Th, Zn		

Soil Area 5 had mean concentrations of barium, boron, selenium, and zinc that were greatest in soils collected from the above the mine site reference area (Figure 7-21). Mean cobalt, lead, nickel, and silver concentrations in the rock pile soils and the above the mine site soils were similar. Mean concentrations of chromium, copper, manganese, molybdenum, and vanadium had greatest concentrations in the rock pile soils.

Figure 7-22 compares the mean concentrations for Soil Area 6. Mean concentrations of barium, boron, and selenium were greatest in soils collected from the above mine site reference area. Mean concentrations of chromium, lead, manganese, molybdenum, thallium, vanadium, and zinc were greatest in the open pit soils. Mean cobalt and nickel concentrations in the open pit soils and the above mine site reference soils were similar.

7.11.2 Soil Area 7 - Mine Site Scars and Reference Area

Mine site scars and reference scars were not analyzed for organic compounds.

The table below lists the analytes that exceeded the ecological or human health SLC in the mine site scar samples and the reference scar samples. Arsenic and iron exceeded the human health SLC in the 0 to 6 inch samples from both the mine scars and reference samples. All samples from the mine site and the reference area exceeded the arsenic SLC of 0.39 mg/kg. Eight of the reference soil samples and four of the mine scar samples exceeded the iron SLC of 23,000 mg/kg.

For the 0 to 24 inch samples, boron, chromium, lead, manganese, molybdenum, selenium, and vanadium exceeded the SLC in at least one mine site scar and reference scar sample. Copper also exceeded the SLC in the mine site scar samples, and barium and silver exceeded the SLC in the reference samples. All mine scar samples had lead (15 mg/kg) and vanadium (2 mg/kg) concentrations that exceeded the SLC. Molybdenum (2 mg/kg) concentrations exceeded the SLC in all but one sample. Boron (0.5 mg/kg) exceeded the SLC in seven samples, and chromium (7.9 mg/kg), manganese (152 mg/kg), and selenium (1 mg/kg) exceeded the SLC in three samples. One sample contained copper (54 mg/kg) concentrations that exceeded the SLC.

All 0 to 24 inch reference soil samples contained lead (SLC = 15 mg/kg), molybdenum (2 mg/kg), and vanadium (2 mg/kg) concentrations that were above the SLC. Chromium (7.9 mg/kg) and manganese (152 mg/kg) exceeded the SLC in 60 percent of reference scar samples. Barium (330 mg/kg) and boron (0.5 mg/kg) exceeded the SLC in 40 percent and 30 percent, respectively. Selenium (1 mg/kg) exceeded the SLC in four samples and one sample had a silver (2 mg/kg) concentration that exceeded the SLC.

SLC (Sample Depth, inches)	Metal Analytes Exceeding Human Health and Chronic Ecological SLC in Mine Site Scars and Reference Scars	
	Mine Site Scars	Reference Scars
Human Health (0 to 6)	As, Fe	As, Fe
Ecological (0 to 24)	B, Cr, Cu, Pb, Mn, Mo, Se, V	Ba, B, Cr, Pb, Mn, Mo, Se, Ag, V

Figure 7-23 compares the mean concentrations of analytes in the 0 to 6 inch mine site scar samples that exceed the human health SLC to the mean concentrations in the reference scar samples. Mean concentrations of arsenic in the mine site scars and reference scars were similar. Mean concentration of arsenic in the mine site scar was 6.2 mg/kg compared to a mean concentration of 8.6 mg/kg in the reference samples. The mean iron concentration in the mine samples was 21,500 mg/kg compared to a mean concentration of 30,100 mg/kg in the reference samples.

Figure 7-24 compares the mean concentrations of analytes in the 0 to 24 inch mine site scar samples that exceeded the ecological SLC to the mean concentrations in reference scar samples.

Mean concentrations of barium, chromium, manganese, selenium, and vanadium were greater in the reference scars than in the mine site scars. Mean copper and lead concentrations were greater in the mine site scars. There were too few detectable results for boron and silver in the reference scar samples to calculate a mean concentration.

7.11.3 Soil Area 14 - Tailings Facility Soils and Reference Areas

Soils were collected from the following areas of the tailings facility: Soils Area 11 - Dry/maintenance Area, Soil Area 12 - IX Plant, Soil Area 13 - Pope Lake, Soil Area 14 - Tailings Soils, and Soil Area 15 - Windblown Tailings Area. The tailings soil sample locations were randomly selected whereas all the other sample locations were biased. Results of samples from biased locations are not discussed in this section.

This section compares the 0 to 6 inch and 0 to 24 inch soils collected at the tailings facility to those collected at Cater Ranch. Tailings soils were not analyzed for organic compounds. Cater Ranch soils were analyzed for dioxins-dibenzofurans and pesticides-PCBs. Cater Ranch soils had concentrations of dioxins-dibenzofurans below the human health SLC. There are no SLC for the pesticides-PCBs.

The table below lists all the metal analytes that exceeded the SLC in at least one sample from either depth for samples collected from tailings soils and Cater Ranch. All 0 to 6 inch samples from both the tailings facility and Cater Ranch contained arsenic concentrations above the 0.39 mg/kg SLC for arsenic. Concentrations of all other metal analytes were below the human health SLC.

All the 0 to 24 inch tailings soil and Cater Ranch soil samples contained concentrations of chromium (SLC = 7.9 mg/kg), manganese (152 mg/kg), and vanadium (2 mg/kg) above the ecological SLC. All but one boron sample from the tailings had concentrations above the SLC. Six of the Cater Ranch samples had detectable boron and all concentrations exceeded the SLC of 0.5 mg/kg. All tailings facility soils also had concentrations of lead (15 mg/kg) and molybdenum (2 mg/kg) that exceeded the SLC. One tailings facility soil had a barium concentration (330 mg/kg) above the SLC, five samples had cadmium (0.4 mg/kg) above the SLC, eight samples had copper (54 mg/kg) above the SLC, and four samples had zinc (120 mg/kg) that was above the SLC.

The mean arsenic concentration in the 0 to 6 inch soils from the tailings facility was 4.2 mg/kg compared to 2.1 mg/kg in the Cater Ranch 0 to 6 inch soils. Comparison of the mean values of the metal analytes that exceeded the ecological SLC are shown in Figure 7-25. Mean concentrations of boron in Cater Ranch soils exceeded those in the tailings facility soils. Mean concentrations of barium were similar in the two areas. Mean concentrations of the other metals were greater in the tailings facility soils than in Cater Ranch soils. The greatest difference was in molybdenum, which had a mean concentration of 102 mg/kg in the tailings facility soils compared to a mean of 0.22 mg/kg in Cater Ranch soils.

SLC (Sample Depth, inches)	Metal Analytes Exceeding Human Health and Chronic Ecological SLC in Tailings Soils and Cater Ranch Reference Soils	
	Tailings Soils	Cater Ranch Reference
Human Health (0 to 6)	As	As
Ecological (0 to 24)	B, Cr, Mn, V, Ba, Cd, Cu, Pb, Mo, Zn	B, Cr, Mn, V

7.11.4 Soil Area 9 – Mine Site Riparian Soils and Reference Areas

Soil Area 9 consists of soils collected in the riparian areas of the Red River along the mine site. The reference for this exposure area include riparian soils collected along the Red River above the mine site and riparian soils collected along upper Cabresto Creek.

No explosives, PCBs, SVOCs, or VOCs were detected in the 0 to 6 inch or 0 to 24 inch riparian soils along the mine site. Soils collected from the reference areas were not analyzed for organic compounds.

The metal analytes that exceeded the human health and ecological SLC in soils from the mine site riparian area and the reference areas are listed in the table below. The 0 to 6 inch mine site riparian soils and the reference soils had arsenic concentrations that exceeded the human health SLC of 0.39 mg/kg. Mine site riparian soils and soils collected above the mine site also had iron concentrations that exceeded the human health SLC of 23,000 mg/kg.

For the 0 to 24 inch soils, concentrations of boron (SLC = 0.5 mg/kg), chromium (7.9 mg/kg), lead (15 mg/kg), manganese (152 mg/kg), selenium (1 mg/kg), and vanadium (2 mg/kg) exceeded the SLC in soils along the mine site and in both reference areas. Soils from along the mine site and the reference riparian area above the mine site also contained copper (54 mg/kg) and molybdenum (2 mg/kg) concentrations above the SLC. Zinc concentrations exceeded the SLC (120 mg/kg) in soils from along the mine site and the upper Cabresto Creek soils. Concentrations of barium (330 mg/kg) and cadmium (0.4 mg/kg) exceeded the SLC only in the soils collected along the mine site.

SLC (Sample Depth, inches)	Metal Analytes Exceeding Human Health and Ecological SLC in Mine Site Riparian Soils and Reference Soils		
	Mine Riparian (Soil 9)	Above the Mine Site Reference Riparian	Upper Cabresto Creek Reference Riparian
Human Health (0 to 6)	As, Fe	As, Fe	As
Ecological (0 to 24)	Ba, B, Cd, Cr, Cu, Pb, Mn, Mo, Se, V, Zn	B, Cr, Cu, Pb, Mn, Mo, Se, V	B, Cr, Pb, Mn, Se, V, Zn

The mean values for analytes that exceeded the SLC in each sampling area are compared in Figures 7-26 and 7-27. Figure 7-26 shows that mean arsenic concentrations in the 0 to 6 inch samples were similar in all three areas, but were greatest in the riparian area along the mine site. Mean iron concentrations were greater in soil samples collected from the reference area above the mine site than in the mine site riparian area or the upper Cabresto Creek reference area.

Figure 7-27 compares the mean concentrations in the 0 to 24 inch soils. Mean concentrations of barium, cadmium, copper, lead, manganese, molybdenum, selenium, and zinc are greatest in the mine site riparian area. The greatest mean chromium and vanadium concentrations were found in the above the mine site reference area.

7.11.5 Soil Area 16 - Tailings Facility Riparian Soils and Reference

No PCBs or SVOCs were detected in the 0 to 6 inch and 0 to 24 inch soils from the tailings facility riparian soils. One VOC was detected in both the 0 to 6 inch and 0 to 24 inch sample at one location. Lower Cabresto Creek soils were not analyzed for organic compounds.

The table below shows that arsenic exceeded the human health SLC in the tailings riparian area and the lower Cabresto Creek reference riparian area. Iron exceeded the SLC only in the tailings riparian area.

All 0 to 24 inch soils from the tailings riparian area contained chromium (SLC = 7.9 mg/kg), lead (15 mg/kg), manganese (152 mg/kg), molybdenum (2 mg/kg), and vanadium (2 mg/kg) that exceeded the ecological SLC. One sample contained barium (330 mg/kg) concentrations that exceeded the SLC. Boron (0.5 mg/kg), cadmium (0.4 mg/kg), and copper (54 mg/kg) concentrations exceeded the SLC in two samples. Selenium (1 mg/kg) exceeded the SLC in one sample and zinc (120 mg/kg) exceeded the SLC in five samples.

Figure 7-28 shows the mean arsenic and iron values for the tailings riparian area and the lower Cabresto Creek reference riparian area. Mean arsenic concentrations from the two areas were nearly identical (3.1 mg/kg compared to 3.2 mg/kg). The mean iron concentration was greater in the tailings riparian soils (20,456 mg/kg) than in the reference area (15,906 mg/kg).

SLC (Sample Depth, inches)	Metal Analytes Exceeding Human Health and Ecological SLC in Tailings Riparian Soils and Reference Soils	
	Tailings Riparian (Soil 16)	Lower Cabresto Creek Reference Riparian
Human Health (0 to 6)	As, Fe	As
Ecological (0 to 24)	Ba, B, Cd, Cr, Cu, Pb, Mn, Mo, Se, V, Zn	B, Cr, Pb, Mn, Mo, Se, V

Figure 7-29 compares the mean concentrations of the metal analytes that exceed the ecological SLC in the two areas. Mean concentrations of chromium, selenium, and vanadium were similar

in both areas. Mean concentrations for all other analytes plotted in the graph, namely barium, boron, cadmium, copper, lead, manganese, molybdenum, and zinc were greater in the tailings riparian soils.

7.11.6 Tailings

Samples of tailings were also collected at the random location in Soil Area 14. These samples were collected to characterize the tailings. There are no SLC for the tailings, and there is no reference area.

7.11.7 South of Tailings Soils and Reference Area

Forty-two soil samples were collected south of the tailings facility. These samples were collected from depths of 0 to 6 inches to be compared to the EPA Region 6 human health SLC. The reference area for these samples is the 0 to 6 inch samples collected from Cater Ranch.

The table below lists the metals that exceeded the human health SLC in soils collected south of the tailings and Cater Ranch.

Arsenic exceeded the SLC in soils collected south of the tailings and in Cater Ranch 0 to 6 inch soils. Iron exceeded the 23,000 mg/kg SLC in five soils south of the tailings, and molybdenum exceeded the 390 mg/kg SLC in one sample from south of the tailings.

SLC (Sample Depth)	Metal Analytes Exceeding Human Health SLC in Soils South of the Tailings Facility and Cater Ranch Reference Soils	
	Soils South of Tailings	Cater Ranch Reference
Human Health (0 to 6 inches)	As, Fe, Mo	As

Figure 7-30 compares the mean concentrations of arsenic, iron, and molybdenum in soil collected south of the tailings facility to those collected at Cater Ranch. Mean concentrations of arsenic and iron in both areas are similar. The mean molybdenum concentration in the south of tailings soils was 39 mg/kg compared to a mean of 0.22 mg/kg in the reference soils.

7.11.8 Synthetic Precipitation Leaching Procedure

The SPLP was conducted on 46 samples collected from the mine site, tailings area, and reference areas. The soluble percentage of each analyte was determined by comparing the concentration extracted in the leach procedure to the concentration in the corresponding solid samples. However, this calculation does not provide the "total" soluble percentage because a strong acid digestion was used on the solid samples rather than a total digestion (aqua regia). Strong acid digestions do not solublize silicates. The result is that metal particles in the soil, which are

associated with or encapsulated in silicates, would not dissolve during the digestion and, therefore, would not be accounted for in the analysis of the solid material.

The results are presented in Figures 7-31 to 7-50. Where concentrations were non-detect, no vertical bar is plotted. Where concentrations in either the solid soil sample or the SPLP leachate were non-detect, the bar is white. In these cases, the reporting limit was used in the calculation.

No graph is provided for mercury because all leachate concentrations of this analyte were non-detect. Figures 7-31 to 7-41 present the percentage of soluble aluminum, arsenic, chromium, cobalt, copper, iron, lead, manganese, nickel, silver, and zinc in the soil samples. The soluble percentage of these analytes in all samples was below 10 percent, with one exception. That exception was the 0 to 6 inch sample collected at MSS3-1, which had 13 percent, 30 percent, and 19 percent soluble concentrations of aluminum, chromium, and zinc, respectively. Leachate concentrations were generally greatest in the mine site soils and mine reference soils. Soluble metal concentrations in riparian and reference riparian soils were also similar to one another. Analytes in the reference samples collected in Cater Ranch were also generally more soluble than those in the tailings soils. Concentrations of all analytes in the windblown reference soils were similar to those in the windblown samples.

Results for antimony are shown in Figure 7-42. Only seven samples had detectable concentrations of antimony in either the solid sample or the leachate. None of the samples had detectable antimony concentrations in either the solid and leachate samples.

Figure 7-43 shows that cadmium was not detected in both the solid samples and leachates from mine site reference samples, windblown and windblown reference samples, and samples collected from Cater Ranch. Leachable concentrations from all other areas were below 10 percent.

Figure 7-44 shows that soluble molybdenum concentrations were generally below 10 percent except for samples collected from the tailings, tailings soils, and from Cater Ranch. Molybdenum concentrations in the Cater Ranch soils and leachates were much lower than those in the tailings and tailings soils, but a similar proportion of molybdenum was soluble in these three groups of samples.

Soluble percentages of selenium are shown in Figure 7-45. Soluble selenium concentrations were generally below 10 percent, with the exception of two samples, MSS3-1 (0 to 24 inch) and MSS3-2 (0 to 6 inch), which had soluble percentages of 31 percent and 11 percent. The selenium concentrations in the windblown and reference windblown samples soil and leachate samples were all non-detect.

Figure 7-46 shows the soluble percentages of boron for each sample. Note that, unlike other graphs presented here, this graph plots to 600 percent, and that four samples (MSS3-1 [0 to 24 inch], MSS3-4 [0 to 6 inch and 0 to 24 inch], TSS14-5 [0 to 24 inch]) have soluble percentages of boron that were above 100 percent. These four samples had higher concentrations in the leachates than in the associated solid samples. These results reflect the heterogeneity of the boron distribution in the soils such that the sub-sample taken for the SPLP contained a larger

boron concentration than the sub-sample for metals analysis. All other samples had soluble percentages of boron below 100 percent.

The leachate concentrations of chloride, fluoride, and sulfate are higher than concentrations detected in the solid samples. The higher leachate concentrations result from the different analytical methods used for the different sample media. To determine chloride, fluoride, and sulfate concentrations in soil samples, one part deionized water (pH = 7) is combined with one part soil, by weight. The sample is shaken vigorously for one minute then allowed to settle. The liquid portion is decanted and filtered, if necessary, prior to analysis. In contrast, for the SPLP, the soil sub-samples are mixed with a solution of pH 5 and agitated for approximately 18 hours. The lower pH solution and preparation time extracts more of these analytes than the analytical method used for the solid samples. Therefore, the concentrations of chloride, fluoride, and sulfate in the leachates are presented rather than the soluble percentages (Figures 7-47 to 7-49). Soluble concentrations were similar in all samples. Concentrations of chloride and sulfate, in contrast, were bimodal, with most samples having concentrations below approximately 23 mg/L and a smaller group of samples have concentrations ranging from 43 mg/L to 500 mg/L.

The SPLP was conducted on bulk rock piles samples from sites MSS4A1-1, MSS4A2-1, MSS4A2-1, and MSS4A3-1 rather than a sieved fraction. These bulk samples were not analyzed for metals concentrations. The leachate results for these four samples are presented in Figure 7-50. Concentrations of arsenic, molybdenum, silver, and thallium were non-detect in all four sample leachates. The fluoride results for samples MSS4A1-1 and MSS4A2-1 were rejected. Antimony was detected at the detection limit for two samples and non-detect for the other two samples. Concentrations of all other metals were similar in the four samples.

SECTION 7

SOILS

TABLES

Table 7-1
Soil 0-6 inches Random
RI/FS Reference Scars
Summary of Results

Analyte	Sample Fraction	Units	Total Number of Samples	Percent Detects (%)	SLC	SLC Value	Percent Above SLC	Min RL for ND	Max RL for ND	Min Value	Max Value	Mean Value	Median Value
Inorganics													
Cation-Exchange Capacity	T	meq/100g	10	100	No SLC					7.8	16.7	12.9	13.5
Chloride	T	mg/kg-dry	10	50	No SLC			2.10	2.30	ND	12.9	2.9	1.8
Fluoride	T	mg/kg-dry	7	100	HH Soil (HQ=1)	3700	0			0.12	0.17	0.14	0.14
Nitrate	T	mg/kg-dry	10	0	No SLC			2.10	2.30	ND	ND		
Organic Soils	T	%	9	100	No SLC					2.4	5	3.8	4.2
pH	T	SU	10	100	No SLC					2.9	5.5	3.8	3.5
Phosphorus	T	mg/kg-dry	10	100	No SLC					39.1	2030	784	770
Sodium Absorption Ratio	T	ratio	10	60	No SLC			0.02	0.03	ND	0.75	0.12	0.02
Solids, Percent	T	%	10	100	No SLC					87.6	96.3	90.9	90.5
Specific Conductance	T	umhos/cm	10	100	No SLC					15.8	3460	1510	1280
Sulfate	T	mg/kg-dry	10	90	No SLC			27.70	27.70	ND	4840	1200	825
Total Kjeldahl Nitrogen	T	mg/kg-dry	10	100	No SLC					29.1	310	113	68.7
Total Organic Carbon	T	mg/kg-dry	10	60	No SLC			104.00	111.00	ND	14500	2100	209
Metals													
Aluminum	T	mg/kg-dry	10	100	HH Soil (HQ=1)	76000	0			3760	9660	6470	6630
Antimony	T	mg/kg-dry	10	10	HH Soil (HQ=1)	31	0	0.16	0.18	ND	0.14		
Arsenic	T	mg/kg-dry	10	100	HH Soil (HQ=1)	0.39	100			3.6	22.9	8.6	7.7
Barium	T	mg/kg-dry	10	100	HH Soil (HQ=1)	5500	0			154	611	319	244
Beryllium	T	mg/kg-dry	10	100	HH Soil (HQ=1)	150	0			0.15	0.92	0.32	0.21
Boron	T	mg/kg-dry	10	30	HH Soil (HQ=1)	5500	0	0.39	0.45	ND	10		
Cadmium	T	mg/kg-dry	10	40	HH Soil (HQ=1)	39	0	0.02	0.06	ND	0.24		
Calcium	T	mg/kg-dry	10	100	No SLC					352	25000	6950	3370
Chromium	T	mg/kg-dry	10	100	HH Soil (HQ=1)	210	0			5.1	32.3	15.7	14.1
Cobalt	T	mg/kg-dry	10	100	HH Soil (HQ=1)	900	0			0.52	9.1	2.9	2.3
Copper	T	mg/kg-dry	10	100	HH Soil (HQ=1)	2900	0			6.9	35.1	18.2	20.3
Iron	T	mg/kg-dry	10	100	HH Soil (HQ=1)	23000	80			18400	42200	30100	32500
Lead	T	mg/kg-dry	10	100	HH Soil (HQ=1)	400	0			30	253	94.6	70.2
Magnesium	T	mg/kg-dry	10	100	No SLC					1920	7150	4120	3800
Manganese	T	mg/kg-dry	10	100	HH Soil (HQ=1)	3200	0			74.4	366	212	182
Mercury	T	mg/kg-dry	10	10	HH Soil (HQ=1)	23	0	0.02	0.02	ND	0.039		
Molybdenum	T	mg/kg-dry	10	100	HH Soil (HQ=1)	390	0			2.7	79.6	16.6	8

"No SLC" indicates that there is not a Screening Level Criterion for this medium specified for the RI/FS.
"HH Soil (HQ=1)" EPA Region 6 RBSLs Human Health Residential Soil (HQ=1)
"Eco Soil" EPA Region 6 Tier 1-3 RBSLs Ecological Soil
Median Value determined using 1/2 the Reporting Limit value for Non-Detects if greater than 50% of the values were detected.
Mean Value calculated using 1/2 the Reporting Limit for Non-Detects if greater than 50% of the values were detected.

T = Total Fraction
D = Filtered Fraction (0.45 micron filter)
A = Filtered Fraction (0.1 micron filter)
ND = Non-Detected Value

Table 7-1
Soil 0-6 inches Random
RI/FS Reference Scars
Summary of Results

Analyte	Sample Fraction	Units	Total Number of Samples	Percent Detects (%)	SLC	SLC Value	Percent Above SLC	Min RL for ND	Max RL for ND	Min Value	Max Value	Mean Value	Median Value
Nickel	T	mg/kg-dry	10	100	HH Soil (HQ=1)	1600	0			2.6	15.9	6.8	6.1
Potassium	T	mg/kg-dry	10	100	No SLC					1440	4010	2750	2870
Selenium	T	mg/kg-dry	10	60	HH Soil (HQ=1)	390	0	1.20	2.80	ND	7.7	1.7	1.2
Silver	T	mg/kg-dry	10	50	HH Soil (HQ=1)	390	0	0.12	0.72	ND	2.3	0.83	0.31
Sodium	T	mg/kg-dry	10	60	No SLC			53.50	347.00	ND	1100	361	162
Thallium	T	mg/kg-dry	10	100	HH Soil (HQ=1)	5.5	0			0.091	0.33	0.18	0.15
Vanadium	T	mg/kg-dry	10	100	HH Soil (HQ=1)	78	0			10.6	27	17.1	16.4
Zinc	T	mg/kg-dry	10	100	HH Soil (HQ=1)	23000	0			16.4	67	32.7	28.2

"No SLC" indicates that there is not a Screening Level Criterion for this medium specified for the RI/FS.
"HH Soil (HQ=1)" EPA Region 6 RBSLs Human Health Residential Soil (HQ=1)
"Eco Soil" EPA Region 6 Tier 1-3 RBSLs Ecological Soil
Median Value determined using 1/2 the Reporting Limit value for Non-Detects if greater than 50% of the values were detected.
Mean Value calculated using 1/2 the Reporting Limit for Non-Detects if greater than 50% of the values were detected.

T = Total Fraction
D = Filtered Fraction (0.45 micron filter)
A = Filtered Fraction (0.1 micron filter)
ND = Non-Detected Value

Table 7-2
Soil 0-24 inches Random
RI/FS Reference Scars
Summary of Results

Analyte	Sample Fraction	Units	Total Number of Samples	Percent Detects (%)	SLC	SLC Value	Percent Above SLC	Min RL for ND	Max RL for ND	Min Value	Max Value	Mean Value	Median Value
Inorganics													
Cation-Exchange Capacity	T	meq/100g	10	100	No SLC					7.3	17.4	12.4	12.4
Chloride	T	mg/kg-dry	10	20	No SLC			2.10	2.30	ND	19.4		
Fluoride	T	mg/kg-dry	6	100	No SLC					0.11	0.21	0.15	0.14
Nitrate	T	mg/kg-dry	10	0	No SLC			2.10	2.30	ND	ND		
Organic Soils	T	%	9	100	No SLC					2.2	4.9	4	3.9
pH	T	SU	10	100	No SLC					2.9	5.2	3.8	3.5
Phosphorus	T	mg/kg-dry	10	100	No SLC					165	1550	829	782
Sodium Absorption Ratio	T	ratio	10	70	No SLC			0.02	0.03	ND	0.94	0.13	0.02
Solids, Percent	T	%	10	100	No SLC					87.7	95.3	90.5	90.3
Specific Conductance	T	umhos/cm	10	100	No SLC					9.2	3870	1630	1630
Sulfate	T	mg/kg-dry	10	90	No SLC			26.60	26.60	ND	2390	986	613
Total Kjeldahl Nitrogen	T	mg/kg-dry	10	100	No SLC					26.9	244	105	86.7
Total Organic Carbon	T	mg/kg-dry	10	50	No SLC			105.00	113.00	ND	8540	1320	95.8
Metals													
Aluminum	T	mg/kg-dry	10	100	No SLC					3400	9180	6140	6120
Antimony	T	mg/kg-dry	10	10	ECO Soil	0.3	0	0.16	0.18	ND	0.13		
Arsenic	T	mg/kg-dry	10	100	ECO Soil	31	0			3.7	17.4	7.9	6.9
Barium	T	mg/kg-dry	10	100	ECO Soil	330	40			182	654	341	259
Beryllium	T	mg/kg-dry	10	100	ECO Soil	30	0			0.15	0.78	0.3	0.2
Boron	T	mg/kg-dry	10	30	ECO Soil	0.5	100	0.37	0.46	ND	10.8		
Cadmium	T	mg/kg-dry	10	40	ECO Soil	0.4	0	0.02	0.06	ND	0.24		
Calcium	T	mg/kg-dry	10	100	No SLC					276	27000	7330	3810
Chromium	T	mg/kg-dry	10	100	ECO Soil	7.9	60			4.4	35.1	14.5	11.8
Cobalt	T	mg/kg-dry	10	100	ECO Soil	32	0			0.28	5.5	2.3	2
Copper	T	mg/kg-dry	10	100	ECO Soil	54	0			6.4	34.6	17.6	18.3
Iron	T	mg/kg-dry	10	100	No SLC					16300	41700	29300	27400
Lead	T	mg/kg-dry	10	100	ECO Soil	15	100			29.8	284	99.2	64.3
Magnesium	T	mg/kg-dry	10	100	No SLC					1450	8090	3900	3290
Manganese	T	mg/kg-dry	10	100	ECO Soil	152	60			41.2	414	195	187
Mercury	T	mg/kg-dry	10	10	ECO Soil	0.1	0	0.02	0.02	ND	0.024		
Molybdenum	T	mg/kg-dry	10	100	ECO Soil	2	100			2.9	63	12.5	6.8

"No SLC" indicates that there is not a Screening Level Criterion for this medium specified for the RI/FS.
"HH Soil (HQ=1)" EPA Region 6 RBSLs Human Health Residential Soil (HQ=1)
"Eco Soil" EPA Region 6 Tier 1-3 RBSLs Ecological Soil
Median Value determined using 1/2 the Reporting Limit value for Non-Detects if greater than 50% of the values were detected.
Mean Value calculated using 1/2 the Reporting Limit for Non-Detects if greater than 50% of the values were detected.

T = Total Fraction
D = Filtered Fraction (0.45 micron filter)
A = Filtered Fraction (0.1 micron filter)
ND = Non-Detected Value

Table 7-2
Soil 0-24 inches Random
RI/FS Reference Scars
Summary of Results

Analyte	Sample Fraction	Units	Total Number of Samples	Percent Detects (%)	SLC	SLC Value	Percent Above SLC	Min RL for ND	Max RL for ND	Min Value	Max Value	Mean Value	Median Value
Nickel	T	mg/kg-dry	10	100	ECO Soil	48	0			2.2	11.9	5.7	5.2
Potassium	T	mg/kg-dry	10	100	No SLC					1530	3650	2770	3060
Selenium	T	mg/kg-dry	10	60	ECO Soil	1	66.7	1.20	2.90	ND	6.3	1.7	1.2
Silver	T	mg/kg-dry	10	30	ECO Soil	2	33.3	0.11	0.93	ND	2.8		
Sodium	T	mg/kg-dry	10	60	No SLC			50.20	357.00	ND	994	337	153
Thallium	T	mg/kg-dry	10	100	ECO Soil	1	0			0.095	0.38	0.19	0.18
Vanadium	T	mg/kg-dry	10	100	ECO Soil	2	100			7.4	26.8	16.4	15.2
Zinc	T	mg/kg-dry	10	100	ECO Soil	120	0			15.2	65.7	30.8	22.7

"No SLC" indicates that there is not a Screening Level Criterion for this medium specified for the RI/FS.
"HH Soil (HQ=1)" EPA Region 6 RBSLs Human Health Residential Soil (HQ=1)
"Eco Soil" EPA Region 6 Tier 1-3 RBSLs Ecological Soil
Median Value determined using 1/2 the Reporting Limit value for Non-Detects if greater than 50% of the values were detected.
Mean Value calculated using 1/2 the Reporting Limit for Non-Detects if greater than 50% of the values were detected.

T = Total Fraction
D = Filtered Fraction (0.45 micron filter)
A = Filtered Fraction (0.1 micron filter)
ND = Non-Detected Value

Table 7-3
Soil 0-6 inches Random
RI/FS Reference for Mine Site
Summary of Results

Analyte	Sample Fraction	Units	Total Number of Samples	Percent Detects (%)	SLC	SLC Value	Percent Above SLC	Min RL for ND	Max RL for ND	Min Value	Max Value	Mean Value	Median Value
Dibenzodioxins-Dibenzofurans													
1,2,3,4,6,7,8-Heptachlorodibenzofuran	T	pg/g	4	0	HH Soil (HQ=1)	1000	0	0.13	0.44	ND	ND		
1,2,3,4,6,7,8-Heptachlorodibenzo-p-dioxin	T	pg/g	4	0	HH Soil (HQ=1)	1000	0	0.42	1.70	ND	ND		
1,2,3,4,7,8,9-Heptachlorodibenzofuran	T	pg/g	4	0	HH Soil (HQ=1)	1000	0	0.13	0.54	ND	ND		
1,2,3,4,7,8-Hexachlorodibenzofuran	T	pg/g	4	0	HH Soil (HQ=1)	1000	0	0.09	0.17	ND	ND		
1,2,3,4,7,8-hexachlorodibenzo-p-dioxin	T	pg/g	4	0	HH Soil (HQ=1)	1000	0	0.13	0.41	ND	ND		
1,2,3,6,7,8-Hexachlorodibenzofuran	T	pg/g	4	0	HH Soil (HQ=1)	1000	0	0.07	0.16	ND	ND		
1,2,3,6,7,8-Hexachlorodibenzo-p-dioxin	T	pg/g	4	0	HH Soil (HQ=1)	1000	0	0.12	0.38	ND	ND		
1,2,3,7,8,9-Hexachlorodibenzofuran	T	pg/g	4	0	HH Soil (HQ=1)	1000	0	0.09	0.20	ND	ND		
1,2,3,7,8,9-Hexachlorodibenzo-p-dioxin	T	pg/g	4	0	HH Soil (HQ=1)	1000	0	0.13	0.40	ND	ND		
1,2,3,7,8-Pentachlorodibenzo-p-dioxin	T	pg/g	4	0	HH Soil (HQ=1)	1000	0	0.14	0.28	ND	ND		
2,3,4,7,8-Pentachlorodibenzofuran	T	pg/g	4	0	HH Soil (HQ=1)	1000	0	0.11	0.23	ND	ND		
2,3,7,8-Tetrachlorodibenzofuran	T	pg/g	4	0	HH Soil (HQ=1)	1000	0	0.22	0.50	ND	ND		
2,3,7,8-Tetrachlorodibenzo-p-dioxin	T	pg/g	4	0	HH Soil (HQ=1)	1000	0	0.34	0.77	ND	ND		
Inorganics													
Cation-Exchange Capacity	T	meq/100g	10	100	No SLC					13.8	28.6	19.3	18.2
Chloride	T	mg/kg-dry	10	40	No SLC			2.30	2.90	ND	3.2		
Fluoride	T	mg/kg-dry	6	100	HH Soil (HQ=1)	3700	0			0.11	0.19	0.16	0.16
Nitrate	T	mg/kg-dry	10	30	No SLC			2.30	2.90	ND	10.3		
Organic Soils	T	%	5	100	No SLC					4.1	11.5	6.2	5.3
pH	T	SU	10	100	No SLC					4.8	6.9	6	6.2
Phosphorus	T	mg/kg-dry	10	100	No SLC					272	1350	767	701
Sodium Absorption Ratio	T	ratio	10	80	No SLC			0.06	0.12	ND	0.48	0.19	0.17
Solids, Percent	T	%	10	100	No SLC					69.6	95.8	85	86.3
Specific Conductance	T	umhos/cm	10	100	No SLC					16.9	190	78.9	64.3
Sulfate	T	mg/kg-dry	10	90	No SLC			2.40	2.40	ND	59	13.9	8.7
Total Kjeldahl Nitrogen	T	mg/kg-dry	10	100	No SLC					176	2100	819	773
Total Organic Carbon	T	mg/kg-dry	10	100	No SLC					2010	107000	28800	22000
Metals													
Aluminum	T	mg/kg-dry	10	100	HH Soil (HQ=1)	76000	0			4370	14600	7860	7710
Antimony	T	mg/kg-dry	10	0	HH Soil (HQ=1)	31	0	0.14	0.21	ND	ND		
Arsenic	T	mg/kg-dry	10	100	HH Soil (HQ=1)	0.39	100			1.4	7.9	4.9	5

"No SLC" indicates that there is not a Screening Level Criterion for this medium specified for the RI/FS.
"HH Soil (HQ=1)" EPA Region 6 RBSLs Human Health Residential Soil (HQ=1)
"Eco Soil" EPA Region 6 Tier 1-3 RBSLs Ecological Soil
Median Value determined using 1/2 the Reporting Limit value for Non-Detects if greater than 50% of the values were detected.
Mean Value calculated using 1/2 the Reporting Limit for Non-Detects if greater than 50% of the values were detected.

T = Total Fraction
D = Filtered Fraction (0.45 micron filter)
A = Filtered Fraction (0.1 micron filter)
ND = Non-Detected Value

Table 7-3
Soil 0-6 inches Random
RI/FS Reference for Mine Site
Summary of Results

Analyte	Sample Fraction	Units	Total Number of Samples	Percent Detects (%)	SLC	SLC Value	Percent Above SLC	Min RL for ND	Max RL for ND	Min Value	Max Value	Mean Value	Median Value
Barium	T	mg/kg-dry	10	100	HH Soil (HQ=1)	5500	0			68.8	482	238	230
Beryllium	T	mg/kg-dry	10	100	HH Soil (HQ=1)	150	0			0.21	2.6	0.65	0.42
Boron	T	mg/kg-dry	10	70	HH Soil (HQ=1)	5500	0	0.44	6.90	ND	21.2	8.2	7.4
Cadmium	T	mg/kg-dry	10	10	HH Soil (HQ=1)	39	0	0.02	0.07	ND	0.39		
Calcium	T	mg/kg-dry	10	100	No SLC					717	8050	3000	2570
Chromium	T	mg/kg-dry	10	100	HH Soil (HQ=1)	210	0			3.7	44.3	11.2	8.1
Cobalt	T	mg/kg-dry	10	100	HH Soil (HQ=1)	900	0			1.5	17.6	5.8	3.4
Copper	T	mg/kg-dry	10	100	HH Soil (HQ=1)	2900	0			3	76.4	21.2	14.7
Iron	T	mg/kg-dry	10	100	HH Soil (HQ=1)	23000	40			4640	65300	22600	19600
Lead	T	mg/kg-dry	10	100	HH Soil (HQ=1)	400	0			8.6	140	48.8	34.9
Magnesium	T	mg/kg-dry	10	100	No SLC					775	7650	3000	2250
Manganese	T	mg/kg-dry	10	100	HH Soil (HQ=1)	3200	0			64.4	901	327	282
Mercury	T	mg/kg-dry	10	30	HH Soil (HQ=1)	23	0	0.02	0.02	ND	0.066		
Molybdenum	T	mg/kg-dry	10	100	HH Soil (HQ=1)	390	0			0.82	10.2	5.3	5.4
Nickel	T	mg/kg-dry	10	100	HH Soil (HQ=1)	1600	0			1.9	68.8	15.5	7
Potassium	T	mg/kg-dry	10	100	No SLC					1220	3370	2210	2290
Selenium	T	mg/kg-dry	10	50	HH Soil (HQ=1)	390	0	0.20	1.20	ND	3.3	0.86	0.67
Silver	T	mg/kg-dry	10	40	HH Soil (HQ=1)	390	0	0.12	0.52	ND	1.6		
Sodium	T	mg/kg-dry	10	30	No SLC			47.50	149.00	ND	269		
Thallium	T	mg/kg-dry	10	100	HH Soil (HQ=1)	5.5	0			0.09	0.19	0.13	0.12
Vanadium	T	mg/kg-dry	10	100	HH Soil (HQ=1)	78	0			7.1	38.1	15.3	14
Zinc	T	mg/kg-dry	10	100	HH Soil (HQ=1)	23000	0			17.1	460	84.6	39.6
Pesticides-PCBs													
a-Chlordane	T	mg/kg-dry	4	0	No SLC			0.00	0.00	ND	ND		
Aldrin	T	mg/kg-dry	4	0	No SLC			0.00	0.00	ND	ND		
alpha-Hexachlorocyclohexane	T	mg/kg-dry	4	0	No SLC			0.00	0.00	ND	ND		
beta-Hexachlorocyclohexane	T	mg/kg-dry	4	0	No SLC			0.00	0.00	ND	ND		
delta-Hexachlorocyclohexane	T	mg/kg-dry	4	0	No SLC			0.00	0.00	ND	ND		
Dichlorodiphenyldichloroethane	T	mg/kg-dry	4	0	No SLC			0.00	0.00	ND	ND		
Dichlorodiphenyldichloroethylene	T	mg/kg-dry	4	0	No SLC			0.00	0.00	ND	ND		
Dichlorodiphenyltrichloroethane	T	mg/kg-dry	4	25	No SLC			0.00	0.00	ND	0.0047		
Dieldrin	T	mg/kg-dry	4	0	No SLC			0.00	0.00	ND	ND		

"No SLC" indicates that there is not a Screening Level Criterion for this medium specified for the RI/FS.
"HH Soil (HQ=1)" EPA Region 6 RBSLs Human Health Residential Soil (HQ=1)
"Eco Soil" EPA Region 6 Tier 1-3 RBSLs Ecological Soil
Median Value determined using 1/2 the Reporting Limit value for Non-Detects if greater than 50% of the values were detected.
Mean Value calculated using 1/2 the Reporting Limit for Non-Detects if greater than 50% of the values were detected.

T = Total Fraction
D = Filtered Fraction (0.45 micron filter)
A = Filtered Fraction (0.1 micron filter)
ND = Non-Detected Value

Table 7-3
Soil 0-6 inches Random
RI/FS Reference for Mine Site
Summary of Results

Analyte	Sample Fraction	Units	Total Number of Samples	Percent Detects (%)	SLC	SLC Value	Percent Above SLC	Min RL for ND	Max RL for ND	Min Value	Max Value	Mean Value	Median Value
Endosulfan I	T	mg/kg-dry	4	0	No SLC			0.00	0.00	ND	ND		
Endosulfan II	T	mg/kg-dry	4	0	No SLC			0.00	0.00	ND	ND		
Endosulfan sulfate	T	mg/kg-dry	4	0	No SLC			0.00	0.00	ND	ND		
Endrin	T	mg/kg-dry	4	0	No SLC			0.00	0.00	ND	ND		
Endrin aldehyde	T	mg/kg-dry	4	0	No SLC			0.00	0.00	ND	ND		
Endrin ketone	T	mg/kg-dry	4	0	No SLC			0.00	0.00	ND	ND		
g-Chlordane	T	mg/kg-dry	4	0	No SLC			0.00	0.00	ND	ND		
Heptachlor	T	mg/kg-dry	4	0	No SLC			0.00	0.00	ND	ND		
Heptachlor epoxide	T	mg/kg-dry	4	0	No SLC			0.00	0.00	ND	ND		
Lindane	T	mg/kg-dry	4	0	No SLC			0.00	0.00	ND	ND		
Methoxychlor	T	mg/kg-dry	4	0	No SLC			0.02	0.02	ND	ND		
Toxaphene	T	mg/kg-dry	4	0	No SLC			0.19	0.20	ND	ND		

"No SLC" indicates that there is not a Screening Level Criterion for this medium specified for the RI/FS.
"HH Soil (HQ=1)" EPA Region 6 RBSLs Human Health Residential Soil (HQ=1)
"Eco Soil" EPA Region 6 Tier 1-3 RBSLs Ecological Soil
Median Value determined using 1/2 the Reporting Limit value for Non-Detects if greater than 50% of the values were detected.
Mean Value calculated using 1/2 the Reporting Limit for Non-Detects if greater than 50% of the values were detected.

T = Total Fraction
D = Filtered Fraction (0.45 micron filter)
A = Filtered Fraction (0.1 micron filter)
ND = Non-Detected Value

Table 7-4
Soil 0-24 inches Random
RI/FS Reference for Mine Site
Summary of Results

Analyte	Sample Fraction	Units	Total Number of Samples	Percent Detects (%)	SLC	SLC Value	Percent Above SLC	Min RL for ND	Max RL for ND	Min Value	Max Value	Mean Value	Median Value
Dibenzodioxins-Dibenzofurans													
1,2,3,4,6,7,8-Heptachlorodibenzofuran	T	pg/g	2	0	No SLC			0.14	0.19	ND	ND		
1,2,3,4,6,7,8-Heptachlorodibenzo-p-dioxin	T	pg/g	2	0	No SLC			0.38	0.65	ND	ND		
1,2,3,4,7,8,9-Heptachlorodibenzofuran	T	pg/g	2	0	No SLC			0.18	0.25	ND	ND		
1,2,3,4,7,8-Hexachlorodibenzofuran	T	pg/g	2	0	No SLC			0.07	0.08	ND	ND		
1,2,3,4,7,8-hexachlorodibenzo-p-dioxin	T	pg/g	2	0	No SLC			0.11	0.14	ND	ND		
1,2,3,6,7,8-Hexachlorodibenzofuran	T	pg/g	2	0	No SLC			0.06	0.08	ND	ND		
1,2,3,6,7,8-Hexachlorodibenzo-p-dioxin	T	pg/g	2	0	No SLC			0.11	0.13	ND	ND		
1,2,3,7,8,9-Hexachlorodibenzofuran	T	pg/g	2	0	No SLC			0.08	0.10	ND	ND		
1,2,3,7,8,9-Hexachlorodibenzo-p-dioxin	T	pg/g	2	0	No SLC			0.11	0.14	ND	ND		
1,2,3,7,8-Pentachlorodibenzo-p-dioxin	T	pg/g	2	0	No SLC			0.12	0.14	ND	ND		
2,3,4,7,8-Pentachlorodibenzofuran	T	pg/g	2	0	No SLC			0.09	0.10	ND	ND		
2,3,7,8-Tetrachlorodibenzofuran	T	pg/g	2	0	No SLC			0.20	0.23	ND	ND		
2,3,7,8-Tetrachlorodibenzo-p-dioxin	T	pg/g	2	0	No SLC			0.28	0.36	ND	ND		
Inorganics													
Cation-Exchange Capacity	T	meq/100g	10	100	No SLC					8.5	30.9	18.4	17.9
Chloride	T	mg/kg-dry	10	10	No SLC			2.20	3.00	ND	2.4		
Fluoride	T	mg/kg-dry	6	100	No SLC					0.11	0.26	0.16	0.15
Nitrate	T	mg/kg-dry	10	20	No SLC			2.20	3.00	ND	8.9		
Organic Soils	T	%	4	100	No SLC					3.8	5.6	4.9	5
pH	T	SU	10	100	No SLC					4.5	6.9	5.9	6.1
Phosphorus	T	mg/kg-dry	10	100	No SLC					310	1440	703	571
Sodium Absorption Ratio	T	ratio	10	80	No SLC			0.05	0.12	ND	0.71	0.24	0.21
Solids, Percent	T	%	10	100	No SLC					66.8	95.5	86.1	86.6
Specific Conductance	T	umhos/cm	10	100	No SLC					7.3	658	112	45.2
Sulfate	T	mg/kg-dry	10	80	No SLC			2.30	2.40	ND	208	34.4	6.6
Total Kjeldahl Nitrogen	T	mg/kg-dry	10	100	No SLC					121	2420	669	575
Total Organic Carbon	T	mg/kg-dry	10	100	No SLC					2110	64100	21900	17100
Metals													
Aluminum	T	mg/kg-dry	10	100	No SLC					3220	17100	8380	8100
Antimony	T	mg/kg-dry	10	0	ECO Soil	0.3	0	0.14	0.22	ND	ND		
Arsenic	T	mg/kg-dry	10	100	ECO Soil	31	0			1.6	11.5	5	4.7

"No SLC" indicates that there is not a Screening Level Criterion for this medium specified for the RI/FS.
"HH Soil (HQ=1)" EPA Region 6 RBSLs Human Health Residential Soil (HQ=1)
"Eco Soil" EPA Region 6 Tier 1-3 RBSLs Ecological Soil
Median Value determined using 1/2 the Reporting Limit value for Non-Detects if greater than 50% of the values were detected.
Mean Value calculated using 1/2 the Reporting Limit for Non-Detects if greater than 50% of the values were detected.

T = Total Fraction
D = Filtered Fraction (0.45 micron filter)
A = Filtered Fraction (0.1 micron filter)
ND = Non-Detected Value

Table 7-4
Soil 0-24 inches Random
RI/FS Reference for Mine Site
Summary of Results

Analyte	Sample Fraction	Units	Total Number of Samples	Percent Detects (%)	SLC	SLC Value	Percent Above SLC	Min RL for ND	Max RL for ND	Min Value	Max Value	Mean Value	Median Value
Barium	T	mg/kg-dry	10	100	ECO Soil	330	30			28.3	781	281	227
Beryllium	T	mg/kg-dry	10	100	ECO Soil	30	0			0.14	1.9	0.59	0.39
Boron	T	mg/kg-dry	10	80	ECO Soil	0.5	100	0.41	0.74	ND	18.4	8.8	8.6
Cadmium	T	mg/kg-dry	10	20	ECO Soil	0.4	0	0.02	0.06	ND	0.33		
Calcium	T	mg/kg-dry	10	100	No SLC					472	7380	2540	1860
Chromium	T	mg/kg-dry	10	100	ECO Soil	7.9	50			2	53.1	12.5	9.2
Cobalt	T	mg/kg-dry	10	100	ECO Soil	32	0			0.65	14.2	5.5	3.5
Copper	T	mg/kg-dry	10	100	ECO Soil	54	0			2.4	52.9	20.1	15.8
Iron	T	mg/kg-dry	10	100	No SLC					4640	55000	22700	20300
Lead	T	mg/kg-dry	10	100	ECO Soil	15	90			11.5	155	57.3	29.1
Magnesium	T	mg/kg-dry	10	100	No SLC					379	8560	3140	2230
Manganese	T	mg/kg-dry	10	100	ECO Soil	152	60			18.5	802	330	244
Mercury	T	mg/kg-dry	10	30	ECO Soil	0.1	0	0.02	0.02	ND	0.042		
Molybdenum	T	mg/kg-dry	10	100	ECO Soil	2	70			1.2	15	5.4	3.2
Nickel	T	mg/kg-dry	10	90	ECO Soil	48	0	0.84	0.84	ND	47.4	14.3	7.1
Potassium	T	mg/kg-dry	10	100	No SLC					816	4360	2250	2200
Selenium	T	mg/kg-dry	10	70	ECO Soil	1	42.9	0.22	0.72	ND	3.3	0.87	0.53
Silver	T	mg/kg-dry	10	30	ECO Soil	2	0	0.09	0.49	ND	1.6		
Sodium	T	mg/kg-dry	10	30	No SLC			33.50	135.00	ND	472		
Thallium	T	mg/kg-dry	10	90	ECO Soil	1	0	0.11	0.11	ND	0.19	0.12	0.11
Vanadium	T	mg/kg-dry	10	100	ECO Soil	2	100			5.4	43.1	15.9	14.8
Zinc	T	mg/kg-dry	10	100	ECO Soil	120	10			7.5	332	70.7	40.6
Pesticides-PCBs													
a-Chlordane	T	mg/kg-dry	2	0	No SLC			0.00	0.00	ND	ND		
Aldrin	T	mg/kg-dry	2	0	No SLC			0.00	0.00	ND	ND		
alpha-Hexachlorocyclohexane	T	mg/kg-dry	2	0	No SLC			0.00	0.00	ND	ND		
beta-Hexachlorocyclohexane	T	mg/kg-dry	2	0	No SLC			0.00	0.00	ND	ND		
delta-Hexachlorocyclohexane	T	mg/kg-dry	2	0	No SLC			0.00	0.00	ND	ND		
Dichlorodiphenyldichloroethane	T	mg/kg-dry	2	0	No SLC			0.00	0.00	ND	ND		
Dichlorodiphenyldichloroethylene	T	mg/kg-dry	2	0	No SLC			0.00	0.00	ND	ND		
Dichlorodiphenyltrichloroethane	T	mg/kg-dry	2	0	No SLC			0.00	0.00	ND	ND		
Dieldrin	T	mg/kg-dry	2	0	No SLC			0.00	0.00	ND	ND		

"No SLC" indicates that there is not a Screening Level Criterion for this medium specified for the RI/FS.
"HH Soil (HQ=1)" EPA Region 6 RBSLs Human Health Residential Soil (HQ=1)
"Eco Soil" EPA Region 6 Tier 1-3 RBSLs Ecological Soil
Median Value determined using 1/2 the Reporting Limit value for Non-Detects if greater than 50% of the values were detected.
Mean Value calculated using 1/2 the Reporting Limit for Non-Detects if greater than 50% of the values were detected.

T = Total Fraction
D = Filtered Fraction (0.45 micron filter)
A = Filtered Fraction (0.1 micron filter)
ND = Non-Detected Value

Table 7-4
Soil 0-24 inches Random
RI/FS Reference for Mine Site
Summary of Results

Analyte	Sample Fraction	Units	Total Number of Samples	Percent Detects (%)	SLC	SLC Value	Percent Above SLC	Min RL for ND	Max RL for ND	Min Value	Max Value	Mean Value	Median Value
Endosulfan I	T	mg/kg-dry	2	0	No SLC			0.00	0.00	ND	ND		
Endosulfan II	T	mg/kg-dry	2	0	No SLC			0.00	0.00	ND	ND		
Endosulfan sulfate	T	mg/kg-dry	2	0	No SLC			0.00	0.00	ND	ND		
Endrin	T	mg/kg-dry	2	0	No SLC			0.00	0.00	ND	ND		
Endrin aldehyde	T	mg/kg-dry	2	0	No SLC			0.00	0.00	ND	ND		
Endrin ketone	T	mg/kg-dry	2	0	No SLC			0.00	0.00	ND	ND		
g-Chlordane	T	mg/kg-dry	2	0	No SLC			0.00	0.00	ND	ND		
Heptachlor	T	mg/kg-dry	2	0	No SLC			0.00	0.00	ND	ND		
Heptachlor epoxide	T	mg/kg-dry	2	0	No SLC			0.00	0.00	ND	ND		
Lindane	T	mg/kg-dry	2	0	No SLC			0.00	0.00	ND	ND		
Methoxychlor	T	mg/kg-dry	2	0	No SLC			0.02	0.02	ND	ND		
Toxaphene	T	mg/kg-dry	2	0	No SLC			0.20	0.20	ND	ND		

"No SLC" indicates that there is not a Screening Level Criterion for this medium specified for the RI/FS.
"HH Soil (HQ=1)" EPA Region 6 RBSLs Human Health Residential Soil (HQ=1)
"Eco Soil" EPA Region 6 Tier 1-3 RBSLs Ecological Soil
Median Value determined using 1/2 the Reporting Limit value for Non-Detects if greater than 50% of the values were detected.
Mean Value calculated using 1/2 the Reporting Limit for Non-Detects if greater than 50% of the values were detected.

T = Total Fraction
D = Filtered Fraction (0.45 micron filter)
A = Filtered Fraction (0.1 micron filter)
ND = Non-Detected Value

Table 7-5
Soil 0-6 inches SPLP Random
RI/FS Reference for Mine Site
Summary of Results

Analyte	Sample Fraction	Units	Total Number of Samples	Percent Detects (%)	SLC	SLC Value	Percent Above SLC	Min RL for ND	Max RL for ND	Min Value	Max Value	Mean Value	Median Value
Inorganics													
Bicarbonate (as CaCO3)	T	mg/L	2	100	No SLC					9.4	24.3	16.8	16.8
Carbonate (as CaCO3)	T	mg/L	2	0	No SLC			1.00	1.00	ND	ND		
Chloride	T	mg/L	2	100	No SLC					0.75	0.83	0.79	0.79
Cyanide	T	mg/L	2	0	HH Soil (HQ=1)	1200	0	0.01	0.01	ND	ND		
Fluoride	T	mg/L	2	0	HH Soil (HQ=1)	3700	0	0.10	0.10	ND	ND		
Hydroxide (as CaCO3)	T	mg/L	2	0	No SLC			1.00	1.00	ND	ND		
Nitrate	T	mg/L	2	0	No SLC			0.40	0.40	ND	ND		
Nitrite	T	mg/L	1	0	No SLC			0.01	0.01	ND	ND		
Phosphate, Ortho As P	T	mg/L	2	100	No SLC					0.021	0.025	0.023	0.023
Phosphorus	T	mg/L	2	100	No SLC					0.056	0.066	0.061	0.061
Sulfate	T	mg/L	2	100	No SLC					0.6	1.3	0.95	0.95
Total Alkalinity	T	mg/L	2	100	No SLC					9.4	24.3	16.8	16.8
Total Kjeldahl Nitrogen	T	mg/L	1	0	No SLC			0.24	0.24	ND	ND		
Metals													
Aluminum	T	mg/L	2	100	HH Soil (HQ=1)	76000	0			1.8	3.5	2.7	2.7
Antimony	T	mg/L	2	0	HH Soil (HQ=1)	31	0	0.00	0.00	ND	ND		
Arsenic	T	mg/L	2	50	HH Soil (HQ=1)	0.39	0	0.00	0.00	ND	0.00087	0.00074	0.00074
Barium	T	mg/L	2	50	HH Soil (HQ=1)	5500	0	0.05	0.05	ND	0.45	0.24	0.24
Beryllium	T	mg/L	2	0	HH Soil (HQ=1)	150	0	0.00	0.00	ND	ND		
Boron	T	mg/L	2	50	HH Soil (HQ=1)	5500	0	0.08	0.08	ND	0.21	0.13	0.13
Cadmium	T	mg/L	2	0	HH Soil (HQ=1)	39	0	0.00	0.00	ND	ND		
Calcium	T	mg/L	2	50	No SLC			1.30	1.30	ND	8.4	4.5	4.5
Chromium	T	mg/L	2	0	HH Soil (HQ=1)	210	0	0.00	0.00	ND	ND		
Cobalt	T	mg/L	2	0	HH Soil (HQ=1)	900	0	0.00	0.00	ND	ND		
Copper	T	mg/L	2	0	HH Soil (HQ=1)	2900	0	0.00	0.00	ND	ND		
Iron	T	mg/L	2	100	HH Soil (HQ=1)	23000	0			1.6	2.6	2.1	2.1
Lead	T	mg/L	2	100	HH Soil (HQ=1)	400	0			0.0059	0.0068	0.0064	0.0064
Magnesium	T	mg/L	2	100	No SLC					0.47	1.1	0.77	0.77
Manganese	T	mg/L	2	100	HH Soil (HQ=1)	3200	0			0.015	0.021	0.018	0.018
Mercury	T	mg/L	2	0	HH Soil (HQ=1)	23	0	0.01	0.01	ND	ND		
Molybdenum	T	mg/L	2	50	HH Soil (HQ=1)	390	0	0.00	0.00	ND	0.001	0.00068	0.00068

"No SLC" indicates that there is not a Screening Level Criterion for this medium specified for the RI/FS.
"HH Soil (HQ=1)" EPA Region 6 RBSLs Human Health Residential Soil (HQ=1)
"Eco Soil" EPA Region 6 Tier 1-3 RBSLs Ecological Soil
Median Value determined using 1/2 the Reporting Limit value for Non-Detects if greater than 50% of the values were detected.
Mean Value calculated using 1/2 the Reporting Limit for Non-Detects if greater than 50% of the values were detected.

T = Total Fraction
D = Filtered Fraction (0.45 micron filter)
A = Filtered Fraction (0.1 micron filter)
ND = Non-Detected Value

Table 7-5
Soil 0-6 inches SPLP Random
RI/FS Reference for Mine Site
Summary of Results

Analyte	Sample Fraction	Units	Total Number of Samples	Percent Detects (%)	SLC	SLC Value	Percent Above SLC	Min RL for ND	Max RL for ND	Min Value	Max Value	Mean Value	Median Value
Nickel	T	mg/L	2	100	HH Soil (HQ=1)	1600	0			0.00063	0.0014	0.001	0.001
Potassium	T	mg/L	2	50	No SLC			1.50	1.50	ND	3.6	2.1	2.1
Selenium	T	mg/L	2	0	HH Soil (HQ=1)	390	0	0.00	0.00	ND	ND		
Silver	T	mg/L	2	0	HH Soil (HQ=1)	390	0	0.00	0.00	ND	ND		
Thallium	T	mg/L	2	0	HH Soil (HQ=1)	5.5	0	0.00	0.00	ND	ND		
Vanadium	T	mg/L	2	100	HH Soil (HQ=1)	78	0			0.0026	0.0058	0.0042	0.0042
Zinc	T	mg/L	2	100	HH Soil (HQ=1)	23000	0			0.016	0.091	0.053	0.053

"No SLC" indicates that there is not a Screening Level Criterion for this medium specified for the RI/FS.
"HH Soil (HQ=1)" EPA Region 6 RBSLs Human Health Residential Soil (HQ=1)
"Eco Soil" EPA Region 6 Tier 1-3 RBSLs Ecological Soil
Median Value determined using 1/2 the Reporting Limit value for Non-Detects if greater than 50% of the values were detected.
Mean Value calculated using 1/2 the Reporting Limit for Non-Detects if greater than 50% of the values were detected.

T = Total Fraction
D = Filtered Fraction (0.45 micron filter)
A = Filtered Fraction (0.1 micron filter)
ND = Non-Detected Value

Table 7-6
Soil 0-24 inches SPLP Random
RI/FS Reference for Mine Site
Summary of Results

Analyte	Sample Fraction	Units	Total Number of Samples	Percent Detects (%)	SLC	SLC Value	Percent Above SLC	Min RL for ND	Max RL for ND	Min Value	Max Value	Mean Value	Median Value
Inorganics													
Bicarbonate (as CaCO3)	T	mg/L	3	66.7	No SLC			1.00	1.00	ND	14.4	7.4	7.4
Carbonate (as CaCO3)	T	mg/L	3	66.7	No SLC			1.00	1.00	ND	20.4	8.7	5.3
Chloride	T	mg/L	3	66.7	No SLC			5.00	5.00	ND	70.9	24.7	2.5
Cyanide	T	mg/L	2	0	No SLC			0.01	0.01	ND	ND		
Fluoride	T	mg/L	3	100	No SLC					0.13	1.1	0.47	0.18
Hydroxide (as CaCO3)	T	mg/L	3	0	No SLC			1.00	1.00	ND	ND		
Nitrate	T	mg/L	3	33.3	No SLC			0.40	0.50	ND	0.58		
Nitrite	T	mg/L	3	100	No SLC					0.007	0.017	0.012	0.011
Phosphate, Ortho As P	T	mg/L	3	100	No SLC					0.071	0.19	0.12	0.11
Phosphorus	T	mg/L	3	100	No SLC					0.061	0.62	0.39	0.48
Sulfate	T	mg/L	3	66.7	No SLC			4.10	4.10	ND	2.2	2	2
Total Alkalinity	T	mg/L	3	66.7	No SLC			1.00	1.00	ND	14.4	9.2	12.7
Total Kjeldahl Nitrogen	T	mg/L	3	33.3	No SLC			0.24	0.24	ND	0.35		
Metals													
Aluminum	T	mg/L	3	100	No SLC					1.6	39.5	20.1	19.4
Antimony	T	mg/L	3	0	ECO Soil	0.3	0	0.00	0.00	ND	ND		
Arsenic	T	mg/L	3	66.7	ECO Soil	31	0	0.00	0.00	ND	0.021	0.0082	0.0036
Barium	T	mg/L	3	66.7	ECO Soil	330	0	0.05	0.05	ND	0.93	0.42	0.3
Beryllium	T	mg/L	3	66.7	ECO Soil	30	0	0.00	0.00	ND	0.001	0.00053	0.00049
Boron	T	mg/L	3	66.7	ECO Soil	0.5	0	0.04	0.04	ND	0.24	0.16	0.21
Cadmium	T	mg/L	3	0	ECO Soil	0.4	0	0.00	0.00	ND	ND		
Calcium	T	mg/L	3	100	No SLC					2.8	11.9	6.2	3.8
Chromium	T	mg/L	3	66.7	ECO Soil	7.9	0	0.00	0.00	ND	0.029	0.02	0.028
Cobalt	T	mg/L	3	66.7	ECO Soil	32	0	0.00	0.00	ND	0.0025	0.0018	0.0022
Copper	T	mg/L	3	66.7	ECO Soil	54	0	0.00	0.00	ND	0.031	0.018	0.021
Iron	T	mg/L	3	100	No SLC					1.3	32.6	16.7	16.3
Lead	T	mg/L	3	100	ECO Soil	15	0			0.0023	0.28	0.1	0.021
Magnesium	T	mg/L	3	100	No SLC					0.51	9.3	4.7	4.3
Manganese	T	mg/L	3	100	ECO Soil	152	0			0.017	0.2	0.12	0.15
Mercury	T	mg/L	3	0	ECO Soil	0.1	0	0.01	0.01	ND	ND		
Molybdenum	T	mg/L	3	33.3	ECO Soil	2	0	0.00	0.00	ND	0.027		

"No SLC" indicates that there is not a Screening Level Criterion for this medium specified for the RI/FS.
"HH Soil (HQ=1)" EPA Region 6 RBSLs Human Health Residential Soil (HQ=1)
"Eco Soil" EPA Region 6 Tier 1-3 RBSLs Ecological Soil
Median Value determined using 1/2 the Reporting Limit value for Non-Detects if greater than 50% of the values were detected.
Mean Value calculated using 1/2 the Reporting Limit for Non-Detects if greater than 50% of the values were detected.

T = Total Fraction
D = Filtered Fraction (0.45 micron filter)
A = Filtered Fraction (0.1 micron filter)
ND = Non-Detected Value

Table 7-6
Soil 0-24 inches SPLP Random
RI/FS Reference for Mine Site
Summary of Results

Analyte	Sample Fraction	Units	Total Number of Samples	Percent Detects (%)	SLC	SLC Value	Percent Above SLC	Min RL for ND	Max RL for ND	Min Value	Max Value	Mean Value	Median Value
Nickel	T	mg/L	3	66.7	ECO Soil	48	0	0.01	0.01	ND	0.017	0.012	0.015
Potassium	T	mg/L	3	100	No SLC					1.9	13.9	6.7	4.2
Selenium	T	mg/L	3	33.3	ECO Soil	1	0	0.00	0.00	ND	0.0014		
Silver	T	mg/L	3	66.7	ECO Soil	2	0	0.00	0.00	ND	0.00053	0.00034	0.00039
Sodium	T	mg/L	1	0	No SLC			6.30	6.30	ND	ND		
Thallium	T	mg/L	3	66.7	ECO Soil	1	0	0.00	0.00	ND	0.00061	0.00029	0.00015
Vanadium	T	mg/L	3	100	ECO Soil	2	0			0.0015	0.036	0.021	0.024
Zinc	T	mg/L	3	100	ECO Soil	120	0			0.0091	0.09	0.059	0.077

"No SLC" indicates that there is not a Screening Level Criterion for this medium specified for the RI/FS.
"HH Soil (HQ=1)" EPA Region 6 RBSLs Human Health Residential Soil (HQ=1)
"Eco Soil" EPA Region 6 Tier 1-3 RBSLs Ecological Soil
Median Value determined using 1/2 the Reporting Limit value for Non-Detects if greater than 50% of the values were detected.
Mean Value calculated using 1/2 the Reporting Limit for Non-Detects if greater than 50% of the values were detected.

T = Total Fraction
D = Filtered Fraction (0.45 micron filter)
A = Filtered Fraction (0.1 micron filter)
ND = Non-Detected Value

Table 7-7
Soil 0-6 inches Random
RI/FS Soil Area 1 - Mill Site
Summary of Results

Analyte	Sample Fraction	Units	Total Number of Samples	Percent Detects (%)	SLC	SLC Value	Percent Above SLC	Min RL for ND	Max RL for ND	Min Value	Max Value	Mean Value	Median Value
Dibenzodioxins-Dibenzofurans													
1,2,3,4,6,7,8-Heptachlorodibenzofuran	T	pg/g	1	0	HH Soil (HQ=1)	1000	0	0.40	0.40	ND	ND		
1,2,3,4,6,7,8-Heptachlorodibenzo-p-dioxin	T	pg/g	1	0	HH Soil (HQ=1)	1000	0	1.70	1.70	ND	ND		
1,2,3,4,7,8,9-Heptachlorodibenzofuran	T	pg/g	1	0	HH Soil (HQ=1)	1000	0	0.12	0.12	ND	ND		
1,2,3,4,7,8-Hexachlorodibenzofuran	T	pg/g	1	0	HH Soil (HQ=1)	1000	0	0.40	0.40	ND	ND		
1,2,3,4,7,8-hexachlorodibenzo-p-dioxin	T	pg/g	1	0	HH Soil (HQ=1)	1000	0	0.11	0.11	ND	ND		
1,2,3,6,7,8-Hexachlorodibenzofuran	T	pg/g	1	0	HH Soil (HQ=1)	1000	0	0.12	0.12	ND	ND		
1,2,3,6,7,8-Hexachlorodibenzo-p-dioxin	T	pg/g	1	0	HH Soil (HQ=1)	1000	0	0.11	0.11	ND	ND		
1,2,3,7,8,9-Hexachlorodibenzofuran	T	pg/g	1	0	HH Soil (HQ=1)	1000	0	0.06	0.06	ND	ND		
1,2,3,7,8,9-Hexachlorodibenzo-p-dioxin	T	pg/g	1	0	HH Soil (HQ=1)	1000	0	0.11	0.11	ND	ND		
1,2,3,7,8-Pentachlorodibenzo-p-dioxin	T	pg/g	1	0	HH Soil (HQ=1)	1000	0	0.12	0.12	ND	ND		
2,3,4,7,8-Pentachlorodibenzofuran	T	pg/g	1	0	HH Soil (HQ=1)	1000	0	0.26	0.26	ND	ND		
2,3,7,8-Tetrachlorodibenzofuran	T	pg/g	1	100	HH Soil (HQ=1)	1000	0			0.34	0.34	0.34	0.34
2,3,7,8-Tetrachlorodibenzo-p-dioxin	T	pg/g	1	0	HH Soil (HQ=1)	1000	0	0.24	0.24	ND	ND		
Inorganics													
Cation-Exchange Capacity	T	meq/100g	10	100	No SLC					7.2	25	14.4	14.8
Chloride	T	mg/kg-dry	10	60	No SLC			2.10	2.20	ND	80.9	11.3	2.5
Fluoride	T	mg/kg-dry	10	100	HH Soil (HQ=1)	3700	0			0.28	2.6	1.1	0.91
Nitrate	T	mg/kg-dry	10	50	No SLC			2.10	2.20	ND	9.7	3	1.9
Organic Soils	T	%	10	100	No SLC					1.1	4.5	2.1	2
pH	T	SU	10	100	No SLC					6.7	8.2	7.6	7.7
Phosphorus	T	mg/kg-dry	10	100	No SLC					142	1170	735	767
Sodium Absorption Ratio	T	ratio	10	90	No SLC			0.05	0.05	ND	0.65	0.19	0.11
Solids, Percent	T	%	10	100	No SLC					91.4	96.8	94.7	94.8
Specific Conductance	T	umhos/cm	10	100	No SLC					37.7	4190	587	122
Sulfate	T	mg/kg-dry	10	100	No SLC					9.5	1860	369	38.8
Total Kjeldahl Nitrogen	T	mg/kg-dry	10	90	No SLC			22.20	22.20	ND	736	304	328
Total Organic Carbon	T	mg/kg-dry	10	80	No SLC			104.00	104.00	ND	10600	4830	4290
Metals													
Aluminum	T	mg/kg-dry	10	100	HH Soil (HQ=1)	76000	0			6210	21700	11800	10600
Antimony	T	mg/kg-dry	10	0	HH Soil (HQ=1)	31	0	0.15	0.26	ND	ND		
Arsenic	T	mg/kg-dry	10	100	HH Soil (HQ=1)	0.39	100			2	4.8	3.7	3.9

"No SLC" indicates that there is not a Screening Level Criterion for this medium specified for the RI/FS.
"HH Soil (HQ=1)" EPA Region 6 RBSLs Human Health Residential Soil (HQ=1)
"Eco Soil" EPA Region 6 Tier 1-3 RBSLs Ecological Soil
Median Value determined using 1/2 the Reporting Limit value for Non-Detects if greater than 50% of the values were detected.
Mean Value calculated using 1/2 the Reporting Limit for Non-Detects if greater than 50% of the values were detected.

T = Total Fraction
D = Filtered Fraction (0.45 micron filter)
A = Filtered Fraction (0.1 micron filter)
ND = Non-Detected Value

Table 7-7
Soil 0-6 inches Random
RI/FS Soil Area 1 - Mill Site
Summary of Results

Analyte	Sample Fraction	Units	Total Number of Samples	Percent Detects (%)	SLC	SLC Value	Percent Above SLC	Min RL for ND	Max RL for ND	Min Value	Max Value	Mean Value	Median Value
Barium	T	mg/kg-dry	10	100	HH Soil (HQ=1)	5500	0			23.1	135	76.2	77.3
Beryllium	T	mg/kg-dry	10	100	HH Soil (HQ=1)	150	0			0.81	1.7	1.3	1.3
Boron	T	mg/kg-dry	10	60	HH Soil (HQ=1)	5500	0	0.56	2.30	ND	5.5	2.5	2.7
Cadmium	T	mg/kg-dry	10	90	HH Soil (HQ=1)	39	0	0.03	0.03	ND	4.3	1.5	1.1
Calcium	T	mg/kg-dry	10	100	No SLC					4450	19500	11200	10600
Chromium	T	mg/kg-dry	10	100	HH Soil (HQ=1)	210	0			9.5	73.7	40.6	35.4
Cobalt	T	mg/kg-dry	10	100	HH Soil (HQ=1)	900	0			3.9	24.3	11.6	10.6
Copper	T	mg/kg-dry	10	100	HH Soil (HQ=1)	2900	0			74	173	113	96.7
Iron	T	mg/kg-dry	10	100	HH Soil (HQ=1)	23000	30			10500	33400	21600	20600
Lead	T	mg/kg-dry	10	100	HH Soil (HQ=1)	400	0			29.5	341	126	87.8
Magnesium	T	mg/kg-dry	10	100	No SLC					2450	17900	8450	7150
Manganese	T	mg/kg-dry	10	100	HH Soil (HQ=1)	3200	0			391	1860	981	936
Mercury	T	mg/kg-dry	10	30	HH Soil (HQ=1)	23	0	0.02	0.02	ND	0.041		
Molybdenum	T	mg/kg-dry	10	100	HH Soil (HQ=1)	390	60			33.1	2250	909	741
Nickel	T	mg/kg-dry	10	100	HH Soil (HQ=1)	1600	0			7.3	54.8	29.1	24.6
Potassium	T	mg/kg-dry	10	100	No SLC					1920	5150	3150	2910
Selenium	T	mg/kg-dry	10	70	HH Soil (HQ=1)	390	0	0.65	0.69	ND	1.4	0.65	0.58
Silver	T	mg/kg-dry	10	100	HH Soil (HQ=1)	390	0			0.39	1.8	1	0.97
Sodium	T	mg/kg-dry	10	20	No SLC			45.10	85.40	ND	74.2		
Thallium	T	mg/kg-dry	10	100	HH Soil (HQ=1)	5.5	0			0.18	0.49	0.27	0.24
Vanadium	T	mg/kg-dry	10	100	HH Soil (HQ=1)	78	0			14.6	67.6	42.5	39
Zinc	T	mg/kg-dry	10	100	HH Soil (HQ=1)	23000	0			89.9	538	197	151
Pesticides-PCBs													
a-Chlordane	T	mg/kg-dry	1	0	No SLC			0.00	0.00	ND	ND		
Aldrin	T	mg/kg-dry	1	0	No SLC			0.00	0.00	ND	ND		
alpha-Hexachlorocyclohexane	T	mg/kg-dry	1	0	No SLC			0.00	0.00	ND	ND		
Aroclor 1016	T	mg/kg-dry	10	0	No SLC			0.03	0.04	ND	ND		
Aroclor 1221	T	mg/kg-dry	10	0	No SLC			0.07	0.07	ND	ND		
Aroclor 1232	T	mg/kg-dry	10	0	No SLC			0.03	0.04	ND	ND		
Aroclor 1242	T	mg/kg-dry	10	0	No SLC			0.03	0.04	ND	ND		
Aroclor 1248	T	mg/kg-dry	10	0	HH Soil (HQ=1)	0.22	0	0.03	0.04	ND	ND		
Aroclor 1254	T	mg/kg-dry	10	60	HH Soil (HQ=1)	0.22	83.3	0.03	0.04	ND	3.3	0.69	0.25

"No SLC" indicates that there is not a Screening Level Criterion for this medium specified for the RI/FS.
"HH Soil (HQ=1)" EPA Region 6 RBSLs Human Health Residential Soil (HQ=1)
"Eco Soil" EPA Region 6 Tier 1-3 RBSLs Ecological Soil
Median Value determined using 1/2 the Reporting Limit value for Non-Detects if greater than 50% of the values were detected.
Mean Value calculated using 1/2 the Reporting Limit for Non-Detects if greater than 50% of the values were detected.

T = Total Fraction
D = Filtered Fraction (0.45 micron filter)
A = Filtered Fraction (0.1 micron filter)
ND = Non-Detected Value

Table 7-7
Soil 0-6 inches Random
RI/FS Soil Area 1 - Mill Site
Summary of Results

Analyte	Sample Fraction	Units	Total Number of Samples	Percent Detects (%)	SLC	SLC Value	Percent Above SLC	Min RL for ND	Max RL for ND	Min Value	Max Value	Mean Value	Median Value
Aroclor 1260	T	mg/kg-dry	10	0	HH Soil (HQ=1)	0.22	0	0.03	0.04	ND	ND		
beta-Hexachlorocyclohexane	T	mg/kg-dry	1	0	No SLC			0.00	0.00	ND	ND		
delta-Hexachlorocyclohexane	T	mg/kg-dry	1	0	No SLC			0.00	0.00	ND	ND		
Dichlorodiphenyldichloroethane	T	mg/kg-dry	1	0	No SLC			0.00	0.00	ND	ND		
Dichlorodiphenyldichloroethylene	T	mg/kg-dry	1	0	No SLC			0.00	0.00	ND	ND		
Dichlorodiphenyltrichloroethane	T	mg/kg-dry	1	0	No SLC			0.00	0.00	ND	ND		
Dieldrin	T	mg/kg-dry	1	0	No SLC			0.00	0.00	ND	ND		
Endosulfan I	T	mg/kg-dry	1	0	No SLC			0.00	0.00	ND	ND		
Endosulfan II	T	mg/kg-dry	1	0	No SLC			0.00	0.00	ND	ND		
Endosulfan sulfate	T	mg/kg-dry	1	0	No SLC			0.00	0.00	ND	ND		
Endrin	T	mg/kg-dry	1	0	No SLC			0.00	0.00	ND	ND		
Endrin aldehyde	T	mg/kg-dry	1	0	No SLC			0.00	0.00	ND	ND		
Endrin ketone	T	mg/kg-dry	1	0	No SLC			0.00	0.00	ND	ND		
g-Chlordane	T	mg/kg-dry	1	0	No SLC			0.00	0.00	ND	ND		
Heptachlor	T	mg/kg-dry	1	0	No SLC			0.00	0.00	ND	ND		
Heptachlor epoxide	T	mg/kg-dry	1	0	No SLC			0.00	0.00	ND	ND		
Lindane	T	mg/kg-dry	1	0	No SLC			0.00	0.00	ND	ND		
Methoxychlor	T	mg/kg-dry	1	0	No SLC			0.02	0.02	ND	ND		
Toxaphene	T	mg/kg-dry	1	0	No SLC			0.18	0.18	ND	ND		
Semi-Volatile Organics													
1,1`-Biphenyl	T	mg/kg-dry	10	0	HH Soil (HQ=1)	3000	0	0.34	0.36	ND	ND		
2,4,5-Trichlorophenol	T	mg/kg-dry	10	0	No SLC			0.85	0.91	ND	ND		
2,4,6-Trichlorophenol	T	mg/kg-dry	10	0	No SLC			0.34	0.36	ND	ND		
2,4-Dichlorophenol	T	mg/kg-dry	10	0	No SLC			0.34	0.36	ND	ND		
2,4-Dimethylphenol	T	mg/kg-dry	10	0	No SLC			0.34	0.36	ND	ND		
2,4-Dinitrophenol	T	mg/kg-dry	10	0	No SLC			0.85	0.91	ND	ND		
2,4-Dinitrotoluene	T	mg/kg-dry	10	0	No SLC			0.34	0.36	ND	ND		
2,6-Dinitrotoluene	T	mg/kg-dry	10	0	HH Soil (HQ=1)	61	0	0.34	0.36	ND	ND		
2-Chloronaphthalene	T	mg/kg-dry	10	0	No SLC			0.34	0.36	ND	ND		
2-Chlorophenol	T	mg/kg-dry	10	0	HH Soil (HQ=1)	64	0	0.34	0.36	ND	ND		
2-Methylnaphthalene	T	mg/kg-dry	10	0	No SLC			0.34	0.36	ND	ND		
2-Methylphenol	T	mg/kg-dry	10	0	No SLC			0.34	0.36	ND	ND		

"No SLC" indicates that there is not a Screening Level Criterion for this medium specified for the RI/FS.
"HH Soil (HQ=1)" EPA Region 6 RBSLs Human Health Residential Soil (HQ=1)
"Eco Soil" EPA Region 6 Tier 1-3 RBSLs Ecological Soil
Median Value determined using 1/2 the Reporting Limit value for Non-Detects if greater than 50% of the values were detected.
Mean Value calculated using 1/2 the Reporting Limit for Non-Detects if greater than 50% of the values were detected.

T = Total Fraction
D = Filtered Fraction (0.45 micron filter)
A = Filtered Fraction (0.1 micron filter)
ND = Non-Detected Value

Table 7-7
Soil 0-6 inches Random
RI/FS Soil Area 1 - Mill Site
Summary of Results

Analyte	Sample Fraction	Units	Total Number of Samples	Percent Detects (%)	SLC	SLC Value	Percent Above SLC	Min RL for ND	Max RL for ND	Min Value	Max Value	Mean Value	Median Value
2-Nitroaniline	T	mg/kg-dry	10	0	No SLC			0.85	0.91	ND	ND		
2-Nitrophenol	T	mg/kg-dry	10	0	No SLC			0.34	0.36	ND	ND		
3,3-Dichlorobenzidine	T	mg/kg-dry	10	0	No SLC			0.34	0.36	ND	ND		
3-Nitroaniline	T	mg/kg-dry	10	0	No SLC			0.85	0.91	ND	ND		
4,6-Dinitro-2-methylphenol	T	mg/kg-dry	10	0	No SLC			0.85	0.91	ND	ND		
4-Bromophenyl phenyl ether	T	mg/kg-dry	10	0	No SLC			0.34	0.36	ND	ND		
4-Chloro-3-methylphenol	T	mg/kg-dry	10	0	No SLC			0.34	0.36	ND	ND		
4-Chloroaniline	T	mg/kg-dry	10	0	No SLC			0.34	0.36	ND	ND		
4-Chlorophenyl phenyl ether	T	mg/kg-dry	10	0	No SLC			0.34	0.36	ND	ND		
4-Methylphenol	T	mg/kg-dry	10	0	No SLC			0.34	0.36	ND	ND		
4-Nitroaniline	T	mg/kg-dry	10	0	No SLC			0.85	0.91	ND	ND		
4-Nitrophenol	T	mg/kg-dry	10	0	No SLC			0.85	0.91	ND	ND		
Acenaphthene	T	mg/kg-dry	10	0	HH Soil (HQ=1)	3700	0	0.34	0.36	ND	ND		
Acenaphthylene	T	mg/kg-dry	10	0	No SLC			0.34	0.36	ND	ND		
Anthracene	T	mg/kg-dry	10	0	HH Soil (HQ=1)	22000	0	0.34	0.36	ND	ND		
Benzo(a)anthracene	T	mg/kg-dry	10	10	HH Soil (HQ=1)	0.62	0	0.34	0.36	ND	0.017		
Benzo(a)pyrene	T	mg/kg-dry	10	10	HH Soil (HQ=1)	0.062	0	0.34	0.36	ND	0.018		
Benzo(b)fluoranthene	T	mg/kg-dry	10	10	HH Soil (HQ=1)	0.62	0	0.34	0.36	ND	0.018		
Benzo(g,h,i)perylene	T	mg/kg-dry	10	0	No SLC			0.34	0.36	ND	ND		
Benzo(k)fluoranthene	T	mg/kg-dry	10	10	HH Soil (HQ=1)	6.2	0	0.34	0.36	ND	0.019		
Bis(2-chloroethoxy)methane	T	mg/kg-dry	10	0	No SLC			0.34	0.36	ND	ND		
Bis(2-chloroethyl)ether	T	mg/kg-dry	10	0	No SLC			0.34	0.36	ND	ND		
Carbazole	T	mg/kg-dry	10	0	HH Soil (HQ=1)	24	0	0.34	0.36	ND	ND		
Chrysene	T	mg/kg-dry	10	20	HH Soil (HQ=1)	62	0	0.34	0.36	ND	0.02		
Dibenz(a,h)anthracene	T	mg/kg-dry	10	0	HH Soil (HQ=1)	0.062	0	0.34	0.36	ND	ND		
Dibenzofuran	T	mg/kg-dry	10	0	HH Soil (HQ=1)	150	0	0.34	0.36	ND	ND		
Dichlorodiisopropyl ether	T	mg/kg-dry	10	0	No SLC			0.34	0.36	ND	ND		
Fluoranthene	T	mg/kg-dry	10	10	HH Soil (HQ=1)	2300	0	0.34	0.36	ND	0.02		
Fluorene	T	mg/kg-dry	10	0	HH Soil (HQ=1)	2600	0	0.34	0.36	ND	ND		
Hexachlorobenzene	T	mg/kg-dry	10	0	No SLC			0.34	0.36	ND	ND		
Hexachlorobutadiene	T	mg/kg-dry	10	0	No SLC			0.34	0.36	ND	ND		
Hexachlorocyclopentadiene	T	mg/kg-dry	10	0	No SLC			0.34	0.36	ND	ND		

"No SLC" indicates that there is not a Screening Level Criterion for this medium specified for the RI/FS.
"HH Soil (HQ=1)" EPA Region 6 RBSLs Human Health Residential Soil (HQ=1)
"Eco Soil" EPA Region 6 Tier 1-3 RBSLs Ecological Soil
Median Value determined using 1/2 the Reporting Limit value for Non-Detects if greater than 50% of the values were detected.
Mean Value calculated using 1/2 the Reporting Limit for Non-Detects if greater than 50% of the values were detected.

T = Total Fraction
D = Filtered Fraction (0.45 micron filter)
A = Filtered Fraction (0.1 micron filter)
ND = Non-Detected Value

Table 7-7
Soil 0-6 inches Random
RI/FS Soil Area 1 - Mill Site
Summary of Results

Analyte	Sample Fraction	Units	Total Number of Samples	Percent Detects (%)	SLC	SLC Value	Percent Above SLC	Min RL for ND	Max RL for ND	Min Value	Max Value	Mean Value	Median Value
Hexachloroethane	T	mg/kg-dry	10	0	No SLC			0.34	0.36	ND	ND		
Indeno(1,2,3-cd)pyrene	T	mg/kg-dry	10	0	HH Soil (HQ=1)	0.62	0	0.34	0.36	ND	ND		
Isophorone	T	mg/kg-dry	10	0	HH Soil (HQ=1)	510	0	0.34	0.36	ND	ND		
Naphthalene	T	mg/kg-dry	10	0	HH Soil (HQ=1)	120	0	0.34	0.36	ND	ND		
Nitrobenzene	T	mg/kg-dry	10	0	No SLC			0.34	0.36	ND	ND		
N-Nitrosodi-n-propylamine	T	mg/kg-dry	10	0	HH Soil (HQ=1)	0.07	0	0.34	0.36	ND	ND		
N-Nitrosodiphenylamine	T	mg/kg-dry	10	0	HH Soil (HQ=1)	99	0	0.34	0.36	ND	ND		
Pentachlorophenol	T	mg/kg-dry	10	0	No SLC			0.85	0.91	ND	ND		
Phenanthrene	T	mg/kg-dry	10	0	No SLC			0.34	0.36	ND	ND		
Phenol	T	mg/kg-dry	10	0	HH Soil (HQ=1)	18000	0	0.34	0.36	ND	ND		
Pyrene	T	mg/kg-dry	10	20	HH Soil (HQ=1)	2300	0	0.34	0.36	ND	0.027		
Volatile Organics													
1,1,1-Trichloroethane	T	mg/kg-dry	10	0	HH Soil (HQ=1)	1400	0	0.01	0.01	ND	ND		
1,1,2,2-Tetrachloroethane	T	mg/kg-dry	10	0	No SLC			0.01	0.01	ND	ND		
1,1,2-Trichloro-1,2,2-trifluoroethane	T	mg/kg-dry	10	0	No SLC			0.01	0.01	ND	ND		
1,1,2-Trichloroethane	T	mg/kg-dry	10	0	No SLC			0.01	0.01	ND	ND		
1,1-Dichloroethane	T	mg/kg-dry	10	0	HH Soil (HQ=1)	590	0	0.01	0.01	ND	ND		
1,1-Dichloroethene	T	mg/kg-dry	10	0	HH Soil (HQ=1)	280	0	0.01	0.01	ND	ND		
1,2,4-Trichlorobenzene	T	mg/kg-dry	10	0	No SLC			0.01	0.01	ND	ND		
1,2-Dibromo-3-chloropropane	T	mg/kg-dry	10	0	No SLC			0.01	0.01	ND	ND		
1,2-Dichlorobenzene	T	mg/kg-dry	10	0	No SLC			0.01	0.01	ND	ND		
1,2-Dichloroethane	T	mg/kg-dry	10	0	No SLC			0.01	0.01	ND	ND		
1,2-Dichloroethene (total)	T	mg/kg-dry	10	0	No SLC			0.01	0.01	ND	ND		
1,2-Dichloropropane	T	mg/kg-dry	10	0	No SLC			0.01	0.01	ND	ND		
1,3-Dichlorobenzene	T	mg/kg-dry	10	0	No SLC			0.01	0.01	ND	ND		
1,4-Dichlorobenzene	T	mg/kg-dry	10	0	No SLC			0.01	0.01	ND	ND		
2-Butanone	T	mg/kg-dry	10	0	HH Soil (HQ=1)	32000	0	0.01	0.01	ND	ND		
2-Hexanone	T	mg/kg-dry	10	0	No SLC			0.01	0.01	ND	ND		
4-Methyl-2-pentanone	T	mg/kg-dry	10	0	HH Soil (HQ=1)	5800	0	0.01	0.01	ND	ND		
Benzene	T	mg/kg-dry	10	0	HH Soil (HQ=1)	0.66	0	0.01	0.01	ND	ND		
Bromodichloromethane	T	mg/kg-dry	10	0	No SLC			0.01	0.01	ND	ND		
Bromoform	T	mg/kg-dry	10	0	No SLC			0.01	0.01	ND	ND		

"No SLC" indicates that there is not a Screening Level Criterion for this medium specified for the RI/FS.
"HH Soil (HQ=1)" EPA Region 6 RBSLs Human Health Residential Soil (HQ=1)
"Eco Soil" EPA Region 6 Tier 1-3 RBSLs Ecological Soil
Median Value determined using 1/2 the Reporting Limit value for Non-Detects if greater than 50% of the values were detected.
Mean Value calculated using 1/2 the Reporting Limit for Non-Detects if greater than 50% of the values were detected.

T = Total Fraction
D = Filtered Fraction (0.45 micron filter)
A = Filtered Fraction (0.1 micron filter)
ND = Non-Detected Value

Table 7-7
Soil 0-6 inches Random
RI/FS Soil Area 1 - Mill Site
Summary of Results

Analyte	Sample Fraction	Units	Total Number of Samples	Percent Detects (%)	SLC	SLC Value	Percent Above SLC	Min RL for ND	Max RL for ND	Min Value	Max Value	Mean Value	Median Value
Bromomethane	T	mg/kg-dry	10	0	No SLC			0.01	0.01	ND	ND		
Carbon tetrachloride	T	mg/kg-dry	10	0	HH Soil (HQ=1)	0.24	0	0.01	0.01	ND	ND		
Chlorobenzene	T	mg/kg-dry	10	0	HH Soil (HQ=1)	320	0	0.01	0.01	ND	ND		
Chloroethane	T	mg/kg-dry	10	0	No SLC			0.01	0.01	ND	ND		
Chloroform	T	mg/kg-dry	10	0	No SLC			0.01	0.01	ND	ND		
Chloromethane	T	mg/kg-dry	10	0	HH Soil (HQ=1)	1.2	0	0.01	0.01	ND	ND		
cis-1,2-Dichloroethene	T	mg/kg-dry	10	0	No SLC			0.01	0.01	ND	ND		
cis-1,3-Dichloropropene	T	mg/kg-dry	10	0	No SLC			0.01	0.01	ND	ND		
Dibromochloromethane	T	mg/kg-dry	10	0	No SLC			0.01	0.01	ND	ND		
Dichlorodifluoromethane	T	mg/kg-dry	10	0	HH Soil (HQ=1)	94	0	0.01	0.01	ND	ND		
Ethylbenzene	T	mg/kg-dry	10	0	HH Soil (HQ=1)	230	0	0.01	0.01	ND	ND		
Styrene	T	mg/kg-dry	10	0	HH Soil (HQ=1)	1700	0	0.01	0.01	ND	ND		
Tetrachloroethene	T	mg/kg-dry	10	0	HH Soil (HQ=1)	0.55	0	0.01	0.01	ND	ND		
Toluene	T	mg/kg-dry	10	0	HH Soil (HQ=1)	520	0	0.01	0.01	ND	ND		
Total Xylene	T	mg/kg-dry	10	0	HH Soil (HQ=1)	210	0	0.01	0.01	ND	ND		
trans-1,2-Dichloroethene	T	mg/kg-dry	10	0	No SLC			0.01	0.01	ND	ND		
trans-1,3-Dichloropropene	T	mg/kg-dry	10	0	No SLC			0.01	0.01	ND	ND		
Trichloroethene	T	mg/kg-dry	10	0	HH Soil (HQ=1)	0.043	0	0.01	0.01	ND	ND		
Trichlorofluoromethane	T	mg/kg-dry	10	0	HH Soil (HQ=1)	390	0	0.01	0.01	ND	ND		
Vinyl chloride	T	mg/kg-dry	10	0	No SLC			0.01	0.01	ND	ND		

"No SLC" indicates that there is not a Screening Level Criterion for this medium specified for the RI/FS.
"HH Soil (HQ=1)" EPA Region 6 RBSLs Human Health Residential Soil (HQ=1)
"Eco Soil" EPA Region 6 Tier 1-3 RBSLs Ecological Soil
Median Value determined using 1/2 the Reporting Limit value for Non-Detects if greater than 50% of the values were detected.
Mean Value calculated using 1/2 the Reporting Limit for Non-Detects if greater than 50% of the values were detected.

T = Total Fraction
D = Filtered Fraction (0.45 micron filter)
A = Filtered Fraction (0.1 micron filter)
ND = Non-Detected Value

Table 7-8
Soil 0-24 inches Random
RI/FS Soil Area 1 - Mill Site
Summary of Results

Analyte	Sample Fraction	Units	Total Number of Samples	Percent Detects (%)	SLC	SLC Value	Percent Above SLC	Min RL for ND	Max RL for ND	Min Value	Max Value	Mean Value	Median Value
Inorganics													
Cation-Exchange Capacity	T	meq/100g	10	100	No SLC					6.8	22	13	11.4
Chloride	T	mg/kg-dry	10	100	No SLC					2.2	89.3	18.9	4
Fluoride	T	mg/kg-dry	10	100	No SLC					0.82	2.1	1.3	1.3
Nitrate	T	mg/kg-dry	10	50	No SLC			2.10	2.20	ND	7.2	2.9	2.1
Organic Soils	T	%	10	100	No SLC					1.2	4.1	2.1	1.6
pH	T	SU	10	100	No SLC					6.9	8.3	7.6	7.7
Phosphorus	T	mg/kg-dry	10	100	No SLC					479	1210	831	823
Sodium Absorption Ratio	T	ratio	10	100	No SLC					0.03	0.6	0.25	0.18
Solids, Percent	T	%	10	100	No SLC					89.3	95.8	93.3	93.3
Specific Conductance	T	umhos/cm	10	100	No SLC					43.6	900	328	263
Sulfate	T	mg/kg-dry	10	100	No SLC					24.4	2160	666	206
Total Kjeldahl Nitrogen	T	mg/kg-dry	10	100	No SLC					5.6	1340	367	187
Total Organic Carbon	T	mg/kg-dry	10	100	No SLC					283	16200	5230	3000
Metals													
Aluminum	T	mg/kg-dry	10	100	No SLC					6620	21700	11700	10800
Antimony	T	mg/kg-dry	10	0	ECO Soil	0.3	0	0.14	0.26	ND	ND		
Arsenic	T	mg/kg-dry	10	100	ECO Soil	31	0			2.2	4.4	3.3	3.5
Barium	T	mg/kg-dry	10	100	ECO Soil	330	0			27.2	144	71.6	72
Beryllium	T	mg/kg-dry	10	100	ECO Soil	30	0			0.6	1.6	1.2	1.2
Boron	T	mg/kg-dry	10	50	ECO Soil	0.5	100	0.44	2.60	ND	4.5	2	1.8
Cadmium	T	mg/kg-dry	10	100	ECO Soil	0.4	80			0.048	10.1	2.1	0.84
Calcium	T	mg/kg-dry	10	100	No SLC					5820	25600	13100	12600
Chromium	T	mg/kg-dry	10	100	ECO Soil	7.9	100			14	74.9	41	39.2
Cobalt	T	mg/kg-dry	10	100	ECO Soil	32	0			4.6	22.3	11.4	9.6
Copper	T	mg/kg-dry	10	100	ECO Soil	54	90			45.1	169	107	96.3
Iron	T	mg/kg-dry	10	100	No SLC					13400	33900	21100	20100
Lead	T	mg/kg-dry	10	100	ECO Soil	15	100			31.3	544	148	70
Magnesium	T	mg/kg-dry	10	100	No SLC					2920	18500	8730	7230
Manganese	T	mg/kg-dry	10	100	ECO Soil	152	100			393	2270	929	835
Mercury	T	mg/kg-dry	10	40	ECO Soil	0.1	0	0.02	0.02	ND	0.025		
Molybdenum	T	mg/kg-dry	10	100	ECO Soil	2	100			66.9	2180	832	520

"No SLC" indicates that there is not a Screening Level Criterion for this medium specified for the RI/FS.
"HH Soil (HQ=1)" EPA Region 6 RBSLs Human Health Residential Soil (HQ=1)
"Eco Soil" EPA Region 6 Tier 1-3 RBSLs Ecological Soil
Median Value determined using 1/2 the Reporting Limit value for Non-Detects if greater than 50% of the values were detected.
Mean Value calculated using 1/2 the Reporting Limit for Non-Detects if greater than 50% of the values were detected.

T = Total Fraction
D = Filtered Fraction (0.45 micron filter)
A = Filtered Fraction (0.1 micron filter)
ND = Non-Detected Value

Table 7-8
Soil 0-24 inches Random
RI/FS Soil Area 1 - Mill Site
Summary of Results

Analyte	Sample Fraction	Units	Total Number of Samples	Percent Detects (%)	SLC	SLC Value	Percent Above SLC	Min RL for ND	Max RL for ND	Min Value	Max Value	Mean Value	Median Value
Nickel	T	mg/kg-dry	10	100	ECO Soil	48	10			8.9	57.5	29.7	26.6
Potassium	T	mg/kg-dry	10	100	No SLC					1800	5420	3140	2720
Selenium	T	mg/kg-dry	10	70	ECO Soil	1	14.3	0.65	0.69	ND	1.1	0.64	0.59
Silver	T	mg/kg-dry	10	100	ECO Soil	2	0			0.32	1.7	0.94	0.82
Sodium	T	mg/kg-dry	10	20	No SLC			40.80	81.40	ND	86.7		
Thallium	T	mg/kg-dry	10	100	ECO Soil	1	0			0.19	0.48	0.26	0.22
Vanadium	T	mg/kg-dry	10	100	ECO Soil	2	100			19.4	70.6	43.1	42.3
Zinc	T	mg/kg-dry	10	100	ECO Soil	120	50			93.1	1580	333	125
Pesticides-PCBs													
Aroclor 1016	T	mg/kg-dry	10	0	No SLC			0.03	0.04	ND	ND		
Aroclor 1221	T	mg/kg-dry	10	0	No SLC			0.07	0.08	ND	ND		
Aroclor 1232	T	mg/kg-dry	10	0	No SLC			0.03	0.04	ND	ND		
Aroclor 1242	T	mg/kg-dry	10	0	No SLC			0.03	0.04	ND	ND		
Aroclor 1248	T	mg/kg-dry	10	0	ECO Soil	10	0	0.03	0.04	ND	ND		
Aroclor 1254	T	mg/kg-dry	10	70	ECO Soil	10	0	0.03	0.04	ND	3.3	0.55	0.2
Aroclor 1260	T	mg/kg-dry	10	0	ECO Soil	10	0	0.03	0.04	ND	ND		
Semi-Volatile Organics													
1,1`-Biphenyl	T	mg/kg-dry	10	0	ECO Soil	60	0	0.34	0.37	ND	ND		
2,4,5-Trichlorophenol	T	mg/kg-dry	10	0	No SLC			0.86	0.93	ND	ND		
2,4,6-Trichlorophenol	T	mg/kg-dry	10	0	No SLC			0.34	0.37	ND	ND		
2,4-Dichlorophenol	T	mg/kg-dry	10	0	No SLC			0.34	0.37	ND	ND		
2,4-Dimethylphenol	T	mg/kg-dry	10	0	No SLC			0.34	0.37	ND	ND		
2,4-Dinitrophenol	T	mg/kg-dry	10	0	No SLC			0.86	0.93	ND	ND		
2,4-Dinitrotoluene	T	mg/kg-dry	10	0	No SLC			0.34	0.37	ND	ND		
2,6-Dinitrotoluene	T	mg/kg-dry	10	0	ECO Soil	0.033	0	0.34	0.37	ND	ND		
2-Chloronaphthalene	T	mg/kg-dry	10	0	No SLC			0.34	0.37	ND	ND		
2-Chlorophenol	T	mg/kg-dry	10	0	ECO Soil	20	0	0.34	0.37	ND	ND		
2-Methylnaphthalene	T	mg/kg-dry	10	0	ECO Soil	3.2	0	0.34	0.37	ND	ND		
2-Methylphenol	T	mg/kg-dry	10	0	No SLC			0.34	0.37	ND	ND		
2-Nitroaniline	T	mg/kg-dry	10	0	No SLC			0.86	0.93	ND	ND		
2-Nitrophenol	T	mg/kg-dry	10	0	No SLC			0.34	0.37	ND	ND		
3,3-Dichlorobenzidine	T	mg/kg-dry	10	0	No SLC			0.34	0.37	ND	ND		

"No SLC" indicates that there is not a Screening Level Criterion for this medium specified for the RI/FS.
"HH Soil (HQ=1)" EPA Region 6 RBSLs Human Health Residential Soil (HQ=1)
"Eco Soil" EPA Region 6 Tier 1-3 RBSLs Ecological Soil
Median Value determined using 1/2 the Reporting Limit value for Non-Detects if greater than 50% of the values were detected.
Mean Value calculated using 1/2 the Reporting Limit for Non-Detects if greater than 50% of the values were detected.

T = Total Fraction
D = Filtered Fraction (0.45 micron filter)
A = Filtered Fraction (0.1 micron filter)
ND = Non-Detected Value

Table 7-8
Soil 0-24 inches Random
RI/FS Soil Area 1 - Mill Site
Summary of Results

Analyte	Sample Fraction	Units	Total Number of Samples	Percent Detects (%)	SLC	SLC Value	Percent Above SLC	Min RL for ND	Max RL for ND	Min Value	Max Value	Mean Value	Median Value
3-Nitroaniline	T	mg/kg-dry	10	0	No SLC			0.86	0.93	ND	ND		
4,6-Dinitro-2-methylphenol	T	mg/kg-dry	10	0	No SLC			0.86	0.93	ND	ND		
4-Bromophenyl phenyl ether	T	mg/kg-dry	10	0	No SLC			0.34	0.37	ND	ND		
4-Chloro-3-methylphenol	T	mg/kg-dry	10	0	ECO Soil	8	0	0.34	0.37	ND	ND		
4-Chloroaniline	T	mg/kg-dry	10	0	No SLC			0.34	0.37	ND	ND		
4-Chlorophenyl phenyl ether	T	mg/kg-dry	10	0	No SLC			0.34	0.37	ND	ND		
4-Methylphenol	T	mg/kg-dry	10	0	No SLC			0.34	0.37	ND	ND		
4-Nitroaniline	T	mg/kg-dry	10	0	No SLC			0.86	0.93	ND	ND		
4-Nitrophenol	T	mg/kg-dry	10	0	No SLC			0.86	0.93	ND	ND		
Acenaphthene	T	mg/kg-dry	10	0	ECO Soil	20	0	0.34	0.37	ND	ND		
Acenaphthylene	T	mg/kg-dry	10	0	No SLC			0.34	0.37	ND	ND		
Anthracene	T	mg/kg-dry	10	0	ECO Soil	10	0	0.34	0.37	ND	ND		
Benzo(a)anthracene	T	mg/kg-dry	10	0	ECO Soil	5.2	0	0.34	0.37	ND	ND		
Benzo(a)pyrene	T	mg/kg-dry	10	0	ECO Soil	1	0	0.34	0.37	ND	ND		
Benzo(b)fluoranthene	T	mg/kg-dry	10	0	ECO Soil	59.8	0	0.34	0.37	ND	ND		
Benzo(g,h,i)perylene	T	mg/kg-dry	10	0	ECO Soil	119	0	0.34	0.37	ND	ND		
Benzo(k)fluoranthene	T	mg/kg-dry	10	0	ECO Soil	148	0	0.34	0.37	ND	ND		
Bis(2-chloroethoxy)methane	T	mg/kg-dry	10	0	No SLC			0.34	0.37	ND	ND		
Bis(2-chloroethyl)ether	T	mg/kg-dry	10	0	No SLC			0.34	0.37	ND	ND		
Carbazole	T	mg/kg-dry	10	0	No SLC			0.34	0.37	ND	ND		
Chrysene	T	mg/kg-dry	10	10	ECO Soil	4.7	0	0.34	0.37	ND	0.018		
Dibenz(a,h)anthracene	T	mg/kg-dry	10	0	ECO Soil	18.4	0	0.34	0.37	ND	ND		
Dibenzofuran	T	mg/kg-dry	10	0	No SLC			0.34	0.37	ND	ND		
Dichlorodiisopropyl ether	T	mg/kg-dry	10	0	No SLC			0.34	0.37	ND	ND		
Fluoranthene	T	mg/kg-dry	10	10	ECO Soil	10	0	0.34	0.37	ND	0.017		
Fluorene	T	mg/kg-dry	10	0	ECO Soil	30	0	0.34	0.37	ND	ND		
Hexachlorobenzene	T	mg/kg-dry	10	0	No SLC			0.34	0.37	ND	ND		
Hexachlorobutadiene	T	mg/kg-dry	10	0	No SLC			0.34	0.37	ND	ND		
Hexachlorocyclopentadiene	T	mg/kg-dry	10	0	No SLC			0.34	0.37	ND	ND		
Hexachloroethane	T	mg/kg-dry	10	0	No SLC			0.34	0.37	ND	ND		
Indeno(1,2,3-cd)pyrene	T	mg/kg-dry	10	0	ECO Soil	109	0	0.34	0.37	ND	ND		
Isophorone	T	mg/kg-dry	10	0	ECO Soil	139	0	0.34	0.37	ND	ND		

"No SLC" indicates that there is not a Screening Level Criterion for this medium specified for the RI/FS.
"HH Soil (HQ=1)" EPA Region 6 RBSLs Human Health Residential Soil (HQ=1)
"Eco Soil" EPA Region 6 Tier 1-3 RBSLs Ecological Soil
Median Value determined using 1/2 the Reporting Limit value for Non-Detects if greater than 50% of the values were detected.
Mean Value calculated using 1/2 the Reporting Limit for Non-Detects if greater than 50% of the values were detected.

T = Total Fraction
D = Filtered Fraction (0.45 micron filter)
A = Filtered Fraction (0.1 micron filter)
ND = Non-Detected Value

Table 7-8
Soil 0-24 inches Random
RI/FS Soil Area 1 - Mill Site
Summary of Results

Analyte	Sample Fraction	Units	Total Number of Samples	Percent Detects (%)	SLC	SLC Value	Percent Above SLC	Min RL for ND	Max RL for ND	Min Value	Max Value	Mean Value	Median Value
Naphthalene	T	mg/kg-dry	10	0	ECO Soil	5	0	0.34	0.37	ND	ND		
Nitrobenzene	T	mg/kg-dry	10	0	No SLC			0.34	0.37	ND	ND		
N-Nitrosodi-n-propylamine	T	mg/kg-dry	10	0	ECO Soil	0.54	0	0.34	0.37	ND	ND		
N-Nitrosodiphenylamine	T	mg/kg-dry	10	0	ECO Soil	20	0	0.34	0.37	ND	ND		
Pentachlorophenol	T	mg/kg-dry	10	0	No SLC			0.86	0.93	ND	ND		
Phenanthrene	T	mg/kg-dry	10	0	ECO Soil	5	0	0.34	0.37	ND	ND		
Phenol	T	mg/kg-dry	10	0	ECO Soil	30	0	0.34	0.37	ND	ND		
Pyrene	T	mg/kg-dry	10	0	ECO Soil	10	0	0.34	0.37	ND	ND		
Volatile Organics													
1,1,1-Trichloroethane	T	mg/kg-dry	10	0	ECO Soil	0.1	0	0.01	0.01	ND	ND		
1,1,2,2-Tetrachloroethane	T	mg/kg-dry	10	0	No SLC			0.01	0.01	ND	ND		
1,1,2-Trichloro-1,2,2-trifluoroethane	T	mg/kg-dry	10	0	No SLC			0.01	0.01	ND	ND		
1,1,2-Trichloroethane	T	mg/kg-dry	10	0	No SLC			0.01	0.01	ND	ND		
1,1-Dichloroethane	T	mg/kg-dry	10	0	ECO Soil	20.1	0	0.01	0.01	ND	ND		
1,1-Dichloroethene	T	mg/kg-dry	10	0	No SLC			0.01	0.01	ND	ND		
1,2,4-Trichlorobenzene	T	mg/kg-dry	10	0	No SLC			0.01	0.01	ND	ND		
1,2-Dibromo-3-chloropropane	T	mg/kg-dry	10	0	No SLC			0.01	0.01	ND	ND		
1,2-Dichlorobenzene	T	mg/kg-dry	10	0	No SLC			0.01	0.01	ND	ND		
1,2-Dichloroethane	T	mg/kg-dry	10	0	No SLC			0.01	0.01	ND	ND		
1,2-Dichloroethene (total)	T	mg/kg-dry	10	0	No SLC			0.01	0.01	ND	ND		
1,2-Dichloropropane	T	mg/kg-dry	10	0	No SLC			0.01	0.01	ND	ND		
1,3-Dichlorobenzene	T	mg/kg-dry	10	0	No SLC			0.01	0.01	ND	ND		
1,4-Dichlorobenzene	T	mg/kg-dry	10	0	No SLC			0.01	0.01	ND	ND		
2-Butanone	T	mg/kg-dry	10	0	ECO Soil	89.6	0	0.01	0.01	ND	ND		
2-Hexanone	T	mg/kg-dry	10	0	ECO Soil	12.6	0	0.01	0.01	ND	ND		
4-Methyl-2-pentanone	T	mg/kg-dry	10	0	ECO Soil	443	0	0.01	0.01	ND	ND		
Benzene	T	mg/kg-dry	10	0	ECO Soil	0.5	0	0.01	0.01	ND	ND		
Bromodichloromethane	T	mg/kg-dry	10	0	No SLC			0.01	0.01	ND	ND		
Bromoform	T	mg/kg-dry	10	0	No SLC			0.01	0.01	ND	ND		
Bromomethane	T	mg/kg-dry	10	0	No SLC			0.01	0.01	ND	ND		
Carbon tetrachloride	T	mg/kg-dry	10	0	ECO Soil	1000	0	0.01	0.01	ND	ND		
Chlorobenzene	T	mg/kg-dry	10	0	ECO Soil	40	0	0.01	0.01	ND	ND		

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"HH Soil (HQ=1)" EPA Region 6 RBSLs Human Health Residential Soil (HQ=1)
"Eco Soil" EPA Region 6 Tier 1-3 RBSLs Ecological Soil
Median Value determined using 1/2 the Reporting Limit value for Non-Detects if greater than 50% of the values were detected.
Mean Value calculated using 1/2 the Reporting Limit for Non-Detects if greater than 50% of the values were detected.

T = Total Fraction
D = Filtered Fraction (0.45 micron filter)
A = Filtered Fraction (0.1 micron filter)
ND = Non-Detected Value

Table 7-8
Soil 0-24 inches Random
RI/FS Soil Area 1 - Mill Site
Summary of Results

Analyte	Sample Fraction	Units	Total Number of Samples	Percent Detects (%)	SLC	SLC Value	Percent Above SLC	Min RL for ND	Max RL for ND	Min Value	Max Value	Mean Value	Median Value
Chloroethane	T	mg/kg-dry	10	0	No SLC			0.01	0.01	ND	ND		
Chloroform	T	mg/kg-dry	10	0	No SLC			0.01	0.01	ND	ND		
Chloromethane	T	mg/kg-dry	10	0	ECO Soil	10.4	0	0.01	0.01	ND	ND		
cis-1,2-Dichloroethene	T	mg/kg-dry	10	0	No SLC			0.01	0.01	ND	ND		
cis-1,3-Dichloropropene	T	mg/kg-dry	10	0	No SLC			0.01	0.01	ND	ND		
Dibromochloromethane	T	mg/kg-dry	10	0	No SLC			0.01	0.01	ND	ND		
Dichlorodifluoromethane	T	mg/kg-dry	10	0	ECO Soil	39.5	0	0.01	0.01	ND	ND		
Ethylbenzene	T	mg/kg-dry	10	0	ECO Soil	5	0	0.01	0.01	ND	ND		
Styrene	T	mg/kg-dry	10	0	ECO Soil	300	0	0.01	0.01	ND	ND		
Tetrachloroethene	T	mg/kg-dry	10	0	No SLC			0.01	0.01	ND	ND		
Toluene	T	mg/kg-dry	10	0	ECO Soil	200	0	0.01	0.01	ND	ND		
Total Xylene	T	mg/kg-dry	10	0	ECO Soil	5	0	0.01	0.01	ND	ND		
trans-1,2-Dichloroethene	T	mg/kg-dry	10	0	No SLC			0.01	0.01	ND	ND		
trans-1,3-Dichloropropene	T	mg/kg-dry	10	0	No SLC			0.01	0.01	ND	ND		
Trichloroethene	T	mg/kg-dry	10	0	No SLC			0.01	0.01	ND	ND		
Trichlorofluoromethane	T	mg/kg-dry	10	10	ECO Soil	16.4	0	0.01	0.01	ND	0.002		
Vinyl chloride	T	mg/kg-dry	10	0	No SLC			0.01	0.01	ND	ND		

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"Eco Soil" EPA Region 6 Tier 1-3 RBSLs Ecological Soil
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Mean Value calculated using 1/2 the Reporting Limit for Non-Detects if greater than 50% of the values were detected.

T = Total Fraction
D = Filtered Fraction (0.45 micron filter)
A = Filtered Fraction (0.1 micron filter)
ND = Non-Detected Value

Table 7-9
Soil 0-6 inches Biased
RI/FS Soil Area 1 - Mill Site
Summary of Results

Analyte	Sample Fraction	Units	Total Number of Samples	Percent Detects (%)	SLC	SLC Value	Percent Above SLC	Min RL for ND	Max RL for ND	Min Value	Max Value	Mean Value	Median Value
Inorganics													
Cation-Exchange Capacity	T	meq/100g	101	100	No SLC					1.4	42.7	12.9	10.6
Chloride	T	mg/kg-dry	101	89.1	No SLC			2.10	27.50	ND	6040	134	14.1
Fluoride	T	mg/kg-dry	99	98	HH Soil (HQ=1)	3700	0	1.10	1.10	ND	250	6.9	1.5
Nitrate	T	mg/kg-dry	101	60.4	No SLC			2.10	2.80	ND	64.6	6.7	2.7
Organic Soils	T	%	101	100	No SLC					0.5	6.9	2	1.8
pH	T	SU	101	100	No SLC					5	10.5	7.4	7.5
Phosphorus	T	mg/kg-dry	101	100	No SLC					111	4130	1000	920
Sodium Absorption Ratio	T	ratio	101	98	No SLC			0.02	0.03	ND	42.6	1.7	0.46
Solids, Percent	T	%	115	100	No SLC					73.9	99	93.6	94.6
Solids, Percent - VOCs Only	T	%	9	100	No SLC					84.6	96.3	91.5	92.8
Specific Conductance	T	umhos/cm	101	100	No SLC					57.7	13200	1230	925
Sulfate	T	mg/kg-dry	101	100	No SLC					10.7	11000	1460	580
Total Kjeldahl Nitrogen	T	mg/kg-dry	101	99	No SLC			29.80	29.80	ND	1220	174	144
Total Organic Carbon	T	mg/kg-dry	101	91.1	No SLC			104.00	136.00	ND	54200	5020	3120
Metals													
Aluminum	T	mg/kg-dry	101	100	HH Soil (HQ=1)	76000	0			4590	20300	11600	11300
Antimony	T	mg/kg-dry	101	5	HH Soil (HQ=1)	31	0	0.21	0.61	ND	0.64		
Arsenic	T	mg/kg-dry	101	99	HH Soil (HQ=1)	0.39	100	0.97	0.97	ND	14.1	4.1	3.6
Barium	T	mg/kg-dry	101	100	HH Soil (HQ=1)	5500	0			21.1	248	93.7	88.1
Beryllium	T	mg/kg-dry	101	100	HH Soil (HQ=1)	150	0			0.36	5.4	1.3	1.1
Boron	T	mg/kg-dry	101	40.6	HH Soil (HQ=1)	5500	0	0.21	3.80	ND	9.5		
Cadmium	T	mg/kg-dry	101	94.1	HH Soil (HQ=1)	39	0	0.04	0.04	ND	7.3	1.1	0.82
Calcium	T	mg/kg-dry	101	100	No SLC					2070	32100	11700	10600
Chromium	T	mg/kg-dry	101	100	HH Soil (HQ=1)	210	0			10.5	83.8	43.9	41.6
Cobalt	T	mg/kg-dry	101	94.1	HH Soil (HQ=1)	900	0	0.13	16.10	ND	25.7	9	8.7
Copper	T	mg/kg-dry	101	100	HH Soil (HQ=1)	2900	0			45.1	1890	160	111
Iron	T	mg/kg-dry	101	100	HH Soil (HQ=1)	23000	46.5			9310	59100	23300	22400
Lead	T	mg/kg-dry	101	100	HH Soil (HQ=1)	400	5			34.5	1230	147	98.3
Magnesium	T	mg/kg-dry	101	100	No SLC					1660	13100	7520	7270
Manganese	T	mg/kg-dry	101	100	HH Soil (HQ=1)	3200	0			226	2230	838	762
Mercury	T	mg/kg-dry	101	34.7	HH Soil (HQ=1)	23	0	0.02	0.02	ND	9		

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Mean Value calculated using 1/2 the Reporting Limit for Non-Detects if greater than 50% of the values were detected.

T = Total Fraction
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A = Filtered Fraction (0.1 micron filter)
ND = Non-Detected Value

Table 7-9
Soil 0-6 inches Biased
RI/FS Soil Area 1 - Mill Site
Summary of Results

Analyte	Sample Fraction	Units	Total Number of Samples	Percent Detects (%)	SLC	SLC Value	Percent Above SLC	Min RL for ND	Max RL for ND	Min Value	Max Value	Mean Value	Median Value
Molybdenum	T	mg/kg-dry	101	100	HH Soil (HQ=1)	390	86.1			126	38300	3970	1240
Nickel	T	mg/kg-dry	101	100	HH Soil (HQ=1)	1600	0			6.4	68.8	30.3	28.7
Potassium	T	mg/kg-dry	101	100	No SLC					947	5910	3170	2980
Selenium	T	mg/kg-dry	100	56	HH Soil (HQ=1)	390	0	0.60	0.91	ND	4.8	0.98	0.75
Silver	T	mg/kg-dry	101	96	HH Soil (HQ=1)	390	0	0.14	0.27	ND	12	1.2	0.89
Sodium	T	mg/kg-dry	101	32.7	No SLC			26.90	362.00	ND	6710		
Thallium	T	mg/kg-dry	101	99	HH Soil (HQ=1)	5.5	0	0.09	0.09	ND	0.96	0.32	0.28
Vanadium	T	mg/kg-dry	101	100	HH Soil (HQ=1)	78	12.9			11.9	175	54.9	46.3
Zinc	T	mg/kg-dry	101	100	HH Soil (HQ=1)	23000	0			69.3	1110	200	170
Pesticides-PCBs													
Aroclor 1016	T	mg/kg-dry	94	0	No SLC			0.03	2.20	ND	ND		
Aroclor 1221	T	mg/kg-dry	94	0	No SLC			0.07	4.40	ND	ND		
Aroclor 1232	T	mg/kg-dry	94	0	No SLC			0.03	2.20	ND	ND		
Aroclor 1242	T	mg/kg-dry	94	0	No SLC			0.03	2.20	ND	ND		
Aroclor 1248	T	mg/kg-dry	95	36.8	HH Soil (HQ=1)	0.22	74.3	0.03	0.10	ND	140		
Aroclor 1254	T	mg/kg-dry	94	71.3	HH Soil (HQ=1)	0.22	52.2	0.03	2.20	ND	20	0.81	0.13
Aroclor 1260	T	mg/kg-dry	94	12.8	HH Soil (HQ=1)	0.22	33.3	0.03	2.20	ND	7.6		
Semi-Volatile Organics													
1,1`-Biphenyl	T	mg/kg-dry	101	3	HH Soil (HQ=1)	3000	0	0.33	7.50	ND	1.9		
2,4,5-Trichlorophenol	T	mg/kg-dry	101	0	No SLC			0.84	19.00	ND	ND		
2,4,6-Trichlorophenol	T	mg/kg-dry	101	0	No SLC			0.33	7.50	ND	ND		
2,4-Dichlorophenol	T	mg/kg-dry	101	0	No SLC			0.33	7.50	ND	ND		
2,4-Dimethylphenol	T	mg/kg-dry	101	0	No SLC			0.33	7.50	ND	ND		
2,4-Dinitrophenol	T	mg/kg-dry	101	0	No SLC			0.84	19.00	ND	ND		
2,4-Dinitrotoluene	T	mg/kg-dry	101	0	No SLC			0.33	7.50	ND	ND		
2,6-Dinitrotoluene	T	mg/kg-dry	101	0	HH Soil (HQ=1)	61	0	0.33	7.50	ND	ND		
2-Chloronaphthalene	T	mg/kg-dry	101	0	No SLC			0.33	7.50	ND	ND		
2-Chlorophenol	T	mg/kg-dry	101	0	HH Soil (HQ=1)	64	0	0.33	7.50	ND	ND		
2-Methylnaphthalene	T	mg/kg-dry	101	5.9	No SLC			0.33	7.50	ND	3.7		
2-Methylphenol	T	mg/kg-dry	101	0	No SLC			0.33	7.50	ND	ND		
2-Nitroaniline	T	mg/kg-dry	101	0	No SLC			0.84	19.00	ND	ND		
2-Nitrophenol	T	mg/kg-dry	101	0	No SLC			0.33	7.50	ND	ND		

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Mean Value calculated using 1/2 the Reporting Limit for Non-Detects if greater than 50% of the values were detected.

T = Total Fraction
D = Filtered Fraction (0.45 micron filter)
A = Filtered Fraction (0.1 micron filter)
ND = Non-Detected Value

Table 7-9
Soil 0-6 inches Biased
RI/FS Soil Area 1 - Mill Site
Summary of Results

Analyte	Sample Fraction	Units	Total Number of Samples	Percent Detects (%)	SLC	SLC Value	Percent Above SLC	Min RL for ND	Max RL for ND	Min Value	Max Value	Mean Value	Median Value
3,3-Dichlorobenzidine	T	mg/kg-dry	101	0	No SLC			0.33	7.50	ND	ND		
3-Nitroaniline	T	mg/kg-dry	101	0	No SLC			0.84	19.00	ND	ND		
4,6-Dinitro-2-methylphenol	T	mg/kg-dry	101	0	No SLC			0.84	19.00	ND	ND		
4-Bromophenyl phenyl ether	T	mg/kg-dry	101	0	No SLC			0.33	7.50	ND	ND		
4-Chloro-3-methylphenol	T	mg/kg-dry	101	0	No SLC			0.33	7.50	ND	ND		
4-Chloroaniline	T	mg/kg-dry	101	0	No SLC			0.33	7.50	ND	ND		
4-Chlorophenyl phenyl ether	T	mg/kg-dry	101	0	No SLC			0.33	7.50	ND	ND		
4-Methylphenol	T	mg/kg-dry	101	0	No SLC			0.33	7.50	ND	ND		
4-Nitroaniline	T	mg/kg-dry	101	0	No SLC			0.84	19.00	ND	ND		
4-Nitrophenol	T	mg/kg-dry	101	0	No SLC			0.84	19.00	ND	ND		
Acenaphthene	T	mg/kg-dry	101	2	HH Soil (HQ=1)	3700	0	0.33	3.50	ND	4		
Acenaphthylene	T	mg/kg-dry	101	0	No SLC			0.33	7.50	ND	ND		
Anthracene	T	mg/kg-dry	101	4	HH Soil (HQ=1)	22000	0	0.33	3.50	ND	2.2		
Benzo(a)anthracene	T	mg/kg-dry	101	13.9	HH Soil (HQ=1)	0.62	7.1	0.33	7.50	ND	1		
Benzo(a)pyrene	T	mg/kg-dry	101	7.9	HH Soil (HQ=1)	0.062	25	0.33	7.50	ND	0.93		
Benzo(b)fluoranthene	T	mg/kg-dry	101	7.9	HH Soil (HQ=1)	0.62	12.5	0.33	7.50	ND	0.9		
Benzo(g,h,i)perylene	T	mg/kg-dry	101	6.9	No SLC			0.33	7.50	ND	0.45		
Benzo(k)fluoranthene	T	mg/kg-dry	101	8.9	HH Soil (HQ=1)	6.2	0	0.33	7.50	ND	1.5		
Bis(2-chloroethoxy)methane	T	mg/kg-dry	101	0	No SLC			0.33	7.50	ND	ND		
Bis(2-chloroethyl)ether	T	mg/kg-dry	101	0	No SLC			0.33	7.50	ND	ND		
Carbazole	T	mg/kg-dry	101	2	HH Soil (HQ=1)	24	0	0.33	7.50	ND	0.12		
Chrysene	T	mg/kg-dry	101	19.8	HH Soil (HQ=1)	62	0	0.33	7.50	ND	1.5		
Dibenz(a,h)anthracene	T	mg/kg-dry	101	2	HH Soil (HQ=1)	0.062	50	0.33	7.50	ND	0.11		
Dibenzofuran	T	mg/kg-dry	101	3	HH Soil (HQ=1)	150	0	0.33	3.50	ND	3.9		
Dichlorodiisopropyl ether	T	mg/kg-dry	101	0	No SLC			0.33	7.50	ND	ND		
Fluoranthene	T	mg/kg-dry	101	17.8	HH Soil (HQ=1)	2300	0	0.33	7.50	ND	1.2		
Fluorene	T	mg/kg-dry	101	4	HH Soil (HQ=1)	2600	0	0.33	3.50	ND	7.3		
Hexachlorobenzene	T	mg/kg-dry	101	0	No SLC			0.33	7.50	ND	ND		
Hexachlorobutadiene	T	mg/kg-dry	101	0	No SLC			0.33	7.50	ND	ND		
Hexachlorocyclopentadiene	T	mg/kg-dry	101	0	No SLC			0.33	7.50	ND	ND		
Hexachloroethane	T	mg/kg-dry	101	0	No SLC			0.33	7.50	ND	ND		
Indeno(1,2,3-cd)pyrene	T	mg/kg-dry	101	6.9	HH Soil (HQ=1)	0.62	0	0.33	7.50	ND	0.44		

"No SLC" indicates that there is not a Screening Level Criterion for this medium specified for the RI/FS.
"HH Soil (HQ=1)" EPA Region 6 RBSLs Human Health Residential Soil (HQ=1)
"Eco Soil" EPA Region 6 Tier 1-3 RBSLs Ecological Soil
Median Value determined using 1/2 the Reporting Limit value for Non-Detects if greater than 50% of the values were detected.
Mean Value calculated using 1/2 the Reporting Limit for Non-Detects if greater than 50% of the values were detected.

T = Total Fraction
D = Filtered Fraction (0.45 micron filter)
A = Filtered Fraction (0.1 micron filter)
ND = Non-Detected Value

Table 7-9
Soil 0-6 inches Biased
RI/FS Soil Area 1 - Mill Site
Summary of Results

Analyte	Sample Fraction	Units	Total Number of Samples	Percent Detects (%)	SLC	SLC Value	Percent Above SLC	Min RL for ND	Max RL for ND	Min Value	Max Value	Mean Value	Median Value
Isophorone	T	mg/kg-dry	101	0	HH Soil (HQ=1)	510	0	0.33	7.50	ND	ND		
Naphthalene	T	mg/kg-dry	101	3	HH Soil (HQ=1)	120	0	0.33	3.50	ND	10		
Nitrobenzene	T	mg/kg-dry	101	0	No SLC			0.33	7.50	ND	ND		
N-Nitrosodi-n-propylamine	T	mg/kg-dry	101	0	HH Soil (HQ=1)	0.07	0	0.33	7.50	ND	ND		
N-Nitrosodiphenylamine	T	mg/kg-dry	102	2	HH Soil (HQ=1)	99	0	0.33	3.50	ND	24		
Pentachlorophenol	T	mg/kg-dry	101	0	No SLC			0.84	19.00	ND	ND		
Phenanthrene	T	mg/kg-dry	101	20.8	No SLC			0.33	3.50	ND	31		
Phenol	T	mg/kg-dry	101	0.99	HH Soil (HQ=1)	18000	0	0.33	7.50	ND	0.22		
Pyrene	T	mg/kg-dry	101	27.7	HH Soil (HQ=1)	2300	0	0.33	3.50	ND	3.6		
Volatile Organics													
1,1,1-Trichloroethane	T	mg/kg-dry	100	1	HH Soil (HQ=1)	1400	0	0.00	0.02	ND	0.008		
1,1,2,2-Tetrachloroethane	T	mg/kg-dry	100	0	No SLC			0.00	0.02	ND	ND		
1,1,2-Trichloro-1,2,2-trifluoroethane	T	mg/kg-dry	100	0	No SLC			0.00	0.02	ND	ND		
1,1,2-Trichloroethane	T	mg/kg-dry	100	0	No SLC			0.00	0.02	ND	ND		
1,1-Dichloroethane	T	mg/kg-dry	100	0	HH Soil (HQ=1)	590	0	0.00	0.02	ND	ND		
1,1-Dichloroethene	T	mg/kg-dry	100	0	HH Soil (HQ=1)	280	0	0.00	0.02	ND	ND		
1,2,4-Trichlorobenzene	T	mg/kg-dry	100	0	No SLC			0.00	0.02	ND	ND		
1,2-Dibromo-3-chloropropane	T	mg/kg-dry	100	0	No SLC			0.00	0.02	ND	ND		
1,2-Dichlorobenzene	T	mg/kg-dry	100	0	No SLC			0.00	0.02	ND	ND		
1,2-Dichloroethane	T	mg/kg-dry	100	0	No SLC			0.00	0.02	ND	ND		
1,2-Dichloroethene (total)	T	mg/kg-dry	100	0	No SLC			0.00	0.02	ND	ND		
1,2-Dichloropropane	T	mg/kg-dry	100	0	No SLC			0.00	0.02	ND	ND		
1,3-Dichlorobenzene	T	mg/kg-dry	100	0	No SLC			0.00	0.02	ND	ND		
1,4-Dichlorobenzene	T	mg/kg-dry	100	0	No SLC			0.00	0.02	ND	ND		
2-Butanone	T	mg/kg-dry	100	23	HH Soil (HQ=1)	32000	0	0.00	0.02	ND	0.012		
2-Hexanone	T	mg/kg-dry	100	0	No SLC			0.00	0.02	ND	ND		
4-Methyl-2-pentanone	T	mg/kg-dry	100	2	HH Soil (HQ=1)	5800	0	0.00	0.02	ND	0.004		
Benzene	T	mg/kg-dry	100	4	HH Soil (HQ=1)	0.66	0	0.00	0.02	ND	0.0007		
Bromodichloromethane	T	mg/kg-dry	100	0	No SLC			0.00	0.02	ND	ND		
Bromoform	T	mg/kg-dry	100	0	No SLC			0.00	0.02	ND	ND		
Bromomethane	T	mg/kg-dry	100	0	No SLC			0.00	0.02	ND	ND		
Carbon tetrachloride	T	mg/kg-dry	100	0	HH Soil (HQ=1)	0.24	0	0.00	0.02	ND	ND		

"No SLC" indicates that there is not a Screening Level Criterion for this medium specified for the RI/FS.
"HH Soil (HQ=1)" EPA Region 6 RBSLs Human Health Residential Soil (HQ=1)
"Eco Soil" EPA Region 6 Tier 1-3 RBSLs Ecological Soil
Median Value determined using 1/2 the Reporting Limit value for Non-Detects if greater than 50% of the values were detected.
Mean Value calculated using 1/2 the Reporting Limit for Non-Detects if greater than 50% of the values were detected.

T = Total Fraction
D = Filtered Fraction (0.45 micron filter)
A = Filtered Fraction (0.1 micron filter)
ND = Non-Detected Value

Table 7-9
Soil 0-6 inches Biased
RI/FS Soil Area 1 - Mill Site
Summary of Results

Analyte	Sample Fraction	Units	Total Number of Samples	Percent Detects (%)	SLC	SLC Value	Percent Above SLC	Min RL for ND	Max RL for ND	Min Value	Max Value	Mean Value	Median Value
Chlorobenzene	T	mg/kg-dry	100	0	HH Soil (HQ=1)	320	0	0.00	0.02	ND	ND		
Chloroethane	T	mg/kg-dry	100	0	No SLC			0.00	0.02	ND	ND		
Chloroform	T	mg/kg-dry	100	0	No SLC			0.00	0.02	ND	ND		
Chloromethane	T	mg/kg-dry	100	0	HH Soil (HQ=1)	1.2	0	0.00	0.02	ND	ND		
cis-1,2-Dichloroethene	T	mg/kg-dry	100	0	No SLC			0.00	0.02	ND	ND		
cis-1,3-Dichloropropene	T	mg/kg-dry	100	0	No SLC			0.00	0.02	ND	ND		
Dibromochloromethane	T	mg/kg-dry	100	0	No SLC			0.00	0.02	ND	ND		
Dichlorodifluoromethane	T	mg/kg-dry	100	0	HH Soil (HQ=1)	94	0	0.00	0.02	ND	ND		
Ethylbenzene	T	mg/kg-dry	100	20	HH Soil (HQ=1)	230	0	0.00	0.02	ND	0.21		
Styrene	T	mg/kg-dry	100	0	HH Soil (HQ=1)	1700	0	0.00	0.02	ND	ND		
Tetrachloroethene	T	mg/kg-dry	100	3	HH Soil (HQ=1)	0.55	0	0.00	0.02	ND	0.004		
Toluene	T	mg/kg-dry	100	19	HH Soil (HQ=1)	520	0	0.00	0.02	ND	0.003		
Total Xylene	T	mg/kg-dry	100	49	HH Soil (HQ=1)	210	0	0.00	0.02	ND	1		
trans-1,2-Dichloroethene	T	mg/kg-dry	100	0	No SLC			0.00	0.02	ND	ND		
trans-1,3-Dichloropropene	T	mg/kg-dry	100	0	No SLC			0.00	0.02	ND	ND		
Trichloroethene	T	mg/kg-dry	100	1	HH Soil (HQ=1)	0.043	0	0.00	0.02	ND	0.0008		
Trichlorofluoromethane	T	mg/kg-dry	100	0	HH Soil (HQ=1)	390	0	0.00	0.02	ND	ND		
Vinyl chloride	T	mg/kg-dry	100	0	No SLC			0.00	0.02	ND	ND		

"No SLC" indicates that there is not a Screening Level Criterion for this medium specified for the RI/FS.
"HH Soil (HQ=1)" EPA Region 6 RBSLs Human Health Residential Soil (HQ=1)
"Eco Soil" EPA Region 6 Tier 1-3 RBSLs Ecological Soil
Median Value determined using 1/2 the Reporting Limit value for Non-Detects if greater than 50% of the values were detected.
Mean Value calculated using 1/2 the Reporting Limit for Non-Detects if greater than 50% of the values were detected.

T = Total Fraction
D = Filtered Fraction (0.45 micron filter)
A = Filtered Fraction (0.1 micron filter)
ND = Non-Detected Value

Table 7-10
Soil 0-24 inches Biased
RI/FS Soil Area 1 - Mill Site
Summary of Results

Analyte	Sample Fraction	Units	Total Number of Samples	Percent Detects (%)	SLC	SLC Value	Percent Above SLC	Min RL for ND	Max RL for ND	Min Value	Max Value	Mean Value	Median Value
Inorganics													
Cation-Exchange Capacity	T	meq/100g	96	100	No SLC					1.7	46.5	13.1	11.4
Chloride	T	mg/kg-dry	96	83.3	No SLC			2.10	27.90	ND	4610	123	12.1
Fluoride	T	mg/kg-dry	94	98.9	No SLC			1.10	1.10	ND	344	6.2	1.7
Nitrate	T	mg/kg-dry	96	55.2	No SLC			2.10	2.40	ND	55.8	6.4	2.5
Organic Soils	T	%	96	100	No SLC					0.5	4.8	1.9	1.8
pH	T	SU	96	100	No SLC					4.9	10.6	7.6	7.6
Phosphorus	T	mg/kg-dry	96	100	No SLC					117	2120	952	898
Sodium Absorption Ratio	T	ratio	96	99	No SLC			0.03	0.03	ND	37.4	1.8	0.45
Solids, Percent	T	%	108	100	No SLC					83.4	98.4	93.5	94
Solids, Percent - VOCs Only	T	%	9	100	No SLC					87.8	96	93	93.1
Specific Conductance	T	umhos/cm	96	100	No SLC					70	11800	1200	964
Sulfate	T	mg/kg-dry	96	100	No SLC					8.2	16700	1600	532
Total Kjeldahl Nitrogen	T	mg/kg-dry	96	100	No SLC					28.9	1130	165	136
Total Organic Carbon	T	mg/kg-dry	96	92.7	No SLC			104.00	116.00	ND	35700	4710	3260
Metals													
Aluminum	T	mg/kg-dry	96	100	No SLC					5370	19500	11500	11200
Antimony	T	mg/kg-dry	96	0	ECO Soil	0.3	0	0.17	0.57	ND	ND		
Arsenic	T	mg/kg-dry	96	100	ECO Soil	31	0			1.1	11.9	4.1	3.6
Barium	T	mg/kg-dry	96	100	ECO Soil	330	0			21	279	97	89.6
Beryllium	T	mg/kg-dry	96	100	ECO Soil	30	0			0.45	4.9	1.3	1.1
Boron	T	mg/kg-dry	96	42.7	ECO Soil	0.5	100	0.20	3.10	ND	7.9		
Cadmium	T	mg/kg-dry	96	91.7	ECO Soil	0.4	75	0.04	0.04	ND	8.9	0.98	0.76
Calcium	T	mg/kg-dry	96	100	No SLC					1880	35700	11100	10400
Chromium	T	mg/kg-dry	96	100	ECO Soil	7.9	100			14.5	165	46.8	43.3
Cobalt	T	mg/kg-dry	96	94.8	ECO Soil	32	0	0.12	15.90	ND	19.8	9.3	8.9
Copper	T	mg/kg-dry	96	100	ECO Soil	54	91.7			40.6	602	133	99.2
Iron	T	mg/kg-dry	96	100	No SLC					10900	53300	23300	23000
Lead	T	mg/kg-dry	96	100	ECO Soil	15	100			32.3	872	134	101
Magnesium	T	mg/kg-dry	96	100	No SLC					1640	13700	7480	7230
Manganese	T	mg/kg-dry	96	100	ECO Soil	152	100			224	2670	852	753
Mercury	T	mg/kg-dry	96	35.4	ECO Soil	0.1	17.6	0.02	0.02	ND	1.2		

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"HH Soil (HQ=1)" EPA Region 6 RBSLs Human Health Residential Soil (HQ=1)
"Eco Soil" EPA Region 6 Tier 1-3 RBSLs Ecological Soil
Median Value determined using 1/2 the Reporting Limit value for Non-Detects if greater than 50% of the values were detected.
Mean Value calculated using 1/2 the Reporting Limit for Non-Detects if greater than 50% of the values were detected.

T = Total Fraction
D = Filtered Fraction (0.45 micron filter)
A = Filtered Fraction (0.1 micron filter)
ND = Non-Detected Value

Table 7-10
Soil 0-24 inches Biased
RI/FS Soil Area 1 - Mill Site
Summary of Results

Analyte	Sample Fraction	Units	Total Number of Samples	Percent Detects (%)	SLC	SLC Value	Percent Above SLC	Min RL for ND	Max RL for ND	Min Value	Max Value	Mean Value	Median Value
Molybdenum	T	mg/kg-dry	96	100	ECO Soil	2	100			64.8	36400	3130	1110
Nickel	T	mg/kg-dry	96	100	ECO Soil	48	8.3			10	74.6	30.3	28.8
Potassium	T	mg/kg-dry	96	100	No SLC					1150	5800	3040	2980
Selenium	T	mg/kg-dry	96	57.3	ECO Soil	1	45.5	0.64	0.88	ND	5.4	0.91	0.75
Silver	T	mg/kg-dry	96	92.7	ECO Soil	2	12.4	0.15	0.85	ND	28.8	1.3	0.84
Sodium	T	mg/kg-dry	96	30.2	No SLC			26.20	409.00	ND	6180		
Thallium	T	mg/kg-dry	96	100	ECO Soil	1	0			0.097	0.79	0.3	0.27
Vanadium	T	mg/kg-dry	96	100	ECO Soil	2	100			12.8	145	50.5	42.4
Zinc	T	mg/kg-dry	96	100	ECO Soil	120	77.1			70.9	1260	188	165
Pesticides-PCBs													
Aroclor 1016	T	mg/kg-dry	89	0	No SLC			0.03	2.90	ND	ND		
Aroclor 1221	T	mg/kg-dry	89	0	No SLC			0.07	6.00	ND	ND		
Aroclor 1232	T	mg/kg-dry	89	0	No SLC			0.03	2.90	ND	ND		
Aroclor 1242	T	mg/kg-dry	89	0	No SLC			0.03	2.90	ND	ND		
Aroclor 1248	T	mg/kg-dry	89	38.2	ECO Soil	10	17.6	0.03	0.10	ND	120		
Aroclor 1254	T	mg/kg-dry	89	73	ECO Soil	10	1.5	0.03	2.90	ND	17	0.76	0.1
Aroclor 1260	T	mg/kg-dry	89	12.4	ECO Soil	10	0	0.03	2.90	ND	1.6		
Semi-Volatile Organics													
1,1`-Biphenyl	T	mg/kg-dry	96	4.2	ECO Soil	60	0	0.34	3.70	ND	1.7		
2,4,5-Trichlorophenol	T	mg/kg-dry	96	0	No SLC			0.84	9.30	ND	ND		
2,4,6-Trichlorophenol	T	mg/kg-dry	96	0	No SLC			0.34	3.70	ND	ND		
2,4-Dichlorophenol	T	mg/kg-dry	96	0	No SLC			0.34	3.70	ND	ND		
2,4-Dimethylphenol	T	mg/kg-dry	96	0	No SLC			0.34	3.70	ND	ND		
2,4-Dinitrophenol	T	mg/kg-dry	96	0	No SLC			0.84	9.30	ND	ND		
2,4-Dinitrotoluene	T	mg/kg-dry	96	0	No SLC			0.34	3.70	ND	ND		
2,6-Dinitrotoluene	T	mg/kg-dry	96	0	ECO Soil	0.033	0	0.34	3.70	ND	ND		
2-Chloronaphthalene	T	mg/kg-dry	96	0	No SLC			0.34	3.70	ND	ND		
2-Chlorophenol	T	mg/kg-dry	96	0	ECO Soil	20	0	0.34	3.70	ND	ND		
2-Methylnaphthalene	T	mg/kg-dry	96	4.2	ECO Soil	3.2	0	0.34	3.70	ND	3.2		
2-Methylphenol	T	mg/kg-dry	96	0	No SLC			0.34	3.70	ND	ND		
2-Nitroaniline	T	mg/kg-dry	96	0	No SLC			0.84	9.30	ND	ND		
2-Nitrophenol	T	mg/kg-dry	96	0	No SLC			0.34	3.70	ND	ND		

"No SLC" indicates that there is not a Screening Level Criterion for this medium specified for the RI/FS.
"HH Soil (HQ=1)" EPA Region 6 RBSLs Human Health Residential Soil (HQ=1)
"Eco Soil" EPA Region 6 Tier 1-3 RBSLs Ecological Soil
Median Value determined using 1/2 the Reporting Limit value for Non-Detects if greater than 50% of the values were detected.
Mean Value calculated using 1/2 the Reporting Limit for Non-Detects if greater than 50% of the values were detected.

T = Total Fraction
D = Filtered Fraction (0.45 micron filter)
A = Filtered Fraction (0.1 micron filter)
ND = Non-Detected Value

Table 7-10
Soil 0-24 inches Biased
RI/FS Soil Area 1 - Mill Site
Summary of Results

Analyte	Sample Fraction	Units	Total Number of Samples	Percent Detects (%)	SLC	SLC Value	Percent Above SLC	Min RL for ND	Max RL for ND	Min Value	Max Value	Mean Value	Median Value
3,3-Dichlorobenzidine	T	mg/kg-dry	96	0	No SLC			0.34	3.70	ND	ND		
3-Nitroaniline	T	mg/kg-dry	96	0	No SLC			0.84	9.30	ND	ND		
4,6-Dinitro-2-methylphenol	T	mg/kg-dry	96	0	No SLC			0.84	9.30	ND	ND		
4-Bromophenyl phenyl ether	T	mg/kg-dry	96	0	No SLC			0.34	3.70	ND	ND		
4-Chloro-3-methylphenol	T	mg/kg-dry	96	0	ECO Soil	8	0	0.34	3.70	ND	ND		
4-Chloroaniline	T	mg/kg-dry	96	0	No SLC			0.34	3.70	ND	ND		
4-Chlorophenyl phenyl ether	T	mg/kg-dry	96	0	No SLC			0.34	3.70	ND	ND		
4-Methylphenol	T	mg/kg-dry	96	0	No SLC			0.34	3.70	ND	ND		
4-Nitroaniline	T	mg/kg-dry	96	0	No SLC			0.84	9.30	ND	ND		
4-Nitrophenol	T	mg/kg-dry	96	0	No SLC			0.84	9.30	ND	ND		
Acenaphthene	T	mg/kg-dry	96	3.1	ECO Soil	20	0	0.34	3.50	ND	2.2		
Acenaphthylene	T	mg/kg-dry	96	0	No SLC			0.34	3.70	ND	ND		
Anthracene	T	mg/kg-dry	96	5.2	ECO Soil	10	0	0.34	3.50	ND	1		
Benzo(a)anthracene	T	mg/kg-dry	96	15.6	ECO Soil	5.2	0	0.34	3.70	ND	1.2		
Benzo(a)pyrene	T	mg/kg-dry	96	10.4	ECO Soil	1	0	0.34	3.70	ND	0.98		
Benzo(b)fluoranthene	T	mg/kg-dry	97	10.3	ECO Soil	59.8	0	0.34	3.70	ND	1		
Benzo(g,h,i)perylene	T	mg/kg-dry	96	7.3	ECO Soil	119	0	0.34	3.70	ND	0.52		
Benzo(k)fluoranthene	T	mg/kg-dry	96	10.4	ECO Soil	148	0	0.34	3.70	ND	1.1		
Bis(2-chloroethoxy)methane	T	mg/kg-dry	96	0	No SLC			0.34	3.70	ND	ND		
Bis(2-chloroethyl)ether	T	mg/kg-dry	96	0	No SLC			0.34	3.70	ND	ND		
Carbazole	T	mg/kg-dry	96	2.1	No SLC			0.34	3.70	ND	0.069		
Chrysene	T	mg/kg-dry	96	18.8	ECO Soil	4.7	0	0.34	3.70	ND	1.6		
Dibenz(a,h)anthracene	T	mg/kg-dry	96	3.1	ECO Soil	18.4	0	0.34	3.70	ND	0.17		
Dibenzofuran	T	mg/kg-dry	96	4.2	No SLC			0.34	3.50	ND	1.7		
Dichlorodiisopropyl ether	T	mg/kg-dry	96	0	No SLC			0.34	3.70	ND	ND		
Fluoranthene	T	mg/kg-dry	96	19.8	ECO Soil	10	0	0.34	3.70	ND	1.2		
Fluorene	T	mg/kg-dry	96	6.3	ECO Soil	30	0	0.34	3.50	ND	3.8		
Hexachlorobenzene	T	mg/kg-dry	96	0	No SLC			0.34	3.70	ND	ND		
Hexachlorobutadiene	T	mg/kg-dry	96	0	No SLC			0.34	3.70	ND	ND		
Hexachlorocyclopentadiene	T	mg/kg-dry	96	0	No SLC			0.34	3.70	ND	ND		
Hexachloroethane	T	mg/kg-dry	96	0	No SLC			0.34	3.70	ND	ND		
Indeno(1,2,3-cd)pyrene	T	mg/kg-dry	96	6.3	ECO Soil	109	0	0.34	3.70	ND	0.54		

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"Eco Soil" EPA Region 6 Tier 1-3 RBSLs Ecological Soil
Median Value determined using 1/2 the Reporting Limit value for Non-Detects if greater than 50% of the values were detected.
Mean Value calculated using 1/2 the Reporting Limit for Non-Detects if greater than 50% of the values were detected.

T = Total Fraction
D = Filtered Fraction (0.45 micron filter)
A = Filtered Fraction (0.1 micron filter)
ND = Non-Detected Value

Table 7-10
Soil 0-24 inches Biased
RI/FS Soil Area 1 - Mill Site
Summary of Results

Analyte	Sample Fraction	Units	Total Number of Samples	Percent Detects (%)	SLC	SLC Value	Percent Above SLC	Min RL for ND	Max RL for ND	Min Value	Max Value	Mean Value	Median Value
Isophorone	T	mg/kg-dry	96	0	ECO Soil	139	0	0.34	3.70	ND	ND		
Naphthalene	T	mg/kg-dry	96	6.3	ECO Soil	5	16.7	0.34	3.50	ND	5.1		
Nitrobenzene	T	mg/kg-dry	96	0	No SLC			0.34	3.70	ND	ND		
N-Nitrosodi-n-propylamine	T	mg/kg-dry	96	0	ECO Soil	0.54	0	0.34	3.70	ND	ND		
N-Nitrosodiphenylamine	T	mg/kg-dry	96	2.1	ECO Soil	20	0	0.34	3.50	ND	13		
Pentachlorophenol	T	mg/kg-dry	96	0	No SLC			0.84	9.30	ND	ND		
Phenanthrene	T	mg/kg-dry	96	22.9	ECO Soil	5	4.5	0.34	3.50	ND	15		
Phenol	T	mg/kg-dry	96	1	ECO Soil	30	0	0.34	3.70	ND	0.46		
Pyrene	T	mg/kg-dry	96	32.3	ECO Soil	10	0	0.34	3.50	ND	1.8		
Volatile Organics													
1,1,1-Trichloroethane	T	mg/kg-dry	95	1.1	ECO Soil	0.1	0	0.00	0.51	ND	0.014		
1,1,2,2-Tetrachloroethane	T	mg/kg-dry	95	0	No SLC			0.00	0.51	ND	ND		
1,1,2-Trichloro-1,2,2-trifluoroethane	T	mg/kg-dry	95	0	No SLC			0.00	0.51	ND	ND		
1,1,2-Trichloroethane	T	mg/kg-dry	95	0	No SLC			0.00	0.51	ND	ND		
1,1-Dichloroethane	T	mg/kg-dry	95	0	ECO Soil	20.1	0	0.00	0.51	ND	ND		
1,1-Dichloroethene	T	mg/kg-dry	95	0	No SLC			0.00	0.51	ND	ND		
1,2,4-Trichlorobenzene	T	mg/kg-dry	95	0	No SLC			0.00	0.51	ND	ND		
1,2-Dibromo-3-chloropropane	T	mg/kg-dry	95	0	No SLC			0.00	0.51	ND	ND		
1,2-Dichlorobenzene	T	mg/kg-dry	95	0	No SLC			0.00	0.51	ND	ND		
1,2-Dichloroethane	T	mg/kg-dry	95	0	No SLC			0.00	0.51	ND	ND		
1,2-Dichloroethene (total)	T	mg/kg-dry	95	0	No SLC			0.00	0.51	ND	ND		
1,2-Dichloropropane	T	mg/kg-dry	95	0	No SLC			0.00	0.51	ND	ND		
1,3-Dichlorobenzene	T	mg/kg-dry	95	0	No SLC			0.00	0.51	ND	ND		
1,4-Dichlorobenzene	T	mg/kg-dry	95	0	No SLC			0.00	0.51	ND	ND		
2-Butanone	T	mg/kg-dry	95	22.1	ECO Soil	89.6	0	0.00	0.51	ND	0.052		
2-Hexanone	T	mg/kg-dry	95	0	ECO Soil	12.6	0	0.00	0.51	ND	ND		
4-Methyl-2-pentanone	T	mg/kg-dry	95	6.3	ECO Soil	443	0	0.00	0.51	ND	0.033		
Benzene	T	mg/kg-dry	95	4.2	ECO Soil	0.5	0	0.00	0.51	ND	0.0007		
Bromodichloromethane	T	mg/kg-dry	95	0	No SLC			0.00	0.51	ND	ND		
Bromoform	T	mg/kg-dry	95	0	No SLC			0.00	0.51	ND	ND		
Bromomethane	T	mg/kg-dry	95	0	No SLC			0.00	0.51	ND	ND		
Carbon tetrachloride	T	mg/kg-dry	95	0	ECO Soil	1000	0	0.00	0.51	ND	ND		

"No SLC" indicates that there is not a Screening Level Criterion for this medium specified for the RI/FS.
"HH Soil (HQ=1)" EPA Region 6 RBSLs Human Health Residential Soil (HQ=1)
"Eco Soil" EPA Region 6 Tier 1-3 RBSLs Ecological Soil
Median Value determined using 1/2 the Reporting Limit value for Non-Detects if greater than 50% of the values were detected.
Mean Value calculated using 1/2 the Reporting Limit for Non-Detects if greater than 50% of the values were detected.

T = Total Fraction
D = Filtered Fraction (0.45 micron filter)
A = Filtered Fraction (0.1 micron filter)
ND = Non-Detected Value

Table 7-10
Soil 0-24 inches Biased
RI/FS Soil Area 1 - Mill Site
Summary of Results

Analyte	Sample Fraction	Units	Total Number of Samples	Percent Detects (%)	SLC	SLC Value	Percent Above SLC	Min RL for ND	Max RL for ND	Min Value	Max Value	Mean Value	Median Value
Chlorobenzene	T	mg/kg-dry	95	0	ECO Soil	40	0	0.00	0.51	ND	ND		
Chloroethane	T	mg/kg-dry	95	0	No SLC			0.00	0.51	ND	ND		
Chloroform	T	mg/kg-dry	95	0	No SLC			0.00	0.51	ND	ND		
Chloromethane	T	mg/kg-dry	95	1.1	ECO Soil	10.4	0	0.00	0.51	ND	0.017		
cis-1,2-Dichloroethene	T	mg/kg-dry	95	0	No SLC			0.00	0.51	ND	ND		
cis-1,3-Dichloropropene	T	mg/kg-dry	95	0	No SLC			0.00	0.51	ND	ND		
Dibromochloromethane	T	mg/kg-dry	95	0	No SLC			0.00	0.51	ND	ND		
Dichlorodifluoromethane	T	mg/kg-dry	95	0	ECO Soil	39.5	0	0.00	0.51	ND	ND		
Ethylbenzene	T	mg/kg-dry	95	20	ECO Soil	5	0	0.00	0.51	ND	0.02		
Styrene	T	mg/kg-dry	95	1.1	ECO Soil	300	0	0.00	0.51	ND	0.002		
Tetrachloroethene	T	mg/kg-dry	95	2.1	No SLC			0.00	0.51	ND	0.001		
Toluene	T	mg/kg-dry	95	22.1	ECO Soil	200	0	0.00	0.51	ND	0.002		
Total Xylene	T	mg/kg-dry	95	47.4	ECO Soil	5	0	0.00	0.02	ND	0.36		
trans-1,2-Dichloroethene	T	mg/kg-dry	95	0	No SLC			0.00	0.51	ND	ND		
trans-1,3-Dichloropropene	T	mg/kg-dry	95	0	No SLC			0.00	0.51	ND	ND		
Trichloroethene	T	mg/kg-dry	95	0	No SLC			0.00	0.51	ND	ND		
Trichlorofluoromethane	T	mg/kg-dry	95	0	ECO Soil	16.4	0	0.00	0.51	ND	ND		
Vinyl chloride	T	mg/kg-dry	95	0	No SLC			0.00	0.51	ND	ND		

"No SLC" indicates that there is not a Screening Level Criterion for this medium specified for the RI/FS.
"HH Soil (HQ=1)" EPA Region 6 RBSLs Human Health Residential Soil (HQ=1)
"Eco Soil" EPA Region 6 Tier 1-3 RBSLs Ecological Soil
Median Value determined using 1/2 the Reporting Limit value for Non-Detects if greater than 50% of the values were detected.
Mean Value calculated using 1/2 the Reporting Limit for Non-Detects if greater than 50% of the values were detected.

T = Total Fraction
D = Filtered Fraction (0.45 micron filter)
A = Filtered Fraction (0.1 micron filter)
ND = Non-Detected Value

Table 7-11
Soil 0-6 inches Biased
RI/FS Soil Area 1 - Mill Tailings
Summary of Results

Analyte	Sample Fraction	Units	Total Number of Samples	Percent Detects (%)	SLC	SLC Value	Percent Above SLC	Min RL for ND	Max RL for ND	Min Value	Max Value	Mean Value	Median Value
Inorganics													
Cation-Exchange Capacity	T	meq/100g	3	100	No SLC					18.3	18.8	18.6	18.8
Chloride	T	mg/kg-dry	3	100	No SLC					187	535	339	294
Fluoride	T	mg/kg-dry	3	100	No SLC					7.5	8.4	7.9	7.9
Nitrate	T	mg/kg-dry	3	0	No SLC			10.70	11.80	ND	ND		
Organic Soils	T	%	3	100	No SLC					1.9	3.6	2.5	2.1
pH	T	SU	3	100	No SLC					2.7	2.9	2.8	2.8
Phosphorus	T	mg/kg-dry	3	100	No SLC					786	1310	1020	955
Sodium Absorption Ratio	T	ratio	3	100	No SLC					0.03	0.05	0.04	0.04
Solids, Percent	T	%	3	100	No SLC					85	93.5	89.9	91.3
Specific Conductance	T	umhos/cm	3	100	No SLC					5810	8380	7510	8350
Sulfate	T	mg/kg-dry	3	100	No SLC					6800	15600	11900	13200
Total Kjeldahl Nitrogen	T	mg/kg-dry	3	100	No SLC					29.4	845	303	34
Total Organic Carbon	T	mg/kg-dry	3	33.3	No SLC			107.00	110.00	ND	190		
Metals													
Aluminum	T	mg/kg-dry	3	100	No SLC					13000	16800	14900	14900
Antimony	T	mg/kg-dry	3	0	No SLC			0.51	0.56	ND	ND		
Arsenic	T	mg/kg-dry	3	100	No SLC					5.8	6.2	5.9	5.8
Barium	T	mg/kg-dry	3	100	No SLC					105	128	119	124
Beryllium	T	mg/kg-dry	3	100	No SLC					10.4	17.7	13.6	12.8
Boron	T	mg/kg-dry	3	0	No SLC			1.60	4.20	ND	ND		
Cadmium	T	mg/kg-dry	3	100	No SLC					1.7	2.8	2.2	2
Calcium	T	mg/kg-dry	3	100	No SLC					23800	28800	26900	28200
Chromium	T	mg/kg-dry	3	100	No SLC					3.7	13.4	7.5	5.4
Cobalt	T	mg/kg-dry	3	100	No SLC					3	3.5	3.2	3
Copper	T	mg/kg-dry	3	100	No SLC					80.1	117	102	109
Iron	T	mg/kg-dry	3	100	No SLC					20800	31900	25700	24400
Lead	T	mg/kg-dry	3	100	No SLC					133	192	164	168
Magnesium	T	mg/kg-dry	3	100	No SLC					1220	2620	1860	1730
Manganese	T	mg/kg-dry	3	100	No SLC					249	438	360	392
Mercury	T	mg/kg-dry	3	100	No SLC					0.06	0.2	0.11	0.072
Molybdenum	T	mg/kg-dry	3	100	No SLC					560	1510	1120	1290

"No SLC" indicates that there is not a Screening Level Criterion for this medium specified for the RI/FS.
"HH Soil (HQ=1)" EPA Region 6 RBSLs Human Health Residential Soil (HQ=1)
"Eco Soil" EPA Region 6 Tier 1-3 RBSLs Ecological Soil
Median Value determined using 1/2 the Reporting Limit value for Non-Detects if greater than 50% of the values were detected.
Mean Value calculated using 1/2 the Reporting Limit for Non-Detects if greater than 50% of the values were detected.

T = Total Fraction
D = Filtered Fraction (0.45 micron filter)
A = Filtered Fraction (0.1 micron filter)
ND = Non-Detected Value

Table 7-11
Soil 0-6 inches Biased
RI/FS Soil Area 1 - Mill Tailings
Summary of Results

Analyte	Sample Fraction	Units	Total Number of Samples	Percent Detects (%)	SLC	SLC Value	Percent Above SLC	Min RL for ND	Max RL for ND	Min Value	Max Value	Mean Value	Median Value
Nickel	T	mg/kg-dry	3	100	No SLC					2.9	7.1	4.8	4.4
Potassium	T	mg/kg-dry	3	100	No SLC					8230	15500	11000	9210
Selenium	T	mg/kg-dry	3	100	No SLC					1.1	1.7	1.3	1.1
Silver	T	mg/kg-dry	3	100	No SLC					2.5	4.3	3.5	3.8
Sodium	T	mg/kg-dry	3	100	No SLC					1390	1900	1650	1670
Thallium	T	mg/kg-dry	3	100	No SLC					0.57	0.76	0.66	0.65
Vanadium	T	mg/kg-dry	3	100	No SLC					17.8	24.6	20.7	19.6
Zinc	T	mg/kg-dry	3	100	No SLC					206	366	264	219

"No SLC" indicates that there is not a Screening Level Criterion for this medium specified for the RI/FS.
"HH Soil (HQ=1)" EPA Region 6 RBSLs Human Health Residential Soil (HQ=1)
"Eco Soil" EPA Region 6 Tier 1-3 RBSLs Ecological Soil
Median Value determined using 1/2 the Reporting Limit value for Non-Detects if greater than 50% of the values were detected.
Mean Value calculated using 1/2 the Reporting Limit for Non-Detects if greater than 50% of the values were detected.

T = Total Fraction
D = Filtered Fraction (0.45 micron filter)
A = Filtered Fraction (0.1 micron filter)
ND = Non-Detected Value

Table 7-12
Soil 0-6 inches Random
RI/FS Soil Area 2 - Admin and M&E
Summary of Results

Analyte	Sample Fraction	Units	Total Number of Samples	Percent Detects (%)	SLC	SLC Value	Percent Above SLC	Min RL for ND	Max RL for ND	Min Value	Max Value	Mean Value	Median Value
Dibenzodioxins-Dibenzofurans													
1,2,3,4,6,7,8-Heptachlorodibenzofuran	T	pg/g	1	0	HH Soil (HQ=1)	1000	0	0.48	0.48	ND	ND		
1,2,3,4,6,7,8-Heptachlorodibenzo-p-dioxin	T	pg/g	1	0	HH Soil (HQ=1)	1000	0	0.77	0.77	ND	ND		
1,2,3,4,7,8,9-Heptachlorodibenzofuran	T	pg/g	1	0	HH Soil (HQ=1)	1000	0	0.14	0.14	ND	ND		
1,2,3,4,7,8-Hexachlorodibenzofuran	T	pg/g	1	0	HH Soil (HQ=1)	1000	0	0.06	0.06	ND	ND		
1,2,3,4,7,8-hexachlorodibenzo-p-dioxin	T	pg/g	1	0	HH Soil (HQ=1)	1000	0	0.15	0.15	ND	ND		
1,2,3,6,7,8-Hexachlorodibenzofuran	T	pg/g	1	0	HH Soil (HQ=1)	1000	0	0.09	0.09	ND	ND		
1,2,3,6,7,8-Hexachlorodibenzo-p-dioxin	T	pg/g	1	0	HH Soil (HQ=1)	1000	0	0.14	0.14	ND	ND		
1,2,3,7,8,9-Hexachlorodibenzofuran	T	pg/g	1	0	HH Soil (HQ=1)	1000	0	0.07	0.07	ND	ND		
1,2,3,7,8,9-Hexachlorodibenzo-p-dioxin	T	pg/g	1	0	HH Soil (HQ=1)	1000	0	0.17	0.17	ND	ND		
1,2,3,7,8-Pentachlorodibenzo-p-dioxin	T	pg/g	1	0	HH Soil (HQ=1)	1000	0	0.17	0.17	ND	ND		
2,3,4,7,8-Pentachlorodibenzofuran	T	pg/g	1	0	HH Soil (HQ=1)	1000	0	0.12	0.12	ND	ND		
2,3,7,8-Tetrachlorodibenzofuran	T	pg/g	1	0	HH Soil (HQ=1)	1000	0	0.22	0.22	ND	ND		
2,3,7,8-Tetrachlorodibenzo-p-dioxin	T	pg/g	1	0	HH Soil (HQ=1)	1000	0	0.29	0.29	ND	ND		
Inorganics													
Cation-Exchange Capacity	T	meq/100g	10	100	No SLC					9.8	28	17.8	16.3
Chloride	T	mg/kg-dry	10	100	No SLC					2.5	14.1	6.2	5.2
Fluoride	T	mg/kg-dry	10	100	HH Soil (HQ=1)	3700	0			0.2	5.6	2	0.88
Nitrate	T	mg/kg-dry	10	90	No SLC			2.30	2.30	ND	4.2	2.6	2.3
Organic Soils	T	%	10	100	No SLC					1.6	5	3.6	3.9
pH	T	SU	10	100	No SLC					3.5	7.4	5.3	5.3
Phosphorus	T	mg/kg-dry	10	100	No SLC					57.2	1470	702	657
Sodium Absorption Ratio	T	ratio	10	100	No SLC					0.02	0.22	0.088	0.075
Solids, Percent	T	%	10	100	No SLC					90.2	96.5	94.3	94.6
Specific Conductance	T	umhos/cm	10	100	No SLC					18.5	1510	528	464
Sulfate	T	mg/kg-dry	10	100	No SLC					3.4	12700	2470	1210
Total Kjeldahl Nitrogen	T	mg/kg-dry	10	100	No SLC					41.5	621	253	173
Total Organic Carbon	T	mg/kg-dry	10	90	No SLC			111.00	111.00	ND	21900	6580	3440
Metals													
Aluminum	T	mg/kg-dry	10	100	HH Soil (HQ=1)	76000	0			3610	23900	11700	10200
Antimony	T	mg/kg-dry	10	0	HH Soil (HQ=1)	31	0	0.16	0.27	ND	ND		
Arsenic	T	mg/kg-dry	10	100	HH Soil (HQ=1)	0.39	100			1.3	12.3	5	3.8

"No SLC" indicates that there is not a Screening Level Criterion for this medium specified for the RI/FS.
"HH Soil (HQ=1)" EPA Region 6 RBSLs Human Health Residential Soil (HQ=1)
"Eco Soil" EPA Region 6 Tier 1-3 RBSLs Ecological Soil
Median Value determined using 1/2 the Reporting Limit value for Non-Detects if greater than 50% of the values were detected.
Mean Value calculated using 1/2 the Reporting Limit for Non-Detects if greater than 50% of the values were detected.

T = Total Fraction
D = Filtered Fraction (0.45 micron filter)
A = Filtered Fraction (0.1 micron filter)
ND = Non-Detected Value

Table 7-12
Soil 0-6 inches Random
RI/FS Soil Area 2 - Admin and M&E
Summary of Results

Analyte	Sample Fraction	Units	Total Number of Samples	Percent Detects (%)	SLC	SLC Value	Percent Above SLC	Min RL for ND	Max RL for ND	Min Value	Max Value	Mean Value	Median Value
Barium	T	mg/kg-dry	10	100	HH Soil (HQ=1)	5500	0			81	467	223	204
Beryllium	T	mg/kg-dry	10	100	HH Soil (HQ=1)	150	0			0.19	4	1.2	0.87
Boron	T	mg/kg-dry	10	70	HH Soil (HQ=1)	5500	0	0.38	0.41	ND	13	4.5	3.4
Cadmium	T	mg/kg-dry	10	50	HH Soil (HQ=1)	39	0	0.02	0.06	ND	1.8	0.35	0.041
Calcium	T	mg/kg-dry	10	100	No SLC					991	18200	6080	3740
Chromium	T	mg/kg-dry	10	100	HH Soil (HQ=1)	210	0			8.3	88.2	32.3	21
Cobalt	T	mg/kg-dry	10	100	HH Soil (HQ=1)	900	0			0.75	30.7	10.4	7.2
Copper	T	mg/kg-dry	10	100	HH Soil (HQ=1)	2900	0			27.2	293	80.8	51.7
Iron	T	mg/kg-dry	10	100	HH Soil (HQ=1)	23000	60			15900	43100	28100	25900
Lead	T	mg/kg-dry	10	100	HH Soil (HQ=1)	400	0			35.1	143	71.7	45.5
Magnesium	T	mg/kg-dry	10	100	No SLC					1320	13800	5300	3610
Manganese	T	mg/kg-dry	10	100	HH Soil (HQ=1)	3200	0			89.7	1380	532	415
Mercury	T	mg/kg-dry	10	20	HH Soil (HQ=1)	23	0	0.02	0.02	ND	0.019		
Molybdenum	T	mg/kg-dry	10	100	HH Soil (HQ=1)	390	10			1.3	784	156	25.4
Nickel	T	mg/kg-dry	10	100	HH Soil (HQ=1)	1600	0			3.5	53.9	24.3	16.1
Potassium	T	mg/kg-dry	10	100	No SLC					1910	6030	3440	2950
Selenium	T	mg/kg-dry	10	70	HH Soil (HQ=1)	390	0	0.65	1.40	ND	2.6	1.1	1.3
Silver	T	mg/kg-dry	10	100	HH Soil (HQ=1)	390	0			0.15	1.6	0.73	0.66
Sodium	T	mg/kg-dry	10	50	No SLC			45.90	254.00	ND	368	135	107
Thallium	T	mg/kg-dry	10	100	HH Soil (HQ=1)	5.5	0			0.16	0.56	0.28	0.27
Vanadium	T	mg/kg-dry	10	100	HH Soil (HQ=1)	78	0			10.7	68.9	32.1	24.2
Zinc	T	mg/kg-dry	10	100	HH Soil (HQ=1)	23000	0			21.1	261	85	78.3
Pesticides-PCBs													
a-Chlordane	T	mg/kg-dry	1	0	No SLC			0.00	0.00	ND	ND		
Aldrin	T	mg/kg-dry	1	0	No SLC			0.00	0.00	ND	ND		
alpha-Hexachlorocyclohexane	T	mg/kg-dry	1	0	No SLC			0.00	0.00	ND	ND		
beta-Hexachlorocyclohexane	T	mg/kg-dry	1	0	No SLC			0.00	0.00	ND	ND		
delta-Hexachlorocyclohexane	T	mg/kg-dry	1	0	No SLC			0.00	0.00	ND	ND		
Dichlorodiphenyldichloroethane	T	mg/kg-dry	1	0	No SLC			0.00	0.00	ND	ND		
Dichlorodiphenyldichloroethylene	T	mg/kg-dry	1	0	No SLC			0.00	0.00	ND	ND		
Dichlorodiphenyltrichloroethane	T	mg/kg-dry	1	0	No SLC			0.00	0.00	ND	ND		
Dieldrin	T	mg/kg-dry	1	0	No SLC			0.00	0.00	ND	ND		

"No SLC" indicates that there is not a Screening Level Criterion for this medium specified for the RI/FS.
"HH Soil (HQ=1)" EPA Region 6 RBSLs Human Health Residential Soil (HQ=1)
"Eco Soil" EPA Region 6 Tier 1-3 RBSLs Ecological Soil
Median Value determined using 1/2 the Reporting Limit value for Non-Detects if greater than 50% of the values were detected.
Mean Value calculated using 1/2 the Reporting Limit for Non-Detects if greater than 50% of the values were detected.

T = Total Fraction
D = Filtered Fraction (0.45 micron filter)
A = Filtered Fraction (0.1 micron filter)
ND = Non-Detected Value

Table 7-12
Soil 0-6 inches Random
RI/FS Soil Area 2 - Admin and M&E
Summary of Results

Analyte	Sample Fraction	Units	Total Number of Samples	Percent Detects (%)	SLC	SLC Value	Percent Above SLC	Min RL for ND	Max RL for ND	Min Value	Max Value	Mean Value	Median Value
Endosulfan I	T	mg/kg-dry	1	0	No SLC			0.00	0.00	ND	ND		
Endosulfan II	T	mg/kg-dry	1	0	No SLC			0.00	0.00	ND	ND		
Endosulfan sulfate	T	mg/kg-dry	1	0	No SLC			0.00	0.00	ND	ND		
Endrin	T	mg/kg-dry	1	0	No SLC			0.00	0.00	ND	ND		
Endrin aldehyde	T	mg/kg-dry	1	0	No SLC			0.00	0.00	ND	ND		
Endrin ketone	T	mg/kg-dry	1	0	No SLC			0.00	0.00	ND	ND		
g-Chlordane	T	mg/kg-dry	1	0	No SLC			0.00	0.00	ND	ND		
Heptachlor	T	mg/kg-dry	1	0	No SLC			0.00	0.00	ND	ND		
Heptachlor epoxide	T	mg/kg-dry	1	0	No SLC			0.00	0.00	ND	ND		
Lindane	T	mg/kg-dry	1	0	No SLC			0.00	0.00	ND	ND		
Methoxychlor	T	mg/kg-dry	1	0	No SLC			0.02	0.02	ND	ND		
Toxaphene	T	mg/kg-dry	1	0	No SLC			0.18	0.18	ND	ND		
Semi-Volatile Organics													
1,1`-Biphenyl	T	mg/kg-dry	10	0	HH Soil (HQ=1)	3000	0	0.34	0.37	ND	ND		
2,4,5-Trichlorophenol	T	mg/kg-dry	10	0	No SLC			0.86	0.92	ND	ND		
2,4,6-Trichlorophenol	T	mg/kg-dry	10	0	No SLC			0.34	0.37	ND	ND		
2,4-Dichlorophenol	T	mg/kg-dry	10	0	No SLC			0.34	0.37	ND	ND		
2,4-Dimethylphenol	T	mg/kg-dry	10	0	No SLC			0.34	0.37	ND	ND		
2,4-Dinitrophenol	T	mg/kg-dry	10	0	No SLC			0.86	0.92	ND	ND		
2,4-Dinitrotoluene	T	mg/kg-dry	10	0	No SLC			0.34	0.37	ND	ND		
2,6-Dinitrotoluene	T	mg/kg-dry	10	0	HH Soil (HQ=1)	61	0	0.34	0.37	ND	ND		
2-Chloronaphthalene	T	mg/kg-dry	10	0	No SLC			0.34	0.37	ND	ND		
2-Chlorophenol	T	mg/kg-dry	10	0	HH Soil (HQ=1)	64	0	0.34	0.37	ND	ND		
2-Methylnaphthalene	T	mg/kg-dry	10	0	No SLC			0.34	0.37	ND	ND		
2-Methylphenol	T	mg/kg-dry	10	0	No SLC			0.34	0.37	ND	ND		
2-Nitroaniline	T	mg/kg-dry	10	0	No SLC			0.86	0.92	ND	ND		
2-Nitrophenol	T	mg/kg-dry	10	0	No SLC			0.34	0.37	ND	ND		
3,3-Dichlorobenzidine	T	mg/kg-dry	10	0	No SLC			0.34	0.37	ND	ND		
3-Nitroaniline	T	mg/kg-dry	10	0	No SLC			0.86	0.92	ND	ND		
4,6-Dinitro-2-methylphenol	T	mg/kg-dry	10	0	No SLC			0.86	0.92	ND	ND		
4-Bromophenyl phenyl ether	T	mg/kg-dry	10	0	No SLC			0.34	0.37	ND	ND		
4-Chloro-3-methylphenol	T	mg/kg-dry	10	0	No SLC			0.34	0.37	ND	ND		

"No SLC" indicates that there is not a Screening Level Criterion for this medium specified for the RI/FS.
"HH Soil (HQ=1)" EPA Region 6 RBSLs Human Health Residential Soil (HQ=1)
"Eco Soil" EPA Region 6 Tier 1-3 RBSLs Ecological Soil
Median Value determined using 1/2 the Reporting Limit value for Non-Detects if greater than 50% of the values were detected.
Mean Value calculated using 1/2 the Reporting Limit for Non-Detects if greater than 50% of the values were detected.

T = Total Fraction
D = Filtered Fraction (0.45 micron filter)
A = Filtered Fraction (0.1 micron filter)
ND = Non-Detected Value

Table 7-12
Soil 0-6 inches Random
RI/FS Soil Area 2 - Admin and M&E
Summary of Results

Analyte	Sample Fraction	Units	Total Number of Samples	Percent Detects (%)	SLC	SLC Value	Percent Above SLC	Min RL for ND	Max RL for ND	Min Value	Max Value	Mean Value	Median Value
4-Chloroaniline	T	mg/kg-dry	10	0	No SLC			0.34	0.37	ND	ND		
4-Chlorophenyl phenyl ether	T	mg/kg-dry	10	0	No SLC			0.34	0.37	ND	ND		
4-Methylphenol	T	mg/kg-dry	10	0	No SLC			0.34	0.37	ND	ND		
4-Nitroaniline	T	mg/kg-dry	10	0	No SLC			0.86	0.92	ND	ND		
4-Nitrophenol	T	mg/kg-dry	10	0	No SLC			0.86	0.92	ND	ND		
Acenaphthene	T	mg/kg-dry	10	0	HH Soil (HQ=1)	3700	0	0.34	0.37	ND	ND		
Acenaphthylene	T	mg/kg-dry	10	0	No SLC			0.34	0.37	ND	ND		
Anthracene	T	mg/kg-dry	10	0	HH Soil (HQ=1)	22000	0	0.34	0.37	ND	ND		
Benzo(a)anthracene	T	mg/kg-dry	10	0	HH Soil (HQ=1)	0.62	0	0.34	0.37	ND	ND		
Benzo(a)pyrene	T	mg/kg-dry	10	0	HH Soil (HQ=1)	0.062	0	0.34	0.37	ND	ND		
Benzo(b)fluoranthene	T	mg/kg-dry	10	0	HH Soil (HQ=1)	0.62	0	0.34	0.37	ND	ND		
Benzo(g,h,i)perylene	T	mg/kg-dry	10	0	No SLC			0.34	0.37	ND	ND		
Benzo(k)fluoranthene	T	mg/kg-dry	10	0	HH Soil (HQ=1)	6.2	0	0.34	0.37	ND	ND		
Bis(2-chloroethoxy)methane	T	mg/kg-dry	10	0	No SLC			0.34	0.37	ND	ND		
Bis(2-chloroethyl)ether	T	mg/kg-dry	10	0	No SLC			0.34	0.37	ND	ND		
Carbazole	T	mg/kg-dry	10	0	HH Soil (HQ=1)	24	0	0.34	0.37	ND	ND		
Chrysene	T	mg/kg-dry	10	0	HH Soil (HQ=1)	62	0	0.34	0.37	ND	ND		
Dibenz(a,h)anthracene	T	mg/kg-dry	10	0	HH Soil (HQ=1)	0.062	0	0.34	0.37	ND	ND		
Dibenzofuran	T	mg/kg-dry	10	0	HH Soil (HQ=1)	150	0	0.34	0.37	ND	ND		
Dichlorodiisopropyl ether	T	mg/kg-dry	10	0	No SLC			0.34	0.37	ND	ND		
Fluoranthene	T	mg/kg-dry	10	0	HH Soil (HQ=1)	2300	0	0.34	0.37	ND	ND		
Fluorene	T	mg/kg-dry	10	0	HH Soil (HQ=1)	2600	0	0.34	0.37	ND	ND		
Hexachlorobenzene	T	mg/kg-dry	10	0	No SLC			0.34	0.37	ND	ND		
Hexachlorobutadiene	T	mg/kg-dry	10	0	No SLC			0.34	0.37	ND	ND		
Hexachlorocyclopentadiene	T	mg/kg-dry	10	0	No SLC			0.34	0.37	ND	ND		
Hexachloroethane	T	mg/kg-dry	10	0	No SLC			0.34	0.37	ND	ND		
Indeno(1,2,3-cd)pyrene	T	mg/kg-dry	10	0	HH Soil (HQ=1)	0.62	0	0.34	0.37	ND	ND		
Isophorone	T	mg/kg-dry	10	0	HH Soil (HQ=1)	510	0	0.34	0.37	ND	ND		
Naphthalene	T	mg/kg-dry	10	0	HH Soil (HQ=1)	120	0	0.34	0.37	ND	ND		
Nitrobenzene	T	mg/kg-dry	10	0	No SLC			0.34	0.37	ND	ND		
N-Nitrosodi-n-propylamine	T	mg/kg-dry	10	0	HH Soil (HQ=1)	0.07	0	0.34	0.37	ND	ND		
N-Nitrosodiphenylamine	T	mg/kg-dry	10	0	HH Soil (HQ=1)	99	0	0.34	0.37	ND	ND		

"No SLC" indicates that there is not a Screening Level Criterion for this medium specified for the RI/FS.
"HH Soil (HQ=1)" EPA Region 6 RBSLs Human Health Residential Soil (HQ=1)
"Eco Soil" EPA Region 6 Tier 1-3 RBSLs Ecological Soil
Median Value determined using 1/2 the Reporting Limit value for Non-Detects if greater than 50% of the values were detected.
Mean Value calculated using 1/2 the Reporting Limit for Non-Detects if greater than 50% of the values were detected.

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A = Filtered Fraction (0.1 micron filter)
ND = Non-Detected Value

Table 7-12
Soil 0-6 inches Random
RI/FS Soil Area 2 - Admin and M&E
Summary of Results

Analyte	Sample Fraction	Units	Total Number of Samples	Percent Detects (%)	SLC	SLC Value	Percent Above SLC	Min RL for ND	Max RL for ND	Min Value	Max Value	Mean Value	Median Value
Pentachlorophenol	T	mg/kg-dry	10	0	No SLC			0.86	0.92	ND	ND		
Phenanthrene	T	mg/kg-dry	10	0	No SLC			0.34	0.37	ND	ND		
Phenol	T	mg/kg-dry	10	0	HH Soil (HQ=1)	18000	0	0.34	0.37	ND	ND		
Pyrene	T	mg/kg-dry	10	0	HH Soil (HQ=1)	2300	0	0.34	0.37	ND	ND		
Volatile Organics													
1,1,1-Trichloroethane	T	mg/kg-dry	10	0	HH Soil (HQ=1)	1400	0	0.01	0.02	ND	ND		
1,1,2,2-Tetrachloroethane	T	mg/kg-dry	10	0	No SLC			0.01	0.02	ND	ND		
1,1,2-Trichloro-1,2,2-trifluoroethane	T	mg/kg-dry	10	0	No SLC			0.01	0.02	ND	ND		
1,1,2-Trichloroethane	T	mg/kg-dry	10	0	No SLC			0.01	0.02	ND	ND		
1,1-Dichloroethane	T	mg/kg-dry	10	0	HH Soil (HQ=1)	590	0	0.01	0.02	ND	ND		
1,1-Dichloroethene	T	mg/kg-dry	10	0	HH Soil (HQ=1)	280	0	0.01	0.02	ND	ND		
1,2,4-Trichlorobenzene	T	mg/kg-dry	10	0	No SLC			0.01	0.02	ND	ND		
1,2-Dibromo-3-chloropropane	T	mg/kg-dry	10	0	No SLC			0.01	0.02	ND	ND		
1,2-Dichlorobenzene	T	mg/kg-dry	10	0	No SLC			0.01	0.02	ND	ND		
1,2-Dichloroethane	T	mg/kg-dry	10	0	No SLC			0.01	0.02	ND	ND		
1,2-Dichloroethene (total)	T	mg/kg-dry	10	0	No SLC			0.01	0.02	ND	ND		
1,2-Dichloropropane	T	mg/kg-dry	10	0	No SLC			0.01	0.02	ND	ND		
1,3-Dichlorobenzene	T	mg/kg-dry	10	0	No SLC			0.01	0.02	ND	ND		
1,4-Dichlorobenzene	T	mg/kg-dry	10	0	No SLC			0.01	0.02	ND	ND		
2-Butanone	T	mg/kg-dry	10	0	HH Soil (HQ=1)	32000	0	0.01	0.02	ND	ND		
2-Hexanone	T	mg/kg-dry	10	0	No SLC			0.01	0.02	ND	ND		
4-Methyl-2-pentanone	T	mg/kg-dry	10	0	HH Soil (HQ=1)	5800	0	0.01	0.02	ND	ND		
Benzene	T	mg/kg-dry	10	0	HH Soil (HQ=1)	0.66	0	0.01	0.02	ND	ND		
Bromodichloromethane	T	mg/kg-dry	10	0	No SLC			0.01	0.02	ND	ND		
Bromoform	T	mg/kg-dry	10	0	No SLC			0.01	0.02	ND	ND		
Bromomethane	T	mg/kg-dry	10	0	No SLC			0.01	0.02	ND	ND		
Carbon tetrachloride	T	mg/kg-dry	10	0	HH Soil (HQ=1)	0.24	0	0.01	0.02	ND	ND		
Chlorobenzene	T	mg/kg-dry	10	0	HH Soil (HQ=1)	320	0	0.01	0.02	ND	ND		
Chloroethane	T	mg/kg-dry	10	0	No SLC			0.01	0.02	ND	ND		
Chloroform	T	mg/kg-dry	10	0	No SLC			0.01	0.02	ND	ND		
Chloromethane	T	mg/kg-dry	10	0	HH Soil (HQ=1)	1.2	0	0.01	0.02	ND	ND		
cis-1,2-Dichloroethene	T	mg/kg-dry	10	0	No SLC			0.01	0.02	ND	ND		

"No SLC" indicates that there is not a Screening Level Criterion for this medium specified for the RI/FS.
"HH Soil (HQ=1)" EPA Region 6 RBSLs Human Health Residential Soil (HQ=1)
"Eco Soil" EPA Region 6 Tier 1-3 RBSLs Ecological Soil
Median Value determined using 1/2 the Reporting Limit value for Non-Detects if greater than 50% of the values were detected.
Mean Value calculated using 1/2 the Reporting Limit for Non-Detects if greater than 50% of the values were detected.

T = Total Fraction
D = Filtered Fraction (0.45 micron filter)
A = Filtered Fraction (0.1 micron filter)
ND = Non-Detected Value

Table 7-12
Soil 0-6 inches Random
RI/FS Soil Area 2 - Admin and M&E
Summary of Results

Analyte	Sample Fraction	Units	Total Number of Samples	Percent Detects (%)	SLC	SLC Value	Percent Above SLC	Min RL for ND	Max RL for ND	Min Value	Max Value	Mean Value	Median Value
cis-1,3-Dichloropropene	T	mg/kg-dry	10	0	No SLC			0.01	0.02	ND	ND		
Dibromochloromethane	T	mg/kg-dry	10	0	No SLC			0.01	0.02	ND	ND		
Dichlorodifluoromethane	T	mg/kg-dry	10	0	HH Soil (HQ=1)	94	0	0.01	0.02	ND	ND		
Ethylbenzene	T	mg/kg-dry	10	0	HH Soil (HQ=1)	230	0	0.01	0.02	ND	ND		
Styrene	T	mg/kg-dry	10	0	HH Soil (HQ=1)	1700	0	0.01	0.02	ND	ND		
Tetrachloroethene	T	mg/kg-dry	10	0	HH Soil (HQ=1)	0.55	0	0.01	0.02	ND	ND		
Toluene	T	mg/kg-dry	10	0	HH Soil (HQ=1)	520	0	0.01	0.02	ND	ND		
Total Xylene	T	mg/kg-dry	10	0	HH Soil (HQ=1)	210	0	0.01	0.02	ND	ND		
trans-1,2-Dichloroethene	T	mg/kg-dry	10	0	No SLC			0.01	0.02	ND	ND		
trans-1,3-Dichloropropene	T	mg/kg-dry	10	0	No SLC			0.01	0.02	ND	ND		
Trichloroethene	T	mg/kg-dry	10	0	HH Soil (HQ=1)	0.043	0	0.01	0.02	ND	ND		
Trichlorofluoromethane	T	mg/kg-dry	10	0	HH Soil (HQ=1)	390	0	0.01	0.02	ND	ND		
Vinyl chloride	T	mg/kg-dry	10	0	No SLC			0.01	0.02	ND	ND		

"No SLC" indicates that there is not a Screening Level Criterion for this medium specified for the RI/FS.
"HH Soil (HQ=1)" EPA Region 6 RBSLs Human Health Residential Soil (HQ=1)
"Eco Soil" EPA Region 6 Tier 1-3 RBSLs Ecological Soil
Median Value determined using 1/2 the Reporting Limit value for Non-Detects if greater than 50% of the values were detected.
Mean Value calculated using 1/2 the Reporting Limit for Non-Detects if greater than 50% of the values were detected.

T = Total Fraction
D = Filtered Fraction (0.45 micron filter)
A = Filtered Fraction (0.1 micron filter)
ND = Non-Detected Value

Table 7-13
Soil 0-24 inches Random
RI/FS Soil Area 2 - Admin and M&E
Summary of Results

Analyte	Sample Fraction	Units	Total Number of Samples	Percent Detects (%)	SLC	SLC Value	Percent Above SLC	Min RL for ND	Max RL for ND	Min Value	Max Value	Mean Value	Median Value
Inorganics													
Cation-Exchange Capacity	T	meq/100g	10	100	No SLC					10	27.8	18.2	17.1
Chloride	T	mg/kg-dry	10	100	No SLC					2.8	13.7	6.5	4.6
Fluoride	T	mg/kg-dry	10	100	No SLC					0.32	11.6	2.7	0.66
Nitrate	T	mg/kg-dry	10	60	No SLC			2.20	2.30	ND	3.6	2.2	2.4
Organic Soils	T	%	10	100	No SLC					1.8	4.9	3.7	4
pH	T	SU	10	100	No SLC					3.3	7.2	5.2	5.3
Phosphorus	T	mg/kg-dry	10	100	No SLC					69.7	1660	896	818
Sodium Absorption Ratio	T	ratio	10	100	No SLC					0.02	0.35	0.1	0.07
Solids, Percent	T	%	10	100	No SLC					87.4	94.7	92.1	92.7
Specific Conductance	T	umhos/cm	10	100	No SLC					23	1380	575	482
Sulfate	T	mg/kg-dry	10	100	No SLC					4	4490	1410	744
Total Kjeldahl Nitrogen	T	mg/kg-dry	10	100	No SLC					43.3	627	212	165
Total Organic Carbon	T	mg/kg-dry	10	90	No SLC			107.00	107.00	ND	16000	4470	3500
Metals													
Aluminum	T	mg/kg-dry	10	100	No SLC					3600	23800	12400	11300
Antimony	T	mg/kg-dry	10	0	ECO Soil	0.3	0	0.16	0.27	ND	ND		
Arsenic	T	mg/kg-dry	10	100	ECO Soil	31	0			1.1	7.1	4.5	3.9
Barium	T	mg/kg-dry	10	100	ECO Soil	330	10			176	444	243	224
Beryllium	T	mg/kg-dry	10	100	ECO Soil	30	0			0.19	3.8	1.1	0.89
Boron	T	mg/kg-dry	10	70	ECO Soil	0.5	100	0.38	0.42	ND	12	4.2	2.5
Cadmium	T	mg/kg-dry	10	50	ECO Soil	0.4	20	0.02	0.05	ND	1.6	0.24	0.034
Calcium	T	mg/kg-dry	10	100	No SLC					838	16300	5060	3660
Chromium	T	mg/kg-dry	10	100	ECO Soil	7.9	90			7.4	91.3	34.9	25.3
Cobalt	T	mg/kg-dry	10	100	ECO Soil	32	0			0.71	31	10.8	8.9
Copper	T	mg/kg-dry	10	100	ECO Soil	54	60			18.5	318	80	56.3
Iron	T	mg/kg-dry	10	100	No SLC					14400	42600	29800	29400
Lead	T	mg/kg-dry	10	100	ECO Soil	15	100			29.9	136	68.7	41.4
Magnesium	T	mg/kg-dry	10	100	No SLC					1340	13700	5890	4440
Manganese	T	mg/kg-dry	10	100	ECO Soil	152	70			88.6	1630	556	454
Mercury	T	mg/kg-dry	10	10	ECO Soil	0.1	0	0.02	0.02	ND	0.019		
Molybdenum	T	mg/kg-dry	10	100	ECO Soil	2	90			1.9	474	111	23.8

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Median Value determined using 1/2 the Reporting Limit value for Non-Detects if greater than 50% of the values were detected.
Mean Value calculated using 1/2 the Reporting Limit for Non-Detects if greater than 50% of the values were detected.

T = Total Fraction
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A = Filtered Fraction (0.1 micron filter)
ND = Non-Detected Value

Table 7-13
Soil 0-24 inches Random
RI/FS Soil Area 2 - Admin and M&E
Summary of Results

Analyte	Sample Fraction	Units	Total Number of Samples	Percent Detects (%)	SLC	SLC Value	Percent Above SLC	Min RL for ND	Max RL for ND	Min Value	Max Value	Mean Value	Median Value
Nickel	T	mg/kg-dry	10	100	ECO Soil	48	20			3.5	53.1	25.4	22.1
Potassium	T	mg/kg-dry	10	100	No SLC					2080	7360	3640	3070
Selenium	T	mg/kg-dry	10	80	ECO Soil	1	62.5	0.85	1.30	ND	2.6	1.2	1.1
Silver	T	mg/kg-dry	10	80	ECO Soil	2	0	0.13	0.44	ND	1.1	0.63	0.6
Sodium	T	mg/kg-dry	10	50	No SLC			46.80	211.00	ND	400	138	120
Thallium	T	mg/kg-dry	10	90	ECO Soil	1	0	0.10	0.10	ND	0.61	0.27	0.27
Vanadium	T	mg/kg-dry	10	100	ECO Soil	2	100			11	67.8	34.4	28.2
Zinc	T	mg/kg-dry	10	100	ECO Soil	120	10			21.1	234	81.3	78.2
Semi-Volatile Organics													
1,1`-Biphenyl	T	mg/kg-dry	10	0	ECO Soil	60	0	0.35	0.38	ND	ND		
2,4,5-Trichlorophenol	T	mg/kg-dry	10	0	No SLC			0.87	0.95	ND	ND		
2,4,6-Trichlorophenol	T	mg/kg-dry	10	0	No SLC			0.35	0.38	ND	ND		
2,4-Dichlorophenol	T	mg/kg-dry	10	0	No SLC			0.35	0.38	ND	ND		
2,4-Dimethylphenol	T	mg/kg-dry	10	0	No SLC			0.35	0.38	ND	ND		
2,4-Dinitrophenol	T	mg/kg-dry	10	0	No SLC			0.87	0.95	ND	ND		
2,4-Dinitrotoluene	T	mg/kg-dry	10	0	No SLC			0.35	0.38	ND	ND		
2,6-Dinitrotoluene	T	mg/kg-dry	10	0	ECO Soil	0.033	0	0.35	0.38	ND	ND		
2-Chloronaphthalene	T	mg/kg-dry	10	0	No SLC			0.35	0.38	ND	ND		
2-Chlorophenol	T	mg/kg-dry	10	0	ECO Soil	20	0	0.35	0.38	ND	ND		
2-Methylnaphthalene	T	mg/kg-dry	10	0	ECO Soil	3.2	0	0.35	0.38	ND	ND		
2-Methylphenol	T	mg/kg-dry	10	0	No SLC			0.35	0.38	ND	ND		
2-Nitroaniline	T	mg/kg-dry	10	0	No SLC			0.87	0.95	ND	ND		
2-Nitrophenol	T	mg/kg-dry	10	0	No SLC			0.35	0.38	ND	ND		
3,3-Dichlorobenzidine	T	mg/kg-dry	10	0	No SLC			0.35	0.38	ND	ND		
3-Nitroaniline	T	mg/kg-dry	10	0	No SLC			0.87	0.95	ND	ND		
4,6-Dinitro-2-methylphenol	T	mg/kg-dry	10	0	No SLC			0.87	0.95	ND	ND		
4-Bromophenyl phenyl ether	T	mg/kg-dry	10	0	No SLC			0.35	0.38	ND	ND		
4-Chloro-3-methylphenol	T	mg/kg-dry	10	0	ECO Soil	8	0	0.35	0.38	ND	ND		
4-Chloroaniline	T	mg/kg-dry	10	0	No SLC			0.35	0.38	ND	ND		
4-Chlorophenyl phenyl ether	T	mg/kg-dry	10	0	No SLC			0.35	0.38	ND	ND		
4-Methylphenol	T	mg/kg-dry	10	0	No SLC			0.35	0.38	ND	ND		
4-Nitroaniline	T	mg/kg-dry	10	0	No SLC			0.87	0.95	ND	ND		

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Soil 0-24 inches Random
RI/FS Soil Area 2 - Admin and M&E
Summary of Results

Analyte	Sample Fraction	Units	Total Number of Samples	Percent Detects (%)	SLC	SLC Value	Percent Above SLC	Min RL for ND	Max RL for ND	Min Value	Max Value	Mean Value	Median Value
4-Nitrophenol	T	mg/kg-dry	10	0	No SLC			0.87	0.95	ND	ND		
Acenaphthene	T	mg/kg-dry	10	0	ECO Soil	20	0	0.35	0.38	ND	ND		
Acenaphthylene	T	mg/kg-dry	10	0	No SLC			0.35	0.38	ND	ND		
Anthracene	T	mg/kg-dry	10	0	ECO Soil	10	0	0.35	0.38	ND	ND		
Benzo(a)anthracene	T	mg/kg-dry	10	0	ECO Soil	5.2	0	0.35	0.38	ND	ND		
Benzo(a)pyrene	T	mg/kg-dry	10	0	ECO Soil	1	0	0.35	0.38	ND	ND		
Benzo(b)fluoranthene	T	mg/kg-dry	10	0	ECO Soil	59.8	0	0.35	0.38	ND	ND		
Benzo(g,h,i)perylene	T	mg/kg-dry	10	0	ECO Soil	119	0	0.35	0.38	ND	ND		
Benzo(k)fluoranthene	T	mg/kg-dry	10	0	ECO Soil	148	0	0.35	0.38	ND	ND		
Bis(2-chloroethoxy)methane	T	mg/kg-dry	10	0	No SLC			0.35	0.38	ND	ND		
Bis(2-chloroethyl)ether	T	mg/kg-dry	10	0	No SLC			0.35	0.38	ND	ND		
Carbazole	T	mg/kg-dry	10	0	No SLC			0.35	0.38	ND	ND		
Chrysene	T	mg/kg-dry	10	0	ECO Soil	4.7	0	0.35	0.38	ND	ND		
Dibenz(a,h)anthracene	T	mg/kg-dry	10	0	ECO Soil	18.4	0	0.35	0.38	ND	ND		
Dibenzofuran	T	mg/kg-dry	10	0	No SLC			0.35	0.38	ND	ND		
Dichlorodiisopropyl ether	T	mg/kg-dry	10	0	No SLC			0.35	0.38	ND	ND		
Fluoranthene	T	mg/kg-dry	10	10	ECO Soil	10	0	0.35	0.38	ND	0.021		
Fluorene	T	mg/kg-dry	10	0	ECO Soil	30	0	0.35	0.38	ND	ND		
Hexachlorobenzene	T	mg/kg-dry	10	0	No SLC			0.35	0.38	ND	ND		
Hexachlorobutadiene	T	mg/kg-dry	10	0	No SLC			0.35	0.38	ND	ND		
Hexachlorocyclopentadiene	T	mg/kg-dry	10	0	No SLC			0.35	0.38	ND	ND		
Hexachloroethane	T	mg/kg-dry	10	0	No SLC			0.35	0.38	ND	ND		
Indeno(1,2,3-cd)pyrene	T	mg/kg-dry	10	0	ECO Soil	109	0	0.35	0.38	ND	ND		
Isophorone	T	mg/kg-dry	10	0	ECO Soil	139	0	0.35	0.38	ND	ND		
Naphthalene	T	mg/kg-dry	10	0	ECO Soil	5	0	0.35	0.38	ND	ND		
Nitrobenzene	T	mg/kg-dry	10	0	No SLC			0.35	0.38	ND	ND		
N-Nitrosodi-n-propylamine	T	mg/kg-dry	10	0	ECO Soil	0.54	0	0.35	0.38	ND	ND		
N-Nitrosodiphenylamine	T	mg/kg-dry	10	0	ECO Soil	20	0	0.35	0.38	ND	ND		
Pentachlorophenol	T	mg/kg-dry	10	0	No SLC			0.87	0.95	ND	ND		
Phenanthrene	T	mg/kg-dry	10	0	ECO Soil	5	0	0.35	0.38	ND	ND		
Phenol	T	mg/kg-dry	10	0	ECO Soil	30	0	0.35	0.38	ND	ND		
Pyrene	T	mg/kg-dry	10	10	ECO Soil	10	0	0.35	0.38	ND	0.022		

"No SLC" indicates that there is not a Screening Level Criterion for this medium specified for the RI/FS.
"HH Soil (HQ=1)" EPA Region 6 RBSLs Human Health Residential Soil (HQ=1)
"Eco Soil" EPA Region 6 Tier 1-3 RBSLs Ecological Soil
Median Value determined using 1/2 the Reporting Limit value for Non-Detects if greater than 50% of the values were detected.
Mean Value calculated using 1/2 the Reporting Limit for Non-Detects if greater than 50% of the values were detected.

T = Total Fraction
D = Filtered Fraction (0.45 micron filter)
A = Filtered Fraction (0.1 micron filter)
ND = Non-Detected Value

Table 7-13
Soil 0-24 inches Random
RI/FS Soil Area 2 - Admin and M&E
Summary of Results

Analyte	Sample Fraction	Units	Total Number of Samples	Percent Detects (%)	SLC	SLC Value	Percent Above SLC	Min RL for ND	Max RL for ND	Min Value	Max Value	Mean Value	Median Value
Volatile Organics													
1,1,1-Trichloroethane	T	mg/kg-dry	10	0	ECO Soil	0.1	0	0.01	0.01	ND	ND		
1,1,2,2-Tetrachloroethane	T	mg/kg-dry	10	0	No SLC			0.01	0.01	ND	ND		
1,1,2-Trichloro-1,2,2-trifluoroethane	T	mg/kg-dry	10	0	No SLC			0.01	0.01	ND	ND		
1,1,2-Trichloroethane	T	mg/kg-dry	10	0	No SLC			0.01	0.01	ND	ND		
1,1-Dichloroethane	T	mg/kg-dry	10	0	ECO Soil	20.1	0	0.01	0.01	ND	ND		
1,1-Dichloroethene	T	mg/kg-dry	10	0	No SLC			0.01	0.01	ND	ND		
1,2,4-Trichlorobenzene	T	mg/kg-dry	10	0	No SLC			0.01	0.01	ND	ND		
1,2-Dibromo-3-chloropropane	T	mg/kg-dry	10	0	No SLC			0.01	0.01	ND	ND		
1,2-Dichlorobenzene	T	mg/kg-dry	10	0	No SLC			0.01	0.01	ND	ND		
1,2-Dichloroethane	T	mg/kg-dry	10	0	No SLC			0.01	0.01	ND	ND		
1,2-Dichloroethene (total)	T	mg/kg-dry	10	0	No SLC			0.01	0.01	ND	ND		
1,2-Dichloropropane	T	mg/kg-dry	10	0	No SLC			0.01	0.01	ND	ND		
1,3-Dichlorobenzene	T	mg/kg-dry	10	0	No SLC			0.01	0.01	ND	ND		
1,4-Dichlorobenzene	T	mg/kg-dry	10	0	No SLC			0.01	0.01	ND	ND		
2-Butanone	T	mg/kg-dry	10	0	ECO Soil	89.6	0	0.01	0.01	ND	ND		
2-Hexanone	T	mg/kg-dry	10	0	ECO Soil	12.6	0	0.01	0.01	ND	ND		
4-Methyl-2-pentanone	T	mg/kg-dry	10	0	ECO Soil	443	0	0.01	0.01	ND	ND		
Benzene	T	mg/kg-dry	10	0	ECO Soil	0.5	0	0.01	0.01	ND	ND		
Bromodichloromethane	T	mg/kg-dry	10	0	No SLC			0.01	0.01	ND	ND		
Bromoform	T	mg/kg-dry	10	0	No SLC			0.01	0.01	ND	ND		
Bromomethane	T	mg/kg-dry	10	0	No SLC			0.01	0.01	ND	ND		
Carbon tetrachloride	T	mg/kg-dry	10	0	ECO Soil	1000	0	0.01	0.01	ND	ND		
Chlorobenzene	T	mg/kg-dry	10	0	ECO Soil	40	0	0.01	0.01	ND	ND		
Chloroethane	T	mg/kg-dry	10	0	No SLC			0.01	0.01	ND	ND		
Chloroform	T	mg/kg-dry	10	0	No SLC			0.01	0.01	ND	ND		
Chloromethane	T	mg/kg-dry	10	0	ECO Soil	10.4	0	0.01	0.01	ND	ND		
cis-1,2-Dichloroethene	T	mg/kg-dry	10	0	No SLC			0.01	0.01	ND	ND		
cis-1,3-Dichloropropene	T	mg/kg-dry	10	0	No SLC			0.01	0.01	ND	ND		
Dibromochloromethane	T	mg/kg-dry	10	0	No SLC			0.01	0.01	ND	ND		
Dichlorodifluoromethane	T	mg/kg-dry	10	0	ECO Soil	39.5	0	0.01	0.01	ND	ND		
Ethylbenzene	T	mg/kg-dry	10	0	ECO Soil	5	0	0.01	0.01	ND	ND		

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"HH Soil (HQ=1)" EPA Region 6 RBSLs Human Health Residential Soil (HQ=1)
"Eco Soil" EPA Region 6 Tier 1-3 RBSLs Ecological Soil
Median Value determined using 1/2 the Reporting Limit value for Non-Detects if greater than 50% of the values were detected.
Mean Value calculated using 1/2 the Reporting Limit for Non-Detects if greater than 50% of the values were detected.

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A = Filtered Fraction (0.1 micron filter)
ND = Non-Detected Value

Table 7-13
Soil 0-24 inches Random
RI/FS Soil Area 2 - Admin and M&E
Summary of Results

Analyte	Sample Fraction	Units	Total Number of Samples	Percent Detects (%)	SLC	SLC Value	Percent Above SLC	Min RL for ND	Max RL for ND	Min Value	Max Value	Mean Value	Median Value
Styrene	T	mg/kg-dry	10	0	ECO Soil	300	0	0.01	0.01	ND	ND		
Tetrachloroethene	T	mg/kg-dry	10	0	No SLC			0.01	0.01	ND	ND		
Toluene	T	mg/kg-dry	10	0	ECO Soil	200	0	0.01	0.01	ND	ND		
Total Xylene	T	mg/kg-dry	10	0	ECO Soil	5	0	0.01	0.01	ND	ND		
trans-1,2-Dichloroethene	T	mg/kg-dry	10	0	No SLC			0.01	0.01	ND	ND		
trans-1,3-Dichloropropene	T	mg/kg-dry	10	0	No SLC			0.01	0.01	ND	ND		
Trichloroethene	T	mg/kg-dry	10	0	No SLC			0.01	0.01	ND	ND		
Trichlorofluoromethane	T	mg/kg-dry	10	0	ECO Soil	16.4	0	0.01	0.01	ND	ND		
Vinyl chloride	T	mg/kg-dry	10	0	No SLC			0.01	0.01	ND	ND		

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Mean Value calculated using 1/2 the Reporting Limit for Non-Detects if greater than 50% of the values were detected.

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A = Filtered Fraction (0.1 micron filter)
ND = Non-Detected Value

Table 7-14
Soil 0-6 inches Biased
RI/FS Soil Area 2 - Admin and M&E
Summary of Results

Analyte	Sample Fraction	Units	Total Number of Samples	Percent Detects (%)	SLC	SLC Value	Percent Above SLC	Min RL for ND	Max RL for ND	Min Value	Max Value	Mean Value	Median Value
Inorganics													
Cation-Exchange Capacity	T	meq/100g	65	100	No SLC					2.5	43.5	14.7	14.2
Chloride	T	mg/kg-dry	67	88.1	No SLC			2.10	37.00	ND	2060	213	70.7
Fluoride	T	mg/kg-dry	65	100	HH Soil (HQ=1)	3700	0			0.28	34.7	2.9	2
Nitrate	T	mg/kg-dry	67	71.6	No SLC			2.10	5.40	ND	51.4	6.4	3.4
Organic Soils	T	%	66	100	No SLC					1.1	9	3	2.6
pH	T	SU	65	100	No SLC					4	10.8	7	7.1
Phosphorus	T	mg/kg-dry	65	100	No SLC					89.9	1920	980	943
Sodium Absorption Ratio	T	ratio	65	100	No SLC					0.05	12.8	1.1	0.71
Solids, Percent	T	%	70	100	No SLC					82.1	97.1	92.5	92.5
Solids, Percent - VOCs Only	T	%	5	100	No SLC					93.9	95.5	94.9	95
Specific Conductance	T	umhos/cm	65	100	No SLC					74.3	5990	1360	1290
Sulfate	T	mg/kg-dry	67	94	No SLC			55.00	109.00	ND	16100	2440	1200
Total Kjeldahl Nitrogen	T	mg/kg-dry	65	100	No SLC					44.2	573	145	113
Total Organic Carbon	T	mg/kg-dry	65	84.6	No SLC			103.00	112.00	ND	46900	5060	1370
Metals													
Aluminum	T	mg/kg-dry	65	100	HH Soil (HQ=1)	76000	0			4650	21200	11700	11300
Antimony	T	mg/kg-dry	65	1.5	HH Soil (HQ=1)	31	0	0.20	0.45	ND	0.31		
Arsenic	T	mg/kg-dry	65	100	HH Soil (HQ=1)	0.39	100			1.5	6.7	3.3	3
Barium	T	mg/kg-dry	65	100	HH Soil (HQ=1)	5500	0			79.7	452	187	172
Beryllium	T	mg/kg-dry	65	100	HH Soil (HQ=1)	150	0			0.23	1.9	0.85	0.82
Boron	T	mg/kg-dry	65	32.3	HH Soil (HQ=1)	5500	0	0.20	2.80	ND	10.1		
Cadmium	T	mg/kg-dry	65	86.2	HH Soil (HQ=1)	39	0	0.03	0.04	ND	2.1	0.47	0.39
Calcium	T	mg/kg-dry	65	100	No SLC					1040	43800	11500	8910
Chromium	T	mg/kg-dry	65	100	HH Soil (HQ=1)	210	0			9.2	91	30.7	30.8
Cobalt	T	mg/kg-dry	65	100	HH Soil (HQ=1)	900	0			0.94	41.7	10	9
Copper	T	mg/kg-dry	65	100	HH Soil (HQ=1)	2900	0			17	360	79.5	70.7
Iron	T	mg/kg-dry	65	100	HH Soil (HQ=1)	23000	70.8			11500	43700	27000	27400
Lead	T	mg/kg-dry	65	100	HH Soil (HQ=1)	400	0			11.1	190	62.8	57.6
Magnesium	T	mg/kg-dry	65	100	No SLC					1440	15900	6060	6040
Manganese	T	mg/kg-dry	65	100	HH Soil (HQ=1)	3200	0			82.5	1700	535	543
Mercury	T	mg/kg-dry	65	9.2	HH Soil (HQ=1)	23	0	0.02	0.02	ND	0.19		

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A = Filtered Fraction (0.1 micron filter)
ND = Non-Detected Value

Table 7-14
Soil 0-6 inches Biased
RI/FS Soil Area 2 - Admin and M&E
Summary of Results

Analyte	Sample Fraction	Units	Total Number of Samples	Percent Detects (%)	SLC	SLC Value	Percent Above SLC	Min RL for ND	Max RL for ND	Min Value	Max Value	Mean Value	Median Value
Molybdenum	T	mg/kg-dry	64	100	HH Soil (HQ=1)	390	1.6			10.5	472	88.6	55.9
Nickel	T	mg/kg-dry	65	100	HH Soil (HQ=1)	1600	0			4.5	74.7	23.5	21.8
Potassium	T	mg/kg-dry	65	100	No SLC					1010	6290	3200	3020
Selenium	T	mg/kg-dry	65	55.4	HH Soil (HQ=1)	390	0	0.66	0.87	ND	1.6	0.71	0.73
Silver	T	mg/kg-dry	65	86.2	HH Soil (HQ=1)	390	0	0.13	0.16	ND	3.4	0.54	0.48
Sodium	T	mg/kg-dry	65	46.2	No SLC			54.20	1,220.00	ND	1140		
Thallium	T	mg/kg-dry	65	96.9	HH Soil (HQ=1)	5.5	0	0.09	0.10	ND	0.52	0.25	0.26
Vanadium	T	mg/kg-dry	65	100	HH Soil (HQ=1)	78	0			11.6	76.7	32.9	33
Zinc	T	mg/kg-dry	65	100	HH Soil (HQ=1)	23000	0			20.9	311	115	102
Pesticides-PCBs													
Aroclor 1016	T	mg/kg-dry	8	0	No SLC			0.03	0.04	ND	ND		
Aroclor 1221	T	mg/kg-dry	8	0	No SLC			0.07	0.08	ND	ND		
Aroclor 1232	T	mg/kg-dry	8	0	No SLC			0.03	0.04	ND	ND		
Aroclor 1242	T	mg/kg-dry	8	0	No SLC			0.03	0.04	ND	ND		
Aroclor 1248	T	mg/kg-dry	8	0	HH Soil (HQ=1)	0.22	0	0.03	0.04	ND	ND		
Aroclor 1254	T	mg/kg-dry	8	0	HH Soil (HQ=1)	0.22	0	0.03	0.04	ND	ND		
Aroclor 1260	T	mg/kg-dry	8	0	HH Soil (HQ=1)	0.22	0	0.03	0.04	ND	ND		
Semi-Volatile Organics													
1,1`-Biphenyl	T	mg/kg-dry	65	3.1	HH Soil (HQ=1)	3000	0	0.34	3.60	ND	0.11		
2,4,5-Trichlorophenol	T	mg/kg-dry	65	0	No SLC			0.85	9.10	ND	ND		
2,4,6-Trichlorophenol	T	mg/kg-dry	65	0	No SLC			0.34	3.60	ND	ND		
2,4-Dichlorophenol	T	mg/kg-dry	65	0	No SLC			0.34	3.60	ND	ND		
2,4-Dimethylphenol	T	mg/kg-dry	65	0	No SLC			0.34	3.60	ND	ND		
2,4-Dinitrophenol	T	mg/kg-dry	65	0	No SLC			0.85	9.10	ND	ND		
2,4-Dinitrotoluene	T	mg/kg-dry	65	0	No SLC			0.34	3.60	ND	ND		
2,6-Dinitrotoluene	T	mg/kg-dry	65	1.5	HH Soil (HQ=1)	61	0	0.34	3.60	ND	0.21		
2-Chloronaphthalene	T	mg/kg-dry	65	0	No SLC			0.34	3.60	ND	ND		
2-Chlorophenol	T	mg/kg-dry	65	0	HH Soil (HQ=1)	64	0	0.34	3.60	ND	ND		
2-Methylnaphthalene	T	mg/kg-dry	65	1.5	No SLC			0.34	3.60	ND	0.064		
2-Methylphenol	T	mg/kg-dry	65	0	No SLC			0.34	3.60	ND	ND		
2-Nitroaniline	T	mg/kg-dry	65	0	No SLC			0.85	9.10	ND	ND		
2-Nitrophenol	T	mg/kg-dry	65	0	No SLC			0.34	3.60	ND	ND		

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ND = Non-Detected Value

Table 7-14
Soil 0-6 inches Biased
RI/FS Soil Area 2 - Admin and M&E
Summary of Results

Analyte	Sample Fraction	Units	Total Number of Samples	Percent Detects (%)	SLC	SLC Value	Percent Above SLC	Min RL for ND	Max RL for ND	Min Value	Max Value	Mean Value	Median Value
3,3-Dichlorobenzidine	T	mg/kg-dry	65	0	No SLC			0.34	3.60	ND	ND		
3-Nitroaniline	T	mg/kg-dry	65	0	No SLC			0.85	9.10	ND	ND		
4,6-Dinitro-2-methylphenol	T	mg/kg-dry	65	0	No SLC			0.85	9.10	ND	ND		
4-Bromophenyl phenyl ether	T	mg/kg-dry	65	0	No SLC			0.34	3.60	ND	ND		
4-Chloro-3-methylphenol	T	mg/kg-dry	65	0	No SLC			0.34	3.60	ND	ND		
4-Chloroaniline	T	mg/kg-dry	65	0	No SLC			0.34	3.60	ND	ND		
4-Chlorophenyl phenyl ether	T	mg/kg-dry	65	0	No SLC			0.34	3.60	ND	ND		
4-Methylphenol	T	mg/kg-dry	65	0	No SLC			0.34	3.60	ND	ND		
4-Nitroaniline	T	mg/kg-dry	65	0	No SLC			0.85	9.10	ND	ND		
4-Nitrophenol	T	mg/kg-dry	65	0	No SLC			0.85	9.10	ND	ND		
Acenaphthene	T	mg/kg-dry	65	0	HH Soil (HQ=1)	3700	0	0.34	3.60	ND	ND		
Acenaphthylene	T	mg/kg-dry	65	0	No SLC			0.34	3.60	ND	ND		
Anthracene	T	mg/kg-dry	65	0	HH Soil (HQ=1)	22000	0	0.34	3.60	ND	ND		
Benzo(a)anthracene	T	mg/kg-dry	65	6.2	HH Soil (HQ=1)	0.62	0	0.34	3.60	ND	0.12		
Benzo(a)pyrene	T	mg/kg-dry	65	3.1	HH Soil (HQ=1)	0.062	50	0.34	3.60	ND	0.12		
Benzo(b)fluoranthene	T	mg/kg-dry	65	3.1	HH Soil (HQ=1)	0.62	0	0.34	3.60	ND	0.21		
Benzo(g,h,i)perylene	T	mg/kg-dry	65	3.1	No SLC			0.34	3.60	ND	0.048		
Benzo(k)fluoranthene	T	mg/kg-dry	65	3.1	HH Soil (HQ=1)	6.2	0	0.34	3.60	ND	0.19		
Bis(2-chloroethoxy)methane	T	mg/kg-dry	65	0	No SLC			0.34	3.60	ND	ND		
Bis(2-chloroethyl)ether	T	mg/kg-dry	65	0	No SLC			0.34	3.60	ND	ND		
Carbazole	T	mg/kg-dry	65	0	HH Soil (HQ=1)	24	0	0.34	3.60	ND	ND		
Chrysene	T	mg/kg-dry	65	10.8	HH Soil (HQ=1)	62	0	0.34	3.60	ND	0.18		
Dibenz(a,h)anthracene	T	mg/kg-dry	65	0	HH Soil (HQ=1)	0.062	0	0.34	3.60	ND	ND		
Dibenzofuran	T	mg/kg-dry	65	1.5	HH Soil (HQ=1)	150	0	0.34	3.60	ND	0.054		
Dichlorodiisopropyl ether	T	mg/kg-dry	65	0	No SLC			0.34	3.60	ND	ND		
Fluoranthene	T	mg/kg-dry	65	7.7	HH Soil (HQ=1)	2300	0	0.34	3.60	ND	0.37		
Fluorene	T	mg/kg-dry	65	1.5	HH Soil (HQ=1)	2600	0	0.34	3.60	ND	0.08		
Hexachlorobenzene	T	mg/kg-dry	65	0	No SLC			0.34	3.60	ND	ND		
Hexachlorobutadiene	T	mg/kg-dry	65	0	No SLC			0.34	3.60	ND	ND		
Hexachlorocyclopentadiene	T	mg/kg-dry	65	0	No SLC			0.34	3.60	ND	ND		
Hexachloroethane	T	mg/kg-dry	65	0	No SLC			0.34	3.60	ND	ND		
Indeno(1,2,3-cd)pyrene	T	mg/kg-dry	65	3.1	HH Soil (HQ=1)	0.62	0	0.34	3.60	ND	0.05		

"No SLC" indicates that there is not a Screening Level Criterion for this medium specified for the RI/FS.
"HH Soil (HQ=1)" EPA Region 6 RBSLs Human Health Residential Soil (HQ=1)
"Eco Soil" EPA Region 6 Tier 1-3 RBSLs Ecological Soil
Median Value determined using 1/2 the Reporting Limit value for Non-Detects if greater than 50% of the values were detected.
Mean Value calculated using 1/2 the Reporting Limit for Non-Detects if greater than 50% of the values were detected.

T = Total Fraction
D = Filtered Fraction (0.45 micron filter)
A = Filtered Fraction (0.1 micron filter)
ND = Non-Detected Value

Table 7-14
Soil 0-6 inches Biased
RI/FS Soil Area 2 - Admin and M&E
Summary of Results

Analyte	Sample Fraction	Units	Total Number of Samples	Percent Detects (%)	SLC	SLC Value	Percent Above SLC	Min RL for ND	Max RL for ND	Min Value	Max Value	Mean Value	Median Value
Isophorone	T	mg/kg-dry	65	1.5	HH Soil (HQ=1)	510	0	0.34	3.50	ND	1.7		
Naphthalene	T	mg/kg-dry	65	0	HH Soil (HQ=1)	120	0	0.34	3.60	ND	ND		
Nitrobenzene	T	mg/kg-dry	65	0	No SLC			0.34	3.60	ND	ND		
N-Nitrosodi-n-propylamine	T	mg/kg-dry	65	0	HH Soil (HQ=1)	0.07	0	0.34	3.60	ND	ND		
N-Nitrosodiphenylamine	T	mg/kg-dry	65	0	HH Soil (HQ=1)	99	0	0.34	3.60	ND	ND		
Pentachlorophenol	T	mg/kg-dry	65	0	No SLC			0.85	9.10	ND	ND		
Phenanthrene	T	mg/kg-dry	65	7.7	No SLC			0.34	3.60	ND	0.31		
Phenol	T	mg/kg-dry	65	4.6	HH Soil (HQ=1)	18000	0	0.34	3.60	ND	0.85		
Pyrene	T	mg/kg-dry	65	16.9	HH Soil (HQ=1)	2300	0	0.34	3.50	ND	0.46		
Volatile Organics													
1,1,1-Trichloroethane	T	mg/kg-dry	64	1.6	HH Soil (HQ=1)	1400	0	0.00	0.02	ND	0.001		
1,1,2,2-Tetrachloroethane	T	mg/kg-dry	64	0	No SLC			0.00	0.02	ND	ND		
1,1,2-Trichloro-1,2,2-trifluoroethane	T	mg/kg-dry	64	0	No SLC			0.00	0.02	ND	ND		
1,1,2-Trichloroethane	T	mg/kg-dry	64	0	No SLC			0.00	0.02	ND	ND		
1,1-Dichloroethane	T	mg/kg-dry	64	0	HH Soil (HQ=1)	590	0	0.00	0.02	ND	ND		
1,1-Dichloroethene	T	mg/kg-dry	64	0	HH Soil (HQ=1)	280	0	0.00	0.02	ND	ND		
1,2,4-Trichlorobenzene	T	mg/kg-dry	64	0	No SLC			0.00	0.02	ND	ND		
1,2-Dibromo-3-chloropropane	T	mg/kg-dry	64	0	No SLC			0.00	0.02	ND	ND		
1,2-Dichlorobenzene	T	mg/kg-dry	64	0	No SLC			0.00	0.02	ND	ND		
1,2-Dichloroethane	T	mg/kg-dry	64	0	No SLC			0.00	0.02	ND	ND		
1,2-Dichloroethene (total)	T	mg/kg-dry	64	0	No SLC			0.00	0.02	ND	ND		
1,2-Dichloropropane	T	mg/kg-dry	64	0	No SLC			0.00	0.02	ND	ND		
1,3-Dichlorobenzene	T	mg/kg-dry	64	0	No SLC			0.00	0.02	ND	ND		
1,4-Dichlorobenzene	T	mg/kg-dry	64	0	No SLC			0.00	0.02	ND	ND		
2-Butanone	T	mg/kg-dry	64	10.9	HH Soil (HQ=1)	32000	0	0.00	0.02	ND	0.004		
2-Hexanone	T	mg/kg-dry	64	0	No SLC			0.00	0.02	ND	ND		
4-Methyl-2-pentanone	T	mg/kg-dry	64	1.6	HH Soil (HQ=1)	5800	0	0.00	0.02	ND	0.0008		
Benzene	T	mg/kg-dry	64	0	HH Soil (HQ=1)	0.66	0	0.00	0.02	ND	ND		
Bromodichloromethane	T	mg/kg-dry	64	0	No SLC			0.00	0.02	ND	ND		
Bromoform	T	mg/kg-dry	64	0	No SLC			0.00	0.02	ND	ND		
Bromomethane	T	mg/kg-dry	64	0	No SLC			0.00	0.02	ND	ND		
Carbon tetrachloride	T	mg/kg-dry	64	0	HH Soil (HQ=1)	0.24	0	0.00	0.02	ND	ND		

"No SLC" indicates that there is not a Screening Level Criterion for this medium specified for the RI/FS.
"HH Soil (HQ=1)" EPA Region 6 RBSLs Human Health Residential Soil (HQ=1)
"Eco Soil" EPA Region 6 Tier 1-3 RBSLs Ecological Soil
Median Value determined using 1/2 the Reporting Limit value for Non-Detects if greater than 50% of the values were detected.
Mean Value calculated using 1/2 the Reporting Limit for Non-Detects if greater than 50% of the values were detected.

T = Total Fraction
D = Filtered Fraction (0.45 micron filter)
A = Filtered Fraction (0.1 micron filter)
ND = Non-Detected Value

Table 7-14
Soil 0-6 inches Biased
RI/FS Soil Area 2 - Admin and M&E
Summary of Results

Analyte	Sample Fraction	Units	Total Number of Samples	Percent Detects (%)	SLC	SLC Value	Percent Above SLC	Min RL for ND	Max RL for ND	Min Value	Max Value	Mean Value	Median Value
Chlorobenzene	T	mg/kg-dry	64	0	HH Soil (HQ=1)	320	0	0.00	0.02	ND	ND		
Chloroethane	T	mg/kg-dry	64	0	No SLC			0.00	0.02	ND	ND		
Chloroform	T	mg/kg-dry	64	0	No SLC			0.00	0.02	ND	ND		
Chloromethane	T	mg/kg-dry	64	0	HH Soil (HQ=1)	1.2	0	0.00	0.02	ND	ND		
cis-1,2-Dichloroethene	T	mg/kg-dry	64	0	No SLC			0.00	0.02	ND	ND		
cis-1,3-Dichloropropene	T	mg/kg-dry	64	0	No SLC			0.00	0.02	ND	ND		
Dibromochloromethane	T	mg/kg-dry	64	0	No SLC			0.00	0.02	ND	ND		
Dichlorodifluoromethane	T	mg/kg-dry	64	0	HH Soil (HQ=1)	94	0	0.00	0.02	ND	ND		
Ethylbenzene	T	mg/kg-dry	64	9.4	HH Soil (HQ=1)	230	0	0.00	0.02	ND	0.009		
Styrene	T	mg/kg-dry	64	3.1	HH Soil (HQ=1)	1700	0	0.00	0.02	ND	0.002		
Tetrachloroethene	T	mg/kg-dry	64	1.6	HH Soil (HQ=1)	0.55	0	0.00	0.02	ND	0.002		
Toluene	T	mg/kg-dry	64	3.1	HH Soil (HQ=1)	520	0	0.00	0.02	ND	0.002		
Total Xylene	T	mg/kg-dry	65	44.6	HH Soil (HQ=1)	210	0	0.00	0.02	ND	0.066		
trans-1,2-Dichloroethene	T	mg/kg-dry	64	0	No SLC			0.00	0.02	ND	ND		
trans-1,3-Dichloropropene	T	mg/kg-dry	64	0	No SLC			0.00	0.02	ND	ND		
Trichloroethene	T	mg/kg-dry	64	0	HH Soil (HQ=1)	0.043	0	0.00	0.02	ND	ND		
Trichlorofluoromethane	T	mg/kg-dry	64	4.7	HH Soil (HQ=1)	390	0	0.00	0.02	ND	0.008		
Vinyl chloride	T	mg/kg-dry	64	0	No SLC			0.00	0.02	ND	ND		

"No SLC" indicates that there is not a Screening Level Criterion for this medium specified for the RI/FS.
"HH Soil (HQ=1)" EPA Region 6 RBSLs Human Health Residential Soil (HQ=1)
"Eco Soil" EPA Region 6 Tier 1-3 RBSLs Ecological Soil
Median Value determined using 1/2 the Reporting Limit value for Non-Detects if greater than 50% of the values were detected.
Mean Value calculated using 1/2 the Reporting Limit for Non-Detects if greater than 50% of the values were detected.

T = Total Fraction
D = Filtered Fraction (0.45 micron filter)
A = Filtered Fraction (0.1 micron filter)
ND = Non-Detected Value

Table 7-15
Soil 0-24 inches Biased
RI/FS Soil Area 2 - Admin and M&E
Summary of Results

Analyte	Sample Fraction	Units	Total Number of Samples	Percent Detects (%)	SLC	SLC Value	Percent Above SLC	Min RL for ND	Max RL for ND	Min Value	Max Value	Mean Value	Median Value
Inorganics													
Cation-Exchange Capacity	T	meq/100g	65	100	No SLC					3.1	46.5	14.9	13.8
Chloride	T	mg/kg-dry	67	83.6	No SLC			2.10	36.00	ND	6050	221	46
Fluoride	T	mg/kg-dry	65	100	No SLC					0.28	51.3	3.2	2
Nitrate	T	mg/kg-dry	67	64.2	No SLC			2.10	5.80	ND	62.2	5.7	2.9
Organic Soils	T	%	66	100	No SLC					1.4	9.4	3.1	2.7
pH	T	SU	65	100	No SLC					3.7	10	6.9	7.1
Phosphorus	T	mg/kg-dry	65	100	No SLC					158	2380	1020	990
Sodium Absorption Ratio	T	ratio	65	100	No SLC					0.04	13.7	1	0.53
Solids, Percent	T	%	69	100	No SLC					83.9	98.2	92.3	92.4
Solids, Percent - VOCs Only	T	%	5	100	No SLC					94.3	96.3	95.2	94.9
Specific Conductance	T	umhos/cm	65	100	No SLC					56.7	14100	1450	1260
Sulfate	T	mg/kg-dry	67	94	No SLC			55.00	109.00	ND	15900	2570	1320
Total Kjeldahl Nitrogen	T	mg/kg-dry	65	100	No SLC					48.6	717	123	103
Total Organic Carbon	T	mg/kg-dry	65	87.7	No SLC			104.00	120.00	ND	432000	10000	1200
Metals													
Aluminum	T	mg/kg-dry	65	100	No SLC					4200	23300	12300	12100
Antimony	T	mg/kg-dry	65	4.6	ECO Soil	0.3	100	0.19	0.47	ND	2		
Arsenic	T	mg/kg-dry	65	100	ECO Soil	31	0			1.9	6.8	3.3	3.1
Barium	T	mg/kg-dry	65	100	ECO Soil	330	6.2			92.6	456	213	203
Beryllium	T	mg/kg-dry	65	100	ECO Soil	30	0			0.19	1.8	0.86	0.85
Boron	T	mg/kg-dry	65	33.8	ECO Soil	0.5	100	0.21	3.80	ND	7.8		
Cadmium	T	mg/kg-dry	65	75.4	ECO Soil	0.4	40.8	0.02	0.04	ND	1.8	0.33	0.26
Calcium	T	mg/kg-dry	65	100	No SLC					453	29100	10500	9420
Chromium	T	mg/kg-dry	65	100	ECO Soil	7.9	98.5			7.7	95.8	32.5	32.4
Cobalt	T	mg/kg-dry	65	100	ECO Soil	32	1.5			0.56	38.2	9.7	8.9
Copper	T	mg/kg-dry	65	100	ECO Soil	54	75.4			19.6	330	82.9	70.6
Iron	T	mg/kg-dry	65	100	No SLC					15000	56600	28800	28300
Lead	T	mg/kg-dry	65	100	ECO Soil	15	100			17.5	162	67	64.9
Magnesium	T	mg/kg-dry	65	100	No SLC					1110	16900	6350	6160
Manganese	T	mg/kg-dry	65	100	ECO Soil	152	92.3			59.4	1170	521	537
Mercury	T	mg/kg-dry	65	9.2	ECO Soil	0.1	16.7	0.02	0.02	ND	0.21		

"No SLC" indicates that there is not a Screening Level Criterion for this medium specified for the RI/FS.
"HH Soil (HQ=1)" EPA Region 6 RBSLs Human Health Residential Soil (HQ=1)
"Eco Soil" EPA Region 6 Tier 1-3 RBSLs Ecological Soil
Median Value determined using 1/2 the Reporting Limit value for Non-Detects if greater than 50% of the values were detected.
Mean Value calculated using 1/2 the Reporting Limit for Non-Detects if greater than 50% of the values were detected.

T = Total Fraction
D = Filtered Fraction (0.45 micron filter)
A = Filtered Fraction (0.1 micron filter)
ND = Non-Detected Value

Table 7-15
Soil 0-24 inches Biased
RI/FS Soil Area 2 - Admin and M&E
Summary of Results

Analyte	Sample Fraction	Units	Total Number of Samples	Percent Detects (%)	SLC	SLC Value	Percent Above SLC	Min RL for ND	Max RL for ND	Min Value	Max Value	Mean Value	Median Value
Molybdenum	T	mg/kg-dry	65	100	ECO Soil	2	100			3	319	64.3	49.1
Nickel	T	mg/kg-dry	65	100	ECO Soil	48	3.1			3.2	52.6	23.8	23.9
Potassium	T	mg/kg-dry	65	100	No SLC					1350	6610	3490	3320
Selenium	T	mg/kg-dry	65	61.5	ECO Soil	1	45	0.66	0.85	ND	2.4	0.84	0.88
Silver	T	mg/kg-dry	65	87.7	ECO Soil	2	1.8	0.13	0.16	ND	2.1	0.54	0.52
Sodium	T	mg/kg-dry	65	44.6	No SLC			52.00	1,280.00	ND	1770		
Thallium	T	mg/kg-dry	65	100	ECO Soil	1	0			0.11	0.67	0.27	0.27
Vanadium	T	mg/kg-dry	65	100	ECO Soil	2	100			10.4	81.6	34.5	33.6
Zinc	T	mg/kg-dry	65	100	ECO Soil	120	27.7			14.9	256	104	101
Pesticides-PCBs													
Aroclor 1016	T	mg/kg-dry	8	0	No SLC			0.04	0.04	ND	ND		
Aroclor 1221	T	mg/kg-dry	8	0	No SLC			0.07	0.08	ND	ND		
Aroclor 1232	T	mg/kg-dry	8	0	No SLC			0.04	0.04	ND	ND		
Aroclor 1242	T	mg/kg-dry	8	0	No SLC			0.04	0.04	ND	ND		
Aroclor 1248	T	mg/kg-dry	8	0	ECO Soil	10	0	0.04	0.04	ND	ND		
Aroclor 1254	T	mg/kg-dry	8	0	ECO Soil	10	0	0.04	0.04	ND	ND		
Aroclor 1260	T	mg/kg-dry	8	0	ECO Soil	10	0	0.04	0.04	ND	ND		
Semi-Volatile Organics													
1,1`-Biphenyl	T	mg/kg-dry	65	3.1	ECO Soil	60	0	0.17	3.50	ND	2		
2,4,5-Trichlorophenol	T	mg/kg-dry	65	0	No SLC			0.44	9.00	ND	ND		
2,4,6-Trichlorophenol	T	mg/kg-dry	65	0	No SLC			0.17	3.60	ND	ND		
2,4-Dichlorophenol	T	mg/kg-dry	65	0	No SLC			0.17	3.60	ND	ND		
2,4-Dimethylphenol	T	mg/kg-dry	65	0	No SLC			0.17	3.60	ND	ND		
2,4-Dinitrophenol	T	mg/kg-dry	65	0	No SLC			0.44	9.00	ND	ND		
2,4-Dinitrotoluene	T	mg/kg-dry	65	0	No SLC			0.17	3.60	ND	ND		
2,6-Dinitrotoluene	T	mg/kg-dry	65	0	ECO Soil	0.033	0	0.17	3.60	ND	ND		
2-Chloronaphthalene	T	mg/kg-dry	65	0	No SLC			0.17	3.60	ND	ND		
2-Chlorophenol	T	mg/kg-dry	65	1.5	ECO Soil	20	0	0.17	3.60	ND	0.037		
2-Methylnaphthalene	T	mg/kg-dry	65	3.1	ECO Soil	3.2	0	0.17	3.60	ND	1.2		
2-Methylphenol	T	mg/kg-dry	65	0	No SLC			0.17	3.60	ND	ND		
2-Nitroaniline	T	mg/kg-dry	65	0	No SLC			0.44	9.00	ND	ND		
2-Nitrophenol	T	mg/kg-dry	65	0	No SLC			0.17	3.60	ND	ND		

"No SLC" indicates that there is not a Screening Level Criterion for this medium specified for the RI/FS.
"HH Soil (HQ=1)" EPA Region 6 RBSLs Human Health Residential Soil (HQ=1)
"Eco Soil" EPA Region 6 Tier 1-3 RBSLs Ecological Soil
Median Value determined using 1/2 the Reporting Limit value for Non-Detects if greater than 50% of the values were detected.
Mean Value calculated using 1/2 the Reporting Limit for Non-Detects if greater than 50% of the values were detected.

T = Total Fraction
D = Filtered Fraction (0.45 micron filter)
A = Filtered Fraction (0.1 micron filter)
ND = Non-Detected Value

Table 7-15
Soil 0-24 inches Biased
RI/FS Soil Area 2 - Admin and M&E
Summary of Results

Analyte	Sample Fraction	Units	Total Number of Samples	Percent Detects (%)	SLC	SLC Value	Percent Above SLC	Min RL for ND	Max RL for ND	Min Value	Max Value	Mean Value	Median Value
3,3-Dichlorobenzidine	T	mg/kg-dry	65	0	No SLC			0.17	3.60	ND	ND		
3-Nitroaniline	T	mg/kg-dry	65	0	No SLC			0.44	9.00	ND	ND		
4,6-Dinitro-2-methylphenol	T	mg/kg-dry	65	0	No SLC			0.44	9.00	ND	ND		
4-Bromophenyl phenyl ether	T	mg/kg-dry	65	0	No SLC			0.17	3.60	ND	ND		
4-Chloro-3-methylphenol	T	mg/kg-dry	65	1.5	ECO Soil	8	0	0.17	3.60	ND	0.036		
4-Chloroaniline	T	mg/kg-dry	65	0	No SLC			0.17	3.60	ND	ND		
4-Chlorophenyl phenyl ether	T	mg/kg-dry	65	0	No SLC			0.17	3.60	ND	ND		
4-Methylphenol	T	mg/kg-dry	65	0	No SLC			0.17	3.60	ND	ND		
4-Nitroaniline	T	mg/kg-dry	65	0	No SLC			0.44	9.00	ND	ND		
4-Nitrophenol	T	mg/kg-dry	65	0	No SLC			0.44	9.00	ND	ND		
Acenaphthene	T	mg/kg-dry	65	1.5	ECO Soil	20	0	0.17	3.60	ND	0.031		
Acenaphthylene	T	mg/kg-dry	65	0	No SLC			0.17	3.60	ND	ND		
Anthracene	T	mg/kg-dry	65	0	ECO Soil	10	0	0.17	3.60	ND	ND		
Benzo(a)anthracene	T	mg/kg-dry	65	3.1	ECO Soil	5.2	0	0.17	3.60	ND	0.078		
Benzo(a)pyrene	T	mg/kg-dry	64	1.6	ECO Soil	1	0	0.34	3.60	ND	0.078		
Benzo(b)fluoranthene	T	mg/kg-dry	64	1.6	ECO Soil	59.8	0	0.34	3.60	ND	0.14		
Benzo(g,h,i)perylene	T	mg/kg-dry	65	1.5	ECO Soil	119	0	0.17	3.60	ND	0.029		
Benzo(k)fluoranthene	T	mg/kg-dry	64	1.6	ECO Soil	148	0	0.34	3.60	ND	0.14		
Bis(2-chloroethoxy)methane	T	mg/kg-dry	65	0	No SLC			0.17	3.60	ND	ND		
Bis(2-chloroethyl)ether	T	mg/kg-dry	65	0	No SLC			0.17	3.60	ND	ND		
Carbazole	T	mg/kg-dry	65	0	No SLC			0.17	3.60	ND	ND		
Chrysene	T	mg/kg-dry	65	7.7	ECO Soil	4.7	0	0.17	3.60	ND	0.12		
Dibenz(a,h)anthracene	T	mg/kg-dry	64	0	ECO Soil	18.4	0	0.34	3.60	ND	ND		
Dibenzofuran	T	mg/kg-dry	65	1.5	No SLC			0.17	3.50	ND	0.93		
Dichlorodiisopropyl ether	T	mg/kg-dry	65	0	No SLC			0.17	3.60	ND	ND		
Fluoranthene	T	mg/kg-dry	65	6.2	ECO Soil	10	0	0.17	3.60	ND	0.28		
Fluorene	T	mg/kg-dry	65	0	ECO Soil	30	0	0.17	3.60	ND	ND		
Hexachlorobenzene	T	mg/kg-dry	65	0	No SLC			0.17	3.60	ND	ND		
Hexachlorobutadiene	T	mg/kg-dry	65	0	No SLC			0.17	3.60	ND	ND		
Hexachlorocyclopentadiene	T	mg/kg-dry	65	0	No SLC			0.17	3.60	ND	ND		
Hexachloroethane	T	mg/kg-dry	65	0	No SLC			0.17	3.60	ND	ND		
Indeno(1,2,3-cd)pyrene	T	mg/kg-dry	64	1.6	ECO Soil	109	0	0.34	3.60	ND	0.032		

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"Eco Soil" EPA Region 6 Tier 1-3 RBSLs Ecological Soil
Median Value determined using 1/2 the Reporting Limit value for Non-Detects if greater than 50% of the values were detected.
Mean Value calculated using 1/2 the Reporting Limit for Non-Detects if greater than 50% of the values were detected.

T = Total Fraction
D = Filtered Fraction (0.45 micron filter)
A = Filtered Fraction (0.1 micron filter)
ND = Non-Detected Value

Table 7-15
Soil 0-24 inches Biased
RI/FS Soil Area 2 - Admin and M&E
Summary of Results

Analyte	Sample Fraction	Units	Total Number of Samples	Percent Detects (%)	SLC	SLC Value	Percent Above SLC	Min RL for ND	Max RL for ND	Min Value	Max Value	Mean Value	Median Value
Isophorone	T	mg/kg-dry	65	0	ECO Soil	139	0	0.17	3.60	ND	ND		
Naphthalene	T	mg/kg-dry	65	1.5	ECO Soil	5	0	0.17	3.60	ND	0.36		
Nitrobenzene	T	mg/kg-dry	65	0	No SLC			0.17	3.60	ND	ND		
N-Nitrosodi-n-propylamine	T	mg/kg-dry	65	1.5	ECO Soil	0.54	0	0.17	3.60	ND	0.029		
N-Nitrosodiphenylamine	T	mg/kg-dry	65	1.5	ECO Soil	20	0	0.17	3.60	ND	0.37		
Pentachlorophenol	T	mg/kg-dry	65	0	No SLC			0.44	9.00	ND	ND		
Phenanthrene	T	mg/kg-dry	65	7.7	ECO Soil	5	0	0.17	3.50	ND	2.3		
Phenol	T	mg/kg-dry	65	4.6	ECO Soil	30	0	0.17	3.60	ND	0.89		
Pyrene	T	mg/kg-dry	65	18.5	ECO Soil	10	0	0.17	3.50	ND	0.49		
Volatile Organics													
1,1,1-Trichloroethane	T	mg/kg-dry	65	1.5	ECO Soil	0.1	0	0.00	0.55	ND	0.0008		
1,1,2,2-Tetrachloroethane	T	mg/kg-dry	65	0	No SLC			0.00	0.55	ND	ND		
1,1,2-Trichloro-1,2,2-trifluoroethane	T	mg/kg-dry	65	0	No SLC			0.00	0.55	ND	ND		
1,1,2-Trichloroethane	T	mg/kg-dry	65	0	No SLC			0.00	0.55	ND	ND		
1,1-Dichloroethane	T	mg/kg-dry	65	0	ECO Soil	20.1	0	0.00	0.55	ND	ND		
1,1-Dichloroethene	T	mg/kg-dry	65	0	No SLC			0.00	0.55	ND	ND		
1,2,4-Trichlorobenzene	T	mg/kg-dry	65	0	No SLC			0.00	0.55	ND	ND		
1,2-Dibromo-3-chloropropane	T	mg/kg-dry	65	0	No SLC			0.00	0.55	ND	ND		
1,2-Dichlorobenzene	T	mg/kg-dry	65	0	No SLC			0.00	0.55	ND	ND		
1,2-Dichloroethane	T	mg/kg-dry	65	0	No SLC			0.00	0.55	ND	ND		
1,2-Dichloroethene (total)	T	mg/kg-dry	65	0	No SLC			0.00	0.55	ND	ND		
1,2-Dichloropropane	T	mg/kg-dry	65	0	No SLC			0.00	0.55	ND	ND		
1,3-Dichlorobenzene	T	mg/kg-dry	65	0	No SLC			0.00	0.55	ND	ND		
1,4-Dichlorobenzene	T	mg/kg-dry	65	0	No SLC			0.00	0.55	ND	ND		
2-Butanone	T	mg/kg-dry	65	9.2	ECO Soil	89.6	0	0.00	0.55	ND	0.33		
2-Hexanone	T	mg/kg-dry	65	1.5	ECO Soil	12.6	0	0.00	0.55	ND	0.002		
4-Methyl-2-pentanone	T	mg/kg-dry	65	0	ECO Soil	443	0	0.00	0.55	ND	ND		
Benzene	T	mg/kg-dry	65	0	ECO Soil	0.5	0	0.00	0.55	ND	ND		
Bromodichloromethane	T	mg/kg-dry	65	0	No SLC			0.00	0.55	ND	ND		
Bromoform	T	mg/kg-dry	65	0	No SLC			0.00	0.55	ND	ND		
Bromomethane	T	mg/kg-dry	65	0	No SLC			0.00	0.55	ND	ND		
Carbon tetrachloride	T	mg/kg-dry	65	0	ECO Soil	1000	0	0.00	0.55	ND	ND		

"No SLC" indicates that there is not a Screening Level Criterion for this medium specified for the RI/FS.
"HH Soil (HQ=1)" EPA Region 6 RBSLs Human Health Residential Soil (HQ=1)
"Eco Soil" EPA Region 6 Tier 1-3 RBSLs Ecological Soil
Median Value determined using 1/2 the Reporting Limit value for Non-Detects if greater than 50% of the values were detected.
Mean Value calculated using 1/2 the Reporting Limit for Non-Detects if greater than 50% of the values were detected.

T = Total Fraction
D = Filtered Fraction (0.45 micron filter)
A = Filtered Fraction (0.1 micron filter)
ND = Non-Detected Value

Table 7-15
Soil 0-24 inches Biased
RI/FS Soil Area 2 - Admin and M&E
Summary of Results

Analyte	Sample Fraction	Units	Total Number of Samples	Percent Detects (%)	SLC	SLC Value	Percent Above SLC	Min RL for ND	Max RL for ND	Min Value	Max Value	Mean Value	Median Value
Chlorobenzene	T	mg/kg-dry	65	0	ECO Soil	40	0	0.00	0.55	ND	ND		
Chloroethane	T	mg/kg-dry	65	0	No SLC			0.00	0.55	ND	ND		
Chloroform	T	mg/kg-dry	65	0	No SLC			0.00	0.55	ND	ND		
Chloromethane	T	mg/kg-dry	65	0	ECO Soil	10.4	0	0.00	0.55	ND	ND		
cis-1,2-Dichloroethene	T	mg/kg-dry	65	0	No SLC			0.00	0.55	ND	ND		
cis-1,3-Dichloropropene	T	mg/kg-dry	65	0	No SLC			0.00	0.55	ND	ND		
Dibromochloromethane	T	mg/kg-dry	65	0	No SLC			0.00	0.55	ND	ND		
Dichlorodifluoromethane	T	mg/kg-dry	65	0	ECO Soil	39.5	0	0.00	0.55	ND	ND		
Ethylbenzene	T	mg/kg-dry	65	4.6	ECO Soil	5	0	0.00	0.55	ND	0.012		
Styrene	T	mg/kg-dry	65	1.5	ECO Soil	300	0	0.00	0.55	ND	0.01		
Tetrachloroethene	T	mg/kg-dry	65	3.1	No SLC			0.00	0.55	ND	0.005		
Toluene	T	mg/kg-dry	65	3.1	ECO Soil	200	0	0.00	0.55	ND	0.003		
Total Xylene	T	mg/kg-dry	65	41.5	ECO Soil	5	0	0.00	0.55	ND	0.09		
trans-1,2-Dichloroethene	T	mg/kg-dry	65	0	No SLC			0.00	0.55	ND	ND		
trans-1,3-Dichloropropene	T	mg/kg-dry	65	0	No SLC			0.00	0.55	ND	ND		
Trichloroethene	T	mg/kg-dry	65	0	No SLC			0.00	0.55	ND	ND		
Trichlorofluoromethane	T	mg/kg-dry	65	1.5	ECO Soil	16.4	0	0.00	0.55	ND	0.006		
Vinyl chloride	T	mg/kg-dry	65	0	No SLC			0.00	0.55	ND	ND		

"No SLC" indicates that there is not a Screening Level Criterion for this medium specified for the RI/FS.
"HH Soil (HQ=1)" EPA Region 6 RBSLs Human Health Residential Soil (HQ=1)
"Eco Soil" EPA Region 6 Tier 1-3 RBSLs Ecological Soil
Median Value determined using 1/2 the Reporting Limit value for Non-Detects if greater than 50% of the values were detected.
Mean Value calculated using 1/2 the Reporting Limit for Non-Detects if greater than 50% of the values were detected.

T = Total Fraction
D = Filtered Fraction (0.45 micron filter)
A = Filtered Fraction (0.1 micron filter)
ND = Non-Detected Value

Table 7-16
Soil 0-6 inches Random
RI/FS Soil Area 3 - Mine Site Soils
Summary of Results

Analyte	Sample Fraction	Units	Total Number of Samples	Percent Detects (%)	SLC	SLC Value	Percent Above SLC	Min RL for ND	Max RL for ND	Min Value	Max Value	Mean Value	Median Value
Inorganics													
Cation-Exchange Capacity	T	meq/100g	10	100	No SLC					1.9	33.9	19.1	21
Chloride	T	mg/kg-dry	10	10	No SLC			1.20	31.80	ND	3.1		
Fluoride	T	mg/kg-dry	6	100	HH Soil (HQ=1)	3700	0			0.12	0.36	0.19	0.16
Nitrate	T	mg/kg-dry	10	20	No SLC			1.20	5.70	ND	3.6		
Organic Soils	T	%	6	100	No SLC					2.8	8.6	4.6	4.1
pH	T	SU	10	100	No SLC					6.1	7.7	7	7
Phosphorus	T	mg/kg-dry	10	100	No SLC					7.1	1510	541	477
Sodium Absorption Ratio	T	ratio	10	70	No SLC			0.05	0.12	ND	0.52	0.11	0.06
Solids, Percent	T	%	10	100	No SLC					78.8	95	87.8	88.8
Specific Conductance	T	umhos/cm	10	100	No SLC					7.3	245	78.2	54.1
Sulfate	T	mg/kg-dry	10	60	No SLC			27.60	122.00	ND	28.9	24	12.8
Total Kjeldahl Nitrogen	T	mg/kg-dry	10	100	No SLC					140	2250	911	735
Total Organic Carbon	T	mg/kg-dry	10	100	No SLC					2300	38900	15400	15600
Metals													
Aluminum	T	mg/kg-dry	10	100	HH Soil (HQ=1)	76000	0			2390	19200	10300	9700
Antimony	T	mg/kg-dry	10	20	HH Soil (HQ=1)	31	0	0.16	0.51	ND	0.1		
Arsenic	T	mg/kg-dry	10	100	HH Soil (HQ=1)	0.39	100			2.2	11.9	6.9	5.8
Barium	T	mg/kg-dry	10	100	HH Soil (HQ=1)	5500	0			7.8	549	185	183
Beryllium	T	mg/kg-dry	10	100	HH Soil (HQ=1)	150	0			0.13	1.7	0.65	0.56
Boron	T	mg/kg-dry	10	80	HH Soil (HQ=1)	5500	0	0.55	2.40	ND	14.4	5.8	4.3
Cadmium	T	mg/kg-dry	10	60	HH Soil (HQ=1)	39	0	0.02	0.06	ND	0.38	0.13	0.073
Calcium	T	mg/kg-dry	10	100	No SLC					538	8510	3330	3260
Chromium	T	mg/kg-dry	10	90	HH Soil (HQ=1)	210	0	0.65	0.65	ND	63.9	16.5	9.5
Cobalt	T	mg/kg-dry	10	100	HH Soil (HQ=1)	900	0			0.34	23.3	6.9	4.6
Copper	T	mg/kg-dry	10	100	HH Soil (HQ=1)	2900	0			3.3	52.4	28	30.6
Iron	T	mg/kg-dry	10	100	HH Soil (HQ=1)	23000	60			3330	32900	22400	24800
Lead	T	mg/kg-dry	10	100	HH Soil (HQ=1)	400	0			10.9	214	82.7	48.7
Magnesium	T	mg/kg-dry	10	100	No SLC					206	8370	3290	1750
Manganese	T	mg/kg-dry	10	100	HH Soil (HQ=1)	3200	0			41.8	1310	501	402
Mercury	T	mg/kg-dry	10	70	HH Soil (HQ=1)	23	0	0.02	0.02	ND	0.043	0.021	0.019
Molybdenum	T	mg/kg-dry	10	100	HH Soil (HQ=1)	390	0			1.3	35.4	10.7	8.8

"No SLC" indicates that there is not a Screening Level Criterion for this medium specified for the RI/FS.
"HH Soil (HQ=1)" EPA Region 6 RBSLs Human Health Residential Soil (HQ=1)
"Eco Soil" EPA Region 6 Tier 1-3 RBSLs Ecological Soil
Median Value determined using 1/2 the Reporting Limit value for Non-Detects if greater than 50% of the values were detected.
Mean Value calculated using 1/2 the Reporting Limit for Non-Detects if greater than 50% of the values were detected.

T = Total Fraction
D = Filtered Fraction (0.45 micron filter)
A = Filtered Fraction (0.1 micron filter)
ND = Non-Detected Value

Table 7-16
Soil 0-6 inches Random
RI/FS Soil Area 3 - Mine Site Soils
Summary of Results

Analyte	Sample Fraction	Units	Total Number of Samples	Percent Detects (%)	SLC	SLC Value	Percent Above SLC	Min RL for ND	Max RL for ND	Min Value	Max Value	Mean Value	Median Value
Nickel	T	mg/kg-dry	10	90	HH Soil (HQ=1)	1600	0	0.22	0.22	ND	62.2	14.1	5.8
Potassium	T	mg/kg-dry	10	100	No SLC					386	4160	2970	3200
Selenium	T	mg/kg-dry	10	90	HH Soil (HQ=1)	390	0	0.37	0.37	ND	1.6	0.83	0.84
Silver	T	mg/kg-dry	10	70	HH Soil (HQ=1)	390	0	0.14	0.46	ND	2.1	0.49	0.23
Sodium	T	mg/kg-dry	10	40	No SLC			48.00	157.00	ND	102		
Thallium	T	mg/kg-dry	10	100	HH Soil (HQ=1)	5.5	0			0.16	0.36	0.24	0.23
Vanadium	T	mg/kg-dry	10	100	HH Soil (HQ=1)	78	0			0.96	50	22.3	20.7
Zinc	T	mg/kg-dry	10	100	HH Soil (HQ=1)	23000	0			15.2	151	74.9	59.3

"No SLC" indicates that there is not a Screening Level Criterion for this medium specified for the RI/FS.
"HH Soil (HQ=1)" EPA Region 6 RBSLs Human Health Residential Soil (HQ=1)
"Eco Soil" EPA Region 6 Tier 1-3 RBSLs Ecological Soil
Median Value determined using 1/2 the Reporting Limit value for Non-Detects if greater than 50% of the values were detected.
Mean Value calculated using 1/2 the Reporting Limit for Non-Detects if greater than 50% of the values were detected.

T = Total Fraction
D = Filtered Fraction (0.45 micron filter)
A = Filtered Fraction (0.1 micron filter)
ND = Non-Detected Value

Table 7-17
Soil 0-24 inches Random
RI/FS Soil Area 3 - Mine Site Soils
Summary of Results

Analyte	Sample Fraction	Units	Total Number of Samples	Percent Detects (%)	SLC	SLC Value	Percent Above SLC	Min RL for ND	Max RL for ND	Min Value	Max Value	Mean Value	Median Value
Inorganics													
Cation-Exchange Capacity	T	meq/100g	10	100	No SLC					1.5	25.2	17.9	20.7
Chloride	T	mg/kg-dry	10	20	No SLC			2.40	29.70	ND	4.2		
Fluoride	T	mg/kg-dry	6	100	No SLC					0.12	0.42	0.24	0.18
Nitrate	T	mg/kg-dry	10	20	No SLC			1.10	17.20	ND	4.2		
Organic Soils	T	%	6	100	No SLC					2.7	8.2	4.7	4.3
pH	T	SU	10	100	No SLC					4.2	7.8	6.5	6.8
Phosphorus	T	mg/kg-dry	10	100	No SLC					89.9	1380	523	432
Sodium Absorption Ratio	T	ratio	10	90	No SLC			0.11	0.11	ND	1.6	0.27	0.09
Solids, Percent	T	%	10	100	No SLC					84.2	95.7	89.2	89.5
Specific Conductance	T	umhos/cm	10	100	No SLC					8.9	1580	211	56.5
Sulfate	T	mg/kg-dry	10	60	No SLC			28.00	116.00	ND	2000	383	37
Total Kjeldahl Nitrogen	T	mg/kg-dry	10	100	No SLC					106	1820	786	792
Total Organic Carbon	T	mg/kg-dry	10	100	No SLC					2650	62400	18900	12900
Metals													
Aluminum	T	mg/kg-dry	10	100	No SLC					2140	20100	9220	7400
Antimony	T	mg/kg-dry	10	30	ECO Soil	0.3	33.3	0.16	0.49	ND	0.5		
Arsenic	T	mg/kg-dry	10	100	ECO Soil	31	0			1.4	12.9	6.4	5.7
Barium	T	mg/kg-dry	10	100	ECO Soil	330	0			5.6	292	151	169
Beryllium	T	mg/kg-dry	10	100	ECO Soil	30	0			0.12	2.1	0.64	0.47
Boron	T	mg/kg-dry	10	60	ECO Soil	0.5	100	0.55	2.60	ND	15.3	4.7	2.5
Cadmium	T	mg/kg-dry	10	50	ECO Soil	0.4	0	0.02	0.06	ND	0.33	0.1	0.03
Calcium	T	mg/kg-dry	10	100	No SLC					444	5080	2460	2410
Chromium	T	mg/kg-dry	10	90	ECO Soil	7.9	44.4	0.53	0.53	ND	71.4	15.3	6.3
Cobalt	T	mg/kg-dry	10	100	ECO Soil	32	0			0.41	22.6	6.5	2.8
Copper	T	mg/kg-dry	10	100	ECO Soil	54	0			2.9	53.4	25.9	31.1
Iron	T	mg/kg-dry	10	100	No SLC					3130	35400	20800	22700
Lead	T	mg/kg-dry	10	100	ECO Soil	15	90			11.5	200	79.7	36.9
Magnesium	T	mg/kg-dry	10	100	No SLC					181	8500	3000	1310
Manganese	T	mg/kg-dry	10	100	ECO Soil	152	60			48.5	1060	406	213
Mercury	T	mg/kg-dry	10	30	ECO Soil	0.1	0	0.02	0.02	ND	0.037		
Molybdenum	T	mg/kg-dry	10	100	ECO Soil	2	80			0.52	15.3	8.3	9.1

"No SLC" indicates that there is not a Screening Level Criterion for this medium specified for the RI/FS.
"HH Soil (HQ=1)" EPA Region 6 RBSLs Human Health Residential Soil (HQ=1)
"Eco Soil" EPA Region 6 Tier 1-3 RBSLs Ecological Soil
Median Value determined using 1/2 the Reporting Limit value for Non-Detects if greater than 50% of the values were detected.
Mean Value calculated using 1/2 the Reporting Limit for Non-Detects if greater than 50% of the values were detected.

T = Total Fraction
D = Filtered Fraction (0.45 micron filter)
A = Filtered Fraction (0.1 micron filter)
ND = Non-Detected Value

Table 7-17
Soil 0-24 inches Random
RI/FS Soil Area 3 - Mine Site Soils
Summary of Results

Analyte	Sample Fraction	Units	Total Number of Samples	Percent Detects (%)	SLC	SLC Value	Percent Above SLC	Min RL for ND	Max RL for ND	Min Value	Max Value	Mean Value	Median Value
Nickel	T	mg/kg-dry	10	90	ECO Soil	48	11.1	0.21	0.21	ND	63.1	13.1	3.6
Potassium	T	mg/kg-dry	10	100	No SLC					345	4230	2660	2820
Selenium	T	mg/kg-dry	10	80	ECO Soil	1	37.5	0.35	0.61	ND	1.8	0.82	0.82
Silver	T	mg/kg-dry	10	50	ECO Soil	2	20	0.10	0.49	ND	2.3	0.48	0.23
Sodium	T	mg/kg-dry	10	40	No SLC			46.20	154.00	ND	134		
Thallium	T	mg/kg-dry	10	100	ECO Soil	1	0			0.15	0.43	0.25	0.23
Vanadium	T	mg/kg-dry	10	100	ECO Soil	2	90			0.64	54.8	19.9	17.1
Zinc	T	mg/kg-dry	10	100	ECO Soil	120	30			13.3	158	69.3	45.4

"No SLC" indicates that there is not a Screening Level Criterion for this medium specified for the RI/FS.
"HH Soil (HQ=1)" EPA Region 6 RBSLs Human Health Residential Soil (HQ=1)
"Eco Soil" EPA Region 6 Tier 1-3 RBSLs Ecological Soil
Median Value determined using 1/2 the Reporting Limit value for Non-Detects if greater than 50% of the values were detected.
Mean Value calculated using 1/2 the Reporting Limit for Non-Detects if greater than 50% of the values were detected.

T = Total Fraction
D = Filtered Fraction (0.45 micron filter)
A = Filtered Fraction (0.1 micron filter)
ND = Non-Detected Value

Table 7-18
Soil 0-6 inches Biased
RI/FS Soil Area 3 - Mine Site Soils
Summary of Results

Analyte	Sample Fraction	Units	Total Number of Samples	Percent Detects (%)	SLC	SLC Value	Percent Above SLC	Min RL for ND	Max RL for ND	Min Value	Max Value	Mean Value	Median Value
Inorganics													
Cation-Exchange Capacity	T	meq/100g	2	100	No SLC					8.5	16.3	12.4	12.4
Chloride	T	mg/kg-dry	2	50	No SLC			2.20	2.20	ND	4.8	3	3
Fluoride	T	mg/kg-dry	2	100	HH Soil (HQ=1)	3700	0			0.42	0.6	0.51	0.51
Nitrate	T	mg/kg-dry	2	50	No SLC			2.20	2.20	ND	3.2	2.2	2.2
Organic Soils	T	%	2	100	No SLC					3.2	5.1	4.2	4.2
pH	T	SU	2	100	No SLC					4.2	4.5	4.3	4.3
Phosphorus	T	mg/kg-dry	2	100	No SLC					823	1540	1180	1180
Sodium Absorption Ratio	T	ratio	2	100	No SLC					0.22	0.29	0.25	0.25
Solids, Percent	T	%	2	100	No SLC					93	97	95	95
Specific Conductance	T	umhos/cm	2	100	No SLC					41.9	190	116	116
Sulfate	T	mg/kg-dry	2	100	No SLC					18.4	157	87.7	87.7
Total Kjeldahl Nitrogen	T	mg/kg-dry	2	100	No SLC					138	704	421	421
Total Organic Carbon	T	mg/kg-dry	2	100	No SLC					4000	11600	7800	7800
Metals													
Aluminum	T	mg/kg-dry	2	100	HH Soil (HQ=1)	76000	0			3860	7320	5590	5590
Antimony	T	mg/kg-dry	2	0	HH Soil (HQ=1)	31	0	0.16	0.17	ND	ND		
Arsenic	T	mg/kg-dry	2	100	HH Soil (HQ=1)	0.39	100			6.2	10.7	8.4	8.4
Barium	T	mg/kg-dry	2	100	HH Soil (HQ=1)	5500	0			104	158	131	131
Beryllium	T	mg/kg-dry	2	100	HH Soil (HQ=1)	150	0			0.23	0.7	0.46	0.46
Boron	T	mg/kg-dry	2	50	HH Soil (HQ=1)	5500	0	0.40	0.40	ND	12.5	6.4	6.4
Cadmium	T	mg/kg-dry	2	0	HH Soil (HQ=1)	39	0	0.03	0.03	ND	ND		
Calcium	T	mg/kg-dry	2	100	No SLC					389	579	484	484
Chromium	T	mg/kg-dry	2	100	HH Soil (HQ=1)	210	0			9	18.1	13.6	13.6
Cobalt	T	mg/kg-dry	2	100	HH Soil (HQ=1)	900	0			1.1	3.1	2.1	2.1
Copper	T	mg/kg-dry	2	100	HH Soil (HQ=1)	2900	0			38	63.4	50.7	50.7
Iron	T	mg/kg-dry	2	100	HH Soil (HQ=1)	23000	100			25900	37400	31700	31700
Lead	T	mg/kg-dry	2	100	HH Soil (HQ=1)	400	0			118	127	123	123
Magnesium	T	mg/kg-dry	2	100	No SLC					1460	3070	2270	2270
Manganese	T	mg/kg-dry	2	100	HH Soil (HQ=1)	3200	0			125	325	225	225
Mercury	T	mg/kg-dry	2	0	HH Soil (HQ=1)	23	0	0.02	0.02	ND	ND		
Molybdenum	T	mg/kg-dry	2	100	HH Soil (HQ=1)	390	0			10	37.8	23.9	23.9

"No SLC" indicates that there is not a Screening Level Criterion for this medium specified for the RI/FS.
"HH Soil (HQ=1)" EPA Region 6 RBSLs Human Health Residential Soil (HQ=1)
"Eco Soil" EPA Region 6 Tier 1-3 RBSLs Ecological Soil
Median Value determined using 1/2 the Reporting Limit value for Non-Detects if greater than 50% of the values were detected.
Mean Value calculated using 1/2 the Reporting Limit for Non-Detects if greater than 50% of the values were detected.

T = Total Fraction
D = Filtered Fraction (0.45 micron filter)
A = Filtered Fraction (0.1 micron filter)
ND = Non-Detected Value

Table 7-18
Soil 0-6 inches Biased
RI/FS Soil Area 3 - Mine Site Soils
Summary of Results

Analyte	Sample Fraction	Units	Total Number of Samples	Percent Detects (%)	SLC	SLC Value	Percent Above SLC	Min RL for ND	Max RL for ND	Min Value	Max Value	Mean Value	Median Value
Nickel	T	mg/kg-dry	2	100	HH Soil (HQ=1)	1600	0			4.5	10	7.3	7.3
Potassium	T	mg/kg-dry	2	100	No SLC					2760	2990	2880	2880
Selenium	T	mg/kg-dry	2	100	HH Soil (HQ=1)	390	0			1.2	1.3	1.3	1.3
Silver	T	mg/kg-dry	2	100	HH Soil (HQ=1)	390	0			0.64	0.78	0.71	0.71
Sodium	T	mg/kg-dry	2	100	No SLC					202	253	228	228
Thallium	T	mg/kg-dry	2	100	HH Soil (HQ=1)	5.5	0			0.28	0.33	0.31	0.31
Vanadium	T	mg/kg-dry	2	100	HH Soil (HQ=1)	78	0			11	19.3	15.1	15.1
Zinc	T	mg/kg-dry	2	100	HH Soil (HQ=1)	23000	0			30	82	56	56

"No SLC" indicates that there is not a Screening Level Criterion for this medium specified for the RI/FS.
"HH Soil (HQ=1)" EPA Region 6 RBSLs Human Health Residential Soil (HQ=1)
"Eco Soil" EPA Region 6 Tier 1-3 RBSLs Ecological Soil
Median Value determined using 1/2 the Reporting Limit value for Non-Detects if greater than 50% of the values were detected.
Mean Value calculated using 1/2 the Reporting Limit for Non-Detects if greater than 50% of the values were detected.

T = Total Fraction
D = Filtered Fraction (0.45 micron filter)
A = Filtered Fraction (0.1 micron filter)
ND = Non-Detected Value

Table 7-19
Soil 0-24 inches Biased
RI/FS Soil Area 3 - Mine Site Soils
Summary of Results

Analyte	Sample Fraction	Units	Total Number of Samples	Percent Detects (%)	SLC	SLC Value	Percent Above SLC	Min RL for ND	Max RL for ND	Min Value	Max Value	Mean Value	Median Value
Inorganics													
Cation-Exchange Capacity	T	meq/100g	2	100	No SLC					8.2	16	12.1	12.1
Chloride	T	mg/kg-dry	2	50	No SLC			2.20	2.20	ND	3	2.1	2.1
Fluoride	T	mg/kg-dry	2	100	No SLC					0.22	0.57	0.39	0.39
Nitrate	T	mg/kg-dry	2	50	No SLC			2.20	2.20	ND	1.2	1.2	1.2
Organic Soils	T	%	2	100	No SLC					2.7	5.1	3.9	3.9
pH	T	SU	2	100	No SLC					3.9	4.4	4.2	4.2
Phosphorus	T	mg/kg-dry	2	100	No SLC					625	1340	983	983
Sodium Absorption Ratio	T	ratio	2	100	No SLC					0.27	0.29	0.28	0.28
Solids, Percent	T	%	2	100	No SLC					92	95.2	93.6	93.6
Specific Conductance	T	umhos/cm	2	100	No SLC					44.2	161	103	103
Sulfate	T	mg/kg-dry	2	100	No SLC					18.8	114	66.4	66.4
Total Kjeldahl Nitrogen	T	mg/kg-dry	2	100	No SLC					82.8	538	310	310
Total Organic Carbon	T	mg/kg-dry	2	100	No SLC					2380	19800	11100	11100
Metals													
Aluminum	T	mg/kg-dry	2	100	No SLC					3370	6580	4980	4980
Antimony	T	mg/kg-dry	2	0	ECO Soil	0.3	0	0.12	0.15	ND	ND		
Arsenic	T	mg/kg-dry	2	100	ECO Soil	31	0			4.4	11.4	7.9	7.9
Barium	T	mg/kg-dry	2	100	ECO Soil	330	0			96.2	131	114	114
Beryllium	T	mg/kg-dry	2	100	ECO Soil	30	0			0.2	0.63	0.41	0.41
Boron	T	mg/kg-dry	2	0	ECO Soil	0.5	0	0.39	8.60	ND	ND		
Cadmium	T	mg/kg-dry	2	0	ECO Soil	0.4	0	0.02	0.03	ND	ND		
Calcium	T	mg/kg-dry	2	100	No SLC					315	447	381	381
Chromium	T	mg/kg-dry	2	100	ECO Soil	7.9	50			7.5	16.6	12.1	12.1
Cobalt	T	mg/kg-dry	2	100	ECO Soil	32	0			0.91	3.8	2.4	2.4
Copper	T	mg/kg-dry	2	100	ECO Soil	54	50			26.6	54.7	40.7	40.7
Iron	T	mg/kg-dry	2	100	No SLC					18000	36700	27400	27400
Lead	T	mg/kg-dry	2	100	ECO Soil	15	100			68.1	113	90.5	90.5
Magnesium	T	mg/kg-dry	2	100	No SLC					1340	2710	2030	2030
Manganese	T	mg/kg-dry	2	100	ECO Soil	152	50			114	397	256	256
Mercury	T	mg/kg-dry	2	0	ECO Soil	0.1	0	0.02	0.02	ND	ND		
Molybdenum	T	mg/kg-dry	2	100	ECO Soil	2	100			7.6	18.7	13.2	13.2

"No SLC" indicates that there is not a Screening Level Criterion for this medium specified for the RI/FS.
"HH Soil (HQ=1)" EPA Region 6 RBSLs Human Health Residential Soil (HQ=1)
"Eco Soil" EPA Region 6 Tier 1-3 RBSLs Ecological Soil
Median Value determined using 1/2 the Reporting Limit value for Non-Detects if greater than 50% of the values were detected.
Mean Value calculated using 1/2 the Reporting Limit for Non-Detects if greater than 50% of the values were detected.

T = Total Fraction
D = Filtered Fraction (0.45 micron filter)
A = Filtered Fraction (0.1 micron filter)
ND = Non-Detected Value

Table 7-19
Soil 0-24 inches Biased
RI/FS Soil Area 3 - Mine Site Soils
Summary of Results

Analyte	Sample Fraction	Units	Total Number of Samples	Percent Detects (%)	SLC	SLC Value	Percent Above SLC	Min RL for ND	Max RL for ND	Min Value	Max Value	Mean Value	Median Value
Nickel	T	mg/kg-dry	2	100	ECO Soil	48	0			3.8	8.9	6.3	6.3
Potassium	T	mg/kg-dry	2	100	No SLC					2250	2710	2480	2480
Selenium	T	mg/kg-dry	2	100	ECO Soil	1	50			0.94	1.2	1.1	1.1
Silver	T	mg/kg-dry	2	100	ECO Soil	2	0			0.43	0.73	0.58	0.58
Sodium	T	mg/kg-dry	2	100	No SLC					175	229	202	202
Thallium	T	mg/kg-dry	2	100	ECO Soil	1	0			0.2	0.23	0.22	0.22
Vanadium	T	mg/kg-dry	2	100	ECO Soil	2	100			9.2	18.5	13.8	13.8
Zinc	T	mg/kg-dry	2	100	ECO Soil	120	0			24.1	77.8	51	51

"No SLC" indicates that there is not a Screening Level Criterion for this medium specified for the RI/FS.
"HH Soil (HQ=1)" EPA Region 6 RBSLs Human Health Residential Soil (HQ=1)
"Eco Soil" EPA Region 6 Tier 1-3 RBSLs Ecological Soil
Median Value determined using 1/2 the Reporting Limit value for Non-Detects if greater than 50% of the values were detected.
Mean Value calculated using 1/2 the Reporting Limit for Non-Detects if greater than 50% of the values were detected.

T = Total Fraction
D = Filtered Fraction (0.45 micron filter)
A = Filtered Fraction (0.1 micron filter)
ND = Non-Detected Value

Table 7-20
Soil 0-6 inches SPLP Random
RI/FS Soil Area 3 - Mine Site Soils
Summary of Results

Analyte	Sample Fraction	Units	Total Number of Samples	Percent Detects (%)	SLC	SLC Value	Percent Above SLC	Min RL for ND	Max RL for ND	Min Value	Max Value	Mean Value	Median Value
Inorganics													
Bicarbonate (as CaCO3)	T	mg/L	4	100	No SLC					11.2	54.5	27.8	22.8
Carbonate (as CaCO3)	T	mg/L	4	50	No SLC			1.00	1.00	ND	10.1	3.7	2
Chloride	T	mg/L	4	0	No SLC			5.00	5.00	ND	ND		
Cyanide	T	mg/L	4	0	HH Soil (HQ=1)	1200	0	0.01	0.01	ND	ND		
Fluoride	T	mg/L	4	100	HH Soil (HQ=1)	3700	0			0.17	0.39	0.33	0.38
Hydroxide (as CaCO3)	T	mg/L	4	0	No SLC			1.00	1.00	ND	ND		
Nitrate	T	mg/L	4	0	No SLC			0.50	1.40	ND	ND		
Nitrite	T	mg/L	4	100	No SLC					0.005	0.014	0.0095	0.0095
Phosphate, Ortho As P	T	mg/L	4	75	No SLC			0.12	0.12	ND	0.32	0.11	0.052
Phosphorus	T	mg/L	4	100	No SLC					0.062	0.5	0.22	0.16
Sulfate	T	mg/L	4	0	No SLC			5.00	5.00	ND	ND		
Total Alkalinity	T	mg/L	4	100	No SLC					21.3	54.5	31.2	24.6
Total Kjeldahl Nitrogen	T	mg/L	4	25	No SLC			0.24	0.24	ND	1.7		
Metals													
Aluminum	T	mg/L	4	100	HH Soil (HQ=1)	76000	0			10.6	23.9	16.2	15.2
Antimony	T	mg/L	4	25	HH Soil (HQ=1)	31	0	0.00	0.01	ND	0.00046		
Arsenic	T	mg/L	4	100	HH Soil (HQ=1)	0.39	0			0.0013	0.016	0.0064	0.0042
Barium	T	mg/L	4	100	HH Soil (HQ=1)	5500	0			0.65	1.3	0.97	0.96
Beryllium	T	mg/L	4	100	HH Soil (HQ=1)	150	0			0.00035	0.0012	0.00065	0.00053
Boron	T	mg/L	4	50	HH Soil (HQ=1)	5500	0	0.15	0.18	ND	0.34	0.19	0.17
Cadmium	T	mg/L	4	0	HH Soil (HQ=1)	39	0	0.00	0.00	ND	ND		
Calcium	T	mg/L	4	100	No SLC					9	24.7	14.4	12
Chromium	T	mg/L	4	100	HH Soil (HQ=1)	210	0			0.0049	0.014	0.0095	0.0098
Cobalt	T	mg/L	4	0	HH Soil (HQ=1)	900	0	0.00	0.00	ND	ND		
Copper	T	mg/L	4	100	HH Soil (HQ=1)	2900	0			0.0048	0.017	0.013	0.015
Iron	T	mg/L	4	100	HH Soil (HQ=1)	23000	0			7.9	16	10.5	9.1
Lead	T	mg/L	4	100	HH Soil (HQ=1)	400	0			0.011	0.034	0.021	0.02
Magnesium	T	mg/L	4	100	No SLC					2.2	5.4	3.7	3.5
Manganese	T	mg/L	4	100	HH Soil (HQ=1)	3200	0			0.053	0.18	0.12	0.12
Mercury	T	mg/L	4	0	HH Soil (HQ=1)	23	0	0.01	0.01	ND	ND		
Molybdenum	T	mg/L	4	100	HH Soil (HQ=1)	390	0			0.0015	0.014	0.0065	0.0056

"No SLC" indicates that there is not a Screening Level Criterion for this medium specified for the RI/FS.
"HH Soil (HQ=1)" EPA Region 6 RBSLs Human Health Residential Soil (HQ=1)
"Eco Soil" EPA Region 6 Tier 1-3 RBSLs Ecological Soil
Median Value determined using 1/2 the Reporting Limit value for Non-Detects if greater than 50% of the values were detected.
Mean Value calculated using 1/2 the Reporting Limit for Non-Detects if greater than 50% of the values were detected.

T = Total Fraction
D = Filtered Fraction (0.45 micron filter)
A = Filtered Fraction (0.1 micron filter)
ND = Non-Detected Value

Table 7-20
Soil 0-6 inches SPLP Random
RI/FS Soil Area 3 - Mine Site Soils
Summary of Results

Analyte	Sample Fraction	Units	Total Number of Samples	Percent Detects (%)	SLC	SLC Value	Percent Above SLC	Min RL for ND	Max RL for ND	Min Value	Max Value	Mean Value	Median Value
Nickel	T	mg/L	4	25	HH Soil (HQ=1)	1600	0	0.00	0.00	ND	0.0028		
Potassium	T	mg/L	4	100	No SLC					4.3	13.9	9	9
Selenium	T	mg/L	4	0	HH Soil (HQ=1)	390	0	0.00	0.00	ND	ND		
Silver	T	mg/L	4	25	HH Soil (HQ=1)	390	0	0.00	0.00	ND	0.00012		
Thallium	T	mg/L	4	100	HH Soil (HQ=1)	5.5	0			0.00014	0.0003	0.00021	0.00019
Vanadium	T	mg/L	4	100	HH Soil (HQ=1)	78	0			0.0057	0.014	0.01	0.011
Zinc	T	mg/L	4	100	HH Soil (HQ=1)	23000	0			0.18	0.39	0.27	0.26

"No SLC" indicates that there is not a Screening Level Criterion for this medium specified for the RI/FS.
"HH Soil (HQ=1)" EPA Region 6 RBSLs Human Health Residential Soil (HQ=1)
"Eco Soil" EPA Region 6 Tier 1-3 RBSLs Ecological Soil
Median Value determined using 1/2 the Reporting Limit value for Non-Detects if greater than 50% of the values were detected.
Mean Value calculated using 1/2 the Reporting Limit for Non-Detects if greater than 50% of the values were detected.

T = Total Fraction
D = Filtered Fraction (0.45 micron filter)
A = Filtered Fraction (0.1 micron filter)
ND = Non-Detected Value

Table 7-21
Soil 0-24 inches SPLP Random
RI/FS Soil Area 3 - Mine Site Soils
Summary of Results

Analyte	Sample Fraction	Units	Total Number of Samples	Percent Detects (%)	SLC	SLC Value	Percent Above SLC	Min RL for ND	Max RL for ND	Min Value	Max Value	Mean Value	Median Value
Inorganics													
Bicarbonate (as CaCO3)	T	mg/L	4	100	No SLC					3.9	16.4	9.6	9
Carbonate (as CaCO3)	T	mg/L	4	100	No SLC					2.4	27.8	11.7	8.3
Chloride	T	mg/L	4	25	No SLC			0.46	9.90	ND	76.6		
Cyanide	T	mg/L	4	0	No SLC			0.01	0.01	ND	ND		
Fluoride	T	mg/L	4	100	No SLC					0.12	0.41	0.23	0.2
Hydroxide (as CaCO3)	T	mg/L	4	0	No SLC			1.00	1.00	ND	ND		
Nitrate	T	mg/L	4	75	No SLC			0.40	0.40	ND	0.88	0.5	0.45
Nitrite	T	mg/L	4	75	No SLC			0.01	0.01	ND	0.01	0.0067	0.0071
Phosphate, Ortho As P	T	mg/L	4	75	No SLC			0.05	0.05	ND	0.28	0.15	0.15
Phosphorus	T	mg/L	4	100	No SLC					0.053	0.18	0.12	0.11
Sulfate	T	mg/L	4	25	No SLC			0.83	5.40	ND	504		
Total Alkalinity	T	mg/L	4	100	No SLC					3.9	16.4	9.6	9
Total Kjeldahl Nitrogen	T	mg/L	4	100	No SLC					0.28	0.43	0.35	0.35
Metals													
Aluminum	T	mg/L	4	100	No SLC					0.17	8.8	4.5	4.5
Antimony	T	mg/L	4	0	ECO Soil	0.3	0	0.00	0.00	ND	ND		
Arsenic	T	mg/L	4	75	ECO Soil	31	0	0.00	0.00	ND	0.0047	0.0024	0.0023
Barium	T	mg/L	4	0	ECO Soil	330	0	0.12	0.20	ND	ND		
Beryllium	T	mg/L	4	0	ECO Soil	30	0	0.00	0.00	ND	ND		
Boron	T	mg/L	4	50	ECO Soil	0.5	0	0.06	0.11	ND	0.3	0.13	0.095
Cadmium	T	mg/L	4	25	ECO Soil	0.4	0	0.00	0.00	ND	0.00029		
Calcium	T	mg/L	4	100	No SLC					2.8	124	34	4.6
Chromium	T	mg/L	4	25	ECO Soil	7.9	0	0.00	0.00	ND	0.0049		
Cobalt	T	mg/L	4	0	ECO Soil	32	0	0.00	0.00	ND	ND		
Copper	T	mg/L	4	0	ECO Soil	54	0	0.00	0.01	ND	ND		
Iron	T	mg/L	4	100	No SLC					0.076	6.6	3.2	3
Lead	T	mg/L	4	100	ECO Soil	15	0			0.00024	0.016	0.0079	0.0078
Magnesium	T	mg/L	4	100	No SLC					0.82	19.9	5.8	1.3
Manganese	T	mg/L	4	100	ECO Soil	152	0			0.023	1.8	0.48	0.056
Mercury	T	mg/L	4	0	ECO Soil	0.1	0	0.01	0.01	ND	ND		
Molybdenum	T	mg/L	4	25	ECO Soil	2	0	0.00	0.00	ND	0.0089		

"No SLC" indicates that there is not a Screening Level Criterion for this medium specified for the RI/FS.
"HH Soil (HQ=1)" EPA Region 6 RBSLs Human Health Residential Soil (HQ=1)
"Eco Soil" EPA Region 6 Tier 1-3 RBSLs Ecological Soil
Median Value determined using 1/2 the Reporting Limit value for Non-Detects if greater than 50% of the values were detected.
Mean Value calculated using 1/2 the Reporting Limit for Non-Detects if greater than 50% of the values were detected.

T = Total Fraction
D = Filtered Fraction (0.45 micron filter)
A = Filtered Fraction (0.1 micron filter)
ND = Non-Detected Value

Table 7-21
Soil 0-24 inches SPLP Random
RI/FS Soil Area 3 - Mine Site Soils
Summary of Results

Analyte	Sample Fraction	Units	Total Number of Samples	Percent Detects (%)	SLC	SLC Value	Percent Above SLC	Min RL for ND	Max RL for ND	Min Value	Max Value	Mean Value	Median Value
Nickel	T	mg/L	4	0	ECO Soil	48	0	0.01	0.04	ND	ND		
Potassium	T	mg/L	4	75	No SLC			1.30	1.30	ND	8	3.9	3.5
Selenium	T	mg/L	4	25	ECO Soil	1	0	0.00	0.00	ND	0.0027		
Silver	T	mg/L	4	0	ECO Soil	2	0	0.00	0.00	ND	ND		
Sodium	T	mg/L	4	0	No SLC			5.90	15.80	ND	ND		
Thallium	T	mg/L	4	0	ECO Soil	1	0	0.00	0.00	ND	ND		
Vanadium	T	mg/L	4	100	ECO Soil	2	0			0.00063	0.0043	0.0027	0.0029
Zinc	T	mg/L	4	100	ECO Soil	120	0			0.015	0.11	0.054	0.044

"No SLC" indicates that there is not a Screening Level Criterion for this medium specified for the RI/FS.
"HH Soil (HQ=1)" EPA Region 6 RBSLs Human Health Residential Soil (HQ=1)
"Eco Soil" EPA Region 6 Tier 1-3 RBSLs Ecological Soil
Median Value determined using 1/2 the Reporting Limit value for Non-Detects if greater than 50% of the values were detected.
Mean Value calculated using 1/2 the Reporting Limit for Non-Detects if greater than 50% of the values were detected.

T = Total Fraction
D = Filtered Fraction (0.45 micron filter)
A = Filtered Fraction (0.1 micron filter)
ND = Non-Detected Value

Table 7-22

Soil 0-6 inches Random

RI/FS Soil Area 4A1 - Capulin and Goathill N and S Rock Piles

Summary of Results

Analyte	Sample Fraction	Units	Total Number of Samples	Percent Detects (%)	SLC	SLC Value	Percent Above SLC	Min RL for ND	Max RL for ND	Min Value	Max Value	Mean Value	Median Value
Inorganics													
Cation-Exchange Capacity	T	meq/100g	10	100	No SLC					7.2	21	14.2	13.8
Chloride	T	mg/kg-dry	10	30	No SLC			27.40	29.20	ND	50.9		
Fluoride	T	mg/kg-dry	3	100	HH Soil (HQ=1)	3700	0			0.13	0.32	0.21	0.18
Nitrate	T	mg/kg-dry	10	0	No SLC			1.00	2.40	ND	ND		
Organic Soils	T	%	7	100	No SLC					2.1	5.6	3.3	2.9
pH	T	SU	10	100	No SLC					3.3	6.1	3.9	3.6
Phosphorus	T	mg/kg-dry	10	100	No SLC					22.5	1660	410	314
Sodium Absorption Ratio	T	ratio	10	40	No SLC			0.02	0.14	ND	0.28		
Solids, Percent	T	%	10	100	No SLC					85.7	94.8	89.8	89.4
Specific Conductance	T	umhos/cm	10	100	No SLC					46.8	2320	761	271
Sulfate	T	mg/kg-dry	10	90	No SLC			1.20	1.20	ND	10100	1700	606
Total Kjeldahl Nitrogen	T	mg/kg-dry	10	90	No SLC			26.10	26.10	ND	103	50.8	44.3
Total Organic Carbon	T	mg/kg-dry	10	20	No SLC			106.00	117.00	ND	1590		
Metals													
Aluminum	T	mg/kg-dry	10	100	HH Soil (HQ=1)	76000	0			1990	15200	6960	5510
Antimony	T	mg/kg-dry	10	0	HH Soil (HQ=1)	31	0	0.04	0.18	ND	ND		
Arsenic	T	mg/kg-dry	10	100	HH Soil (HQ=1)	0.39	100			3.7	15.1	6.6	6.4
Barium	T	mg/kg-dry	10	100	HH Soil (HQ=1)	5500	0			32.3	200	77.4	61.6
Beryllium	T	mg/kg-dry	10	100	HH Soil (HQ=1)	150	0			0.21	1	0.47	0.47
Boron	T	mg/kg-dry	10	10	HH Soil (HQ=1)	5500	0	0.43	1.40	ND	0.54		
Cadmium	T	mg/kg-dry	10	30	HH Soil (HQ=1)	39	0	0.03	0.07	ND	1.3		
Calcium	T	mg/kg-dry	10	100	No SLC					77.1	12000	2100	923
Chromium	T	mg/kg-dry	10	100	HH Soil (HQ=1)	210	0			2.7	28.6	13.3	10
Cobalt	T	mg/kg-dry	10	90	HH Soil (HQ=1)	900	0	0.23	0.23	ND	14.5	3.8	2.8
Copper	T	mg/kg-dry	10	100	HH Soil (HQ=1)	2900	0			21.1	85	45	33.6
Iron	T	mg/kg-dry	10	100	HH Soil (HQ=1)	23000	50			15900	47400	27000	23700
Lead	T	mg/kg-dry	10	100	HH Soil (HQ=1)	400	10			51.5	869	221	155
Magnesium	T	mg/kg-dry	10	100	No SLC					435	6710	2830	1890
Manganese	T	mg/kg-dry	10	100	HH Soil (HQ=1)	3200	0			179	2580	681	400
Mercury	T	mg/kg-dry	10	0	HH Soil (HQ=1)	23	0	0.02	0.02	ND	ND		
Molybdenum	T	mg/kg-dry	10	100	HH Soil (HQ=1)	390	0			4.7	15.8	10.8	9.6

"No SLC" indicates that there is not a Screening Level Criterion for this medium specified for the RI/FS.
"HH Soil (HQ=1)" EPA Region 6 RBSLs Human Health Residential Soil (HQ=1)
"Eco Soil" EPA Region 6 Tier 1-3 RBSLs Ecological Soil
Median Value determined using 1/2 the Reporting Limit value for Non-Detects if greater than 50% of the values were detected.
Mean Value calculated using 1/2 the Reporting Limit for Non-Detects if greater than 50% of the values were detected.

T = Total Fraction
D = Filtered Fraction (0.45 micron filter)
A = Filtered Fraction (0.1 micron filter)
ND = Non-Detected Value

Table 7-22

Soil 0-6 inches Random

RI/FS Soil Area 4A1 - Capulin and Goathill N and S Rock Piles

Summary of Results

Analyte	Sample Fraction	Units	Total Number of Samples	Percent Detects (%)	SLC	SLC Value	Percent Above SLC	Min RL for ND	Max RL for ND	Min Value	Max Value	Mean Value	Median Value
Nickel	T	mg/kg-dry	10	90	HH Soil (HQ=1)	1600	0	1.40	1.40	ND	25.6	9.9	7.1
Potassium	T	mg/kg-dry	10	100	No SLC					1000	5000	2590	2240
Selenium	T	mg/kg-dry	10	90	HH Soil (HQ=1)	390	0	0.87	0.87	ND	1.4	0.85	0.84
Silver	T	mg/kg-dry	10	100	HH Soil (HQ=1)	390	0			0.45	2.1	1.1	0.93
Sodium	T	mg/kg-dry	10	80	No SLC			51.20	98.80	ND	169	100	103
Thallium	T	mg/kg-dry	10	100	HH Soil (HQ=1)	5.5	0			0.09	0.37	0.17	0.16
Vanadium	T	mg/kg-dry	10	100	HH Soil (HQ=1)	78	0			2.7	26	13	10.3
Zinc	T	mg/kg-dry	10	100	HH Soil (HQ=1)	23000	0			26.1	357	101	63.7

"No SLC" indicates that there is not a Screening Level Criterion for this medium specified for the RI/FS.
"HH Soil (HQ=1)" EPA Region 6 RBSLs Human Health Residential Soil (HQ=1)
"Eco Soil" EPA Region 6 Tier 1-3 RBSLs Ecological Soil
Median Value determined using 1/2 the Reporting Limit value for Non-Detects if greater than 50% of the values were detected.
Mean Value calculated using 1/2 the Reporting Limit for Non-Detects if greater than 50% of the values were detected.

T = Total Fraction
D = Filtered Fraction (0.45 micron filter)
A = Filtered Fraction (0.1 micron filter)
ND = Non-Detected Value

Table 7-23

Soil 0-24 inches Random

RI/FS Soil Area 4A1 - Capulin and Goathill N and S Rock Piles

Summary of Results

Analyte	Sample Fraction	Units	Total Number of Samples	Percent Detects (%)	SLC	SLC Value	Percent Above SLC	Min RL for ND	Max RL for ND	Min Value	Max Value	Mean Value	Median Value
Inorganics													
Cation-Exchange Capacity	T	meq/100g	10	100	No SLC					6.5	21.7	12.4	10.7
Chloride	T	mg/kg-dry	10	20	No SLC			27.10	28.30	ND	45.8		
Fluoride	T	mg/kg-dry	4	100	No SLC					0.15	0.33	0.23	0.23
Nitrate	T	mg/kg-dry	10	0	No SLC			1.10	2.40	ND	ND		
Organic Soils	T	%	6	100	No SLC					1.7	5.5	2.9	2.6
pH	T	SU	10	100	No SLC					3.1	6.1	3.8	3.5
Phosphorus	T	mg/kg-dry	10	100	No SLC					16.4	1470	496	399
Sodium Absorption Ratio	T	ratio	10	30	No SLC			0.02	0.14	ND	0.27		
Solids, Percent	T	%	10	100	No SLC					86.9	94.3	90.4	90.4
Specific Conductance	T	umhos/cm	10	100	No SLC					43.8	2260	838	618
Sulfate	T	mg/kg-dry	10	100	No SLC					15.9	5160	1730	1280
Total Kjeldahl Nitrogen	T	mg/kg-dry	10	80	No SLC			25.70	25.80	ND	100	43.8	36.8
Total Organic Carbon	T	mg/kg-dry	10	30	No SLC			109.00	116.00	ND	1220		
Metals													
Aluminum	T	mg/kg-dry	10	100	No SLC					1620	14700	6400	4740
Antimony	T	mg/kg-dry	10	10	ECO Soil	0.3	0	0.04	0.18	ND	0.04		
Arsenic	T	mg/kg-dry	10	100	ECO Soil	31	0			3	15.7	6.5	6.3
Barium	T	mg/kg-dry	10	100	ECO Soil	330	0			25	198	82.2	66.1
Beryllium	T	mg/kg-dry	10	100	ECO Soil	30	0			0.22	0.99	0.47	0.43
Boron	T	mg/kg-dry	10	30	ECO Soil	0.5	66.7	0.37	0.48	ND	0.59		
Cadmium	T	mg/kg-dry	10	40	ECO Soil	0.4	25	0.03	0.06	ND	1.4		
Calcium	T	mg/kg-dry	10	100	No SLC					121	5600	1790	1740
Chromium	T	mg/kg-dry	10	100	ECO Soil	7.9	70			2.9	29.8	13.5	10.1
Cobalt	T	mg/kg-dry	10	100	ECO Soil	32	0			0.39	13.3	3.6	2.8
Copper	T	mg/kg-dry	10	100	ECO Soil	54	30			16.5	85.2	44.1	32.9
Iron	T	mg/kg-dry	10	100	No SLC					13100	47800	24900	22800
Lead	T	mg/kg-dry	10	100	ECO Soil	15	100			45.5	322	169	147
Magnesium	T	mg/kg-dry	10	100	No SLC					291	6080	2500	1570
Manganese	T	mg/kg-dry	10	100	ECO Soil	152	90			39.6	2220	638	356
Mercury	T	mg/kg-dry	10	0	ECO Soil	0.1	0	0.02	0.02	ND	ND		
Molybdenum	T	mg/kg-dry	10	100	ECO Soil	2	100			4.8	17.7	11.7	13.6

"No SLC" indicates that there is not a Screening Level Criterion for this medium specified for the RI/FS.
"HH Soil (HQ=1)" EPA Region 6 RBSLs Human Health Residential Soil (HQ=1)
"Eco Soil" EPA Region 6 Tier 1-3 RBSLs Ecological Soil
Median Value determined using 1/2 the Reporting Limit value for Non-Detects if greater than 50% of the values were detected.
Mean Value calculated using 1/2 the Reporting Limit for Non-Detects if greater than 50% of the values were detected.

T = Total Fraction
D = Filtered Fraction (0.45 micron filter)
A = Filtered Fraction (0.1 micron filter)
ND = Non-Detected Value

Table 7-23

Soil 0-24 inches Random

RI/FS Soil Area 4A1 - Capulin and Goathill N and S Rock Piles

Summary of Results

Analyte	Sample Fraction	Units	Total Number of Samples	Percent Detects (%)	SLC	SLC Value	Percent Above SLC	Min RL for ND	Max RL for ND	Min Value	Max Value	Mean Value	Median Value
Nickel	T	mg/kg-dry	10	100	ECO Soil	48	0			1.6	25.5	9.2	6.2
Potassium	T	mg/kg-dry	10	100	No SLC					1120	5160	2410	2100
Selenium	T	mg/kg-dry	10	90	ECO Soil	1	22.2	1.10	1.10	ND	1.3	0.74	0.75
Silver	T	mg/kg-dry	10	100	ECO Soil	2	20			0.48	2.9	1.3	1.1
Sodium	T	mg/kg-dry	10	90	No SLC			50.50	50.50	ND	181	102	94.3
Thallium	T	mg/kg-dry	10	100	ECO Soil	1	0			0.084	0.38	0.17	0.15
Vanadium	T	mg/kg-dry	10	100	ECO Soil	2	100			2.5	27.2	11.4	8.3
Zinc	T	mg/kg-dry	10	100	ECO Soil	120	40			9.9	352	108	93

"No SLC" indicates that there is not a Screening Level Criterion for this medium specified for the RI/FS.
"HH Soil (HQ=1)" EPA Region 6 RBSLs Human Health Residential Soil (HQ=1)
"Eco Soil" EPA Region 6 Tier 1-3 RBSLs Ecological Soil
Median Value determined using 1/2 the Reporting Limit value for Non-Detects if greater than 50% of the values were detected.
Mean Value calculated using 1/2 the Reporting Limit for Non-Detects if greater than 50% of the values were detected.

T = Total Fraction
D = Filtered Fraction (0.45 micron filter)
A = Filtered Fraction (0.1 micron filter)
ND = Non-Detected Value

Table 7-24

Soil 0-6 inches Biased

RI/FS Soil Area 4A1 - Capulin and Goathill N and S Rock Piles

Summary of Results

Analyte	Sample Fraction	Units	Total Number of Samples	Percent Detects (%)	SLC	SLC Value	Percent Above SLC	Min RL for ND	Max RL for ND	Min Value	Max Value	Mean Value	Median Value
Inorganics													
Cation-Exchange Capacity	T	meq/100g	8	100	No SLC					12.5	20.7	17.7	17.7
Chloride	T	mg/kg-dry	8	37.5	No SLC			2.20	27.50	ND	4.3		
Fluoride	T	mg/kg-dry	8	100	HH Soil (HQ=1)	3700	0			0.15	1.5	0.77	0.69
Nitrate	T	mg/kg-dry	8	12.5	No SLC			2.20	2.30	ND	2.5		
Organic Soils	T	%	8	100	No SLC					2.5	4.5	3.3	3.3
pH	T	SU	8	100	No SLC					3.4	7.1	4.9	4.5
Phosphorus	T	mg/kg-dry	8	100	No SLC					458	1180	859	876
Sodium Absorption Ratio	T	ratio	8	87.5	No SLC			0.06	0.06	ND	0.08	0.049	0.045
Solids, Percent	T	%	8	100	No SLC					88.9	93.9	91.2	91.3
Specific Conductance	T	umhos/cm	8	100	No SLC					7.3	2860	586	256
Sulfate	T	mg/kg-dry	8	87.5	No SLC			110.00	110.00	ND	7410	1200	56
Total Kjeldahl Nitrogen	T	mg/kg-dry	8	100	No SLC					64	642	208	108
Total Organic Carbon	T	mg/kg-dry	8	62.5	No SLC			107.00	112.00	ND	12200	3280	584
Metals													
Aluminum	T	mg/kg-dry	8	100	HH Soil (HQ=1)	76000	0			3110	13600	9650	10100
Antimony	T	mg/kg-dry	8	0	HH Soil (HQ=1)	31	0	0.15	0.31	ND	ND		
Arsenic	T	mg/kg-dry	8	100	HH Soil (HQ=1)	0.39	100			2.6	7.4	5.3	5.6
Barium	T	mg/kg-dry	8	100	HH Soil (HQ=1)	5500	0			75.7	350	170	136
Beryllium	T	mg/kg-dry	8	100	HH Soil (HQ=1)	150	0			0.31	1.3	0.87	0.93
Boron	T	mg/kg-dry	8	75	HH Soil (HQ=1)	5500	0	0.91	0.94	ND	13.2	5.6	4.8
Cadmium	T	mg/kg-dry	8	62.5	HH Soil (HQ=1)	39	0	0.03	0.03	ND	0.47	0.16	0.15
Calcium	T	mg/kg-dry	8	100	No SLC					1140	3060	1880	1670
Chromium	T	mg/kg-dry	8	100	HH Soil (HQ=1)	210	0			4.1	23.4	17.3	19.4
Cobalt	T	mg/kg-dry	8	100	HH Soil (HQ=1)	900	0			1.9	13.8	8	7.2
Copper	T	mg/kg-dry	8	100	HH Soil (HQ=1)	2900	0			13.1	63.3	38.2	34.6
Iron	T	mg/kg-dry	8	100	HH Soil (HQ=1)	23000	87.5			18400	30900	25500	25400
Lead	T	mg/kg-dry	8	100	HH Soil (HQ=1)	400	0			27.2	218	104	79.5
Magnesium	T	mg/kg-dry	8	100	No SLC					1020	5490	3650	3590
Manganese	T	mg/kg-dry	8	100	HH Soil (HQ=1)	3200	0			243	2000	874	531
Mercury	T	mg/kg-dry	8	12.5	HH Soil (HQ=1)	23	0	0.02	0.02	ND	0.016		
Molybdenum	T	mg/kg-dry	8	87.5	HH Soil (HQ=1)	390	0	3.70	3.70	ND	8.6	4.9	4.4

"No SLC" indicates that there is not a Screening Level Criterion for this medium specified for the RI/FS.
"HH Soil (HQ=1)" EPA Region 6 RBSLs Human Health Residential Soil (HQ=1)
"Eco Soil" EPA Region 6 Tier 1-3 RBSLs Ecological Soil
Median Value determined using 1/2 the Reporting Limit value for Non-Detects if greater than 50% of the values were detected.
Mean Value calculated using 1/2 the Reporting Limit for Non-Detects if greater than 50% of the values were detected.

T = Total Fraction
D = Filtered Fraction (0.45 micron filter)
A = Filtered Fraction (0.1 micron filter)
ND = Non-Detected Value

Table 7-24

Soil 0-6 inches Biased

RI/FS Soil Area 4A1 - Capulin and Goathill N and S Rock Piles

Summary of Results

Analyte	Sample Fraction	Units	Total Number of Samples	Percent Detects (%)	SLC	SLC Value	Percent Above SLC	Min RL for ND	Max RL for ND	Min Value	Max Value	Mean Value	Median Value
Nickel	T	mg/kg-dry	8	100	HH Soil (HQ=1)	1600	0			4.1	20.5	14	16.4
Potassium	T	mg/kg-dry	8	100	No SLC					1880	2910	2450	2390
Selenium	T	mg/kg-dry	8	75	HH Soil (HQ=1)	390	0	0.72	0.84	ND	2.1	0.89	0.81
Silver	T	mg/kg-dry	8	87.5	HH Soil (HQ=1)	390	0	0.13	0.13	ND	1.1	0.47	0.44
Sodium	T	mg/kg-dry	8	50	No SLC			88.10	131.00	ND	454	127	71.8
Thallium	T	mg/kg-dry	8	100	HH Soil (HQ=1)	5.5	0			0.11	0.24	0.17	0.17
Vanadium	T	mg/kg-dry	8	100	HH Soil (HQ=1)	78	0			9.3	24.2	19	21.9
Zinc	T	mg/kg-dry	8	100	HH Soil (HQ=1)	23000	0			53.3	275	134	86

"No SLC" indicates that there is not a Screening Level Criterion for this medium specified for the RI/FS.
"HH Soil (HQ=1)" EPA Region 6 RBSLs Human Health Residential Soil (HQ=1)
"Eco Soil" EPA Region 6 Tier 1-3 RBSLs Ecological Soil
Median Value determined using 1/2 the Reporting Limit value for Non-Detects if greater than 50% of the values were detected.
Mean Value calculated using 1/2 the Reporting Limit for Non-Detects if greater than 50% of the values were detected.

T = Total Fraction
D = Filtered Fraction (0.45 micron filter)
A = Filtered Fraction (0.1 micron filter)
ND = Non-Detected Value

Table 7-25

Soil 0-24 inches Biased

RI/FS Soil Area 4A1 - Capulin and Goathill N and S Rock Piles

Summary of Results

Analyte	Sample Fraction	Units	Total Number of Samples	Percent Detects (%)	SLC	SLC Value	Percent Above SLC	Min RL for ND	Max RL for ND	Min Value	Max Value	Mean Value	Median Value
Inorganics													
Cation-Exchange Capacity	T	meq/100g	8	100	No SLC					12.7	22.3	16.9	16.2
Chloride	T	mg/kg-dry	8	37.5	No SLC			2.30	27.60	ND	4.2		
Fluoride	T	mg/kg-dry	8	100	No SLC					0.15	2.3	0.8	0.58
Nitrate	T	mg/kg-dry	8	25	No SLC			2.20	2.30	ND	2.8		
Organic Soils	T	%	8	100	No SLC					2.6	4.8	3.3	3.2
pH	T	SU	8	100	No SLC					3.3	6.3	4.6	4
Phosphorus	T	mg/kg-dry	8	100	No SLC					331	1190	793	836
Sodium Absorption Ratio	T	ratio	8	87.5	No SLC			0.06	0.06	ND	0.1	0.052	0.045
Solids, Percent	T	%	8	100	No SLC					89	93.2	90.9	90.6
Specific Conductance	T	umhos/cm	8	100	No SLC					17.1	3130	646	343
Sulfate	T	mg/kg-dry	8	87.5	No SLC			110.00	110.00	ND	7370	1310	363
Total Kjeldahl Nitrogen	T	mg/kg-dry	8	100	No SLC					28.7	421	171	138
Total Organic Carbon	T	mg/kg-dry	8	75	No SLC			108.00	109.00	ND	12900	4090	1300
Metals													
Aluminum	T	mg/kg-dry	8	100	No SLC					3560	12300	9650	10400
Antimony	T	mg/kg-dry	8	0	ECO Soil	0.3	0	0.17	0.32	ND	ND		
Arsenic	T	mg/kg-dry	8	100	ECO Soil	31	0			2.7	9.1	5.5	5.2
Barium	T	mg/kg-dry	8	100	ECO Soil	330	12.5			82.5	432	175	121
Beryllium	T	mg/kg-dry	8	100	ECO Soil	30	0			0.37	1.3	0.86	0.91
Boron	T	mg/kg-dry	8	75	ECO Soil	0.5	100	0.91	1.20	ND	13.4	5.6	4.8
Cadmium	T	mg/kg-dry	8	50	ECO Soil	0.4	0	0.02	0.04	ND	0.39	0.096	0.051
Calcium	T	mg/kg-dry	8	100	No SLC					1040	3310	1780	1570
Chromium	T	mg/kg-dry	8	100	ECO Soil	7.9	87.5			5	23.2	17.3	20.6
Cobalt	T	mg/kg-dry	8	100	ECO Soil	32	0			2.3	11.1	7.1	7.4
Copper	T	mg/kg-dry	8	100	ECO Soil	54	12.5			14.9	62	38.5	39.4
Iron	T	mg/kg-dry	8	100	No SLC					21200	33300	26600	25200
Lead	T	mg/kg-dry	8	100	ECO Soil	15	100			30.4	265	115	83.9
Magnesium	T	mg/kg-dry	8	100	No SLC					1310	5600	3770	4100
Manganese	T	mg/kg-dry	8	100	ECO Soil	152	100			259	1560	749	500
Mercury	T	mg/kg-dry	8	12.5	ECO Soil	0.1	0	0.02	0.02	ND	0.02		
Molybdenum	T	mg/kg-dry	8	87.5	ECO Soil	2	100	4.10	4.10	ND	10.7	5.5	4

"No SLC" indicates that there is not a Screening Level Criterion for this medium specified for the RI/FS.
"HH Soil (HQ=1)" EPA Region 6 RBSLs Human Health Residential Soil (HQ=1)
"Eco Soil" EPA Region 6 Tier 1-3 RBSLs Ecological Soil
Median Value determined using 1/2 the Reporting Limit value for Non-Detects if greater than 50% of the values were detected.
Mean Value calculated using 1/2 the Reporting Limit for Non-Detects if greater than 50% of the values were detected.

T = Total Fraction
D = Filtered Fraction (0.45 micron filter)
A = Filtered Fraction (0.1 micron filter)
ND = Non-Detected Value

Table 7-25

Soil 0-24 inches Biased

RI/FS Soil Area 4A1 - Capulin and Goathill N and S Rock Piles

Summary of Results

Analyte	Sample Fraction	Units	Total Number of Samples	Percent Detects (%)	SLC	SLC Value	Percent Above SLC	Min RL for ND	Max RL for ND	Min Value	Max Value	Mean Value	Median Value
Nickel	T	mg/kg-dry	8	100	ECO Soil	48	0			5	20.6	14	15.7
Potassium	T	mg/kg-dry	8	100	No SLC					2090	3130	2520	2480
Selenium	T	mg/kg-dry	8	87.5	ECO Soil	1	71.4	0.85	0.85	ND	1.7	1.1	1.1
Silver	T	mg/kg-dry	8	87.5	ECO Soil	2	0	0.14	0.14	ND	1.3	0.54	0.36
Sodium	T	mg/kg-dry	8	50	No SLC			79.60	149.00	ND	550	140	73.6
Thallium	T	mg/kg-dry	8	100	ECO Soil	1	0			0.11	0.26	0.18	0.17
Vanadium	T	mg/kg-dry	8	100	ECO Soil	2	100			9	27.2	18.9	20.9
Zinc	T	mg/kg-dry	8	100	ECO Soil	120	37.5			61.3	234	121	80.5

"No SLC" indicates that there is not a Screening Level Criterion for this medium specified for the RI/FS.
"HH Soil (HQ=1)" EPA Region 6 RBSLs Human Health Residential Soil (HQ=1)
"Eco Soil" EPA Region 6 Tier 1-3 RBSLs Ecological Soil
Median Value determined using 1/2 the Reporting Limit value for Non-Detects if greater than 50% of the values were detected.
Mean Value calculated using 1/2 the Reporting Limit for Non-Detects if greater than 50% of the values were detected.

T = Total Fraction
D = Filtered Fraction (0.45 micron filter)
A = Filtered Fraction (0.1 micron filter)
ND = Non-Detected Value

Table 7-26

Soil 0-6 inches Random

RI/FS Soil Area 4A2 - Sugar Shack S, W, Mid, Sulphur Gulch Rock Piles

Summary of Results

Analyte	Sample Fraction	Units	Total Number of Samples	Percent Detects (%)	SLC	SLC Value	Percent Above SLC	Min RL for ND	Max RL for ND	Min Value	Max Value	Mean Value	Median Value
Inorganics													
Cation-Exchange Capacity	T	meq/100g	10	100	No SLC					7.2	23.3	12.8	11
Chloride	T	mg/kg-dry	10	50	No SLC			2.10	27.80	ND	16.3	9.4	13.1
Fluoride	T	mg/kg-dry	9	100	HH Soil (HQ=1)	3700	0			0.11	5.5	1.1	0.26
Fluoride	T	mg/Kg	1	100	HH Soil (HQ=1)	3700	0			0.14	0.14	0.14	0.26
Fluoride	T	mg/Kg	1	900	HH Soil (HQ=1)	3700	0			ND	5.5	0.14	0.26
Fluoride	T	mg/kg-dry	9	11.1	HH Soil (HQ=1)	3700	0			ND	0.14		
Nitrate	T	mg/kg-dry	10	30	No SLC			1.20	2.40	ND	3.8		
Organic Soils	T	%	10	100	No SLC					1.9	5.7	3.4	2.9
pH	T	SU	10	100	No SLC					3.1	7.5	4.2	3.4
Phosphorus	T	mg/kg-dry	10	100	No SLC					10.4	2140	885	917
Sodium Absorption Ratio	T	ratio	10	20	No SLC			0.01	0.03	ND	0.05		
Solids, Percent	T	%	10	100	No SLC					86.1	95.9	91.7	91.4
Specific Conductance	T	umhos/cm	10	100	No SLC					580	4700	1680	1500
Sulfate	T	mg/kg-dry	10	90	No SLC			5,810.00	5,810.00	ND	10200	4640	3200
Total Kjeldahl Nitrogen	T	mg/kg-dry	10	100	No SLC					29.6	382	104	48.7
Total Organic Carbon	T	mg/kg-dry	10	40	No SLC			106.00	112.00	ND	2210		
Metals													
Aluminum	T	mg/kg-dry	10	100	HH Soil (HQ=1)	76000	0			2550	16000	9980	11700
Antimony	T	mg/kg-dry	10	0	HH Soil (HQ=1)	31	0	0.15	0.19	ND	ND		
Arsenic	T	mg/kg-dry	10	100	HH Soil (HQ=1)	0.39	100			0.89	4.1	2.4	2.2
Barium	T	mg/kg-dry	10	100	HH Soil (HQ=1)	5500	0			30.7	240	127	134
Beryllium	T	mg/kg-dry	10	100	HH Soil (HQ=1)	150	0			0.18	1.4	0.57	0.49
Boron	T	mg/kg-dry	10	10	HH Soil (HQ=1)	5500	0	0.36	1.00	ND	13.8		
Cadmium	T	mg/kg-dry	10	20	HH Soil (HQ=1)	39	0	0.02	0.03	ND	0.41		
Calcium	T	mg/kg-dry	10	100	No SLC					1750	22600	10200	8020
Chromium	T	mg/kg-dry	10	100	HH Soil (HQ=1)	210	0			3.6	67.9	37	45.1
Cobalt	T	mg/kg-dry	10	100	HH Soil (HQ=1)	900	0			0.24	24.1	7.9	6.3
Copper	T	mg/kg-dry	10	100	HH Soil (HQ=1)	2900	0			15.7	184	83.3	67.9
Iron	T	mg/kg-dry	10	100	HH Soil (HQ=1)	23000	50			17100	55100	31400	27300
Lead	T	mg/kg-dry	10	100	HH Soil (HQ=1)	400	0			9.8	202	74.8	58.2
Magnesium	T	mg/kg-dry	10	100	No SLC					810	13000	7410	9080

"No SLC" indicates that there is not a Screening Level Criterion for this medium specified for the RI/FS.
"HH Soil (HQ=1)" EPA Region 6 RBSLs Human Health Residential Soil (HQ=1)
"Eco Soil" EPA Region 6 Tier 1-3 RBSLs Ecological Soil
Median Value determined using 1/2 the Reporting Limit value for Non-Detects if greater than 50% of the values were detected.
Mean Value calculated using 1/2 the Reporting Limit for Non-Detects if greater than 50% of the values were detected.

T = Total Fraction
D = Filtered Fraction (0.45 micron filter)
A = Filtered Fraction (0.1 micron filter)
ND = Non-Detected Value

Table 7-26

Soil 0-6 inches Random

RI/FS Soil Area 4A2 - Sugar Shack S, W, Mid, Sulphur Gulch Rock Piles

Summary of Results

Analyte	Sample Fraction	Units	Total Number of Samples	Percent Detects (%)	SLC	SLC Value	Percent Above SLC	Min RL for ND	Max RL for ND	Min Value	Max Value	Mean Value	Median Value
Manganese	T	mg/kg-dry	10	100	HH Soil (HQ=1)	3200	0			98.8	968	466	354
Mercury	T	mg/kg-dry	10	0	HH Soil (HQ=1)	23	0	0.02	0.02	ND	ND		
Molybdenum	T	mg/kg-dry	10	100	HH Soil (HQ=1)	390	20			9	693	152	35.8
Nickel	T	mg/kg-dry	10	100	HH Soil (HQ=1)	1600	0			1.9	48.5	23.2	23.6
Potassium	T	mg/kg-dry	10	100	No SLC					2060	7690	4410	4600
Selenium	T	mg/kg-dry	10	90	HH Soil (HQ=1)	390	0	1.00	1.00	ND	2.3	1.1	0.89
Silver	T	mg/kg-dry	10	90	HH Soil (HQ=1)	390	0	0.11	0.11	ND	1.7	0.69	0.68
Sodium	T	mg/kg-dry	10	80	No SLC			40.40	46.60	ND	270	142	121
Thallium	T	mg/kg-dry	10	100	HH Soil (HQ=1)	5.5	0			0.16	1.3	0.59	0.56
Vanadium	T	mg/kg-dry	10	100	HH Soil (HQ=1)	78	0			6	60.3	37.3	46.9
Zinc	T	mg/kg-dry	10	100	HH Soil (HQ=1)	23000	0			10.5	125	55.4	51.3

"No SLC" indicates that there is not a Screening Level Criterion for this medium specified for the RI/FS.
"HH Soil (HQ=1)" EPA Region 6 RBSLs Human Health Residential Soil (HQ=1)
"Eco Soil" EPA Region 6 Tier 1-3 RBSLs Ecological Soil
Median Value determined using 1/2 the Reporting Limit value for Non-Detects if greater than 50% of the values were detected.
Mean Value calculated using 1/2 the Reporting Limit for Non-Detects if greater than 50% of the values were detected.

T = Total Fraction
D = Filtered Fraction (0.45 micron filter)
A = Filtered Fraction (0.1 micron filter)
ND = Non-Detected Value

Table 7-27

Soil 0-24 inches Random

RI/FS Soil Area 4A2 - Sugar Shack S, W, Mid, Sulphur Gulch Rock Piles

Summary of Results

Analyte	Sample Fraction	Units	Total Number of Samples	Percent Detects (%)	SLC	SLC Value	Percent Above SLC	Min RL for ND	Max RL for ND	Min Value	Max Value	Mean Value	Median Value
Inorganics													
Cation-Exchange Capacity	T	meq/100g	10	100	No SLC					6.4	20.7	13.1	10.7
Chloride	T	mg/kg-dry	10	60	No SLC			2.50	27.90	ND	15.1	9.5	11.1
Fluoride	T	mg/kg-dry	10	100	No SLC					0.12	7.4	1.2	0.34
Nitrate	T	mg/kg-dry	10	10	No SLC			1.20	2.50	ND	4.1		
Organic Soils	T	%	10	100	No SLC					1.8	5.7	3.5	3.1
pH	T	SU	10	100	No SLC					3.1	7.4	4.1	3.4
Phosphorus	T	mg/kg-dry	10	90	No SLC			54.80	54.80	ND	1580	482	139
Sodium Absorption Ratio	T	ratio	10	30	No SLC			0.01	0.03	ND	0.04		
Solids, Percent	T	%	10	100	No SLC					81.2	94.1	89.9	90.9
Specific Conductance	T	umhos/cm	10	100	No SLC					479	4800	1870	1640
Sulfate	T	mg/kg-dry	10	100	No SLC					74.6	12700	6110	7710
Total Kjeldahl Nitrogen	T	mg/kg-dry	10	100	No SLC					29.3	204	68.4	43.7
Total Organic Carbon	T	mg/kg-dry	10	50	No SLC			109.00	113.00	ND	5110	1010	208
Metals													
Aluminum	T	mg/kg-dry	10	100	No SLC					3060	15900	10100	11400
Antimony	T	mg/kg-dry	10	0	ECO Soil	0.3	0	0.17	0.20	ND	ND		
Arsenic	T	mg/kg-dry	10	100	ECO Soil	31	0			0.78	5.4	2.6	2.2
Barium	T	mg/kg-dry	10	100	ECO Soil	330	0			25.7	245	126	133
Beryllium	T	mg/kg-dry	10	100	ECO Soil	30	0			0.23	1.6	0.6	0.48
Boron	T	mg/kg-dry	10	10	ECO Soil	0.5	100	0.39	1.10	ND	13.1		
Cadmium	T	mg/kg-dry	10	20	ECO Soil	0.4	100	0.02	0.03	ND	0.95		
Calcium	T	mg/kg-dry	10	100	No SLC					1680	24100	10100	8930
Chromium	T	mg/kg-dry	10	100	ECO Soil	7.9	90			5.8	75.1	38.6	45.7
Cobalt	T	mg/kg-dry	10	100	ECO Soil	32	0			0.38	17.7	6.8	6.3
Copper	T	mg/kg-dry	10	100	ECO Soil	54	60			17.8	190	81.8	75.3
Iron	T	mg/kg-dry	10	100	No SLC					17700	53600	30500	24900
Lead	T	mg/kg-dry	10	100	ECO Soil	15	90			8.9	1520	209	55
Magnesium	T	mg/kg-dry	10	100	No SLC					1270	13800	7590	9470
Manganese	T	mg/kg-dry	10	100	ECO Soil	152	100			180	909	429	330
Mercury	T	mg/kg-dry	10	0	ECO Soil	0.1	0	0.02	0.02	ND	ND		
Molybdenum	T	mg/kg-dry	10	100	ECO Soil	2	100			8.1	962	173	31.5

"No SLC" indicates that there is not a Screening Level Criterion for this medium specified for the RI/FS.
"HH Soil (HQ=1)" EPA Region 6 RBSLs Human Health Residential Soil (HQ=1)
"Eco Soil" EPA Region 6 Tier 1-3 RBSLs Ecological Soil
Median Value determined using 1/2 the Reporting Limit value for Non-Detects if greater than 50% of the values were detected.
Mean Value calculated using 1/2 the Reporting Limit for Non-Detects if greater than 50% of the values were detected.

T = Total Fraction
D = Filtered Fraction (0.45 micron filter)
A = Filtered Fraction (0.1 micron filter)
ND = Non-Detected Value

Table 7-27

Soil 0-24 inches Random

RI/FS Soil Area 4A2 - Sugar Shack S, W, Mid, Sulphur Gulch Rock Piles

Summary of Results

Analyte	Sample Fraction	Units	Total Number of Samples	Percent Detects (%)	SLC	SLC Value	Percent Above SLC	Min RL for ND	Max RL for ND	Min Value	Max Value	Mean Value	Median Value
Nickel	T	mg/kg-dry	10	100	ECO Soil	48	0			3.3	44.6	22.7	25.6
Potassium	T	mg/kg-dry	10	100	No SLC					1980	7890	4480	4440
Selenium	T	mg/kg-dry	10	90	ECO Soil	1	55.6	0.86	0.86	ND	2.1	1.1	1.1
Silver	T	mg/kg-dry	10	90	ECO Soil	2	0	0.12	0.12	ND	1.8	0.72	0.63
Sodium	T	mg/kg-dry	10	80	No SLC			45.80	54.90	ND	273	149	127
Thallium	T	mg/kg-dry	10	100	ECO Soil	1	10			0.16	1.3	0.6	0.51
Vanadium	T	mg/kg-dry	10	100	ECO Soil	2	100			6.9	62.1	37.4	43.8
Zinc	T	mg/kg-dry	10	100	ECO Soil	120	10			11	184	61.6	45.9

"No SLC" indicates that there is not a Screening Level Criterion for this medium specified for the RI/FS.
"HH Soil (HQ=1)" EPA Region 6 RBSLs Human Health Residential Soil (HQ=1)
"Eco Soil" EPA Region 6 Tier 1-3 RBSLs Ecological Soil
Median Value determined using 1/2 the Reporting Limit value for Non-Detects if greater than 50% of the values were detected.
Mean Value calculated using 1/2 the Reporting Limit for Non-Detects if greater than 50% of the values were detected.

T = Total Fraction
D = Filtered Fraction (0.45 micron filter)
A = Filtered Fraction (0.1 micron filter)
ND = Non-Detected Value

Table 7-28

Soil 0-6 inches Biased

RI/FS Soil Area 4A2 - Sugar Shack S, W, Mid, Sulphur Gulch Rock Piles

Summary of Results

Analyte	Sample Fraction	Units	Total Number of Samples	Percent Detects (%)	SLC	SLC Value	Percent Above SLC	Min RL for ND	Max RL for ND	Min Value	Max Value	Mean Value	Median Value
Inorganics													
Cation-Exchange Capacity	T	meq/100g	16	100	No SLC					2.8	16.1	9.5	9.3
Chloride	T	mg/kg-dry	16	50	No SLC			2.20	28.20	ND	12.1	6.4	3.8
Fluoride	T	mg/kg-dry	16	100	HH Soil (HQ=1)	3700	0			0.35	20.1	3.3	1.7
Nitrate	T	mg/kg-dry	16	18.8	No SLC			2.10	2.30	ND	4.3		
Organic Soils	T	%	16	100	No SLC					1.2	6.9	2.3	1.6
pH	T	SU	16	100	No SLC					3	7.5	6.2	6.9
Phosphorus	T	mg/kg-dry	16	100	No SLC					117	1630	684	533
Sodium Absorption Ratio	T	ratio	16	93.8	No SLC			0.02	0.02	ND	0.09	0.041	0.035
Solids, Percent	T	%	16	100	No SLC					88.3	96	92.3	92.8
Specific Conductance	T	umhos/cm	16	100	No SLC					838	1760	1240	1220
Sulfate	T	mg/kg-dry	16	100	No SLC					647	22900	6040	3010
Total Kjeldahl Nitrogen	T	mg/kg-dry	16	100	No SLC					22	111	51.8	43.2
Total Organic Carbon	T	mg/kg-dry	16	62.5	No SLC			108.00	113.00	ND	4860	813	220
Metals													
Aluminum	T	mg/kg-dry	16	100	HH Soil (HQ=1)	76000	0			8110	22800	13000	12100
Antimony	T	mg/kg-dry	16	0	HH Soil (HQ=1)	31	0	0.18	0.48	ND	ND		
Arsenic	T	mg/kg-dry	16	100	HH Soil (HQ=1)	0.39	100			1.6	9.4	3.1	2.4
Barium	T	mg/kg-dry	16	100	HH Soil (HQ=1)	5500	0			48.1	228	113	99.7
Beryllium	T	mg/kg-dry	16	100	HH Soil (HQ=1)	150	0			0.51	3.4	1.4	1.2
Boron	T	mg/kg-dry	16	0	HH Soil (HQ=1)	5500	0	0.21	2.20	ND	ND		
Cadmium	T	mg/kg-dry	16	81.3	HH Soil (HQ=1)	39	0	0.03	0.35	ND	2.6	0.72	0.51
Calcium	T	mg/kg-dry	16	100	No SLC					10200	45000	19800	18200
Chromium	T	mg/kg-dry	16	100	HH Soil (HQ=1)	210	0			18.8	72	38.2	34.2
Cobalt	T	mg/kg-dry	16	100	HH Soil (HQ=1)	900	0			4.8	19	10.4	8.8
Copper	T	mg/kg-dry	16	100	HH Soil (HQ=1)	2900	0			80.6	223	142	132
Iron	T	mg/kg-dry	16	100	HH Soil (HQ=1)	23000	43.8			14600	39100	24700	21700
Lead	T	mg/kg-dry	16	100	HH Soil (HQ=1)	400	0			41	147	92.2	95.6
Magnesium	T	mg/kg-dry	16	100	No SLC					5680	14500	8840	8410
Manganese	T	mg/kg-dry	16	100	HH Soil (HQ=1)	3200	0			352	1980	845	801
Mercury	T	mg/kg-dry	16	0	HH Soil (HQ=1)	23	0	0.02	0.02	ND	ND		
Molybdenum	T	mg/kg-dry	16	100	HH Soil (HQ=1)	390	56.3			10.7	2460	529	407

"No SLC" indicates that there is not a Screening Level Criterion for this medium specified for the RI/FS.
"HH Soil (HQ=1)" EPA Region 6 RBSLs Human Health Residential Soil (HQ=1)
"Eco Soil" EPA Region 6 Tier 1-3 RBSLs Ecological Soil
Median Value determined using 1/2 the Reporting Limit value for Non-Detects if greater than 50% of the values were detected.
Mean Value calculated using 1/2 the Reporting Limit for Non-Detects if greater than 50% of the values were detected.

T = Total Fraction
D = Filtered Fraction (0.45 micron filter)
A = Filtered Fraction (0.1 micron filter)
ND = Non-Detected Value

Table 7-28

Soil 0-6 inches Biased

RI/FS Soil Area 4A2 - Sugar Shack S, W, Mid, Sulphur Gulch Rock Piles

Summary of Results

Analyte	Sample Fraction	Units	Total Number of Samples	Percent Detects (%)	SLC	SLC Value	Percent Above SLC	Min RL for ND	Max RL for ND	Min Value	Max Value	Mean Value	Median Value
Nickel	T	mg/kg-dry	16	100	HH Soil (HQ=1)	1600	0			16	53.2	28	24.6
Potassium	T	mg/kg-dry	16	100	No SLC					1700	6590	4320	4680
Selenium	T	mg/kg-dry	16	62.5	HH Soil (HQ=1)	390	0	0.57	0.87	ND	1.5	0.85	0.97
Silver	T	mg/kg-dry	16	100	HH Soil (HQ=1)	390	0			0.49	4.1	1.1	0.84
Sodium	T	mg/kg-dry	16	25	No SLC			25.10	296.00	ND	569		
Thallium	T	mg/kg-dry	16	100	HH Soil (HQ=1)	5.5	0			0.15	0.7	0.42	0.42
Vanadium	T	mg/kg-dry	16	100	HH Soil (HQ=1)	78	0			23.6	67.1	41.5	41.9
Zinc	T	mg/kg-dry	16	100	HH Soil (HQ=1)	23000	0			58.1	406	149	112

"No SLC" indicates that there is not a Screening Level Criterion for this medium specified for the RI/FS.
"HH Soil (HQ=1)" EPA Region 6 RBSLs Human Health Residential Soil (HQ=1)
"Eco Soil" EPA Region 6 Tier 1-3 RBSLs Ecological Soil
Median Value determined using 1/2 the Reporting Limit value for Non-Detects if greater than 50% of the values were detected.
Mean Value calculated using 1/2 the Reporting Limit for Non-Detects if greater than 50% of the values were detected.

T = Total Fraction
D = Filtered Fraction (0.45 micron filter)
A = Filtered Fraction (0.1 micron filter)
ND = Non-Detected Value

Table 7-29

Soil 0-24 inches Biased

RI/FS Soil Area 4A2 - Sugar Shack S, W, Mid, Sulphur Gulch Rock Piles

Summary of Results

Analyte	Sample Fraction	Units	Total Number of Samples	Percent Detects (%)	SLC	SLC Value	Percent Above SLC	Min RL for ND	Max RL for ND	Min Value	Max Value	Mean Value	Median Value
Inorganics													
Cation-Exchange Capacity	T	meq/100g	16	100	No SLC					2	15.9	9.9	10.1
Chloride	T	mg/kg-dry	16	56.3	No SLC			2.20	28.40	ND	225	20.5	3.3
Fluoride	T	mg/kg-dry	16	100	No SLC					0.37	45.3	5.1	2.1
Nitrate	T	mg/kg-dry	16	18.8	No SLC			2.10	2.30	ND	3.1		
Organic Soils	T	%	16	100	No SLC					1.1	3.9	1.9	1.7
pH	T	SU	16	100	No SLC					3	7.8	6.2	7
Phosphorus	T	mg/kg-dry	16	100	No SLC					97.7	1700	709	644
Sodium Absorption Ratio	T	ratio	16	100	No SLC					0.02	0.09	0.038	0.03
Solids, Percent	T	%	16	100	No SLC					88	94.1	91	90.8
Specific Conductance	T	umhos/cm	16	100	No SLC					862	1900	1320	1310
Sulfate	T	mg/kg-dry	16	100	No SLC					518	19000	5540	2410
Total Kjeldahl Nitrogen	T	mg/kg-dry	16	100	No SLC					28.3	106	54.1	49.9
Total Organic Carbon	T	mg/kg-dry	16	43.8	No SLC			107.00	114.00	ND	2700		
Metals													
Aluminum	T	mg/kg-dry	16	100	No SLC					8480	22200	13500	12900
Antimony	T	mg/kg-dry	16	0	ECO Soil	0.3	0	0.17	0.28	ND	ND		
Arsenic	T	mg/kg-dry	16	100	ECO Soil	31	0			1.7	12.8	3.3	2.6
Barium	T	mg/kg-dry	16	100	ECO Soil	330	0			51.2	258	125	111
Beryllium	T	mg/kg-dry	16	100	ECO Soil	30	0			0.47	3.1	1.3	1.3
Boron	T	mg/kg-dry	16	0	ECO Soil	0.5	0	0.20	2.50	ND	ND		
Cadmium	T	mg/kg-dry	16	75	ECO Soil	0.4	83.3	0.03	0.26	ND	2.7	0.7	0.59
Calcium	T	mg/kg-dry	16	100	No SLC					8840	34100	19000	17600
Chromium	T	mg/kg-dry	16	100	ECO Soil	7.9	100			16.9	69.5	40.1	39.9
Cobalt	T	mg/kg-dry	16	100	ECO Soil	32	0			4.7	18	10.9	10.7
Copper	T	mg/kg-dry	16	100	ECO Soil	54	100			79.5	238	156	155
Iron	T	mg/kg-dry	16	100	No SLC					13900	37700	25500	25600
Lead	T	mg/kg-dry	16	100	ECO Soil	15	100			43.8	361	88.8	73.3
Magnesium	T	mg/kg-dry	16	100	No SLC					5030	14200	9420	9960
Manganese	T	mg/kg-dry	16	100	ECO Soil	152	100			330	2240	848	772
Mercury	T	mg/kg-dry	16	0	ECO Soil	0.1	0	0.02	0.02	ND	ND		
Molybdenum	T	mg/kg-dry	16	100	ECO Soil	2	100			9.1	3370	578	413

"No SLC" indicates that there is not a Screening Level Criterion for this medium specified for the RI/FS.
"HH Soil (HQ=1)" EPA Region 6 RBSLs Human Health Residential Soil (HQ=1)
"Eco Soil" EPA Region 6 Tier 1-3 RBSLs Ecological Soil
Median Value determined using 1/2 the Reporting Limit value for Non-Detects if greater than 50% of the values were detected.
Mean Value calculated using 1/2 the Reporting Limit for Non-Detects if greater than 50% of the values were detected.

T = Total Fraction
D = Filtered Fraction (0.45 micron filter)
A = Filtered Fraction (0.1 micron filter)
ND = Non-Detected Value

Table 7-29

Soil 0-24 inches Biased

RI/FS Soil Area 4A2 - Sugar Shack S, W, Mid, Sulphur Gulch Rock Piles

Summary of Results

Analyte	Sample Fraction	Units	Total Number of Samples	Percent Detects (%)	SLC	SLC Value	Percent Above SLC	Min RL for ND	Max RL for ND	Min Value	Max Value	Mean Value	Median Value
Nickel	T	mg/kg-dry	16	100	ECO Soil	48	6.3			16.2	48.5	29.5	30.4
Potassium	T	mg/kg-dry	16	100	No SLC					1910	6430	4590	4450
Selenium	T	mg/kg-dry	16	75	ECO Soil	1	50	0.60	0.80	ND	1.4	0.89	0.98
Silver	T	mg/kg-dry	16	100	ECO Soil	2	12.5			0.39	2.7	0.95	0.74
Sodium	T	mg/kg-dry	16	18.8	No SLC			25.10	149.00	ND	977		
Thallium	T	mg/kg-dry	16	93.8	ECO Soil	1	0	0.42	0.42	ND	0.66	0.46	0.45
Vanadium	T	mg/kg-dry	16	100	ECO Soil	2	100			22.5	64.4	44.3	45.4
Zinc	T	mg/kg-dry	16	100	ECO Soil	120	50			55.7	416	147	118

"No SLC" indicates that there is not a Screening Level Criterion for this medium specified for the RI/FS.
"HH Soil (HQ=1)" EPA Region 6 RBSLs Human Health Residential Soil (HQ=1)
"Eco Soil" EPA Region 6 Tier 1-3 RBSLs Ecological Soil
Median Value determined using 1/2 the Reporting Limit value for Non-Detects if greater than 50% of the values were detected.
Mean Value calculated using 1/2 the Reporting Limit for Non-Detects if greater than 50% of the values were detected.

T = Total Fraction
D = Filtered Fraction (0.45 micron filter)
A = Filtered Fraction (0.1 micron filter)
ND = Non-Detected Value

Table 7-30

Soil 0-6 inches Random

RI/FS Soil Area 4A3 - Sulphur Gulch N, Blind Gulch Rock Piles

Summary of Results

Analyte	Sample Fraction	Units	Total Number of Samples	Percent Detects (%)	SLC	SLC Value	Percent Above SLC	Min RL for ND	Max RL for ND	Min Value	Max Value	Mean Value	Median Value
Inorganics													
Cation-Exchange Capacity	T	meq/100g	10	100	No SLC					7.6	24	13.9	13.9
Chloride	T	mg/kg-dry	10	20	No SLC			27.10	28.60	ND	1180		
Fluoride	T	mg/kg-dry	9	100	HH Soil (HQ=1)	3700	0			0.18	4.9	2.3	2
Nitrate	T	mg/kg-dry	10	10	No SLC			1.10	2.30	ND	1.1		
Organic Soils	T	%	4	100	No SLC					1.6	2.9	2.1	2.1
pH	T	SU	10	100	No SLC					3.1	7.8	5.1	5.1
Phosphorus	T	mg/kg-dry	10	100	No SLC					217	1480	920	976
Sodium Absorption Ratio	T	ratio	10	50	No SLC			0.02	0.05	ND	0.05	0.024	0.02
Solids, Percent	T	%	10	100	No SLC					87.7	92.5	90.7	90.8
Specific Conductance	T	umhos/cm	10	100	No SLC					125	1990	935	756
Sulfate	T	mg/kg-dry	10	100	No SLC					47.3	11100	3200	1890
Total Kjeldahl Nitrogen	T	mg/kg-dry	10	80	No SLC			24.30	25.80	ND	208	68.6	48.2
Total Organic Carbon	T	mg/kg-dry	10	80	No SLC			110.00	111.00	ND	13000	1980	572
Metals													
Aluminum	T	mg/kg-dry	10	100	HH Soil (HQ=1)	76000	0			4950	21700	12400	12100
Antimony	T	mg/kg-dry	10	10	HH Soil (HQ=1)	31	0	0.03	0.04	ND	0.04		
Arsenic	T	mg/kg-dry	10	100	HH Soil (HQ=1)	0.39	100			1.3	3.8	2.7	2.7
Barium	T	mg/kg-dry	10	100	HH Soil (HQ=1)	5500	0			43.6	152	109	109
Beryllium	T	mg/kg-dry	10	100	HH Soil (HQ=1)	150	0			0.23	1.7	0.91	1
Boron	T	mg/kg-dry	10	20	HH Soil (HQ=1)	5500	0	0.30	0.53	ND	1.2		
Cadmium	T	mg/kg-dry	10	60	HH Soil (HQ=1)	39	0	0.02	0.03	ND	1.8	0.41	0.23
Calcium	T	mg/kg-dry	10	100	No SLC					693	16800	10300	11700
Chromium	T	mg/kg-dry	10	100	HH Soil (HQ=1)	210	0			7.4	93.1	33.8	29
Cobalt	T	mg/kg-dry	10	100	HH Soil (HQ=1)	900	0			0.67	27.2	11.8	13.1
Copper	T	mg/kg-dry	10	100	HH Soil (HQ=1)	2900	0			23.2	221	141	172
Iron	T	mg/kg-dry	10	100	HH Soil (HQ=1)	23000	90			13800	41200	28500	27100
Lead	T	mg/kg-dry	10	100	HH Soil (HQ=1)	400	0			10.4	263	68.9	45.3
Magnesium	T	mg/kg-dry	10	100	No SLC					1910	15300	8250	7670
Manganese	T	mg/kg-dry	10	100	HH Soil (HQ=1)	3200	0			74.9	1040	525	620
Mercury	T	mg/kg-dry	10	10	HH Soil (HQ=1)	23	0	0.02	0.02	ND	0.075		
Molybdenum	T	mg/kg-dry	10	100	HH Soil (HQ=1)	390	20			25.2	740	182	89.4

"No SLC" indicates that there is not a Screening Level Criterion for this medium specified for the RI/FS.
"HH Soil (HQ=1)" EPA Region 6 RBSLs Human Health Residential Soil (HQ=1)
"Eco Soil" EPA Region 6 Tier 1-3 RBSLs Ecological Soil
Median Value determined using 1/2 the Reporting Limit value for Non-Detects if greater than 50% of the values were detected.
Mean Value calculated using 1/2 the Reporting Limit for Non-Detects if greater than 50% of the values were detected.

T = Total Fraction
D = Filtered Fraction (0.45 micron filter)
A = Filtered Fraction (0.1 micron filter)
ND = Non-Detected Value

Table 7-30

Soil 0-6 inches Random

RI/FS Soil Area 4A3 - Sulphur Gulch N, Blind Gulch Rock Piles

Summary of Results

Analyte	Sample Fraction	Units	Total Number of Samples	Percent Detects (%)	SLC	SLC Value	Percent Above SLC	Min RL for ND	Max RL for ND	Min Value	Max Value	Mean Value	Median Value
Nickel	T	mg/kg-dry	10	100	HH Soil (HQ=1)	1600	0			3	68.4	26.6	22.1
Potassium	T	mg/kg-dry	10	100	No SLC					2390	5680	4270	4390
Selenium	T	mg/kg-dry	10	100	HH Soil (HQ=1)	390	0			0.65	1.1	0.92	0.94
Silver	T	mg/kg-dry	10	100	HH Soil (HQ=1)	390	0			0.45	6.5	1.2	0.6
Sodium	T	mg/kg-dry	10	50	No SLC			33.60	101.00	ND	459	131	46.6
Thallium	T	mg/kg-dry	10	100	HH Soil (HQ=1)	5.5	0			0.22	0.74	0.46	0.45
Vanadium	T	mg/kg-dry	10	100	HH Soil (HQ=1)	78	0			10.9	66.4	37.8	36.2
Zinc	T	mg/kg-dry	10	100	HH Soil (HQ=1)	23000	0			15.2	165	59.6	51

"No SLC" indicates that there is not a Screening Level Criterion for this medium specified for the RI/FS.
"HH Soil (HQ=1)" EPA Region 6 RBSLs Human Health Residential Soil (HQ=1)
"Eco Soil" EPA Region 6 Tier 1-3 RBSLs Ecological Soil
Median Value determined using 1/2 the Reporting Limit value for Non-Detects if greater than 50% of the values were detected.
Mean Value calculated using 1/2 the Reporting Limit for Non-Detects if greater than 50% of the values were detected.

T = Total Fraction
D = Filtered Fraction (0.45 micron filter)
A = Filtered Fraction (0.1 micron filter)
ND = Non-Detected Value

Table 7-31

Soil 0-24 inches Random

RI/FS Soil Area 4A3 - Sulphur Gulch N, Blind Gulch Rock Piles

Summary of Results

Analyte	Sample Fraction	Units	Total Number of Samples	Percent Detects (%)	SLC	SLC Value	Percent Above SLC	Min RL for ND	Max RL for ND	Min Value	Max Value	Mean Value	Median Value
Inorganics													
Cation-Exchange Capacity	T	meq/100g	10	100	No SLC					6.8	27.6	14.7	13.4
Chloride	T	mg/kg-dry	10	20	No SLC			1.10	28.90	ND	7.5		
Fluoride	T	mg/kg-dry	10	100	No SLC					0.19	5.4	1.7	1.6
Nitrate	T	mg/kg-dry	10	10	No SLC			1.10	2.30	ND	2.7		
Organic Soils	T	%	5	100	No SLC					1.6	3.9	2.7	2.6
pH	T	SU	10	100	No SLC					3	7.2	5.1	5
Phosphorus	T	mg/kg-dry	10	100	No SLC					474	1910	1060	974
Sodium Absorption Ratio	T	ratio	10	40	No SLC			0.02	0.05	ND	0.03		
Solids, Percent	T	%	10	100	No SLC					86.8	92	90.5	91
Specific Conductance	T	umhos/cm	10	100	No SLC					295	2320	1080	975
Sulfate	T	mg/kg-dry	10	100	No SLC					5.5	6820	2130	2080
Total Kjeldahl Nitrogen	T	mg/kg-dry	10	90	No SLC			24.80	24.80	ND	145	61.3	45.5
Total Organic Carbon	T	mg/kg-dry	10	40	No SLC			109.00	113.00	ND	7530		
Metals													
Aluminum	T	mg/kg-dry	10	100	No SLC					3900	22800	12400	12100
Antimony	T	mg/kg-dry	10	30	ECO Soil	0.3	0	0.03	0.04	ND	0.05		
Arsenic	T	mg/kg-dry	10	100	ECO Soil	31	0			1.7	4.2	2.9	2.8
Barium	T	mg/kg-dry	10	100	ECO Soil	330	0			35.5	168	112	111
Beryllium	T	mg/kg-dry	10	100	ECO Soil	30	0			0.2	2	0.97	1
Boron	T	mg/kg-dry	10	20	ECO Soil	0.5	100	0.32	0.56	ND	1		
Cadmium	T	mg/kg-dry	10	70	ECO Soil	0.4	42.9	0.02	0.02	ND	1.7	0.4	0.26
Calcium	T	mg/kg-dry	10	100	No SLC					632	20200	10900	11500
Chromium	T	mg/kg-dry	10	100	ECO Soil	7.9	90			5.2	88.7	32.6	30.6
Cobalt	T	mg/kg-dry	10	100	ECO Soil	32	0			0.45	22.3	11.6	13.4
Copper	T	mg/kg-dry	10	100	ECO Soil	54	70			18.9	241	132	161
Iron	T	mg/kg-dry	10	100	No SLC					15800	42400	29000	29500
Lead	T	mg/kg-dry	10	100	ECO Soil	15	90			9.8	185	53	39.4
Magnesium	T	mg/kg-dry	10	100	No SLC					1240	15900	8170	7960
Manganese	T	mg/kg-dry	10	100	ECO Soil	152	80			61.1	1140	521	620
Mercury	T	mg/kg-dry	10	10	ECO Soil	0.1	100	0.02	0.02	ND	0.11		
Molybdenum	T	mg/kg-dry	10	100	ECO Soil	2	100			24.4	839	201	90.5

"No SLC" indicates that there is not a Screening Level Criterion for this medium specified for the RI/FS.
"HH Soil (HQ=1)" EPA Region 6 RBSLs Human Health Residential Soil (HQ=1)
"Eco Soil" EPA Region 6 Tier 1-3 RBSLs Ecological Soil
Median Value determined using 1/2 the Reporting Limit value for Non-Detects if greater than 50% of the values were detected.
Mean Value calculated using 1/2 the Reporting Limit for Non-Detects if greater than 50% of the values were detected.

T = Total Fraction
D = Filtered Fraction (0.45 micron filter)
A = Filtered Fraction (0.1 micron filter)
ND = Non-Detected Value

Table 7-31

Soil 0-24 inches Random

RI/FS Soil Area 4A3 - Sulphur Gulch N, Blind Gulch Rock Piles

Summary of Results

Analyte	Sample Fraction	Units	Total Number of Samples	Percent Detects (%)	SLC	SLC Value	Percent Above SLC	Min RL for ND	Max RL for ND	Min Value	Max Value	Mean Value	Median Value
Nickel	T	mg/kg-dry	10	100	ECO Soil	48	10			2.1	58.8	25.2	22.9
Potassium	T	mg/kg-dry	10	100	No SLC					2450	6140	4310	4320
Selenium	T	mg/kg-dry	10	100	ECO Soil	1	20			0.66	1.1	0.91	0.93
Silver	T	mg/kg-dry	10	90	ECO Soil	2	0	0.45	0.45	ND	0.84	0.58	0.56
Sodium	T	mg/kg-dry	10	40	No SLC			36.30	82.30	ND	395		
Thallium	T	mg/kg-dry	10	100	ECO Soil	1	0			0.2	0.87	0.48	0.47
Vanadium	T	mg/kg-dry	10	100	ECO Soil	2	100			8.2	70.5	37.8	38
Zinc	T	mg/kg-dry	10	100	ECO Soil	120	10			10.6	142	54.5	42.3

"No SLC" indicates that there is not a Screening Level Criterion for this medium specified for the RI/FS.
"HH Soil (HQ=1)" EPA Region 6 RBSLs Human Health Residential Soil (HQ=1)
"Eco Soil" EPA Region 6 Tier 1-3 RBSLs Ecological Soil
Median Value determined using 1/2 the Reporting Limit value for Non-Detects if greater than 50% of the values were detected.
Mean Value calculated using 1/2 the Reporting Limit for Non-Detects if greater than 50% of the values were detected.

T = Total Fraction
D = Filtered Fraction (0.45 micron filter)
A = Filtered Fraction (0.1 micron filter)
ND = Non-Detected Value

Table 7-32

Soil 0-6 inches Biased

RI/FS Soil Area 4A3 - Sulphur Gulch N, Blind Gulch Rock Piles

Summary of Results

Analyte	Sample Fraction	Units	Total Number of Samples	Percent Detects (%)	SLC	SLC Value	Percent Above SLC	Min RL for ND	Max RL for ND	Min Value	Max Value	Mean Value	Median Value
Inorganics													
Cation-Exchange Capacity	T	meq/100g	3	100	No SLC					6.4	16.4	12.2	13.7
Chloride	T	mg/kg-dry	3	33.3	No SLC			2.10	2.20	ND	2.4		
Fluoride	T	mg/kg-dry	3	100	HH Soil (HQ=1)	3700	0			0.51	2.3	1.2	0.68
Nitrate	T	mg/kg-dry	3	0	No SLC			2.10	2.20	ND	ND		
Organic Soils	T	%	3	100	No SLC					1.2	2	1.6	1.7
pH	T	SU	3	100	No SLC					7.5	8	7.8	7.9
Phosphorus	T	mg/kg-dry	3	100	No SLC					21.3	657	273	140
Sodium Absorption Ratio	T	ratio	3	33.3	No SLC			0.03	0.03	ND	0.12		
Solids, Percent	T	%	3	100	No SLC					93.9	98.6	95.5	93.9
Specific Conductance	T	umhos/cm	3	100	No SLC					34.4	148	72.8	36
Sulfate	T	mg/kg-dry	3	100	No SLC					21.8	209	94.4	52.5
Total Kjeldahl Nitrogen	T	mg/kg-dry	3	100	No SLC					39.7	76.3	63.3	73.9
Total Organic Carbon	T	mg/kg-dry	3	33.3	No SLC			102.00	107.00	ND	2340		
Metals													
Aluminum	T	mg/kg-dry	3	100	HH Soil (HQ=1)	76000	0			7550	19100	14100	15700
Antimony	T	mg/kg-dry	3	0	HH Soil (HQ=1)	31	0	0.21	0.23	ND	ND		
Arsenic	T	mg/kg-dry	3	100	HH Soil (HQ=1)	0.39	100			2.2	3.9	3.2	3.6
Barium	T	mg/kg-dry	3	100	HH Soil (HQ=1)	5500	0			14.3	161	91.5	99.3
Beryllium	T	mg/kg-dry	3	100	HH Soil (HQ=1)	150	0			1.4	2.7	2	1.9
Boron	T	mg/kg-dry	3	0	HH Soil (HQ=1)	5500	0	0.22	0.83	ND	ND		
Cadmium	T	mg/kg-dry	3	100	HH Soil (HQ=1)	39	0			0.5	1.7	1	0.81
Calcium	T	mg/kg-dry	3	100	No SLC					11100	15100	13200	13400
Chromium	T	mg/kg-dry	3	100	HH Soil (HQ=1)	210	0			4.4	52.8	31.5	37.4
Cobalt	T	mg/kg-dry	3	100	HH Soil (HQ=1)	900	0			3.4	14.3	9.8	11.7
Copper	T	mg/kg-dry	3	100	HH Soil (HQ=1)	2900	0			98	186	154	179
Iron	T	mg/kg-dry	3	100	HH Soil (HQ=1)	23000	33.3			8430	26000	17300	17500
Lead	T	mg/kg-dry	3	100	HH Soil (HQ=1)	400	0			52.1	205	110	73.6
Magnesium	T	mg/kg-dry	3	100	No SLC					1660	9720	6290	7490
Manganese	T	mg/kg-dry	3	100	HH Soil (HQ=1)	3200	0			1070	1670	1280	1090
Mercury	T	mg/kg-dry	3	0	HH Soil (HQ=1)	23	0	0.02	0.02	ND	ND		
Molybdenum	T	mg/kg-dry	3	100	HH Soil (HQ=1)	390	66.7			280	558	447	503

"No SLC" indicates that there is not a Screening Level Criterion for this medium specified for the RI/FS.
"HH Soil (HQ=1)" EPA Region 6 RBSLs Human Health Residential Soil (HQ=1)
"Eco Soil" EPA Region 6 Tier 1-3 RBSLs Ecological Soil
Median Value determined using 1/2 the Reporting Limit value for Non-Detects if greater than 50% of the values were detected.
Mean Value calculated using 1/2 the Reporting Limit for Non-Detects if greater than 50% of the values were detected.

T = Total Fraction
D = Filtered Fraction (0.45 micron filter)
A = Filtered Fraction (0.1 micron filter)
ND = Non-Detected Value

Table 7-32

Soil 0-6 inches Biased

RI/FS Soil Area 4A3 - Sulphur Gulch N, Blind Gulch Rock Piles

Summary of Results

Analyte	Sample Fraction	Units	Total Number of Samples	Percent Detects (%)	SLC	SLC Value	Percent Above SLC	Min RL for ND	Max RL for ND	Min Value	Max Value	Mean Value	Median Value
Nickel	T	mg/kg-dry	3	100	HH Soil (HQ=1)	1600	0			4.6	35.5	22.6	27.8
Potassium	T	mg/kg-dry	3	100	No SLC					1320	5630	3690	4130
Selenium	T	mg/kg-dry	3	33.3	HH Soil (HQ=1)	390	0	0.55	0.60	ND	1.2		
Silver	T	mg/kg-dry	3	100	HH Soil (HQ=1)	390	0			0.52	1.5	0.97	0.89
Sodium	T	mg/kg-dry	3	33.3	No SLC			56.30	64.60	ND	1270		
Thallium	T	mg/kg-dry	3	100	HH Soil (HQ=1)	5.5	0			0.27	1.1	0.62	0.49
Vanadium	T	mg/kg-dry	3	100	HH Soil (HQ=1)	78	0			9.8	55.8	36.1	42.8
Zinc	T	mg/kg-dry	3	100	HH Soil (HQ=1)	23000	0			95.6	384	212	155

"No SLC" indicates that there is not a Screening Level Criterion for this medium specified for the RI/FS.
"HH Soil (HQ=1)" EPA Region 6 RBSLs Human Health Residential Soil (HQ=1)
"Eco Soil" EPA Region 6 Tier 1-3 RBSLs Ecological Soil
Median Value determined using 1/2 the Reporting Limit value for Non-Detects if greater than 50% of the values were detected.
Mean Value calculated using 1/2 the Reporting Limit for Non-Detects if greater than 50% of the values were detected.

T = Total Fraction
D = Filtered Fraction (0.45 micron filter)
A = Filtered Fraction (0.1 micron filter)
ND = Non-Detected Value

Table 7-33

Soil 0-24 inches Biased

RI/FS Soil Area 4A3 - Sulphur Gulch N, Blind Gulch Rock Piles

Summary of Results

Analyte	Sample Fraction	Units	Total Number of Samples	Percent Detects (%)	SLC	SLC Value	Percent Above SLC	Min RL for ND	Max RL for ND	Min Value	Max Value	Mean Value	Median Value
Inorganics													
Cation-Exchange Capacity	T	meq/100g	3	100	No SLC					3.8	12.2	8.5	9.6
Chloride	T	mg/kg-dry	3	66.7	No SLC			2.10	2.10	ND	5.1	3.6	4.7
Fluoride	T	mg/kg-dry	3	100	No SLC					0.64	3.1	1.5	0.76
Nitrate	T	mg/kg-dry	3	33.3	No SLC			2.10	2.90	ND	3.7		
Organic Soils	T	%	3	100	No SLC					1.2	1.7	1.4	1.5
pH	T	SU	3	100	No SLC					7.5	8	7.8	7.9
Phosphorus	T	mg/kg-dry	3	100	No SLC					172	690	368	241
Sodium Absorption Ratio	T	ratio	3	33.3	No SLC			0.03	0.03	ND	0.12		
Solids, Percent	T	%	3	100	No SLC					71.1	97.9	87.7	94.2
Specific Conductance	T	umhos/cm	3	100	No SLC					36.7	168	84.3	48.1
Sulfate	T	mg/kg-dry	3	100	No SLC					10.7	264	100	26.2
Total Kjeldahl Nitrogen	T	mg/kg-dry	3	100	No SLC					41.7	90.1	59.1	45.6
Total Organic Carbon	T	mg/kg-dry	3	33.3	No SLC			103.00	107.00	ND	4040		
Metals													
Aluminum	T	mg/kg-dry	3	100	No SLC					7780	24300	15100	13200
Antimony	T	mg/kg-dry	3	0	ECO Soil	0.3	0	0.17	0.38	ND	ND		
Arsenic	T	mg/kg-dry	3	100	ECO Soil	31	0			1.7	5.6	3.5	3.1
Barium	T	mg/kg-dry	3	100	ECO Soil	330	0			15.9	203	94.7	65.3
Beryllium	T	mg/kg-dry	3	100	ECO Soil	30	0			1.4	2.4	2.1	2.4
Boron	T	mg/kg-dry	3	0	ECO Soil	0.5	0	0.30	0.57	ND	ND		
Cadmium	T	mg/kg-dry	3	100	ECO Soil	0.4	66.7			0.3	2.1	1.3	1.5
Calcium	T	mg/kg-dry	3	100	No SLC					12000	19100	15300	14900
Chromium	T	mg/kg-dry	3	100	ECO Soil	7.9	66.7			4.4	74.8	35.5	27.4
Cobalt	T	mg/kg-dry	3	100	ECO Soil	32	0			3.7	21.3	11.5	9.4
Copper	T	mg/kg-dry	3	100	ECO Soil	54	100			70.1	238	178	227
Iron	T	mg/kg-dry	3	100	No SLC					7920	35900	19200	13700
Lead	T	mg/kg-dry	3	100	ECO Soil	15	100			46.2	1360	507	116
Magnesium	T	mg/kg-dry	3	100	No SLC					1620	13700	6950	5520
Manganese	T	mg/kg-dry	3	100	ECO Soil	152	100			1070	1590	1370	1450
Mercury	T	mg/kg-dry	3	0	ECO Soil	0.1	0	0.02	0.03	ND	ND		
Molybdenum	T	mg/kg-dry	3	100	ECO Soil	2	100			265	731	569	711

"No SLC" indicates that there is not a Screening Level Criterion for this medium specified for the RI/FS.
"HH Soil (HQ=1)" EPA Region 6 RBSLs Human Health Residential Soil (HQ=1)
"Eco Soil" EPA Region 6 Tier 1-3 RBSLs Ecological Soil
Median Value determined using 1/2 the Reporting Limit value for Non-Detects if greater than 50% of the values were detected.
Mean Value calculated using 1/2 the Reporting Limit for Non-Detects if greater than 50% of the values were detected.

T = Total Fraction
D = Filtered Fraction (0.45 micron filter)
A = Filtered Fraction (0.1 micron filter)
ND = Non-Detected Value

Table 7-33

Soil 0-24 inches Biased

RI/FS Soil Area 4A3 - Sulphur Gulch N, Blind Gulch Rock Piles

Summary of Results

Analyte	Sample Fraction	Units	Total Number of Samples	Percent Detects (%)	SLC	SLC Value	Percent Above SLC	Min RL for ND	Max RL for ND	Min Value	Max Value	Mean Value	Median Value
Nickel	T	mg/kg-dry	3	100	ECO Soil	48	33.3			4.8	49.5	25.2	21.3
Potassium	T	mg/kg-dry	3	100	No SLC					1460	7270	4110	3590
Selenium	T	mg/kg-dry	3	100	ECO Soil	1	33.3			0.55	1.3	0.94	0.96
Silver	T	mg/kg-dry	3	100	ECO Soil	2	33.3			0.45	3	1.6	1.2
Sodium	T	mg/kg-dry	3	33.3	No SLC			51.30	101.00	ND	1080		
Thallium	T	mg/kg-dry	3	100	ECO Soil	1	0			0.26	1	0.65	0.69
Vanadium	T	mg/kg-dry	3	100	ECO Soil	2	100			9.7	75.9	40	34.4
Zinc	T	mg/kg-dry	3	100	ECO Soil	120	66.7			69.8	525	284	258

"No SLC" indicates that there is not a Screening Level Criterion for this medium specified for the RI/FS.
"HH Soil (HQ=1)" EPA Region 6 RBSLs Human Health Residential Soil (HQ=1)
"Eco Soil" EPA Region 6 Tier 1-3 RBSLs Ecological Soil
Median Value determined using 1/2 the Reporting Limit value for Non-Detects if greater than 50% of the values were detected.
Mean Value calculated using 1/2 the Reporting Limit for Non-Detects if greater than 50% of the values were detected.

T = Total Fraction
D = Filtered Fraction (0.45 micron filter)
A = Filtered Fraction (0.1 micron filter)
ND = Non-Detected Value

Table 7-34

Soil 0-6 inches SPLP Random

RI/FS Soil Area 4A1 - Capulin and Goathill N and S Rock Piles

Summary of Results

Analyte	Sample Fraction	Units	Total Number of Samples	Percent Detects (%)	SLC	SLC Value	Percent Above SLC	Min RL for ND	Max RL for ND	Min Value	Max Value	Mean Value	Median Value
Inorganics													
Bicarbonate (as CaCO3)	T	mg/L	1	0	No SLC			1.00	1.00	ND	ND		
Carbonate (as CaCO3)	T	mg/L	1	0	No SLC			1.00	1.00	ND	ND		
Chloride	T	mg/L	1	100	No SLC					1.6	1.6	1.6	1.6
Cyanide	T	mg/L	1	0	HH Soil (HQ=1)	1200	0	0.01	0.01	ND	ND		
Fluoride	T	mg/L	1	100	HH Soil (HQ=1)	3700	0			0.12	0.12	0.12	0.12
Hydroxide (as CaCO3)	T	mg/L	1	0	No SLC			1.00	1.00	ND	ND		
Nitrate	T	mg/L	1	0	No SLC			0.40	0.40	ND	ND		
Nitrite	T	mg/L	1	0	No SLC			0.01	0.01	ND	ND		
Phosphate, Ortho As P	T	mg/L	1	0	No SLC			0.01	0.01	ND	ND		
Phosphorus	T	mg/L	1	100	No SLC					0.013	0.013	0.013	0.013
Sulfate	T	mg/L	1	100	No SLC					823	823	823	823
Total Alkalinity	T	mg/L	1	0	No SLC			1.00	1.00	ND	ND		
Total Kjeldahl Nitrogen	T	mg/L	1	0	No SLC			0.24	0.24	ND	ND		
Metals													
Aluminum	T	mg/L	1	100	HH Soil (HQ=1)	76000	0			2.8	2.8	2.8	2.8
Antimony	T	mg/L	1	100	HH Soil (HQ=1)	31	0			0.0002	0.0002	0.0002	0.0002
Arsenic	T	mg/L	1	0	HH Soil (HQ=1)	0.39	0	0.00	0.00	ND	ND		
Barium	T	mg/L	1	0	HH Soil (HQ=1)	5500	0	0.09	0.09	ND	ND		
Beryllium	T	mg/L	1	100	HH Soil (HQ=1)	150	0			0.0011	0.0011	0.0011	0.0011
Boron	T	mg/L	1	0	HH Soil (HQ=1)	5500	0	0.07	0.07	ND	ND		
Cadmium	T	mg/L	1	100	HH Soil (HQ=1)	39	0			0.00016	0.00016	0.00016	0.00016
Calcium	T	mg/L	1	100	No SLC					143	143	143	143
Chromium	T	mg/L	1	0	HH Soil (HQ=1)	210	0	0.00	0.00	ND	ND		
Cobalt	T	mg/L	1	100	HH Soil (HQ=1)	900	0			0.0063	0.0063	0.0063	0.0063
Copper	T	mg/L	1	100	HH Soil (HQ=1)	2900	0			0.11	0.11	0.1	0.1
Iron	T	mg/L	1	100	HH Soil (HQ=1)	23000	0			0.54	0.54	0.54	0.54
Lead	T	mg/L	1	100	HH Soil (HQ=1)	400	0			0.0014	0.0014	0.0014	0.0014
Magnesium	T	mg/L	1	100	No SLC					1.9	1.9	1.9	1.9
Manganese	T	mg/L	1	100	HH Soil (HQ=1)	3200	0			0.33	0.33	0.32	0.32
Mercury	T	mg/L	1	0	HH Soil (HQ=1)	23	0	0.01	0.01	ND	ND		
Molybdenum	T	mg/L	1	0	HH Soil (HQ=1)	390	0	0.00	0.00	ND	ND		

"No SLC" indicates that there is not a Screening Level Criterion for this medium specified for the RI/FS.
"HH Soil (HQ=1)" EPA Region 6 RBSLs Human Health Residential Soil (HQ=1)
"Eco Soil" EPA Region 6 Tier 1-3 RBSLs Ecological Soil
Median Value determined using 1/2 the Reporting Limit value for Non-Detects if greater than 50% of the values were detected.
Mean Value calculated using 1/2 the Reporting Limit for Non-Detects if greater than 50% of the values were detected.

T = Total Fraction
D = Filtered Fraction (0.45 micron filter)
A = Filtered Fraction (0.1 micron filter)
ND = Non-Detected Value

Table 7-34

Soil 0-6 inches SPLP Random

RI/FS Soil Area 4A1 - Capulin and Goathill N and S Rock Piles

Summary of Results

Analyte	Sample Fraction	Units	Total Number of Samples	Percent Detects (%)	SLC	SLC Value	Percent Above SLC	Min RL for ND	Max RL for ND	Min Value	Max Value	Mean Value	Median Value
Nickel	T	mg/L	1	100	HH Soil (HQ=1)	1600	0			0.016	0.016	0.016	0.016
Potassium	T	mg/L	1	0	No SLC			1.60	1.60	ND	ND		
Selenium	T	mg/L	1	0	HH Soil (HQ=1)	390	0	0.00	0.00	ND	ND		
Silver	T	mg/L	1	0	HH Soil (HQ=1)	390	0	0.00	0.00	ND	ND		
Thallium	T	mg/L	1	0	HH Soil (HQ=1)	5.5	0	0.00	0.00	ND	ND		
Vanadium	T	mg/L	1	0	HH Soil (HQ=1)	78	0	0.00	0.00	ND	ND		
Zinc	T	mg/L	1	100	HH Soil (HQ=1)	23000	0			0.11	0.11	0.11	0.11

"No SLC" indicates that there is not a Screening Level Criterion for this medium specified for the RI/FS.
"HH Soil (HQ=1)" EPA Region 6 RBSLs Human Health Residential Soil (HQ=1)
"Eco Soil" EPA Region 6 Tier 1-3 RBSLs Ecological Soil
Median Value determined using 1/2 the Reporting Limit value for Non-Detects if greater than 50% of the values were detected.
Mean Value calculated using 1/2 the Reporting Limit for Non-Detects if greater than 50% of the values were detected.

T = Total Fraction
D = Filtered Fraction (0.45 micron filter)
A = Filtered Fraction (0.1 micron filter)
ND = Non-Detected Value

Table 7-35

Soil 0-6 inches SPLP Random

RI/FS Soil Area 4A2 - Sugar Shack S, W, Mid, Sulphur Gulch Rock Piles

Summary of Results

Analyte	Sample Fraction	Units	Total Number of Samples	Percent Detects (%)	SLC	SLC Value	Percent Above SLC	Min RL for ND	Max RL for ND	Min Value	Max Value	Mean Value	Median Value
Inorganics													
Bicarbonate (as CaCO3)	T	mg/L	2	0	No SLC			1.00	1.00	ND	ND		
Carbonate (as CaCO3)	T	mg/L	2	0	No SLC			1.00	1.00	ND	ND		
Chloride	T	mg/L	2	50	No SLC			5.00	5.00	ND	2.6	2.5	2.5
Cyanide	T	mg/L	1	0	HH Soil (HQ=1)	1200	0	0.01	0.01	ND	ND		
Fluoride	T	mg/L	2	50	HH Soil (HQ=1)	3700	0	0.10	0.10	ND	0.18	0.12	0.12
Hydroxide (as CaCO3)	T	mg/L	2	0	No SLC			1.00	1.00	ND	ND		
Nitrate	T	mg/L	2	0	No SLC			0.40	0.50	ND	ND		
Nitrite	T	mg/L	1	0	No SLC			0.01	0.01	ND	ND		
Phosphate, Ortho As P	T	mg/L	1	0	No SLC			0.01	0.01	ND	ND		
Phosphorus	T	mg/L	2	100	No SLC					0.015	0.036	0.025	0.025
Sulfate	T	mg/L	2	100	No SLC					1500	1580	1540	1540
Total Alkalinity	T	mg/L	2	0	No SLC			1.00	1.00	ND	ND		
Total Kjeldahl Nitrogen	T	mg/L	2	0	No SLC			0.24	0.24	ND	ND		
Metals													
Aluminum	T	mg/L	2	100	HH Soil (HQ=1)	76000	0			3.5	4.5	4	4
Antimony	T	mg/L	2	50	HH Soil (HQ=1)	31	0	0.00	0.00	ND	0.0002	0.00015	0.00015
Arsenic	T	mg/L	2	0	HH Soil (HQ=1)	0.39	0	0.00	0.00	ND	ND		
Barium	T	mg/L	2	100	HH Soil (HQ=1)	5500	0			0.0094	0.011	0.01	0.01
Beryllium	T	mg/L	2	100	HH Soil (HQ=1)	150	0			0.00094	0.0012	0.0011	0.0011
Boron	T	mg/L	2	50	HH Soil (HQ=1)	5500	0	0.05	0.05	ND	0.081	0.052	0.052
Cadmium	T	mg/L	2	100	HH Soil (HQ=1)	39	0			0.0001	0.00037	0.00023	0.00023
Calcium	T	mg/L	2	100	No SLC					290	366	328	328
Chromium	T	mg/L	2	50	HH Soil (HQ=1)	210	0	0.00	0.00	ND	0.0044	0.0034	0.0034
Cobalt	T	mg/L	2	50	HH Soil (HQ=1)	900	0	0.00	0.00	ND	0.007	0.0041	0.0041
Copper	T	mg/L	2	100	HH Soil (HQ=1)	2900	0			0.052	0.14	0.097	0.097
Iron	T	mg/L	2	100	HH Soil (HQ=1)	23000	0			0.36	0.46	0.41	0.41
Lead	T	mg/L	2	100	HH Soil (HQ=1)	400	0			0.0015	0.0042	0.0028	0.0028
Magnesium	T	mg/L	2	100	No SLC					0.85	1.6	1.2	1.2
Manganese	T	mg/L	2	100	HH Soil (HQ=1)	3200	0			0.25	0.36	0.3	0.3
Mercury	T	mg/L	2	0	HH Soil (HQ=1)	23	0	0.01	0.01	ND	ND		
Molybdenum	T	mg/L	2	0	HH Soil (HQ=1)	390	0	0.00	0.00	ND	ND		

"No SLC" indicates that there is not a Screening Level Criterion for this medium specified for the RI/FS.
"HH Soil (HQ=1)" EPA Region 6 RBSLs Human Health Residential Soil (HQ=1)
"Eco Soil" EPA Region 6 Tier 1-3 RBSLs Ecological Soil
Median Value determined using 1/2 the Reporting Limit value for Non-Detects if greater than 50% of the values were detected.
Mean Value calculated using 1/2 the Reporting Limit for Non-Detects if greater than 50% of the values were detected.

T = Total Fraction
D = Filtered Fraction (0.45 micron filter)
A = Filtered Fraction (0.1 micron filter)
ND = Non-Detected Value

Table 7-35

Soil 0-6 inches SPLP Random

RI/FS Soil Area 4A2 - Sugar Shack S, W, Mid, Sulphur Gulch Rock Piles

Summary of Results

Analyte	Sample Fraction	Units	Total Number of Samples	Percent Detects (%)	SLC	SLC Value	Percent Above SLC	Min RL for ND	Max RL for ND	Min Value	Max Value	Mean Value	Median Value
Nickel	T	mg/L	2	100	HH Soil (HQ=1)	1600	0			0.0052	0.0061	0.0056	0.0056
Potassium	T	mg/L	2	100	No SLC					0.65	0.91	0.78	0.78
Selenium	T	mg/L	2	0	HH Soil (HQ=1)	390	0	0.00	0.00	ND	ND		
Silver	T	mg/L	2	0	HH Soil (HQ=1)	390	0	0.00	0.00	ND	ND		
Thallium	T	mg/L	2	0	HH Soil (HQ=1)	5.5	0	0.00	0.00	ND	ND		
Vanadium	T	mg/L	2	50	HH Soil (HQ=1)	78	0	0.00	0.00	ND	0.00022	0.00014	0.00014
Zinc	T	mg/L	2	100	HH Soil (HQ=1)	23000	0			0.045	0.11	0.077	0.077

"No SLC" indicates that there is not a Screening Level Criterion for this medium specified for the RI/FS.
"HH Soil (HQ=1)" EPA Region 6 RBSLs Human Health Residential Soil (HQ=1)
"Eco Soil" EPA Region 6 Tier 1-3 RBSLs Ecological Soil
Median Value determined using 1/2 the Reporting Limit value for Non-Detects if greater than 50% of the values were detected.
Mean Value calculated using 1/2 the Reporting Limit for Non-Detects if greater than 50% of the values were detected.

T = Total Fraction
D = Filtered Fraction (0.45 micron filter)
A = Filtered Fraction (0.1 micron filter)
ND = Non-Detected Value

Table 7-36

Soil 0-6 inches SPLP Random

RI/FS Soil Area 4A3 - Sulphur Gulch N, Blind Gulch Rock Piles

Summary of Results

Analyte	Sample Fraction	Units	Total Number of Samples	Percent Detects (%)	SLC	SLC Value	Percent Above SLC	Min RL for ND	Max RL for ND	Min Value	Max Value	Mean Value	Median Value
Inorganics													
Bicarbonate (as CaCO3)	T	mg/L	1	0	No SLC			1.00	1.00	ND	ND		
Carbonate (as CaCO3)	T	mg/L	1	0	No SLC			1.00	1.00	ND	ND		
Chloride	T	mg/L	1	0	No SLC			5.00	5.00	ND	ND		
Cyanide	T	mg/L	1	0	HH Soil (HQ=1)	1200	0	0.01	0.01	ND	ND		
Fluoride	T	mg/L	1	100	HH Soil (HQ=1)	3700	0			0.27	0.27	0.27	0.27
Hydroxide (as CaCO3)	T	mg/L	1	0	No SLC			1.00	1.00	ND	ND		
Nitrate	T	mg/L	1	0	No SLC			0.50	0.50	ND	ND		
Nitrite	T	mg/L	1	0	No SLC			0.01	0.01	ND	ND		
Phosphate, Ortho As P	T	mg/L	1	100	No SLC					0.014	0.014	0.014	0.014
Phosphorus	T	mg/L	1	100	No SLC					0.026	0.026	0.026	0.026
Sulfate	T	mg/L	1	100	No SLC					529	529	529	529
Total Alkalinity	T	mg/L	1	0	No SLC			1.00	1.00	ND	ND		
Total Kjeldahl Nitrogen	T	mg/L	1	0	No SLC			0.24	0.24	ND	ND		
Metals													
Aluminum	T	mg/L	1	100	HH Soil (HQ=1)	76000	0			10.6	10.6	10.6	10.6
Antimony	T	mg/L	1	0	HH Soil (HQ=1)	31	0	0.00	0.00	ND	ND		
Arsenic	T	mg/L	1	0	HH Soil (HQ=1)	0.39	0	0.00	0.00	ND	ND		
Barium	T	mg/L	1	100	HH Soil (HQ=1)	5500	0			0.018	0.018	0.018	0.018
Beryllium	T	mg/L	1	100	HH Soil (HQ=1)	150	0			0.0016	0.0016	0.0016	0.0016
Boron	T	mg/L	1	0	HH Soil (HQ=1)	5500	0	0.05	0.05	ND	ND		
Cadmium	T	mg/L	1	100	HH Soil (HQ=1)	39	0			0.0006	0.0006	0.0006	0.0006
Calcium	T	mg/L	1	100	No SLC					28.7	28.7	28.7	28.7
Chromium	T	mg/L	1	100	HH Soil (HQ=1)	210	0			0.0079	0.0079	0.0079	0.0079
Cobalt	T	mg/L	1	100	HH Soil (HQ=1)	900	0			0.034	0.034	0.034	0.034
Copper	T	mg/L	1	100	HH Soil (HQ=1)	2900	0			0.45	0.45	0.45	0.45
Iron	T	mg/L	1	100	HH Soil (HQ=1)	23000	0			0.6	0.6	0.6	0.6
Lead	T	mg/L	1	100	HH Soil (HQ=1)	400	0			0.00023	0.00023	0.00023	0.00023
Magnesium	T	mg/L	1	100	No SLC					8.6	8.6	8.6	8.6
Manganese	T	mg/L	1	100	HH Soil (HQ=1)	3200	0			1.1	1.1	1.1	1.1
Mercury	T	mg/L	1	0	HH Soil (HQ=1)	23	0	0.01	0.01	ND	ND		
Molybdenum	T	mg/L	1	0	HH Soil (HQ=1)	390	0	0.00	0.00	ND	ND		

"No SLC" indicates that there is not a Screening Level Criterion for this medium specified for the RI/FS.
"HH Soil (HQ=1)" EPA Region 6 RBSLs Human Health Residential Soil (HQ=1)
"Eco Soil" EPA Region 6 Tier 1-3 RBSLs Ecological Soil
Median Value determined using 1/2 the Reporting Limit value for Non-Detects if greater than 50% of the values were detected.
Mean Value calculated using 1/2 the Reporting Limit for Non-Detects if greater than 50% of the values were detected.

T = Total Fraction
D = Filtered Fraction (0.45 micron filter)
A = Filtered Fraction (0.1 micron filter)
ND = Non-Detected Value

Table 7-36

Soil 0-6 inches SPLP Random

RI/FS Soil Area 4A3 - Sulphur Gulch N, Blind Gulch Rock Piles

Summary of Results

Analyte	Sample Fraction	Units	Total Number of Samples	Percent Detects (%)	SLC	SLC Value	Percent Above SLC	Min RL for ND	Max RL for ND	Min Value	Max Value	Mean Value	Median Value
Nickel	T	mg/L	1	100	HH Soil (HQ=1)	1600	0			0.064	0.064	0.064	0.064
Potassium	T	mg/L	1	100	No SLC					1.7	1.7	1.7	1.7
Selenium	T	mg/L	1	0	HH Soil (HQ=1)	390	0	0.00	0.00	ND	ND		
Silver	T	mg/L	1	0	HH Soil (HQ=1)	390	0	0.00	0.00	ND	ND		
Thallium	T	mg/L	1	0	HH Soil (HQ=1)	5.5	0	0.00	0.00	ND	ND		
Vanadium	T	mg/L	1	100	HH Soil (HQ=1)	78	0			0.00018	0.00018	0.00018	0.00018
Zinc	T	mg/L	1	100	HH Soil (HQ=1)	23000	0			0.24	0.24	0.24	0.24

"No SLC" indicates that there is not a Screening Level Criterion for this medium specified for the RI/FS.
"HH Soil (HQ=1)" EPA Region 6 RBSLs Human Health Residential Soil (HQ=1)
"Eco Soil" EPA Region 6 Tier 1-3 RBSLs Ecological Soil
Median Value determined using 1/2 the Reporting Limit value for Non-Detects if greater than 50% of the values were detected.
Mean Value calculated using 1/2 the Reporting Limit for Non-Detects if greater than 50% of the values were detected.

T = Total Fraction
D = Filtered Fraction (0.45 micron filter)
A = Filtered Fraction (0.1 micron filter)
ND = Non-Detected Value

Table 7-37
Soil 0-6 inches Random
RI/FS Soil Area 5 - Spring Gulch RP and Truck Slice Area
Summary of Results

Analyte	Sample Fraction	Units	Total Number of Samples	Percent Detects (%)	SLC	SLC Value	Percent Above SLC	Min RL for ND	Max RL for ND	Min Value	Max Value	Mean Value	Median Value
Inorganics													
Cation-Exchange Capacity	T	meq/100g	10	100	No SLC					3.9	21	12.1	12.5
Chloride	T	mg/kg-dry	10	20	No SLC			0.22	27.90	ND	135		
Fluoride	T	mg/kg-dry	9	100	HH Soil (HQ=1)	3700	0			0.35	4	2	2
Nitrate	T	mg/kg-dry	10	0	No SLC			0.22	4.30	ND	ND		
Organic Soils	T	%	8	100	No SLC					0.81	3.4	1.8	1.7
pH	T	SU	10	100	No SLC					3.9	8.2	6.3	6.9
Phosphorus	T	mg/kg-dry	10	100	No SLC					17.7	1180	433	387
Sodium Absorption Ratio	T	ratio	10	30	No SLC			0.02	0.09	ND	0.25		
Solids, Percent	T	%	10	100	No SLC					89.8	94.9	92.4	92
Specific Conductance	T	umhos/cm	10	100	No SLC					20.7	3680	685	151
Sulfate	T	mg/kg-dry	10	100	No SLC					13.7	27700	3010	48.3
Total Kjeldahl Nitrogen	T	mg/kg-dry	10	90	No SLC			24.90	24.90	ND	498	91	44.4
Total Organic Carbon	T	mg/kg-dry	10	30	No SLC			106.00	111.00	ND	8710		
Metals													
Aluminum	T	mg/kg-dry	10	100	HH Soil (HQ=1)	76000	0			5760	21300	10800	8820
Antimony	T	mg/kg-dry	10	10	HH Soil (HQ=1)	31	0	0.04	0.25	ND	0.12		
Arsenic	T	mg/kg-dry	10	100	HH Soil (HQ=1)	0.39	100			1.4	7	3	2.9
Barium	T	mg/kg-dry	10	100	HH Soil (HQ=1)	5500	0			5.6	341	116	84.4
Beryllium	T	mg/kg-dry	10	100	HH Soil (HQ=1)	150	0			0.28	2.5	1.1	1
Boron	T	mg/kg-dry	10	60	HH Soil (HQ=1)	5500	0	0.35	0.48	ND	7.9	2.5	1.2
Cadmium	T	mg/kg-dry	10	60	HH Soil (HQ=1)	39	0	0.02	0.03	ND	1.4	0.41	0.047
Calcium	T	mg/kg-dry	10	100	No SLC					653	22600	12800	12700
Chromium	T	mg/kg-dry	10	100	HH Soil (HQ=1)	210	0			1.6	73.8	28.6	22.9
Cobalt	T	mg/kg-dry	10	100	HH Soil (HQ=1)	900	0			1.8	30	10.2	7.9
Copper	T	mg/kg-dry	10	100	HH Soil (HQ=1)	2900	0			33.6	257	135	136
Iron	T	mg/kg-dry	10	100	HH Soil (HQ=1)	23000	40			5620	41200	22000	17400
Lead	T	mg/kg-dry	10	100	HH Soil (HQ=1)	400	0			10.9	249	90.9	64.9
Magnesium	T	mg/kg-dry	10	100	No SLC					1180	21900	6700	5230
Manganese	T	mg/kg-dry	10	100	HH Soil (HQ=1)	3200	10			207	4650	1110	760
Mercury	T	mg/kg-dry	10	0	HH Soil (HQ=1)	23	0	0.02	0.02	ND	ND		
Molybdenum	T	mg/kg-dry	10	100	HH Soil (HQ=1)	390	20			79.1	1190	335	264

"No SLC" indicates that there is not a Screening Level Criterion for this medium specified for the RI/FS.
"HH Soil (HQ=1)" EPA Region 6 RBSLs Human Health Residential Soil (HQ=1)
"Eco Soil" EPA Region 6 Tier 1-3 RBSLs Ecological Soil
Median Value determined using 1/2 the Reporting Limit value for Non-Detects if greater than 50% of the values were detected.
Mean Value calculated using 1/2 the Reporting Limit for Non-Detects if greater than 50% of the values were detected.

T = Total Fraction
D = Filtered Fraction (0.45 micron filter)
A = Filtered Fraction (0.1 micron filter)
ND = Non-Detected Value

Table 7-37

Soil 0-6 inches Random

RI/FS Soil Area 5 - Spring Gulch RP and Truck Slice Area

Summary of Results

Analyte	Sample Fraction	Units	Total Number of Samples	Percent Detects (%)	SLC	SLC Value	Percent Above SLC	Min RL for ND	Max RL for ND	Min Value	Max Value	Mean Value	Median Value
Nickel	T	mg/kg-dry	10	100	HH Soil (HQ=1)	1600	0			1.6	47.3	21.1	14.5
Potassium	T	mg/kg-dry	10	100	No SLC					937	8030	3380	2710
Selenium	T	mg/kg-dry	10	90	HH Soil (HQ=1)	390	0	0.67	0.67	ND	2.7	1	0.85
Silver	T	mg/kg-dry	10	100	HH Soil (HQ=1)	390	0			0.31	1.9	0.72	0.48
Sodium	T	mg/kg-dry	10	30	No SLC			39.60	53.50	ND	666		
Thallium	T	mg/kg-dry	10	90	HH Soil (HQ=1)	5.5	0	0.09	0.09	ND	0.72	0.31	0.28
Vanadium	T	mg/kg-dry	10	100	HH Soil (HQ=1)	78	10			6.6	92.9	35	31.9
Zinc	T	mg/kg-dry	10	100	HH Soil (HQ=1)	23000	0			31.4	249	90.8	53.6

"No SLC" indicates that there is not a Screening Level Criterion for this medium specified for the RI/FS.
"HH Soil (HQ=1)" EPA Region 6 RBSLs Human Health Residential Soil (HQ=1)
"Eco Soil" EPA Region 6 Tier 1-3 RBSLs Ecological Soil
Median Value determined using 1/2 the Reporting Limit value for Non-Detects if greater than 50% of the values were detected.
Mean Value calculated using 1/2 the Reporting Limit for Non-Detects if greater than 50% of the values were detected.

T = Total Fraction
D = Filtered Fraction (0.45 micron filter)
A = Filtered Fraction (0.1 micron filter)
ND = Non-Detected Value

Table 7-38

Soil 0-24 inches Random

RI/FS Soil Area 5 - Spring Gulch RP and Truck Slice Area

Summary of Results

Analyte	Sample Fraction	Units	Total Number of Samples	Percent Detects (%)	SLC	SLC Value	Percent Above SLC	Min RL for ND	Max RL for ND	Min Value	Max Value	Mean Value	Median Value
Inorganics													
Cation-Exchange Capacity	T	meq/100g	10	100	No SLC					3.3	24.7	14.3	14.9
Chloride	T	mg/kg-dry	10	20	No SLC			2.20	28.20	ND	64.3		
Fluoride	T	mg/kg-dry	9	100	No SLC					0.55	4.9	2.1	1.2
Nitrate	T	mg/kg-dry	10	10	No SLC			0.22	2.90	ND	7.6		
Organic Soils	T	%	8	100	No SLC					0.87	3.4	1.9	1.8
pH	T	SU	10	100	No SLC					4	8	6.2	7
Phosphorus	T	mg/kg-dry	10	100	No SLC					38.1	977	329	267
Sodium Absorption Ratio	T	ratio	10	50	No SLC			0.02	0.05	ND	0.25	0.05	0.027
Solids, Percent	T	%	10	100	No SLC					88.8	93.8	91.8	92.5
Specific Conductance	T	umhos/cm	10	100	No SLC					22.8	1650	473	239
Sulfate	T	mg/kg-dry	10	100	No SLC					25	7440	1070	79.7
Total Kjeldahl Nitrogen	T	mg/kg-dry	10	60	No SLC			24.60	26.10	ND	410	72.4	34.6
Total Organic Carbon	T	mg/kg-dry	10	40	No SLC			108.00	113.00	ND	5010		
Metals													
Aluminum	T	mg/kg-dry	10	100	No SLC					5650	23700	11400	9720
Antimony	T	mg/kg-dry	10	10	ECO Soil	0.3	0	0.04	0.25	ND	0.1		
Arsenic	T	mg/kg-dry	10	100	ECO Soil	31	0			0.85	6.7	2.8	2.6
Barium	T	mg/kg-dry	10	100	ECO Soil	330	0			8	330	122	93.5
Beryllium	T	mg/kg-dry	10	100	ECO Soil	30	0			0.28	2.3	1	1
Boron	T	mg/kg-dry	10	60	ECO Soil	0.5	100	0.31	0.46	ND	9.2	3	1.2
Cadmium	T	mg/kg-dry	10	60	ECO Soil	0.4	50	0.03	0.03	ND	1.3	0.36	0.094
Calcium	T	mg/kg-dry	10	100	No SLC					714	27700	14000	13000
Chromium	T	mg/kg-dry	10	100	ECO Soil	7.9	70			3.4	74.8	31.1	27.7
Cobalt	T	mg/kg-dry	10	100	ECO Soil	32	10			1.9	35.9	12.2	9.8
Copper	T	mg/kg-dry	10	100	ECO Soil	54	90			35.6	282	140	137
Iron	T	mg/kg-dry	10	100	No SLC					6750	50000	23600	23100
Lead	T	mg/kg-dry	10	100	ECO Soil	15	90			9.9	245	81.2	59.1
Magnesium	T	mg/kg-dry	10	100	No SLC					817	25400	7440	5690
Manganese	T	mg/kg-dry	10	100	ECO Soil	152	100			200	4240	1060	765
Mercury	T	mg/kg-dry	10	0	ECO Soil	0.1	0	0.02	0.02	ND	ND		
Molybdenum	T	mg/kg-dry	10	100	ECO Soil	2	100			59.6	555	262	192

"No SLC" indicates that there is not a Screening Level Criterion for this medium specified for the RI/FS.
"HH Soil (HQ=1)" EPA Region 6 RBSLs Human Health Residential Soil (HQ=1)
"Eco Soil" EPA Region 6 Tier 1-3 RBSLs Ecological Soil
Median Value determined using 1/2 the Reporting Limit value for Non-Detects if greater than 50% of the values were detected.
Mean Value calculated using 1/2 the Reporting Limit for Non-Detects if greater than 50% of the values were detected.

T = Total Fraction
D = Filtered Fraction (0.45 micron filter)
A = Filtered Fraction (0.1 micron filter)
ND = Non-Detected Value

Table 7-38

Soil 0-24 inches Random

RI/FS Soil Area 5 - Spring Gulch RP and Truck Slice Area

Summary of Results

Analyte	Sample Fraction	Units	Total Number of Samples	Percent Detects (%)	SLC	SLC Value	Percent Above SLC	Min RL for ND	Max RL for ND	Min Value	Max Value	Mean Value	Median Value
Nickel	T	mg/kg-dry	10	100	ECO Soil	48	10			2	52.6	21	19.8
Potassium	T	mg/kg-dry	10	100	No SLC					973	8780	3600	2980
Selenium	T	mg/kg-dry	10	90	ECO Soil	1	22.2	0.66	0.66	ND	2.6	0.93	0.81
Silver	T	mg/kg-dry	10	100	ECO Soil	2	10			0.2	2.3	0.74	0.47
Sodium	T	mg/kg-dry	10	30	No SLC			43.70	54.20	ND	572		
Thallium	T	mg/kg-dry	10	100	ECO Soil	1	0			0.09	0.77	0.34	0.31
Vanadium	T	mg/kg-dry	10	100	ECO Soil	2	100			6.9	110	38.1	31.4
Zinc	T	mg/kg-dry	10	100	ECO Soil	120	30			28.8	205	86	58.7

"No SLC" indicates that there is not a Screening Level Criterion for this medium specified for the RI/FS.
"HH Soil (HQ=1)" EPA Region 6 RBSLs Human Health Residential Soil (HQ=1)
"Eco Soil" EPA Region 6 Tier 1-3 RBSLs Ecological Soil
Median Value determined using 1/2 the Reporting Limit value for Non-Detects if greater than 50% of the values were detected.
Mean Value calculated using 1/2 the Reporting Limit for Non-Detects if greater than 50% of the values were detected.

T = Total Fraction
D = Filtered Fraction (0.45 micron filter)
A = Filtered Fraction (0.1 micron filter)
ND = Non-Detected Value

Table 7-39

Soil 0-6 inches Biased

RI/FS Soil Area 5 - Spring Gulch RP and Truck Slice Area

Summary of Results

Analyte	Sample Fraction	Units	Total Number of Samples	Percent Detects (%)	SLC	SLC Value	Percent Above SLC	Min RL for ND	Max RL for ND	Min Value	Max Value	Mean Value	Median Value
Inorganics													
Cation-Exchange Capacity	T	meq/100g	9	100	No SLC					5.9	20.4	13.1	11.3
Chloride	T	mg/kg-dry	9	66.7	No SLC			2.20	2.30	ND	6.4	2.6	2.3
Fluoride	T	mg/kg-dry	9	100	HH Soil (HQ=1)	3700	0			0.47	2.5	1.4	0.93
Nitrate	T	mg/kg-dry	9	22.2	No SLC			2.20	2.30	ND	2.6		
Organic Soils	T	%	9	100	No SLC					1.1	4.5	2.4	2.6
pH	T	SU	9	100	No SLC					3.4	7.6	5.6	5.3
Phosphorus	T	mg/kg-dry	9	100	No SLC					259	1460	994	1140
Sodium Absorption Ratio	T	ratio	9	88.9	No SLC			0.15	0.15	ND	0.22	0.079	0.05
Solids, Percent	T	%	9	100	No SLC					87.2	94.7	91.6	91.3
Specific Conductance	T	umhos/cm	9	100	No SLC					13.6	1310	393	295
Sulfate	T	mg/kg-dry	9	100	No SLC					9.5	1420	563	352
Total Kjeldahl Nitrogen	T	mg/kg-dry	9	77.8	No SLC			22.70	25.40	ND	136	58.9	52.3
Total Organic Carbon	T	mg/kg-dry	9	55.6	No SLC			106.00	115.00	ND	3160	803	146
Metals													
Aluminum	T	mg/kg-dry	9	100	HH Soil (HQ=1)	76000	0			2330	24100	12000	10000
Antimony	T	mg/kg-dry	9	0	HH Soil (HQ=1)	31	0	0.16	0.33	ND	ND		
Arsenic	T	mg/kg-dry	9	100	HH Soil (HQ=1)	0.39	100			1.3	5.4	3	2.9
Barium	T	mg/kg-dry	9	100	HH Soil (HQ=1)	5500	0			9.2	455	196	169
Beryllium	T	mg/kg-dry	9	100	HH Soil (HQ=1)	150	0			0.14	3	1.3	1
Boron	T	mg/kg-dry	9	33.3	HH Soil (HQ=1)	5500	0	0.79	2.80	ND	2.1		
Cadmium	T	mg/kg-dry	9	66.7	HH Soil (HQ=1)	39	0	0.04	0.04	ND	2.7	0.71	0.17
Calcium	T	mg/kg-dry	9	100	No SLC					430	17800	7270	2720
Chromium	T	mg/kg-dry	9	100	HH Soil (HQ=1)	210	0			1.5	76.7	34.9	26.5
Cobalt	T	mg/kg-dry	9	100	HH Soil (HQ=1)	900	0			0.44	15.8	6.9	4.8
Copper	T	mg/kg-dry	9	100	HH Soil (HQ=1)	2900	0			6.3	581	158	135
Iron	T	mg/kg-dry	9	100	HH Soil (HQ=1)	23000	44.4			7630	51200	25300	20600
Lead	T	mg/kg-dry	9	100	HH Soil (HQ=1)	400	0			19.7	323	115	75.3
Magnesium	T	mg/kg-dry	9	100	No SLC					354	11800	6530	5410
Manganese	T	mg/kg-dry	9	100	HH Soil (HQ=1)	3200	0			45	2180	804	684
Mercury	T	mg/kg-dry	9	0	HH Soil (HQ=1)	23	0	0.02	0.02	ND	ND		
Molybdenum	T	mg/kg-dry	9	100	HH Soil (HQ=1)	390	44.4			40.3	1550	423	89.9

"No SLC" indicates that there is not a Screening Level Criterion for this medium specified for the RI/FS.
"HH Soil (HQ=1)" EPA Region 6 RBSLs Human Health Residential Soil (HQ=1)
"Eco Soil" EPA Region 6 Tier 1-3 RBSLs Ecological Soil
Median Value determined using 1/2 the Reporting Limit value for Non-Detects if greater than 50% of the values were detected.
Mean Value calculated using 1/2 the Reporting Limit for Non-Detects if greater than 50% of the values were detected.

T = Total Fraction
D = Filtered Fraction (0.45 micron filter)
A = Filtered Fraction (0.1 micron filter)
ND = Non-Detected Value

Table 7-39

Soil 0-6 inches Biased

RI/FS Soil Area 5 - Spring Gulch RP and Truck Slice Area

Summary of Results

Analyte	Sample Fraction	Units	Total Number of Samples	Percent Detects (%)	SLC	SLC Value	Percent Above SLC	Min RL for ND	Max RL for ND	Min Value	Max Value	Mean Value	Median Value
Nickel	T	mg/kg-dry	9	100	HH Soil (HQ=1)	1600	0			0.9	41.4	20.8	15.7
Potassium	T	mg/kg-dry	9	100	No SLC					967	7610	4310	3940
Selenium	T	mg/kg-dry	9	66.7	HH Soil (HQ=1)	390	0	0.71	0.82	ND	1.7	0.95	1
Silver	T	mg/kg-dry	9	100	HH Soil (HQ=1)	390	0			0.47	2.5	0.93	0.69
Sodium	T	mg/kg-dry	9	44.4	No SLC			42.80	98.20	ND	429		
Thallium	T	mg/kg-dry	9	100	HH Soil (HQ=1)	5.5	0			0.17	1	0.52	0.4
Vanadium	T	mg/kg-dry	9	100	HH Soil (HQ=1)	78	0			7.6	65.3	38.1	33.5
Zinc	T	mg/kg-dry	9	100	HH Soil (HQ=1)	23000	0			4.8	435	131	92.6

"No SLC" indicates that there is not a Screening Level Criterion for this medium specified for the RI/FS.
"HH Soil (HQ=1)" EPA Region 6 RBSLs Human Health Residential Soil (HQ=1)
"Eco Soil" EPA Region 6 Tier 1-3 RBSLs Ecological Soil
Median Value determined using 1/2 the Reporting Limit value for Non-Detects if greater than 50% of the values were detected.
Mean Value calculated using 1/2 the Reporting Limit for Non-Detects if greater than 50% of the values were detected.

T = Total Fraction
D = Filtered Fraction (0.45 micron filter)
A = Filtered Fraction (0.1 micron filter)
ND = Non-Detected Value

Table 7-40

Soil 0-24 inches Biased

RI/FS Soil Area 5 - Spring Gulch RP and Truck Slice Area

Summary of Results

Analyte	Sample Fraction	Units	Total Number of Samples	Percent Detects (%)	SLC	SLC Value	Percent Above SLC	Min RL for ND	Max RL for ND	Min Value	Max Value	Mean Value	Median Value
Inorganics													
Cation-Exchange Capacity	T	meq/100g	8	100	No SLC					5.6	22.1	12.4	10.6
Chloride	T	mg/kg-dry	8	62.5	No SLC			2.20	2.20	ND	3.1	2.1	2.3
Fluoride	T	mg/kg-dry	8	100	No SLC					0.47	2.3	1.3	0.95
Nitrate	T	mg/kg-dry	8	37.5	No SLC			2.20	2.30	ND	2.5		
Organic Soils	T	%	8	100	No SLC					0.99	3.8	2.1	1.9
pH	T	SU	8	100	No SLC					4	7.7	5.9	6.2
Phosphorus	T	mg/kg-dry	8	100	No SLC					168	1730	778	736
Sodium Absorption Ratio	T	ratio	8	87.5	No SLC			0.14	0.14	ND	0.26	0.092	0.055
Solids, Percent	T	%	8	100	No SLC					89.1	95	92.3	92.9
Specific Conductance	T	umhos/cm	8	100	No SLC					13.9	671	272	214
Sulfate	T	mg/kg-dry	8	100	No SLC					8.4	1340	469	213
Total Kjeldahl Nitrogen	T	mg/kg-dry	8	75	No SLC			23.60	25.40	ND	109	54.1	49.8
Total Organic Carbon	T	mg/kg-dry	8	62.5	No SLC			106.00	107.00	ND	4180	1120	298
Metals													
Aluminum	T	mg/kg-dry	8	100	No SLC					2610	23300	11600	9340
Antimony	T	mg/kg-dry	8	0	ECO Soil	0.3	0	0.15	0.31	ND	ND		
Arsenic	T	mg/kg-dry	8	100	ECO Soil	31	0			1.4	3.9	2.7	3
Barium	T	mg/kg-dry	8	100	ECO Soil	330	25			6.5	415	182	162
Beryllium	T	mg/kg-dry	8	100	ECO Soil	30	0			0.14	3.1	1.4	1.2
Boron	T	mg/kg-dry	8	37.5	ECO Soil	0.5	100	0.74	2.90	ND	2		
Cadmium	T	mg/kg-dry	8	62.5	ECO Soil	0.4	60	0.03	0.10	ND	3.3	1	0.29
Calcium	T	mg/kg-dry	8	100	No SLC					229	19000	7870	5910
Chromium	T	mg/kg-dry	8	100	ECO Soil	7.9	75			2.2	72.2	32.7	24.9
Cobalt	T	mg/kg-dry	8	100	ECO Soil	32	0			0.4	14.9	7.6	6.5
Copper	T	mg/kg-dry	8	100	ECO Soil	54	75			5.1	176	126	154
Iron	T	mg/kg-dry	8	100	No SLC					8390	44600	21400	18900
Lead	T	mg/kg-dry	8	100	ECO Soil	15	100			16.6	451	135	102
Magnesium	T	mg/kg-dry	8	100	No SLC					474	11400	6070	4860
Manganese	T	mg/kg-dry	8	100	ECO Soil	152	87.5			44.8	2440	954	794
Mercury	T	mg/kg-dry	8	0	ECO Soil	0.1	0	0.02	0.02	ND	ND		
Molybdenum	T	mg/kg-dry	8	100	ECO Soil	2	100			30.2	1580	485	285

"No SLC" indicates that there is not a Screening Level Criterion for this medium specified for the RI/FS.
"HH Soil (HQ=1)" EPA Region 6 RBSLs Human Health Residential Soil (HQ=1)
"Eco Soil" EPA Region 6 Tier 1-3 RBSLs Ecological Soil
Median Value determined using 1/2 the Reporting Limit value for Non-Detects if greater than 50% of the values were detected.
Mean Value calculated using 1/2 the Reporting Limit for Non-Detects if greater than 50% of the values were detected.

T = Total Fraction
D = Filtered Fraction (0.45 micron filter)
A = Filtered Fraction (0.1 micron filter)
ND = Non-Detected Value

Table 7-40

Soil 0-24 inches Biased

RI/FS Soil Area 5 - Spring Gulch RP and Truck Slice Area

Summary of Results

Analyte	Sample Fraction	Units	Total Number of Samples	Percent Detects (%)	SLC	SLC Value	Percent Above SLC	Min RL for ND	Max RL for ND	Min Value	Max Value	Mean Value	Median Value
Nickel	T	mg/kg-dry	8	100	ECO Soil	48	0			1.2	42.2	21.5	17.4
Potassium	T	mg/kg-dry	8	100	No SLC					958	7010	3770	3470
Selenium	T	mg/kg-dry	8	62.5	ECO Soil	1	60	0.70	0.77	ND	1.4	0.85	0.97
Silver	T	mg/kg-dry	8	100	ECO Soil	2	25			0.41	3.4	1.3	0.81
Sodium	T	mg/kg-dry	8	0	No SLC			42.50	334.00	ND	ND		
Thallium	T	mg/kg-dry	8	100	ECO Soil	1	12.5			0.19	1.2	0.51	0.37
Vanadium	T	mg/kg-dry	8	100	ECO Soil	2	100			5.8	63.8	35.5	31.3
Zinc	T	mg/kg-dry	8	100	ECO Soil	120	37.5			5.1	500	174	95.7

"No SLC" indicates that there is not a Screening Level Criterion for this medium specified for the RI/FS.
"HH Soil (HQ=1)" EPA Region 6 RBSLs Human Health Residential Soil (HQ=1)
"Eco Soil" EPA Region 6 Tier 1-3 RBSLs Ecological Soil
Median Value determined using 1/2 the Reporting Limit value for Non-Detects if greater than 50% of the values were detected.
Mean Value calculated using 1/2 the Reporting Limit for Non-Detects if greater than 50% of the values were detected.

T = Total Fraction
D = Filtered Fraction (0.45 micron filter)
A = Filtered Fraction (0.1 micron filter)
ND = Non-Detected Value

Table 7-41
Soil 0-6 inches Random
RI/FS Soil Area 6 - Open Pit
Summary of Results

Analyte	Sample Fraction	Units	Total Number of Samples	Percent Detects (%)	SLC	SLC Value	Percent Above SLC	Min RL for ND	Max RL for ND	Min Value	Max Value	Mean Value	Median Value
Inorganics													
Cation-Exchange Capacity	T	meq/100g	10	100	No SLC					7.6	17.9	11.6	11.4
Chloride	T	mg/kg-dry	10	20	No SLC			2.10	2.30	ND	3.8		
Fluoride	T	mg/kg-dry	10	100	HH Soil (HQ=1)	3700	0			0.19	15.9	2.4	0.73
Nitrate	T	mg/kg-dry	10	0	No SLC			2.10	2.30	ND	ND		
Organic Soils	T	%	8	100	No SLC					1.6	3.4	2.2	2
pH	T	SU	10	100	No SLC					4.3	7.6	6.4	6.8
Phosphorus	T	mg/kg-dry	10	100	No SLC					72.4	1620	876	918
Sodium Absorption Ratio	T	ratio	10	30	No SLC			0.02	0.13	ND	0.1		
Solids, Percent	T	%	10	100	No SLC					89.3	95.8	93.4	93.4
Specific Conductance	T	umhos/cm	10	100	No SLC					18.4	1060	430	355
Sulfate	T	mg/kg-dry	10	90	No SLC			2.30	2.30	ND	2040	724	509
Total Kjeldahl Nitrogen	T	mg/kg-dry	10	70	No SLC			23.90	26.40	ND	152	45.6	36.5
Total Organic Carbon	T	mg/kg-dry	10	70	No SLC			105.00	112.00	ND	2150	878	689
Metals													
Aluminum	T	mg/kg-dry	10	100	HH Soil (HQ=1)	76000	0			5010	18000	12400	12800
Antimony	T	mg/kg-dry	10	0	HH Soil (HQ=1)	31	0	0.13	0.18	ND	ND		
Arsenic	T	mg/kg-dry	10	100	HH Soil (HQ=1)	0.39	100			0.98	10.1	3.4	2.4
Barium	T	mg/kg-dry	10	100	HH Soil (HQ=1)	5500	0			11.9	152	76.5	77.5
Beryllium	T	mg/kg-dry	10	100	HH Soil (HQ=1)	150	0			0.35	2.1	1.2	1.2
Boron	T	mg/kg-dry	10	40	HH Soil (HQ=1)	5500	0	0.40	0.43	ND	15.5		
Cadmium	T	mg/kg-dry	10	70	HH Soil (HQ=1)	39	0	0.03	0.06	ND	1.8	0.6	0.41
Calcium	T	mg/kg-dry	10	100	No SLC					1020	16800	10500	12700
Chromium	T	mg/kg-dry	10	100	HH Soil (HQ=1)	210	0			7.1	95.1	41	39.4
Cobalt	T	mg/kg-dry	10	100	HH Soil (HQ=1)	900	0			3.4	25.9	13.8	13.8
Copper	T	mg/kg-dry	10	100	HH Soil (HQ=1)	2900	0			37.3	277	156	173
Iron	T	mg/kg-dry	10	100	HH Soil (HQ=1)	23000	70			14500	35100	25900	26100
Lead	T	mg/kg-dry	10	100	HH Soil (HQ=1)	400	20			15.9	749	183	62
Magnesium	T	mg/kg-dry	10	100	No SLC					1120	17600	9190	8140
Manganese	T	mg/kg-dry	10	100	HH Soil (HQ=1)	3200	0			202	3200	1180	791
Mercury	T	mg/kg-dry	10	0	HH Soil (HQ=1)	23	0	0.02	0.02	ND	ND		
Molybdenum	T	mg/kg-dry	10	100	HH Soil (HQ=1)	390	10			1.6	1860	293	61.3

"No SLC" indicates that there is not a Screening Level Criterion for this medium specified for the RI/FS.
"HH Soil (HQ=1)" EPA Region 6 RBSLs Human Health Residential Soil (HQ=1)
"Eco Soil" EPA Region 6 Tier 1-3 RBSLs Ecological Soil
Median Value determined using 1/2 the Reporting Limit value for Non-Detects if greater than 50% of the values were detected.
Mean Value calculated using 1/2 the Reporting Limit for Non-Detects if greater than 50% of the values were detected.

T = Total Fraction
D = Filtered Fraction (0.45 micron filter)
A = Filtered Fraction (0.1 micron filter)
ND = Non-Detected Value

Table 7-41
Soil 0-6 inches Random
RI/FS Soil Area 6 - Open Pit
Summary of Results

Analyte	Sample Fraction	Units	Total Number of Samples	Percent Detects (%)	SLC	SLC Value	Percent Above SLC	Min RL for ND	Max RL for ND	Min Value	Max Value	Mean Value	Median Value
Nickel	T	mg/kg-dry	10	100	HH Soil (HQ=1)	1600	0			5.2	63.9	32.4	28.7
Potassium	T	mg/kg-dry	10	100	No SLC					304	7610	3190	3300
Selenium	T	mg/kg-dry	10	50	HH Soil (HQ=1)	390	0	0.55	1.70	ND	1.6	0.8	0.81
Silver	T	mg/kg-dry	10	80	HH Soil (HQ=1)	390	0	0.22	0.51	ND	1.6	0.66	0.52
Sodium	T	mg/kg-dry	10	10	No SLC			42.10	51.80	ND	174		
Thallium	T	mg/kg-dry	10	90	HH Soil (HQ=1)	5.5	0	0.08	0.08	ND	1.2	0.42	0.4
Vanadium	T	mg/kg-dry	10	100	HH Soil (HQ=1)	78	0			6.2	69.8	38.3	42.5
Zinc	T	mg/kg-dry	10	100	HH Soil (HQ=1)	23000	0			38.1	855	240	131

"No SLC" indicates that there is not a Screening Level Criterion for this medium specified for the RI/FS.
"HH Soil (HQ=1)" EPA Region 6 RBSLs Human Health Residential Soil (HQ=1)
"Eco Soil" EPA Region 6 Tier 1-3 RBSLs Ecological Soil
Median Value determined using 1/2 the Reporting Limit value for Non-Detects if greater than 50% of the values were detected.
Mean Value calculated using 1/2 the Reporting Limit for Non-Detects if greater than 50% of the values were detected.

T = Total Fraction
D = Filtered Fraction (0.45 micron filter)
A = Filtered Fraction (0.1 micron filter)
ND = Non-Detected Value

Table 7-42
Soil 0-24 inches Random
RI/FS Soil Area 6 - Open Pit
Summary of Results

Analyte	Sample Fraction	Units	Total Number of Samples	Percent Detects (%)	SLC	SLC Value	Percent Above SLC	Min RL for ND	Max RL for ND	Min Value	Max Value	Mean Value	Median Value
Inorganics													
Cation-Exchange Capacity	T	meq/100g	10	100	No SLC					8.7	16.2	12.1	11.9
Chloride	T	mg/kg-dry	10	40	No SLC			2.20	2.30	ND	4.2		
Fluoride	T	mg/kg-dry	10	100	No SLC					0.17	9.3	1.8	0.74
Nitrate	T	mg/kg-dry	10	10	No SLC			2.20	2.30	ND	2.2		
Organic Soils	T	%	8	100	No SLC					1.5	3.2	2.1	2
pH	T	SU	10	100	No SLC					4.3	7.7	6.5	7
Phosphorus	T	mg/kg-dry	10	100	No SLC					202	1470	917	987
Sodium Absorption Ratio	T	ratio	10	40	No SLC			0.02	0.17	ND	0.12		
Solids, Percent	T	%	10	100	No SLC					90	94	92.8	93.2
Specific Conductance	T	umhos/cm	10	100	No SLC					22.2	1210	453	324
Sulfate	T	mg/kg-dry	10	90	No SLC			2.30	2.30	ND	1960	836	786
Total Kjeldahl Nitrogen	T	mg/kg-dry	10	80	No SLC			24.00	26.90	ND	126	52.5	39.1
Total Organic Carbon	T	mg/kg-dry	10	70	No SLC			107.00	112.00	ND	6020	1560	1570
Metals													
Aluminum	T	mg/kg-dry	10	100	No SLC					5540	17600	12400	12800
Antimony	T	mg/kg-dry	10	0	ECO Soil	0.3	0	0.12	0.18	ND	ND		
Arsenic	T	mg/kg-dry	10	100	ECO Soil	31	0			0.66	10.9	3.4	2.4
Barium	T	mg/kg-dry	10	100	ECO Soil	330	0			15.6	128	73.2	82.5
Beryllium	T	mg/kg-dry	10	100	ECO Soil	30	0			0.36	2.1	1.2	1.2
Boron	T	mg/kg-dry	10	40	ECO Soil	0.5	100	0.39	0.43	ND	13.5		
Cadmium	T	mg/kg-dry	10	70	ECO Soil	0.4	85.7	0.03	0.05	ND	2.4	0.63	0.58
Calcium	T	mg/kg-dry	10	100	No SLC					983	19100	10900	12200
Chromium	T	mg/kg-dry	10	100	ECO Soil	7.9	90			6.9	88.2	41.2	40.6
Cobalt	T	mg/kg-dry	10	100	ECO Soil	32	0			3	19.5	12.7	13.2
Copper	T	mg/kg-dry	10	100	ECO Soil	54	90			41	206	132	134
Iron	T	mg/kg-dry	10	100	No SLC					15400	35700	25700	26300
Lead	T	mg/kg-dry	10	100	ECO Soil	15	100			16.9	1520	296	82.2
Magnesium	T	mg/kg-dry	10	100	No SLC					990	18000	9280	8310
Manganese	T	mg/kg-dry	10	100	ECO Soil	152	100			159	3880	1150	805
Mercury	T	mg/kg-dry	10	0	ECO Soil	0.1	0	0.02	0.02	ND	ND		
Molybdenum	T	mg/kg-dry	10	100	ECO Soil	2	100			2.6	1800	340	96.3

"No SLC" indicates that there is not a Screening Level Criterion for this medium specified for the RI/FS.
"HH Soil (HQ=1)" EPA Region 6 RBSLs Human Health Residential Soil (HQ=1)
"Eco Soil" EPA Region 6 Tier 1-3 RBSLs Ecological Soil
Median Value determined using 1/2 the Reporting Limit value for Non-Detects if greater than 50% of the values were detected.
Mean Value calculated using 1/2 the Reporting Limit for Non-Detects if greater than 50% of the values were detected.

T = Total Fraction
D = Filtered Fraction (0.45 micron filter)
A = Filtered Fraction (0.1 micron filter)
ND = Non-Detected Value

Table 7-42
Soil 0-24 inches Random
RI/FS Soil Area 6 - Open Pit
Summary of Results

Analyte	Sample Fraction	Units	Total Number of Samples	Percent Detects (%)	SLC	SLC Value	Percent Above SLC	Min RL for ND	Max RL for ND	Min Value	Max Value	Mean Value	Median Value
Nickel	T	mg/kg-dry	10	100	ECO Soil	48	20			4.6	59.3	31.7	28.8
Potassium	T	mg/kg-dry	10	100	No SLC					320	7060	3120	3320
Selenium	T	mg/kg-dry	10	50	ECO Soil	1	40	0.72	1.90	ND	1.3	0.74	0.79
Silver	T	mg/kg-dry	10	80	ECO Soil	2	0	0.25	0.48	ND	1.8	0.76	0.63
Sodium	T	mg/kg-dry	10	10	No SLC			41.60	51.20	ND	168		
Thallium	T	mg/kg-dry	10	80	ECO Soil	1	12.5	0.08	0.09	ND	1.1	0.39	0.4
Vanadium	T	mg/kg-dry	10	100	ECO Soil	2	100			6.3	66.4	38.5	43
Zinc	T	mg/kg-dry	10	100	ECO Soil	120	60			41.4	1120	276	167

"No SLC" indicates that there is not a Screening Level Criterion for this medium specified for the RI/FS.
"HH Soil (HQ=1)" EPA Region 6 RBSLs Human Health Residential Soil (HQ=1)
"Eco Soil" EPA Region 6 Tier 1-3 RBSLs Ecological Soil
Median Value determined using 1/2 the Reporting Limit value for Non-Detects if greater than 50% of the values were detected.
Mean Value calculated using 1/2 the Reporting Limit for Non-Detects if greater than 50% of the values were detected.

T = Total Fraction
D = Filtered Fraction (0.45 micron filter)
A = Filtered Fraction (0.1 micron filter)
ND = Non-Detected Value

Table 7-43
Soil 0-6 inches Random
RI/FS Soil Area 7 - Mine Site Scars
Summary of Results

Analyte	Sample Fraction	Units	Total Number of Samples	Percent Detects (%)	SLC	SLC Value	Percent Above SLC	Min RL for ND	Max RL for ND	Min Value	Max Value	Mean Value	Median Value
Inorganics													
Cation-Exchange Capacity	T	meq/100g	10	100	No SLC					4.3	18.6	10.4	11.6
Chloride	T	mg/kg-dry	10	50	No SLC			2.10	28.20	ND	2.6	5.7	2.6
Fluoride	T	mg/kg-dry	7	100	HH Soil (HQ=1)	3700	0			0.12	0.7	0.3	0.25
Nitrate	T	mg/kg-dry	10	20	No SLC			2.10	7.40	ND	5.8		
Organic Soils	T	%	9	100	No SLC					2.2	4.2	3.3	3.6
pH	T	SU	10	100	No SLC					3	6.5	4.7	4.8
Phosphorus	T	mg/kg-dry	10	100	No SLC					12.4	1190	530	446
Sodium Absorption Ratio	T	ratio	10	30	No SLC			0.02	0.14	ND	0.15		
Solids, Percent	T	%	10	100	No SLC					87.5	98	92.1	90.8
Specific Conductance	T	umhos/cm	10	100	No SLC					3	1510	605	459
Sulfate	T	mg/kg-dry	10	80	No SLC			2.10	28.20	ND	2400	614	297
Total Kjeldahl Nitrogen	T	mg/kg-dry	10	100	No SLC					38.5	410	159	113
Total Organic Carbon	T	mg/kg-dry	10	80	No SLC			110.00	115.00	ND	11700	4270	2940
Metals													
Aluminum	T	mg/kg-dry	10	100	HH Soil (HQ=1)	76000	0			1050	8810	4240	4020
Antimony	T	mg/kg-dry	10	0	HH Soil (HQ=1)	31	0	0.14	0.26	ND	ND		
Arsenic	T	mg/kg-dry	10	100	HH Soil (HQ=1)	0.39	100			3.6	11.2	6.2	4.5
Barium	T	mg/kg-dry	10	100	HH Soil (HQ=1)	5500	0			68.6	354	170	153
Beryllium	T	mg/kg-dry	10	100	HH Soil (HQ=1)	150	0			0.07	1	0.31	0.22
Boron	T	mg/kg-dry	10	70	HH Soil (HQ=1)	5500	0	0.36	2.30	ND	9.4	4.1	4
Cadmium	T	mg/kg-dry	10	20	HH Soil (HQ=1)	39	0	0.02	0.03	ND	0.21		
Calcium	T	mg/kg-dry	10	100	No SLC					203	32300	4670	920
Chromium	T	mg/kg-dry	10	100	HH Soil (HQ=1)	210	0			0.99	29.9	6.8	3.1
Cobalt	T	mg/kg-dry	10	90	HH Soil (HQ=1)	900	0	0.20	0.20	ND	15.9	2.6	0.77
Copper	T	mg/kg-dry	10	100	HH Soil (HQ=1)	2900	0			5.3	77.2	31.2	24.6
Iron	T	mg/kg-dry	10	100	HH Soil (HQ=1)	23000	40			9600	42000	21500	17600
Lead	T	mg/kg-dry	10	100	HH Soil (HQ=1)	400	0			46	286	136	121
Magnesium	T	mg/kg-dry	10	100	No SLC					174	5140	1230	650
Manganese	T	mg/kg-dry	10	100	HH Soil (HQ=1)	3200	0			12.1	1090	191	67.7
Mercury	T	mg/kg-dry	10	0	HH Soil (HQ=1)	23	0	0.02	0.02	ND	ND		
Molybdenum	T	mg/kg-dry	10	100	HH Soil (HQ=1)	390	0			2	18.8	9.6	9.3

"No SLC" indicates that there is not a Screening Level Criterion for this medium specified for the RI/FS.
"HH Soil (HQ=1)" EPA Region 6 RBSLs Human Health Residential Soil (HQ=1)
"Eco Soil" EPA Region 6 Tier 1-3 RBSLs Ecological Soil
Median Value determined using 1/2 the Reporting Limit value for Non-Detects if greater than 50% of the values were detected.
Mean Value calculated using 1/2 the Reporting Limit for Non-Detects if greater than 50% of the values were detected.

T = Total Fraction
D = Filtered Fraction (0.45 micron filter)
A = Filtered Fraction (0.1 micron filter)
ND = Non-Detected Value

Table 7-43
Soil 0-6 inches Random
RI/FS Soil Area 7 - Mine Site Scars
Summary of Results

Analyte	Sample Fraction	Units	Total Number of Samples	Percent Detects (%)	SLC	SLC Value	Percent Above SLC	Min RL for ND	Max RL for ND	Min Value	Max Value	Mean Value	Median Value
Nickel	T	mg/kg-dry	10	60	HH Soil (HQ=1)	1600	0	1.10	1.20	ND	26.4	4.6	1.4
Potassium	T	mg/kg-dry	10	100	No SLC					2010	3660	2750	2600
Selenium	T	mg/kg-dry	10	100	HH Soil (HQ=1)	390	0			0.37	1.7	0.95	0.81
Silver	T	mg/kg-dry	10	100	HH Soil (HQ=1)	390	0			0.19	2.3	0.93	0.81
Sodium	T	mg/kg-dry	10	70	No SLC			43.00	77.60	ND	551	148	97.5
Thallium	T	mg/kg-dry	10	90	HH Soil (HQ=1)	5.5	0	0.09	0.09	ND	0.33	0.21	0.23
Vanadium	T	mg/kg-dry	10	100	HH Soil (HQ=1)	78	0			2.8	19.7	8.5	6.3
Zinc	T	mg/kg-dry	10	100	HH Soil (HQ=1)	23000	0			2.9	142	30.4	10.8

"No SLC" indicates that there is not a Screening Level Criterion for this medium specified for the RI/FS.
"HH Soil (HQ=1)" EPA Region 6 RBSLs Human Health Residential Soil (HQ=1)
"Eco Soil" EPA Region 6 Tier 1-3 RBSLs Ecological Soil
Median Value determined using 1/2 the Reporting Limit value for Non-Detects if greater than 50% of the values were detected.
Mean Value calculated using 1/2 the Reporting Limit for Non-Detects if greater than 50% of the values were detected.

T = Total Fraction
D = Filtered Fraction (0.45 micron filter)
A = Filtered Fraction (0.1 micron filter)
ND = Non-Detected Value

Table 7-44
Soil 0-24 inches Random
RI/FS Soil Area 7 - Mine Site Scars
Summary of Results

Analyte	Sample Fraction	Units	Total Number of Samples	Percent Detects (%)	SLC	SLC Value	Percent Above SLC	Min RL for ND	Max RL for ND	Min Value	Max Value	Mean Value	Median Value
Inorganics													
Cation-Exchange Capacity	T	meq/100g	10	100	No SLC					5.5	15.9	10.9	11.1
Chloride	T	mg/kg-dry	10	30	No SLC			2.10	28.80	ND	2.5		
Fluoride	T	mg/kg-dry	8	100	No SLC					0.12	0.37	0.24	0.23
Nitrate	T	mg/kg-dry	10	20	No SLC			1.10	9.50	ND	6.8		
Organic Soils	T	%	9	100	No SLC					2.3	4.1	3.3	3.5
pH	T	SU	10	100	No SLC					2.9	6.1	4.6	4.9
Phosphorus	T	mg/kg-dry	10	100	No SLC					11.4	1080	480	347
Sodium Absorption Ratio	T	ratio	10	40	No SLC			0.02	0.11	ND	0.13		
Solids, Percent	T	%	10	100	No SLC					86.9	97.4	91.9	90.8
Specific Conductance	T	umhos/cm	10	100	No SLC					4.1	1600	621	337
Sulfate	T	mg/kg-dry	10	90	No SLC			27.90	27.90	ND	11300	2300	323
Total Kjeldahl Nitrogen	T	mg/kg-dry	10	100	No SLC					29.7	364	161	127
Total Organic Carbon	T	mg/kg-dry	10	80	No SLC			109.00	111.00	ND	7300	3120	2860
Metals													
Aluminum	T	mg/kg-dry	10	100	No SLC					914	8520	4220	4270
Antimony	T	mg/kg-dry	10	0	ECO Soil	0.3	0	0.15	0.26	ND	ND		
Arsenic	T	mg/kg-dry	10	100	ECO Soil	31	0			2.9	17.7	7.3	5.8
Barium	T	mg/kg-dry	10	100	ECO Soil	330	0			58.2	309	176	175
Beryllium	T	mg/kg-dry	10	100	ECO Soil	30	0			0.078	0.68	0.27	0.23
Boron	T	mg/kg-dry	10	70	ECO Soil	0.5	100	0.36	2.10	ND	8.8	3.7	3.4
Cadmium	T	mg/kg-dry	10	10	ECO Soil	0.4	0	0.02	0.03	ND	0.18		
Calcium	T	mg/kg-dry	10	100	No SLC					247	9970	2260	911
Chromium	T	mg/kg-dry	10	100	ECO Soil	7.9	30			1	29.2	6.7	3.3
Cobalt	T	mg/kg-dry	10	90	ECO Soil	32	0	0.20	0.20	ND	8.1	1.9	0.89
Copper	T	mg/kg-dry	10	100	ECO Soil	54	10			7.2	64.1	28.1	24.7
Iron	T	mg/kg-dry	10	100	No SLC					11000	35700	21900	19600
Lead	T	mg/kg-dry	10	100	ECO Soil	15	100			35	324	141	119
Magnesium	T	mg/kg-dry	10	100	No SLC					128	6530	1370	716
Manganese	T	mg/kg-dry	10	100	ECO Soil	152	30			13	520	135	71.9
Mercury	T	mg/kg-dry	10	0	ECO Soil	0.1	0	0.02	0.02	ND	ND		
Molybdenum	T	mg/kg-dry	10	100	ECO Soil	2	90			0.96	21.1	9.6	8.7

"No SLC" indicates that there is not a Screening Level Criterion for this medium specified for the RI/FS.
"HH Soil (HQ=1)" EPA Region 6 RBSLs Human Health Residential Soil (HQ=1)
"Eco Soil" EPA Region 6 Tier 1-3 RBSLs Ecological Soil
Median Value determined using 1/2 the Reporting Limit value for Non-Detects if greater than 50% of the values were detected.
Mean Value calculated using 1/2 the Reporting Limit for Non-Detects if greater than 50% of the values were detected.

T = Total Fraction
D = Filtered Fraction (0.45 micron filter)
A = Filtered Fraction (0.1 micron filter)
ND = Non-Detected Value

Table 7-44
Soil 0-24 inches Random
RI/FS Soil Area 7 - Mine Site Scars
Summary of Results

Analyte	Sample Fraction	Units	Total Number of Samples	Percent Detects (%)	SLC	SLC Value	Percent Above SLC	Min RL for ND	Max RL for ND	Min Value	Max Value	Mean Value	Median Value
Nickel	T	mg/kg-dry	10	60	ECO Soil	48	0	1.10	1.20	ND	20.8	3.9	1.5
Potassium	T	mg/kg-dry	10	100	No SLC					1880	3610	2880	2900
Selenium	T	mg/kg-dry	10	100	ECO Soil	1	30			0.64	1.6	1	0.94
Silver	T	mg/kg-dry	10	100	ECO Soil	2	0			0.28	2	0.95	0.81
Sodium	T	mg/kg-dry	10	80	No SLC			48.00	104.00	ND	472	159	89.2
Thallium	T	mg/kg-dry	10	90	ECO Soil	1	0	0.09	0.09	ND	0.36	0.21	0.27
Vanadium	T	mg/kg-dry	10	100	ECO Soil	2	100			3.1	24.9	8.9	6.7
Zinc	T	mg/kg-dry	10	100	ECO Soil	120	0			3.3	76.4	23.3	13.4

"No SLC" indicates that there is not a Screening Level Criterion for this medium specified for the RI/FS.
"HH Soil (HQ=1)" EPA Region 6 RBSLs Human Health Residential Soil (HQ=1)
"Eco Soil" EPA Region 6 Tier 1-3 RBSLs Ecological Soil
Median Value determined using 1/2 the Reporting Limit value for Non-Detects if greater than 50% of the values were detected.
Mean Value calculated using 1/2 the Reporting Limit for Non-Detects if greater than 50% of the values were detected.

T = Total Fraction
D = Filtered Fraction (0.45 micron filter)
A = Filtered Fraction (0.1 micron filter)
ND = Non-Detected Value

Table 7-45
Soil 0-6 inches Biased
RI/FS Soil Area 8a - Explosives Storage Areas
Summary of Results

Analyte	Sample Fraction	Units	Total Number of Samples	Percent Detects (%)	SLC	SLC Value	Percent Above SLC	Min RL for ND	Max RL for ND	Min Value	Max Value	Mean Value	Median Value
Explosives													
2,4,6-Trinitrotoluene	T	mg/kg-dry	12	0	No SLC			0.12	0.12	ND	ND		
2,6-Pyridinediamine,	T	mg/kg-dry	12	0	No SLC			0.12	0.12	ND	ND		
3,5-dinitro-N,N`-bis(2,4,6-trinitrophenyl)-Cyclotetramethylenetetranitramine	T	mg/kg-dry	12	0	No SLC			0.12	0.12	ND	ND		
Cyclotrimethylenetrinitramine	T	mg/kg-dry	12	0	No SLC			0.12	0.12	ND	ND		
Pentaerythritol tetranitrate	T	mg/kg-dry	12	8.3	No SLC			5.00	5.00	ND	13		
Inorganics													
Cation-Exchange Capacity	T	meq/100g	14	100	No SLC					6.9	18.6	12.7	13.9
Chloride	T	mg/kg-dry	14	35.7	No SLC			2.10	34.00	ND	770		
Fluoride	T	mg/kg-dry	13	100	HH Soil (HQ=1)	3700	0			0.17	3.6	1.2	0.8
Nitrate	T	mg/kg-dry	14	35.7	No SLC			2.10	2.20	ND	56		
Organic Soils	T	%	11	100	No SLC					0.9	7.3	3.3	2.8
pH	T	SU	14	100	No SLC					3.5	7.6	6	6.7
Phosphorus	T	mg/kg-dry	14	100	No SLC					389	1440	865	860
Sodium Absorption Ratio	T	ratio	14	92.9	No SLC			0.12	0.12	ND	2.8	0.34	0.11
Solids, Percent	T	%	14	100	No SLC					87.9	97.5	92.6	92.8
Specific Conductance	T	umhos/cm	14	100	No SLC					17	2420	748	740
Sulfate	T	mg/kg-dry	14	100	No SLC					5.3	4700	806	381
Total Kjeldahl Nitrogen	T	mg/kg-dry	14	100	No SLC					57.3	465	130	92.8
Total Organic Carbon	T	mg/kg-dry	14	92.9	No SLC			108.00	108.00	ND	69000	12900	1770
Pesticides-PCBs													
Aroclor 1016	T	mg/kg-dry	2	0	No SLC			0.03	0.04	ND	ND		
Aroclor 1221	T	mg/kg-dry	2	0	No SLC			0.07	0.07	ND	ND		
Aroclor 1232	T	mg/kg-dry	2	0	No SLC			0.03	0.04	ND	ND		
Aroclor 1242	T	mg/kg-dry	2	0	No SLC			0.03	0.04	ND	ND		
Aroclor 1248	T	mg/kg-dry	2	0	HH Soil (HQ=1)	0.22	0	0.03	0.04	ND	ND		
Aroclor 1254	T	mg/kg-dry	2	0	HH Soil (HQ=1)	0.22	0	0.03	0.04	ND	ND		
Aroclor 1260	T	mg/kg-dry	2	0	HH Soil (HQ=1)	0.22	0	0.03	0.04	ND	ND		
Semi-Volatile Organics													
1,1`-Biphenyl	T	mg/kg-dry	14	0	HH Soil (HQ=1)	3000	0	0.34	3.40	ND	ND		

"No SLC" indicates that there is not a Screening Level Criterion for this medium specified for the RI/FS.
"HH Soil (HQ=1)" EPA Region 6 RBSLs Human Health Residential Soil (HQ=1)
"Eco Soil" EPA Region 6 Tier 1-3 RBSLs Ecological Soil
Median Value determined using 1/2 the Reporting Limit value for Non-Detects if greater than 50% of the values were detected.
Mean Value calculated using 1/2 the Reporting Limit for Non-Detects if greater than 50% of the values were detected.

T = Total Fraction
D = Filtered Fraction (0.45 micron filter)
A = Filtered Fraction (0.1 micron filter)
ND = Non-Detected Value

Table 7-45
Soil 0-6 inches Biased
RI/FS Soil Area 8a - Explosives Storage Areas
Summary of Results

Analyte	Sample Fraction	Units	Total Number of Samples	Percent Detects (%)	SLC	SLC Value	Percent Above SLC	Min RL for ND	Max RL for ND	Min Value	Max Value	Mean Value	Median Value
2,4,5-Trichlorophenol	T	mg/kg-dry	14	0	No SLC			0.86	8.60	ND	ND		
2,4,6-Trichlorophenol	T	mg/kg-dry	14	0	No SLC			0.34	3.40	ND	ND		
2,4-Dichlorophenol	T	mg/kg-dry	14	0	No SLC			0.34	3.40	ND	ND		
2,4-Dimethylphenol	T	mg/kg-dry	14	0	No SLC			0.34	3.40	ND	ND		
2,4-Dinitrophenol	T	mg/kg-dry	14	0	No SLC			0.86	8.60	ND	ND		
2,4-Dinitrotoluene	T	mg/kg-dry	14	0	No SLC			0.34	3.40	ND	ND		
2,6-Dinitrotoluene	T	mg/kg-dry	14	0	HH Soil (HQ=1)	61	0	0.34	3.40	ND	ND		
2-Chloronaphthalene	T	mg/kg-dry	14	0	No SLC			0.34	3.40	ND	ND		
2-Chlorophenol	T	mg/kg-dry	14	0	HH Soil (HQ=1)	64	0	0.34	3.40	ND	ND		
2-Methylnaphthalene	T	mg/kg-dry	14	0	No SLC			0.34	3.40	ND	ND		
2-Methylphenol	T	mg/kg-dry	14	0	No SLC			0.34	3.40	ND	ND		
2-Nitroaniline	T	mg/kg-dry	14	0	No SLC			0.86	8.60	ND	ND		
2-Nitrophenol	T	mg/kg-dry	14	0	No SLC			0.34	3.40	ND	ND		
3,3-Dichlorobenzidine	T	mg/kg-dry	14	0	No SLC			0.34	3.40	ND	ND		
3-Nitroaniline	T	mg/kg-dry	14	0	No SLC			0.86	8.60	ND	ND		
4,6-Dinitro-2-methylphenol	T	mg/kg-dry	14	0	No SLC			0.86	8.60	ND	ND		
4-Bromophenyl phenyl ether	T	mg/kg-dry	14	0	No SLC			0.34	3.40	ND	ND		
4-Chloro-3-methylphenol	T	mg/kg-dry	14	0	No SLC			0.34	3.40	ND	ND		
4-Chloroaniline	T	mg/kg-dry	14	0	No SLC			0.34	3.40	ND	ND		
4-Chlorophenyl phenyl ether	T	mg/kg-dry	14	0	No SLC			0.34	3.40	ND	ND		
4-Methylphenol	T	mg/kg-dry	14	0	No SLC			0.34	3.40	ND	ND		
4-Nitroaniline	T	mg/kg-dry	14	0	No SLC			0.86	8.60	ND	ND		
4-Nitrophenol	T	mg/kg-dry	14	0	No SLC			0.86	8.60	ND	ND		
Acenaphthene	T	mg/kg-dry	14	0	HH Soil (HQ=1)	3700	0	0.34	3.40	ND	ND		
Acenaphthylene	T	mg/kg-dry	14	0	No SLC			0.34	3.40	ND	ND		
Anthracene	T	mg/kg-dry	14	0	HH Soil (HQ=1)	22000	0	0.34	3.40	ND	ND		
Benzo(a)anthracene	T	mg/kg-dry	14	0	HH Soil (HQ=1)	0.62	0	0.34	3.40	ND	ND		
Benzo(a)pyrene	T	mg/kg-dry	14	0	HH Soil (HQ=1)	0.062	0	0.34	3.40	ND	ND		
Benzo(b)fluoranthene	T	mg/kg-dry	14	0	HH Soil (HQ=1)	0.62	0	0.34	3.40	ND	ND		
Benzo(g,h,i)perylene	T	mg/kg-dry	14	0	No SLC			0.34	3.40	ND	ND		
Benzo(k)fluoranthene	T	mg/kg-dry	14	0	HH Soil (HQ=1)	6.2	0	0.34	3.40	ND	ND		
Bis(2-chloroethoxy)methane	T	mg/kg-dry	14	0	No SLC			0.34	3.40	ND	ND		

"No SLC" indicates that there is not a Screening Level Criterion for this medium specified for the RI/FS.
"HH Soil (HQ=1)" EPA Region 6 RBSLs Human Health Residential Soil (HQ=1)
"Eco Soil" EPA Region 6 Tier 1-3 RBSLs Ecological Soil
Median Value determined using 1/2 the Reporting Limit value for Non-Detects if greater than 50% of the values were detected.
Mean Value calculated using 1/2 the Reporting Limit for Non-Detects if greater than 50% of the values were detected.

T = Total Fraction
D = Filtered Fraction (0.45 micron filter)
A = Filtered Fraction (0.1 micron filter)
ND = Non-Detected Value

Table 7-45
Soil 0-6 inches Biased
RI/FS Soil Area 8a - Explosives Storage Areas
Summary of Results

Analyte	Sample Fraction	Units	Total Number of Samples	Percent Detects (%)	SLC	SLC Value	Percent Above SLC	Min RL for ND	Max RL for ND	Min Value	Max Value	Mean Value	Median Value
Bis(2-chloroethyl)ether	T	mg/kg-dry	14	0	No SLC			0.34	3.40	ND	ND		
Carbazole	T	mg/kg-dry	14	0	HH Soil (HQ=1)	24	0	0.34	3.40	ND	ND		
Chrysene	T	mg/kg-dry	14	0	HH Soil (HQ=1)	62	0	0.34	3.40	ND	ND		
Dibenz(a,h)anthracene	T	mg/kg-dry	14	0	HH Soil (HQ=1)	0.062	0	0.34	3.40	ND	ND		
Dibenzofuran	T	mg/kg-dry	14	0	HH Soil (HQ=1)	150	0	0.34	3.40	ND	ND		
Dichlorodiisopropyl ether	T	mg/kg-dry	14	0	No SLC			0.34	3.40	ND	ND		
Fluoranthene	T	mg/kg-dry	14	7.1	HH Soil (HQ=1)	2300	0	0.34	3.40	ND	0.043		
Fluorene	T	mg/kg-dry	14	7.1	HH Soil (HQ=1)	2600	0	0.34	3.40	ND	0.17		
Hexachlorobenzene	T	mg/kg-dry	14	0	No SLC			0.34	3.40	ND	ND		
Hexachlorobutadiene	T	mg/kg-dry	14	0	No SLC			0.34	3.40	ND	ND		
Hexachlorocyclopentadiene	T	mg/kg-dry	14	0	No SLC			0.34	3.40	ND	ND		
Hexachloroethane	T	mg/kg-dry	14	0	No SLC			0.34	3.40	ND	ND		
Indeno(1,2,3-cd)pyrene	T	mg/kg-dry	14	0	HH Soil (HQ=1)	0.62	0	0.34	3.40	ND	ND		
Isophorone	T	mg/kg-dry	14	0	HH Soil (HQ=1)	510	0	0.34	3.40	ND	ND		
Naphthalene	T	mg/kg-dry	14	0	HH Soil (HQ=1)	120	0	0.34	3.40	ND	ND		
Nitrobenzene	T	mg/kg-dry	14	0	No SLC			0.34	3.40	ND	ND		
N-Nitrosodi-n-propylamine	T	mg/kg-dry	14	0	HH Soil (HQ=1)	0.07	0	0.34	3.40	ND	ND		
N-Nitrosodiphenylamine	T	mg/kg-dry	14	0	HH Soil (HQ=1)	99	0	0.34	3.40	ND	ND		
Pentachlorophenol	T	mg/kg-dry	14	0	No SLC			0.86	8.60	ND	ND		
Phenanthrene	T	mg/kg-dry	14	7.1	No SLC			0.34	3.40	ND	0.5		
Phenol	T	mg/kg-dry	14	0	HH Soil (HQ=1)	18000	0	0.34	3.40	ND	ND		
Pyrene	T	mg/kg-dry	14	7.1	HH Soil (HQ=1)	2300	0	0.34	3.40	ND	0.16		

"No SLC" indicates that there is not a Screening Level Criterion for this medium specified for the RI/FS.
"HH Soil (HQ=1)" EPA Region 6 RBSLs Human Health Residential Soil (HQ=1)
"Eco Soil" EPA Region 6 Tier 1-3 RBSLs Ecological Soil
Median Value determined using 1/2 the Reporting Limit value for Non-Detects if greater than 50% of the values were detected.
Mean Value calculated using 1/2 the Reporting Limit for Non-Detects if greater than 50% of the values were detected.

T = Total Fraction
D = Filtered Fraction (0.45 micron filter)
A = Filtered Fraction (0.1 micron filter)
ND = Non-Detected Value

Table 7-46
Soil 0-24 inches Biased
RI/FS Soil Area 8a - Explosives Storage Areas
Summary of Results

Analyte	Sample Fraction	Units	Total Number of Samples	Percent Detects (%)	SLC	SLC Value	Percent Above SLC	Min RL for ND	Max RL for ND	Min Value	Max Value	Mean Value	Median Value
Explosives													
2,4,6-Trinitrotoluene	T	mg/kg-dry	12	0	No SLC			0.12	0.12	ND	ND		
2,6-Pyridinediamine,	T	mg/kg-dry	12	0	No SLC			0.12	0.12	ND	ND		
3,5-dinitro-N,N`-bis(2,4,6-trinitrophenyl)-Cyclotetramethylenetetranitramine	T	mg/kg-dry	12	0	No SLC			0.12	0.12	ND	ND		
Cyclotrimethylenetrinitramine	T	mg/kg-dry	12	0	No SLC			0.12	0.12	ND	ND		
Pentaerythritol tetranitrate	T	mg/kg-dry	12	8.3	No SLC			5.00	5.00	ND	6.1		
Inorganics													
Cation-Exchange Capacity	T	meq/100g	14	100	No SLC					6.9	18.1	12.8	13.2
Chloride	T	mg/kg-dry	14	42.9	No SLC			2.10	34.00	ND	470		
Fluoride	T	mg/kg-dry	14	100	No SLC					0.17	3.5	1.1	0.8
Nitrate	T	mg/kg-dry	14	35.7	No SLC			2.10	2.30	ND	30		
Organic Soils	T	%	11	100	No SLC					0.9	7.2	3	2.7
pH	T	SU	14	100	No SLC					3.5	7.7	6	6.8
Phosphorus	T	mg/kg-dry	14	100	No SLC					396	1540	978	955
Sodium Absorption Ratio	T	ratio	14	92.9	No SLC			0.12	0.12	ND	2.8	0.32	0.075
Solids, Percent	T	%	14	100	No SLC					87.5	97	92.5	92.4
Specific Conductance	T	umhos/cm	14	100	No SLC					17.4	1990	726	708
Sulfate	T	mg/kg-dry	14	100	No SLC					3.3	12000	1770	812
Total Kjeldahl Nitrogen	T	mg/kg-dry	14	92.9	No SLC			22.40	22.40	ND	783	139	89.8
Total Organic Carbon	T	mg/kg-dry	14	100	No SLC					299	60800	11400	2020
Pesticides-PCBs													
Aroclor 1016	T	mg/kg-dry	2	0	No SLC			0.03	0.04	ND	ND		
Aroclor 1221	T	mg/kg-dry	2	0	No SLC			0.07	0.07	ND	ND		
Aroclor 1232	T	mg/kg-dry	2	0	No SLC			0.03	0.04	ND	ND		
Aroclor 1242	T	mg/kg-dry	2	0	No SLC			0.03	0.04	ND	ND		
Aroclor 1248	T	mg/kg-dry	2	0	ECO Soil	10	0	0.03	0.04	ND	ND		
Aroclor 1254	T	mg/kg-dry	2	0	ECO Soil	10	0	0.03	0.04	ND	ND		
Aroclor 1260	T	mg/kg-dry	2	0	ECO Soil	10	0	0.03	0.04	ND	ND		
Semi-Volatile Organics													
1,1`-Biphenyl	T	mg/kg-dry	14	7.1	ECO Soil	60	0	0.34	3.50	ND	0.045		

"No SLC" indicates that there is not a Screening Level Criterion for this medium specified for the RI/FS.
"HH Soil (HQ=1)" EPA Region 6 RBSLs Human Health Residential Soil (HQ=1)
"Eco Soil" EPA Region 6 Tier 1-3 RBSLs Ecological Soil
Median Value determined using 1/2 the Reporting Limit value for Non-Detects if greater than 50% of the values were detected.
Mean Value calculated using 1/2 the Reporting Limit for Non-Detects if greater than 50% of the values were detected.

T = Total Fraction
D = Filtered Fraction (0.45 micron filter)
A = Filtered Fraction (0.1 micron filter)
ND = Non-Detected Value

Table 7-46
Soil 0-24 inches Biased
RI/FS Soil Area 8a - Explosives Storage Areas
Summary of Results

Analyte	Sample Fraction	Units	Total Number of Samples	Percent Detects (%)	SLC	SLC Value	Percent Above SLC	Min RL for ND	Max RL for ND	Min Value	Max Value	Mean Value	Median Value
2,4,5-Trichlorophenol	T	mg/kg-dry	14	0	No SLC			0.86	8.70	ND	ND		
2,4,6-Trichlorophenol	T	mg/kg-dry	14	0	No SLC			0.34	3.50	ND	ND		
2,4-Dichlorophenol	T	mg/kg-dry	14	0	No SLC			0.34	3.50	ND	ND		
2,4-Dimethylphenol	T	mg/kg-dry	14	0	No SLC			0.34	3.50	ND	ND		
2,4-Dinitrophenol	T	mg/kg-dry	14	0	No SLC			0.86	8.70	ND	ND		
2,4-Dinitrotoluene	T	mg/kg-dry	14	0	No SLC			0.34	3.50	ND	ND		
2,6-Dinitrotoluene	T	mg/kg-dry	14	0	ECO Soil	0.033	0	0.34	3.50	ND	ND		
2-Chloronaphthalene	T	mg/kg-dry	14	0	No SLC			0.34	3.50	ND	ND		
2-Chlorophenol	T	mg/kg-dry	14	0	ECO Soil	20	0	0.34	3.50	ND	ND		
2-Methylnaphthalene	T	mg/kg-dry	14	0	ECO Soil	3.2	0	0.34	3.50	ND	ND		
2-Methylphenol	T	mg/kg-dry	14	0	No SLC			0.34	3.50	ND	ND		
2-Nitroaniline	T	mg/kg-dry	14	0	No SLC			0.86	8.70	ND	ND		
2-Nitrophenol	T	mg/kg-dry	14	0	No SLC			0.34	3.50	ND	ND		
3,3-Dichlorobenzidine	T	mg/kg-dry	14	0	No SLC			0.34	3.50	ND	ND		
3-Nitroaniline	T	mg/kg-dry	14	0	No SLC			0.86	8.70	ND	ND		
4,6-Dinitro-2-methylphenol	T	mg/kg-dry	14	0	No SLC			0.86	8.70	ND	ND		
4-Bromophenyl phenyl ether	T	mg/kg-dry	14	0	No SLC			0.34	3.50	ND	ND		
4-Chloro-3-methylphenol	T	mg/kg-dry	14	0	ECO Soil	8	0	0.34	3.50	ND	ND		
4-Chloroaniline	T	mg/kg-dry	14	0	No SLC			0.34	3.50	ND	ND		
4-Chlorophenyl phenyl ether	T	mg/kg-dry	14	0	No SLC			0.34	3.50	ND	ND		
4-Methylphenol	T	mg/kg-dry	14	0	No SLC			0.34	3.50	ND	ND		
4-Nitroaniline	T	mg/kg-dry	14	0	No SLC			0.86	8.70	ND	ND		
4-Nitrophenol	T	mg/kg-dry	14	0	No SLC			0.86	8.70	ND	ND		
Acenaphthene	T	mg/kg-dry	14	0	ECO Soil	20	0	0.34	3.50	ND	ND		
Acenaphthylene	T	mg/kg-dry	14	0	No SLC			0.34	3.50	ND	ND		
Anthracene	T	mg/kg-dry	14	0	ECO Soil	10	0	0.34	3.50	ND	ND		
Benzo(a)anthracene	T	mg/kg-dry	14	0	ECO Soil	5.2	0	0.34	3.50	ND	ND		
Benzo(a)pyrene	T	mg/kg-dry	14	0	ECO Soil	1	0	0.34	3.50	ND	ND		
Benzo(b)fluoranthene	T	mg/kg-dry	14	0	ECO Soil	59.8	0	0.34	3.50	ND	ND		
Benzo(g,h,i)perylene	T	mg/kg-dry	14	0	ECO Soil	119	0	0.34	3.50	ND	ND		
Benzo(k)fluoranthene	T	mg/kg-dry	14	0	ECO Soil	148	0	0.34	3.50	ND	ND		
Bis(2-chloroethoxy)methane	T	mg/kg-dry	14	0	No SLC			0.34	3.50	ND	ND		

"No SLC" indicates that there is not a Screening Level Criterion for this medium specified for the RI/FS.
"HH Soil (HQ=1)" EPA Region 6 RBSLs Human Health Residential Soil (HQ=1)
"Eco Soil" EPA Region 6 Tier 1-3 RBSLs Ecological Soil
Median Value determined using 1/2 the Reporting Limit value for Non-Detects if greater than 50% of the values were detected.
Mean Value calculated using 1/2 the Reporting Limit for Non-Detects if greater than 50% of the values were detected.

T = Total Fraction
D = Filtered Fraction (0.45 micron filter)
A = Filtered Fraction (0.1 micron filter)
ND = Non-Detected Value

Table 7-46
Soil 0-24 inches Biased
RI/FS Soil Area 8a - Explosives Storage Areas
Summary of Results

Analyte	Sample Fraction	Units	Total Number of Samples	Percent Detects (%)	SLC	SLC Value	Percent Above SLC	Min RL for ND	Max RL for ND	Min Value	Max Value	Mean Value	Median Value
Bis(2-chloroethyl)ether	T	mg/kg-dry	14	0	No SLC			0.34	3.50	ND	ND		
Carbazole	T	mg/kg-dry	14	0	No SLC			0.34	3.50	ND	ND		
Chrysene	T	mg/kg-dry	14	0	ECO Soil	4.7	0	0.34	3.50	ND	ND		
Dibenz(a,h)anthracene	T	mg/kg-dry	14	0	ECO Soil	18.4	0	0.34	3.50	ND	ND		
Dibenzofuran	T	mg/kg-dry	14	0	No SLC			0.34	3.50	ND	ND		
Dichlorodiisopropyl ether	T	mg/kg-dry	14	0	No SLC			0.34	3.50	ND	ND		
Fluoranthene	T	mg/kg-dry	14	7.1	ECO Soil	10	0	0.34	3.50	ND	0.022		
Fluorene	T	mg/kg-dry	14	7.1	ECO Soil	30	0	0.34	3.50	ND	0.072		
Hexachlorobenzene	T	mg/kg-dry	14	0	No SLC			0.34	3.50	ND	ND		
Hexachlorobutadiene	T	mg/kg-dry	14	0	No SLC			0.34	3.50	ND	ND		
Hexachlorocyclopentadiene	T	mg/kg-dry	14	0	No SLC			0.34	3.50	ND	ND		
Hexachloroethane	T	mg/kg-dry	14	0	No SLC			0.34	3.50	ND	ND		
Indeno(1,2,3-cd)pyrene	T	mg/kg-dry	14	0	ECO Soil	109	0	0.34	3.50	ND	ND		
Isophorone	T	mg/kg-dry	14	0	ECO Soil	139	0	0.34	3.50	ND	ND		
Naphthalene	T	mg/kg-dry	14	0	ECO Soil	5	0	0.34	3.50	ND	ND		
Nitrobenzene	T	mg/kg-dry	14	0	No SLC			0.34	3.50	ND	ND		
N-Nitrosodi-n-propylamine	T	mg/kg-dry	14	0	ECO Soil	0.54	0	0.34	3.50	ND	ND		
N-Nitrosodiphenylamine	T	mg/kg-dry	14	0	ECO Soil	20	0	0.34	3.50	ND	ND		
Pentachlorophenol	T	mg/kg-dry	14	0	No SLC			0.86	8.70	ND	ND		
Phenanthrene	T	mg/kg-dry	14	7.1	ECO Soil	5	0	0.34	3.50	ND	0.2		
Phenol	T	mg/kg-dry	14	0	ECO Soil	30	0	0.34	3.50	ND	ND		
Pyrene	T	mg/kg-dry	14	7.1	ECO Soil	10	0	0.34	3.50	ND	0.068		

"No SLC" indicates that there is not a Screening Level Criterion for this medium specified for the RI/FS.
"HH Soil (HQ=1)" EPA Region 6 RBSLs Human Health Residential Soil (HQ=1)
"Eco Soil" EPA Region 6 Tier 1-3 RBSLs Ecological Soil
Median Value determined using 1/2 the Reporting Limit value for Non-Detects if greater than 50% of the values were detected.
Mean Value calculated using 1/2 the Reporting Limit for Non-Detects if greater than 50% of the values were detected.

T = Total Fraction
D = Filtered Fraction (0.45 micron filter)
A = Filtered Fraction (0.1 micron filter)
ND = Non-Detected Value

Table 7-47
Soil 0-6 inches Biased
RI/FS Soil Area 8b - Historic Fueling Areas
Summary of Results

Analyte	Sample Fraction	Units	Total Number of Samples	Percent Detects (%)	SLC	SLC Value	Percent Above SLC	Min RL for ND	Max RL for ND	Min Value	Max Value	Mean Value	Median Value
Inorganics													
Solids, Percent	T	%	3	100	No SLC					90.2	95.1	92.6	92.5
Semi-Volatile Organics													
1,1`-Biphenyl	T	mg/kg-dry	3	0	HH Soil (HQ=1)	3000	0	0.36	1.70	ND	ND		
2,4,5-Trichlorophenol	T	mg/kg-dry	3	0	No SLC			0.90	4.40	ND	ND		
2,4,6-Trichlorophenol	T	mg/kg-dry	3	0	No SLC			0.36	1.70	ND	ND		
2,4-Dichlorophenol	T	mg/kg-dry	3	0	No SLC			0.36	1.70	ND	ND		
2,4-Dimethylphenol	T	mg/kg-dry	3	0	No SLC			0.36	1.70	ND	ND		
2,4-Dinitrophenol	T	mg/kg-dry	3	0	No SLC			0.90	4.40	ND	ND		
2,4-Dinitrotoluene	T	mg/kg-dry	3	0	No SLC			0.36	1.70	ND	ND		
2,6-Dinitrotoluene	T	mg/kg-dry	3	0	HH Soil (HQ=1)	61	0	0.36	1.70	ND	ND		
2-Chloronaphthalene	T	mg/kg-dry	3	0	No SLC			0.36	1.70	ND	ND		
2-Chlorophenol	T	mg/kg-dry	3	0	HH Soil (HQ=1)	64	0	0.36	1.70	ND	ND		
2-Methylnaphthalene	T	mg/kg-dry	3	33.3	No SLC			0.36	0.73	ND	10		
2-Methylphenol	T	mg/kg-dry	3	0	No SLC			0.36	1.70	ND	ND		
2-Nitroaniline	T	mg/kg-dry	3	0	No SLC			0.90	4.40	ND	ND		
2-Nitrophenol	T	mg/kg-dry	3	0	No SLC			0.36	1.70	ND	ND		
3,3-Dichlorobenzidine	T	mg/kg-dry	3	0	No SLC			0.36	1.70	ND	ND		
3-Nitroaniline	T	mg/kg-dry	3	0	No SLC			0.90	4.40	ND	ND		
4,6-Dinitro-2-methylphenol	T	mg/kg-dry	3	0	No SLC			0.90	4.40	ND	ND		
4-Bromophenyl phenyl ether	T	mg/kg-dry	3	0	No SLC			0.36	1.70	ND	ND		
4-Chloro-3-methylphenol	T	mg/kg-dry	3	0	No SLC			0.36	1.70	ND	ND		
4-Chloroaniline	T	mg/kg-dry	3	0	No SLC			0.36	1.70	ND	ND		
4-Chlorophenyl phenyl ether	T	mg/kg-dry	3	0	No SLC			0.36	1.70	ND	ND		
4-Methylphenol	T	mg/kg-dry	3	0	No SLC			0.36	1.70	ND	ND		
4-Nitroaniline	T	mg/kg-dry	3	0	No SLC			0.90	4.40	ND	ND		
4-Nitrophenol	T	mg/kg-dry	3	0	No SLC			0.90	4.40	ND	ND		
Acenaphthene	T	mg/kg-dry	3	33.3	HH Soil (HQ=1)	3700	0	0.36	0.73	ND	0.75		
Acenaphthylene	T	mg/kg-dry	3	0	No SLC			0.36	1.70	ND	ND		
Anthracene	T	mg/kg-dry	3	0	HH Soil (HQ=1)	22000	0	0.36	1.70	ND	ND		
Benzo(a)anthracene	T	mg/kg-dry	3	0	HH Soil (HQ=1)	0.62	0	0.36	1.70	ND	ND		
Benzo(a)pyrene	T	mg/kg-dry	3	0	HH Soil (HQ=1)	0.062	0	0.36	1.70	ND	ND		

"No SLC" indicates that there is not a Screening Level Criterion for this medium specified for the RI/FS.
"HH Soil (HQ=1)" EPA Region 6 RBSLs Human Health Residential Soil (HQ=1)
"Eco Soil" EPA Region 6 Tier 1-3 RBSLs Ecological Soil
Median Value determined using 1/2 the Reporting Limit value for Non-Detects if greater than 50% of the values were detected.
Mean Value calculated using 1/2 the Reporting Limit for Non-Detects if greater than 50% of the values were detected.

T = Total Fraction
D = Filtered Fraction (0.45 micron filter)
A = Filtered Fraction (0.1 micron filter)
ND = Non-Detected Value

Table 7-47
Soil 0-6 inches Biased
RI/FS Soil Area 8b - Historic Fueling Areas
Summary of Results

Analyte	Sample Fraction	Units	Total Number of Samples	Percent Detects (%)	SLC	SLC Value	Percent Above SLC	Min RL for ND	Max RL for ND	Min Value	Max Value	Mean Value	Median Value
Benzo(b)fluoranthene	T	mg/kg-dry	3	0	HH Soil (HQ=1)	0.62	0	0.36	1.70	ND	ND		
Benzo(g,h,i)perylene	T	mg/kg-dry	3	0	No SLC			0.36	1.70	ND	ND		
Benzo(k)fluoranthene	T	mg/kg-dry	3	0	HH Soil (HQ=1)	6.2	0	0.36	1.70	ND	ND		
Bis(2-chloroethoxy)methane	T	mg/kg-dry	3	0	No SLC			0.36	1.70	ND	ND		
Bis(2-chloroethyl)ether	T	mg/kg-dry	3	0	No SLC			0.36	1.70	ND	ND		
Carbazole	T	mg/kg-dry	3	0	HH Soil (HQ=1)	24	0	0.36	1.70	ND	ND		
Chrysene	T	mg/kg-dry	3	33.3	HH Soil (HQ=1)	62	0	0.36	0.73	ND	0.3		
Dibenz(a,h)anthracene	T	mg/kg-dry	3	0	HH Soil (HQ=1)	0.062	0	0.36	1.70	ND	ND		
Dibenzofuran	T	mg/kg-dry	3	0	HH Soil (HQ=1)	150	0	0.36	1.70	ND	ND		
Dichlorodiisopropyl ether	T	mg/kg-dry	3	0	No SLC			0.36	1.70	ND	ND		
Fluoranthene	T	mg/kg-dry	3	33.3	HH Soil (HQ=1)	2300	0	0.36	0.73	ND	0.11		
Fluorene	T	mg/kg-dry	3	33.3	HH Soil (HQ=1)	2600	0	0.36	0.73	ND	1.4		
Hexachlorobenzene	T	mg/kg-dry	3	0	No SLC			0.36	1.70	ND	ND		
Hexachlorobutadiene	T	mg/kg-dry	3	0	No SLC			0.36	1.70	ND	ND		
Hexachlorocyclopentadiene	T	mg/kg-dry	3	0	No SLC			0.36	1.70	ND	ND		
Hexachloroethane	T	mg/kg-dry	3	0	No SLC			0.36	1.70	ND	ND		
Indeno(1,2,3-cd)pyrene	T	mg/kg-dry	3	0	HH Soil (HQ=1)	0.62	0	0.36	1.70	ND	ND		
Isophorone	T	mg/kg-dry	3	0	HH Soil (HQ=1)	510	0	0.36	1.70	ND	ND		
Naphthalene	T	mg/kg-dry	3	33.3	HH Soil (HQ=1)	120	0	0.36	0.73	ND	2.4		
Nitrobenzene	T	mg/kg-dry	3	0	No SLC			0.36	1.70	ND	ND		
N-Nitrosodi-n-propylamine	T	mg/kg-dry	3	0	HH Soil (HQ=1)	0.07	0	0.36	1.70	ND	ND		
N-Nitrosodiphenylamine	T	mg/kg-dry	3	0	HH Soil (HQ=1)	99	0	0.36	1.70	ND	ND		
Pentachlorophenol	T	mg/kg-dry	3	0	No SLC			0.90	4.40	ND	ND		
Phenanthrene	T	mg/kg-dry	3	33.3	No SLC			0.36	0.73	ND	3.8		
Phenol	T	mg/kg-dry	3	0	HH Soil (HQ=1)	18000	0	0.36	1.70	ND	ND		
Pyrene	T	mg/kg-dry	3	33.3	HH Soil (HQ=1)	2300	0	0.36	0.73	ND	0.81		

"No SLC" indicates that there is not a Screening Level Criterion for this medium specified for the RI/FS.
"HH Soil (HQ=1)" EPA Region 6 RBSLs Human Health Residential Soil (HQ=1)
"Eco Soil" EPA Region 6 Tier 1-3 RBSLs Ecological Soil
Median Value determined using 1/2 the Reporting Limit value for Non-Detects if greater than 50% of the values were detected.
Mean Value calculated using 1/2 the Reporting Limit for Non-Detects if greater than 50% of the values were detected.

T = Total Fraction
D = Filtered Fraction (0.45 micron filter)
A = Filtered Fraction (0.1 micron filter)
ND = Non-Detected Value

Table 7-48
Soil 0-24 inches Biased
RI/FS Soil Area 8b - Historic Fueling Areas
Summary of Results

Analyte	Sample Fraction	Units	Total Number of Samples	Percent Detects (%)	SLC	SLC Value	Percent Above SLC	Min RL for ND	Max RL for ND	Min Value	Max Value	Mean Value	Median Value
Inorganics													
Solids, Percent	T	%	3	100	No SLC					89.4	95.2	92.4	92.5
Semi-Volatile Organics													
1,1`-Biphenyl	T	mg/kg-dry	3	33.3	ECO Soil	60	0	0.36	0.74	ND	1.4		
2,4,5-Trichlorophenol	T	mg/kg-dry	3	0	No SLC			0.90	4.40	ND	ND		
2,4,6-Trichlorophenol	T	mg/kg-dry	3	0	No SLC			0.36	1.70	ND	ND		
2,4-Dichlorophenol	T	mg/kg-dry	3	0	No SLC			0.36	1.70	ND	ND		
2,4-Dimethylphenol	T	mg/kg-dry	3	0	No SLC			0.36	1.70	ND	ND		
2,4-Dinitrophenol	T	mg/kg-dry	3	0	No SLC			0.90	4.40	ND	ND		
2,4-Dinitrotoluene	T	mg/kg-dry	3	0	No SLC			0.36	1.70	ND	ND		
2,6-Dinitrotoluene	T	mg/kg-dry	3	0	ECO Soil	0.033	0	0.36	1.70	ND	ND		
2-Chloronaphthalene	T	mg/kg-dry	3	0	No SLC			0.36	1.70	ND	ND		
2-Chlorophenol	T	mg/kg-dry	3	0	ECO Soil	20	0	0.36	1.70	ND	ND		
2-Methylnaphthalene	T	mg/kg-dry	3	33.3	ECO Soil	3.2	100	0.36	0.74	ND	12		
2-Methylphenol	T	mg/kg-dry	3	0	No SLC			0.36	1.70	ND	ND		
2-Nitroaniline	T	mg/kg-dry	3	0	No SLC			0.90	4.40	ND	ND		
2-Nitrophenol	T	mg/kg-dry	3	0	No SLC			0.36	1.70	ND	ND		
3,3-Dichlorobenzidine	T	mg/kg-dry	3	0	No SLC			0.36	1.70	ND	ND		
3-Nitroaniline	T	mg/kg-dry	3	0	No SLC			0.90	4.40	ND	ND		
4,6-Dinitro-2-methylphenol	T	mg/kg-dry	3	0	No SLC			0.90	4.40	ND	ND		
4-Bromophenyl phenyl ether	T	mg/kg-dry	3	0	No SLC			0.36	1.70	ND	ND		
4-Chloro-3-methylphenol	T	mg/kg-dry	3	0	ECO Soil	8	0	0.36	1.70	ND	ND		
4-Chloroaniline	T	mg/kg-dry	3	0	No SLC			0.36	1.70	ND	ND		
4-Chlorophenyl phenyl ether	T	mg/kg-dry	3	0	No SLC			0.36	1.70	ND	ND		
4-Methylphenol	T	mg/kg-dry	3	0	No SLC			0.36	1.70	ND	ND		
4-Nitroaniline	T	mg/kg-dry	3	0	No SLC			0.90	4.40	ND	ND		
4-Nitrophenol	T	mg/kg-dry	3	0	No SLC			0.90	4.40	ND	ND		
Acenaphthene	T	mg/kg-dry	3	33.3	ECO Soil	20	0	0.36	0.74	ND	1.6		
Acenaphthylene	T	mg/kg-dry	3	0	No SLC			0.36	1.70	ND	ND		
Anthracene	T	mg/kg-dry	3	0	ECO Soil	10	0	0.36	1.70	ND	ND		
Benzo(a)anthracene	T	mg/kg-dry	3	0	ECO Soil	5.2	0	0.36	1.70	ND	ND		
Benzo(a)pyrene	T	mg/kg-dry	3	0	ECO Soil	1	0	0.36	1.70	ND	ND		

"No SLC" indicates that there is not a Screening Level Criterion for this medium specified for the RI/FS.
"HH Soil (HQ=1)" EPA Region 6 RBSLs Human Health Residential Soil (HQ=1)
"Eco Soil" EPA Region 6 Tier 1-3 RBSLs Ecological Soil
Median Value determined using 1/2 the Reporting Limit value for Non-Detects if greater than 50% of the values were detected.
Mean Value calculated using 1/2 the Reporting Limit for Non-Detects if greater than 50% of the values were detected.

T = Total Fraction
D = Filtered Fraction (0.45 micron filter)
A = Filtered Fraction (0.1 micron filter)
ND = Non-Detected Value

Table 7-48
Soil 0-24 inches Biased
RI/FS Soil Area 8b - Historic Fueling Areas
Summary of Results

Analyte	Sample Fraction	Units	Total Number of Samples	Percent Detects (%)	SLC	SLC Value	Percent Above SLC	Min RL for ND	Max RL for ND	Min Value	Max Value	Mean Value	Median Value
Benzo(b)fluoranthene	T	mg/kg-dry	3	0	ECO Soil	59.8	0	0.36	1.70	ND	ND		
Benzo(g,h,i)perylene	T	mg/kg-dry	3	0	ECO Soil	119	0	0.36	1.70	ND	ND		
Benzo(k)fluoranthene	T	mg/kg-dry	3	0	ECO Soil	148	0	0.36	1.70	ND	ND		
Bis(2-chloroethoxy)methane	T	mg/kg-dry	3	0	No SLC			0.36	1.70	ND	ND		
Bis(2-chloroethyl)ether	T	mg/kg-dry	3	0	No SLC			0.36	1.70	ND	ND		
Carbazole	T	mg/kg-dry	3	0	No SLC			0.36	1.70	ND	ND		
Chrysene	T	mg/kg-dry	3	33.3	ECO Soil	4.7	0	0.36	0.74	ND	0.35		
Dibenz(a,h)anthracene	T	mg/kg-dry	3	0	ECO Soil	18.4	0	0.36	1.70	ND	ND		
Dibenzofuran	T	mg/kg-dry	3	33.3	No SLC			0.36	0.74	ND	1.1		
Dichlorodiisopropyl ether	T	mg/kg-dry	3	0	No SLC			0.36	1.70	ND	ND		
Fluoranthene	T	mg/kg-dry	3	33.3	ECO Soil	10	0	0.36	0.74	ND	0.22		
Fluorene	T	mg/kg-dry	3	33.3	ECO Soil	30	0	0.36	0.74	ND	3.2		
Hexachlorobenzene	T	mg/kg-dry	3	0	No SLC			0.36	1.70	ND	ND		
Hexachlorobutadiene	T	mg/kg-dry	3	0	No SLC			0.36	1.70	ND	ND		
Hexachlorocyclopentadiene	T	mg/kg-dry	3	0	No SLC			0.36	1.70	ND	ND		
Hexachloroethane	T	mg/kg-dry	3	0	No SLC			0.36	1.70	ND	ND		
Indeno(1,2,3-cd)pyrene	T	mg/kg-dry	3	0	ECO Soil	109	0	0.36	1.70	ND	ND		
Isophorone	T	mg/kg-dry	3	0	ECO Soil	139	0	0.36	1.70	ND	ND		
Naphthalene	T	mg/kg-dry	3	33.3	ECO Soil	5	0	0.36	0.74	ND	2.8		
Nitrobenzene	T	mg/kg-dry	3	0	No SLC			0.36	1.70	ND	ND		
N-Nitrosodi-n-propylamine	T	mg/kg-dry	3	0	ECO Soil	0.54	0	0.36	1.70	ND	ND		
N-Nitrosodiphenylamine	T	mg/kg-dry	3	0	ECO Soil	20	0	0.36	1.70	ND	ND		
Pentachlorophenol	T	mg/kg-dry	3	0	No SLC			0.90	4.40	ND	ND		
Phenanthrene	T	mg/kg-dry	3	33.3	ECO Soil	5	100	0.36	0.74	ND	7.6		
Phenol	T	mg/kg-dry	3	0	ECO Soil	30	0	0.36	1.70	ND	ND		
Pyrene	T	mg/kg-dry	3	33.3	ECO Soil	10	0	0.36	0.74	ND	1.1		

"No SLC" indicates that there is not a Screening Level Criterion for this medium specified for the RI/FS.
"HH Soil (HQ=1)" EPA Region 6 RBSLs Human Health Residential Soil (HQ=1)
"Eco Soil" EPA Region 6 Tier 1-3 RBSLs Ecological Soil
Median Value determined using 1/2 the Reporting Limit value for Non-Detects if greater than 50% of the values were detected.
Mean Value calculated using 1/2 the Reporting Limit for Non-Detects if greater than 50% of the values were detected.

T = Total Fraction
D = Filtered Fraction (0.45 micron filter)
A = Filtered Fraction (0.1 micron filter)
ND = Non-Detected Value

Table 7-49
Soil 0-6 inches Biased
RI/FS Soil Area 8c - Landfills
Summary of Results

Analyte	Sample Fraction	Units	Total Number of Samples	Percent Detects (%)	SLC	SLC Value	Percent Above SLC	Min RL for ND	Max RL for ND	Min Value	Max Value	Mean Value	Median Value
Inorganics													
Cation-Exchange Capacity	T	meq/100g	6	100	No SLC					4.1	18.4	13.5	14.9
Chloride	T	mg/kg-dry	6	50	No SLC			2.20	2.20	ND	12.3	5.4	3.3
Fluoride	T	mg/kg-dry	6	100	HH Soil (HQ=1)	3700	0			0.2	16	3.9	1.1
Nitrate	T	mg/kg-dry	6	50	No SLC			2.20	2.20	ND	13	3.5	1.7
Organic Soils	T	%	6	100	No SLC					2.2	7.6	4	3.1
pH	T	SU	6	100	No SLC					3.4	7.4	6.3	7
Phosphorus	T	mg/kg-dry	6	100	No SLC					613	3090	1360	1180
Sodium Absorption Ratio	T	ratio	6	83.3	No SLC			0.02	0.02	ND	0.45	0.12	0.045
Solids, Percent	T	%	6	100	No SLC					85.1	94.1	92.1	93.8
Specific Conductance	T	umhos/cm	6	100	No SLC					35.4	880	440	431
Sulfate	T	mg/kg-dry	6	100	No SLC					10.2	2410	1340	1740
Total Kjeldahl Nitrogen	T	mg/kg-dry	6	100	No SLC					53.2	551	152	74.5
Total Organic Carbon	T	mg/kg-dry	6	100	No SLC					196	36300	13400	9330
Metals													
Aluminum	T	mg/kg-dry	6	100	HH Soil (HQ=1)	76000	0			5940	18400	10400	8720
Antimony	T	mg/kg-dry	6	16.7	HH Soil (HQ=1)	31	0	0.13	0.28	ND	2.3		
Arsenic	T	mg/kg-dry	6	100	HH Soil (HQ=1)	0.39	100			2	162	29.4	2.9
Barium	T	mg/kg-dry	6	100	HH Soil (HQ=1)	5500	0			32.4	121	84.6	88.9
Beryllium	T	mg/kg-dry	6	100	HH Soil (HQ=1)	150	0			0.55	1.2	0.85	0.85
Boron	T	mg/kg-dry	6	66.7	HH Soil (HQ=1)	5500	0	0.40	43.30	ND	6.1	6.5	4.5
Cadmium	T	mg/kg-dry	6	83.3	HH Soil (HQ=1)	39	0	0.03	0.03	ND	2.9	0.87	0.58
Calcium	T	mg/kg-dry	6	100	No SLC					3490	15600	8270	7160
Chromium	T	mg/kg-dry	6	100	HH Soil (HQ=1)	210	0			14.4	49.8	32	29.1
Cobalt	T	mg/kg-dry	6	83.3	HH Soil (HQ=1)	900	0	19.00	19.00	ND	19	9.1	7.2
Copper	T	mg/kg-dry	6	100	HH Soil (HQ=1)	2900	0			39.4	483	164	95.1
Iron	T	mg/kg-dry	6	100	HH Soil (HQ=1)	23000	83.3			15100	36400	27400	26900
Lead	T	mg/kg-dry	6	100	HH Soil (HQ=1)	400	16.7			56.6	1330	323	99.7
Magnesium	T	mg/kg-dry	6	100	No SLC					3550	11300	5880	4320
Manganese	T	mg/kg-dry	6	100	HH Soil (HQ=1)	3200	0			324	683	471	430
Mercury	T	mg/kg-dry	6	33.3	HH Soil (HQ=1)	23	0	0.02	0.02	ND	0.13		
Molybdenum	T	mg/kg-dry	6	100	HH Soil (HQ=1)	390	66.7			39	178000	30100	585

"No SLC" indicates that there is not a Screening Level Criterion for this medium specified for the RI/FS.
"HH Soil (HQ=1)" EPA Region 6 RBSLs Human Health Residential Soil (HQ=1)
"Eco Soil" EPA Region 6 Tier 1-3 RBSLs Ecological Soil
Median Value determined using 1/2 the Reporting Limit value for Non-Detects if greater than 50% of the values were detected.
Mean Value calculated using 1/2 the Reporting Limit for Non-Detects if greater than 50% of the values were detected.

T = Total Fraction
D = Filtered Fraction (0.45 micron filter)
A = Filtered Fraction (0.1 micron filter)
ND = Non-Detected Value

Table 7-49
Soil 0-6 inches Biased
RI/FS Soil Area 8c - Landfills
Summary of Results

Analyte	Sample Fraction	Units	Total Number of Samples	Percent Detects (%)	SLC	SLC Value	Percent Above SLC	Min RL for ND	Max RL for ND	Min Value	Max Value	Mean Value	Median Value
Nickel	T	mg/kg-dry	6	100	HH Soil (HQ=1)	1600	0			12.6	34.3	20.4	16.3
Potassium	T	mg/kg-dry	6	100	No SLC					1670	5700	3780	3590
Selenium	T	mg/kg-dry	6	83.3	HH Soil (HQ=1)	390	0	0.75	0.75	ND	19.8	4.3	1.3
Silver	T	mg/kg-dry	6	66.7	HH Soil (HQ=1)	390	0	0.13	16.50	ND	1.3	2.1	1.2
Sodium	T	mg/kg-dry	6	50	No SLC			46.70	50.70	ND	569	211	59.5
Thallium	T	mg/kg-dry	6	100	HH Soil (HQ=1)	5.5	0			0.27	4.2	1.1	0.39
Vanadium	T	mg/kg-dry	6	100	HH Soil (HQ=1)	78	16.7			27.9	2330	420	42.1
Zinc	T	mg/kg-dry	6	100	HH Soil (HQ=1)	23000	0			65.6	355	140	107
Semi-Volatile Organics													
1,1`-Biphenyl	T	mg/kg-dry	6	0	HH Soil (HQ=1)	3000	0	0.35	3.50	ND	ND		
2,4,5-Trichlorophenol	T	mg/kg-dry	6	0	No SLC			0.88	8.80	ND	ND		
2,4,6-Trichlorophenol	T	mg/kg-dry	6	0	No SLC			0.35	3.50	ND	ND		
2,4-Dichlorophenol	T	mg/kg-dry	6	0	No SLC			0.35	3.50	ND	ND		
2,4-Dimethylphenol	T	mg/kg-dry	6	0	No SLC			0.35	3.50	ND	ND		
2,4-Dinitrophenol	T	mg/kg-dry	6	0	No SLC			0.88	8.80	ND	ND		
2,4-Dinitrotoluene	T	mg/kg-dry	6	0	No SLC			0.35	3.50	ND	ND		
2,6-Dinitrotoluene	T	mg/kg-dry	6	0	HH Soil (HQ=1)	61	0	0.35	3.50	ND	ND		
2-Chloronaphthalene	T	mg/kg-dry	6	0	No SLC			0.35	3.50	ND	ND		
2-Chlorophenol	T	mg/kg-dry	6	0	HH Soil (HQ=1)	64	0	0.35	3.50	ND	ND		
2-Methylnaphthalene	T	mg/kg-dry	6	0	No SLC			0.35	3.50	ND	ND		
2-Methylphenol	T	mg/kg-dry	6	0	No SLC			0.35	3.50	ND	ND		
2-Nitroaniline	T	mg/kg-dry	6	0	No SLC			0.88	8.80	ND	ND		
2-Nitrophenol	T	mg/kg-dry	6	0	No SLC			0.35	3.50	ND	ND		
3,3-Dichlorobenzidine	T	mg/kg-dry	6	0	No SLC			0.35	3.50	ND	ND		
3-Nitroaniline	T	mg/kg-dry	6	0	No SLC			0.88	8.80	ND	ND		
4,6-Dinitro-2-methylphenol	T	mg/kg-dry	6	0	No SLC			0.88	8.80	ND	ND		
4-Bromophenyl phenyl ether	T	mg/kg-dry	6	0	No SLC			0.35	3.50	ND	ND		
4-Chloro-3-methylphenol	T	mg/kg-dry	6	0	No SLC			0.35	3.50	ND	ND		
4-Chloroaniline	T	mg/kg-dry	6	0	No SLC			0.35	3.50	ND	ND		
4-Chlorophenyl phenyl ether	T	mg/kg-dry	6	0	No SLC			0.35	3.50	ND	ND		
4-Methylphenol	T	mg/kg-dry	6	0	No SLC			0.35	3.50	ND	ND		
4-Nitroaniline	T	mg/kg-dry	6	0	No SLC			0.88	8.80	ND	ND		

"No SLC" indicates that there is not a Screening Level Criterion for this medium specified for the RI/FS.
"HH Soil (HQ=1)" EPA Region 6 RBSLs Human Health Residential Soil (HQ=1)
"Eco Soil" EPA Region 6 Tier 1-3 RBSLs Ecological Soil
Median Value determined using 1/2 the Reporting Limit value for Non-Detects if greater than 50% of the values were detected.
Mean Value calculated using 1/2 the Reporting Limit for Non-Detects if greater than 50% of the values were detected.

T = Total Fraction
D = Filtered Fraction (0.45 micron filter)
A = Filtered Fraction (0.1 micron filter)
ND = Non-Detected Value

Table 7-49
Soil 0-6 inches Biased
RI/FS Soil Area 8c - Landfills
Summary of Results

Analyte	Sample Fraction	Units	Total Number of Samples	Percent Detects (%)	SLC	SLC Value	Percent Above SLC	Min RL for ND	Max RL for ND	Min Value	Max Value	Mean Value	Median Value
4-Nitrophenol	T	mg/kg-dry	6	0	No SLC			0.88	8.80	ND	ND		
Acenaphthene	T	mg/kg-dry	6	0	HH Soil (HQ=1)	3700	0	0.35	3.50	ND	ND		
Acenaphthylene	T	mg/kg-dry	6	0	No SLC			0.35	3.50	ND	ND		
Anthracene	T	mg/kg-dry	6	0	HH Soil (HQ=1)	22000	0	0.35	3.50	ND	ND		
Benzo(a)anthracene	T	mg/kg-dry	6	0	HH Soil (HQ=1)	0.62	0	0.35	3.50	ND	ND		
Benzo(a)pyrene	T	mg/kg-dry	6	0	HH Soil (HQ=1)	0.062	0	0.35	3.50	ND	ND		
Benzo(b)fluoranthene	T	mg/kg-dry	6	0	HH Soil (HQ=1)	0.62	0	0.35	3.50	ND	ND		
Benzo(g,h,i)perylene	T	mg/kg-dry	6	0	No SLC			0.35	3.50	ND	ND		
Benzo(k)fluoranthene	T	mg/kg-dry	6	0	HH Soil (HQ=1)	6.2	0	0.35	3.50	ND	ND		
Bis(2-chloroethoxy)methane	T	mg/kg-dry	6	0	No SLC			0.35	3.50	ND	ND		
Bis(2-chloroethyl)ether	T	mg/kg-dry	6	0	No SLC			0.35	3.50	ND	ND		
Carbazole	T	mg/kg-dry	6	0	HH Soil (HQ=1)	24	0	0.35	3.50	ND	ND		
Chrysene	T	mg/kg-dry	6	0	HH Soil (HQ=1)	62	0	0.35	3.50	ND	ND		
Dibenz(a,h)anthracene	T	mg/kg-dry	6	0	HH Soil (HQ=1)	0.062	0	0.35	3.50	ND	ND		
Dibenzofuran	T	mg/kg-dry	6	0	HH Soil (HQ=1)	150	0	0.35	3.50	ND	ND		
Dichlorodiisopropyl ether	T	mg/kg-dry	6	0	No SLC			0.35	3.50	ND	ND		
Fluoranthene	T	mg/kg-dry	6	0	HH Soil (HQ=1)	2300	0	0.35	3.50	ND	ND		
Fluorene	T	mg/kg-dry	6	0	HH Soil (HQ=1)	2600	0	0.35	3.50	ND	ND		
Hexachlorobenzene	T	mg/kg-dry	6	0	No SLC			0.35	3.50	ND	ND		
Hexachlorobutadiene	T	mg/kg-dry	6	0	No SLC			0.35	3.50	ND	ND		
Hexachlorocyclopentadiene	T	mg/kg-dry	6	0	No SLC			0.35	3.50	ND	ND		
Hexachloroethane	T	mg/kg-dry	6	0	No SLC			0.35	3.50	ND	ND		
Indeno(1,2,3-cd)pyrene	T	mg/kg-dry	6	0	HH Soil (HQ=1)	0.62	0	0.35	3.50	ND	ND		
Isophorone	T	mg/kg-dry	6	0	HH Soil (HQ=1)	510	0	0.35	3.50	ND	ND		
Naphthalene	T	mg/kg-dry	6	0	HH Soil (HQ=1)	120	0	0.35	3.50	ND	ND		
Nitrobenzene	T	mg/kg-dry	6	0	No SLC			0.35	3.50	ND	ND		
N-Nitrosodi-n-propylamine	T	mg/kg-dry	6	0	HH Soil (HQ=1)	0.07	0	0.35	3.50	ND	ND		
N-Nitrosodiphenylamine	T	mg/kg-dry	6	0	HH Soil (HQ=1)	99	0	0.35	3.50	ND	ND		
Pentachlorophenol	T	mg/kg-dry	6	0	No SLC			0.88	8.80	ND	ND		
Phenanthrene	T	mg/kg-dry	6	0	No SLC			0.35	3.50	ND	ND		
Phenol	T	mg/kg-dry	6	0	HH Soil (HQ=1)	18000	0	0.35	3.50	ND	ND		
Pyrene	T	mg/kg-dry	6	16.7	HH Soil (HQ=1)	2300	0	0.35	1.80	ND	0.82		

"No SLC" indicates that there is not a Screening Level Criterion for this medium specified for the RI/FS.
"HH Soil (HQ=1)" EPA Region 6 RBSLs Human Health Residential Soil (HQ=1)
"Eco Soil" EPA Region 6 Tier 1-3 RBSLs Ecological Soil
Median Value determined using 1/2 the Reporting Limit value for Non-Detects if greater than 50% of the values were detected.
Mean Value calculated using 1/2 the Reporting Limit for Non-Detects if greater than 50% of the values were detected.

T = Total Fraction
D = Filtered Fraction (0.45 micron filter)
A = Filtered Fraction (0.1 micron filter)
ND = Non-Detected Value

Table 7-49
Soil 0-6 inches Biased
RI/FS Soil Area 8c - Landfills
Summary of Results

Analyte	Sample Fraction	Units	Total Number of Samples	Percent Detects (%)	SLC	SLC Value	Percent Above SLC	Min RL for ND	Max RL for ND	Min Value	Max Value	Mean Value	Median Value
Volatile Organics													
1,1,1-Trichloroethane	T	mg/kg-dry	6	0	HH Soil (HQ=1)	1400	0	0.01	1.70	ND	ND		
1,1,2,2-Tetrachloroethane	T	mg/kg-dry	6	0	No SLC			0.01	1.70	ND	ND		
1,1,2-Trichloro-1,2,2-trifluoroethane	T	mg/kg-dry	6	0	No SLC			0.01	1.70	ND	ND		
1,1,2-Trichloroethane	T	mg/kg-dry	6	0	No SLC			0.01	1.70	ND	ND		
1,1-Dichloroethane	T	mg/kg-dry	6	0	HH Soil (HQ=1)	590	0	0.01	1.70	ND	ND		
1,1-Dichloroethene	T	mg/kg-dry	6	0	HH Soil (HQ=1)	280	0	0.01	1.70	ND	ND		
1,2,4-Trichlorobenzene	T	mg/kg-dry	6	0	No SLC			0.01	1.70	ND	ND		
1,2-Dibromo-3-chloropropane	T	mg/kg-dry	6	0	No SLC			0.01	1.70	ND	ND		
1,2-Dichlorobenzene	T	mg/kg-dry	6	0	No SLC			0.01	1.70	ND	ND		
1,2-Dichloroethane	T	mg/kg-dry	6	0	No SLC			0.01	1.70	ND	ND		
1,2-Dichloroethene (total)	T	mg/kg-dry	6	0	No SLC			0.01	1.70	ND	ND		
1,2-Dichloropropane	T	mg/kg-dry	6	0	No SLC			0.01	1.70	ND	ND		
1,3-Dichlorobenzene	T	mg/kg-dry	6	0	No SLC			0.01	1.70	ND	ND		
1,4-Dichlorobenzene	T	mg/kg-dry	6	0	No SLC			0.01	1.70	ND	ND		
2-Butanone	T	mg/kg-dry	6	0	HH Soil (HQ=1)	32000	0	0.01	1.70	ND	ND		
2-Hexanone	T	mg/kg-dry	6	0	No SLC			0.01	1.70	ND	ND		
4-Methyl-2-pentanone	T	mg/kg-dry	6	0	HH Soil (HQ=1)	5800	0	0.01	1.70	ND	ND		
Benzene	T	mg/kg-dry	6	0	HH Soil (HQ=1)	0.66	0	0.01	1.70	ND	ND		
Bromodichloromethane	T	mg/kg-dry	6	0	No SLC			0.01	1.70	ND	ND		
Bromoform	T	mg/kg-dry	6	0	No SLC			0.01	1.70	ND	ND		
Bromomethane	T	mg/kg-dry	6	0	No SLC			0.01	1.70	ND	ND		
Carbon tetrachloride	T	mg/kg-dry	6	33.3	HH Soil (HQ=1)	0.24	0	0.01	1.70	ND	0.001		
Chlorobenzene	T	mg/kg-dry	6	0	HH Soil (HQ=1)	320	0	0.01	1.70	ND	ND		
Chloroethane	T	mg/kg-dry	6	0	No SLC			0.01	1.70	ND	ND		
Chloroform	T	mg/kg-dry	6	0	No SLC			0.01	1.70	ND	ND		
Chloromethane	T	mg/kg-dry	6	0	HH Soil (HQ=1)	1.2	0	0.01	1.70	ND	ND		
cis-1,2-Dichloroethene	T	mg/kg-dry	6	0	No SLC			0.01	1.70	ND	ND		
cis-1,3-Dichloropropene	T	mg/kg-dry	6	0	No SLC			0.01	1.70	ND	ND		
Dibromochloromethane	T	mg/kg-dry	6	0	No SLC			0.01	1.70	ND	ND		
Dichlorodifluoromethane	T	mg/kg-dry	6	0	HH Soil (HQ=1)	94	0	0.01	1.70	ND	ND		
Ethylbenzene	T	mg/kg-dry	6	0	HH Soil (HQ=1)	230	0	0.01	1.70	ND	ND		

"No SLC" indicates that there is not a Screening Level Criterion for this medium specified for the RI/FS.
"HH Soil (HQ=1)" EPA Region 6 RBSLs Human Health Residential Soil (HQ=1)
"Eco Soil" EPA Region 6 Tier 1-3 RBSLs Ecological Soil
Median Value determined using 1/2 the Reporting Limit value for Non-Detects if greater than 50% of the values were detected.
Mean Value calculated using 1/2 the Reporting Limit for Non-Detects if greater than 50% of the values were detected.

T = Total Fraction
D = Filtered Fraction (0.45 micron filter)
A = Filtered Fraction (0.1 micron filter)
ND = Non-Detected Value

Table 7-49
Soil 0-6 inches Biased
RI/FS Soil Area 8c - Landfills
Summary of Results

Analyte	Sample Fraction	Units	Total Number of Samples	Percent Detects (%)	SLC	SLC Value	Percent Above SLC	Min RL for ND	Max RL for ND	Min Value	Max Value	Mean Value	Median Value
Styrene	T	mg/kg-dry	6	0	HH Soil (HQ=1)	1700	0	0.01	1.70	ND	ND		
Tetrachloroethene	T	mg/kg-dry	6	0	HH Soil (HQ=1)	0.55	0	0.01	1.70	ND	ND		
Toluene	T	mg/kg-dry	6	0	HH Soil (HQ=1)	520	0	0.01	1.70	ND	ND		
Total Xylene	T	mg/kg-dry	6	0	HH Soil (HQ=1)	210	0	0.01	1.70	ND	ND		
trans-1,2-Dichloroethene	T	mg/kg-dry	6	0	No SLC			0.01	1.70	ND	ND		
trans-1,3-Dichloropropene	T	mg/kg-dry	6	0	No SLC			0.01	1.70	ND	ND		
Trichloroethene	T	mg/kg-dry	6	0	HH Soil (HQ=1)	0.043	0	0.01	1.70	ND	ND		
Trichlorofluoromethane	T	mg/kg-dry	6	33.3	HH Soil (HQ=1)	390	0	0.01	1.70	ND	0.004		
Vinyl chloride	T	mg/kg-dry	6	0	No SLC			0.01	1.70	ND	ND		

"No SLC" indicates that there is not a Screening Level Criterion for this medium specified for the RI/FS.
"HH Soil (HQ=1)" EPA Region 6 RBSLs Human Health Residential Soil (HQ=1)
"Eco Soil" EPA Region 6 Tier 1-3 RBSLs Ecological Soil
Median Value determined using 1/2 the Reporting Limit value for Non-Detects if greater than 50% of the values were detected.
Mean Value calculated using 1/2 the Reporting Limit for Non-Detects if greater than 50% of the values were detected.

T = Total Fraction
D = Filtered Fraction (0.45 micron filter)
A = Filtered Fraction (0.1 micron filter)
ND = Non-Detected Value

Table 7-50
Soil 0-24 inches Biased
RI/FS Soil Area 8c - Landfills
Summary of Results

Analyte	Sample Fraction	Units	Total Number of Samples	Percent Detects (%)	SLC	SLC Value	Percent Above SLC	Min RL for ND	Max RL for ND	Min Value	Max Value	Mean Value	Median Value
Inorganics													
Cation-Exchange Capacity	T	meq/100g	6	100	No SLC					4.2	16.9	12.1	12.9
Chloride	T	mg/kg-dry	6	83.3	No SLC			2.20	2.20	ND	6.8	4.8	5.3
Fluoride	T	mg/kg-dry	6	100	No SLC					0.41	23.5	5.7	1.7
Nitrate	T	mg/kg-dry	6	33.3	No SLC			2.20	2.30	ND	7.6		
Organic Soils	T	%	6	100	No SLC					2.7	7.7	3.8	3
pH	T	SU	6	100	No SLC					4.2	7.5	6.3	6.8
Phosphorus	T	mg/kg-dry	6	100	No SLC					506	2560	1340	1110
Sodium Absorption Ratio	T	ratio	6	83.3	No SLC			0.02	0.02	ND	0.31	0.093	0.055
Solids, Percent	T	%	6	100	No SLC					80.5	94	90.4	92.3
Specific Conductance	T	umhos/cm	6	100	No SLC					33.1	885	471	469
Sulfate	T	mg/kg-dry	6	100	No SLC					30	2720	1400	1670
Total Kjeldahl Nitrogen	T	mg/kg-dry	6	100	No SLC					57.2	491	144	81.5
Total Organic Carbon	T	mg/kg-dry	6	83.3	No SLC			107.00	107.00	ND	42700	10800	3370
Metals													
Aluminum	T	mg/kg-dry	6	100	No SLC					5870	20000	11900	8910
Antimony	T	mg/kg-dry	6	16.7	ECO Soil	0.3	100	0.13	0.30	ND	2.9		
Arsenic	T	mg/kg-dry	6	100	ECO Soil	31	16.7			1.7	186	33.5	3.2
Barium	T	mg/kg-dry	6	100	ECO Soil	330	0			31.1	208	105	95.3
Beryllium	T	mg/kg-dry	6	100	ECO Soil	30	0			0.55	1.3	0.99	1
Boron	T	mg/kg-dry	6	66.7	ECO Soil	0.5	100	0.41	43.90	ND	7	7	5.2
Cadmium	T	mg/kg-dry	6	83.3	ECO Soil	0.4	60	0.03	0.03	ND	3.3	0.88	0.48
Calcium	T	mg/kg-dry	6	100	No SLC					3340	17300	8650	7860
Chromium	T	mg/kg-dry	6	100	ECO Soil	7.9	100			15.3	92.1	38.5	27.6
Cobalt	T	mg/kg-dry	6	83.3	ECO Soil	32	0	19.30	19.30	ND	19.1	10	10.1
Copper	T	mg/kg-dry	6	100	ECO Soil	54	83.3			42.8	509	214	182
Iron	T	mg/kg-dry	6	100	No SLC					16100	42300	29800	29400
Lead	T	mg/kg-dry	6	100	ECO Soil	15	100			34	1520	365	102
Magnesium	T	mg/kg-dry	6	100	No SLC					3260	18600	7060	4790
Manganese	T	mg/kg-dry	6	100	ECO Soil	152	100			313	641	524	573
Mercury	T	mg/kg-dry	6	16.7	ECO Soil	0.1	100	0.02	0.02	ND	0.17		
Molybdenum	T	mg/kg-dry	6	100	ECO Soil	2	100			25.1	189000	31900	411

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"HH Soil (HQ=1)" EPA Region 6 RBSLs Human Health Residential Soil (HQ=1)
"Eco Soil" EPA Region 6 Tier 1-3 RBSLs Ecological Soil
Median Value determined using 1/2 the Reporting Limit value for Non-Detects if greater than 50% of the values were detected.
Mean Value calculated using 1/2 the Reporting Limit for Non-Detects if greater than 50% of the values were detected.

T = Total Fraction
D = Filtered Fraction (0.45 micron filter)
A = Filtered Fraction (0.1 micron filter)
ND = Non-Detected Value

Table 7-50
Soil 0-24 inches Biased
RI/FS Soil Area 8c - Landfills
Summary of Results

Analyte	Sample Fraction	Units	Total Number of Samples	Percent Detects (%)	SLC	SLC Value	Percent Above SLC	Min RL for ND	Max RL for ND	Min Value	Max Value	Mean Value	Median Value
Nickel	T	mg/kg-dry	6	100	ECO Soil	48	0			11.2	44.3	23.2	19.1
Potassium	T	mg/kg-dry	6	100	No SLC					1650	8640	4300	3430
Selenium	T	mg/kg-dry	6	83.3	ECO Soil	1	80	0.80	0.80	ND	22.1	4.7	1.4
Silver	T	mg/kg-dry	6	83.3	ECO Soil	2	0	16.70	16.70	ND	1.7	2.2	1.3
Sodium	T	mg/kg-dry	6	50	No SLC			47.30	53.10	ND	649	235	51.4
Thallium	T	mg/kg-dry	6	100	ECO Soil	1	33.3			0.27	4	1.2	0.38
Vanadium	T	mg/kg-dry	6	100	ECO Soil	2	100			24.9	2580	466	43.3
Zinc	T	mg/kg-dry	6	100	ECO Soil	120	16.7			59.6	370	132	88.3
Semi-Volatile Organics													
1,1`-Biphenyl	T	mg/kg-dry	6	0	ECO Soil	60	0	0.35	1.80	ND	ND		
2,4,5-Trichlorophenol	T	mg/kg-dry	6	0	No SLC			0.88	4.40	ND	ND		
2,4,6-Trichlorophenol	T	mg/kg-dry	6	0	No SLC			0.35	1.80	ND	ND		
2,4-Dichlorophenol	T	mg/kg-dry	6	0	No SLC			0.35	1.80	ND	ND		
2,4-Dimethylphenol	T	mg/kg-dry	6	0	No SLC			0.35	1.80	ND	ND		
2,4-Dinitrophenol	T	mg/kg-dry	6	0	No SLC			0.88	4.40	ND	ND		
2,4-Dinitrotoluene	T	mg/kg-dry	6	0	No SLC			0.35	1.80	ND	ND		
2,6-Dinitrotoluene	T	mg/kg-dry	6	0	ECO Soil	0.033	0	0.35	1.80	ND	ND		
2-Chloronaphthalene	T	mg/kg-dry	6	0	No SLC			0.35	1.80	ND	ND		
2-Chlorophenol	T	mg/kg-dry	6	0	ECO Soil	20	0	0.35	1.80	ND	ND		
2-Methylnaphthalene	T	mg/kg-dry	6	0	ECO Soil	3.2	0	0.35	1.80	ND	ND		
2-Methylphenol	T	mg/kg-dry	6	0	No SLC			0.35	1.80	ND	ND		
2-Nitroaniline	T	mg/kg-dry	6	0	No SLC			0.88	4.40	ND	ND		
2-Nitrophenol	T	mg/kg-dry	6	0	No SLC			0.35	1.80	ND	ND		
3,3-Dichlorobenzidine	T	mg/kg-dry	6	0	No SLC			0.35	1.80	ND	ND		
3-Nitroaniline	T	mg/kg-dry	6	0	No SLC			0.88	4.40	ND	ND		
4,6-Dinitro-2-methylphenol	T	mg/kg-dry	6	0	No SLC			0.88	4.40	ND	ND		
4-Bromophenyl phenyl ether	T	mg/kg-dry	6	0	No SLC			0.35	1.80	ND	ND		
4-Chloro-3-methylphenol	T	mg/kg-dry	6	0	ECO Soil	8	0	0.35	1.80	ND	ND		
4-Chloroaniline	T	mg/kg-dry	6	0	No SLC			0.35	1.80	ND	ND		
4-Chlorophenyl phenyl ether	T	mg/kg-dry	6	0	No SLC			0.35	1.80	ND	ND		
4-Methylphenol	T	mg/kg-dry	6	0	No SLC			0.35	1.80	ND	ND		
4-Nitroaniline	T	mg/kg-dry	6	0	No SLC			0.88	4.40	ND	ND		

"No SLC" indicates that there is not a Screening Level Criterion for this medium specified for the RI/FS.
"HH Soil (HQ=1)" EPA Region 6 RBSLs Human Health Residential Soil (HQ=1)
"Eco Soil" EPA Region 6 Tier 1-3 RBSLs Ecological Soil
Median Value determined using 1/2 the Reporting Limit value for Non-Detects if greater than 50% of the values were detected.
Mean Value calculated using 1/2 the Reporting Limit for Non-Detects if greater than 50% of the values were detected.

T = Total Fraction
D = Filtered Fraction (0.45 micron filter)
A = Filtered Fraction (0.1 micron filter)
ND = Non-Detected Value

Table 7-50
Soil 0-24 inches Biased
RI/FS Soil Area 8c - Landfills
Summary of Results

Analyte	Sample Fraction	Units	Total Number of Samples	Percent Detects (%)	SLC	SLC Value	Percent Above SLC	Min RL for ND	Max RL for ND	Min Value	Max Value	Mean Value	Median Value
4-Nitrophenol	T	mg/kg-dry	6	0	No SLC			0.88	4.40	ND	ND		
Acenaphthene	T	mg/kg-dry	6	0	ECO Soil	20	0	0.35	1.80	ND	ND		
Acenaphthylene	T	mg/kg-dry	6	0	No SLC			0.35	1.80	ND	ND		
Anthracene	T	mg/kg-dry	6	0	ECO Soil	10	0	0.35	1.80	ND	ND		
Benzo(a)anthracene	T	mg/kg-dry	6	0	ECO Soil	5.2	0	0.35	1.80	ND	ND		
Benzo(a)pyrene	T	mg/kg-dry	6	0	ECO Soil	1	0	0.35	1.80	ND	ND		
Benzo(b)fluoranthene	T	mg/kg-dry	6	0	ECO Soil	59.8	0	0.35	1.80	ND	ND		
Benzo(g,h,i)perylene	T	mg/kg-dry	6	0	ECO Soil	119	0	0.35	1.80	ND	ND		
Benzo(k)fluoranthene	T	mg/kg-dry	6	0	ECO Soil	148	0	0.35	1.80	ND	ND		
Bis(2-chloroethoxy)methane	T	mg/kg-dry	6	0	No SLC			0.35	1.80	ND	ND		
Bis(2-chloroethyl)ether	T	mg/kg-dry	6	0	No SLC			0.35	1.80	ND	ND		
Carbazole	T	mg/kg-dry	6	0	No SLC			0.35	1.80	ND	ND		
Chrysene	T	mg/kg-dry	6	16.7	ECO Soil	4.7	0	0.35	1.80	ND	0.06		
Dibenz(a,h)anthracene	T	mg/kg-dry	6	0	ECO Soil	18.4	0	0.35	1.80	ND	ND		
Dibenzofuran	T	mg/kg-dry	6	0	No SLC			0.35	1.80	ND	ND		
Dichlorodiisopropyl ether	T	mg/kg-dry	6	0	No SLC			0.35	1.80	ND	ND		
Fluoranthene	T	mg/kg-dry	6	0	ECO Soil	10	0	0.35	1.80	ND	ND		
Fluorene	T	mg/kg-dry	6	0	ECO Soil	30	0	0.35	1.80	ND	ND		
Hexachlorobenzene	T	mg/kg-dry	6	0	No SLC			0.35	1.80	ND	ND		
Hexachlorobutadiene	T	mg/kg-dry	6	0	No SLC			0.35	1.80	ND	ND		
Hexachlorocyclopentadiene	T	mg/kg-dry	6	0	No SLC			0.35	1.80	ND	ND		
Hexachloroethane	T	mg/kg-dry	6	0	No SLC			0.35	1.80	ND	ND		
Indeno(1,2,3-cd)pyrene	T	mg/kg-dry	6	0	ECO Soil	109	0	0.35	1.80	ND	ND		
Isophorone	T	mg/kg-dry	6	0	ECO Soil	139	0	0.35	1.80	ND	ND		
Naphthalene	T	mg/kg-dry	6	0	ECO Soil	5	0	0.35	1.80	ND	ND		
Nitrobenzene	T	mg/kg-dry	6	0	No SLC			0.35	1.80	ND	ND		
N-Nitrosodi-n-propylamine	T	mg/kg-dry	6	0	ECO Soil	0.54	0	0.35	1.80	ND	ND		
N-Nitrosodiphenylamine	T	mg/kg-dry	6	0	ECO Soil	20	0	0.35	1.80	ND	ND		
Pentachlorophenol	T	mg/kg-dry	6	0	No SLC			0.88	4.40	ND	ND		
Phenanthrene	T	mg/kg-dry	6	0	ECO Soil	5	0	0.35	1.80	ND	ND		
Phenol	T	mg/kg-dry	6	0	ECO Soil	30	0	0.35	1.80	ND	ND		
Pyrene	T	mg/kg-dry	6	33.3	ECO Soil	10	0	0.35	0.72	ND	0.39		

"No SLC" indicates that there is not a Screening Level Criterion for this medium specified for the RI/FS.
"HH Soil (HQ=1)" EPA Region 6 RBSLs Human Health Residential Soil (HQ=1)
"Eco Soil" EPA Region 6 Tier 1-3 RBSLs Ecological Soil
Median Value determined using 1/2 the Reporting Limit value for Non-Detects if greater than 50% of the values were detected.
Mean Value calculated using 1/2 the Reporting Limit for Non-Detects if greater than 50% of the values were detected.

T = Total Fraction
D = Filtered Fraction (0.45 micron filter)
A = Filtered Fraction (0.1 micron filter)
ND = Non-Detected Value

Table 7-50
Soil 0-24 inches Biased
RI/FS Soil Area 8c - Landfills
Summary of Results

Analyte	Sample Fraction	Units	Total Number of Samples	Percent Detects (%)	SLC	SLC Value	Percent Above SLC	Min RL for ND	Max RL for ND	Min Value	Max Value	Mean Value	Median Value
Volatile Organics													
1,1,1-Trichloroethane	T	mg/kg-dry	6	0	ECO Soil	0.1	0	0.01	0.01	ND	ND		
1,1,2,2-Tetrachloroethane	T	mg/kg-dry	6	0	No SLC			0.01	0.01	ND	ND		
1,1,2-Trichloro-1,2,2-trifluoroethane	T	mg/kg-dry	6	0	No SLC			0.01	0.01	ND	ND		
1,1,2-Trichloroethane	T	mg/kg-dry	6	0	No SLC			0.01	0.01	ND	ND		
1,1-Dichloroethane	T	mg/kg-dry	6	0	ECO Soil	20.1	0	0.01	0.01	ND	ND		
1,1-Dichloroethene	T	mg/kg-dry	6	0	No SLC			0.01	0.01	ND	ND		
1,2,4-Trichlorobenzene	T	mg/kg-dry	6	0	No SLC			0.01	0.01	ND	ND		
1,2-Dibromo-3-chloropropane	T	mg/kg-dry	6	0	No SLC			0.01	0.01	ND	ND		
1,2-Dichlorobenzene	T	mg/kg-dry	6	0	No SLC			0.01	0.01	ND	ND		
1,2-Dichloroethane	T	mg/kg-dry	6	0	No SLC			0.01	0.01	ND	ND		
1,2-Dichloroethene (total)	T	mg/kg-dry	6	0	No SLC			0.01	0.01	ND	ND		
1,2-Dichloropropane	T	mg/kg-dry	6	0	No SLC			0.01	0.01	ND	ND		
1,3-Dichlorobenzene	T	mg/kg-dry	6	0	No SLC			0.01	0.01	ND	ND		
1,4-Dichlorobenzene	T	mg/kg-dry	6	0	No SLC			0.01	0.01	ND	ND		
2-Butanone	T	mg/kg-dry	6	33.3	ECO Soil	89.6	0	0.01	0.01	ND	0.005		
2-Hexanone	T	mg/kg-dry	6	0	ECO Soil	12.6	0	0.01	0.01	ND	ND		
4-Methyl-2-pentanone	T	mg/kg-dry	6	0	ECO Soil	443	0	0.01	0.01	ND	ND		
Benzene	T	mg/kg-dry	6	0	ECO Soil	0.5	0	0.01	0.01	ND	ND		
Bromodichloromethane	T	mg/kg-dry	6	0	No SLC			0.01	0.01	ND	ND		
Bromoform	T	mg/kg-dry	6	0	No SLC			0.01	0.01	ND	ND		
Bromomethane	T	mg/kg-dry	6	0	No SLC			0.01	0.01	ND	ND		
Carbon tetrachloride	T	mg/kg-dry	6	33.3	ECO Soil	1000	0	0.01	0.01	ND	0.002		
Chlorobenzene	T	mg/kg-dry	6	0	ECO Soil	40	0	0.01	0.01	ND	ND		
Chloroethane	T	mg/kg-dry	6	0	No SLC			0.01	0.01	ND	ND		
Chloroform	T	mg/kg-dry	6	0	No SLC			0.01	0.01	ND	ND		
Chloromethane	T	mg/kg-dry	6	0	ECO Soil	10.4	0	0.01	0.01	ND	ND		
cis-1,2-Dichloroethene	T	mg/kg-dry	6	0	No SLC			0.01	0.01	ND	ND		
cis-1,3-Dichloropropene	T	mg/kg-dry	6	0	No SLC			0.01	0.01	ND	ND		
Dibromochloromethane	T	mg/kg-dry	6	0	No SLC			0.01	0.01	ND	ND		
Dichlorodifluoromethane	T	mg/kg-dry	6	0	ECO Soil	39.5	0	0.01	0.01	ND	ND		
Ethylbenzene	T	mg/kg-dry	6	0	ECO Soil	5	0	0.01	0.01	ND	ND		

"No SLC" indicates that there is not a Screening Level Criterion for this medium specified for the RI/FS.
"HH Soil (HQ=1)" EPA Region 6 RBSLs Human Health Residential Soil (HQ=1)
"Eco Soil" EPA Region 6 Tier 1-3 RBSLs Ecological Soil
Median Value determined using 1/2 the Reporting Limit value for Non-Detects if greater than 50% of the values were detected.
Mean Value calculated using 1/2 the Reporting Limit for Non-Detects if greater than 50% of the values were detected.

T = Total Fraction
D = Filtered Fraction (0.45 micron filter)
A = Filtered Fraction (0.1 micron filter)
ND = Non-Detected Value

Table 7-50
Soil 0-24 inches Biased
RI/FS Soil Area 8c - Landfills
Summary of Results

Analyte	Sample Fraction	Units	Total Number of Samples	Percent Detects (%)	SLC	SLC Value	Percent Above SLC	Min RL for ND	Max RL for ND	Min Value	Max Value	Mean Value	Median Value
Styrene	T	mg/kg-dry	6	0	ECO Soil	300	0	0.01	0.01	ND	ND		
Tetrachloroethene	T	mg/kg-dry	6	0	No SLC			0.01	0.01	ND	ND		
Toluene	T	mg/kg-dry	6	0	ECO Soil	200	0	0.01	0.01	ND	ND		
Total Xylene	T	mg/kg-dry	6	0	ECO Soil	5	0	0.01	0.01	ND	ND		
trans-1,2-Dichloroethene	T	mg/kg-dry	6	0	No SLC			0.01	0.01	ND	ND		
trans-1,3-Dichloropropene	T	mg/kg-dry	6	0	No SLC			0.01	0.01	ND	ND		
Trichloroethene	T	mg/kg-dry	6	0	No SLC			0.01	0.01	ND	ND		
Trichlorofluoromethane	T	mg/kg-dry	6	33.3	ECO Soil	16.4	0	0.01	0.01	ND	0.008		
Vinyl chloride	T	mg/kg-dry	6	0	No SLC			0.01	0.01	ND	ND		

"No SLC" indicates that there is not a Screening Level Criterion for this medium specified for the RI/FS.
"HH Soil (HQ=1)" EPA Region 6 RBSLs Human Health Residential Soil (HQ=1)
"Eco Soil" EPA Region 6 Tier 1-3 RBSLs Ecological Soil
Median Value determined using 1/2 the Reporting Limit value for Non-Detects if greater than 50% of the values were detected.
Mean Value calculated using 1/2 the Reporting Limit for Non-Detects if greater than 50% of the values were detected.

T = Total Fraction
D = Filtered Fraction (0.45 micron filter)
A = Filtered Fraction (0.1 micron filter)
ND = Non-Detected Value

Table 7-51
Soil 0-6 inches Biased
RI/FS Soil Area 8d - Truck Shop Soils
Summary of Results

Analyte	Sample Fraction	Units	Total Number of Samples	Percent Detects (%)	SLC	SLC Value	Percent Above SLC	Min RL for ND	Max RL for ND	Min Value	Max Value	Mean Value	Median Value
Inorganics													
Cation-Exchange Capacity	T	meq/100g	30	100	No SLC					12	28.3	17.8	17.3
Chloride	T	mg/kg-dry	30	73.3	No SLC			2.30	28.40	ND	84.9	12.4	5.8
Fluoride	T	mg/kg-dry	30	100	HH Soil (HQ=1)	3700	0			0.26	98.5	5.1	1
Nitrate	T	mg/kg-dry	30	13.3	No SLC			2.10	2.40	ND	3		
Organic Soils	T	%	30	100	No SLC					1.6	7.6	3.5	3.5
pH	T	SU	30	100	No SLC					3	6.8	4.9	4.6
Phosphorus	T	mg/kg-dry	30	100	No SLC					13.2	3190	1610	1550
Sodium Absorption Ratio	T	ratio	30	86.7	No SLC			0.02	0.06	ND	1.5	0.17	0.085
Solids, Percent	T	%	40	100	No SLC					84.1	98.5	91.9	92
Specific Conductance	T	umhos/cm	30	100	No SLC					92.4	4720	1370	1430
Sulfate	T	mg/kg-dry	30	96.7	No SLC			114.00	114.00	ND	12900	2630	1200
Total Kjeldahl Nitrogen	T	mg/kg-dry	30	100	No SLC					57.6	702	208	149
Total Organic Carbon	T	mg/kg-dry	30	96.7	No SLC			108.00	108.00	ND	25600	5390	3710
Metals													
Aluminum	T	mg/kg-dry	30	100	HH Soil (HQ=1)	76000	0			6050	29300	15100	14700
Antimony	T	mg/kg-dry	30	0	HH Soil (HQ=1)	31	0	0.24	0.69	ND	ND		
Arsenic	T	mg/kg-dry	30	100	HH Soil (HQ=1)	0.39	100			0.98	15.4	4.9	4.1
Barium	T	mg/kg-dry	30	100	HH Soil (HQ=1)	5500	0			85.3	679	267	248
Beryllium	T	mg/kg-dry	30	100	HH Soil (HQ=1)	150	0			0.3	2.1	0.86	0.76
Boron	T	mg/kg-dry	30	36.7	HH Soil (HQ=1)	5500	0	0.23	2.40	ND	10.4		
Cadmium	T	mg/kg-dry	30	43.3	HH Soil (HQ=1)	39	0	0.02	0.06	ND	7.3		
Calcium	T	mg/kg-dry	30	100	No SLC					947	20500	6570	3900
Chromium	T	mg/kg-dry	30	100	HH Soil (HQ=1)	210	0			19.6	96.7	49.6	46.1
Cobalt	T	mg/kg-dry	30	100	HH Soil (HQ=1)	900	0			1.9	29.9	10.9	9.2
Copper	T	mg/kg-dry	30	100	HH Soil (HQ=1)	2900	3.3			36.8	5870	381	133
Iron	T	mg/kg-dry	30	100	HH Soil (HQ=1)	23000	90			18700	73500	41100	39200
Lead	T	mg/kg-dry	30	100	HH Soil (HQ=1)	400	10			27.4	4290	271	93
Magnesium	T	mg/kg-dry	30	100	No SLC					2640	16100	8280	8250
Manganese	T	mg/kg-dry	30	100	HH Soil (HQ=1)	3200	0			97.3	1340	484	395
Mercury	T	mg/kg-dry	30	13.3	HH Soil (HQ=1)	23	0	0.02	0.02	ND	0.058		
Molybdenum	T	mg/kg-dry	30	100	HH Soil (HQ=1)	390	13.3			24.8	604	161	104

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"Eco Soil" EPA Region 6 Tier 1-3 RBSLs Ecological Soil
Median Value determined using 1/2 the Reporting Limit value for Non-Detects if greater than 50% of the values were detected.
Mean Value calculated using 1/2 the Reporting Limit for Non-Detects if greater than 50% of the values were detected.

T = Total Fraction
D = Filtered Fraction (0.45 micron filter)
A = Filtered Fraction (0.1 micron filter)
ND = Non-Detected Value

Table 7-51
Soil 0-6 inches Biased
RI/FS Soil Area 8d - Truck Shop Soils
Summary of Results

Analyte	Sample Fraction	Units	Total Number of Samples	Percent Detects (%)	SLC	SLC Value	Percent Above SLC	Min RL for ND	Max RL for ND	Min Value	Max Value	Mean Value	Median Value
Nickel	T	mg/kg-dry	30	100	HH Soil (HQ=1)	1600	0			8.7	50.2	29.1	30.5
Potassium	T	mg/kg-dry	30	100	No SLC					2420	18800	5630	4970
Selenium	T	mg/kg-dry	30	76.7	HH Soil (HQ=1)	390	0	0.67	0.83	ND	3.7	1.4	1.1
Silver	T	mg/kg-dry	30	90	HH Soil (HQ=1)	390	0	0.15	0.18	ND	9.6	0.95	0.62
Sodium	T	mg/kg-dry	30	36.7	No SLC			28.00	734.00	ND	1080		
Thallium	T	mg/kg-dry	30	100	HH Soil (HQ=1)	5.5	0			0.18	1.6	0.7	0.63
Vanadium	T	mg/kg-dry	30	100	HH Soil (HQ=1)	78	3.3			19.1	78.8	44.9	42.6
Zinc	T	mg/kg-dry	30	100	HH Soil (HQ=1)	23000	0			22.6	247	114	95.5
Pesticides-PCBs													
Aroclor 1016	T	mg/kg-dry	7	0	No SLC			0.04	0.04	ND	ND		
Aroclor 1221	T	mg/kg-dry	7	0	No SLC			0.07	0.08	ND	ND		
Aroclor 1232	T	mg/kg-dry	7	0	No SLC			0.04	0.04	ND	ND		
Aroclor 1242	T	mg/kg-dry	7	0	No SLC			0.04	0.04	ND	ND		
Aroclor 1248	T	mg/kg-dry	7	14.3	HH Soil (HQ=1)	0.22	0	0.04	0.04	ND	0.067		
Aroclor 1254	T	mg/kg-dry	7	0	HH Soil (HQ=1)	0.22	0	0.04	0.04	ND	ND		
Aroclor 1260	T	mg/kg-dry	7	28.6	HH Soil (HQ=1)	0.22	50	0.04	0.04	ND	0.23		
Semi-Volatile Organics													
1,1`-Biphenyl	T	mg/kg-dry	30	3.3	HH Soil (HQ=1)	3000	0	0.34	3.80	ND	1.3		
2,4,5-Trichlorophenol	T	mg/kg-dry	30	0	No SLC			0.85	9.60	ND	ND		
2,4,6-Trichlorophenol	T	mg/kg-dry	30	0	No SLC			0.34	3.80	ND	ND		
2,4-Dichlorophenol	T	mg/kg-dry	30	0	No SLC			0.34	3.80	ND	ND		
2,4-Dimethylphenol	T	mg/kg-dry	30	0	No SLC			0.34	3.80	ND	ND		
2,4-Dinitrophenol	T	mg/kg-dry	30	0	No SLC			0.85	9.60	ND	ND		
2,4-Dinitrotoluene	T	mg/kg-dry	30	0	No SLC			0.34	3.80	ND	ND		
2,6-Dinitrotoluene	T	mg/kg-dry	30	0	HH Soil (HQ=1)	61	0	0.34	3.80	ND	ND		
2-Chloronaphthalene	T	mg/kg-dry	30	0	No SLC			0.34	3.80	ND	ND		
2-Chlorophenol	T	mg/kg-dry	30	0	HH Soil (HQ=1)	64	0	0.34	3.80	ND	ND		
2-Methylnaphthalene	T	mg/kg-dry	30	6.7	No SLC			0.34	3.80	ND	15		
2-Methylphenol	T	mg/kg-dry	30	0	No SLC			0.34	3.80	ND	ND		
2-Nitroaniline	T	mg/kg-dry	30	0	No SLC			0.85	9.60	ND	ND		
2-Nitrophenol	T	mg/kg-dry	30	0	No SLC			0.34	3.80	ND	ND		
3,3-Dichlorobenzidine	T	mg/kg-dry	30	0	No SLC			0.34	3.80	ND	ND		

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"HH Soil (HQ=1)" EPA Region 6 RBSLs Human Health Residential Soil (HQ=1)
"Eco Soil" EPA Region 6 Tier 1-3 RBSLs Ecological Soil
Median Value determined using 1/2 the Reporting Limit value for Non-Detects if greater than 50% of the values were detected.
Mean Value calculated using 1/2 the Reporting Limit for Non-Detects if greater than 50% of the values were detected.

T = Total Fraction
D = Filtered Fraction (0.45 micron filter)
A = Filtered Fraction (0.1 micron filter)
ND = Non-Detected Value

Table 7-51
Soil 0-6 inches Biased
RI/FS Soil Area 8d - Truck Shop Soils
Summary of Results

Analyte	Sample Fraction	Units	Total Number of Samples	Percent Detects (%)	SLC	SLC Value	Percent Above SLC	Min RL for ND	Max RL for ND	Min Value	Max Value	Mean Value	Median Value
3-Nitroaniline	T	mg/kg-dry	30	0	No SLC			0.85	9.60	ND	ND		
4,6-Dinitro-2-methylphenol	T	mg/kg-dry	30	0	No SLC			0.85	9.60	ND	ND		
4-Bromophenyl phenyl ether	T	mg/kg-dry	30	0	No SLC			0.34	3.80	ND	ND		
4-Chloro-3-methylphenol	T	mg/kg-dry	30	0	No SLC			0.34	3.80	ND	ND		
4-Chloroaniline	T	mg/kg-dry	30	0	No SLC			0.34	3.80	ND	ND		
4-Chlorophenyl phenyl ether	T	mg/kg-dry	30	0	No SLC			0.34	3.80	ND	ND		
4-Methylphenol	T	mg/kg-dry	30	0	No SLC			0.34	3.80	ND	ND		
4-Nitroaniline	T	mg/kg-dry	30	0	No SLC			0.85	9.60	ND	ND		
4-Nitrophenol	T	mg/kg-dry	30	0	No SLC			0.85	9.60	ND	ND		
Acenaphthene	T	mg/kg-dry	30	3.3	HH Soil (HQ=1)	3700	0	0.34	3.80	ND	0.68		
Acenaphthylene	T	mg/kg-dry	30	0	No SLC			0.34	3.80	ND	ND		
Anthracene	T	mg/kg-dry	30	3.3	HH Soil (HQ=1)	22000	0	0.34	3.80	ND	0.069		
Benzo(a)anthracene	T	mg/kg-dry	30	0	HH Soil (HQ=1)	0.62	0	0.34	3.80	ND	ND		
Benzo(a)pyrene	T	mg/kg-dry	30	0	HH Soil (HQ=1)	0.062	0	0.34	3.80	ND	ND		
Benzo(b)fluoranthene	T	mg/kg-dry	30	0	HH Soil (HQ=1)	0.62	0	0.34	3.80	ND	ND		
Benzo(g,h,i)perylene	T	mg/kg-dry	30	0	No SLC			0.34	3.80	ND	ND		
Benzo(k)fluoranthene	T	mg/kg-dry	30	0	HH Soil (HQ=1)	6.2	0	0.34	3.80	ND	ND		
Bis(2-chloroethoxy)methane	T	mg/kg-dry	30	0	No SLC			0.34	3.80	ND	ND		
Bis(2-chloroethyl)ether	T	mg/kg-dry	30	0	No SLC			0.34	3.80	ND	ND		
Carbazole	T	mg/kg-dry	30	0	HH Soil (HQ=1)	24	0	0.34	3.80	ND	ND		
Chrysene	T	mg/kg-dry	30	26.7	HH Soil (HQ=1)	62	0	0.34	3.60	ND	0.56		
Dibenz(a,h)anthracene	T	mg/kg-dry	30	0	HH Soil (HQ=1)	0.062	0	0.34	3.80	ND	ND		
Dibenzofuran	T	mg/kg-dry	30	3.3	HH Soil (HQ=1)	150	0	0.34	3.80	ND	1.2		
Dichlorodiisopropyl ether	T	mg/kg-dry	30	0	No SLC			0.34	3.80	ND	ND		
Fluoranthene	T	mg/kg-dry	30	20	HH Soil (HQ=1)	2300	0	0.34	3.80	ND	0.07		
Fluorene	T	mg/kg-dry	30	3.3	HH Soil (HQ=1)	2600	0	0.34	3.80	ND	1.8		
Hexachlorobenzene	T	mg/kg-dry	30	0	No SLC			0.34	3.80	ND	ND		
Hexachlorobutadiene	T	mg/kg-dry	30	0	No SLC			0.34	3.80	ND	ND		
Hexachlorocyclopentadiene	T	mg/kg-dry	30	0	No SLC			0.34	3.80	ND	ND		
Hexachloroethane	T	mg/kg-dry	30	0	No SLC			0.34	3.80	ND	ND		
Indeno(1,2,3-cd)pyrene	T	mg/kg-dry	30	0	HH Soil (HQ=1)	0.62	0	0.34	3.80	ND	ND		
Isophorone	T	mg/kg-dry	30	0	HH Soil (HQ=1)	510	0	0.34	3.80	ND	ND		

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Mean Value calculated using 1/2 the Reporting Limit for Non-Detects if greater than 50% of the values were detected.

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A = Filtered Fraction (0.1 micron filter)
ND = Non-Detected Value

Table 7-51
Soil 0-6 inches Biased
RI/FS Soil Area 8d - Truck Shop Soils
Summary of Results

Analyte	Sample Fraction	Units	Total Number of Samples	Percent Detects (%)	SLC	SLC Value	Percent Above SLC	Min RL for ND	Max RL for ND	Min Value	Max Value	Mean Value	Median Value
Naphthalene	T	mg/kg-dry	30	3.3	HH Soil (HQ=1)	120	0	0.34	3.80	ND	3.6		
Nitrobenzene	T	mg/kg-dry	30	0	No SLC			0.34	3.80	ND	ND		
N-Nitrosodi-n-propylamine	T	mg/kg-dry	30	0	HH Soil (HQ=1)	0.07	0	0.34	3.80	ND	ND		
N-Nitrosodiphenylamine	T	mg/kg-dry	30	0	HH Soil (HQ=1)	99	0	0.34	3.80	ND	ND		
Pentachlorophenol	T	mg/kg-dry	30	0	No SLC			0.85	9.60	ND	ND		
Phenanthrene	T	mg/kg-dry	30	26.7	No SLC			0.34	1.80	ND	3.2		
Phenol	T	mg/kg-dry	30	0	HH Soil (HQ=1)	18000	0	0.34	3.80	ND	ND		
Pyrene	T	mg/kg-dry	30	16.7	HH Soil (HQ=1)	2300	0	0.34	3.60	ND	0.59		
Volatile Organics													
1,1,1-Trichloroethane	T	mg/kg-dry	28	3.6	HH Soil (HQ=1)	1400	0	0.00	0.83	ND	0.004		
1,1,2,2-Tetrachloroethane	T	mg/kg-dry	28	0	No SLC			0.00	0.83	ND	ND		
1,1,2-Trichloro-1,2,2-trifluoroethane	T	mg/kg-dry	28	0	No SLC			0.00	0.83	ND	ND		
1,1,2-Trichloroethane	T	mg/kg-dry	28	0	No SLC			0.00	0.83	ND	ND		
1,1-Dichloroethane	T	mg/kg-dry	28	0	HH Soil (HQ=1)	590	0	0.00	0.83	ND	ND		
1,1-Dichloroethene	T	mg/kg-dry	28	0	HH Soil (HQ=1)	280	0	0.00	0.83	ND	ND		
1,2,4-Trichlorobenzene	T	mg/kg-dry	28	0	No SLC			0.00	0.83	ND	ND		
1,2-Dibromo-3-chloropropane	T	mg/kg-dry	28	0	No SLC			0.00	0.83	ND	ND		
1,2-Dichlorobenzene	T	mg/kg-dry	28	0	No SLC			0.00	0.83	ND	ND		
1,2-Dichloroethane	T	mg/kg-dry	28	0	No SLC			0.00	0.83	ND	ND		
1,2-Dichloroethene (total)	T	mg/kg-dry	28	0	No SLC			0.00	0.83	ND	ND		
1,2-Dichloropropane	T	mg/kg-dry	28	0	No SLC			0.00	0.83	ND	ND		
1,3-Dichlorobenzene	T	mg/kg-dry	28	0	No SLC			0.00	0.83	ND	ND		
1,4-Dichlorobenzene	T	mg/kg-dry	28	0	No SLC			0.00	0.83	ND	ND		
2-Butanone	T	mg/kg-dry	28	21.4	HH Soil (HQ=1)	32000	0	0.00	0.83	ND	0.011		
2-Hexanone	T	mg/kg-dry	28	7.1	No SLC			0.00	0.83	ND	0.001		
4-Methyl-2-pentanone	T	mg/kg-dry	28	0	HH Soil (HQ=1)	5800	0	0.00	0.83	ND	ND		
Benzene	T	mg/kg-dry	28	0	HH Soil (HQ=1)	0.66	0	0.00	0.83	ND	ND		
Bromodichloromethane	T	mg/kg-dry	28	0	No SLC			0.00	0.83	ND	ND		
Bromoform	T	mg/kg-dry	28	0	No SLC			0.00	0.83	ND	ND		
Bromomethane	T	mg/kg-dry	28	0	No SLC			0.00	0.83	ND	ND		
Carbon tetrachloride	T	mg/kg-dry	28	0	HH Soil (HQ=1)	0.24	0	0.00	0.83	ND	ND		
Chlorobenzene	T	mg/kg-dry	28	0	HH Soil (HQ=1)	320	0	0.00	0.83	ND	ND		

"No SLC" indicates that there is not a Screening Level Criterion for this medium specified for the RI/FS.
"HH Soil (HQ=1)" EPA Region 6 RBSLs Human Health Residential Soil (HQ=1)
"Eco Soil" EPA Region 6 Tier 1-3 RBSLs Ecological Soil
Median Value determined using 1/2 the Reporting Limit value for Non-Detects if greater than 50% of the values were detected.
Mean Value calculated using 1/2 the Reporting Limit for Non-Detects if greater than 50% of the values were detected.

T = Total Fraction
D = Filtered Fraction (0.45 micron filter)
A = Filtered Fraction (0.1 micron filter)
ND = Non-Detected Value

Table 7-51
Soil 0-6 inches Biased
RI/FS Soil Area 8d - Truck Shop Soils
Summary of Results

Analyte	Sample Fraction	Units	Total Number of Samples	Percent Detects (%)	SLC	SLC Value	Percent Above SLC	Min RL for ND	Max RL for ND	Min Value	Max Value	Mean Value	Median Value
Chloroethane	T	mg/kg-dry	28	0	No SLC			0.00	0.83	ND	ND		
Chloroform	T	mg/kg-dry	28	0	No SLC			0.00	0.83	ND	ND		
Chloromethane	T	mg/kg-dry	28	0	HH Soil (HQ=1)	1.2	0	0.00	0.83	ND	ND		
cis-1,2-Dichloroethene	T	mg/kg-dry	28	0	No SLC			0.00	0.83	ND	ND		
cis-1,3-Dichloropropene	T	mg/kg-dry	28	0	No SLC			0.00	0.83	ND	ND		
Dibromochloromethane	T	mg/kg-dry	28	0	No SLC			0.00	0.83	ND	ND		
Dichlorodifluoromethane	T	mg/kg-dry	28	0	HH Soil (HQ=1)	94	0	0.00	0.83	ND	ND		
Ethylbenzene	T	mg/kg-dry	28	35.7	HH Soil (HQ=1)	230	0	0.00	0.01	ND	0.76		
Styrene	T	mg/kg-dry	28	0	HH Soil (HQ=1)	1700	0	0.00	0.83	ND	ND		
Tetrachloroethene	T	mg/kg-dry	28	0	HH Soil (HQ=1)	0.55	0	0.00	0.83	ND	ND		
Toluene	T	mg/kg-dry	28	7.1	HH Soil (HQ=1)	520	0	0.00	0.83	ND	0.001		
Total Xylene	T	mg/kg-dry	29	69	HH Soil (HQ=1)	210	0	0.00	0.01	ND	0.6	0.026	0.003
trans-1,2-Dichloroethene	T	mg/kg-dry	28	0	No SLC			0.00	0.83	ND	ND		
trans-1,3-Dichloropropene	T	mg/kg-dry	28	0	No SLC			0.00	0.83	ND	ND		
Trichloroethene	T	mg/kg-dry	28	0	HH Soil (HQ=1)	0.043	0	0.00	0.83	ND	ND		
Trichlorofluoromethane	T	mg/kg-dry	28	0	HH Soil (HQ=1)	390	0	0.00	0.83	ND	ND		
Vinyl chloride	T	mg/kg-dry	28	0	No SLC			0.00	0.83	ND	ND		

"No SLC" indicates that there is not a Screening Level Criterion for this medium specified for the RI/FS.
"HH Soil (HQ=1)" EPA Region 6 RBSLs Human Health Residential Soil (HQ=1)
"Eco Soil" EPA Region 6 Tier 1-3 RBSLs Ecological Soil
Median Value determined using 1/2 the Reporting Limit value for Non-Detects if greater than 50% of the values were detected.
Mean Value calculated using 1/2 the Reporting Limit for Non-Detects if greater than 50% of the values were detected.

T = Total Fraction
D = Filtered Fraction (0.45 micron filter)
A = Filtered Fraction (0.1 micron filter)
ND = Non-Detected Value

Table 7-52
Soil 0-24 inches Biased
RI/FS Soil Area 8d - Truck Shop Soils
Summary of Results

Analyte	Sample Fraction	Units	Total Number of Samples	Percent Detects (%)	SLC	SLC Value	Percent Above SLC	Min RL for ND	Max RL for ND	Min Value	Max Value	Mean Value	Median Value
Inorganics													
Cation-Exchange Capacity	T	meq/100g	30	100	No SLC					10	24	17.6	17.8
Chloride	T	mg/kg-dry	30	73.3	No SLC			2.20	27.50	ND	86.5	11.7	5.1
Fluoride	T	mg/kg-dry	30	100	No SLC					0.27	173	7.7	1.3
Nitrate	T	mg/kg-dry	30	10	No SLC			2.10	2.40	ND	3.9		
Organic Soils	T	%	30	100	No SLC					1.5	6.9	3.3	3
pH	T	SU	30	100	No SLC					2.9	7	4.9	4.6
Phosphorus	T	mg/kg-dry	30	100	No SLC					86.5	3430	1670	1570
Sodium Absorption Ratio	T	ratio	30	86.7	No SLC			0.02	0.06	ND	5.1	0.34	0.11
Solids, Percent	T	%	40	100	No SLC					85.9	96.9	91.8	91.7
Specific Conductance	T	umhos/cm	30	100	No SLC					63.8	5500	1390	1400
Sulfate	T	mg/kg-dry	30	96.7	No SLC			110.00	110.00	ND	17600	3030	1280
Total Kjeldahl Nitrogen	T	mg/kg-dry	30	100	No SLC					49.4	369	159	147
Total Organic Carbon	T	mg/kg-dry	30	93.3	No SLC			110.00	115.00	ND	10000	2850	2610
Metals													
Aluminum	T	mg/kg-dry	30	100	No SLC					6330	29200	16100	16600
Antimony	T	mg/kg-dry	30	0	ECO Soil	0.3	0	0.24	1.40	ND	ND		
Arsenic	T	mg/kg-dry	30	96.7	ECO Soil	31	3.4	2.10	2.10	ND	41.9	5.2	3.4
Barium	T	mg/kg-dry	30	100	ECO Soil	330	30			86.2	630	277	266
Beryllium	T	mg/kg-dry	30	100	ECO Soil	30	0			0.26	2.1	0.89	0.82
Boron	T	mg/kg-dry	30	23.3	ECO Soil	0.5	100	0.24	2.40	ND	7.7		
Cadmium	T	mg/kg-dry	30	46.7	ECO Soil	0.4	35.7	0.03	0.04	ND	0.7		
Calcium	T	mg/kg-dry	30	100	No SLC					997	20200	6870	4020
Chromium	T	mg/kg-dry	30	100	ECO Soil	7.9	96.7			7.6	166	57.1	57.6
Cobalt	T	mg/kg-dry	30	100	ECO Soil	32	0			1.4	29.1	10.9	8.7
Copper	T	mg/kg-dry	30	100	ECO Soil	54	80			18.1	634	195	137
Iron	T	mg/kg-dry	30	100	No SLC					12600	69900	40200	38900
Lead	T	mg/kg-dry	30	100	ECO Soil	15	96.7			12.4	2860	237	79.5
Magnesium	T	mg/kg-dry	30	100	No SLC					1860	15900	8950	9440
Manganese	T	mg/kg-dry	30	100	ECO Soil	152	93.3			93.9	1680	524	487
Mercury	T	mg/kg-dry	30	13.3	ECO Soil	0.1	0	0.02	0.02	ND	0.044		
Molybdenum	T	mg/kg-dry	30	100	ECO Soil	2	100			2.4	552	131	75

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"Eco Soil" EPA Region 6 Tier 1-3 RBSLs Ecological Soil
Median Value determined using 1/2 the Reporting Limit value for Non-Detects if greater than 50% of the values were detected.
Mean Value calculated using 1/2 the Reporting Limit for Non-Detects if greater than 50% of the values were detected.

T = Total Fraction
D = Filtered Fraction (0.45 micron filter)
A = Filtered Fraction (0.1 micron filter)
ND = Non-Detected Value

Table 7-52
Soil 0-24 inches Biased
RI/FS Soil Area 8d - Truck Shop Soils
Summary of Results

Analyte	Sample Fraction	Units	Total Number of Samples	Percent Detects (%)	SLC	SLC Value	Percent Above SLC	Min RL for ND	Max RL for ND	Min Value	Max Value	Mean Value	Median Value
Nickel	T	mg/kg-dry	30	100	ECO Soil	48	10			3.9	53.8	32.2	36.6
Potassium	T	mg/kg-dry	30	100	No SLC					1360	19500	6080	4990
Selenium	T	mg/kg-dry	30	80	ECO Soil	1	70.8	0.68	0.75	ND	3.7	1.4	1.2
Silver	T	mg/kg-dry	30	90	ECO Soil	2	0	0.15	0.58	ND	2	0.65	0.53
Sodium	T	mg/kg-dry	30	36.7	No SLC			29.30	322.00	ND	928		
Thallium	T	mg/kg-dry	30	100	ECO Soil	1	20			0.12	1.9	0.73	0.6
Vanadium	T	mg/kg-dry	30	100	ECO Soil	2	100			12.8	91	47.4	45.1
Zinc	T	mg/kg-dry	30	100	ECO Soil	120	26.7			16.2	217	93.7	92
Pesticides-PCBs													
Aroclor 1016	T	mg/kg-dry	7	0	No SLC			0.04	0.04	ND	ND		
Aroclor 1221	T	mg/kg-dry	7	0	No SLC			0.07	0.08	ND	ND		
Aroclor 1232	T	mg/kg-dry	7	0	No SLC			0.04	0.04	ND	ND		
Aroclor 1242	T	mg/kg-dry	7	0	No SLC			0.04	0.04	ND	ND		
Aroclor 1248	T	mg/kg-dry	7	14.3	ECO Soil	10	0	0.04	0.04	ND	0.061		
Aroclor 1254	T	mg/kg-dry	7	0	ECO Soil	10	0	0.04	0.04	ND	ND		
Aroclor 1260	T	mg/kg-dry	7	14.3	ECO Soil	10	0	0.04	0.04	ND	0.18		
Semi-Volatile Organics													
1,1`-Biphenyl	T	mg/kg-dry	30	6.7	ECO Soil	60	0	0.34	1.80	ND	1.4		
2,4,5-Trichlorophenol	T	mg/kg-dry	30	0	No SLC			0.86	9.00	ND	ND		
2,4,6-Trichlorophenol	T	mg/kg-dry	30	0	No SLC			0.34	3.60	ND	ND		
2,4-Dichlorophenol	T	mg/kg-dry	30	0	No SLC			0.34	3.60	ND	ND		
2,4-Dimethylphenol	T	mg/kg-dry	30	0	No SLC			0.34	3.60	ND	ND		
2,4-Dinitrophenol	T	mg/kg-dry	30	0	No SLC			0.86	9.00	ND	ND		
2,4-Dinitrotoluene	T	mg/kg-dry	30	0	No SLC			0.34	3.60	ND	ND		
2,6-Dinitrotoluene	T	mg/kg-dry	30	0	ECO Soil	0.033	0	0.34	3.60	ND	ND		
2-Chloronaphthalene	T	mg/kg-dry	30	0	No SLC			0.34	3.60	ND	ND		
2-Chlorophenol	T	mg/kg-dry	30	0	ECO Soil	20	0	0.34	3.60	ND	ND		
2-Methylnaphthalene	T	mg/kg-dry	30	6.7	ECO Soil	3.2	50	0.34	1.80	ND	17		
2-Methylphenol	T	mg/kg-dry	30	0	No SLC			0.34	3.60	ND	ND		
2-Nitroaniline	T	mg/kg-dry	30	0	No SLC			0.86	9.00	ND	ND		
2-Nitrophenol	T	mg/kg-dry	30	0	No SLC			0.34	3.60	ND	ND		
3,3-Dichlorobenzidine	T	mg/kg-dry	30	0	No SLC			0.34	3.60	ND	ND		

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"HH Soil (HQ=1)" EPA Region 6 RBSLs Human Health Residential Soil (HQ=1)
"Eco Soil" EPA Region 6 Tier 1-3 RBSLs Ecological Soil
Median Value determined using 1/2 the Reporting Limit value for Non-Detects if greater than 50% of the values were detected.
Mean Value calculated using 1/2 the Reporting Limit for Non-Detects if greater than 50% of the values were detected.

T = Total Fraction
D = Filtered Fraction (0.45 micron filter)
A = Filtered Fraction (0.1 micron filter)
ND = Non-Detected Value

Table 7-52
Soil 0-24 inches Biased
RI/FS Soil Area 8d - Truck Shop Soils
Summary of Results

Analyte	Sample Fraction	Units	Total Number of Samples	Percent Detects (%)	SLC	SLC Value	Percent Above SLC	Min RL for ND	Max RL for ND	Min Value	Max Value	Mean Value	Median Value
3-Nitroaniline	T	mg/kg-dry	30	0	No SLC			0.86	9.00	ND	ND		
4,6-Dinitro-2-methylphenol	T	mg/kg-dry	30	0	No SLC			0.86	9.00	ND	ND		
4-Bromophenyl phenyl ether	T	mg/kg-dry	30	0	No SLC			0.34	3.60	ND	ND		
4-Chloro-3-methylphenol	T	mg/kg-dry	30	0	ECO Soil	8	0	0.34	3.60	ND	ND		
4-Chloroaniline	T	mg/kg-dry	30	0	No SLC			0.34	3.60	ND	ND		
4-Chlorophenyl phenyl ether	T	mg/kg-dry	30	0	No SLC			0.34	3.60	ND	ND		
4-Methylphenol	T	mg/kg-dry	30	0	No SLC			0.34	3.60	ND	ND		
4-Nitroaniline	T	mg/kg-dry	30	0	No SLC			0.86	9.00	ND	ND		
4-Nitrophenol	T	mg/kg-dry	30	0	No SLC			0.86	9.00	ND	ND		
Acenaphthene	T	mg/kg-dry	30	6.7	ECO Soil	20	0	0.34	1.80	ND	0.64		
Acenaphthylene	T	mg/kg-dry	30	0	No SLC			0.34	3.60	ND	ND		
Anthracene	T	mg/kg-dry	30	3.3	ECO Soil	10	0	0.34	3.60	ND	0.099		
Benzo(a)anthracene	T	mg/kg-dry	30	0	ECO Soil	5.2	0	0.34	3.60	ND	ND		
Benzo(a)pyrene	T	mg/kg-dry	30	0	ECO Soil	1	0	0.34	3.60	ND	ND		
Benzo(b)fluoranthene	T	mg/kg-dry	30	0	ECO Soil	59.8	0	0.34	3.60	ND	ND		
Benzo(g,h,i)perylene	T	mg/kg-dry	30	0	ECO Soil	119	0	0.34	3.60	ND	ND		
Benzo(k)fluoranthene	T	mg/kg-dry	30	0	ECO Soil	148	0	0.34	3.60	ND	ND		
Bis(2-chloroethoxy)methane	T	mg/kg-dry	30	0	No SLC			0.34	3.60	ND	ND		
Bis(2-chloroethyl)ether	T	mg/kg-dry	30	0	No SLC			0.34	3.60	ND	ND		
Carbazole	T	mg/kg-dry	30	0	No SLC			0.34	3.60	ND	ND		
Chrysene	T	mg/kg-dry	30	20	ECO Soil	4.7	0	0.34	3.60	ND	0.14		
Dibenz(a,h)anthracene	T	mg/kg-dry	30	0	ECO Soil	18.4	0	0.34	3.60	ND	ND		
Dibenzofuran	T	mg/kg-dry	30	3.3	No SLC			0.34	1.80	ND	1.3		
Dichlorodiisopropyl ether	T	mg/kg-dry	30	0	No SLC			0.34	3.60	ND	ND		
Fluoranthene	T	mg/kg-dry	30	16.7	ECO Soil	10	0	0.35	3.60	ND	0.084		
Fluorene	T	mg/kg-dry	30	6.7	ECO Soil	30	0	0.34	1.80	ND	2		
Hexachlorobenzene	T	mg/kg-dry	30	0	No SLC			0.34	3.60	ND	ND		
Hexachlorobutadiene	T	mg/kg-dry	30	0	No SLC			0.34	3.60	ND	ND		
Hexachlorocyclopentadiene	T	mg/kg-dry	30	0	No SLC			0.34	3.60	ND	ND		
Hexachloroethane	T	mg/kg-dry	30	0	No SLC			0.34	3.60	ND	ND		
Indeno(1,2,3-cd)pyrene	T	mg/kg-dry	30	0	ECO Soil	109	0	0.34	3.60	ND	ND		
Isophorone	T	mg/kg-dry	30	0	ECO Soil	139	0	0.34	3.60	ND	ND		

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"HH Soil (HQ=1)" EPA Region 6 RBSLs Human Health Residential Soil (HQ=1)
"Eco Soil" EPA Region 6 Tier 1-3 RBSLs Ecological Soil
Median Value determined using 1/2 the Reporting Limit value for Non-Detects if greater than 50% of the values were detected.
Mean Value calculated using 1/2 the Reporting Limit for Non-Detects if greater than 50% of the values were detected.

T = Total Fraction
D = Filtered Fraction (0.45 micron filter)
A = Filtered Fraction (0.1 micron filter)
ND = Non-Detected Value

Table 7-52
Soil 0-24 inches Biased
RI/FS Soil Area 8d - Truck Shop Soils
Summary of Results

Analyte	Sample Fraction	Units	Total Number of Samples	Percent Detects (%)	SLC	SLC Value	Percent Above SLC	Min RL for ND	Max RL for ND	Min Value	Max Value	Mean Value	Median Value
Naphthalene	T	mg/kg-dry	30	3.3	ECO Soil	5	0	0.34	1.80	ND	4.1		
Nitrobenzene	T	mg/kg-dry	30	0	No SLC			0.34	3.60	ND	ND		
N-Nitrosodi-n-propylamine	T	mg/kg-dry	30	0	ECO Soil	0.54	0	0.34	3.60	ND	ND		
N-Nitrosodiphenylamine	T	mg/kg-dry	30	0	ECO Soil	20	0	0.34	3.60	ND	ND		
Pentachlorophenol	T	mg/kg-dry	30	0	No SLC			0.86	9.00	ND	ND		
Phenanthrene	T	mg/kg-dry	30	26.7	ECO Soil	5	0	0.35	1.80	ND	3.5		
Phenol	T	mg/kg-dry	30	0	ECO Soil	30	0	0.34	3.60	ND	ND		
Pyrene	T	mg/kg-dry	30	23.3	ECO Soil	10	0	0.35	3.60	ND	0.38		
Volatile Organics													
1,1,1-Trichloroethane	T	mg/kg-dry	30	3.3	ECO Soil	0.1	0	0.00	0.54	ND	0.009		
1,1,2,2-Tetrachloroethane	T	mg/kg-dry	30	0	No SLC			0.00	0.54	ND	ND		
1,1,2-Trichloro-1,2,2-trifluoroethane	T	mg/kg-dry	30	0	No SLC			0.00	0.54	ND	ND		
1,1,2-Trichloroethane	T	mg/kg-dry	30	0	No SLC			0.00	0.54	ND	ND		
1,1-Dichloroethane	T	mg/kg-dry	30	0	ECO Soil	20.1	0	0.00	0.54	ND	ND		
1,1-Dichloroethene	T	mg/kg-dry	30	0	No SLC			0.00	0.54	ND	ND		
1,2,4-Trichlorobenzene	T	mg/kg-dry	30	0	No SLC			0.00	0.54	ND	ND		
1,2-Dibromo-3-chloropropane	T	mg/kg-dry	30	0	No SLC			0.00	0.54	ND	ND		
1,2-Dichlorobenzene	T	mg/kg-dry	30	0	No SLC			0.00	0.54	ND	ND		
1,2-Dichloroethane	T	mg/kg-dry	30	0	No SLC			0.00	0.54	ND	ND		
1,2-Dichloroethene (total)	T	mg/kg-dry	30	0	No SLC			0.00	0.54	ND	ND		
1,2-Dichloropropane	T	mg/kg-dry	30	0	No SLC			0.00	0.54	ND	ND		
1,3-Dichlorobenzene	T	mg/kg-dry	30	0	No SLC			0.00	0.54	ND	ND		
1,4-Dichlorobenzene	T	mg/kg-dry	30	0	No SLC			0.00	0.54	ND	ND		
2-Butanone	T	mg/kg-dry	30	23.3	ECO Soil	89.6	0	0.00	0.54	ND	0.015		
2-Hexanone	T	mg/kg-dry	30	6.7	ECO Soil	12.6	0	0.00	0.54	ND	0.002		
4-Methyl-2-pentanone	T	mg/kg-dry	30	0	ECO Soil	443	0	0.00	0.54	ND	ND		
Benzene	T	mg/kg-dry	30	0	ECO Soil	0.5	0	0.00	0.54	ND	ND		
Bromodichloromethane	T	mg/kg-dry	30	0	No SLC			0.00	0.54	ND	ND		
Bromoform	T	mg/kg-dry	30	0	No SLC			0.00	0.54	ND	ND		
Bromomethane	T	mg/kg-dry	30	0	No SLC			0.00	0.54	ND	ND		
Carbon tetrachloride	T	mg/kg-dry	30	0	ECO Soil	1000	0	0.00	0.54	ND	ND		
Chlorobenzene	T	mg/kg-dry	30	0	ECO Soil	40	0	0.00	0.54	ND	ND		

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Median Value determined using 1/2 the Reporting Limit value for Non-Detects if greater than 50% of the values were detected.
Mean Value calculated using 1/2 the Reporting Limit for Non-Detects if greater than 50% of the values were detected.

T = Total Fraction
D = Filtered Fraction (0.45 micron filter)
A = Filtered Fraction (0.1 micron filter)
ND = Non-Detected Value

Table 7-52
Soil 0-24 inches Biased
RI/FS Soil Area 8d - Truck Shop Soils
Summary of Results

Analyte	Sample Fraction	Units	Total Number of Samples	Percent Detects (%)	SLC	SLC Value	Percent Above SLC	Min RL for ND	Max RL for ND	Min Value	Max Value	Mean Value	Median Value
Chloroethane	T	mg/kg-dry	30	0	No SLC			0.00	0.54	ND	ND		
Chloroform	T	mg/kg-dry	30	0	No SLC			0.00	0.54	ND	ND		
Chloromethane	T	mg/kg-dry	30	0	ECO Soil	10.4	0	0.00	0.54	ND	ND		
cis-1,2-Dichloroethene	T	mg/kg-dry	30	0	No SLC			0.00	0.54	ND	ND		
cis-1,3-Dichloropropene	T	mg/kg-dry	30	0	No SLC			0.00	0.54	ND	ND		
Dibromochloromethane	T	mg/kg-dry	30	0	No SLC			0.00	0.54	ND	ND		
Dichlorodifluoromethane	T	mg/kg-dry	30	3.3	ECO Soil	39.5	0	0.00	0.54	ND	0.0006		
Ethylbenzene	T	mg/kg-dry	30	26.7	ECO Soil	5	0	0.01	0.01	ND	0.43		
Styrene	T	mg/kg-dry	30	0	ECO Soil	300	0	0.00	0.54	ND	ND		
Tetrachloroethene	T	mg/kg-dry	30	0	No SLC			0.00	0.54	ND	ND		
Toluene	T	mg/kg-dry	30	3.3	ECO Soil	200	0	0.01	0.54	ND	0.008		
Total Xylene	T	mg/kg-dry	30	73.3	ECO Soil	5	0	0.01	0.01	ND	0.34	0.016	0.004
trans-1,2-Dichloroethene	T	mg/kg-dry	30	0	No SLC			0.00	0.54	ND	ND		
trans-1,3-Dichloropropene	T	mg/kg-dry	30	0	No SLC			0.00	0.54	ND	ND		
Trichloroethene	T	mg/kg-dry	30	3.3	No SLC			0.00	0.54	ND	0.002		
Trichlorofluoromethane	T	mg/kg-dry	30	0	ECO Soil	16.4	0	0.00	0.54	ND	ND		
Vinyl chloride	T	mg/kg-dry	30	0	No SLC			0.00	0.54	ND	ND		

"No SLC" indicates that there is not a Screening Level Criterion for this medium specified for the RI/FS.
"HH Soil (HQ=1)" EPA Region 6 RBSLs Human Health Residential Soil (HQ=1)
"Eco Soil" EPA Region 6 Tier 1-3 RBSLs Ecological Soil
Median Value determined using 1/2 the Reporting Limit value for Non-Detects if greater than 50% of the values were detected.
Mean Value calculated using 1/2 the Reporting Limit for Non-Detects if greater than 50% of the values were detected.

T = Total Fraction
D = Filtered Fraction (0.45 micron filter)
A = Filtered Fraction (0.1 micron filter)
ND = Non-Detected Value

Table 7-53
Soil 0-6 inches Biased
RI/FS Soil Area 8e - Transformers
Summary of Results

Analyte	Sample Fraction	Units	Total Number of Samples	Percent Detects (%)	SLC	SLC Value	Percent Above SLC	Min RL for ND	Max RL for ND	Min Value	Max Value	Mean Value	Median Value
Inorganics													
Solids, Percent	T	%	6	100	No SLC					89	98	93.8	94
Pesticides-PCBs													
Aroclor 1016	T	mg/kg-dry	6	0	No SLC			0.03	0.04	ND	ND		
Aroclor 1221	T	mg/kg-dry	6	0	No SLC			0.07	0.08	ND	ND		
Aroclor 1232	T	mg/kg-dry	6	0	No SLC			0.03	0.04	ND	ND		
Aroclor 1242	T	mg/kg-dry	6	0	No SLC			0.03	0.04	ND	ND		
Aroclor 1248	T	mg/kg-dry	6	16.7	HH Soil (HQ=1)	0.22	0	0.03	0.04	ND	0.14		
Aroclor 1254	T	mg/kg-dry	6	16.7	HH Soil (HQ=1)	0.22	0	0.03	0.04	ND	0.092		
Aroclor 1260	T	mg/kg-dry	6	0	HH Soil (HQ=1)	0.22	0	0.03	0.04	ND	ND		

"No SLC" indicates that there is not a Screening Level Criterion for this medium specified for the RI/FS.
"HH Soil (HQ=1)" EPA Region 6 RBSLs Human Health Residential Soil (HQ=1)
"Eco Soil" EPA Region 6 Tier 1-3 RBSLs Ecological Soil
Median Value determined using 1/2 the Reporting Limit value for Non-Detects if greater than 50% of the values were detected.
Mean Value calculated using 1/2 the Reporting Limit for Non-Detects if greater than 50% of the values were detected.

T = Total Fraction
D = Filtered Fraction (0.45 micron filter)
A = Filtered Fraction (0.1 micron filter)
ND = Non-Detected Value

Table 7-54
Soil 0-24 inches Biased
RI/FS Soil Area 8e - Transformers
Summary of Results

Analyte	Sample Fraction	Units	Total Number of Samples	Percent Detects (%)	SLC	SLC Value	Percent Above SLC	Min RL for ND	Max RL for ND	Min Value	Max Value	Mean Value	Median Value
Inorganics													
Solids, Percent	T	%	6	100	No SLC					87.6	96.4	92.8	93.6
Pesticides-PCBs													
Aroclor 1016	T	mg/kg-dry	6	0	No SLC			0.03	0.04	ND	ND		
Aroclor 1221	T	mg/kg-dry	6	0	No SLC			0.07	0.08	ND	ND		
Aroclor 1232	T	mg/kg-dry	6	0	No SLC			0.03	0.04	ND	ND		
Aroclor 1242	T	mg/kg-dry	6	0	No SLC			0.03	0.04	ND	ND		
Aroclor 1248	T	mg/kg-dry	6	16.7	ECO Soil	10	0	0.04	0.04	ND	0.068		
Aroclor 1254	T	mg/kg-dry	6	16.7	ECO Soil	10	0	0.04	0.04	ND	0.048		
Aroclor 1260	T	mg/kg-dry	6	0	ECO Soil	10	0	0.03	0.04	ND	ND		

"No SLC" indicates that there is not a Screening Level Criterion for this medium specified for the RI/FS.
"HH Soil (HQ=1)" EPA Region 6 RBSLs Human Health Residential Soil (HQ=1)
"Eco Soil" EPA Region 6 Tier 1-3 RBSLs Ecological Soil
Median Value determined using 1/2 the Reporting Limit value for Non-Detects if greater than 50% of the values were detected.
Mean Value calculated using 1/2 the Reporting Limit for Non-Detects if greater than 50% of the values were detected.

T = Total Fraction
D = Filtered Fraction (0.45 micron filter)
A = Filtered Fraction (0.1 micron filter)
ND = Non-Detected Value

Table 7-55

Soil 0-6 inches Biased

RI/FS Soil Area 8f - Core Shack and Carpenter Shack Soil

Summary of Results

Analyte	Sample Fraction	Units	Total Number of Samples	Percent Detects (%)	SLC	SLC Value	Percent Above SLC	Min RL for ND	Max RL for ND	Min Value	Max Value	Mean Value	Median Value
Inorganics													
Cation-Exchange Capacity	T	meq/100g	17	100	No SLC					8.7	20	14.7	14.8
Chloride	T	mg/kg-dry	17	100	No SLC					2.4	200	19	4.4
Fluoride	T	mg/kg-dry	17	100	HH Soil (HQ=1)	3700	0			0.17	76.9	6.1	1.4
Nitrate	T	mg/kg-dry	17	23.5	No SLC			2.20	2.60	ND	9.9		
Organic Soils	T	%	17	100	No SLC					1.1	7.2	3.3	3.1
pH	T	SU	17	100	No SLC					4.6	7.9	7	7.1
Phosphorus	T	mg/kg-dry	17	100	No SLC					514	1930	1080	1020
Sodium Absorption Ratio	T	ratio	17	100	No SLC					0.02	5	0.4	0.11
Solids, Percent	T	%	17	100	No SLC					78.8	96.4	89.5	91.5
Specific Conductance	T	umhos/cm	17	100	No SLC					127	3710	979	705
Sulfate	T	mg/kg-dry	17	100	No SLC					5	4650	751	72.5
Total Kjeldahl Nitrogen	T	mg/kg-dry	17	100	No SLC					55.8	1370	494	397
Total Organic Carbon	T	mg/kg-dry	17	100	No SLC					687	23500	7700	4640
Metals													
Aluminum	T	mg/kg-dry	17	100	HH Soil (HQ=1)	76000	0			7580	16800	11900	12100
Antimony	T	mg/kg-dry	17	0	HH Soil (HQ=1)	31	0	0.28	0.51	ND	ND		
Arsenic	T	mg/kg-dry	17	100	HH Soil (HQ=1)	0.39	100			2.8	9.3	4.4	3.5
Barium	T	mg/kg-dry	17	100	HH Soil (HQ=1)	5500	0			24.6	651	182	167
Beryllium	T	mg/kg-dry	17	100	HH Soil (HQ=1)	150	0			0.52	1.7	1	0.91
Boron	T	mg/kg-dry	17	41.2	HH Soil (HQ=1)	5500	0	0.24	2.40	ND	5.2		
Cadmium	T	mg/kg-dry	17	94.1	HH Soil (HQ=1)	39	0	0.04	0.04	ND	15.5	2	0.91
Calcium	T	mg/kg-dry	17	100	No SLC					4110	15300	7810	8080
Chromium	T	mg/kg-dry	17	100	HH Soil (HQ=1)	210	0			19.4	59.9	39.7	41.3
Cobalt	T	mg/kg-dry	17	100	HH Soil (HQ=1)	900	0			2.1	18	11.2	11.5
Copper	T	mg/kg-dry	17	100	HH Soil (HQ=1)	2900	0			37.5	195	87.9	67
Iron	T	mg/kg-dry	17	100	HH Soil (HQ=1)	23000	58.8			18600	39300	27300	27800
Lead	T	mg/kg-dry	17	100	HH Soil (HQ=1)	400	0			29.4	253	90.4	82.7
Magnesium	T	mg/kg-dry	17	100	No SLC					3520	10100	6750	6830
Manganese	T	mg/kg-dry	17	100	HH Soil (HQ=1)	3200	0			511	1470	810	691
Mercury	T	mg/kg-dry	17	76.5	HH Soil (HQ=1)	23	0	0.02	0.02	ND	0.31	0.065	0.031
Molybdenum	T	mg/kg-dry	17	100	HH Soil (HQ=1)	390	47.1			21.8	1960	670	297

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"HH Soil (HQ=1)" EPA Region 6 RBSLs Human Health Residential Soil (HQ=1)
"Eco Soil" EPA Region 6 Tier 1-3 RBSLs Ecological Soil
Median Value determined using 1/2 the Reporting Limit value for Non-Detects if greater than 50% of the values were detected.
Mean Value calculated using 1/2 the Reporting Limit for Non-Detects if greater than 50% of the values were detected.

T = Total Fraction
D = Filtered Fraction (0.45 micron filter)
A = Filtered Fraction (0.1 micron filter)
ND = Non-Detected Value

Table 7-55
Soil 0-6 inches Biased
RI/FS Soil Area 8f - Core Shack and Carpenter Shack Soil
Summary of Results

Analyte	Sample Fraction	Units	Total Number of Samples	Percent Detects (%)	SLC	SLC Value	Percent Above SLC	Min RL for ND	Max RL for ND	Min Value	Max Value	Mean Value	Median Value
Nickel	T	mg/kg-dry	17	100	HH Soil (HQ=1)	1600	0			9.9	45.8	27.4	27.1
Potassium	T	mg/kg-dry	17	100	No SLC					1970	3770	2950	3080
Selenium	T	mg/kg-dry	17	29.4	HH Soil (HQ=1)	390	0	0.78	0.96	ND	1.3		
Silver	T	mg/kg-dry	17	100	HH Soil (HQ=1)	390	0			0.28	2.3	0.93	0.56
Sodium	T	mg/kg-dry	17	11.8	No SLC			29.60	141.00	ND	1150		
Thallium	T	mg/kg-dry	17	100	HH Soil (HQ=1)	5.5	0			0.13	0.38	0.24	0.23
Vanadium	T	mg/kg-dry	17	100	HH Soil (HQ=1)	78	0			23.1	50	34.6	33.8
Zinc	T	mg/kg-dry	17	100	HH Soil (HQ=1)	23000	0			83.8	742	248	144
Semi-Volatile Organics													
1,1`-Biphenyl	T	mg/kg-dry	3	0	HH Soil (HQ=1)	3000	0	0.35	0.36	ND	ND		
2,4,5-Trichlorophenol	T	mg/kg-dry	3	0	No SLC			0.88	0.90	ND	ND		
2,4,6-Trichlorophenol	T	mg/kg-dry	3	0	No SLC			0.35	0.36	ND	ND		
2,4-Dichlorophenol	T	mg/kg-dry	3	0	No SLC			0.35	0.36	ND	ND		
2,4-Dimethylphenol	T	mg/kg-dry	3	0	No SLC			0.35	0.36	ND	ND		
2,4-Dinitrophenol	T	mg/kg-dry	3	0	No SLC			0.88	0.90	ND	ND		
2,4-Dinitrotoluene	T	mg/kg-dry	3	0	No SLC			0.35	0.36	ND	ND		
2,6-Dinitrotoluene	T	mg/kg-dry	3	0	HH Soil (HQ=1)	61	0	0.35	0.36	ND	ND		
2-Chloronaphthalene	T	mg/kg-dry	3	0	No SLC			0.35	0.36	ND	ND		
2-Chlorophenol	T	mg/kg-dry	3	0	HH Soil (HQ=1)	64	0	0.35	0.36	ND	ND		
2-Methylnaphthalene	T	mg/kg-dry	3	0	No SLC			0.35	0.36	ND	ND		
2-Methylphenol	T	mg/kg-dry	3	0	No SLC			0.35	0.36	ND	ND		
2-Nitroaniline	T	mg/kg-dry	3	0	No SLC			0.88	0.90	ND	ND		
2-Nitrophenol	T	mg/kg-dry	3	0	No SLC			0.35	0.36	ND	ND		
3,3-Dichlorobenzidine	T	mg/kg-dry	3	0	No SLC			0.35	0.36	ND	ND		
3-Nitroaniline	T	mg/kg-dry	3	0	No SLC			0.88	0.90	ND	ND		
4,6-Dinitro-2-methylphenol	T	mg/kg-dry	3	0	No SLC			0.88	0.90	ND	ND		
4-Bromophenyl phenyl ether	T	mg/kg-dry	3	0	No SLC			0.35	0.36	ND	ND		
4-Chloro-3-methylphenol	T	mg/kg-dry	3	0	No SLC			0.35	0.36	ND	ND		
4-Chloroaniline	T	mg/kg-dry	3	0	No SLC			0.35	0.36	ND	ND		
4-Chlorophenyl phenyl ether	T	mg/kg-dry	3	0	No SLC			0.35	0.36	ND	ND		
4-Methylphenol	T	mg/kg-dry	3	0	No SLC			0.35	0.36	ND	ND		
4-Nitroaniline	T	mg/kg-dry	3	0	No SLC			0.88	0.90	ND	ND		

"No SLC" indicates that there is not a Screening Level Criterion for this medium specified for the RI/FS.
"HH Soil (HQ=1)" EPA Region 6 RBSLs Human Health Residential Soil (HQ=1)
"Eco Soil" EPA Region 6 Tier 1-3 RBSLs Ecological Soil
Median Value determined using 1/2 the Reporting Limit value for Non-Detects if greater than 50% of the values were detected.
Mean Value calculated using 1/2 the Reporting Limit for Non-Detects if greater than 50% of the values were detected.

T = Total Fraction
D = Filtered Fraction (0.45 micron filter)
A = Filtered Fraction (0.1 micron filter)
ND = Non-Detected Value

Table 7-55
Soil 0-6 inches Biased
RI/FS Soil Area 8f - Core Shack and Carpenter Shack Soil
Summary of Results

Analyte	Sample Fraction	Units	Total Number of Samples	Percent Detects (%)	SLC	SLC Value	Percent Above SLC	Min RL for ND	Max RL for ND	Min Value	Max Value	Mean Value	Median Value
4-Nitrophenol	T	mg/kg-dry	3	0	No SLC			0.88	0.90	ND	ND		
Acenaphthene	T	mg/kg-dry	3	0	HH Soil (HQ=1)	3700	0	0.35	0.36	ND	ND		
Acenaphthylene	T	mg/kg-dry	3	0	No SLC			0.35	0.36	ND	ND		
Anthracene	T	mg/kg-dry	3	0	HH Soil (HQ=1)	22000	0	0.35	0.36	ND	ND		
Benzo(a)anthracene	T	mg/kg-dry	3	0	HH Soil (HQ=1)	0.62	0	0.35	0.36	ND	ND		
Benzo(a)pyrene	T	mg/kg-dry	3	0	HH Soil (HQ=1)	0.062	0	0.35	0.36	ND	ND		
Benzo(b)fluoranthene	T	mg/kg-dry	3	0	HH Soil (HQ=1)	0.62	0	0.35	0.36	ND	ND		
Benzo(g,h,i)perylene	T	mg/kg-dry	3	0	No SLC			0.35	0.36	ND	ND		
Benzo(k)fluoranthene	T	mg/kg-dry	3	0	HH Soil (HQ=1)	6.2	0	0.35	0.36	ND	ND		
Bis(2-chloroethoxy)methane	T	mg/kg-dry	3	0	No SLC			0.35	0.36	ND	ND		
Bis(2-chloroethyl)ether	T	mg/kg-dry	3	0	No SLC			0.35	0.36	ND	ND		
Carbazole	T	mg/kg-dry	3	0	HH Soil (HQ=1)	24	0	0.35	0.36	ND	ND		
Chrysene	T	mg/kg-dry	3	0	HH Soil (HQ=1)	62	0	0.35	0.36	ND	ND		
Dibenz(a,h)anthracene	T	mg/kg-dry	3	0	HH Soil (HQ=1)	0.062	0	0.35	0.36	ND	ND		
Dibenzofuran	T	mg/kg-dry	3	0	HH Soil (HQ=1)	150	0	0.35	0.36	ND	ND		
Dichlorodiisopropyl ether	T	mg/kg-dry	3	0	No SLC			0.35	0.36	ND	ND		
Fluoranthene	T	mg/kg-dry	3	0	HH Soil (HQ=1)	2300	0	0.35	0.36	ND	ND		
Fluorene	T	mg/kg-dry	3	0	HH Soil (HQ=1)	2600	0	0.35	0.36	ND	ND		
Hexachlorobenzene	T	mg/kg-dry	3	0	No SLC			0.35	0.36	ND	ND		
Hexachlorobutadiene	T	mg/kg-dry	3	0	No SLC			0.35	0.36	ND	ND		
Hexachlorocyclopentadiene	T	mg/kg-dry	3	0	No SLC			0.35	0.36	ND	ND		
Hexachloroethane	T	mg/kg-dry	3	0	No SLC			0.35	0.36	ND	ND		
Indeno(1,2,3-cd)pyrene	T	mg/kg-dry	3	0	HH Soil (HQ=1)	0.62	0	0.35	0.36	ND	ND		
Isophorone	T	mg/kg-dry	3	0	HH Soil (HQ=1)	510	0	0.35	0.36	ND	ND		
Naphthalene	T	mg/kg-dry	3	0	HH Soil (HQ=1)	120	0	0.35	0.36	ND	ND		
Nitrobenzene	T	mg/kg-dry	3	0	No SLC			0.35	0.36	ND	ND		
N-Nitrosodi-n-propylamine	T	mg/kg-dry	3	0	HH Soil (HQ=1)	0.07	0	0.35	0.36	ND	ND		
N-Nitrosodiphenylamine	T	mg/kg-dry	3	0	HH Soil (HQ=1)	99	0	0.35	0.36	ND	ND		
Pentachlorophenol	T	mg/kg-dry	3	0	No SLC			0.88	0.90	ND	ND		
Phenanthrene	T	mg/kg-dry	3	0	No SLC			0.35	0.36	ND	ND		
Phenol	T	mg/kg-dry	3	0	HH Soil (HQ=1)	18000	0	0.35	0.36	ND	ND		
Pyrene	T	mg/kg-dry	3	0	HH Soil (HQ=1)	2300	0	0.35	0.36	ND	ND		

"No SLC" indicates that there is not a Screening Level Criterion for this medium specified for the RI/FS.
"HH Soil (HQ=1)" EPA Region 6 RBSLs Human Health Residential Soil (HQ=1)
"Eco Soil" EPA Region 6 Tier 1-3 RBSLs Ecological Soil
Median Value determined using 1/2 the Reporting Limit value for Non-Detects if greater than 50% of the values were detected.
Mean Value calculated using 1/2 the Reporting Limit for Non-Detects if greater than 50% of the values were detected.

T = Total Fraction
D = Filtered Fraction (0.45 micron filter)
A = Filtered Fraction (0.1 micron filter)
ND = Non-Detected Value

Table 7-55
Soil 0-6 inches Biased
RI/FS Soil Area 8f - Core Shack and Carpenter Shack Soil
Summary of Results

Analyte	Sample Fraction	Units	Total Number of Samples	Percent Detects (%)	SLC	SLC Value	Percent Above SLC	Min RL for ND	Max RL for ND	Min Value	Max Value	Mean Value	Median Value
Volatile Organics													
1,1,1-Trichloroethane	T	mg/kg-dry	4	0	HH Soil (HQ=1)	1400	0	0.01	0.01	ND	ND		
1,1,2,2-Tetrachloroethane	T	mg/kg-dry	4	0	No SLC			0.01	0.01	ND	ND		
1,1,2-Trichloro-1,2,2-trifluoroethane	T	mg/kg-dry	4	0	No SLC			0.01	0.01	ND	ND		
1,1,2-Trichloroethane	T	mg/kg-dry	4	0	No SLC			0.01	0.01	ND	ND		
1,1-Dichloroethane	T	mg/kg-dry	4	0	HH Soil (HQ=1)	590	0	0.01	0.01	ND	ND		
1,1-Dichloroethene	T	mg/kg-dry	4	0	HH Soil (HQ=1)	280	0	0.01	0.01	ND	ND		
1,2,4-Trichlorobenzene	T	mg/kg-dry	4	0	No SLC			0.01	0.01	ND	ND		
1,2-Dibromo-3-chloropropane	T	mg/kg-dry	4	0	No SLC			0.01	0.01	ND	ND		
1,2-Dichlorobenzene	T	mg/kg-dry	4	0	No SLC			0.01	0.01	ND	ND		
1,2-Dichloroethane	T	mg/kg-dry	4	0	No SLC			0.01	0.01	ND	ND		
1,2-Dichloroethene (total)	T	mg/kg-dry	4	0	No SLC			0.01	0.01	ND	ND		
1,2-Dichloropropane	T	mg/kg-dry	4	0	No SLC			0.01	0.01	ND	ND		
1,3-Dichlorobenzene	T	mg/kg-dry	4	0	No SLC			0.01	0.01	ND	ND		
1,4-Dichlorobenzene	T	mg/kg-dry	4	0	No SLC			0.01	0.01	ND	ND		
2-Butanone	T	mg/kg-dry	4	25	HH Soil (HQ=1)	32000	0	0.01	0.01	ND	0.003		
2-Hexanone	T	mg/kg-dry	4	0	No SLC			0.01	0.01	ND	ND		
4-Methyl-2-pentanone	T	mg/kg-dry	4	0	HH Soil (HQ=1)	5800	0	0.01	0.01	ND	ND		
Benzene	T	mg/kg-dry	4	0	HH Soil (HQ=1)	0.66	0	0.01	0.01	ND	ND		
Bromodichloromethane	T	mg/kg-dry	4	0	No SLC			0.01	0.01	ND	ND		
Bromoform	T	mg/kg-dry	4	0	No SLC			0.01	0.01	ND	ND		
Bromomethane	T	mg/kg-dry	4	0	No SLC			0.01	0.01	ND	ND		
Carbon tetrachloride	T	mg/kg-dry	4	0	HH Soil (HQ=1)	0.24	0	0.01	0.01	ND	ND		
Chlorobenzene	T	mg/kg-dry	4	0	HH Soil (HQ=1)	320	0	0.01	0.01	ND	ND		
Chloroethane	T	mg/kg-dry	4	0	No SLC			0.01	0.01	ND	ND		
Chloroform	T	mg/kg-dry	4	0	No SLC			0.01	0.01	ND	ND		
Chloromethane	T	mg/kg-dry	4	0	HH Soil (HQ=1)	1.2	0	0.01	0.01	ND	ND		
cis-1,2-Dichloroethene	T	mg/kg-dry	4	0	No SLC			0.01	0.01	ND	ND		
cis-1,3-Dichloropropene	T	mg/kg-dry	4	0	No SLC			0.01	0.01	ND	ND		
Dibromochloromethane	T	mg/kg-dry	4	0	No SLC			0.01	0.01	ND	ND		
Dichlorodifluoromethane	T	mg/kg-dry	4	0	HH Soil (HQ=1)	94	0	0.01	0.01	ND	ND		
Ethylbenzene	T	mg/kg-dry	4	0	HH Soil (HQ=1)	230	0	0.01	0.01	ND	ND		

"No SLC" indicates that there is not a Screening Level Criterion for this medium specified for the RI/FS.
"HH Soil (HQ=1)" EPA Region 6 RBSLs Human Health Residential Soil (HQ=1)
"Eco Soil" EPA Region 6 Tier 1-3 RBSLs Ecological Soil
Median Value determined using 1/2 the Reporting Limit value for Non-Detects if greater than 50% of the values were detected.
Mean Value calculated using 1/2 the Reporting Limit for Non-Detects if greater than 50% of the values were detected.

T = Total Fraction
D = Filtered Fraction (0.45 micron filter)
A = Filtered Fraction (0.1 micron filter)
ND = Non-Detected Value

Table 7-55

Soil 0-6 inches Biased

RI/FS Soil Area 8f - Core Shack and Carpenter Shack Soil

Summary of Results

Analyte	Sample Fraction	Units	Total Number of Samples	Percent Detects (%)	SLC	SLC Value	Percent Above SLC	Min RL for ND	Max RL for ND	Min Value	Max Value	Mean Value	Median Value
Styrene	T	mg/kg-dry	4	0	HH Soil (HQ=1)	1700	0	0.01	0.01	ND	ND		
Tetrachloroethene	T	mg/kg-dry	4	0	HH Soil (HQ=1)	0.55	0	0.01	0.01	ND	ND		
Toluene	T	mg/kg-dry	4	0	HH Soil (HQ=1)	520	0	0.01	0.01	ND	ND		
Total Xylene	T	mg/kg-dry	4	75	HH Soil (HQ=1)	210	0	0.01	0.01	ND	0.002	0.0022	0.002
trans-1,2-Dichloroethene	T	mg/kg-dry	4	0	No SLC			0.01	0.01	ND	ND		
trans-1,3-Dichloropropene	T	mg/kg-dry	4	0	No SLC			0.01	0.01	ND	ND		
Trichloroethene	T	mg/kg-dry	4	0	HH Soil (HQ=1)	0.043	0	0.01	0.01	ND	ND		
Trichlorofluoromethane	T	mg/kg-dry	4	0	HH Soil (HQ=1)	390	0	0.01	0.01	ND	ND		
Vinyl chloride	T	mg/kg-dry	4	0	No SLC			0.01	0.01	ND	ND		

"No SLC" indicates that there is not a Screening Level Criterion for this medium specified for the RI/FS.
"HH Soil (HQ=1)" EPA Region 6 RBSLs Human Health Residential Soil (HQ=1)
"Eco Soil" EPA Region 6 Tier 1-3 RBSLs Ecological Soil
Median Value determined using 1/2 the Reporting Limit value for Non-Detects if greater than 50% of the values were detected.
Mean Value calculated using 1/2 the Reporting Limit for Non-Detects if greater than 50% of the values were detected.

T = Total Fraction
D = Filtered Fraction (0.45 micron filter)
A = Filtered Fraction (0.1 micron filter)
ND = Non-Detected Value

Table 7-56

Soil 0-24 inches Biased

RI/FS Soil Area 8f - Core Shack and Carpenter Shack Soil

Summary of Results

Analyte	Sample Fraction	Units	Total Number of Samples	Percent Detects (%)	SLC	SLC Value	Percent Above SLC	Min RL for ND	Max RL for ND	Min Value	Max Value	Mean Value	Median Value
Inorganics													
Cation-Exchange Capacity	T	meq/100g	17	100	No SLC					7.5	22	14.7	14.5
Chloride	T	mg/kg-dry	17	94.1	No SLC			2.30	2.30	ND	277	22.5	4.6
Fluoride	T	mg/kg-dry	17	100	No SLC					0.17	48.4	4.3	1.3
Nitrate	T	mg/kg-dry	17	35.3	No SLC			2.20	2.30	ND	11.1		
Organic Soils	T	%	17	100	No SLC					0.9	4.9	2.8	3
pH	T	SU	17	100	No SLC					4.8	7.9	7.1	7.2
Phosphorus	T	mg/kg-dry	17	100	No SLC					442	1780	1070	928
Sodium Absorption Ratio	T	ratio	17	100	No SLC					0.02	7.6	0.72	0.14
Solids, Percent	T	%	17	100	No SLC					86.4	95.3	90.8	91
Specific Conductance	T	umhos/cm	17	100	No SLC					117	3550	819	376
Sulfate	T	mg/kg-dry	17	100	No SLC					4.3	2710	627	163
Total Kjeldahl Nitrogen	T	mg/kg-dry	17	100	No SLC					54.6	840	364	358
Total Organic Carbon	T	mg/kg-dry	17	100	No SLC					191	16900	5040	3090
Metals													
Aluminum	T	mg/kg-dry	17	100	No SLC					6960	15500	12200	11700
Antimony	T	mg/kg-dry	17	0	ECO Soil	0.3	0	0.27	0.51	ND	ND		
Arsenic	T	mg/kg-dry	17	100	ECO Soil	31	0			2.1	11	4.3	3.5
Barium	T	mg/kg-dry	17	100	ECO Soil	330	5.9			21.5	360	167	159
Beryllium	T	mg/kg-dry	17	100	ECO Soil	30	0			0.79	2	1.1	1
Boron	T	mg/kg-dry	17	35.3	ECO Soil	0.5	100	0.24	2.20	ND	3.5		
Cadmium	T	mg/kg-dry	17	76.5	ECO Soil	0.4	84.6	0.03	0.04	ND	19.9	2.3	0.94
Calcium	T	mg/kg-dry	17	100	No SLC					4050	13800	7770	7180
Chromium	T	mg/kg-dry	17	100	ECO Soil	7.9	100			12.3	67.1	40.9	42.3
Cobalt	T	mg/kg-dry	17	100	ECO Soil	32	0			1.9	15.3	10.3	11
Copper	T	mg/kg-dry	17	100	ECO Soil	54	70.6			34.9	151	83.7	72.6
Iron	T	mg/kg-dry	17	100	No SLC					15500	35300	26800	27600
Lead	T	mg/kg-dry	17	100	ECO Soil	15	100			30.1	371	122	91.2
Magnesium	T	mg/kg-dry	17	100	No SLC					2270	10400	6850	7000
Manganese	T	mg/kg-dry	17	100	ECO Soil	152	100			613	1420	779	692
Mercury	T	mg/kg-dry	17	76.5	ECO Soil	0.1	38.5	0.02	0.02	ND	1.6	0.18	0.036
Molybdenum	T	mg/kg-dry	17	100	ECO Soil	2	100			16.3	1940	662	309

"No SLC" indicates that there is not a Screening Level Criterion for this medium specified for the RI/FS.
"HH Soil (HQ=1)" EPA Region 6 RBSLs Human Health Residential Soil (HQ=1)
"Eco Soil" EPA Region 6 Tier 1-3 RBSLs Ecological Soil
Median Value determined using 1/2 the Reporting Limit value for Non-Detects if greater than 50% of the values were detected.
Mean Value calculated using 1/2 the Reporting Limit for Non-Detects if greater than 50% of the values were detected.

T = Total Fraction
D = Filtered Fraction (0.45 micron filter)
A = Filtered Fraction (0.1 micron filter)
ND = Non-Detected Value

Table 7-56
Soil 0-24 inches Biased
RI/FS Soil Area 8f - Core Shack and Carpenter Shack Soil
Summary of Results

Analyte	Sample Fraction	Units	Total Number of Samples	Percent Detects (%)	SLC	SLC Value	Percent Above SLC	Min RL for ND	Max RL for ND	Min Value	Max Value	Mean Value	Median Value
Nickel	T	mg/kg-dry	17	100	ECO Soil	48	0			9	39.5	27.5	29.2
Potassium	T	mg/kg-dry	17	100	No SLC					1540	3690	2860	2990
Selenium	T	mg/kg-dry	17	41.2	ECO Soil	1	28.6	0.75	0.90	ND	1.3		
Silver	T	mg/kg-dry	17	100	ECO Soil	2	11.8			0.18	2.1	0.96	0.58
Sodium	T	mg/kg-dry	17	11.8	No SLC			34.60	158.00	ND	747		
Thallium	T	mg/kg-dry	17	100	ECO Soil	1	0			0.13	0.38	0.24	0.22
Vanadium	T	mg/kg-dry	17	100	ECO Soil	2	100			8.9	46.6	34.1	38.4
Zinc	T	mg/kg-dry	17	100	ECO Soil	120	76.5			77.3	708	254	160
Semi-Volatile Organics													
1,1`-Biphenyl	T	mg/kg-dry	3	0	ECO Soil	60	0	0.35	0.36	ND	ND		
2,4,5-Trichlorophenol	T	mg/kg-dry	3	0	No SLC			0.88	0.90	ND	ND		
2,4,6-Trichlorophenol	T	mg/kg-dry	3	0	No SLC			0.35	0.36	ND	ND		
2,4-Dichlorophenol	T	mg/kg-dry	3	0	No SLC			0.35	0.36	ND	ND		
2,4-Dimethylphenol	T	mg/kg-dry	3	0	No SLC			0.35	0.36	ND	ND		
2,4-Dinitrophenol	T	mg/kg-dry	3	0	No SLC			0.88	0.90	ND	ND		
2,4-Dinitrotoluene	T	mg/kg-dry	3	0	No SLC			0.35	0.36	ND	ND		
2,6-Dinitrotoluene	T	mg/kg-dry	3	0	ECO Soil	0.033	0	0.35	0.36	ND	ND		
2-Chloronaphthalene	T	mg/kg-dry	3	0	No SLC			0.35	0.36	ND	ND		
2-Chlorophenol	T	mg/kg-dry	3	0	ECO Soil	20	0	0.35	0.36	ND	ND		
2-Methylnaphthalene	T	mg/kg-dry	3	0	ECO Soil	3.2	0	0.35	0.36	ND	ND		
2-Methylphenol	T	mg/kg-dry	3	0	No SLC			0.35	0.36	ND	ND		
2-Nitroaniline	T	mg/kg-dry	3	0	No SLC			0.88	0.90	ND	ND		
2-Nitrophenol	T	mg/kg-dry	3	0	No SLC			0.35	0.36	ND	ND		
3,3-Dichlorobenzidine	T	mg/kg-dry	3	0	No SLC			0.35	0.36	ND	ND		
3-Nitroaniline	T	mg/kg-dry	3	0	No SLC			0.88	0.90	ND	ND		
4,6-Dinitro-2-methylphenol	T	mg/kg-dry	3	0	No SLC			0.88	0.90	ND	ND		
4-Bromophenyl phenyl ether	T	mg/kg-dry	3	0	No SLC			0.35	0.36	ND	ND		
4-Chloro-3-methylphenol	T	mg/kg-dry	3	0	ECO Soil	8	0	0.35	0.36	ND	ND		
4-Chloroaniline	T	mg/kg-dry	3	0	No SLC			0.35	0.36	ND	ND		
4-Chlorophenyl phenyl ether	T	mg/kg-dry	3	0	No SLC			0.35	0.36	ND	ND		
4-Methylphenol	T	mg/kg-dry	3	0	No SLC			0.35	0.36	ND	ND		
4-Nitroaniline	T	mg/kg-dry	3	0	No SLC			0.88	0.90	ND	ND		

"No SLC" indicates that there is not a Screening Level Criterion for this medium specified for the RI/FS.
"HH Soil (HQ=1)" EPA Region 6 RBSLs Human Health Residential Soil (HQ=1)
"Eco Soil" EPA Region 6 Tier 1-3 RBSLs Ecological Soil
Median Value determined using 1/2 the Reporting Limit value for Non-Detects if greater than 50% of the values were detected.
Mean Value calculated using 1/2 the Reporting Limit for Non-Detects if greater than 50% of the values were detected.

T = Total Fraction
D = Filtered Fraction (0.45 micron filter)
A = Filtered Fraction (0.1 micron filter)
ND = Non-Detected Value

Table 7-56
Soil 0-24 inches Biased
RI/FS Soil Area 8f - Core Shack and Carpenter Shack Soil
Summary of Results

Analyte	Sample Fraction	Units	Total Number of Samples	Percent Detects (%)	SLC	SLC Value	Percent Above SLC	Min RL for ND	Max RL for ND	Min Value	Max Value	Mean Value	Median Value
4-Nitrophenol	T	mg/kg-dry	3	0	No SLC			0.88	0.90	ND	ND		
Acenaphthene	T	mg/kg-dry	3	0	ECO Soil	20	0	0.35	0.36	ND	ND		
Acenaphthylene	T	mg/kg-dry	3	0	No SLC			0.35	0.36	ND	ND		
Anthracene	T	mg/kg-dry	3	0	ECO Soil	10	0	0.35	0.36	ND	ND		
Benzo(a)anthracene	T	mg/kg-dry	3	0	ECO Soil	5.2	0	0.35	0.36	ND	ND		
Benzo(a)pyrene	T	mg/kg-dry	3	0	ECO Soil	1	0	0.35	0.36	ND	ND		
Benzo(b)fluoranthene	T	mg/kg-dry	3	0	ECO Soil	59.8	0	0.35	0.36	ND	ND		
Benzo(g,h,i)perylene	T	mg/kg-dry	3	0	ECO Soil	119	0	0.35	0.36	ND	ND		
Benzo(k)fluoranthene	T	mg/kg-dry	3	0	ECO Soil	148	0	0.35	0.36	ND	ND		
Bis(2-chloroethoxy)methane	T	mg/kg-dry	3	0	No SLC			0.35	0.36	ND	ND		
Bis(2-chloroethyl)ether	T	mg/kg-dry	3	0	No SLC			0.35	0.36	ND	ND		
Carbazole	T	mg/kg-dry	3	0	No SLC			0.35	0.36	ND	ND		
Chrysene	T	mg/kg-dry	3	33.3	ECO Soil	4.7	0	0.35	0.36	ND	0.036		
Dibenz(a,h)anthracene	T	mg/kg-dry	3	0	ECO Soil	18.4	0	0.35	0.36	ND	ND		
Dibenzofuran	T	mg/kg-dry	3	0	No SLC			0.35	0.36	ND	ND		
Dichlorodiisopropyl ether	T	mg/kg-dry	3	0	No SLC			0.35	0.36	ND	ND		
Fluoranthene	T	mg/kg-dry	3	0	ECO Soil	10	0	0.35	0.36	ND	ND		
Fluorene	T	mg/kg-dry	3	0	ECO Soil	30	0	0.35	0.36	ND	ND		
Hexachlorobenzene	T	mg/kg-dry	3	0	No SLC			0.35	0.36	ND	ND		
Hexachlorobutadiene	T	mg/kg-dry	3	0	No SLC			0.35	0.36	ND	ND		
Hexachlorocyclopentadiene	T	mg/kg-dry	3	0	No SLC			0.35	0.36	ND	ND		
Hexachloroethane	T	mg/kg-dry	3	0	No SLC			0.35	0.36	ND	ND		
Indeno(1,2,3-cd)pyrene	T	mg/kg-dry	3	0	ECO Soil	109	0	0.35	0.36	ND	ND		
Isophorone	T	mg/kg-dry	3	0	ECO Soil	139	0	0.35	0.36	ND	ND		
Naphthalene	T	mg/kg-dry	3	0	ECO Soil	5	0	0.35	0.36	ND	ND		
Nitrobenzene	T	mg/kg-dry	3	0	No SLC			0.35	0.36	ND	ND		
N-Nitrosodi-n-propylamine	T	mg/kg-dry	3	0	ECO Soil	0.54	0	0.35	0.36	ND	ND		
N-Nitrosodiphenylamine	T	mg/kg-dry	3	0	ECO Soil	20	0	0.35	0.36	ND	ND		
Pentachlorophenol	T	mg/kg-dry	3	0	No SLC			0.88	0.90	ND	ND		
Phenanthrene	T	mg/kg-dry	3	0	ECO Soil	5	0	0.35	0.36	ND	ND		
Phenol	T	mg/kg-dry	3	0	ECO Soil	30	0	0.35	0.36	ND	ND		
Pyrene	T	mg/kg-dry	3	0	ECO Soil	10	0	0.35	0.36	ND	ND		

"No SLC" indicates that there is not a Screening Level Criterion for this medium specified for the RI/FS.
"HH Soil (HQ=1)" EPA Region 6 RBSLs Human Health Residential Soil (HQ=1)
"Eco Soil" EPA Region 6 Tier 1-3 RBSLs Ecological Soil
Median Value determined using 1/2 the Reporting Limit value for Non-Detects if greater than 50% of the values were detected.
Mean Value calculated using 1/2 the Reporting Limit for Non-Detects if greater than 50% of the values were detected.

T = Total Fraction
D = Filtered Fraction (0.45 micron filter)
A = Filtered Fraction (0.1 micron filter)
ND = Non-Detected Value

Table 7-56
Soil 0-24 inches Biased
RI/FS Soil Area 8f - Core Shack and Carpenter Shack Soil
Summary of Results

Analyte	Sample Fraction	Units	Total Number of Samples	Percent Detects (%)	SLC	SLC Value	Percent Above SLC	Min RL for ND	Max RL for ND	Min Value	Max Value	Mean Value	Median Value
Volatile Organics													
1,1,1-Trichloroethane	T	mg/kg-dry	4	0	ECO Soil	0.1	0	0.01	0.01	ND	ND		
1,1,2,2-Tetrachloroethane	T	mg/kg-dry	4	0	No SLC			0.01	0.01	ND	ND		
1,1,2-Trichloro-1,2,2-trifluoroethane	T	mg/kg-dry	4	0	No SLC			0.01	0.01	ND	ND		
1,1,2-Trichloroethane	T	mg/kg-dry	4	0	No SLC			0.01	0.01	ND	ND		
1,1-Dichloroethane	T	mg/kg-dry	4	0	ECO Soil	20.1	0	0.01	0.01	ND	ND		
1,1-Dichloroethene	T	mg/kg-dry	4	0	No SLC			0.01	0.01	ND	ND		
1,2,4-Trichlorobenzene	T	mg/kg-dry	4	0	No SLC			0.01	0.01	ND	ND		
1,2-Dibromo-3-chloropropane	T	mg/kg-dry	4	0	No SLC			0.01	0.01	ND	ND		
1,2-Dichlorobenzene	T	mg/kg-dry	4	0	No SLC			0.01	0.01	ND	ND		
1,2-Dichloroethane	T	mg/kg-dry	4	0	No SLC			0.01	0.01	ND	ND		
1,2-Dichloroethene (total)	T	mg/kg-dry	4	0	No SLC			0.01	0.01	ND	ND		
1,2-Dichloropropane	T	mg/kg-dry	4	0	No SLC			0.01	0.01	ND	ND		
1,3-Dichlorobenzene	T	mg/kg-dry	4	0	No SLC			0.01	0.01	ND	ND		
1,4-Dichlorobenzene	T	mg/kg-dry	4	0	No SLC			0.01	0.01	ND	ND		
2-Butanone	T	mg/kg-dry	4	50	ECO Soil	89.6	0	0.01	0.01	ND	0.005	0.0036	0.0037
2-Hexanone	T	mg/kg-dry	4	0	ECO Soil	12.6	0	0.01	0.01	ND	ND		
4-Methyl-2-pentanone	T	mg/kg-dry	4	0	ECO Soil	443	0	0.01	0.01	ND	ND		
Benzene	T	mg/kg-dry	4	0	ECO Soil	0.5	0	0.01	0.01	ND	ND		
Bromodichloromethane	T	mg/kg-dry	4	0	No SLC			0.01	0.01	ND	ND		
Bromoform	T	mg/kg-dry	4	0	No SLC			0.01	0.01	ND	ND		
Bromomethane	T	mg/kg-dry	4	0	No SLC			0.01	0.01	ND	ND		
Carbon tetrachloride	T	mg/kg-dry	4	0	ECO Soil	1000	0	0.01	0.01	ND	ND		
Chlorobenzene	T	mg/kg-dry	4	0	ECO Soil	40	0	0.01	0.01	ND	ND		
Chloroethane	T	mg/kg-dry	4	0	No SLC			0.01	0.01	ND	ND		
Chloroform	T	mg/kg-dry	4	0	No SLC			0.01	0.01	ND	ND		
Chloromethane	T	mg/kg-dry	4	0	ECO Soil	10.4	0	0.01	0.01	ND	ND		
cis-1,2-Dichloroethene	T	mg/kg-dry	4	0	No SLC			0.01	0.01	ND	ND		
cis-1,3-Dichloropropene	T	mg/kg-dry	4	0	No SLC			0.01	0.01	ND	ND		
Dibromochloromethane	T	mg/kg-dry	4	0	No SLC			0.01	0.01	ND	ND		
Dichlorodifluoromethane	T	mg/kg-dry	4	0	ECO Soil	39.5	0	0.01	0.01	ND	ND		
Ethylbenzene	T	mg/kg-dry	4	0	ECO Soil	5	0	0.01	0.01	ND	ND		

"No SLC" indicates that there is not a Screening Level Criterion for this medium specified for the RI/FS.
"HH Soil (HQ=1)" EPA Region 6 RBSLs Human Health Residential Soil (HQ=1)
"Eco Soil" EPA Region 6 Tier 1-3 RBSLs Ecological Soil
Median Value determined using 1/2 the Reporting Limit value for Non-Detects if greater than 50% of the values were detected.
Mean Value calculated using 1/2 the Reporting Limit for Non-Detects if greater than 50% of the values were detected.

T = Total Fraction
D = Filtered Fraction (0.45 micron filter)
A = Filtered Fraction (0.1 micron filter)
ND = Non-Detected Value

Table 7-56

Soil 0-24 inches Biased

RI/FS Soil Area 8f - Core Shack and Carpenter Shack Soil

Summary of Results

Analyte	Sample Fraction	Units	Total Number of Samples	Percent Detects (%)	SLC	SLC Value	Percent Above SLC	Min RL for ND	Max RL for ND	Min Value	Max Value	Mean Value	Median Value
Styrene	T	mg/kg-dry	4	0	ECO Soil	300	0	0.01	0.01	ND	ND		
Tetrachloroethene	T	mg/kg-dry	4	0	No SLC			0.01	0.01	ND	ND		
Toluene	T	mg/kg-dry	4	25	ECO Soil	200	0	0.01	0.01	ND	0.001		
Total Xylene	T	mg/kg-dry	4	50	ECO Soil	5	0	0.01	0.01	ND	0.001	0.0024	0.002
trans-1,2-Dichloroethene	T	mg/kg-dry	4	0	No SLC			0.01	0.01	ND	ND		
trans-1,3-Dichloropropene	T	mg/kg-dry	4	0	No SLC			0.01	0.01	ND	ND		
Trichloroethene	T	mg/kg-dry	4	0	No SLC			0.01	0.01	ND	ND		
Trichlorofluoromethane	T	mg/kg-dry	4	0	ECO Soil	16.4	0	0.01	0.01	ND	ND		
Vinyl chloride	T	mg/kg-dry	4	0	No SLC			0.01	0.01	ND	ND		

"No SLC" indicates that there is not a Screening Level Criterion for this medium specified for the RI/FS.
"HH Soil (HQ=1)" EPA Region 6 RBSLs Human Health Residential Soil (HQ=1)
"Eco Soil" EPA Region 6 Tier 1-3 RBSLs Ecological Soil
Median Value determined using 1/2 the Reporting Limit value for Non-Detects if greater than 50% of the values were detected.
Mean Value calculated using 1/2 the Reporting Limit for Non-Detects if greater than 50% of the values were detected.

T = Total Fraction
D = Filtered Fraction (0.45 micron filter)
A = Filtered Fraction (0.1 micron filter)
ND = Non-Detected Value

Table 7-57
Soil 0-6 inches Random
RI/FS Reference Soil at Cater Ranch
Summary of Results

Analyte	Sample Fraction	Units	Total Number of Samples	Percent Detects (%)	SLC	SLC Value	Percent Above SLC	Min RL for ND	Max RL for ND	Min Value	Max Value	Mean Value	Median Value
Dibenzodioxins-Dibenzofurans													
1,2,3,4,6,7,8-Heptachlorodibenzofuran	T	pg/g	2	50	HH Soil (HQ=1)	1000	0	0.32	0.32	ND	1.1	0.63	0.63
1,2,3,4,6,7,8-Heptachlorodibenzo-p-dioxin	T	pg/g	2	50	HH Soil (HQ=1)	1000	0	0.94	0.94	ND	3.1	1.8	1.8
1,2,3,4,7,8,9-Heptachlorodibenzofuran	T	pg/g	2	0	HH Soil (HQ=1)	1000	0	0.14	0.19	ND	ND		
1,2,3,4,7,8-Hexachlorodibenzofuran	T	pg/g	2	0	HH Soil (HQ=1)	1000	0	0.18	0.22	ND	ND		
1,2,3,4,7,8-hexachlorodibenzo-p-dioxin	T	pg/g	2	0	HH Soil (HQ=1)	1000	0	0.14	0.21	ND	ND		
1,2,3,6,7,8-Hexachlorodibenzofuran	T	pg/g	2	0	HH Soil (HQ=1)	1000	0	0.09	0.12	ND	ND		
1,2,3,6,7,8-Hexachlorodibenzo-p-dioxin	T	pg/g	2	50	HH Soil (HQ=1)	1000	0	0.20	0.20	ND	0.2	0.15	0.15
1,2,3,7,8,9-Hexachlorodibenzofuran	T	pg/g	2	0	HH Soil (HQ=1)	1000	0	0.09	0.11	ND	ND		
1,2,3,7,8,9-Hexachlorodibenzo-p-dioxin	T	pg/g	2	50	HH Soil (HQ=1)	1000	0	0.20	0.20	ND	0.24	0.17	0.17
1,2,3,7,8-Pentachlorodibenzo-p-dioxin	T	pg/g	2	0	HH Soil (HQ=1)	1000	0	0.08	0.13	ND	ND		
2,3,4,7,8-Pentachlorodibenzofuran	T	pg/g	2	0	HH Soil (HQ=1)	1000	0	0.07	0.11	ND	ND		
2,3,7,8-Tetrachlorodibenzofuran	T	pg/g	2	0	HH Soil (HQ=1)	1000	0	0.10	0.15	ND	ND		
2,3,7,8-Tetrachlorodibenzo-p-dioxin	T	pg/g	2	0	HH Soil (HQ=1)	1000	0	0.11	0.17	ND	ND		
Inorganics													
Cation-Exchange Capacity	T	meq/100g	10	100	No SLC					8.1	42	22	17.8
Chloride	T	mg/kg-dry	10	90	No SLC			2.10	2.10	ND	10.5	3.8	2.9
Fluoride	T	mg/kg-dry	10	90	HH Soil (HQ=1)	3700	0	0.11	0.11	ND	3.7	0.89	0.34
Nitrate	T	mg/kg-dry	10	90	No SLC			2.20	2.20	ND	53.9	12	6
Organic Soils	T	%	10	100	No SLC					2.2	14.7	5.5	3.9
pH	T	SU	10	100	No SLC					6.3	8.3	7.7	8
Phosphorus	T	mg/kg-dry	10	100	No SLC					521	3350	1390	1210
Sodium Absorption Ratio	T	ratio	10	90	No SLC			0.03	0.03	ND	0.99	0.27	0.08
Solids, Percent	T	%	10	100	No SLC					91.9	99.1	95.6	95.4
Specific Conductance	T	umhos/cm	10	100	No SLC					58.7	609	206	161
Sulfate	T	mg/kg-dry	10	100	No SLC					2.7	25.6	7.9	5
Total Kjeldahl Nitrogen	T	mg/kg-dry	2	100	No SLC					305	2850	1580	1580
Total Organic Carbon	T	mg/kg-dry	10	100	No SLC					4980	41200	12300	8710
Metals													
Aluminum	T	mg/kg-dry	10	100	HH Soil (HQ=1)	76000	0			7640	14100	11900	11800
Antimony	T	mg/kg-dry	10	0	HH Soil (HQ=1)	31	0	0.46	0.52	ND	ND		
Arsenic	T	mg/kg-dry	10	100	HH Soil (HQ=1)	0.39	100			1.2	3.2	2.1	2.1

"No SLC" indicates that there is not a Screening Level Criterion for this medium specified for the RI/FS.
"HH Soil (HQ=1)" EPA Region 6 RBSLs Human Health Residential Soil (HQ=1)
"Eco Soil" EPA Region 6 Tier 1-3 RBSLs Ecological Soil
Median Value determined using 1/2 the Reporting Limit value for Non-Detects if greater than 50% of the values were detected.
Mean Value calculated using 1/2 the Reporting Limit for Non-Detects if greater than 50% of the values were detected.

T = Total Fraction
D = Filtered Fraction (0.45 micron filter)
A = Filtered Fraction (0.1 micron filter)
ND = Non-Detected Value

Table 7-57
Soil 0-6 inches Random
RI/FS Reference Soil at Cater Ranch
Summary of Results

Analyte	Sample Fraction	Units	Total Number of Samples	Percent Detects (%)	SLC	SLC Value	Percent Above SLC	Min RL for ND	Max RL for ND	Min Value	Max Value	Mean Value	Median Value
Barium	T	mg/kg-dry	10	100	HH Soil (HQ=1)	5500	0			56	212	131	110
Beryllium	T	mg/kg-dry	10	100	HH Soil (HQ=1)	150	0			0.48	0.92	0.79	0.82
Boron	T	mg/kg-dry	10	60	HH Soil (HQ=1)	5500	0	3.90	5.20	ND	16	6.7	5.2
Cadmium	T	mg/kg-dry	10	0	HH Soil (HQ=1)	39	0	0.02	0.03	ND	ND		
Calcium	T	mg/kg-dry	10	100	No SLC					3430	93300	28600	11500
Chromium	T	mg/kg-dry	10	100	HH Soil (HQ=1)	210	0			13.7	21.8	18.1	19.3
Cobalt	T	mg/kg-dry	10	100	HH Soil (HQ=1)	900	0			6.4	9.4	8.2	8.7
Copper	T	mg/kg-dry	10	100	HH Soil (HQ=1)	2900	0			11	23.2	17.2	16.6
Iron	T	mg/kg-dry	10	100	HH Soil (HQ=1)	23000	0			12000	18800	15600	15500
Lead	T	mg/kg-dry	10	100	HH Soil (HQ=1)	400	0			5.1	9.9	7.7	7.8
Magnesium	T	mg/kg-dry	10	100	No SLC					3660	20600	8920	5930
Manganese	T	mg/kg-dry	10	100	HH Soil (HQ=1)	3200	0			259	474	377	362
Mercury	T	mg/kg-dry	10	40	HH Soil (HQ=1)	23	0	0.02	0.02	ND	0.079		
Molybdenum	T	mg/kg-dry	10	60	HH Soil (HQ=1)	390	0	0.15	0.16	ND	0.5	0.22	0.21
Nickel	T	mg/kg-dry	10	100	HH Soil (HQ=1)	1600	0			9.4	15.7	13.4	13.8
Potassium	T	mg/kg-dry	10	100	No SLC					2240	4750	3090	2470
Selenium	T	mg/kg-dry	10	10	HH Soil (HQ=1)	390	0	0.74	0.83	ND	0.97		
Silver	T	mg/kg-dry	10	60	HH Soil (HQ=1)	390	0	0.09	0.17	ND	0.16	0.099	0.098
Sodium	T	mg/kg-dry	10	100	No SLC					455	946	603	542
Thallium	T	mg/kg-dry	10	80	HH Soil (HQ=1)	5.5	0	0.09	0.10	ND	0.14	0.11	0.11
Vanadium	T	mg/kg-dry	10	100	HH Soil (HQ=1)	78	0			22.2	39.9	29	28
Zinc	T	mg/kg-dry	10	100	HH Soil (HQ=1)	23000	0			32.7	54.9	48.1	50.1
Pesticides-PCBs													
a-Chlordane	T	mg/kg-dry	2	0	No SLC			0.00	0.00	ND	ND		
Aldrin	T	mg/kg-dry	2	0	No SLC			0.00	0.00	ND	ND		
alpha-Hexachlorocyclohexane	T	mg/kg-dry	2	0	No SLC			0.00	0.00	ND	ND		
beta-Hexachlorocyclohexane	T	mg/kg-dry	2	0	No SLC			0.00	0.00	ND	ND		
delta-Hexachlorocyclohexane	T	mg/kg-dry	2	0	No SLC			0.00	0.00	ND	ND		
Dichlorodiphenyldichloroethane	T	mg/kg-dry	2	0	No SLC			0.00	0.00	ND	ND		
Dichlorodiphenyldichloroethylene	T	mg/kg-dry	2	0	No SLC			0.00	0.00	ND	ND		
Dichlorodiphenyltrichloroethane	T	mg/kg-dry	2	0	No SLC			0.00	0.00	ND	ND		
Dieldrin	T	mg/kg-dry	2	0	No SLC			0.00	0.00	ND	ND		

"No SLC" indicates that there is not a Screening Level Criterion for this medium specified for the RI/FS.
"HH Soil (HQ=1)" EPA Region 6 RBSLs Human Health Residential Soil (HQ=1)
"Eco Soil" EPA Region 6 Tier 1-3 RBSLs Ecological Soil
Median Value determined using 1/2 the Reporting Limit value for Non-Detects if greater than 50% of the values were detected.
Mean Value calculated using 1/2 the Reporting Limit for Non-Detects if greater than 50% of the values were detected.

T = Total Fraction
D = Filtered Fraction (0.45 micron filter)
A = Filtered Fraction (0.1 micron filter)
ND = Non-Detected Value

Table 7-57
Soil 0-6 inches Random
RI/FS Reference Soil at Cater Ranch
Summary of Results

Analyte	Sample Fraction	Units	Total Number of Samples	Percent Detects (%)	SLC	SLC Value	Percent Above SLC	Min RL for ND	Max RL for ND	Min Value	Max Value	Mean Value	Median Value
Endosulfan I	T	mg/kg-dry	2	0	No SLC			0.00	0.00	ND	ND		
Endosulfan II	T	mg/kg-dry	2	0	No SLC			0.00	0.00	ND	ND		
Endosulfan sulfate	T	mg/kg-dry	2	0	No SLC			0.00	0.00	ND	ND		
Endrin	T	mg/kg-dry	2	0	No SLC			0.00	0.00	ND	ND		
Endrin aldehyde	T	mg/kg-dry	2	0	No SLC			0.00	0.00	ND	ND		
Endrin ketone	T	mg/kg-dry	2	0	No SLC			0.00	0.00	ND	ND		
g-Chlordane	T	mg/kg-dry	2	0	No SLC			0.00	0.00	ND	ND		
Heptachlor	T	mg/kg-dry	2	0	No SLC			0.00	0.00	ND	ND		
Heptachlor epoxide	T	mg/kg-dry	2	0	No SLC			0.00	0.00	ND	ND		
Lindane	T	mg/kg-dry	2	0	No SLC			0.00	0.00	ND	ND		
Methoxychlor	T	mg/kg-dry	2	0	No SLC			0.02	0.02	ND	ND		

"No SLC" indicates that there is not a Screening Level Criterion for this medium specified for the RI/FS.
"HH Soil (HQ=1)" EPA Region 6 RBSLs Human Health Residential Soil (HQ=1)
"Eco Soil" EPA Region 6 Tier 1-3 RBSLs Ecological Soil
Median Value determined using 1/2 the Reporting Limit value for Non-Detects if greater than 50% of the values were detected.
Mean Value calculated using 1/2 the Reporting Limit for Non-Detects if greater than 50% of the values were detected.

T = Total Fraction
D = Filtered Fraction (0.45 micron filter)
A = Filtered Fraction (0.1 micron filter)
ND = Non-Detected Value

Table 7-58
Soil 0-24 inches Random
RI/FS Reference Soil at Cater Ranch
Summary of Results

Analyte	Sample Fraction	Units	Total Number of Samples	Percent Detects (%)	SLC	SLC Value	Percent Above SLC	Min RL for ND	Max RL for ND	Min Value	Max Value	Mean Value	Median Value
Inorganics													
Cation-Exchange Capacity	T	meq/100g	10	100	No SLC					13	42.2	22.8	18
Chloride	T	mg/kg-dry	10	100	No SLC					2.4	15.6	5.5	4.3
Fluoride	T	mg/kg-dry	10	100	No SLC					0.17	4.5	1.1	0.83
Nitrate	T	mg/kg-dry	10	100	No SLC					2.3	46.4	11.5	5.6
Organic Soils	T	%	10	100	No SLC					2.7	13.6	5.4	4
pH	T	SU	10	100	No SLC					6.9	8.4	7.9	8.1
Phosphorus	T	mg/kg-dry	10	100	No SLC					645	2000	1320	1230
Sodium Absorption Ratio	T	ratio	10	100	No SLC					0.09	2	0.55	0.18
Solids, Percent	T	%	10	100	No SLC					89.7	99.2	94.5	93.9
Specific Conductance	T	umhos/cm	10	100	No SLC					83.8	513	221	197
Sulfate	T	mg/kg-dry	10	100	No SLC					5	125	20.5	7.7
Total Kjeldahl Nitrogen	T	mg/kg-dry	2	100	No SLC					302	2570	1440	1440
Total Organic Carbon	T	mg/kg-dry	10	100	No SLC					4760	39800	15500	9050
Metals													
Aluminum	T	mg/kg-dry	10	100	No SLC					9050	14900	12500	12500
Antimony	T	mg/kg-dry	10	0	ECO Soil	0.3	0	0.48	0.52	ND	ND		
Arsenic	T	mg/kg-dry	10	100	ECO Soil	31	0			1.3	3.2	2.2	2
Barium	T	mg/kg-dry	10	100	ECO Soil	330	0			67.7	209	130	115
Beryllium	T	mg/kg-dry	10	100	ECO Soil	30	0			0.58	0.94	0.83	0.86
Boron	T	mg/kg-dry	10	60	ECO Soil	0.5	100	3.50	4.70	ND	15.1	6.2	5
Cadmium	T	mg/kg-dry	10	0	ECO Soil	0.4	0	0.02	0.03	ND	ND		
Calcium	T	mg/kg-dry	10	100	No SLC					4080	79600	27000	10900
Chromium	T	mg/kg-dry	10	100	ECO Soil	7.9	100			14.1	23.4	19.5	20.1
Cobalt	T	mg/kg-dry	10	100	ECO Soil	32	0			6.9	10.1	8.8	8.9
Copper	T	mg/kg-dry	10	100	ECO Soil	54	0			13.5	24	18.1	17.8
Iron	T	mg/kg-dry	10	100	No SLC					12900	19700	16800	16900
Lead	T	mg/kg-dry	10	100	ECO Soil	15	0			5.7	10.2	8	8
Magnesium	T	mg/kg-dry	10	100	No SLC					3950	19600	9030	6040
Manganese	T	mg/kg-dry	10	100	ECO Soil	152	100			278	680	397	374
Mercury	T	mg/kg-dry	10	20	ECO Soil	0.1	0	0.02	0.02	ND	0.024		
Molybdenum	T	mg/kg-dry	10	50	ECO Soil	2	0	0.13	0.17	ND	0.64	0.22	0.15

"No SLC" indicates that there is not a Screening Level Criterion for this medium specified for the RI/FS.
"HH Soil (HQ=1)" EPA Region 6 RBSLs Human Health Residential Soil (HQ=1)
"Eco Soil" EPA Region 6 Tier 1-3 RBSLs Ecological Soil
Median Value determined using 1/2 the Reporting Limit value for Non-Detects if greater than 50% of the values were detected.
Mean Value calculated using 1/2 the Reporting Limit for Non-Detects if greater than 50% of the values were detected.

T = Total Fraction
D = Filtered Fraction (0.45 micron filter)
A = Filtered Fraction (0.1 micron filter)
ND = Non-Detected Value

Table 7-58
Soil 0-24 inches Random
RI/FS Reference Soil at Cater Ranch
Summary of Results

Analyte	Sample Fraction	Units	Total Number of Samples	Percent Detects (%)	SLC	SLC Value	Percent Above SLC	Min RL for ND	Max RL for ND	Min Value	Max Value	Mean Value	Median Value
Nickel	T	mg/kg-dry	10	100	ECO Soil	48	0			9.8	17.7	14.6	15
Potassium	T	mg/kg-dry	10	100	No SLC					1780	4650	2820	2600
Selenium	T	mg/kg-dry	10	0	ECO Soil	1	0	0.76	0.84	ND	ND		
Silver	T	mg/kg-dry	10	80	ECO Soil	2	0	0.09	0.19	ND	0.24	0.14	0.13
Sodium	T	mg/kg-dry	10	100	No SLC					447	1110	668	612
Thallium	T	mg/kg-dry	10	70	ECO Soil	1	0	0.10	0.10	ND	0.14	0.097	0.11
Vanadium	T	mg/kg-dry	10	100	ECO Soil	2	100			24.1	41.9	32	32.1
Zinc	T	mg/kg-dry	10	100	ECO Soil	120	0			36.7	53.9	48.9	50.2

"No SLC" indicates that there is not a Screening Level Criterion for this medium specified for the RI/FS.
"HH Soil (HQ=1)" EPA Region 6 RBSLs Human Health Residential Soil (HQ=1)
"Eco Soil" EPA Region 6 Tier 1-3 RBSLs Ecological Soil
Median Value determined using 1/2 the Reporting Limit value for Non-Detects if greater than 50% of the values were detected.
Mean Value calculated using 1/2 the Reporting Limit for Non-Detects if greater than 50% of the values were detected.

T = Total Fraction
D = Filtered Fraction (0.45 micron filter)
A = Filtered Fraction (0.1 micron filter)
ND = Non-Detected Value

Table 7-59
Soil 0-2 inches Random
RI/FS Reference Soil at Cater Ranch
Summary of Results

Analyte	Sample Fraction	Units	Total Number of Samples	Percent Detects (%)	SLC	SLC Value	Percent Above SLC	Min RL for ND	Max RL for ND	Min Value	Max Value	Mean Value	Median Value
Inorganics													
Cation-Exchange Capacity	T	meq/100g	16	100	No SLC					11.3	42	24.3	24.8
Chloride	T	mg/kg-dry	16	100	No SLC					2.1	108	11.1	4.4
Fluoride	T	mg/kg-dry	16	75	HH Soil (HQ=1)	3700	0	0.11	0.11	ND	1.9	0.58	0.35
Nitrate	T	mg/kg-dry	16	100	No SLC					2.3	74.2	17.6	10.4
Organic Soils	T	%	16	100	No SLC					2.7	14.9	6.3	6
pH	T	SU	16	100	No SLC					5.5	8.4	7.6	7.9
Phosphorus	T	mg/kg-dry	16	100	No SLC					530	1840	1340	1450
Sodium Absorption Ratio	T	ratio	16	81.3	No SLC			0.02	0.03	ND	12.9	0.91	0.065
Solids, Percent	T	%	16	100	No SLC					94.2	99.5	97.9	98.6
Specific Conductance	T	umhos/cm	16	100	No SLC					53.9	845	327	248
Sulfate	T	mg/kg-dry	16	100	No SLC					3.3	95.9	15.8	8.9
Total Kjeldahl Nitrogen	T	mg/kg-dry	6	100	No SLC					1500	3580	2650	2530
Total Organic Carbon	T	mg/kg-dry	16	100	No SLC					4590	42000	17000	13500
Metals													
Aluminum	T	mg/kg-dry	16	100	HH Soil (HQ=1)	76000	0			6840	17400	12300	12400
Antimony	T	mg/kg-dry	16	0	HH Soil (HQ=1)	31	0	0.46	0.53	ND	ND		
Arsenic	T	mg/kg-dry	16	93.8	HH Soil (HQ=1)	0.39	100	1.20	1.20	ND	2.6	1.9	2
Barium	T	mg/kg-dry	16	100	HH Soil (HQ=1)	5500	0			50.8	246	134	130
Beryllium	T	mg/kg-dry	16	100	HH Soil (HQ=1)	150	0			0.4	1.1	0.79	0.79
Boron	T	mg/kg-dry	16	75	HH Soil (HQ=1)	5500	0	3.30	4.20	ND	17.1	7.9	7.4
Cadmium	T	mg/kg-dry	16	6.3	HH Soil (HQ=1)	39	0	0.02	0.05	ND	0.044		
Calcium	T	mg/kg-dry	16	100	No SLC					3350	93200	29800	15500
Chromium	T	mg/kg-dry	16	100	HH Soil (HQ=1)	210	0			12.3	23.2	17.7	17.9
Cobalt	T	mg/kg-dry	16	100	HH Soil (HQ=1)	900	0			5.7	10.5	8.1	8.2
Copper	T	mg/kg-dry	16	100	HH Soil (HQ=1)	2900	0			10.3	25.1	18.1	17.9
Iron	T	mg/kg-dry	16	100	HH Soil (HQ=1)	23000	0			10500	20000	15400	15400
Lead	T	mg/kg-dry	16	100	HH Soil (HQ=1)	400	0			4.6	11	8.2	8.2
Magnesium	T	mg/kg-dry	16	100	No SLC					3390	30000	9900	6600
Manganese	T	mg/kg-dry	16	100	HH Soil (HQ=1)	3200	0			245	708	413	417
Mercury	T	mg/kg-dry	16	25	HH Soil (HQ=1)	23	0	0.02	0.02	ND	0.021		
Molybdenum	T	mg/kg-dry	16	50	HH Soil (HQ=1)	390	0	0.13	0.17	ND	0.59	0.22	0.17

"No SLC" indicates that there is not a Screening Level Criterion for this medium specified for the RI/FS.
"HH Soil (HQ=1)" EPA Region 6 RBSLs Human Health Residential Soil (HQ=1)
"Eco Soil" EPA Region 6 Tier 1-3 RBSLs Ecological Soil
Median Value determined using 1/2 the Reporting Limit value for Non-Detects if greater than 50% of the values were detected.
Mean Value calculated using 1/2 the Reporting Limit for Non-Detects if greater than 50% of the values were detected.

T = Total Fraction
D = Filtered Fraction (0.45 micron filter)
A = Filtered Fraction (0.1 micron filter)
ND = Non-Detected Value

Table 7-59
Soil 0-2 inches Random
RI/FS Reference Soil at Cater Ranch
Summary of Results

Analyte	Sample Fraction	Units	Total Number of Samples	Percent Detects (%)	SLC	SLC Value	Percent Above SLC	Min RL for ND	Max RL for ND	Min Value	Max Value	Mean Value	Median Value
Nickel	T	mg/kg-dry	16	100	HH Soil (HQ=1)	1600	0			8.4	15.3	12.6	12.8
Potassium	T	mg/kg-dry	16	100	No SLC					2310	5090	3620	3720
Selenium	T	mg/kg-dry	16	0	HH Soil (HQ=1)	390	0	0.73	0.84	ND	ND		
Silver	T	mg/kg-dry	16	37.5	HH Soil (HQ=1)	390	0	0.08	0.28	ND	0.2		
Sodium	T	mg/kg-dry	16	93.8	No SLC			415.00	415.00	ND	1960	692	614
Thallium	T	mg/kg-dry	16	62.5	HH Soil (HQ=1)	5.5	0	0.10	0.11	ND	0.18	0.1	0.11
Vanadium	T	mg/kg-dry	16	100	HH Soil (HQ=1)	78	0			19.6	37.2	27.7	26.3
Zinc	T	mg/kg-dry	16	100	HH Soil (HQ=1)	23000	0			29.4	66.8	50.5	51.5

"No SLC" indicates that there is not a Screening Level Criterion for this medium specified for the RI/FS.
"HH Soil (HQ=1)" EPA Region 6 RBSLs Human Health Residential Soil (HQ=1)
"Eco Soil" EPA Region 6 Tier 1-3 RBSLs Ecological Soil
Median Value determined using 1/2 the Reporting Limit value for Non-Detects if greater than 50% of the values were detected.
Mean Value calculated using 1/2 the Reporting Limit for Non-Detects if greater than 50% of the values were detected.

T = Total Fraction
D = Filtered Fraction (0.45 micron filter)
A = Filtered Fraction (0.1 micron filter)
ND = Non-Detected Value

Table 7-60
Soil 0-24 inches SPLP Random
RI/FS Reference Soil at Cater Ranch
Summary of Results

Analyte	Sample Fraction	Units	Total Number of Samples	Percent Detects (%)	SLC	SLC Value	Percent Above SLC	Min RL for ND	Max RL for ND	Min Value	Max Value	Mean Value	Median Value
Inorganics													
Bicarbonate (as CaCO3)	T	mg/L	4	100	No SLC					43.6	54.5	49.1	49.1
Carbonate (as CaCO3)	T	mg/L	4	75	No SLC			1.00	1.00	ND	39.1	16.9	14
Chloride	T	mg/L	4	100	No SLC					0.47	0.72	0.56	0.52
Cyanide	T	mg/L	4	0	No SLC			0.01	0.01	ND	ND		
Fluoride	T	mg/L	4	100	No SLC					0.47	0.74	0.62	0.64
Hydroxide (as CaCO3)	T	mg/L	4	0	No SLC			1.00	1.00	ND	ND		
Nitrate	T	mg/L	4	75	No SLC			0.40	0.40	ND	1.4	0.69	0.59
Nitrite	T	mg/L	4	100	No SLC					0.018	0.023	0.02	0.019
Phosphate, Ortho As P	T	mg/L	4	100	No SLC					0.03	0.36	0.18	0.17
Phosphorus	T	mg/L	4	100	No SLC					0.3	0.75	0.45	0.38
Sulfate	T	mg/L	4	100	No SLC					0.67	1.8	1.2	1.2
Total Alkalinity	T	mg/L	4	100	No SLC					43.6	87.9	65.9	66.1
Total Kjeldahl Nitrogen	T	mg/L	4	100	No SLC					0.42	1.4	0.72	0.54
Metals													
Aluminum	T	mg/L	4	100	No SLC					1.7	17.9	8.2	6.7
Antimony	T	mg/L	4	0	ECO Soil	0.3	0	0.00	0.00	ND	ND		
Arsenic	T	mg/L	4	75	ECO Soil	31	0	0.00	0.00	ND	0.0019	0.0014	0.0015
Barium	T	mg/L	4	100	ECO Soil	330	0			0.031	0.098	0.052	0.039
Beryllium	T	mg/L	4	25	ECO Soil	30	0	0.00	0.00	ND	0.00081		
Boron	T	mg/L	4	50	ECO Soil	0.5	0	0.07	0.17	ND	0.21	0.12	0.12
Cadmium	T	mg/L	4	0	ECO Soil	0.4	0	0.00	0.00	ND	ND		
Calcium	T	mg/L	4	100	No SLC					11.4	25	15.8	13.3
Chromium	T	mg/L	4	75	ECO Soil	7.9	0	0.00	0.00	ND	0.021	0.0096	0.0087
Cobalt	T	mg/L	4	50	ECO Soil	32	0	0.00	0.00	ND	0.0038	0.002	0.0015
Copper	T	mg/L	4	75	ECO Soil	54	0	0.00	0.00	ND	0.024	0.0096	0.0058
Iron	T	mg/L	4	100	No SLC					1.3	18.3	8	6.1
Lead	T	mg/L	4	75	ECO Soil	15	0	0.00	0.00	ND	0.013	0.0058	0.0053
Magnesium	T	mg/L	4	100	No SLC					2.7	7.5	4.2	3.4
Manganese	T	mg/L	4	100	ECO Soil	152	0			0.013	0.14	0.06	0.043
Mercury	T	mg/L	4	0	ECO Soil	0.1	0	0.01	0.01	ND	ND		
Molybdenum	T	mg/L	4	75	ECO Soil	2	0	0.00	0.00	ND	0.0014	0.0011	0.0012

"No SLC" indicates that there is not a Screening Level Criterion for this medium specified for the RI/FS.
"HH Soil (HQ=1)" EPA Region 6 RBSLs Human Health Residential Soil (HQ=1)
"Eco Soil" EPA Region 6 Tier 1-3 RBSLs Ecological Soil
Median Value determined using 1/2 the Reporting Limit value for Non-Detects if greater than 50% of the values were detected.
Mean Value calculated using 1/2 the Reporting Limit for Non-Detects if greater than 50% of the values were detected.

T = Total Fraction
D = Filtered Fraction (0.45 micron filter)
A = Filtered Fraction (0.1 micron filter)
ND = Non-Detected Value

Table 7-60
Soil 0-24 inches SPLP Random
RI/FS Reference Soil at Cater Ranch
Summary of Results

Analyte	Sample Fraction	Units	Total Number of Samples	Percent Detects (%)	SLC	SLC Value	Percent Above SLC	Min RL for ND	Max RL for ND	Min Value	Max Value	Mean Value	Median Value
Nickel	T	mg/L	4	50	ECO Soil	48	0	0.00	0.00	ND	0.011	0.004	0.0021
Potassium	T	mg/L	4	75	No SLC			1.50	1.50	ND	9.9	3.6	1.8
Selenium	T	mg/L	4	25	ECO Soil	1	0	0.00	0.00	ND	0.00085		
Silver	T	mg/L	4	0	ECO Soil	2	0	0.00	0.00	ND	ND		
Sodium	T	mg/L	4	100	No SLC					8.1	24.1	16.7	17.3
Thallium	T	mg/L	4	0	ECO Soil	1	0	0.00	0.00	ND	ND		
Vanadium	T	mg/L	4	100	ECO Soil	2	0			0.017	0.049	0.034	0.036
Zinc	T	mg/L	4	100	ECO Soil	120	0			0.0071	0.065	0.032	0.029

"No SLC" indicates that there is not a Screening Level Criterion for this medium specified for the RI/FS.
"HH Soil (HQ=1)" EPA Region 6 RBSLs Human Health Residential Soil (HQ=1)
"Eco Soil" EPA Region 6 Tier 1-3 RBSLs Ecological Soil
Median Value determined using 1/2 the Reporting Limit value for Non-Detects if greater than 50% of the values were detected.
Mean Value calculated using 1/2 the Reporting Limit for Non-Detects if greater than 50% of the values were detected.

T = Total Fraction
D = Filtered Fraction (0.45 micron filter)
A = Filtered Fraction (0.1 micron filter)
ND = Non-Detected Value

Table 7-61
Soil 0-6 inches Biased
RI/FS Soil Area 11 - Dry/Maintenance
Summary of Results

Analyte	Sample Fraction	Units	Total Number of Samples	Percent Detects (%)	SLC	SLC Value	Percent Above SLC	Min RL for ND	Max RL for ND	Min Value	Max Value	Mean Value	Median Value
Inorganics													
Cation-Exchange Capacity	T	meq/100g	5	100	No SLC					13.6	26.3	21.4	25.6
Chloride	T	mg/kg-dry	5	20	No SLC			36.00	37.00	ND	110		
Fluoride	T	mg/kg-dry	5	100	HH Soil (HQ=1)	3700	0			0.17	6.1	2.9	2.6
Nitrate	T	mg/kg-dry	5	100	No SLC					3.1	7.8	5.2	4.7
Organic Soils	T	%	5	100	No SLC					3.2	8.3	5.2	4.5
pH	T	SU	5	100	No SLC					8.1	8.4	8.3	8.3
Phosphorus	T	mg/kg-dry	5	100	No SLC					764	888	824	818
Sodium Absorption Ratio	T	ratio	5	100	No SLC					0.05	4.4	1.8	1.2
Solids, Percent	T	%	5	100	No SLC					81.2	90.1	84.7	82.5
Specific Conductance	T	umhos/cm	5	100	No SLC					115	975	345	221
Sulfate	T	mg/kg-dry	5	20	No SLC			60.00	62.00	ND	610		
Total Kjeldahl Nitrogen	T	mg/kg-dry	5	100	No SLC					211	775	467	488
Total Organic Carbon	T	mg/kg-dry	5	100	No SLC					1850	20900	12600	15800
Metals													
Aluminum	T	mg/kg-dry	5	100	HH Soil (HQ=1)	76000	0			10800	18800	15400	17200
Antimony	T	mg/kg-dry	5	0	HH Soil (HQ=1)	31	0	0.21	0.26	ND	ND		
Arsenic	T	mg/kg-dry	5	100	HH Soil (HQ=1)	0.39	100			4.1	8.9	5.8	5.6
Barium	T	mg/kg-dry	5	100	HH Soil (HQ=1)	5500	0			76.7	267	175	170
Beryllium	T	mg/kg-dry	5	100	HH Soil (HQ=1)	150	0			0.67	0.9	0.78	0.77
Boron	T	mg/kg-dry	5	100	HH Soil (HQ=1)	5500	0			7.3	11.8	10.2	10.3
Cadmium	T	mg/kg-dry	5	100	HH Soil (HQ=1)	39	0			0.22	1.4	0.49	0.28
Calcium	T	mg/kg-dry	5	100	No SLC					4590	65000	29100	19300
Chromium	T	mg/kg-dry	5	100	HH Soil (HQ=1)	210	0			18.8	46.8	26.5	21.6
Cobalt	T	mg/kg-dry	5	100	HH Soil (HQ=1)	900	0			8.2	10.1	9.2	9.2
Copper	T	mg/kg-dry	5	100	HH Soil (HQ=1)	2900	0			21.3	58.6	31.5	25
Iron	T	mg/kg-dry	5	100	HH Soil (HQ=1)	23000	20			17800	38400	23000	19600
Lead	T	mg/kg-dry	5	100	HH Soil (HQ=1)	400	0			17.3	56.6	31.8	29.6
Magnesium	T	mg/kg-dry	5	100	No SLC					4850	7160	6080	5820
Manganese	T	mg/kg-dry	5	100	HH Soil (HQ=1)	3200	0			369	620	461	453
Mercury	T	mg/kg-dry	5	0	HH Soil (HQ=1)	23	0	0.02	0.02	ND	ND		
Molybdenum	T	mg/kg-dry	5	100	HH Soil (HQ=1)	390	0			4.1	324	73.6	13.6

"No SLC" indicates that there is not a Screening Level Criterion for this medium specified for the RI/FS.
"HH Soil (HQ=1)" EPA Region 6 RBSLs Human Health Residential Soil (HQ=1)
"Eco Soil" EPA Region 6 Tier 1-3 RBSLs Ecological Soil
Median Value determined using 1/2 the Reporting Limit value for Non-Detects if greater than 50% of the values were detected.
Mean Value calculated using 1/2 the Reporting Limit for Non-Detects if greater than 50% of the values were detected.

T = Total Fraction
D = Filtered Fraction (0.45 micron filter)
A = Filtered Fraction (0.1 micron filter)
ND = Non-Detected Value

Table 7-61
Soil 0-6 inches Biased
RI/FS Soil Area 11 - Dry/Maintenance
Summary of Results

Analyte	Sample Fraction	Units	Total Number of Samples	Percent Detects (%)	SLC	SLC Value	Percent Above SLC	Min RL for ND	Max RL for ND	Min Value	Max Value	Mean Value	Median Value
Nickel	T	mg/kg-dry	5	100	HH Soil (HQ=1)	1600	0			14	28.9	18.7	15.7
Potassium	T	mg/kg-dry	5	100	No SLC					1920	2770	2550	2720
Selenium	T	mg/kg-dry	5	100	HH Soil (HQ=1)	390	0			0.84	1	0.92	0.93
Silver	T	mg/kg-dry	5	20	HH Soil (HQ=1)	390	0	0.14	0.15	ND	0.14		
Sodium	T	mg/kg-dry	5	20	No SLC			52.50	174.00	ND	346		
Thallium	T	mg/kg-dry	5	100	HH Soil (HQ=1)	5.5	0			0.15	0.24	0.2	0.23
Vanadium	T	mg/kg-dry	5	100	HH Soil (HQ=1)	78	0			34.3	49.9	40.9	40
Zinc	T	mg/kg-dry	5	100	HH Soil (HQ=1)	23000	0			58.9	173	105	70.2
Semi-Volatile Organics													
1,1`-Biphenyl	T	mg/kg-dry	5	0	HH Soil (HQ=1)	3000	0	0.37	0.41	ND	ND		
2,4,5-Trichlorophenol	T	mg/kg-dry	5	0	No SLC			0.92	1.00	ND	ND		
2,4,6-Trichlorophenol	T	mg/kg-dry	5	0	No SLC			0.37	0.41	ND	ND		
2,4-Dichlorophenol	T	mg/kg-dry	5	0	No SLC			0.37	0.41	ND	ND		
2,4-Dimethylphenol	T	mg/kg-dry	5	0	No SLC			0.37	0.41	ND	ND		
2,4-Dinitrophenol	T	mg/kg-dry	5	0	No SLC			0.92	1.00	ND	ND		
2,4-Dinitrotoluene	T	mg/kg-dry	5	0	No SLC			0.37	0.41	ND	ND		
2,6-Dinitrotoluene	T	mg/kg-dry	5	0	HH Soil (HQ=1)	61	0	0.37	0.41	ND	ND		
2-Chloronaphthalene	T	mg/kg-dry	5	0	No SLC			0.37	0.41	ND	ND		
2-Chlorophenol	T	mg/kg-dry	5	0	HH Soil (HQ=1)	64	0	0.37	0.41	ND	ND		
2-Methylnaphthalene	T	mg/kg-dry	5	0	No SLC			0.37	0.41	ND	ND		
2-Methylphenol	T	mg/kg-dry	5	0	No SLC			0.37	0.41	ND	ND		
2-Nitroaniline	T	mg/kg-dry	5	0	No SLC			0.92	1.00	ND	ND		
2-Nitrophenol	T	mg/kg-dry	5	0	No SLC			0.37	0.41	ND	ND		
3,3-Dichlorobenzidine	T	mg/kg-dry	5	0	No SLC			0.37	0.41	ND	ND		
3-Nitroaniline	T	mg/kg-dry	5	0	No SLC			0.92	1.00	ND	ND		
4,6-Dinitro-2-methylphenol	T	mg/kg-dry	5	0	No SLC			0.92	1.00	ND	ND		
4-Bromophenyl phenyl ether	T	mg/kg-dry	5	0	No SLC			0.37	0.41	ND	ND		
4-Chloro-3-methylphenol	T	mg/kg-dry	5	0	No SLC			0.37	0.41	ND	ND		
4-Chloroaniline	T	mg/kg-dry	5	0	No SLC			0.37	0.41	ND	ND		
4-Chlorophenyl phenyl ether	T	mg/kg-dry	5	0	No SLC			0.37	0.41	ND	ND		
4-Methylphenol	T	mg/kg-dry	5	0	No SLC			0.37	0.41	ND	ND		
4-Nitroaniline	T	mg/kg-dry	5	0	No SLC			0.92	1.00	ND	ND		

"No SLC" indicates that there is not a Screening Level Criterion for this medium specified for the RI/FS.
"HH Soil (HQ=1)" EPA Region 6 RBSLs Human Health Residential Soil (HQ=1)
"Eco Soil" EPA Region 6 Tier 1-3 RBSLs Ecological Soil
Median Value determined using 1/2 the Reporting Limit value for Non-Detects if greater than 50% of the values were detected.
Mean Value calculated using 1/2 the Reporting Limit for Non-Detects if greater than 50% of the values were detected.

T = Total Fraction
D = Filtered Fraction (0.45 micron filter)
A = Filtered Fraction (0.1 micron filter)
ND = Non-Detected Value

Table 7-61
Soil 0-6 inches Biased
RI/FS Soil Area 11 - Dry/Maintenance
Summary of Results

Analyte	Sample Fraction	Units	Total Number of Samples	Percent Detects (%)	SLC	SLC Value	Percent Above SLC	Min RL for ND	Max RL for ND	Min Value	Max Value	Mean Value	Median Value
4-Nitrophenol	T	mg/kg-dry	5	0	No SLC			0.92	1.00	ND	ND		
Acenaphthene	T	mg/kg-dry	5	20	HH Soil (HQ=1)	3700	0	0.38	0.41	ND	0.064		
Acenaphthylene	T	mg/kg-dry	5	0	No SLC			0.37	0.41	ND	ND		
Anthracene	T	mg/kg-dry	5	20	HH Soil (HQ=1)	22000	0	0.38	0.41	ND	0.1		
Benzo(a)anthracene	T	mg/kg-dry	5	20	HH Soil (HQ=1)	0.62	0	0.38	0.41	ND	0.36		
Benzo(a)pyrene	T	mg/kg-dry	5	20	HH Soil (HQ=1)	0.062	100	0.38	0.41	ND	0.26		
Benzo(b)fluoranthene	T	mg/kg-dry	5	20	HH Soil (HQ=1)	0.62	0	0.38	0.41	ND	0.41		
Benzo(g,h,i)perylene	T	mg/kg-dry	5	20	No SLC			0.38	0.41	ND	0.14		
Benzo(k)fluoranthene	T	mg/kg-dry	5	20	HH Soil (HQ=1)	6.2	0	0.38	0.41	ND	0.37		
Bis(2-chloroethoxy)methane	T	mg/kg-dry	5	0	No SLC			0.37	0.41	ND	ND		
Bis(2-chloroethyl)ether	T	mg/kg-dry	5	0	No SLC			0.37	0.41	ND	ND		
Carbazole	T	mg/kg-dry	5	20	HH Soil (HQ=1)	24	0	0.38	0.41	ND	0.096		
Chrysene	T	mg/kg-dry	5	20	HH Soil (HQ=1)	62	0	0.38	0.41	ND	0.41		
Dibenz(a,h)anthracene	T	mg/kg-dry	5	20	HH Soil (HQ=1)	0.062	0	0.38	0.41	ND	0.057		
Dibenzofuran	T	mg/kg-dry	5	20	HH Soil (HQ=1)	150	0	0.38	0.41	ND	0.024		
Dichlorodiisopropyl ether	T	mg/kg-dry	5	0	No SLC			0.37	0.41	ND	ND		
Fluoranthene	T	mg/kg-dry	5	20	HH Soil (HQ=1)	2300	0	0.38	0.41	ND	0.74		
Fluorene	T	mg/kg-dry	5	20	HH Soil (HQ=1)	2600	0	0.38	0.41	ND	0.052		
Hexachlorobenzene	T	mg/kg-dry	5	0	No SLC			0.37	0.41	ND	ND		
Hexachlorobutadiene	T	mg/kg-dry	5	0	No SLC			0.37	0.41	ND	ND		
Hexachlorocyclopentadiene	T	mg/kg-dry	5	0	No SLC			0.37	0.41	ND	ND		
Hexachloroethane	T	mg/kg-dry	5	0	No SLC			0.37	0.41	ND	ND		
Indeno(1,2,3-cd)pyrene	T	mg/kg-dry	5	20	HH Soil (HQ=1)	0.62	0	0.38	0.41	ND	0.16		
Isophorone	T	mg/kg-dry	5	0	HH Soil (HQ=1)	510	0	0.37	0.41	ND	ND		
Naphthalene	T	mg/kg-dry	5	0	HH Soil (HQ=1)	120	0	0.37	0.41	ND	ND		
Nitrobenzene	T	mg/kg-dry	5	0	No SLC			0.37	0.41	ND	ND		
N-Nitrosodi-n-propylamine	T	mg/kg-dry	5	0	HH Soil (HQ=1)	0.07	0	0.37	0.41	ND	ND		
N-Nitrosodiphenylamine	T	mg/kg-dry	5	0	HH Soil (HQ=1)	99	0	0.37	0.41	ND	ND		
Pentachlorophenol	T	mg/kg-dry	5	0	No SLC			0.92	1.00	ND	ND		
Phenanthrene	T	mg/kg-dry	5	20	No SLC			0.38	0.41	ND	0.55		
Phenol	T	mg/kg-dry	5	0	HH Soil (HQ=1)	18000	0	0.37	0.41	ND	ND		
Pyrene	T	mg/kg-dry	5	20	HH Soil (HQ=1)	2300	0	0.38	0.41	ND	0.63		

"No SLC" indicates that there is not a Screening Level Criterion for this medium specified for the RI/FS.
"HH Soil (HQ=1)" EPA Region 6 RBSLs Human Health Residential Soil (HQ=1)
"Eco Soil" EPA Region 6 Tier 1-3 RBSLs Ecological Soil
Median Value determined using 1/2 the Reporting Limit value for Non-Detects if greater than 50% of the values were detected.
Mean Value calculated using 1/2 the Reporting Limit for Non-Detects if greater than 50% of the values were detected.

T = Total Fraction
D = Filtered Fraction (0.45 micron filter)
A = Filtered Fraction (0.1 micron filter)
ND = Non-Detected Value

Table 7-61
Soil 0-6 inches Biased
RI/FS Soil Area 11 - Dry/Maintenance
Summary of Results

Analyte	Sample Fraction	Units	Total Number of Samples	Percent Detects (%)	SLC	SLC Value	Percent Above SLC	Min RL for ND	Max RL for ND	Min Value	Max Value	Mean Value	Median Value
Volatile Organics													
1,1,1-Trichloroethane	T	mg/kg-dry	5	0	HH Soil (HQ=1)	1400	0	0.00	0.01	ND	ND		
1,1,2,2-Tetrachloroethane	T	mg/kg-dry	5	0	No SLC			0.00	0.01	ND	ND		
1,1,2-Trichloro-1,2,2-trifluoroethane	T	mg/kg-dry	5	0	No SLC			0.00	0.01	ND	ND		
1,1,2-Trichloroethane	T	mg/kg-dry	5	0	No SLC			0.00	0.01	ND	ND		
1,1-Dichloroethane	T	mg/kg-dry	5	0	HH Soil (HQ=1)	590	0	0.00	0.01	ND	ND		
1,1-Dichloroethene	T	mg/kg-dry	5	0	HH Soil (HQ=1)	280	0	0.00	0.01	ND	ND		
1,2,4-Trichlorobenzene	T	mg/kg-dry	5	0	No SLC			0.00	0.01	ND	ND		
1,2-Dibromo-3-chloropropane	T	mg/kg-dry	5	0	No SLC			0.00	0.01	ND	ND		
1,2-Dichlorobenzene	T	mg/kg-dry	5	0	No SLC			0.00	0.01	ND	ND		
1,2-Dichloroethane	T	mg/kg-dry	5	0	No SLC			0.00	0.01	ND	ND		
1,2-Dichloroethene (total)	T	mg/kg-dry	5	0	No SLC			0.00	0.01	ND	ND		
1,2-Dichloropropane	T	mg/kg-dry	5	0	No SLC			0.00	0.01	ND	ND		
1,3-Dichlorobenzene	T	mg/kg-dry	5	0	No SLC			0.00	0.01	ND	ND		
1,4-Dichlorobenzene	T	mg/kg-dry	5	0	No SLC			0.00	0.01	ND	ND		
2-Butanone	T	mg/kg-dry	5	0	HH Soil (HQ=1)	32000	0	0.00	0.01	ND	ND		
2-Hexanone	T	mg/kg-dry	5	0	No SLC			0.00	0.01	ND	ND		
4-Methyl-2-pentanone	T	mg/kg-dry	5	0	HH Soil (HQ=1)	5800	0	0.00	0.01	ND	ND		
Benzene	T	mg/kg-dry	5	0	HH Soil (HQ=1)	0.66	0	0.00	0.01	ND	ND		
Bromodichloromethane	T	mg/kg-dry	5	0	No SLC			0.00	0.01	ND	ND		
Bromoform	T	mg/kg-dry	5	0	No SLC			0.00	0.01	ND	ND		
Bromomethane	T	mg/kg-dry	5	0	No SLC			0.00	0.01	ND	ND		
Carbon tetrachloride	T	mg/kg-dry	5	0	HH Soil (HQ=1)	0.24	0	0.00	0.01	ND	ND		
Chlorobenzene	T	mg/kg-dry	5	0	HH Soil (HQ=1)	320	0	0.00	0.01	ND	ND		
Chloroethane	T	mg/kg-dry	5	0	No SLC			0.00	0.01	ND	ND		
Chloroform	T	mg/kg-dry	5	0	No SLC			0.00	0.01	ND	ND		
Chloromethane	T	mg/kg-dry	5	0	HH Soil (HQ=1)	1.2	0	0.00	0.01	ND	ND		
cis-1,2-Dichloroethene	T	mg/kg-dry	5	0	No SLC			0.00	0.01	ND	ND		
cis-1,3-Dichloropropene	T	mg/kg-dry	5	0	No SLC			0.00	0.01	ND	ND		
Dibromochloromethane	T	mg/kg-dry	5	0	No SLC			0.00	0.01	ND	ND		
Dichlorodifluoromethane	T	mg/kg-dry	5	0	HH Soil (HQ=1)	94	0	0.00	0.01	ND	ND		
Ethylbenzene	T	mg/kg-dry	5	0	HH Soil (HQ=1)	230	0	0.00	0.01	ND	ND		

"No SLC" indicates that there is not a Screening Level Criterion for this medium specified for the RI/FS.
"HH Soil (HQ=1)" EPA Region 6 RBSLs Human Health Residential Soil (HQ=1)
"Eco Soil" EPA Region 6 Tier 1-3 RBSLs Ecological Soil
Median Value determined using 1/2 the Reporting Limit value for Non-Detects if greater than 50% of the values were detected.
Mean Value calculated using 1/2 the Reporting Limit for Non-Detects if greater than 50% of the values were detected.

T = Total Fraction
D = Filtered Fraction (0.45 micron filter)
A = Filtered Fraction (0.1 micron filter)
ND = Non-Detected Value

Table 7-61
Soil 0-6 inches Biased
RI/FS Soil Area 11 - Dry/Maintenance
Summary of Results

Analyte	Sample Fraction	Units	Total Number of Samples	Percent Detects (%)	SLC	SLC Value	Percent Above SLC	Min RL for ND	Max RL for ND	Min Value	Max Value	Mean Value	Median Value
Styrene	T	mg/kg-dry	5	0	HH Soil (HQ=1)	1700	0	0.00	0.01	ND	ND		
Tetrachloroethene	T	mg/kg-dry	5	0	HH Soil (HQ=1)	0.55	0	0.00	0.01	ND	ND		
Toluene	T	mg/kg-dry	5	0	HH Soil (HQ=1)	520	0	0.00	0.01	ND	ND		
Total Xylene	T	mg/kg-dry	5	0	HH Soil (HQ=1)	210	0	0.00	0.01	ND	ND		
trans-1,2-Dichloroethene	T	mg/kg-dry	5	0	No SLC			0.00	0.01	ND	ND		
trans-1,3-Dichloropropene	T	mg/kg-dry	5	0	No SLC			0.00	0.01	ND	ND		
Trichloroethene	T	mg/kg-dry	5	0	HH Soil (HQ=1)	0.043	0	0.00	0.01	ND	ND		
Trichlorofluoromethane	T	mg/kg-dry	5	0	HH Soil (HQ=1)	390	0	0.00	0.01	ND	ND		
Vinyl chloride	T	mg/kg-dry	5	0	No SLC			0.00	0.01	ND	ND		

"No SLC" indicates that there is not a Screening Level Criterion for this medium specified for the RI/FS.
"HH Soil (HQ=1)" EPA Region 6 RBSLs Human Health Residential Soil (HQ=1)
"Eco Soil" EPA Region 6 Tier 1-3 RBSLs Ecological Soil
Median Value determined using 1/2 the Reporting Limit value for Non-Detects if greater than 50% of the values were detected.
Mean Value calculated using 1/2 the Reporting Limit for Non-Detects if greater than 50% of the values were detected.

T = Total Fraction
D = Filtered Fraction (0.45 micron filter)
A = Filtered Fraction (0.1 micron filter)
ND = Non-Detected Value

Table 7-62
Soil 0-24 inches Biased
RI/FS Soil Area 11 - Dry/Maintenance
Summary of Results

Analyte	Sample Fraction	Units	Total Number of Samples	Percent Detects (%)	SLC	SLC Value	Percent Above SLC	Min RL for ND	Max RL for ND	Min Value	Max Value	Mean Value	Median Value
Inorganics													
Cation-Exchange Capacity	T	meq/100g	5	100	No SLC					12.9	29.4	22	24.2
Chloride	T	mg/kg-dry	5	20	No SLC			34.00	36.00	ND	130		
Fluoride	T	mg/kg-dry	5	100	No SLC					0.49	7.6	2.9	2.6
Nitrate	T	mg/kg-dry	5	100	No SLC					2.5	8.3	5.2	6.2
Organic Soils	T	%	5	100	No SLC					2.8	7.5	4.9	5.4
pH	T	SU	5	100	No SLC					7.9	8.5	8.2	8.3
Phosphorus	T	mg/kg-dry	5	100	No SLC					471	758	667	698
Sodium Absorption Ratio	T	ratio	5	100	No SLC					0.06	3.3	1.1	0.36
Solids, Percent	T	%	5	100	No SLC					82.9	90.4	86	84.4
Specific Conductance	T	umhos/cm	5	100	No SLC					106	893	386	343
Sulfate	T	mg/kg-dry	5	40	No SLC			57.00	62.00	ND	470		
Total Kjeldahl Nitrogen	T	mg/kg-dry	5	100	No SLC					92.1	706	412	441
Total Organic Carbon	T	mg/kg-dry	5	100	No SLC					1770	8560	5740	5510
Metals													
Aluminum	T	mg/kg-dry	5	100	No SLC					10800	20800	16300	17400
Antimony	T	mg/kg-dry	5	0	ECO Soil	0.3	0	0.20	0.49	ND	ND		
Arsenic	T	mg/kg-dry	5	100	ECO Soil	31	0			4.3	8.3	5.4	4.9
Barium	T	mg/kg-dry	5	100	ECO Soil	330	0			88.8	269	180	192
Beryllium	T	mg/kg-dry	5	100	ECO Soil	30	0			0.76	0.96	0.86	0.88
Boron	T	mg/kg-dry	5	100	ECO Soil	0.5	100			7.1	10.3	9.3	10.1
Cadmium	T	mg/kg-dry	5	100	ECO Soil	0.4	20			0.19	1.3	0.45	0.25
Calcium	T	mg/kg-dry	5	100	No SLC					11400	50800	24800	15100
Chromium	T	mg/kg-dry	5	100	ECO Soil	7.9	100			17.9	25.5	21.2	20.1
Cobalt	T	mg/kg-dry	5	100	ECO Soil	32	0			7.1	10.1	8.8	8.7
Copper	T	mg/kg-dry	5	100	ECO Soil	54	20			21.5	74.3	35.1	25.7
Iron	T	mg/kg-dry	5	100	No SLC					18100	21300	19900	20700
Lead	T	mg/kg-dry	5	100	ECO Soil	15	100			17.3	218	59	20.3
Magnesium	T	mg/kg-dry	5	100	No SLC					4770	6670	6020	6300
Manganese	T	mg/kg-dry	5	100	ECO Soil	152	100			380	676	487	457
Mercury	T	mg/kg-dry	5	0	ECO Soil	0.1	0	0.02	0.02	ND	ND		
Molybdenum	T	mg/kg-dry	5	100	ECO Soil	2	100			2.6	1150	236	7.5

"No SLC" indicates that there is not a Screening Level Criterion for this medium specified for the RI/FS.
"HH Soil (HQ=1)" EPA Region 6 RBSLs Human Health Residential Soil (HQ=1)
"Eco Soil" EPA Region 6 Tier 1-3 RBSLs Ecological Soil
Median Value determined using 1/2 the Reporting Limit value for Non-Detects if greater than 50% of the values were detected.
Mean Value calculated using 1/2 the Reporting Limit for Non-Detects if greater than 50% of the values were detected.

T = Total Fraction
D = Filtered Fraction (0.45 micron filter)
A = Filtered Fraction (0.1 micron filter)
ND = Non-Detected Value

Table 7-62
Soil 0-24 inches Biased
RI/FS Soil Area 11 - Dry/Maintenance
Summary of Results

Analyte	Sample Fraction	Units	Total Number of Samples	Percent Detects (%)	SLC	SLC Value	Percent Above SLC	Min RL for ND	Max RL for ND	Min Value	Max Value	Mean Value	Median Value
Nickel	T	mg/kg-dry	5	100	ECO Soil	48	0			14.6	21.6	17.8	17.6
Potassium	T	mg/kg-dry	5	100	No SLC					1820	2860	2510	2660
Selenium	T	mg/kg-dry	5	100	ECO Soil	1	20			0.74	1.1	0.96	1
Silver	T	mg/kg-dry	5	20	ECO Soil	2	0	0.14	0.15	ND	0.4		
Sodium	T	mg/kg-dry	5	20	No SLC			60.20	257.00	ND	357		
Thallium	T	mg/kg-dry	5	100	ECO Soil	1	0			0.13	0.26	0.21	0.22
Vanadium	T	mg/kg-dry	5	100	ECO Soil	2	100			34.7	43.2	40.8	42
Zinc	T	mg/kg-dry	5	100	ECO Soil	120	40			58.8	185	104	69.3
Semi-Volatile Organics													
1,1`-Biphenyl	T	mg/kg-dry	5	0	ECO Soil	60	0	0.37	0.40	ND	ND		
2,4,5-Trichlorophenol	T	mg/kg-dry	5	0	No SLC			0.92	1.00	ND	ND		
2,4,6-Trichlorophenol	T	mg/kg-dry	5	0	No SLC			0.37	0.40	ND	ND		
2,4-Dichlorophenol	T	mg/kg-dry	5	0	No SLC			0.37	0.40	ND	ND		
2,4-Dimethylphenol	T	mg/kg-dry	5	0	No SLC			0.37	0.40	ND	ND		
2,4-Dinitrophenol	T	mg/kg-dry	5	0	No SLC			0.92	1.00	ND	ND		
2,4-Dinitrotoluene	T	mg/kg-dry	5	0	No SLC			0.37	0.40	ND	ND		
2,6-Dinitrotoluene	T	mg/kg-dry	5	0	ECO Soil	0.033	0	0.37	0.40	ND	ND		
2-Chloronaphthalene	T	mg/kg-dry	5	0	No SLC			0.37	0.40	ND	ND		
2-Chlorophenol	T	mg/kg-dry	5	0	ECO Soil	20	0	0.37	0.40	ND	ND		
2-Methylnaphthalene	T	mg/kg-dry	5	0	ECO Soil	3.2	0	0.37	0.40	ND	ND		
2-Methylphenol	T	mg/kg-dry	5	0	No SLC			0.37	0.40	ND	ND		
2-Nitroaniline	T	mg/kg-dry	5	0	No SLC			0.92	1.00	ND	ND		
2-Nitrophenol	T	mg/kg-dry	5	0	No SLC			0.37	0.40	ND	ND		
3,3-Dichlorobenzidine	T	mg/kg-dry	5	0	No SLC			0.37	0.40	ND	ND		
3-Nitroaniline	T	mg/kg-dry	5	0	No SLC			0.92	1.00	ND	ND		
4,6-Dinitro-2-methylphenol	T	mg/kg-dry	5	0	No SLC			0.92	1.00	ND	ND		
4-Bromophenyl phenyl ether	T	mg/kg-dry	5	0	No SLC			0.37	0.40	ND	ND		
4-Chloro-3-methylphenol	T	mg/kg-dry	5	0	ECO Soil	8	0	0.37	0.40	ND	ND		
4-Chloroaniline	T	mg/kg-dry	5	0	No SLC			0.37	0.40	ND	ND		
4-Chlorophenyl phenyl ether	T	mg/kg-dry	5	0	No SLC			0.37	0.40	ND	ND		
4-Methylphenol	T	mg/kg-dry	5	0	No SLC			0.37	0.40	ND	ND		
4-Nitroaniline	T	mg/kg-dry	5	0	No SLC			0.92	1.00	ND	ND		

"No SLC" indicates that there is not a Screening Level Criterion for this medium specified for the RI/FS.
"HH Soil (HQ=1)" EPA Region 6 RBSLs Human Health Residential Soil (HQ=1)
"Eco Soil" EPA Region 6 Tier 1-3 RBSLs Ecological Soil
Median Value determined using 1/2 the Reporting Limit value for Non-Detects if greater than 50% of the values were detected.
Mean Value calculated using 1/2 the Reporting Limit for Non-Detects if greater than 50% of the values were detected.

T = Total Fraction
D = Filtered Fraction (0.45 micron filter)
A = Filtered Fraction (0.1 micron filter)
ND = Non-Detected Value

Table 7-62
Soil 0-24 inches Biased
RI/FS Soil Area 11 - Dry/Maintenance
Summary of Results

Analyte	Sample Fraction	Units	Total Number of Samples	Percent Detects (%)	SLC	SLC Value	Percent Above SLC	Min RL for ND	Max RL for ND	Min Value	Max Value	Mean Value	Median Value
4-Nitrophenol	T	mg/kg-dry	5	0	No SLC			0.92	1.00	ND	ND		
Acenaphthene	T	mg/kg-dry	5	0	ECO Soil	20	0	0.37	0.40	ND	ND		
Acenaphthylene	T	mg/kg-dry	5	0	No SLC			0.37	0.40	ND	ND		
Anthracene	T	mg/kg-dry	5	20	ECO Soil	10	0	0.37	0.40	ND	0.017		
Benzo(a)anthracene	T	mg/kg-dry	5	20	ECO Soil	5.2	0	0.37	0.40	ND	0.067		
Benzo(a)pyrene	T	mg/kg-dry	5	20	ECO Soil	1	0	0.37	0.40	ND	0.053		
Benzo(b)fluoranthene	T	mg/kg-dry	5	20	ECO Soil	59.8	0	0.37	0.40	ND	0.076		
Benzo(g,h,i)perylene	T	mg/kg-dry	5	20	ECO Soil	119	0	0.37	0.40	ND	0.031		
Benzo(k)fluoranthene	T	mg/kg-dry	5	20	ECO Soil	148	0	0.37	0.40	ND	0.081		
Bis(2-chloroethoxy)methane	T	mg/kg-dry	5	0	No SLC			0.37	0.40	ND	ND		
Bis(2-chloroethyl)ether	T	mg/kg-dry	5	0	No SLC			0.37	0.40	ND	ND		
Carbazole	T	mg/kg-dry	5	0	No SLC			0.37	0.40	ND	ND		
Chrysene	T	mg/kg-dry	5	20	ECO Soil	4.7	0	0.37	0.40	ND	0.078		
Dibenz(a,h)anthracene	T	mg/kg-dry	5	0	ECO Soil	18.4	0	0.37	0.40	ND	ND		
Dibenzofuran	T	mg/kg-dry	5	0	No SLC			0.37	0.40	ND	ND		
Dichlorodiisopropyl ether	T	mg/kg-dry	5	0	No SLC			0.37	0.40	ND	ND		
Fluoranthene	T	mg/kg-dry	5	20	ECO Soil	10	0	0.37	0.40	ND	0.12		
Fluorene	T	mg/kg-dry	5	0	ECO Soil	30	0	0.37	0.40	ND	ND		
Hexachlorobenzene	T	mg/kg-dry	5	0	No SLC			0.37	0.40	ND	ND		
Hexachlorobutadiene	T	mg/kg-dry	5	0	No SLC			0.37	0.40	ND	ND		
Hexachlorocyclopentadiene	T	mg/kg-dry	5	0	No SLC			0.37	0.40	ND	ND		
Hexachloroethane	T	mg/kg-dry	5	0	No SLC			0.37	0.40	ND	ND		
Indeno(1,2,3-cd)pyrene	T	mg/kg-dry	5	20	ECO Soil	109	0	0.37	0.40	ND	0.032		
Isophorone	T	mg/kg-dry	5	0	ECO Soil	139	0	0.37	0.40	ND	ND		
Naphthalene	T	mg/kg-dry	5	0	ECO Soil	5	0	0.37	0.40	ND	ND		
Nitrobenzene	T	mg/kg-dry	5	0	No SLC			0.37	0.40	ND	ND		
N-Nitrosodi-n-propylamine	T	mg/kg-dry	5	0	ECO Soil	0.54	0	0.37	0.40	ND	ND		
N-Nitrosodiphenylamine	T	mg/kg-dry	5	0	ECO Soil	20	0	0.37	0.40	ND	ND		
Pentachlorophenol	T	mg/kg-dry	5	0	No SLC			0.92	1.00	ND	ND		
Phenanthrene	T	mg/kg-dry	5	20	ECO Soil	5	0	0.37	0.40	ND	0.067		
Phenol	T	mg/kg-dry	5	0	ECO Soil	30	0	0.37	0.40	ND	ND		
Pyrene	T	mg/kg-dry	5	20	ECO Soil	10	0	0.37	0.40	ND	0.11		

"No SLC" indicates that there is not a Screening Level Criterion for this medium specified for the RI/FS.
"HH Soil (HQ=1)" EPA Region 6 RBSLs Human Health Residential Soil (HQ=1)
"Eco Soil" EPA Region 6 Tier 1-3 RBSLs Ecological Soil
Median Value determined using 1/2 the Reporting Limit value for Non-Detects if greater than 50% of the values were detected.
Mean Value calculated using 1/2 the Reporting Limit for Non-Detects if greater than 50% of the values were detected.

T = Total Fraction
D = Filtered Fraction (0.45 micron filter)
A = Filtered Fraction (0.1 micron filter)
ND = Non-Detected Value

Table 7-62
Soil 0-24 inches Biased
RI/FS Soil Area 11 - Dry/Maintenance
Summary of Results

Analyte	Sample Fraction	Units	Total Number of Samples	Percent Detects (%)	SLC	SLC Value	Percent Above SLC	Min RL for ND	Max RL for ND	Min Value	Max Value	Mean Value	Median Value
Volatile Organics													
1,1,1-Trichloroethane	T	mg/kg-dry	5	0	ECO Soil	0.1	0	0.01	0.01	ND	ND		
1,1,2,2-Tetrachloroethane	T	mg/kg-dry	5	0	No SLC			0.01	0.01	ND	ND		
1,1,2-Trichloro-1,2,2-trifluoroethane	T	mg/kg-dry	5	0	No SLC			0.01	0.01	ND	ND		
1,1,2-Trichloroethane	T	mg/kg-dry	5	0	No SLC			0.01	0.01	ND	ND		
1,1-Dichloroethane	T	mg/kg-dry	5	0	ECO Soil	20.1	0	0.01	0.01	ND	ND		
1,1-Dichloroethene	T	mg/kg-dry	5	0	No SLC			0.01	0.01	ND	ND		
1,2,4-Trichlorobenzene	T	mg/kg-dry	5	0	No SLC			0.01	0.01	ND	ND		
1,2-Dibromo-3-chloropropane	T	mg/kg-dry	5	0	No SLC			0.01	0.01	ND	ND		
1,2-Dichlorobenzene	T	mg/kg-dry	5	0	No SLC			0.01	0.01	ND	ND		
1,2-Dichloroethane	T	mg/kg-dry	5	0	No SLC			0.01	0.01	ND	ND		
1,2-Dichloroethene (total)	T	mg/kg-dry	5	0	No SLC			0.01	0.01	ND	ND		
1,2-Dichloropropane	T	mg/kg-dry	5	0	No SLC			0.01	0.01	ND	ND		
1,3-Dichlorobenzene	T	mg/kg-dry	5	0	No SLC			0.01	0.01	ND	ND		
1,4-Dichlorobenzene	T	mg/kg-dry	5	0	No SLC			0.01	0.01	ND	ND		
2-Butanone	T	mg/kg-dry	5	0	ECO Soil	89.6	0	0.01	0.01	ND	ND		
2-Hexanone	T	mg/kg-dry	5	0	ECO Soil	12.6	0	0.01	0.01	ND	ND		
4-Methyl-2-pentanone	T	mg/kg-dry	5	0	ECO Soil	443	0	0.01	0.01	ND	ND		
Benzene	T	mg/kg-dry	5	0	ECO Soil	0.5	0	0.01	0.01	ND	ND		
Bromodichloromethane	T	mg/kg-dry	5	0	No SLC			0.01	0.01	ND	ND		
Bromoform	T	mg/kg-dry	5	0	No SLC			0.01	0.01	ND	ND		
Bromomethane	T	mg/kg-dry	5	0	No SLC			0.01	0.01	ND	ND		
Carbon tetrachloride	T	mg/kg-dry	5	0	ECO Soil	1000	0	0.01	0.01	ND	ND		
Chlorobenzene	T	mg/kg-dry	5	0	ECO Soil	40	0	0.01	0.01	ND	ND		
Chloroethane	T	mg/kg-dry	5	0	No SLC			0.01	0.01	ND	ND		
Chloroform	T	mg/kg-dry	5	0	No SLC			0.01	0.01	ND	ND		
Chloromethane	T	mg/kg-dry	5	0	ECO Soil	10.4	0	0.01	0.01	ND	ND		
cis-1,2-Dichloroethene	T	mg/kg-dry	5	0	No SLC			0.01	0.01	ND	ND		
cis-1,3-Dichloropropene	T	mg/kg-dry	5	0	No SLC			0.01	0.01	ND	ND		
Dibromochloromethane	T	mg/kg-dry	5	0	No SLC			0.01	0.01	ND	ND		
Dichlorodifluoromethane	T	mg/kg-dry	5	0	ECO Soil	39.5	0	0.01	0.01	ND	ND		
Ethylbenzene	T	mg/kg-dry	5	0	ECO Soil	5	0	0.01	0.01	ND	ND		

"No SLC" indicates that there is not a Screening Level Criterion for this medium specified for the RI/FS.
"HH Soil (HQ=1)" EPA Region 6 RBSLs Human Health Residential Soil (HQ=1)
"Eco Soil" EPA Region 6 Tier 1-3 RBSLs Ecological Soil
Median Value determined using 1/2 the Reporting Limit value for Non-Detects if greater than 50% of the values were detected.
Mean Value calculated using 1/2 the Reporting Limit for Non-Detects if greater than 50% of the values were detected.

T = Total Fraction
D = Filtered Fraction (0.45 micron filter)
A = Filtered Fraction (0.1 micron filter)
ND = Non-Detected Value

Table 7-62
Soil 0-24 inches Biased
RI/FS Soil Area 11 - Dry/Maintenance
Summary of Results

Analyte	Sample Fraction	Units	Total Number of Samples	Percent Detects (%)	SLC	SLC Value	Percent Above SLC	Min RL for ND	Max RL for ND	Min Value	Max Value	Mean Value	Median Value
Styrene	T	mg/kg-dry	5	0	ECO Soil	300	0	0.01	0.01	ND	ND		
Tetrachloroethene	T	mg/kg-dry	5	20	No SLC			0.01	0.01	ND	0.001		
Toluene	T	mg/kg-dry	5	0	ECO Soil	200	0	0.01	0.01	ND	ND		
Total Xylene	T	mg/kg-dry	5	0	ECO Soil	5	0	0.01	0.01	ND	ND		
trans-1,2-Dichloroethene	T	mg/kg-dry	5	0	No SLC			0.01	0.01	ND	ND		
trans-1,3-Dichloropropene	T	mg/kg-dry	5	0	No SLC			0.01	0.01	ND	ND		
Trichloroethene	T	mg/kg-dry	5	0	No SLC			0.01	0.01	ND	ND		
Trichlorofluoromethane	T	mg/kg-dry	5	0	ECO Soil	16.4	0	0.01	0.01	ND	ND		
Vinyl chloride	T	mg/kg-dry	5	0	No SLC			0.01	0.01	ND	ND		

"No SLC" indicates that there is not a Screening Level Criterion for this medium specified for the RI/FS.
"HH Soil (HQ=1)" EPA Region 6 RBSLs Human Health Residential Soil (HQ=1)
"Eco Soil" EPA Region 6 Tier 1-3 RBSLs Ecological Soil
Median Value determined using 1/2 the Reporting Limit value for Non-Detects if greater than 50% of the values were detected.
Mean Value calculated using 1/2 the Reporting Limit for Non-Detects if greater than 50% of the values were detected.

T = Total Fraction
D = Filtered Fraction (0.45 micron filter)
A = Filtered Fraction (0.1 micron filter)
ND = Non-Detected Value

Table 7-63
Soil 0-6 inches Biased
RI/FS Soil Area 12 - IX Plant
Summary of Results

Analyte	Sample Fraction	Units	Total Number of Samples	Percent Detects (%)	SLC	SLC Value	Percent Above SLC	Min RL for ND	Max RL for ND	Min Value	Max Value	Mean Value	Median Value
Inorganics													
Cation-Exchange Capacity	T	meq/100g	4	100	No SLC					15.9	30.4	21.5	19.9
Chloride	T	mg/kg-dry	4	75	No SLC			2.30	2.30	ND	13.3	6.7	6.2
Fluoride	T	mg/kg-dry	4	100	HH Soil (HQ=1)	3700	0			0.71	2	1.2	1
Nitrate	T	mg/kg-dry	4	100	No SLC					4.3	23.9	11.3	8.5
Organic Soils	T	%	4	100	No SLC					2.9	9.7	5.7	5
pH	T	SU	4	100	No SLC					7.4	8.9	8.2	8.3
Phosphorus	T	mg/kg-dry	4	100	No SLC					337	719	569	609
Sodium Absorption Ratio	T	ratio	4	100	No SLC					0.37	2.3	1.4	1.6
Solids, Percent	T	%	4	100	No SLC					84.8	93.3	89.1	89.2
Specific Conductance	T	umhos/cm	4	100	No SLC					83.6	771	268	109
Sulfate	T	mg/kg-dry	4	100	No SLC					6.1	2020	513	12.3
Total Kjeldahl Nitrogen	T	mg/kg-dry	4	100	No SLC					181	1720	820	690
Total Organic Carbon	T	mg/kg-dry	4	100	No SLC					4900	30000	14600	11800
Metals													
Aluminum	T	mg/kg-dry	4	100	HH Soil (HQ=1)	76000	0			10800	15500	13700	14300
Antimony	T	mg/kg-dry	4	0	HH Soil (HQ=1)	31	0	0.16	0.19	ND	ND		
Arsenic	T	mg/kg-dry	4	100	HH Soil (HQ=1)	0.39	100			3.3	4.3	3.8	3.8
Barium	T	mg/kg-dry	4	100	HH Soil (HQ=1)	5500	0			92.4	373	192	152
Beryllium	T	mg/kg-dry	4	100	HH Soil (HQ=1)	150	0			0.67	0.81	0.76	0.78
Boron	T	mg/kg-dry	4	75	HH Soil (HQ=1)	5500	0	3.20	3.20	ND	12.2	6.4	5.8
Cadmium	T	mg/kg-dry	4	100	HH Soil (HQ=1)	39	0			0.084	0.61	0.28	0.22
Calcium	T	mg/kg-dry	4	100	No SLC					11800	29700	19700	18600
Chromium	T	mg/kg-dry	4	100	HH Soil (HQ=1)	210	0			15.8	34.4	23.4	21.6
Cobalt	T	mg/kg-dry	4	100	HH Soil (HQ=1)	900	0			5.9	10.9	8.3	8.2
Copper	T	mg/kg-dry	4	100	HH Soil (HQ=1)	2900	0			18.1	58.2	33.7	29.3
Iron	T	mg/kg-dry	4	100	HH Soil (HQ=1)	23000	0			14900	22100	18400	18300
Lead	T	mg/kg-dry	4	100	HH Soil (HQ=1)	400	0			16.2	54.9	31.6	27.5
Magnesium	T	mg/kg-dry	4	100	No SLC					4000	6460	5650	6070
Manganese	T	mg/kg-dry	4	100	HH Soil (HQ=1)	3200	0			307	850	527	476
Mercury	T	mg/kg-dry	4	50	HH Soil (HQ=1)	23	0	0.02	0.02	ND	0.18	0.054	0.014
Molybdenum	T	mg/kg-dry	4	75	HH Soil (HQ=1)	390	0	4.00	4.00	ND	53.4	17.6	7.4

"No SLC" indicates that there is not a Screening Level Criterion for this medium specified for the RI/FS.
"HH Soil (HQ=1)" EPA Region 6 RBSLs Human Health Residential Soil (HQ=1)
"Eco Soil" EPA Region 6 Tier 1-3 RBSLs Ecological Soil
Median Value determined using 1/2 the Reporting Limit value for Non-Detects if greater than 50% of the values were detected.
Mean Value calculated using 1/2 the Reporting Limit for Non-Detects if greater than 50% of the values were detected.

T = Total Fraction
D = Filtered Fraction (0.45 micron filter)
A = Filtered Fraction (0.1 micron filter)
ND = Non-Detected Value

Table 7-63
Soil 0-6 inches Biased
RI/FS Soil Area 12 - IX Plant
Summary of Results

Analyte	Sample Fraction	Units	Total Number of Samples	Percent Detects (%)	SLC	SLC Value	Percent Above SLC	Min RL for ND	Max RL for ND	Min Value	Max Value	Mean Value	Median Value
Nickel	T	mg/kg-dry	4	100	HH Soil (HQ=1)	1600	0			13.2	21	16.9	16.7
Potassium	T	mg/kg-dry	4	100	No SLC					1500	2950	2110	2000
Selenium	T	mg/kg-dry	4	100	HH Soil (HQ=1)	390	0			0.4	1.3	0.75	0.65
Silver	T	mg/kg-dry	4	25	HH Soil (HQ=1)	390	0	0.11	0.13	ND	0.32		
Sodium	T	mg/kg-dry	4	100	No SLC					56.9	190	140	156
Thallium	T	mg/kg-dry	4	100	HH Soil (HQ=1)	5.5	0			0.11	0.19	0.16	0.17
Vanadium	T	mg/kg-dry	4	100	HH Soil (HQ=1)	78	0			25.2	39.4	32.9	33.5
Zinc	T	mg/kg-dry	4	100	HH Soil (HQ=1)	23000	0			65.2	134	85	70.4

"No SLC" indicates that there is not a Screening Level Criterion for this medium specified for the RI/FS.
"HH Soil (HQ=1)" EPA Region 6 RBSLs Human Health Residential Soil (HQ=1)
"Eco Soil" EPA Region 6 Tier 1-3 RBSLs Ecological Soil
Median Value determined using 1/2 the Reporting Limit value for Non-Detects if greater than 50% of the values were detected.
Mean Value calculated using 1/2 the Reporting Limit for Non-Detects if greater than 50% of the values were detected.

T = Total Fraction
D = Filtered Fraction (0.45 micron filter)
A = Filtered Fraction (0.1 micron filter)
ND = Non-Detected Value

Table 7-64
Soil 0-24 inches Biased
RI/FS Soil Area 12 - IX Plant
Summary of Results

Analyte	Sample Fraction	Units	Total Number of Samples	Percent Detects (%)	SLC	SLC Value	Percent Above SLC	Min RL for ND	Max RL for ND	Min Value	Max Value	Mean Value	Median Value
Inorganics													
Cation-Exchange Capacity	T	meq/100g	4	100	No SLC					14	24.8	18.2	17
Chloride	T	mg/kg-dry	4	75	No SLC			2.30	2.30	ND	19.9	9.2	7.9
Fluoride	T	mg/kg-dry	4	100	No SLC					1.1	2.3	1.5	1.3
Nitrate	T	mg/kg-dry	4	100	No SLC					4.2	26.9	13.1	10.8
Organic Soils	T	%	4	100	No SLC					2.6	6.6	4.4	4.2
pH	T	SU	4	100	No SLC					8	9	8.4	8.3
Phosphorus	T	mg/kg-dry	4	100	No SLC					324	521	445	468
Sodium Absorption Ratio	T	ratio	4	100	No SLC					0.86	2.7	2.1	2.4
Solids, Percent	T	%	4	100	No SLC					83.6	94.2	89.5	90.1
Specific Conductance	T	umhos/cm	4	100	No SLC					80.5	976	335	143
Sulfate	T	mg/kg-dry	4	100	No SLC					6.9	1360	349	14.8
Total Kjeldahl Nitrogen	T	mg/kg-dry	4	100	No SLC					178	1280	618	507
Total Organic Carbon	T	mg/kg-dry	4	100	No SLC					4340	20900	11800	11000
Metals													
Aluminum	T	mg/kg-dry	4	100	No SLC					9460	16200	12800	12700
Antimony	T	mg/kg-dry	4	0	ECO Soil	0.3	0	0.16	0.19	ND	ND		
Arsenic	T	mg/kg-dry	4	100	ECO Soil	31	0			2.8	4.2	3.5	3.5
Barium	T	mg/kg-dry	4	100	ECO Soil	330	25			91.1	334	190	168
Beryllium	T	mg/kg-dry	4	100	ECO Soil	30	0			0.52	0.81	0.68	0.7
Boron	T	mg/kg-dry	4	75	ECO Soil	0.5	100	3.30	3.30	ND	8.2	5.4	5.8
Cadmium	T	mg/kg-dry	4	100	ECO Soil	0.4	0			0.041	0.31	0.2	0.22
Calcium	T	mg/kg-dry	4	100	No SLC					10500	31400	22300	23700
Chromium	T	mg/kg-dry	4	100	ECO Soil	7.9	100			13	27	18.8	17.5
Cobalt	T	mg/kg-dry	4	100	ECO Soil	32	0			5.2	9.4	7.1	7
Copper	T	mg/kg-dry	4	100	ECO Soil	54	0			14.9	39	24.4	21.8
Iron	T	mg/kg-dry	4	100	No SLC					11900	19900	15700	15400
Lead	T	mg/kg-dry	4	100	ECO Soil	15	50			12.6	33.9	21.3	19.3
Magnesium	T	mg/kg-dry	4	100	No SLC					3910	6550	5220	5210
Manganese	T	mg/kg-dry	4	100	ECO Soil	152	100			294	609	391	330
Mercury	T	mg/kg-dry	4	25	ECO Soil	0.1	0	0.02	0.02	ND	0.083		
Molybdenum	T	mg/kg-dry	4	100	ECO Soil	2	100			3.2	43.7	15.3	7.1

"No SLC" indicates that there is not a Screening Level Criterion for this medium specified for the RI/FS.
"HH Soil (HQ=1)" EPA Region 6 RBSLs Human Health Residential Soil (HQ=1)
"Eco Soil" EPA Region 6 Tier 1-3 RBSLs Ecological Soil
Median Value determined using 1/2 the Reporting Limit value for Non-Detects if greater than 50% of the values were detected.
Mean Value calculated using 1/2 the Reporting Limit for Non-Detects if greater than 50% of the values were detected.

T = Total Fraction
D = Filtered Fraction (0.45 micron filter)
A = Filtered Fraction (0.1 micron filter)
ND = Non-Detected Value

Table 7-64
Soil 0-24 inches Biased
RI/FS Soil Area 12 - IX Plant
Summary of Results

Analyte	Sample Fraction	Units	Total Number of Samples	Percent Detects (%)	SLC	SLC Value	Percent Above SLC	Min RL for ND	Max RL for ND	Min Value	Max Value	Mean Value	Median Value
Nickel	T	mg/kg-dry	4	100	ECO Soil	48	0			11	17.8	14.7	15.1
Potassium	T	mg/kg-dry	4	100	No SLC					1310	2430	1830	1800
Selenium	T	mg/kg-dry	4	75	ECO Soil	1	0	0.34	0.34	ND	0.9	0.47	0.41
Silver	T	mg/kg-dry	4	25	ECO Soil	2	0	0.11	0.12	ND	0.16		
Sodium	T	mg/kg-dry	4	100	No SLC					84	375	209	189
Thallium	T	mg/kg-dry	4	100	ECO Soil	1	0			0.1	0.19	0.14	0.14
Vanadium	T	mg/kg-dry	4	100	ECO Soil	2	100			21.8	38.4	29.2	28.2
Zinc	T	mg/kg-dry	4	100	ECO Soil	120	0			45.2	89.6	65.4	63.5

"No SLC" indicates that there is not a Screening Level Criterion for this medium specified for the RI/FS.
"HH Soil (HQ=1)" EPA Region 6 RBSLs Human Health Residential Soil (HQ=1)
"Eco Soil" EPA Region 6 Tier 1-3 RBSLs Ecological Soil
Median Value determined using 1/2 the Reporting Limit value for Non-Detects if greater than 50% of the values were detected.
Mean Value calculated using 1/2 the Reporting Limit for Non-Detects if greater than 50% of the values were detected.

T = Total Fraction
D = Filtered Fraction (0.45 micron filter)
A = Filtered Fraction (0.1 micron filter)
ND = Non-Detected Value

Table 7-65
Soil 0-6 inches Biased
RI/FS Soil Area 13 - Pope Lake
Summary of Results

Analyte	Sample Fraction	Units	Total Number of Samples	Percent Detects (%)	SLC	SLC Value	Percent Above SLC	Min RL for ND	Max RL for ND	Min Value	Max Value	Mean Value	Median Value
Inorganics													
Cation-Exchange Capacity	T	meq/100g	1	100	No SLC					35.6	35.6	35.6	35.6
Chloride	T	mg/kg-dry	1	100	No SLC					2.8	2.8	2.8	2.8
Fluoride	T	mg/kg-dry	1	100	HH Soil (HQ=1)	3700	0			1.1	1.1	1.1	1.1
Nitrate	T	mg/kg-dry	1	100	No SLC					7	7	7	7
Organic Soils	T	%	1	100	No SLC					5	5	5	5
pH	T	SU	1	100	No SLC					4.3	4.3	4.3	4.3
Phosphorus	T	mg/kg-dry	1	100	No SLC					575	575	575	575
Sodium Absorption Ratio	T	ratio	1	100	No SLC					0.21	0.21	0.21	0.21
Solids, Percent	T	%	1	100	No SLC					84.2	84.2	84.2	84.2
Specific Conductance	T	umhos/cm	1	100	No SLC					254	254	254	254
Sulfate	T	mg/kg-dry	1	100	No SLC					53.9	53.9	53.9	53.9
Total Kjeldahl Nitrogen	T	mg/kg-dry	1	100	No SLC					726	726	726	726
Total Organic Carbon	T	mg/kg-dry	1	100	No SLC					8980	8980	8980	8980
Metals													
Aluminum	T	mg/kg-dry	1	100	HH Soil (HQ=1)	76000	0			27300	27300	27300	27300
Antimony	T	mg/kg-dry	1	0	HH Soil (HQ=1)	31	0	0.19	0.19	ND	ND		
Arsenic	T	mg/kg-dry	1	100	HH Soil (HQ=1)	0.39	100			2.6	2.6	2.6	2.6
Barium	T	mg/kg-dry	1	100	HH Soil (HQ=1)	5500	0			295	295	295	295
Beryllium	T	mg/kg-dry	1	100	HH Soil (HQ=1)	150	0			1.2	1.2	1.2	1.2
Boron	T	mg/kg-dry	1	100	HH Soil (HQ=1)	5500	0			7.9	7.9	7.9	7.9
Cadmium	T	mg/kg-dry	1	0	HH Soil (HQ=1)	39	0	0.03	0.03	ND	ND		
Calcium	T	mg/kg-dry	1	100	No SLC					11000	11000	11000	11000
Chromium	T	mg/kg-dry	1	100	HH Soil (HQ=1)	210	0			23.2	23.2	23.2	23.2
Cobalt	T	mg/kg-dry	1	100	HH Soil (HQ=1)	900	0			11	11	11	11
Copper	T	mg/kg-dry	1	100	HH Soil (HQ=1)	2900	0			67.5	67.5	67.5	67.5
Iron	T	mg/kg-dry	1	100	HH Soil (HQ=1)	23000	100			23600	23600	23600	23600
Lead	T	mg/kg-dry	1	100	HH Soil (HQ=1)	400	0			16.3	16.3	16.3	16.3
Magnesium	T	mg/kg-dry	1	100	No SLC					7490	7490	7490	7490
Manganese	T	mg/kg-dry	1	100	HH Soil (HQ=1)	3200	0			235	235	235	235
Mercury	T	mg/kg-dry	1	100	HH Soil (HQ=1)	23	0			0.029	0.029	0.029	0.029
Molybdenum	T	mg/kg-dry	1	100	HH Soil (HQ=1)	390	0			14	14	14	14

"No SLC" indicates that there is not a Screening Level Criterion for this medium specified for the RI/FS.
"HH Soil (HQ=1)" EPA Region 6 RBSLs Human Health Residential Soil (HQ=1)
"Eco Soil" EPA Region 6 Tier 1-3 RBSLs Ecological Soil
Median Value determined using 1/2 the Reporting Limit value for Non-Detects if greater than 50% of the values were detected.
Mean Value calculated using 1/2 the Reporting Limit for Non-Detects if greater than 50% of the values were detected.

T = Total Fraction
D = Filtered Fraction (0.45 micron filter)
A = Filtered Fraction (0.1 micron filter)
ND = Non-Detected Value

Table 7-65
Soil 0-6 inches Biased
RI/FS Soil Area 13 - Pope Lake
Summary of Results

Analyte	Sample Fraction	Units	Total Number of Samples	Percent Detects (%)	SLC	SLC Value	Percent Above SLC	Min RL for ND	Max RL for ND	Min Value	Max Value	Mean Value	Median Value
Nickel	T	mg/kg-dry	1	100	HH Soil (HQ=1)	1600	0			35.5	35.5	35.5	35.5
Potassium	T	mg/kg-dry	1	100	No SLC					4430	4430	4430	4430
Selenium	T	mg/kg-dry	1	100	HH Soil (HQ=1)	390	0			0.87	0.87	0.87	0.87
Silver	T	mg/kg-dry	1	0	HH Soil (HQ=1)	390	0	0.13	0.13	ND	ND		
Sodium	T	mg/kg-dry	1	0	No SLC			49.20	49.20	ND	ND		
Thallium	T	mg/kg-dry	1	100	HH Soil (HQ=1)	5.5	0			0.34	0.34	0.34	0.34
Vanadium	T	mg/kg-dry	1	100	HH Soil (HQ=1)	78	0			38.2	38.2	38.2	38.2
Zinc	T	mg/kg-dry	1	100	HH Soil (HQ=1)	23000	0			75.6	75.6	75.6	75.6

"No SLC" indicates that there is not a Screening Level Criterion for this medium specified for the RI/FS.
"HH Soil (HQ=1)" EPA Region 6 RBSLs Human Health Residential Soil (HQ=1)
"Eco Soil" EPA Region 6 Tier 1-3 RBSLs Ecological Soil
Median Value determined using 1/2 the Reporting Limit value for Non-Detects if greater than 50% of the values were detected.
Mean Value calculated using 1/2 the Reporting Limit for Non-Detects if greater than 50% of the values were detected.

T = Total Fraction
D = Filtered Fraction (0.45 micron filter)
A = Filtered Fraction (0.1 micron filter)
ND = Non-Detected Value

Table 7-66
Soil 0-24 inches Biased
RI/FS Soil Area 13 - Pope Lake
Summary of Results

Analyte	Sample Fraction	Units	Total Number of Samples	Percent Detects (%)	SLC	SLC Value	Percent Above SLC	Min RL for ND	Max RL for ND	Min Value	Max Value	Mean Value	Median Value
Inorganics													
Cation-Exchange Capacity	T	meq/100g	1	100	No SLC					32.1	32.1	32.1	32.1
Chloride	T	mg/kg-dry	1	100	No SLC					3.6	3.6	3.6	3.6
Fluoride	T	mg/kg-dry	1	100	No SLC					1.3	1.3	1.3	1.3
Nitrate	T	mg/kg-dry	1	100	No SLC					9.6	9.6	9.6	9.6
Organic Soils	T	%	1	100	No SLC					4.8	4.8	4.8	4.8
pH	T	SU	1	100	No SLC					8.1	8.1	8.1	8.1
Phosphorus	T	mg/kg-dry	1	100	No SLC					641	641	641	641
Sodium Absorption Ratio	T	ratio	1	100	No SLC					0.23	0.23	0.23	0.23
Solids, Percent	T	%	1	100	No SLC					86.1	86.1	86.1	86.1
Specific Conductance	T	umhos/cm	1	100	No SLC					305	305	305	305
Sulfate	T	mg/kg-dry	1	100	No SLC					123	123	123	123
Total Kjeldahl Nitrogen	T	mg/kg-dry	1	100	No SLC					658	658	658	658
Total Organic Carbon	T	mg/kg-dry	1	100	No SLC					8690	8690	8690	8690
Metals													
Aluminum	T	mg/kg-dry	1	100	No SLC					25200	25200	25200	25200
Antimony	T	mg/kg-dry	1	0	ECO Soil	0.3	0	0.18	0.18	ND	ND		
Arsenic	T	mg/kg-dry	1	100	ECO Soil	31	0			2.7	2.7	2.7	2.7
Barium	T	mg/kg-dry	1	100	ECO Soil	330	0			288	288	288	288
Beryllium	T	mg/kg-dry	1	100	ECO Soil	30	0			1.2	1.2	1.2	1.2
Boron	T	mg/kg-dry	1	100	ECO Soil	0.5	100			6.9	6.9	6.9	6.9
Cadmium	T	mg/kg-dry	1	0	ECO Soil	0.4	0	0.03	0.03	ND	ND		
Calcium	T	mg/kg-dry	1	100	No SLC					11800	11800	11800	11800
Chromium	T	mg/kg-dry	1	100	ECO Soil	7.9	100			23.8	23.8	23.8	23.8
Cobalt	T	mg/kg-dry	1	100	ECO Soil	32	0			11.3	11.3	11.3	11.3
Copper	T	mg/kg-dry	1	100	ECO Soil	54	100			62.2	62.2	62.2	62.2
Iron	T	mg/kg-dry	1	100	No SLC					22800	22800	22800	22800
Lead	T	mg/kg-dry	1	100	ECO Soil	15	100			17.4	17.4	17.4	17.4
Magnesium	T	mg/kg-dry	1	100	No SLC					7140	7140	7140	7140
Manganese	T	mg/kg-dry	1	100	ECO Soil	152	100			249	249	249	249
Mercury	T	mg/kg-dry	1	100	ECO Soil	0.1	0			0.033	0.033	0.033	0.033
Molybdenum	T	mg/kg-dry	1	100	ECO Soil	2	100			22	22	22	22

"No SLC" indicates that there is not a Screening Level Criterion for this medium specified for the RI/FS.
"HH Soil (HQ=1)" EPA Region 6 RBSLs Human Health Residential Soil (HQ=1)
"Eco Soil" EPA Region 6 Tier 1-3 RBSLs Ecological Soil
Median Value determined using 1/2 the Reporting Limit value for Non-Detects if greater than 50% of the values were detected.
Mean Value calculated using 1/2 the Reporting Limit for Non-Detects if greater than 50% of the values were detected.

T = Total Fraction
D = Filtered Fraction (0.45 micron filter)
A = Filtered Fraction (0.1 micron filter)
ND = Non-Detected Value

Table 7-66
Soil 0-24 inches Biased
RI/FS Soil Area 13 - Pope Lake
Summary of Results

Analyte	Sample Fraction	Units	Total Number of Samples	Percent Detects (%)	SLC	SLC Value	Percent Above SLC	Min RL for ND	Max RL for ND	Min Value	Max Value	Mean Value	Median Value
Nickel	T	mg/kg-dry	1	100	ECO Soil	48	0			35	35	35	35
Potassium	T	mg/kg-dry	1	100	No SLC					4070	4070	4070	4070
Selenium	T	mg/kg-dry	1	100	ECO Soil	1	0			0.78	0.78	0.78	0.78
Silver	T	mg/kg-dry	1	0	ECO Soil	2	0	0.12	0.12	ND	ND		
Sodium	T	mg/kg-dry	1	0	No SLC			47.80	47.80	ND	ND		
Thallium	T	mg/kg-dry	1	100	ECO Soil	1	0			0.3	0.3	0.3	0.3
Vanadium	T	mg/kg-dry	1	100	ECO Soil	2	100			38.9	38.9	38.9	38.9
Zinc	T	mg/kg-dry	1	100	ECO Soil	120	0			70.6	70.6	70.6	70.6

"No SLC" indicates that there is not a Screening Level Criterion for this medium specified for the RI/FS.
"HH Soil (HQ=1)" EPA Region 6 RBSLs Human Health Residential Soil (HQ=1)
"Eco Soil" EPA Region 6 Tier 1-3 RBSLs Ecological Soil
Median Value determined using 1/2 the Reporting Limit value for Non-Detects if greater than 50% of the values were detected.
Mean Value calculated using 1/2 the Reporting Limit for Non-Detects if greater than 50% of the values were detected.

T = Total Fraction
D = Filtered Fraction (0.45 micron filter)
A = Filtered Fraction (0.1 micron filter)
ND = Non-Detected Value

Table 7-67
Soil 0-6 inches Random
RI/FS Soil Area 14 - Tailings Impoundments
Summary of Results

Analyte	Sample Fraction	Units	Total Number of Samples	Percent Detects (%)	SLC	SLC Value	Percent Above SLC	Min RL for ND	Max RL for ND	Min Value	Max Value	Mean Value	Median Value
Inorganics													
Cation-Exchange Capacity	T	meq/100g	10	100	No SLC					11	26.5	19.1	18.7
Chloride	T	mg/kg-dry	10	80	No SLC			2.10	2.10	ND	4.1	2.7	2.9
Fluoride	T	mg/kg-dry	10	100	HH Soil (HQ=1)	3700	0			0.28	5.9	1.8	1.3
Nitrate	T	mg/kg-dry	10	60	No SLC			2.10	2.10	ND	13.6	4.2	2.5
Organic Soils	T	%	10	100	No SLC					1.3	6.7	3	2.6
pH	T	SU	10	100	No SLC					7.3	8.3	8	8.1
Phosphorus	T	mg/kg-dry	10	100	No SLC					455	1460	949	951
Sodium Absorption Ratio	T	ratio	10	80	No SLC			0.04	0.04	ND	0.89	0.2	0.06
Solids, Percent	T	%	10	100	No SLC					76.5	98.8	95.2	97.5
Specific Conductance	T	umhos/cm	10	100	No SLC					138	2300	450	228
Sulfate	T	mg/kg-dry	10	100	No SLC					7.9	1320	171	27.2
Total Kjeldahl Nitrogen	T	mg/kg-dry	6	100	No SLC					86.6	422	275	293
Total Organic Carbon	T	mg/kg-dry	10	100	No SLC					1120	14900	5450	4560
Metals													
Aluminum	T	mg/kg-dry	10	100	HH Soil (HQ=1)	76000	0			5330	17900	12800	13400
Antimony	T	mg/kg-dry	10	0	HH Soil (HQ=1)	31	0	0.09	0.65	ND	ND		
Arsenic	T	mg/kg-dry	10	100	HH Soil (HQ=1)	0.39	100			2.1	7.3	4.2	3.6
Barium	T	mg/kg-dry	10	100	HH Soil (HQ=1)	5500	0			35	441	130	81.6
Beryllium	T	mg/kg-dry	10	100	HH Soil (HQ=1)	150	0			0.43	1.2	0.89	0.91
Boron	T	mg/kg-dry	10	100	HH Soil (HQ=1)	5500	0			1.3	7.9	3.6	3.5
Cadmium	T	mg/kg-dry	10	50	HH Soil (HQ=1)	39	0	0.02	0.03	ND	1.1	0.19	0.053
Calcium	T	mg/kg-dry	10	100	No SLC					2680	77800	19400	8710
Chromium	T	mg/kg-dry	10	100	HH Soil (HQ=1)	210	0			12	36.5	22.1	21.1
Cobalt	T	mg/kg-dry	10	100	HH Soil (HQ=1)	900	0			4.9	11	7.9	7.4
Copper	T	mg/kg-dry	10	100	HH Soil (HQ=1)	2900	0			16	107	40.7	21.2
Iron	T	mg/kg-dry	10	100	HH Soil (HQ=1)	23000	0			10300	21700	16500	16600
Lead	T	mg/kg-dry	10	100	HH Soil (HQ=1)	400	0			12.2	120	28.8	16.6
Magnesium	T	mg/kg-dry	10	100	No SLC					3370	8380	5690	5280
Manganese	T	mg/kg-dry	10	100	HH Soil (HQ=1)	3200	0			232	521	368	348
Mercury	T	mg/kg-dry	10	10	HH Soil (HQ=1)	23	0	0.02	0.02	ND	0.022		
Molybdenum	T	mg/kg-dry	10	100	HH Soil (HQ=1)	390	0			2.6	110	28.6	11.3

"No SLC" indicates that there is not a Screening Level Criterion for this medium specified for the RI/FS.
"HH Soil (HQ=1)" EPA Region 6 RBSLs Human Health Residential Soil (HQ=1)
"Eco Soil" EPA Region 6 Tier 1-3 RBSLs Ecological Soil
Median Value determined using 1/2 the Reporting Limit value for Non-Detects if greater than 50% of the values were detected.
Mean Value calculated using 1/2 the Reporting Limit for Non-Detects if greater than 50% of the values were detected.

T = Total Fraction
D = Filtered Fraction (0.45 micron filter)
A = Filtered Fraction (0.1 micron filter)
ND = Non-Detected Value

Table 7-67
Soil 0-6 inches Random
RI/FS Soil Area 14 - Tailings Impoundments
Summary of Results

Analyte	Sample Fraction	Units	Total Number of Samples	Percent Detects (%)	SLC	SLC Value	Percent Above SLC	Min RL for ND	Max RL for ND	Min Value	Max Value	Mean Value	Median Value
Nickel	T	mg/kg-dry	10	100	HH Soil (HQ=1)	1600	0			11.2	30.8	19.7	20.3
Potassium	T	mg/kg-dry	10	100	No SLC					1030	3240	2150	2420
Selenium	T	mg/kg-dry	10	0	HH Soil (HQ=1)	390	0	0.15	1.00	ND	ND		
Silver	T	mg/kg-dry	10	30	HH Soil (HQ=1)	390	0	0.09	0.49	ND	0.37		
Sodium	T	mg/kg-dry	10	70	No SLC			47.20	230.00	ND	413	195	171
Thallium	T	mg/kg-dry	10	80	HH Soil (HQ=1)	5.5	0	0.10	0.10	ND	0.16	0.085	0.074
Vanadium	T	mg/kg-dry	10	100	HH Soil (HQ=1)	78	0			15.5	50.6	31.7	29.3
Zinc	T	mg/kg-dry	10	100	HH Soil (HQ=1)	23000	0			47.1	258	84.6	61

"No SLC" indicates that there is not a Screening Level Criterion for this medium specified for the RI/FS.
"HH Soil (HQ=1)" EPA Region 6 RBSLs Human Health Residential Soil (HQ=1)
"Eco Soil" EPA Region 6 Tier 1-3 RBSLs Ecological Soil
Median Value determined using 1/2 the Reporting Limit value for Non-Detects if greater than 50% of the values were detected.
Mean Value calculated using 1/2 the Reporting Limit for Non-Detects if greater than 50% of the values were detected.

T = Total Fraction
D = Filtered Fraction (0.45 micron filter)
A = Filtered Fraction (0.1 micron filter)
ND = Non-Detected Value

Table 7-68
Soil 0-24 inches Random
RI/FS Soil Area 14 - Tailings Impoundments
Summary of Results

Analyte	Sample Fraction	Units	Total Number of Samples	Percent Detects (%)	SLC	SLC Value	Percent Above SLC	Min RL for ND	Max RL for ND	Min Value	Max Value	Mean Value	Median Value
Inorganics													
Cation-Exchange Capacity	T	meq/100g	10	100	No SLC					7.3	25	16.3	14.8
Chloride	T	mg/kg-dry	10	50	No SLC			0.21	2.20	ND	14	4	1.6
Fluoride	T	mg/kg-dry	10	100	No SLC					0.42	2.1	1.2	1.4
Nitrate	T	mg/kg-dry	10	50	No SLC			2.10	2.20	ND	5.7	2.2	1.4
Organic Soils	T	%	10	100	No SLC					1.3	5.2	2	1.5
pH	T	SU	10	100	No SLC					7.6	8.1	7.9	7.9
Phosphorus	T	mg/kg-dry	10	100	No SLC					477	1400	988	1050
Sodium Absorption Ratio	T	ratio	10	100	No SLC					0.01	1.7	0.43	0.14
Solids, Percent	T	%	10	100	No SLC					91.2	98.5	95	95
Specific Conductance	T	umhos/cm	10	100	No SLC					66.5	2500	1340	1430
Sulfate	T	mg/kg-dry	10	100	No SLC					3	759	485	576
Total Kjeldahl Nitrogen	T	mg/kg-dry	6	100	No SLC					46.2	224	124	88.9
Total Organic Carbon	T	mg/kg-dry	10	80	No SLC			102.00	107.00	ND	5490	1630	1130
Metals													
Aluminum	T	mg/kg-dry	10	100	No SLC					9160	16600	12500	12400
Antimony	T	mg/kg-dry	10	0	ECO Soil	0.3	0	0.09	0.53	ND	ND		
Arsenic	T	mg/kg-dry	10	100	ECO Soil	31	0			1.7	5.1	3.4	3.3
Barium	T	mg/kg-dry	10	100	ECO Soil	330	10			54.5	337	117	109
Beryllium	T	mg/kg-dry	10	100	ECO Soil	30	0			0.76	1.5	1	1.1
Boron	T	mg/kg-dry	10	100	ECO Soil	0.5	90			0.48	5.8	2.5	2.4
Cadmium	T	mg/kg-dry	10	70	ECO Soil	0.4	71.4	0.03	0.03	ND	1.5	0.38	0.37
Calcium	T	mg/kg-dry	10	100	No SLC					3760	57800	16600	13500
Chromium	T	mg/kg-dry	10	100	ECO Soil	7.9	100			18.9	46.7	32.4	30.8
Cobalt	T	mg/kg-dry	10	100	ECO Soil	32	0			5.2	14.7	9.8	9.8
Copper	T	mg/kg-dry	10	100	ECO Soil	54	80			30.1	172	101	104
Iron	T	mg/kg-dry	10	100	No SLC					13400	22800	18400	18500
Lead	T	mg/kg-dry	10	100	ECO Soil	15	100			15.5	150	46.4	41
Magnesium	T	mg/kg-dry	10	100	No SLC					3910	8470	6540	6580
Manganese	T	mg/kg-dry	10	100	ECO Soil	152	100			329	968	501	463
Mercury	T	mg/kg-dry	10	0	ECO Soil	0.1	0	0.02	0.02	ND	ND		
Molybdenum	T	mg/kg-dry	10	100	ECO Soil	2	100			2.9	288	102	79

"No SLC" indicates that there is not a Screening Level Criterion for this medium specified for the RI/FS.
"HH Soil (HQ=1)" EPA Region 6 RBSLs Human Health Residential Soil (HQ=1)
"Eco Soil" EPA Region 6 Tier 1-3 RBSLs Ecological Soil
Median Value determined using 1/2 the Reporting Limit value for Non-Detects if greater than 50% of the values were detected.
Mean Value calculated using 1/2 the Reporting Limit for Non-Detects if greater than 50% of the values were detected.

T = Total Fraction
D = Filtered Fraction (0.45 micron filter)
A = Filtered Fraction (0.1 micron filter)
ND = Non-Detected Value

Table 7-68
Soil 0-24 inches Random
RI/FS Soil Area 14 - Tailings Impoundments
Summary of Results

Analyte	Sample Fraction	Units	Total Number of Samples	Percent Detects (%)	SLC	SLC Value	Percent Above SLC	Min RL for ND	Max RL for ND	Min Value	Max Value	Mean Value	Median Value
Nickel	T	mg/kg-dry	10	100	ECO Soil	48	0			11.6	36.9	24.7	26.6
Potassium	T	mg/kg-dry	10	100	No SLC					1710	5120	3220	3040
Selenium	T	mg/kg-dry	10	0	ECO Soil	1	0	0.14	0.85	ND	ND		
Silver	T	mg/kg-dry	10	40	ECO Soil	2	0	0.22	0.71	ND	0.83		
Sodium	T	mg/kg-dry	10	80	No SLC			148.00	322.00	ND	906	344	360
Thallium	T	mg/kg-dry	10	90	ECO Soil	1	0	0.11	0.11	ND	0.42	0.18	0.16
Vanadium	T	mg/kg-dry	10	100	ECO Soil	2	100			21.9	46.3	36.1	37.1
Zinc	T	mg/kg-dry	10	100	ECO Soil	120	40			64.9	304	121	101

"No SLC" indicates that there is not a Screening Level Criterion for this medium specified for the RI/FS.
"HH Soil (HQ=1)" EPA Region 6 RBSLs Human Health Residential Soil (HQ=1)
"Eco Soil" EPA Region 6 Tier 1-3 RBSLs Ecological Soil
Median Value determined using 1/2 the Reporting Limit value for Non-Detects if greater than 50% of the values were detected.
Mean Value calculated using 1/2 the Reporting Limit for Non-Detects if greater than 50% of the values were detected.

T = Total Fraction
D = Filtered Fraction (0.45 micron filter)
A = Filtered Fraction (0.1 micron filter)
ND = Non-Detected Value

Table 7-69
Soil 0-24 inches SPLP Random
RI/FS Soil Area 14 - Tailings Impoundments
Summary of Results

Analyte	Sample Fraction	Units	Total Number of Samples	Percent Detects (%)	SLC	SLC Value	Percent Above SLC	Min RL for ND	Max RL for ND	Min Value	Max Value	Mean Value	Median Value
Inorganics													
Bicarbonate (as CaCO3)	T	mg/L	4	75	No SLC			15.40	15.40	ND	41.6	30.3	36
Carbonate (as CaCO3)	T	mg/L	4	0	No SLC			1.00	1.00	ND	ND		
Chloride	T	mg/L	4	50	No SLC			0.40	0.40	ND	0.7	0.38	0.31
Cyanide	T	mg/L	4	0	No SLC			0.01	0.01	ND	ND		
Fluoride	T	mg/L	4	100	No SLC					0.24	0.83	0.48	0.42
Hydroxide (as CaCO3)	T	mg/L	4	0	No SLC			1.00	1.00	ND	ND		
Nitrate	T	mg/L	4	25	No SLC			0.40	0.40	ND	0.4		
Nitrite	T	mg/L	4	50	No SLC			0.01	0.01	ND	0.011	0.0053	0.004
Phosphate, Ortho As P	T	mg/L	4	50	No SLC			0.01	0.01	ND	0.021	0.01	0.008
Phosphorus	T	mg/L	4	50	No SLC			0.01	0.01	ND	0.016	0.0093	0.008
Sulfate	T	mg/L	4	100	No SLC					77.5	257	148	129
Total Alkalinity	T	mg/L	4	75	No SLC			15.40	15.40	ND	41.6	30.3	36
Total Kjeldahl Nitrogen	T	mg/L	4	100	No SLC					0.26	0.76	0.39	0.28
Metals													
Aluminum	T	mg/L	4	50	No SLC			0.02	0.02	ND	0.089	0.04	0.031
Antimony	T	mg/L	4	0	ECO Soil	0.3	0	0.00	0.00	ND	ND		
Arsenic	T	mg/L	4	25	ECO Soil	31	0	0.00	0.00	ND	0.0004		
Barium	T	mg/L	4	100	ECO Soil	330	0			0.035	0.055	0.043	0.042
Beryllium	T	mg/L	4	0	ECO Soil	30	0	0.00	0.00	ND	ND		
Boron	T	mg/L	4	25	ECO Soil	0.5	0	0.02	0.04	ND	0.14		
Cadmium	T	mg/L	4	0	ECO Soil	0.4	0	0.00	0.00	ND	ND		
Calcium	T	mg/L	4	100	No SLC					37.7	133	66.9	48.4
Chromium	T	mg/L	4	25	ECO Soil	7.9	0	0.00	0.00	ND	0.00068		
Cobalt	T	mg/L	4	0	ECO Soil	32	0	0.00	0.00	ND	ND		
Copper	T	mg/L	4	100	ECO Soil	54	0			0.003	0.016	0.0069	0.0042
Iron	T	mg/L	4	0	No SLC			0.02	0.03	ND	ND		
Lead	T	mg/L	4	75	ECO Soil	15	0	0.00	0.00	ND	0.0011	0.00073	0.00087
Magnesium	T	mg/L	4	100	No SLC					1.8	7.3	3.4	2.2
Manganese	T	mg/L	4	25	ECO Soil	152	0	0.00	0.00	ND	0.0014		
Mercury	T	mg/L	4	0	ECO Soil	0.1	0	0.01	0.01	ND	ND		
Molybdenum	T	mg/L	4	100	ECO Soil	2	0			0.39	1.7	1.2	1.4

"No SLC" indicates that there is not a Screening Level Criterion for this medium specified for the RI/FS.
"HH Soil (HQ=1)" EPA Region 6 RBSLs Human Health Residential Soil (HQ=1)
"Eco Soil" EPA Region 6 Tier 1-3 RBSLs Ecological Soil
Median Value determined using 1/2 the Reporting Limit value for Non-Detects if greater than 50% of the values were detected.
Mean Value calculated using 1/2 the Reporting Limit for Non-Detects if greater than 50% of the values were detected.

T = Total Fraction
D = Filtered Fraction (0.45 micron filter)
A = Filtered Fraction (0.1 micron filter)
ND = Non-Detected Value

Table 7-69
Soil 0-24 inches SPLP Random
RI/FS Soil Area 14 - Tailings Impoundments
Summary of Results

Analyte	Sample Fraction	Units	Total Number of Samples	Percent Detects (%)	SLC	SLC Value	Percent Above SLC	Min RL for ND	Max RL for ND	Min Value	Max Value	Mean Value	Median Value
Nickel	T	mg/L	4	0	ECO Soil	48	0	0.00	0.00	ND	ND		
Potassium	T	mg/L	4	100	No SLC					1.7	4.5	2.8	2.6
Selenium	T	mg/L	4	0	ECO Soil	1	0	0.00	0.00	ND	ND		
Silver	T	mg/L	4	25	ECO Soil	2	0	0.00	0.00	ND	0.00059		
Sodium	T	mg/L	4	50	No SLC			1.00	5.10	ND	8.6	4.7	4.9
Thallium	T	mg/L	4	0	ECO Soil	1	0	0.00	0.00	ND	ND		
Vanadium	T	mg/L	4	75	ECO Soil	2	0	0.00	0.00	ND	0.02	0.0055	0.0012
Zinc	T	mg/L	4	0	ECO Soil	120	0	0.00	0.01	ND	ND		

"No SLC" indicates that there is not a Screening Level Criterion for this medium specified for the RI/FS.
"HH Soil (HQ=1)" EPA Region 6 RBSLs Human Health Residential Soil (HQ=1)
"Eco Soil" EPA Region 6 Tier 1-3 RBSLs Ecological Soil
Median Value determined using 1/2 the Reporting Limit value for Non-Detects if greater than 50% of the values were detected.
Mean Value calculated using 1/2 the Reporting Limit for Non-Detects if greater than 50% of the values were detected.

T = Total Fraction
D = Filtered Fraction (0.45 micron filter)
A = Filtered Fraction (0.1 micron filter)
ND = Non-Detected Value

Table 7-70

Soil 0-2 inches Biased

RI/FS Soil Area 15 - Soil Potentially Affected by Windblown Particulate

Summary of Results

Analyte	Sample Fraction	Units	Total Number of Samples	Percent Detects (%)	SLC	SLC Value	Percent Above SLC	Min RL for ND	Max RL for ND	Min Value	Max Value	Mean Value	Median Value
Dibenzodioxins-Dibenzofurans													
1,2,3,4,6,7,8-Heptachlorodibenzofuran	T	pg/g	2	0	HH Soil (HQ=1)	1000	0	0.15	0.30	ND	ND		
1,2,3,4,6,7,8-Heptachlorodibenzo-p-dioxin	T	pg/g	2	0	HH Soil (HQ=1)	1000	0	0.29	1.00	ND	ND		
1,2,3,4,7,8,9-Heptachlorodibenzofuran	T	pg/g	2	0	HH Soil (HQ=1)	1000	0	0.17	0.19	ND	ND		
1,2,3,4,7,8-Hexachlorodibenzofuran	T	pg/g	2	0	HH Soil (HQ=1)	1000	0	0.08	0.16	ND	ND		
1,2,3,4,7,8-hexachlorodibenzo-p-dioxin	T	pg/g	2	0	HH Soil (HQ=1)	1000	0	0.15	0.17	ND	ND		
1,2,3,6,7,8-Hexachlorodibenzofuran	T	pg/g	2	0	HH Soil (HQ=1)	1000	0	0.07	0.07	ND	ND		
1,2,3,6,7,8-Hexachlorodibenzo-p-dioxin	T	pg/g	2	0	HH Soil (HQ=1)	1000	0	0.14	0.16	ND	ND		
1,2,3,7,8,9-Hexachlorodibenzofuran	T	pg/g	2	0	HH Soil (HQ=1)	1000	0	0.08	0.09	ND	ND		
1,2,3,7,8,9-Hexachlorodibenzo-p-dioxin	T	pg/g	2	0	HH Soil (HQ=1)	1000	0	0.15	0.17	ND	ND		
1,2,3,7,8-Pentachlorodibenzo-p-dioxin	T	pg/g	2	0	HH Soil (HQ=1)	1000	0	0.15	0.17	ND	ND		
2,3,4,7,8-Pentachlorodibenzofuran	T	pg/g	2	0	HH Soil (HQ=1)	1000	0	0.13	0.15	ND	ND		
2,3,7,8-Tetrachlorodibenzofuran	T	pg/g	2	50	HH Soil (HQ=1)	1000	0	0.21	0.21	ND	0.31	0.21	0.21
2,3,7,8-Tetrachlorodibenzo-p-dioxin	T	pg/g	2	0	HH Soil (HQ=1)	1000	0	0.26	0.35	ND	ND		
Inorganics													
Cation-Exchange Capacity	T	meq/100g	57	100	No SLC					9.6	73.5	28.2	28.4
Chloride	T	mg/kg-dry	62	62.9	No SLC			2.10	37.00	ND	82.4	8	4.1
Fluoride	T	mg/kg-dry	56	73.2	HH Soil (HQ=1)	3700	0	0.11	0.15	ND	64	1.6	0.16
Nitrate	T	mg/kg-dry	62	90.3	No SLC			2.10	7.40	ND	110	8.2	4.7
Organic Soils	T	%	62	100	No SLC					1.9	63.8	7	4.8
pH	T	SU	62	100	No SLC					6.4	8.6	7.8	7.9
Phosphorus	T	mg/kg-dry	62	100	No SLC					27.2	1390	546	576
Sodium Absorption Ratio	T	ratio	57	70.2	No SLC			0.02	0.06	ND	2.1	0.12	0.04
Solids, Percent	T	%	62	100	No SLC					27.3	99	87.7	91.5
Specific Conductance	T	umhos/cm	62	100	No SLC					16.1	1830	190	130
Sulfate	T	mg/kg-dry	62	82.3	No SLC			2.10	65.00	ND	3570	83.9	8.1
Total Kjeldahl Nitrogen	T	mg/kg-dry	62	100	No SLC					32.3	38200	1940	989
Total Organic Carbon	T	mg/kg-dry	62	98.4	No SLC			107.00	107.00	ND	424000	32200	13900
Metals													
Aluminum	T	mg/kg-dry	62	100	HH Soil (HQ=1)	76000	0			1820	26800	16800	17600
Antimony	T	mg/kg-dry	61	0	HH Soil (HQ=1)	31	0	0.15	1.60	ND	ND		
Arsenic	T	mg/kg-dry	62	98.4	HH Soil (HQ=1)	0.39	100	4.80	4.80	ND	6.7	3.4	3.5

"No SLC" indicates that there is not a Screening Level Criterion for this medium specified for the RI/FS.
"HH Soil (HQ=1)" EPA Region 6 RBSLs Human Health Residential Soil (HQ=1)
"Eco Soil" EPA Region 6 Tier 1-3 RBSLs Ecological Soil
Median Value determined using 1/2 the Reporting Limit value for Non-Detects if greater than 50% of the values were detected.
Mean Value calculated using 1/2 the Reporting Limit for Non-Detects if greater than 50% of the values were detected.

T = Total Fraction
D = Filtered Fraction (0.45 micron filter)
A = Filtered Fraction (0.1 micron filter)
ND = Non-Detected Value

Table 7-70

Soil 0-2 inches Biased

RI/FS Soil Area 15 - Soil Potentially Affected by Windblown Particulate

Summary of Results

Analyte	Sample Fraction	Units	Total Number of Samples	Percent Detects (%)	SLC	SLC Value	Percent Above SLC	Min RL for ND	Max RL for ND	Min Value	Max Value	Mean Value	Median Value
Barium	T	mg/kg-dry	62	100	HH Soil (HQ=1)	5500	0			30.9	525	202	196
Beryllium	T	mg/kg-dry	62	100	HH Soil (HQ=1)	150	0			0.2	1.2	0.81	0.8
Boron	T	mg/kg-dry	62	82.3	HH Soil (HQ=1)	5500	0	0.63	6.00	ND	23.3	7.3	7
Cadmium	T	mg/kg-dry	62	50	HH Soil (HQ=1)	39	0	0.02	0.64	ND	0.87	0.13	0.029
Calcium	T	mg/kg-dry	62	100	No SLC					904	100000	12500	6710
Chromium	T	mg/kg-dry	62	100	HH Soil (HQ=1)	210	0			3.1	23.4	16.9	17.7
Cobalt	T	mg/kg-dry	62	100	HH Soil (HQ=1)	900	0			1.7	12.5	8.7	9.1
Copper	T	mg/kg-dry	62	100	HH Soil (HQ=1)	2900	0			4.5	56.7	19.5	17.8
Iron	T	mg/kg-dry	62	100	HH Soil (HQ=1)	23000	8.1			4320	23800	18200	18500
Lead	T	mg/kg-dry	62	100	HH Soil (HQ=1)	400	0			8.2	61.7	19.2	16
Magnesium	T	mg/kg-dry	62	100	No SLC					677	8010	4570	4780
Manganese	T	mg/kg-dry	62	100	HH Soil (HQ=1)	3200	0			184	812	504	504
Mercury	T	mg/kg-dry	62	33.9	HH Soil (HQ=1)	23	0	0.01	0.02	ND	0.074		
Molybdenum	T	mg/kg-dry	62	88.7	HH Soil (HQ=1)	390	0	0.27	0.56	ND	43	4.7	2
Nickel	T	mg/kg-dry	62	100	HH Soil (HQ=1)	1600	0			2.3	31.9	13.6	13.1
Potassium	T	mg/kg-dry	62	100	No SLC					626	4680	2870	2820
Selenium	T	mg/kg-dry	62	51.6	HH Soil (HQ=1)	390	0	0.28	1.10	ND	3.8	0.59	0.44
Silver	T	mg/kg-dry	62	6.5	HH Soil (HQ=1)	390	0	0.09	0.23	ND	0.55		
Sodium	T	mg/kg-dry	62	17.7	No SLC			30.10	378.00	ND	1030		
Thallium	T	mg/kg-dry	62	95.2	HH Soil (HQ=1)	5.5	0	0.09	0.32	ND	0.28	0.19	0.2
Vanadium	T	mg/kg-dry	62	100	HH Soil (HQ=1)	78	0			5	46.7	33.4	35.1
Zinc	T	mg/kg-dry	62	100	HH Soil (HQ=1)	23000	0			18.5	149	62.3	57.1
Pesticides-PCBs													
a-Chlordane	T	mg/kg-dry	2	0	No SLC			0.00	0.00	ND	ND		
Aldrin	T	mg/kg-dry	2	0	No SLC			0.00	0.00	ND	ND		
alpha-Hexachlorocyclohexane	T	mg/kg-dry	2	0	No SLC			0.00	0.00	ND	ND		
beta-Hexachlorocyclohexane	T	mg/kg-dry	2	0	No SLC			0.00	0.00	ND	ND		
delta-Hexachlorocyclohexane	T	mg/kg-dry	2	0	No SLC			0.00	0.00	ND	ND		
Dichlorodiphenyldichloroethane	T	mg/kg-dry	2	0	No SLC			0.00	0.00	ND	ND		
Dichlorodiphenyldichloroethylene	T	mg/kg-dry	2	0	No SLC			0.00	0.00	ND	ND		
Dichlorodiphenyltrichloroethane	T	mg/kg-dry	2	0	No SLC			0.00	0.00	ND	ND		
Dieldrin	T	mg/kg-dry	2	0	No SLC			0.00	0.00	ND	ND		

"No SLC" indicates that there is not a Screening Level Criterion for this medium specified for the RI/FS.
"HH Soil (HQ=1)" EPA Region 6 RBSLs Human Health Residential Soil (HQ=1)
"Eco Soil" EPA Region 6 Tier 1-3 RBSLs Ecological Soil
Median Value determined using 1/2 the Reporting Limit value for Non-Detects if greater than 50% of the values were detected.
Mean Value calculated using 1/2 the Reporting Limit for Non-Detects if greater than 50% of the values were detected.

T = Total Fraction
D = Filtered Fraction (0.45 micron filter)
A = Filtered Fraction (0.1 micron filter)
ND = Non-Detected Value

Table 7-70

Soil 0-2 inches Biased

RI/FS Soil Area 15 - Soil Potentially Affected by Windblown Particulate

Summary of Results

Analyte	Sample Fraction	Units	Total Number of Samples	Percent Detects (%)	SLC	SLC Value	Percent Above SLC	Min RL for ND	Max RL for ND	Min Value	Max Value	Mean Value	Median Value
Endosulfan I	T	mg/kg-dry	2	0	No SLC			0.00	0.00	ND	ND		
Endosulfan II	T	mg/kg-dry	2	0	No SLC			0.00	0.00	ND	ND		
Endosulfan sulfate	T	mg/kg-dry	2	0	No SLC			0.00	0.00	ND	ND		
Endrin	T	mg/kg-dry	2	0	No SLC			0.00	0.00	ND	ND		
Endrin aldehyde	T	mg/kg-dry	2	0	No SLC			0.00	0.00	ND	ND		
Endrin ketone	T	mg/kg-dry	2	0	No SLC			0.00	0.00	ND	ND		
g-Chlordane	T	mg/kg-dry	2	0	No SLC			0.00	0.00	ND	ND		
Heptachlor	T	mg/kg-dry	2	0	No SLC			0.00	0.00	ND	ND		
Heptachlor epoxide	T	mg/kg-dry	2	0	No SLC			0.00	0.00	ND	ND		
Lindane	T	mg/kg-dry	2	0	No SLC			0.00	0.00	ND	ND		
Methoxychlor	T	mg/kg-dry	2	0	No SLC			0.02	0.02	ND	ND		

"No SLC" indicates that there is not a Screening Level Criterion for this medium specified for the RI/FS.
"HH Soil (HQ=1)" EPA Region 6 RBSLs Human Health Residential Soil (HQ=1)
"Eco Soil" EPA Region 6 Tier 1-3 RBSLs Ecological Soil
Median Value determined using 1/2 the Reporting Limit value for Non-Detects if greater than 50% of the values were detected.
Mean Value calculated using 1/2 the Reporting Limit for Non-Detects if greater than 50% of the values were detected.

T = Total Fraction
D = Filtered Fraction (0.45 micron filter)
A = Filtered Fraction (0.1 micron filter)
ND = Non-Detected Value

Table 7-71

Soil 2-6 inches Biased

RI/FS Soil Area 15 - Soil Potentially Affected by Windblown Particulate

Summary of Results

Analyte	Sample Fraction	Units	Total Number of Samples	Percent Detects (%)	SLC	SLC Value	Percent Above SLC	Min RL for ND	Max RL for ND	Min Value	Max Value	Mean Value	Median Value
Dibenzodioxins-Dibenzofurans													
1,2,3,4,6,7,8-Heptachlorodibenzofuran	T	pg/g	2	0	HH Soil (HQ=1)	1000	0	0.08	0.32	ND	ND		
1,2,3,4,6,7,8-Heptachlorodibenzo-p-dioxin	T	pg/g	2	0	HH Soil (HQ=1)	1000	0	0.10	0.71	ND	ND		
1,2,3,4,7,8,9-Heptachlorodibenzofuran	T	pg/g	2	0	HH Soil (HQ=1)	1000	0	0.10	0.10	ND	ND		
1,2,3,4,7,8-Hexachlorodibenzofuran	T	pg/g	2	0	HH Soil (HQ=1)	1000	0	0.06	0.15	ND	ND		
1,2,3,4,7,8-hexachlorodibenzo-p-dioxin	T	pg/g	2	0	HH Soil (HQ=1)	1000	0	0.10	0.12	ND	ND		
1,2,3,6,7,8-Hexachlorodibenzofuran	T	pg/g	2	0	HH Soil (HQ=1)	1000	0	0.05	0.07	ND	ND		
1,2,3,6,7,8-Hexachlorodibenzo-p-dioxin	T	pg/g	2	0	HH Soil (HQ=1)	1000	0	0.09	0.12	ND	ND		
1,2,3,7,8,9-Hexachlorodibenzofuran	T	pg/g	2	0	HH Soil (HQ=1)	1000	0	0.06	0.07	ND	ND		
1,2,3,7,8,9-Hexachlorodibenzo-p-dioxin	T	pg/g	2	0	HH Soil (HQ=1)	1000	0	0.10	0.12	ND	ND		
1,2,3,7,8-Pentachlorodibenzo-p-dioxin	T	pg/g	2	0	HH Soil (HQ=1)	1000	0	0.10	0.11	ND	ND		
2,3,4,7,8-Pentachlorodibenzofuran	T	pg/g	2	0	HH Soil (HQ=1)	1000	0	0.08	0.10	ND	ND		
2,3,7,8-Tetrachlorodibenzofuran	T	pg/g	2	0	HH Soil (HQ=1)	1000	0	0.14	0.15	ND	ND		
2,3,7,8-Tetrachlorodibenzo-p-dioxin	T	pg/g	2	0	HH Soil (HQ=1)	1000	0	0.20	0.23	ND	ND		
Inorganics													
Cation-Exchange Capacity	T	meq/100g	57	100	No SLC					11.8	61.9	29.4	28.8
Chloride	T	mg/kg-dry	62	56.5	No SLC			2.10	37.00	ND	23.3	6.4	3.1
Fluoride	T	mg/kg-dry	55	80	HH Soil (HQ=1)	3700	0	0.11	0.14	ND	93.3	2.3	0.21
Nitrate	T	mg/kg-dry	62	85.5	No SLC			2.10	6.20	ND	74.6	6.4	3.9
Organic Soils	T	%	62	100	No SLC					0.7	57.3	5.9	4.7
pH	T	SU	62	100	No SLC					6	8.9	7.8	7.9
Phosphorus	T	mg/kg-dry	62	100	No SLC					51.5	2350	502	539
Sodium Absorption Ratio	T	ratio	57	89.5	No SLC			0.05	0.07	ND	2.9	0.21	0.07
Solids, Percent	T	%	62	100	No SLC					32.3	99.3	85.6	84.8
Specific Conductance	T	umhos/cm	62	100	No SLC					11.1	1060	186	143
Sulfate	T	mg/kg-dry	62	80.6	No SLC			2.10	62.00	ND	2240	64.5	8.4
Total Kjeldahl Nitrogen	T	mg/kg-dry	62	100	No SLC					39.5	24100	1300	916
Total Organic Carbon	T	mg/kg-dry	62	98.4	No SLC			112.00	112.00	ND	271000	20800	13900
Metals													
Aluminum	T	mg/kg-dry	62	100	HH Soil (HQ=1)	76000	0			1850	31200	18200	19300
Antimony	T	mg/kg-dry	61	0	HH Soil (HQ=1)	31	0	0.16	1.50	ND	ND		
Arsenic	T	mg/kg-dry	62	100	HH Soil (HQ=1)	0.39	100			1.3	6.8	3.6	3.8

"No SLC" indicates that there is not a Screening Level Criterion for this medium specified for the RI/FS.
"HH Soil (HQ=1)" EPA Region 6 RBSLs Human Health Residential Soil (HQ=1)
"Eco Soil" EPA Region 6 Tier 1-3 RBSLs Ecological Soil
Median Value determined using 1/2 the Reporting Limit value for Non-Detects if greater than 50% of the values were detected.
Mean Value calculated using 1/2 the Reporting Limit for Non-Detects if greater than 50% of the values were detected.

T = Total Fraction
D = Filtered Fraction (0.45 micron filter)
A = Filtered Fraction (0.1 micron filter)
ND = Non-Detected Value

Table 7-71

Soil 2-6 inches Biased

RI/FS Soil Area 15 - Soil Potentially Affected by Windblown Particulate

Summary of Results

Analyte	Sample Fraction	Units	Total Number of Samples	Percent Detects (%)	SLC	SLC Value	Percent Above SLC	Min RL for ND	Max RL for ND	Min Value	Max Value	Mean Value	Median Value
Barium	T	mg/kg-dry	62	100	HH Soil (HQ=1)	5500	0			30.8	469	212	214
Beryllium	T	mg/kg-dry	62	100	HH Soil (HQ=1)	150	0			0.21	1.3	0.86	0.87
Boron	T	mg/kg-dry	62	82.3	HH Soil (HQ=1)	5500	0	0.52	7.10	ND	18.2	7.1	7
Cadmium	T	mg/kg-dry	62	45.2	HH Soil (HQ=1)	39	0	0.02	0.05	ND	0.83		
Calcium	T	mg/kg-dry	62	100	No SLC					647	92300	13700	6820
Chromium	T	mg/kg-dry	62	100	HH Soil (HQ=1)	210	0			4	24.8	17.5	18.3
Cobalt	T	mg/kg-dry	62	100	HH Soil (HQ=1)	900	0			2.4	11.8	9	9.3
Copper	T	mg/kg-dry	62	100	HH Soil (HQ=1)	2900	0			4.5	54.3	18.6	16.9
Iron	T	mg/kg-dry	62	100	HH Soil (HQ=1)	23000	14.5			4880	27900	19100	20100
Lead	T	mg/kg-dry	62	100	HH Soil (HQ=1)	400	0			8.2	55.9	17.8	14.7
Magnesium	T	mg/kg-dry	62	100	No SLC					803	7960	4690	4940
Manganese	T	mg/kg-dry	62	100	HH Soil (HQ=1)	3200	0			117	778	498	501
Mercury	T	mg/kg-dry	62	29	HH Soil (HQ=1)	23	0	0.02	0.02	ND	0.07		
Molybdenum	T	mg/kg-dry	62	59.7	HH Soil (HQ=1)	390	0	0.09	0.96	ND	38.2	3.4	0.94
Nickel	T	mg/kg-dry	62	100	HH Soil (HQ=1)	1600	0			3.1	29.7	14	13.9
Potassium	T	mg/kg-dry	62	100	No SLC					597	4510	2750	2780
Selenium	T	mg/kg-dry	62	48.4	HH Soil (HQ=1)	390	0	0.18	1.30	ND	4.6		
Silver	T	mg/kg-dry	62	6.5	HH Soil (HQ=1)	390	0	0.10	0.20	ND	0.55		
Sodium	T	mg/kg-dry	62	19.4	No SLC			28.10	212.00	ND	985		
Thallium	T	mg/kg-dry	62	95.2	HH Soil (HQ=1)	5.5	0	0.10	0.30	ND	0.3	0.2	0.21
Vanadium	T	mg/kg-dry	62	100	HH Soil (HQ=1)	78	0			6.4	48.9	35.2	36.4
Zinc	T	mg/kg-dry	62	100	HH Soil (HQ=1)	23000	0			17.8	134	59	57.7
Pesticides-PCBs													
a-Chlordane	T	mg/kg-dry	2	0	No SLC			0.00	0.00	ND	ND		
Aldrin	T	mg/kg-dry	2	0	No SLC			0.00	0.00	ND	ND		
alpha-Hexachlorocyclohexane	T	mg/kg-dry	2	0	No SLC			0.00	0.00	ND	ND		
beta-Hexachlorocyclohexane	T	mg/kg-dry	2	0	No SLC			0.00	0.00	ND	ND		
delta-Hexachlorocyclohexane	T	mg/kg-dry	2	0	No SLC			0.00	0.00	ND	ND		
Dichlorodiphenyldichloroethane	T	mg/kg-dry	2	0	No SLC			0.00	0.00	ND	ND		
Dichlorodiphenyldichloroethylene	T	mg/kg-dry	2	0	No SLC			0.00	0.00	ND	ND		
Dichlorodiphenyltrichloroethane	T	mg/kg-dry	2	0	No SLC			0.00	0.00	ND	ND		
Dieldrin	T	mg/kg-dry	2	0	No SLC			0.00	0.00	ND	ND		

"No SLC" indicates that there is not a Screening Level Criterion for this medium specified for the RI/FS.
"HH Soil (HQ=1)" EPA Region 6 RBSLs Human Health Residential Soil (HQ=1)
"Eco Soil" EPA Region 6 Tier 1-3 RBSLs Ecological Soil
Median Value determined using 1/2 the Reporting Limit value for Non-Detects if greater than 50% of the values were detected.
Mean Value calculated using 1/2 the Reporting Limit for Non-Detects if greater than 50% of the values were detected.

T = Total Fraction
D = Filtered Fraction (0.45 micron filter)
A = Filtered Fraction (0.1 micron filter)
ND = Non-Detected Value

Table 7-71

Soil 2-6 inches Biased

RI/FS Soil Area 15 - Soil Potentially Affected by Windblown Particulate

Summary of Results

Analyte	Sample Fraction	Units	Total Number of Samples	Percent Detects (%)	SLC	SLC Value	Percent Above SLC	Min RL for ND	Max RL for ND	Min Value	Max Value	Mean Value	Median Value
Endosulfan I	T	mg/kg-dry	2	0	No SLC			0.00	0.00	ND	ND		
Endosulfan II	T	mg/kg-dry	2	0	No SLC			0.00	0.00	ND	ND		
Endosulfan sulfate	T	mg/kg-dry	2	0	No SLC			0.00	0.00	ND	ND		
Endrin	T	mg/kg-dry	2	0	No SLC			0.00	0.00	ND	ND		
Endrin aldehyde	T	mg/kg-dry	2	0	No SLC			0.00	0.00	ND	ND		
Endrin ketone	T	mg/kg-dry	2	0	No SLC			0.00	0.00	ND	ND		
g-Chlordane	T	mg/kg-dry	2	0	No SLC			0.00	0.00	ND	ND		
Heptachlor	T	mg/kg-dry	2	0	No SLC			0.00	0.00	ND	ND		
Heptachlor epoxide	T	mg/kg-dry	2	0	No SLC			0.00	0.00	ND	ND		
Lindane	T	mg/kg-dry	2	0	No SLC			0.00	0.00	ND	ND		
Methoxychlor	T	mg/kg-dry	2	0	No SLC			0.02	0.02	ND	ND		

"No SLC" indicates that there is not a Screening Level Criterion for this medium specified for the RI/FS.
"HH Soil (HQ=1)" EPA Region 6 RBSLs Human Health Residential Soil (HQ=1)
"Eco Soil" EPA Region 6 Tier 1-3 RBSLs Ecological Soil
Median Value determined using 1/2 the Reporting Limit value for Non-Detects if greater than 50% of the values were detected.
Mean Value calculated using 1/2 the Reporting Limit for Non-Detects if greater than 50% of the values were detected.

T = Total Fraction
D = Filtered Fraction (0.45 micron filter)
A = Filtered Fraction (0.1 micron filter)
ND = Non-Detected Value

Table 7-72

Soil 0-2 inches SPLP Biased

RI/FS Soil Area 15 - Soil Potentially Affected by Windblown Particulate

Summary of Results

Analyte	Sample Fraction	Units	Total Number of Samples	Percent Detects (%)	SLC	SLC Value	Percent Above SLC	Min RL for ND	Max RL for ND	Min Value	Max Value	Mean Value	Median Value
Inorganics													
Bicarbonate (as CaCO3)	T	mg/L	4	75	No SLC			1.00	1.00	ND	37.2	21.4	23.9
Carbonate (as CaCO3)	T	mg/L	4	75	No SLC			1.00	1.00	ND	61.5	22.4	13.9
Chloride	T	mg/L	4	25	No SLC			0.40	1.50	ND	3.4		
Cyanide	T	mg/L	4	25	HH Soil (HQ=1)	1200	0	0.01	0.01	ND	0.016		
Fluoride	T	mg/L	2	50	HH Soil (HQ=1)	3700	0	0.10	0.10	ND	0.17	0.11	0.11
Hydroxide (as CaCO3)	T	mg/L	4	0	No SLC			1.00	1.00	ND	ND		
Nitrate	T	mg/L	4	50	No SLC			0.40	0.40	ND	0.73	0.41	0.35
Nitrite	T	mg/L	2	100	No SLC					0.005	0.007	0.006	0.006
Phosphate, Ortho As P	T	mg/L	4	100	No SLC					0.047	1.6	0.5	0.18
Phosphorus	T	mg/L	4	100	No SLC					0.11	1.8	0.69	0.43
Sulfate	T	mg/L	4	75	No SLC			0.40	0.40	ND	11.7	3.6	1.3
Total Alkalinity	T	mg/L	4	75	No SLC			1.00	1.00	ND	76.3	43.6	48.9
Total Kjeldahl Nitrogen	T	mg/L	4	25	No SLC			0.24	0.24	ND	1.3		
Metals													
Aluminum	T	mg/L	4	100	HH Soil (HQ=1)	76000	0			2.3	15.2	10.1	11.4
Antimony	T	mg/L	4	0	HH Soil (HQ=1)	31	0	0.00	0.00	ND	ND		
Arsenic	T	mg/L	4	100	HH Soil (HQ=1)	0.39	0			0.00092	0.0033	0.0018	0.0015
Barium	T	mg/L	4	100	HH Soil (HQ=1)	5500	0			0.074	0.15	0.1	0.099
Beryllium	T	mg/L	4	75	HH Soil (HQ=1)	150	0	0.00	0.00	ND	0.00059	0.00035	0.00035
Boron	T	mg/L	4	50	HH Soil (HQ=1)	5500	0	0.05	0.13	ND	0.16	0.088	0.086
Cadmium	T	mg/L	4	0	HH Soil (HQ=1)	39	0	0.00	0.00	ND	ND		
Calcium	T	mg/L	4	100	No SLC					4.6	34.6	15.4	11.2
Chromium	T	mg/L	4	75	HH Soil (HQ=1)	210	0	0.00	0.00	ND	0.0089	0.0062	0.007
Cobalt	T	mg/L	4	25	HH Soil (HQ=1)	900	0	0.00	0.00	ND	0.0019		
Copper	T	mg/L	4	25	HH Soil (HQ=1)	2900	0	0.00	0.02	ND	0.0076		
Iron	T	mg/L	4	100	HH Soil (HQ=1)	23000	0			1.1	9.2	5.8	6.5
Lead	T	mg/L	4	100	HH Soil (HQ=1)	400	0			0.0019	0.006	0.0041	0.0042
Magnesium	T	mg/L	4	100	No SLC					2	3.5	2.8	2.9
Manganese	T	mg/L	4	100	HH Soil (HQ=1)	3200	0			0.039	0.067	0.054	0.056
Mercury	T	mg/L	4	0	HH Soil (HQ=1)	23	0	0.01	0.01	ND	ND		
Molybdenum	T	mg/L	4	0	HH Soil (HQ=1)	390	0	0.00	0.00	ND	ND		

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"HH Soil (HQ=1)" EPA Region 6 RBSLs Human Health Residential Soil (HQ=1)
"Eco Soil" EPA Region 6 Tier 1-3 RBSLs Ecological Soil
Median Value determined using 1/2 the Reporting Limit value for Non-Detects if greater than 50% of the values were detected.
Mean Value calculated using 1/2 the Reporting Limit for Non-Detects if greater than 50% of the values were detected.

T = Total Fraction
D = Filtered Fraction (0.45 micron filter)
A = Filtered Fraction (0.1 micron filter)
ND = Non-Detected Value

Table 7-72

Soil 0-2 inches SPLP Biased

RI/FS Soil Area 15 - Soil Potentially Affected by Windblown Particulate

Summary of Results

Analyte	Sample Fraction	Units	Total Number of Samples	Percent Detects (%)	SLC	SLC Value	Percent Above SLC	Min RL for ND	Max RL for ND	Min Value	Max Value	Mean Value	Median Value
Nickel	T	mg/L	4	75	HH Soil (HQ=1)	1600	0	0.00	0.00	ND	0.0072	0.0048	0.0052
Potassium	T	mg/L	4	100	No SLC					1.3	10.7	5	4
Selenium	T	mg/L	4	0	HH Soil (HQ=1)	390	0	0.00	0.00	ND	ND		
Silver	T	mg/L	4	0	HH Soil (HQ=1)	390	0	0.00	0.00	ND	ND		
Thallium	T	mg/L	4	0	HH Soil (HQ=1)	5.5	0	0.00	0.00	ND	ND		
Vanadium	T	mg/L	4	100	HH Soil (HQ=1)	78	0			0.011	0.033	0.018	0.014
Zinc	T	mg/L	4	0	HH Soil (HQ=1)	23000	0	0.01	0.05	ND	ND		

"No SLC" indicates that there is not a Screening Level Criterion for this medium specified for the RI/FS.
"HH Soil (HQ=1)" EPA Region 6 RBSLs Human Health Residential Soil (HQ=1)
"Eco Soil" EPA Region 6 Tier 1-3 RBSLs Ecological Soil
Median Value determined using 1/2 the Reporting Limit value for Non-Detects if greater than 50% of the values were detected.
Mean Value calculated using 1/2 the Reporting Limit for Non-Detects if greater than 50% of the values were detected.

T = Total Fraction
D = Filtered Fraction (0.45 micron filter)
A = Filtered Fraction (0.1 micron filter)
ND = Non-Detected Value

Table 7-73

Soil 2-6 inches SPLP Biased

RI/FS Soil Area 15 - Soil Potentially Affected by Windblown Particulate

Summary of Results

Analyte	Sample Fraction	Units	Total Number of Samples	Percent Detects (%)	SLC	SLC Value	Percent Above SLC	Min RL for ND	Max RL for ND	Min Value	Max Value	Mean Value	Median Value
Inorganics													
Bicarbonate (as CaCO3)	T	mg/L	4	75	No SLC			1.00	1.00	ND	76.7	27.6	16.6
Carbonate (as CaCO3)	T	mg/L	4	50	No SLC			1.00	1.00	ND	48.2	16.2	8.1
Chloride	T	mg/L	4	50	No SLC			1.80	8.70	ND	2.2	2.2	1.8
Cyanide	T	mg/L	4	0	HH Soil (HQ=1)	1200	0	0.01	0.01	ND	ND		
Fluoride	T	mg/L	2	100	HH Soil (HQ=1)	3700	0			0.15	0.22	0.19	0.19
Hydroxide (as CaCO3)	T	mg/L	4	0	No SLC			1.00	1.00	ND	ND		
Nitrate	T	mg/L	4	100	No SLC					0.41	0.79	0.53	0.46
Nitrite	T	mg/L	2	50	No SLC			0.01	0.01	ND	0.013	0.0078	0.0078
Phosphate, Ortho As P	T	mg/L	4	100	No SLC					0.054	1.6	0.51	0.2
Phosphorus	T	mg/L	4	100	No SLC					0.16	1.6	0.59	0.3
Sulfate	T	mg/L	4	75	No SLC			0.40	0.40	ND	2.6	0.96	0.52
Total Alkalinity	T	mg/L	4	75	No SLC			1.00	1.00	ND	125	43.6	24.4
Total Kjeldahl Nitrogen	T	mg/L	4	100	No SLC					0.28	0.81	0.59	0.63
Metals													
Aluminum	T	mg/L	4	100	HH Soil (HQ=1)	76000	0			7.4	48	20	12.2
Antimony	T	mg/L	4	0	HH Soil (HQ=1)	31	0	0.00	0.00	ND	ND		
Arsenic	T	mg/L	4	100	HH Soil (HQ=1)	0.39	0			0.001	0.0034	0.0021	0.002
Barium	T	mg/L	4	100	HH Soil (HQ=1)	5500	0			0.073	0.24	0.12	0.092
Beryllium	T	mg/L	4	100	HH Soil (HQ=1)	150	0			0.0003	0.0014	0.0006	0.00035
Boron	T	mg/L	4	50	HH Soil (HQ=1)	5500	0	0.19	0.23	ND	0.079	0.086	0.086
Cadmium	T	mg/L	4	0	HH Soil (HQ=1)	39	0	0.00	0.00	ND	ND		
Calcium	T	mg/L	4	100	No SLC					4.4	35	14.7	9.7
Chromium	T	mg/L	4	100	HH Soil (HQ=1)	210	0			0.0045	0.03	0.012	0.007
Cobalt	T	mg/L	4	25	HH Soil (HQ=1)	900	0	0.00	0.00	ND	0.0061		
Copper	T	mg/L	4	50	HH Soil (HQ=1)	2900	0	0.01	0.01	ND	0.012	0.0047	0.0032
Iron	T	mg/L	4	100	HH Soil (HQ=1)	23000	0			4.1	30.2	12.1	7
Lead	T	mg/L	4	100	HH Soil (HQ=1)	400	0			0.0025	0.011	0.0057	0.0044
Magnesium	T	mg/L	4	100	No SLC					2.5	7.2	3.8	2.7
Manganese	T	mg/L	4	100	HH Soil (HQ=1)	3200	0			0.047	0.16	0.081	0.06
Mercury	T	mg/L	4	0	HH Soil (HQ=1)	23	0	0.01	0.01	ND	ND		
Molybdenum	T	mg/L	4	0	HH Soil (HQ=1)	390	0	0.00	0.00	ND	ND		

"No SLC" indicates that there is not a Screening Level Criterion for this medium specified for the RI/FS.
"HH Soil (HQ=1)" EPA Region 6 RBSLs Human Health Residential Soil (HQ=1)
"Eco Soil" EPA Region 6 Tier 1-3 RBSLs Ecological Soil
Median Value determined using 1/2 the Reporting Limit value for Non-Detects if greater than 50% of the values were detected.
Mean Value calculated using 1/2 the Reporting Limit for Non-Detects if greater than 50% of the values were detected.

T = Total Fraction
D = Filtered Fraction (0.45 micron filter)
A = Filtered Fraction (0.1 micron filter)
ND = Non-Detected Value

Table 7-73

Soil 2-6 inches SPLP Biased

RI/FS Soil Area 15 - Soil Potentially Affected by Windblown Particulate

Summary of Results

Analyte	Sample Fraction	Units	Total Number of Samples	Percent Detects (%)	SLC	SLC Value	Percent Above SLC	Min RL for ND	Max RL for ND	Min Value	Max Value	Mean Value	Median Value
Nickel	T	mg/L	4	75	HH Soil (HQ=1)	1600	0	0.00	0.00	ND	0.015	0.007	0.0058
Potassium	T	mg/L	4	100	No SLC					2	10	5.7	5.5
Selenium	T	mg/L	4	0	HH Soil (HQ=1)	390	0	0.00	0.00	ND	ND		
Silver	T	mg/L	4	0	HH Soil (HQ=1)	390	0	0.00	0.00	ND	ND		
Thallium	T	mg/L	4	25	HH Soil (HQ=1)	5.5	0	0.00	0.00	ND	0.0003		
Vanadium	T	mg/L	4	100	HH Soil (HQ=1)	78	0			0.012	0.032	0.021	0.021
Zinc	T	mg/L	4	0	HH Soil (HQ=1)	23000	0	0.02	0.09	ND	ND		

"No SLC" indicates that there is not a Screening Level Criterion for this medium specified for the RI/FS.
"HH Soil (HQ=1)" EPA Region 6 RBSLs Human Health Residential Soil (HQ=1)
"Eco Soil" EPA Region 6 Tier 1-3 RBSLs Ecological Soil
Median Value determined using 1/2 the Reporting Limit value for Non-Detects if greater than 50% of the values were detected.
Mean Value calculated using 1/2 the Reporting Limit for Non-Detects if greater than 50% of the values were detected.

T = Total Fraction
D = Filtered Fraction (0.45 micron filter)
A = Filtered Fraction (0.1 micron filter)
ND = Non-Detected Value

Table 7-74
Soil 0-6 inches Random
RI/FS Reference Red River Riparian
Summary of Results

Analyte	Sample Fraction	Units	Total Number of Samples	Percent Detects (%)	SLC	SLC Value	Percent Above SLC	Min RL for ND	Max RL for ND	Min Value	Max Value	Mean Value	Median Value
Inorganics													
Cation-Exchange Capacity	T	meq/100g	16	100	No SLC					7.7	33.6	18.2	14
Chloride	T	mg/kg-dry	16	87.5	No SLC			2.30	2.40	ND	32.2	8.7	4.4
Fluoride	T	mg/kg-dry	15	100	HH Soil (HQ=1)	3700	0			0.18	0.81	0.32	0.29
Nitrate	T	mg/kg-dry	16	25	No SLC			1.30	2.90	ND	18.7		
Organic Soils	T	%	16	100	No SLC					1.4	9	4.5	3.3
pH	T	SU	16	100	No SLC					4	7.4	6	6.3
Phosphorus	T	mg/kg-dry	16	100	No SLC					432	1330	784	703
Sodium Absorption Ratio	T	ratio	16	87.5	No SLC			0.02	0.05	ND	0.89	0.2	0.17
Solids, Percent	T	%	16	100	No SLC					69.6	94.6	84.3	85
Specific Conductance	T	umhos/cm	16	100	No SLC					9.1	838	118	41.7
Sulfate	T	mg/kg-dry	16	100	No SLC					5	931	112	24.8
Total Kjeldahl Nitrogen	T	mg/kg-dry	16	100	No SLC					187	2030	818	434
Total Organic Carbon	T	mg/kg-dry	16	100	No SLC					1910	50200	19900	13500
Metals													
Aluminum	T	mg/kg-dry	16	100	HH Soil (HQ=1)	76000	0			5460	13000	8160	7920
Antimony	T	mg/kg-dry	16	6.3	HH Soil (HQ=1)	31	0	0.05	0.33	ND	0.05		
Arsenic	T	mg/kg-dry	16	100	HH Soil (HQ=1)	0.39	100			1.4	7.7	2.8	2.6
Barium	T	mg/kg-dry	16	100	HH Soil (HQ=1)	5500	0			45.6	608	143	98.6
Beryllium	T	mg/kg-dry	16	100	HH Soil (HQ=1)	150	0			0.19	1.5	0.66	0.56
Boron	T	mg/kg-dry	16	56.3	HH Soil (HQ=1)	5500	0	0.44	2.90	ND	13.1	3.5	1.9
Cadmium	T	mg/kg-dry	16	81.3	HH Soil (HQ=1)	39	0	0.03	0.03	ND	0.39	0.14	0.15
Calcium	T	mg/kg-dry	16	100	No SLC					1710	15500	4200	3040
Chromium	T	mg/kg-dry	16	100	HH Soil (HQ=1)	210	0			13.4	24.4	18.5	17.2
Cobalt	T	mg/kg-dry	16	100	HH Soil (HQ=1)	900	0			0.67	11.7	6.7	6.4
Copper	T	mg/kg-dry	16	100	HH Soil (HQ=1)	2900	0			9.4	91.6	25.6	15.2
Iron	T	mg/kg-dry	16	100	HH Soil (HQ=1)	23000	31.3			13200	37900	20500	19600
Lead	T	mg/kg-dry	16	100	HH Soil (HQ=1)	400	0			11.5	54.9	30.4	27.1
Magnesium	T	mg/kg-dry	16	100	No SLC					3230	6000	4260	4170
Manganese	T	mg/kg-dry	16	100	HH Soil (HQ=1)	3200	0			176	608	400	394
Mercury	T	mg/kg-dry	16	25	HH Soil (HQ=1)	23	0	0.02	0.02	ND	0.06		
Molybdenum	T	mg/kg-dry	16	68.8	HH Soil (HQ=1)	390	0	0.46	1.20	ND	19.9	4.3	1.3

"No SLC" indicates that there is not a Screening Level Criterion for this medium specified for the RI/FS.
"HH Soil (HQ=1)" EPA Region 6 RBSLs Human Health Residential Soil (HQ=1)
"Eco Soil" EPA Region 6 Tier 1-3 RBSLs Ecological Soil
Median Value determined using 1/2 the Reporting Limit value for Non-Detects if greater than 50% of the values were detected.
Mean Value calculated using 1/2 the Reporting Limit for Non-Detects if greater than 50% of the values were detected.

T = Total Fraction
D = Filtered Fraction (0.45 micron filter)
A = Filtered Fraction (0.1 micron filter)
ND = Non-Detected Value

Table 7-74
Soil 0-6 inches Random
RI/FS Reference Red River Riparian
Summary of Results

Analyte	Sample Fraction	Units	Total Number of Samples	Percent Detects (%)	SLC	SLC Value	Percent Above SLC	Min RL for ND	Max RL for ND	Min Value	Max Value	Mean Value	Median Value
Nickel	T	mg/kg-dry	16	100	HH Soil (HQ=1)	1600	0			2.3	19	13.9	14.4
Potassium	T	mg/kg-dry	16	100	No SLC					878	3810	1680	1520
Selenium	T	mg/kg-dry	16	50	HH Soil (HQ=1)	390	0	0.45	0.98	ND	2.8	0.78	0.52
Silver	T	mg/kg-dry	16	31.3	HH Soil (HQ=1)	390	0	0.11	0.61	ND	0.33		
Sodium	T	mg/kg-dry	16	31.3	No SLC			43.80	114.00	ND	948		
Thallium	T	mg/kg-dry	16	81.3	HH Soil (HQ=1)	5.5	0	0.08	0.11	ND	0.18	0.1	0.11
Vanadium	T	mg/kg-dry	16	100	HH Soil (HQ=1)	78	0			16	49.9	27.4	25.8
Zinc	T	mg/kg-dry	16	100	HH Soil (HQ=1)	23000	0			21.5	190	92.1	84.3

"No SLC" indicates that there is not a Screening Level Criterion for this medium specified for the RI/FS.
"HH Soil (HQ=1)" EPA Region 6 RBSLs Human Health Residential Soil (HQ=1)
"Eco Soil" EPA Region 6 Tier 1-3 RBSLs Ecological Soil
Median Value determined using 1/2 the Reporting Limit value for Non-Detects if greater than 50% of the values were detected.
Mean Value calculated using 1/2 the Reporting Limit for Non-Detects if greater than 50% of the values were detected.

T = Total Fraction
D = Filtered Fraction (0.45 micron filter)
A = Filtered Fraction (0.1 micron filter)
ND = Non-Detected Value

Table 7-75
Soil 0-24 inches Random
RI/FS Reference Red River Riparian
Summary of Results

Analyte	Sample Fraction	Units	Total Number of Samples	Percent Detects (%)	SLC	SLC Value	Percent Above SLC	Min RL for ND	Max RL for ND	Min Value	Max Value	Mean Value	Median Value
Inorganics													
Cation-Exchange Capacity	T	meq/100g	16	100	No SLC					5.7	30.3	14.3	12.7
Chloride	T	mg/kg-dry	16	93.8	No SLC			2.20	2.20	ND	17.8	7.1	5.8
Fluoride	T	mg/kg-dry	16	100	No SLC					0.17	0.45	0.29	0.28
Nitrate	T	mg/kg-dry	16	18.8	No SLC			1.30	3.10	ND	4		
Organic Soils	T	%	16	100	No SLC					1.3	6.9	3.3	2.7
pH	T	SU	16	100	No SLC					4.6	7.6	6.4	6.5
Phosphorus	T	mg/kg-dry	16	100	No SLC					428	1060	737	726
Sodium Absorption Ratio	T	ratio	16	87.5	No SLC			0.07	0.12	ND	0.73	0.22	0.18
Solids, Percent	T	%	16	100	No SLC					64.8	95.2	83.8	85.4
Specific Conductance	T	umhos/cm	16	100	No SLC					9.6	723	94.3	33.6
Sulfate	T	mg/kg-dry	16	100	No SLC					7.1	595	87.5	39.2
Total Kjeldahl Nitrogen	T	mg/kg-dry	16	100	No SLC					145	1700	650	449
Total Organic Carbon	T	mg/kg-dry	16	100	No SLC					1380	36200	11800	8120
Metals													
Aluminum	T	mg/kg-dry	16	100	No SLC					5550	13000	7910	7590
Antimony	T	mg/kg-dry	16	0	ECO Soil	0.3	0	0.05	0.36	ND	ND		
Arsenic	T	mg/kg-dry	16	100	ECO Soil	31	0			1.2	5.7	2.7	2.6
Barium	T	mg/kg-dry	16	100	ECO Soil	330	0			39.5	266	105	82.6
Beryllium	T	mg/kg-dry	16	100	ECO Soil	30	0			0.4	1.3	0.64	0.55
Boron	T	mg/kg-dry	16	37.5	ECO Soil	0.5	100	0.40	2.80	ND	12.9		
Cadmium	T	mg/kg-dry	16	68.8	ECO Soil	0.4	0	0.03	0.03	ND	0.34	0.12	0.072
Calcium	T	mg/kg-dry	16	100	No SLC					1720	6490	2920	2540
Chromium	T	mg/kg-dry	16	100	ECO Soil	7.9	100			11.5	26.4	18.4	19.1
Cobalt	T	mg/kg-dry	16	100	ECO Soil	32	0			4.2	10	6.9	6.9
Copper	T	mg/kg-dry	16	100	ECO Soil	54	25			9.1	84	30	15.5
Iron	T	mg/kg-dry	16	100	No SLC					13800	26900	19100	18200
Lead	T	mg/kg-dry	16	100	ECO Soil	15	93.8			11.7	54.7	28.9	24.1
Magnesium	T	mg/kg-dry	16	100	No SLC					2600	6450	4200	4030
Manganese	T	mg/kg-dry	16	100	ECO Soil	152	100			214	656	394	387
Mercury	T	mg/kg-dry	16	18.8	ECO Soil	0.1	0	0.02	0.02	ND	0.034		
Molybdenum	T	mg/kg-dry	16	68.8	ECO Soil	2	45.5	0.54	1.60	ND	11.3	3.5	1.1

"No SLC" indicates that there is not a Screening Level Criterion for this medium specified for the RI/FS.
"HH Soil (HQ=1)" EPA Region 6 RBSLs Human Health Residential Soil (HQ=1)
"Eco Soil" EPA Region 6 Tier 1-3 RBSLs Ecological Soil
Median Value determined using 1/2 the Reporting Limit value for Non-Detects if greater than 50% of the values were detected.
Mean Value calculated using 1/2 the Reporting Limit for Non-Detects if greater than 50% of the values were detected.

T = Total Fraction
D = Filtered Fraction (0.45 micron filter)
A = Filtered Fraction (0.1 micron filter)
ND = Non-Detected Value

Table 7-75
Soil 0-24 inches Random
RI/FS Reference Red River Riparian
Summary of Results

Analyte	Sample Fraction	Units	Total Number of Samples	Percent Detects (%)	SLC	SLC Value	Percent Above SLC	Min RL for ND	Max RL for ND	Min Value	Max Value	Mean Value	Median Value
Nickel	T	mg/kg-dry	16	100	ECO Soil	48	0			10.1	17.5	14.3	14.7
Potassium	T	mg/kg-dry	16	100	No SLC					1050	2320	1440	1370
Selenium	T	mg/kg-dry	16	37.5	ECO Soil	1	50	0.23	0.89	ND	1.2		
Silver	T	mg/kg-dry	16	25	ECO Soil	2	0	0.12	0.56	ND	0.39		
Sodium	T	mg/kg-dry	16	25	No SLC			47.10	106.00	ND	162		
Thallium	T	mg/kg-dry	16	68.8	ECO Soil	1	0	0.08	0.12	ND	0.18	0.098	0.097
Vanadium	T	mg/kg-dry	16	100	ECO Soil	2	100			16.5	51.2	27.4	26.2
Zinc	T	mg/kg-dry	16	100	ECO Soil	120	12.5			57.2	164	90.9	78.3

"No SLC" indicates that there is not a Screening Level Criterion for this medium specified for the RI/FS.
"HH Soil (HQ=1)" EPA Region 6 RBSLs Human Health Residential Soil (HQ=1)
"Eco Soil" EPA Region 6 Tier 1-3 RBSLs Ecological Soil
Median Value determined using 1/2 the Reporting Limit value for Non-Detects if greater than 50% of the values were detected.
Mean Value calculated using 1/2 the Reporting Limit for Non-Detects if greater than 50% of the values were detected.

T = Total Fraction
D = Filtered Fraction (0.45 micron filter)
A = Filtered Fraction (0.1 micron filter)
ND = Non-Detected Value

Table 7-76
Soil 0-6 inches Non-Random
RI/FS Reference Red River Riparian
Summary of Results

Analyte	Sample Fraction	Units	Total Number of Samples	Percent Detects (%)	SLC	SLC Value	Percent Above SLC	Min RL for ND	Max RL for ND	Min Value	Max Value	Mean Value	Median Value
Inorganics													
Cation-Exchange Capacity	T	meq/100g	3	100	No SLC					11.7	26.6	20.3	22.6
Chloride	T	mg/kg-dry	3	100	No SLC					2.8	4	3.3	3.2
Fluoride	T	mg/kg-dry	3	33.3	HH Soil (HQ=1)	3700	0	0.12	0.23	ND	0.15		
Nitrate	T	mg/kg-dry	3	66.7	No SLC			2.30	2.30	ND	5.3	3.8	4.9
Organic Soils	T	%	3	100	No SLC					2.3	7.1	4.4	3.9
pH	T	SU	3	100	No SLC					7.2	8.1	7.6	7.4
Phosphorus	T	mg/kg-dry	3	100	No SLC					599	901	749	747
Sodium Absorption Ratio	T	ratio	3	100	No SLC					0.06	0.14	0.09	0.07
Solids, Percent	T	%	3	100	No SLC					85.4	89.6	88	89.1
Specific Conductance	T	umhos/cm	3	100	No SLC					60	104	75.4	62.2
Sulfate	T	mg/kg-dry	3	100	No SLC					4	19.2	12	12.9
Total Kjeldahl Nitrogen	T	mg/kg-dry	3	100	No SLC					224	987	494	271
Total Organic Carbon	T	mg/kg-dry	3	100	No SLC					8490	40000	21200	15100
Metals													
Aluminum	T	mg/kg-dry	3	100	HH Soil (HQ=1)	76000	0			8000	9110	8640	8800
Antimony	T	mg/kg-dry	3	0	HH Soil (HQ=1)	31	0	0.46	0.56	ND	ND		
Arsenic	T	mg/kg-dry	3	66.7	HH Soil (HQ=1)	0.39	100	2.60	2.60	ND	4.5	2.8	2.7
Barium	T	mg/kg-dry	3	100	HH Soil (HQ=1)	5500	0			53.7	289	134	60.3
Beryllium	T	mg/kg-dry	3	100	HH Soil (HQ=1)	150	0			0.54	0.67	0.62	0.64
Boron	T	mg/kg-dry	3	100	HH Soil (HQ=1)	5500	0			2.4	2.8	2.6	2.6
Cadmium	T	mg/kg-dry	3	0	HH Soil (HQ=1)	39	0	0.03	0.07	ND	ND		
Calcium	T	mg/kg-dry	3	100	No SLC					2970	3190	3060	3030
Chromium	T	mg/kg-dry	3	100	HH Soil (HQ=1)	210	0			15.1	21.5	18.1	17.6
Cobalt	T	mg/kg-dry	3	100	HH Soil (HQ=1)	900	0			6.8	8.5	7.6	7.5
Copper	T	mg/kg-dry	3	100	HH Soil (HQ=1)	2900	0			14.6	67.4	33.6	18.9
Iron	T	mg/kg-dry	3	100	HH Soil (HQ=1)	23000	0			15000	21500	17800	16900
Lead	T	mg/kg-dry	3	100	HH Soil (HQ=1)	400	0			13.5	75.1	39.4	29.6
Magnesium	T	mg/kg-dry	3	100	No SLC					4230	5120	4630	4550
Manganese	T	mg/kg-dry	3	100	HH Soil (HQ=1)	3200	0			288	470	389	409
Mercury	T	mg/kg-dry	3	66.7	HH Soil (HQ=1)	23	0	0.02	0.02	ND	0.026	0.018	0.02
Molybdenum	T	mg/kg-dry	3	33.3	HH Soil (HQ=1)	390	0	1.00	1.70	ND	18.7		

"No SLC" indicates that there is not a Screening Level Criterion for this medium specified for the RI/FS.
"HH Soil (HQ=1)" EPA Region 6 RBSLs Human Health Residential Soil (HQ=1)
"Eco Soil" EPA Region 6 Tier 1-3 RBSLs Ecological Soil
Median Value determined using 1/2 the Reporting Limit value for Non-Detects if greater than 50% of the values were detected.
Mean Value calculated using 1/2 the Reporting Limit for Non-Detects if greater than 50% of the values were detected.

T = Total Fraction
D = Filtered Fraction (0.45 micron filter)
A = Filtered Fraction (0.1 micron filter)
ND = Non-Detected Value

Table 7-76
Soil 0-6 inches Non-Random
RI/FS Reference Red River Riparian
Summary of Results

Analyte	Sample Fraction	Units	Total Number of Samples	Percent Detects (%)	SLC	SLC Value	Percent Above SLC	Min RL for ND	Max RL for ND	Min Value	Max Value	Mean Value	Median Value
Nickel	T	mg/kg-dry	3	100	HH Soil (HQ=1)	1600	0			12.9	20.8	16.7	16.4
Potassium	T	mg/kg-dry	3	100	No SLC					1360	2380	1960	2130
Selenium	T	mg/kg-dry	3	66.7	HH Soil (HQ=1)	390	0	0.34	0.34	ND	1.3	0.61	0.37
Silver	T	mg/kg-dry	3	33.3	HH Soil (HQ=1)	390	0	0.09	0.10	ND	0.44		
Sodium	T	mg/kg-dry	3	33.3	No SLC			256.00	315.00	ND	133		
Thallium	T	mg/kg-dry	3	33.3	HH Soil (HQ=1)	5.5	0	0.11	0.11	ND	0.14		
Vanadium	T	mg/kg-dry	3	100	HH Soil (HQ=1)	78	0			20.9	22.4	21.8	22
Zinc	T	mg/kg-dry	3	100	HH Soil (HQ=1)	23000	0			49.3	121	78.8	66.2

"No SLC" indicates that there is not a Screening Level Criterion for this medium specified for the RI/FS.
"HH Soil (HQ=1)" EPA Region 6 RBSLs Human Health Residential Soil (HQ=1)
"Eco Soil" EPA Region 6 Tier 1-3 RBSLs Ecological Soil
Median Value determined using 1/2 the Reporting Limit value for Non-Detects if greater than 50% of the values were detected.
Mean Value calculated using 1/2 the Reporting Limit for Non-Detects if greater than 50% of the values were detected.

T = Total Fraction
D = Filtered Fraction (0.45 micron filter)
A = Filtered Fraction (0.1 micron filter)
ND = Non-Detected Value

Table 7-77
Soil 0-24 inches Non-Random
RI/FS Reference Red River Riparian
Summary of Results

Analyte	Sample Fraction	Units	Total Number of Samples	Percent Detects (%)	SLC	SLC Value	Percent Above SLC	Min RL for ND	Max RL for ND	Min Value	Max Value	Mean Value	Median Value
Inorganics													
Cation-Exchange Capacity	T	meq/100g	3	100	No SLC					17.2	28	22.7	23
Chloride	T	mg/kg-dry	3	66.7	No SLC			2.20	2.20	ND	4.5	2.7	2.6
Fluoride	T	mg/kg-dry	3	66.7	No SLC			0.23	0.23	ND	0.26	0.2	0.23
Nitrate	T	mg/kg-dry	3	66.7	No SLC			2.20	2.20	ND	4.3	2.9	3.2
Organic Soils	T	%	3	100	No SLC					1.9	5.1	3.6	3.7
pH	T	SU	3	100	No SLC					7.4	8	7.7	7.7
Phosphorus	T	mg/kg-dry	3	100	No SLC					472	1170	849	904
Sodium Absorption Ratio	T	ratio	3	100	No SLC					0.04	0.11	0.07	0.06
Solids, Percent	T	%	3	100	No SLC					89.9	94.8	92	91.3
Specific Conductance	T	umhos/cm	3	100	No SLC					38.1	74.3	52.7	45.7
Sulfate	T	mg/kg-dry	3	100	No SLC					2.7	23.2	9.9	3.8
Total Kjeldahl Nitrogen	T	mg/kg-dry	3	100	No SLC					138	836	437	337
Total Organic Carbon	T	mg/kg-dry	3	100	No SLC					6830	14700	11300	12300
Metals													
Aluminum	T	mg/kg-dry	3	100	No SLC					7650	10700	9170	9170
Antimony	T	mg/kg-dry	3	0	ECO Soil	0.3	0	0.41	0.55	ND	ND		
Arsenic	T	mg/kg-dry	3	66.7	ECO Soil	31	0	1.90	1.90	ND	5.1	3	3.1
Barium	T	mg/kg-dry	3	100	ECO Soil	330	33.3			34.5	363	152	59.6
Beryllium	T	mg/kg-dry	3	100	ECO Soil	30	0			0.5	0.75	0.62	0.62
Boron	T	mg/kg-dry	3	100	ECO Soil	0.5	100			2.1	2.9	2.5	2.4
Cadmium	T	mg/kg-dry	3	33.3	ECO Soil	0.4	0	0.03	0.07	ND	0.054		
Calcium	T	mg/kg-dry	3	100	No SLC					2220	3210	2710	2690
Chromium	T	mg/kg-dry	3	100	ECO Soil	7.9	100			13.4	18.7	16.2	16.6
Cobalt	T	mg/kg-dry	3	100	ECO Soil	32	0			6	9	7.9	8.6
Copper	T	mg/kg-dry	3	100	ECO Soil	54	33.3			11.9	71	34.5	20.7
Iron	T	mg/kg-dry	3	100	No SLC					15100	23100	18600	17600
Lead	T	mg/kg-dry	3	100	ECO Soil	15	100			17.5	76.7	41.8	31.2
Magnesium	T	mg/kg-dry	3	100	No SLC					4310	4880	4600	4600
Manganese	T	mg/kg-dry	3	100	ECO Soil	152	100			316	512	412	409
Mercury	T	mg/kg-dry	3	33.3	ECO Soil	0.1	0	0.02	0.02	ND	0.019		
Molybdenum	T	mg/kg-dry	3	66.7	ECO Soil	2	50	0.95	0.95	ND	15.9	6.1	1.8

"No SLC" indicates that there is not a Screening Level Criterion for this medium specified for the RI/FS.
"HH Soil (HQ=1)" EPA Region 6 RBSLs Human Health Residential Soil (HQ=1)
"Eco Soil" EPA Region 6 Tier 1-3 RBSLs Ecological Soil
Median Value determined using 1/2 the Reporting Limit value for Non-Detects if greater than 50% of the values were detected.
Mean Value calculated using 1/2 the Reporting Limit for Non-Detects if greater than 50% of the values were detected.

T = Total Fraction
D = Filtered Fraction (0.45 micron filter)
A = Filtered Fraction (0.1 micron filter)
ND = Non-Detected Value

Table 7-77
Soil 0-24 inches Non-Random
RI/FS Reference Red River Riparian
Summary of Results

Analyte	Sample Fraction	Units	Total Number of Samples	Percent Detects (%)	SLC	SLC Value	Percent Above SLC	Min RL for ND	Max RL for ND	Min Value	Max Value	Mean Value	Median Value
Nickel	T	mg/kg-dry	3	100	ECO Soil	48	0			10.7	18.6	15.1	16
Potassium	T	mg/kg-dry	3	100	No SLC					1550	2340	2040	2220
Selenium	T	mg/kg-dry	3	33.3	ECO Soil	1	0	0.32	0.33	ND	0.97		
Silver	T	mg/kg-dry	3	66.7	ECO Soil	2	0	0.09	0.09	ND	0.55	0.25	0.14
Sodium	T	mg/kg-dry	3	66.7	No SLC			221.00	221.00	ND	330	197	150
Thallium	T	mg/kg-dry	3	66.7	ECO Soil	1	0	0.11	0.11	ND	0.15	0.11	0.13
Vanadium	T	mg/kg-dry	3	100	ECO Soil	2	100			17.5	24.5	21.3	22
Zinc	T	mg/kg-dry	3	100	ECO Soil	120	0			49.2	105	73	64.8

"No SLC" indicates that there is not a Screening Level Criterion for this medium specified for the RI/FS.
"HH Soil (HQ=1)" EPA Region 6 RBSLs Human Health Residential Soil (HQ=1)
"Eco Soil" EPA Region 6 Tier 1-3 RBSLs Ecological Soil
Median Value determined using 1/2 the Reporting Limit value for Non-Detects if greater than 50% of the values were detected.
Mean Value calculated using 1/2 the Reporting Limit for Non-Detects if greater than 50% of the values were detected.

T = Total Fraction
D = Filtered Fraction (0.45 micron filter)
A = Filtered Fraction (0.1 micron filter)
ND = Non-Detected Value

Table 7-78
Soil 0-24 inches SPLP Random
RI/FS Reference Red River Riparian
Summary of Results

Analyte	Sample Fraction	Units	Total Number of Samples	Percent Detects (%)	SLC	SLC Value	Percent Above SLC	Min RL for ND	Max RL for ND	Min Value	Max Value	Mean Value	Median Value
Inorganics													
Bicarbonate (as CaCO3)	T	mg/L	4	100	No SLC					5	23.4	12.3	10.3
Carbonate (as CaCO3)	T	mg/L	4	50	No SLC			1.00	1.00	ND	8.1	3.9	3.4
Chloride	T	mg/L	4	75	No SLC			5.00	5.00	ND	296	78.9	9.2
Cyanide	T	mg/L	4	0	No SLC			0.01	0.01	ND	ND		
Fluoride	T	mg/L	4	100	No SLC					0.11	0.46	0.24	0.2
Hydroxide (as CaCO3)	T	mg/L	4	0	No SLC			1.00	1.00	ND	ND		
Nitrate	T	mg/L	4	25	No SLC			0.20	0.50	ND	1.2		
Nitrite	T	mg/L	4	25	No SLC			0.01	0.01	ND	0.074		
Phosphate, Ortho As P	T	mg/L	4	75	No SLC			0.01	0.01	ND	0.03	0.023	0.028
Phosphorus	T	mg/L	4	100	No SLC					0.051	0.31	0.15	0.11
Sulfate	T	mg/L	4	75	No SLC			5.00	5.00	ND	16.2	7	4.9
Total Alkalinity	T	mg/L	4	100	No SLC					5	31.5	14.3	10.3
Total Kjeldahl Nitrogen	T	mg/L	4	25	No SLC			0.24	0.24	ND	0.32		
Metals													
Aluminum	T	mg/L	4	100	No SLC					0.52	7.3	2.9	1.9
Antimony	T	mg/L	4	0	ECO Soil	0.3	0	0.00	0.00	ND	ND		
Arsenic	T	mg/L	4	75	ECO Soil	31	0	0.00	0.00	ND	0.00077	0.00056	0.00064
Barium	T	mg/L	4	100	ECO Soil	330	0			0.026	0.81	0.24	0.064
Beryllium	T	mg/L	4	25	ECO Soil	30	0	0.00	0.00	ND	0.00023		
Boron	T	mg/L	4	50	ECO Soil	0.5	0	0.12	0.16	ND	0.029	0.047	0.043
Cadmium	T	mg/L	4	0	ECO Soil	0.4	0	0.00	0.00	ND	ND		
Calcium	T	mg/L	4	100	No SLC					2.1	14.6	8.1	7.8
Chromium	T	mg/L	4	50	ECO Soil	7.9	0	0.00	0.00	ND	0.0079	0.0042	0.0035
Cobalt	T	mg/L	4	0	ECO Soil	32	0	0.00	0.00	ND	ND		
Copper	T	mg/L	4	50	ECO Soil	54	0	0.00	0.00	ND	0.0062	0.0031	0.0029
Iron	T	mg/L	4	100	No SLC					0.56	4.3	1.9	1.4
Lead	T	mg/L	4	100	ECO Soil	15	0			0.00099	0.0043	0.0021	0.0016
Magnesium	T	mg/L	4	100	No SLC					0.55	4	2	1.6
Manganese	T	mg/L	4	100	ECO Soil	152	0			0.014	0.046	0.032	0.034
Mercury	T	mg/L	4	0	ECO Soil	0.1	0	0.01	0.01	ND	ND		
Molybdenum	T	mg/L	4	75	ECO Soil	2	0	0.00	0.00	ND	0.0013	0.00077	0.00079

"No SLC" indicates that there is not a Screening Level Criterion for this medium specified for the RI/FS.
"HH Soil (HQ=1)" EPA Region 6 RBSLs Human Health Residential Soil (HQ=1)
"Eco Soil" EPA Region 6 Tier 1-3 RBSLs Ecological Soil
Median Value determined using 1/2 the Reporting Limit value for Non-Detects if greater than 50% of the values were detected.
Mean Value calculated using 1/2 the Reporting Limit for Non-Detects if greater than 50% of the values were detected.

T = Total Fraction
D = Filtered Fraction (0.45 micron filter)
A = Filtered Fraction (0.1 micron filter)
ND = Non-Detected Value

Table 7-78
Soil 0-24 inches SPLP Random
RI/FS Reference Red River Riparian
Summary of Results

Analyte	Sample Fraction	Units	Total Number of Samples	Percent Detects (%)	SLC	SLC Value	Percent Above SLC	Min RL for ND	Max RL for ND	Min Value	Max Value	Mean Value	Median Value
Nickel	T	mg/L	4	50	ECO Soil	48	0	0.00	0.00	ND	0.001	0.00048	0.00042
Potassium	T	mg/L	4	100	No SLC					0.65	3.9	2.2	2.2
Selenium	T	mg/L	4	0	ECO Soil	1	0	0.00	0.00	ND	ND		
Silver	T	mg/L	4	0	ECO Soil	2	0	0.00	0.00	ND	ND		
Sodium	T	mg/L	2	100	No SLC					2	5.1	3.5	3.5
Thallium	T	mg/L	4	0	ECO Soil	1	0	0.00	0.00	ND	ND		
Vanadium	T	mg/L	4	100	ECO Soil	2	0			0.00062	0.0079	0.0035	0.0027
Zinc	T	mg/L	4	100	ECO Soil	120	0			0.0091	0.14	0.046	0.016

"No SLC" indicates that there is not a Screening Level Criterion for this medium specified for the RI/FS.
"HH Soil (HQ=1)" EPA Region 6 RBSLs Human Health Residential Soil (HQ=1)
"Eco Soil" EPA Region 6 Tier 1-3 RBSLs Ecological Soil
Median Value determined using 1/2 the Reporting Limit value for Non-Detects if greater than 50% of the values were detected.
Mean Value calculated using 1/2 the Reporting Limit for Non-Detects if greater than 50% of the values were detected.

T = Total Fraction
D = Filtered Fraction (0.45 micron filter)
A = Filtered Fraction (0.1 micron filter)
ND = Non-Detected Value

Table 7-79
Soil 0-6 inches Non-Random
RI/FS Junebug Campground
Summary of Results

Analyte	Sample Fraction	Units	Total Number of Samples	Percent Detects (%)	SLC	SLC Value	Percent Above SLC	Min RL for ND	Max RL for ND	Min Value	Max Value	Mean Value	Median Value
Inorganics													
Cation-Exchange Capacity	T	meq/100g	5	100	No SLC					8.2	21.2	13.9	12.7
Chloride	T	mg/kg-dry	5	80	No SLC			2.20	2.20	ND	6.6	3.9	4
Fluoride	T	mg/kg-dry	5	100	HH Soil (HQ=1)	3700	0			0.13	0.39	0.25	0.22
Nitrate	T	mg/kg-dry	5	20	No SLC			2.20	2.50	ND	2.9		
Organic Soils	T	%	5	100	No SLC					2.3	8.7	4.5	3.7
pH	T	SU	5	100	No SLC					5	7.4	6.6	7.2
Phosphorus	T	mg/kg-dry	5	100	No SLC					105	2260	886	753
Sodium Absorption Ratio	T	ratio	5	100	No SLC					0.08	0.59	0.24	0.12
Solids, Percent	T	%	5	100	No SLC					80.3	95	90.3	91
Specific Conductance	T	umhos/cm	5	100	No SLC					34.4	109	73.5	77.4
Sulfate	T	mg/kg-dry	5	100	No SLC					4.8	61.9	20.5	7.6
Total Kjeldahl Nitrogen	T	mg/kg-dry	5	100	No SLC					290	883	680	700
Total Organic Carbon	T	mg/kg-dry	5	100	No SLC					11300	22400	16200	15400
Metals													
Aluminum	T	mg/kg-dry	5	100	HH Soil (HQ=1)	76000	0			8260	13900	10500	10600
Antimony	T	mg/kg-dry	5	0	HH Soil (HQ=1)	31	0	0.22	0.30	ND	ND		
Arsenic	T	mg/kg-dry	5	100	HH Soil (HQ=1)	0.39	100			3.1	10.4	4.8	3.2
Barium	T	mg/kg-dry	5	100	HH Soil (HQ=1)	5500	0			141	492	233	175
Beryllium	T	mg/kg-dry	5	100	HH Soil (HQ=1)	150	0			0.42	0.75	0.56	0.56
Boron	T	mg/kg-dry	5	20	HH Soil (HQ=1)	5500	0	0.94	1.80	ND	2		
Cadmium	T	mg/kg-dry	5	20	HH Soil (HQ=1)	39	0	0.03	0.04	ND	0.087		
Calcium	T	mg/kg-dry	5	100	No SLC					1540	3500	2880	3430
Chromium	T	mg/kg-dry	5	100	HH Soil (HQ=1)	210	0			21.4	42.1	27.2	24.4
Cobalt	T	mg/kg-dry	5	100	HH Soil (HQ=1)	900	0			1.8	10.1	7.8	9.4
Copper	T	mg/kg-dry	5	100	HH Soil (HQ=1)	2900	0			52.3	118	81.3	77.4
Iron	T	mg/kg-dry	5	100	HH Soil (HQ=1)	23000	80			21600	52500	30300	25500
Lead	T	mg/kg-dry	5	100	HH Soil (HQ=1)	400	0			41.1	274	92.9	49.7
Magnesium	T	mg/kg-dry	5	100	No SLC					4240	9210	5640	4910
Manganese	T	mg/kg-dry	5	100	HH Soil (HQ=1)	3200	0			392	594	487	519
Mercury	T	mg/kg-dry	5	0	HH Soil (HQ=1)	23	0	0.02	0.02	ND	ND		
Molybdenum	T	mg/kg-dry	5	100	HH Soil (HQ=1)	390	0			11.8	31.7	19.3	17.6

"No SLC" indicates that there is not a Screening Level Criterion for this medium specified for the RI/FS.
"HH Soil (HQ=1)" EPA Region 6 RBSLs Human Health Residential Soil (HQ=1)
"Eco Soil" EPA Region 6 Tier 1-3 RBSLs Ecological Soil
Median Value determined using 1/2 the Reporting Limit value for Non-Detects if greater than 50% of the values were detected.
Mean Value calculated using 1/2 the Reporting Limit for Non-Detects if greater than 50% of the values were detected.

T = Total Fraction
D = Filtered Fraction (0.45 micron filter)
A = Filtered Fraction (0.1 micron filter)
ND = Non-Detected Value

Table 7-79
Soil 0-6 inches Non-Random
RI/FS Junebug Campground
Summary of Results

Analyte	Sample Fraction	Units	Total Number of Samples	Percent Detects (%)	SLC	SLC Value	Percent Above SLC	Min RL for ND	Max RL for ND	Min Value	Max Value	Mean Value	Median Value
Nickel	T	mg/kg-dry	5	100	HH Soil (HQ=1)	1600	0			9.4	21.3	15.3	14.3
Potassium	T	mg/kg-dry	5	100	No SLC					1810	4520	2580	2110
Selenium	T	mg/kg-dry	5	80	HH Soil (HQ=1)	390	0	0.66	0.66	ND	3.2	1.3	1
Silver	T	mg/kg-dry	5	100	HH Soil (HQ=1)	390	0			0.23	1.8	0.63	0.34
Sodium	T	mg/kg-dry	5	20	No SLC			97.20	163.00	ND	568		
Thallium	T	mg/kg-dry	5	100	HH Soil (HQ=1)	5.5	0			0.14	0.29	0.19	0.17
Vanadium	T	mg/kg-dry	5	100	HH Soil (HQ=1)	78	0			30.8	37.7	34.2	34.7
Zinc	T	mg/kg-dry	5	100	HH Soil (HQ=1)	23000	0			66	143	106	114

"No SLC" indicates that there is not a Screening Level Criterion for this medium specified for the RI/FS.
"HH Soil (HQ=1)" EPA Region 6 RBSLs Human Health Residential Soil (HQ=1)
"Eco Soil" EPA Region 6 Tier 1-3 RBSLs Ecological Soil
Median Value determined using 1/2 the Reporting Limit value for Non-Detects if greater than 50% of the values were detected.
Mean Value calculated using 1/2 the Reporting Limit for Non-Detects if greater than 50% of the values were detected.

T = Total Fraction
D = Filtered Fraction (0.45 micron filter)
A = Filtered Fraction (0.1 micron filter)
ND = Non-Detected Value

Table 7-80
Soil 0-6 inches Non-Random
RI/FS Fawn Lake Campground
Summary of Results

Analyte	Sample Fraction	Units	Total Number of Samples	Percent Detects (%)	SLC	SLC Value	Percent Above SLC	Min RL for ND	Max RL for ND	Min Value	Max Value	Mean Value	Median Value
Inorganics													
Cation-Exchange Capacity	T	meq/100g	5	100	No SLC					14.1	17.5	16.3	16.7
Chloride	T	mg/kg-dry	5	100	No SLC					4.5	9.3	7.1	7.7
Fluoride	T	mg/kg-dry	5	100	HH Soil (HQ=1)	3700	0			0.18	0.38	0.25	0.23
Nitrate	T	mg/kg-dry	5	40	No SLC			2.20	2.40	ND	2.7		
Organic Soils	T	%	5	100	No SLC					5.2	11.6	8.1	7.5
pH	T	SU	5	100	No SLC					5.2	6.6	5.9	6
Phosphorus	T	mg/kg-dry	5	100	No SLC					599	697	652	653
Sodium Absorption Ratio	T	ratio	5	100	No SLC					0.13	0.19	0.15	0.14
Solids, Percent	T	%	5	100	No SLC					86.1	94	91	91.9
Specific Conductance	T	umhos/cm	5	100	No SLC					122	206	155	151
Sulfate	T	mg/kg-dry	5	100	No SLC					14.8	98.6	51.6	49.4
Total Kjeldahl Nitrogen	T	mg/kg-dry	5	100	No SLC					599	1430	981	1030
Total Organic Carbon	T	mg/kg-dry	5	100	No SLC					16900	79700	36300	32200
Metals													
Aluminum	T	mg/kg-dry	5	100	HH Soil (HQ=1)	76000	0			6710	9340	8170	8820
Antimony	T	mg/kg-dry	5	0	HH Soil (HQ=1)	31	0	0.25	0.53	ND	ND		
Arsenic	T	mg/kg-dry	5	100	HH Soil (HQ=1)	0.39	100			5.2	7.6	6.9	7.5
Barium	T	mg/kg-dry	5	100	HH Soil (HQ=1)	5500	0			147	336	273	302
Beryllium	T	mg/kg-dry	5	100	HH Soil (HQ=1)	150	0			0.55	0.87	0.66	0.65
Boron	T	mg/kg-dry	5	0	HH Soil (HQ=1)	5500	0	0.71	1.80	ND	ND		
Cadmium	T	mg/kg-dry	5	0	HH Soil (HQ=1)	39	0	0.03	0.04	ND	ND		
Calcium	T	mg/kg-dry	5	100	No SLC					2640	3960	3230	2890
Chromium	T	mg/kg-dry	5	100	HH Soil (HQ=1)	210	0			8.1	24.5	13.6	10.3
Cobalt	T	mg/kg-dry	5	100	HH Soil (HQ=1)	900	0			3.6	9.2	6.8	7.2
Copper	T	mg/kg-dry	5	100	HH Soil (HQ=1)	2900	0			18.1	33.2	26.4	26.9
Iron	T	mg/kg-dry	5	100	HH Soil (HQ=1)	23000	40			18200	31100	23200	20800
Lead	T	mg/kg-dry	5	100	HH Soil (HQ=1)	400	0			42.5	53.5	47	47.9
Magnesium	T	mg/kg-dry	5	100	No SLC					2150	4960	3250	2880
Manganese	T	mg/kg-dry	5	100	HH Soil (HQ=1)	3200	0			334	566	422	362
Mercury	T	mg/kg-dry	5	60	HH Soil (HQ=1)	23	0	0.02	0.02	ND	0.044	0.025	0.03
Molybdenum	T	mg/kg-dry	5	100	HH Soil (HQ=1)	390	0			13.7	42.9	26.9	28.3

"No SLC" indicates that there is not a Screening Level Criterion for this medium specified for the RI/FS.
"HH Soil (HQ=1)" EPA Region 6 RBSLs Human Health Residential Soil (HQ=1)
"Eco Soil" EPA Region 6 Tier 1-3 RBSLs Ecological Soil
Median Value determined using 1/2 the Reporting Limit value for Non-Detects if greater than 50% of the values were detected.
Mean Value calculated using 1/2 the Reporting Limit for Non-Detects if greater than 50% of the values were detected.

T = Total Fraction
D = Filtered Fraction (0.45 micron filter)
A = Filtered Fraction (0.1 micron filter)
ND = Non-Detected Value

Table 7-80
Soil 0-6 inches Non-Random
RI/FS Fawn Lake Campground
Summary of Results

Analyte	Sample Fraction	Units	Total Number of Samples	Percent Detects (%)	SLC	SLC Value	Percent Above SLC	Min RL for ND	Max RL for ND	Min Value	Max Value	Mean Value	Median Value
Nickel	T	mg/kg-dry	5	100	HH Soil (HQ=1)	1600	0			10.9	19.5	15.3	16.3
Potassium	T	mg/kg-dry	5	100	No SLC					2160	3380	2870	3000
Selenium	T	mg/kg-dry	5	80	HH Soil (HQ=1)	390	0	0.68	0.68	ND	1.2	0.82	0.8
Silver	T	mg/kg-dry	5	20	HH Soil (HQ=1)	390	0	0.13	0.15	ND	0.21		
Sodium	T	mg/kg-dry	5	0	No SLC			95.00	212.00	ND	ND		
Thallium	T	mg/kg-dry	5	100	HH Soil (HQ=1)	5.5	0			0.1	0.15	0.13	0.14
Vanadium	T	mg/kg-dry	5	100	HH Soil (HQ=1)	78	0			12.7	34.1	20.4	14.8
Zinc	T	mg/kg-dry	5	100	HH Soil (HQ=1)	23000	0			50.4	61.1	57.6	58.4

"No SLC" indicates that there is not a Screening Level Criterion for this medium specified for the RI/FS.
"HH Soil (HQ=1)" EPA Region 6 RBSLs Human Health Residential Soil (HQ=1)
"Eco Soil" EPA Region 6 Tier 1-3 RBSLs Ecological Soil
Median Value determined using 1/2 the Reporting Limit value for Non-Detects if greater than 50% of the values were detected.
Mean Value calculated using 1/2 the Reporting Limit for Non-Detects if greater than 50% of the values were detected.

T = Total Fraction
D = Filtered Fraction (0.45 micron filter)
A = Filtered Fraction (0.1 micron filter)
ND = Non-Detected Value

Table 7-81
Soil 0-6 inches Random
RI/FS Soil Area 9 - Red River Riparian along Mine Site
Summary of Results

Analyte	Sample Fraction	Units	Total Number of Samples	Percent Detects (%)	SLC	SLC Value	Percent Above SLC	Min RL for ND	Max RL for ND	Min Value	Max Value	Mean Value	Median Value
Explosives													
2,4,6-Trinitrotoluene	T	mg/kg-dry	1	0	No SLC			0.12	0.12	ND	ND		
2,6-Pyridinediamine,	T	mg/kg-dry	1	0	No SLC			0.12	0.12	ND	ND		
3,5-dinitro-N,N`-bis(2,4,6-trinitrophenyl)-Cyclotetramethylenetetranitramine	T	mg/kg-dry	1	0	No SLC			0.12	0.12	ND	ND		
Cyclotrimethylenetrinitramine	T	mg/kg-dry	1	0	No SLC			0.12	0.12	ND	ND		
Pentaerythritol tetranitrate	T	mg/kg-dry	1	0	No SLC			5.00	5.00	ND	ND		
Inorganics													
Cation-Exchange Capacity	T	meq/100g	10	100	No SLC					14.6	29.3	21.6	21.1
Chloride	T	mg/kg-dry	10	90	No SLC			2.30	2.30	ND	37.2	13	7.8
Fluoride	T	mg/kg-dry	10	100	HH Soil (HQ=1)	3700	0			0.27	1.8	0.67	0.49
Nitrate	T	mg/kg-dry	10	30	No SLC			2.30	3.20	ND	11.2		
Organic Soils	T	%	10	100	No SLC					3.3	9.4	5.5	5.4
pH	T	SU	10	100	No SLC					4.5	7.6	6.2	6.4
Phosphorus	T	mg/kg-dry	10	100	No SLC					510	1040	829	884
Sodium Absorption Ratio	T	ratio	10	100	No SLC					0.07	0.61	0.25	0.18
Solids, Percent	T	%	11	100	No SLC					62.9	92.5	82.7	90.1
Specific Conductance	T	umhos/cm	10	100	No SLC					20.1	1150	353	230
Sulfate	T	mg/kg-dry	10	100	No SLC					22.6	1110	390	231
Total Kjeldahl Nitrogen	T	mg/kg-dry	10	100	No SLC					369	1940	908	731
Total Organic Carbon	T	mg/kg-dry	10	100	No SLC					5470	36800	17800	13400
Metals													
Aluminum	T	mg/kg-dry	10	100	HH Soil (HQ=1)	76000	0			8020	12100	9160	8510
Antimony	T	mg/kg-dry	10	0	HH Soil (HQ=1)	31	0	0.18	0.34	ND	ND		
Arsenic	T	mg/kg-dry	10	100	HH Soil (HQ=1)	0.39	100			3.2	7.1	5.2	5
Barium	T	mg/kg-dry	10	100	HH Soil (HQ=1)	5500	0			187	698	441	446
Beryllium	T	mg/kg-dry	10	100	HH Soil (HQ=1)	150	0			0.54	2.1	1.1	0.77
Boron	T	mg/kg-dry	10	60	HH Soil (HQ=1)	5500	0	0.25	0.43	ND	8.4	2.9	3
Cadmium	T	mg/kg-dry	10	80	HH Soil (HQ=1)	39	0	0.02	0.03	ND	1.7	0.6	0.31
Calcium	T	mg/kg-dry	10	100	No SLC					1900	4530	2590	2390
Chromium	T	mg/kg-dry	10	100	HH Soil (HQ=1)	210	0			12.7	22.9	18.9	18.9
Cobalt	T	mg/kg-dry	10	100	HH Soil (HQ=1)	900	0			5.5	18	10.2	8.6

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"HH Soil (HQ=1)" EPA Region 6 RBSLs Human Health Residential Soil (HQ=1)
"Eco Soil" EPA Region 6 Tier 1-3 RBSLs Ecological Soil
Median Value determined using 1/2 the Reporting Limit value for Non-Detects if greater than 50% of the values were detected.
Mean Value calculated using 1/2 the Reporting Limit for Non-Detects if greater than 50% of the values were detected.

T = Total Fraction
D = Filtered Fraction (0.45 micron filter)
A = Filtered Fraction (0.1 micron filter)
ND = Non-Detected Value

Table 7-81
Soil 0-6 inches Random
RI/FS Soil Area 9 - Red River Riparian along Mine Site
Summary of Results

Analyte	Sample Fraction	Units	Total Number of Samples	Percent Detects (%)	SLC	SLC Value	Percent Above SLC	Min RL for ND	Max RL for ND	Min Value	Max Value	Mean Value	Median Value
Copper	T	mg/kg-dry	10	100	HH Soil (HQ=1)	2900	0			45.7	106	68.5	67.8
Iron	T	mg/kg-dry	10	100	HH Soil (HQ=1)	23000	70			17000	27900	24100	23900
Lead	T	mg/kg-dry	10	100	HH Soil (HQ=1)	400	0			44.8	80.2	60.2	58.6
Magnesium	T	mg/kg-dry	10	100	No SLC					2980	4930	3940	3920
Manganese	T	mg/kg-dry	10	100	HH Soil (HQ=1)	3200	0			322	1610	687	459
Mercury	T	mg/kg-dry	10	20	HH Soil (HQ=1)	23	0	0.02	0.03	ND	0.032		
Molybdenum	T	mg/kg-dry	10	100	HH Soil (HQ=1)	390	0			12.1	35.8	20.2	18.5
Nickel	T	mg/kg-dry	10	100	HH Soil (HQ=1)	1600	0			12.9	53.1	25.7	21.6
Potassium	T	mg/kg-dry	10	100	No SLC					1370	2630	2100	2100
Selenium	T	mg/kg-dry	10	100	HH Soil (HQ=1)	390	0			1	2.1	1.4	1.3
Silver	T	mg/kg-dry	10	80	HH Soil (HQ=1)	390	0	0.29	0.40	ND	0.43	0.29	0.29
Sodium	T	mg/kg-dry	10	40	No SLC			94.10	184.00	ND	163		
Thallium	T	mg/kg-dry	10	100	HH Soil (HQ=1)	5.5	0			0.14	0.2	0.17	0.17
Vanadium	T	mg/kg-dry	10	100	HH Soil (HQ=1)	78	0			16.5	30.7	24	24.1
Zinc	T	mg/kg-dry	10	100	HH Soil (HQ=1)	23000	0			73.4	497	192	144
Pesticides-PCBs													
Aroclor 1016	T	mg/kg-dry	2	0	No SLC			0.04	0.04	ND	ND		
Aroclor 1221	T	mg/kg-dry	2	0	No SLC			0.07	0.07	ND	ND		
Aroclor 1232	T	mg/kg-dry	2	0	No SLC			0.04	0.04	ND	ND		
Aroclor 1242	T	mg/kg-dry	2	0	No SLC			0.04	0.04	ND	ND		
Aroclor 1248	T	mg/kg-dry	2	0	HH Soil (HQ=1)	0.22	0	0.04	0.04	ND	ND		
Aroclor 1254	T	mg/kg-dry	2	0	HH Soil (HQ=1)	0.22	0	0.04	0.04	ND	ND		
Aroclor 1260	T	mg/kg-dry	2	0	HH Soil (HQ=1)	0.22	0	0.04	0.04	ND	ND		
Semi-Volatile Organics													
1,1`-Biphenyl	T	mg/kg-dry	2	0	HH Soil (HQ=1)	3000	0	0.37	0.37	ND	ND		
2,4,5-Trichlorophenol	T	mg/kg-dry	2	0	No SLC			0.92	0.92	ND	ND		
2,4,6-Trichlorophenol	T	mg/kg-dry	2	0	No SLC			0.37	0.37	ND	ND		
2,4-Dichlorophenol	T	mg/kg-dry	2	0	No SLC			0.37	0.37	ND	ND		
2,4-Dimethylphenol	T	mg/kg-dry	2	0	No SLC			0.37	0.37	ND	ND		
2,4-Dinitrophenol	T	mg/kg-dry	2	0	No SLC			0.92	0.92	ND	ND		
2,4-Dinitrotoluene	T	mg/kg-dry	2	0	No SLC			0.37	0.37	ND	ND		
2,6-Dinitrotoluene	T	mg/kg-dry	2	0	HH Soil (HQ=1)	61	0	0.37	0.37	ND	ND		

"No SLC" indicates that there is not a Screening Level Criterion for this medium specified for the RI/FS.
"HH Soil (HQ=1)" EPA Region 6 RBSLs Human Health Residential Soil (HQ=1)
"Eco Soil" EPA Region 6 Tier 1-3 RBSLs Ecological Soil
Median Value determined using 1/2 the Reporting Limit value for Non-Detects if greater than 50% of the values were detected.
Mean Value calculated using 1/2 the Reporting Limit for Non-Detects if greater than 50% of the values were detected.

T = Total Fraction
D = Filtered Fraction (0.45 micron filter)
A = Filtered Fraction (0.1 micron filter)
ND = Non-Detected Value

Table 7-81
Soil 0-6 inches Random
RI/FS Soil Area 9 - Red River Riparian along Mine Site
Summary of Results

Analyte	Sample Fraction	Units	Total Number of Samples	Percent Detects (%)	SLC	SLC Value	Percent Above SLC	Min RL for ND	Max RL for ND	Min Value	Max Value	Mean Value	Median Value
2-Chloronaphthalene	T	mg/kg-dry	2	0	No SLC			0.37	0.37	ND	ND		
2-Chlorophenol	T	mg/kg-dry	2	0	HH Soil (HQ=1)	64	0	0.37	0.37	ND	ND		
2-Methylnaphthalene	T	mg/kg-dry	2	0	No SLC			0.37	0.37	ND	ND		
2-Methylphenol	T	mg/kg-dry	2	0	No SLC			0.37	0.37	ND	ND		
2-Nitroaniline	T	mg/kg-dry	2	0	No SLC			0.92	0.92	ND	ND		
2-Nitrophenol	T	mg/kg-dry	2	0	No SLC			0.37	0.37	ND	ND		
3,3-Dichlorobenzidine	T	mg/kg-dry	2	0	No SLC			0.37	0.37	ND	ND		
3-Nitroaniline	T	mg/kg-dry	2	0	No SLC			0.92	0.92	ND	ND		
4,6-Dinitro-2-methylphenol	T	mg/kg-dry	2	0	No SLC			0.92	0.92	ND	ND		
4-Bromophenyl phenyl ether	T	mg/kg-dry	2	0	No SLC			0.37	0.37	ND	ND		
4-Chloro-3-methylphenol	T	mg/kg-dry	2	0	No SLC			0.37	0.37	ND	ND		
4-Chloroaniline	T	mg/kg-dry	2	0	No SLC			0.37	0.37	ND	ND		
4-Chlorophenyl phenyl ether	T	mg/kg-dry	2	0	No SLC			0.37	0.37	ND	ND		
4-Methylphenol	T	mg/kg-dry	2	0	No SLC			0.37	0.37	ND	ND		
4-Nitroaniline	T	mg/kg-dry	2	0	No SLC			0.92	0.92	ND	ND		
4-Nitrophenol	T	mg/kg-dry	2	0	No SLC			0.92	0.92	ND	ND		
Acenaphthene	T	mg/kg-dry	2	0	HH Soil (HQ=1)	3700	0	0.37	0.37	ND	ND		
Acenaphthylene	T	mg/kg-dry	2	0	No SLC			0.37	0.37	ND	ND		
Anthracene	T	mg/kg-dry	2	0	HH Soil (HQ=1)	22000	0	0.37	0.37	ND	ND		
Benzo(a)anthracene	T	mg/kg-dry	2	0	HH Soil (HQ=1)	0.62	0	0.37	0.37	ND	ND		
Benzo(a)pyrene	T	mg/kg-dry	2	0	HH Soil (HQ=1)	0.062	0	0.37	0.37	ND	ND		
Benzo(b)fluoranthene	T	mg/kg-dry	2	0	HH Soil (HQ=1)	0.62	0	0.37	0.37	ND	ND		
Benzo(g,h,i)perylene	T	mg/kg-dry	2	0	No SLC			0.37	0.37	ND	ND		
Benzo(k)fluoranthene	T	mg/kg-dry	2	0	HH Soil (HQ=1)	6.2	0	0.37	0.37	ND	ND		
Bis(2-chloroethoxy)methane	T	mg/kg-dry	2	0	No SLC			0.37	0.37	ND	ND		
Bis(2-chloroethyl)ether	T	mg/kg-dry	2	0	No SLC			0.37	0.37	ND	ND		
Carbazole	T	mg/kg-dry	2	0	HH Soil (HQ=1)	24	0	0.37	0.37	ND	ND		
Chrysene	T	mg/kg-dry	2	0	HH Soil (HQ=1)	62	0	0.37	0.37	ND	ND		
Dibenz(a,h)anthracene	T	mg/kg-dry	2	0	HH Soil (HQ=1)	0.062	0	0.37	0.37	ND	ND		
Dibenzofuran	T	mg/kg-dry	2	0	HH Soil (HQ=1)	150	0	0.37	0.37	ND	ND		
Dichlorodiisopropyl ether	T	mg/kg-dry	2	0	No SLC			0.37	0.37	ND	ND		
Fluoranthene	T	mg/kg-dry	2	0	HH Soil (HQ=1)	2300	0	0.37	0.37	ND	ND		

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"HH Soil (HQ=1)" EPA Region 6 RBSLs Human Health Residential Soil (HQ=1)
"Eco Soil" EPA Region 6 Tier 1-3 RBSLs Ecological Soil
Median Value determined using 1/2 the Reporting Limit value for Non-Detects if greater than 50% of the values were detected.
Mean Value calculated using 1/2 the Reporting Limit for Non-Detects if greater than 50% of the values were detected.

T = Total Fraction
D = Filtered Fraction (0.45 micron filter)
A = Filtered Fraction (0.1 micron filter)
ND = Non-Detected Value

Table 7-81
Soil 0-6 inches Random
RI/FS Soil Area 9 - Red River Riparian along Mine Site
Summary of Results

Analyte	Sample Fraction	Units	Total Number of Samples	Percent Detects (%)	SLC	SLC Value	Percent Above SLC	Min RL for ND	Max RL for ND	Min Value	Max Value	Mean Value	Median Value
Fluorene	T	mg/kg-dry	2	0	HH Soil (HQ=1)	2600	0	0.37	0.37	ND	ND		
Hexachlorobenzene	T	mg/kg-dry	2	0	No SLC			0.37	0.37	ND	ND		
Hexachlorobutadiene	T	mg/kg-dry	2	0	No SLC			0.37	0.37	ND	ND		
Hexachlorocyclopentadiene	T	mg/kg-dry	2	0	No SLC			0.37	0.37	ND	ND		
Hexachloroethane	T	mg/kg-dry	2	0	No SLC			0.37	0.37	ND	ND		
Indeno(1,2,3-cd)pyrene	T	mg/kg-dry	2	0	HH Soil (HQ=1)	0.62	0	0.37	0.37	ND	ND		
Isophorone	T	mg/kg-dry	2	0	HH Soil (HQ=1)	510	0	0.37	0.37	ND	ND		
Naphthalene	T	mg/kg-dry	2	0	HH Soil (HQ=1)	120	0	0.37	0.37	ND	ND		
Nitrobenzene	T	mg/kg-dry	2	0	No SLC			0.37	0.37	ND	ND		
N-Nitrosodi-n-propylamine	T	mg/kg-dry	2	0	HH Soil (HQ=1)	0.07	0	0.37	0.37	ND	ND		
N-Nitrosodiphenylamine	T	mg/kg-dry	2	0	HH Soil (HQ=1)	99	0	0.37	0.37	ND	ND		
Pentachlorophenol	T	mg/kg-dry	2	0	No SLC			0.92	0.92	ND	ND		
Phenanthrene	T	mg/kg-dry	2	0	No SLC			0.37	0.37	ND	ND		
Phenol	T	mg/kg-dry	2	0	HH Soil (HQ=1)	18000	0	0.37	0.37	ND	ND		
Pyrene	T	mg/kg-dry	2	0	HH Soil (HQ=1)	2300	0	0.37	0.37	ND	ND		
Volatile Organics													
1,1,1-Trichloroethane	T	mg/kg-dry	2	0	HH Soil (HQ=1)	1400	0	0.01	0.01	ND	ND		
1,1,2,2-Tetrachloroethane	T	mg/kg-dry	2	0	No SLC			0.01	0.01	ND	ND		
1,1,2-Trichloro-1,2,2-trifluoroethane	T	mg/kg-dry	2	0	No SLC			0.01	0.01	ND	ND		
1,1,2-Trichloroethane	T	mg/kg-dry	2	0	No SLC			0.01	0.01	ND	ND		
1,1-Dichloroethane	T	mg/kg-dry	2	0	HH Soil (HQ=1)	590	0	0.01	0.01	ND	ND		
1,1-Dichloroethene	T	mg/kg-dry	2	0	HH Soil (HQ=1)	280	0	0.01	0.01	ND	ND		
1,2,4-Trichlorobenzene	T	mg/kg-dry	2	0	No SLC			0.01	0.01	ND	ND		
1,2-Dibromo-3-chloropropane	T	mg/kg-dry	2	0	No SLC			0.01	0.01	ND	ND		
1,2-Dichlorobenzene	T	mg/kg-dry	2	0	No SLC			0.01	0.01	ND	ND		
1,2-Dichloroethane	T	mg/kg-dry	2	0	No SLC			0.01	0.01	ND	ND		
1,2-Dichloroethene (total)	T	mg/kg-dry	2	0	No SLC			0.01	0.01	ND	ND		
1,2-Dichloropropane	T	mg/kg-dry	2	0	No SLC			0.01	0.01	ND	ND		
1,3-Dichlorobenzene	T	mg/kg-dry	2	0	No SLC			0.01	0.01	ND	ND		
1,4-Dichlorobenzene	T	mg/kg-dry	2	0	No SLC			0.01	0.01	ND	ND		
2-Butanone	T	mg/kg-dry	2	0	HH Soil (HQ=1)	32000	0	0.01	0.01	ND	ND		
2-Hexanone	T	mg/kg-dry	2	0	No SLC			0.01	0.01	ND	ND		

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"HH Soil (HQ=1)" EPA Region 6 RBSLs Human Health Residential Soil (HQ=1)
"Eco Soil" EPA Region 6 Tier 1-3 RBSLs Ecological Soil
Median Value determined using 1/2 the Reporting Limit value for Non-Detects if greater than 50% of the values were detected.
Mean Value calculated using 1/2 the Reporting Limit for Non-Detects if greater than 50% of the values were detected.

T = Total Fraction
D = Filtered Fraction (0.45 micron filter)
A = Filtered Fraction (0.1 micron filter)
ND = Non-Detected Value

Table 7-81
Soil 0-6 inches Random
RI/FS Soil Area 9 - Red River Riparian along Mine Site
Summary of Results

Analyte	Sample Fraction	Units	Total Number of Samples	Percent Detects (%)	SLC	SLC Value	Percent Above SLC	Min RL for ND	Max RL for ND	Min Value	Max Value	Mean Value	Median Value
4-Methyl-2-pentanone	T	mg/kg-dry	2	0	HH Soil (HQ=1)	5800	0	0.01	0.01	ND	ND		
Benzene	T	mg/kg-dry	2	0	HH Soil (HQ=1)	0.66	0	0.01	0.01	ND	ND		
Bromodichloromethane	T	mg/kg-dry	2	0	No SLC			0.01	0.01	ND	ND		
Bromoform	T	mg/kg-dry	2	0	No SLC			0.01	0.01	ND	ND		
Bromomethane	T	mg/kg-dry	2	0	No SLC			0.01	0.01	ND	ND		
Carbon tetrachloride	T	mg/kg-dry	2	0	HH Soil (HQ=1)	0.24	0	0.01	0.01	ND	ND		
Chlorobenzene	T	mg/kg-dry	2	0	HH Soil (HQ=1)	320	0	0.01	0.01	ND	ND		
Chloroethane	T	mg/kg-dry	2	0	No SLC			0.01	0.01	ND	ND		
Chloroform	T	mg/kg-dry	2	0	No SLC			0.01	0.01	ND	ND		
Chloromethane	T	mg/kg-dry	2	0	HH Soil (HQ=1)	1.2	0	0.01	0.01	ND	ND		
cis-1,2-Dichloroethene	T	mg/kg-dry	2	0	No SLC			0.01	0.01	ND	ND		
cis-1,3-Dichloropropene	T	mg/kg-dry	2	0	No SLC			0.01	0.01	ND	ND		
Dibromochloromethane	T	mg/kg-dry	2	0	No SLC			0.01	0.01	ND	ND		
Dichlorodifluoromethane	T	mg/kg-dry	2	0	HH Soil (HQ=1)	94	0	0.01	0.01	ND	ND		
Ethylbenzene	T	mg/kg-dry	2	0	HH Soil (HQ=1)	230	0	0.01	0.01	ND	ND		
Styrene	T	mg/kg-dry	2	0	HH Soil (HQ=1)	1700	0	0.01	0.01	ND	ND		
Tetrachloroethene	T	mg/kg-dry	2	0	HH Soil (HQ=1)	0.55	0	0.01	0.01	ND	ND		
Toluene	T	mg/kg-dry	2	0	HH Soil (HQ=1)	520	0	0.01	0.01	ND	ND		
Total Xylene	T	mg/kg-dry	2	0	HH Soil (HQ=1)	210	0	0.01	0.01	ND	ND		
trans-1,2-Dichloroethene	T	mg/kg-dry	2	0	No SLC			0.01	0.01	ND	ND		
trans-1,3-Dichloropropene	T	mg/kg-dry	2	0	No SLC			0.01	0.01	ND	ND		
Trichloroethene	T	mg/kg-dry	2	0	HH Soil (HQ=1)	0.043	0	0.01	0.01	ND	ND		
Trichlorofluoromethane	T	mg/kg-dry	2	0	HH Soil (HQ=1)	390	0	0.01	0.01	ND	ND		
Vinyl chloride	T	mg/kg-dry	2	0	No SLC			0.01	0.01	ND	ND		

"No SLC" indicates that there is not a Screening Level Criterion for this medium specified for the RI/FS.
"HH Soil (HQ=1)" EPA Region 6 RBSLs Human Health Residential Soil (HQ=1)
"Eco Soil" EPA Region 6 Tier 1-3 RBSLs Ecological Soil
Median Value determined using 1/2 the Reporting Limit value for Non-Detects if greater than 50% of the values were detected.
Mean Value calculated using 1/2 the Reporting Limit for Non-Detects if greater than 50% of the values were detected.

T = Total Fraction
D = Filtered Fraction (0.45 micron filter)
A = Filtered Fraction (0.1 micron filter)
ND = Non-Detected Value

Table 7-82

Soil 0-24 inches Random

RI/FS Soil Area 9 - Red River Riparian along Mine Site

Summary of Results

Analyte	Sample Fraction	Units	Total Number of Samples	Percent Detects (%)	SLC	SLC Value	Percent Above SLC	Min RL for ND	Max RL for ND	Min Value	Max Value	Mean Value	Median Value
Explosives													
2,4,6-Trinitrotoluene	T	mg/kg-dry	2	0	No SLC			0.12	0.12	ND	ND		
2,6-Pyridinediamine,	T	mg/kg-dry	2	0	No SLC			0.12	0.12	ND	ND		
3,5-dinitro-N,N`-bis(2,4,6-trinitrophenyl)-Cyclotetramethylenetetranitramine	T	mg/kg-dry	2	0	No SLC			0.12	0.12	ND	ND		
Cyclotrimethylenetrinitramine	T	mg/kg-dry	2	0	No SLC			0.12	0.12	ND	ND		
Pentaerythritol tetranitrate	T	mg/kg-dry	2	0	No SLC			5.00	5.00	ND	ND		
Inorganics													
Cation-Exchange Capacity	T	meq/100g	10	100	No SLC					9.4	36.6	16.9	14
Chloride	T	mg/kg-dry	10	100	No SLC					2.3	24.6	8.5	6
Fluoride	T	mg/kg-dry	10	100	No SLC					0.29	4.6	1	0.54
Nitrate	T	mg/kg-dry	10	10	No SLC			2.20	3.20	ND	6.7		
Organic Soils	T	%	10	100	No SLC					2.1	7.5	3.7	3.6
pH	T	SU	10	100	No SLC					4.4	7.4	6.2	6.5
Phosphorus	T	mg/kg-dry	10	100	No SLC					147	1270	651	626
Sodium Absorption Ratio	T	ratio	10	100	No SLC					0.1	0.4	0.19	0.16
Solids, Percent	T	%	11	100	No SLC					64.5	92.5	85.3	89.8
Specific Conductance	T	umhos/cm	10	100	No SLC					27.2	1340	242	116
Sulfate	T	mg/kg-dry	10	100	No SLC					30.1	1100	228	144
Total Kjeldahl Nitrogen	T	mg/kg-dry	10	100	No SLC					204	1400	588	439
Total Organic Carbon	T	mg/kg-dry	10	100	No SLC					5430	21500	10900	9700
Metals													
Aluminum	T	mg/kg-dry	10	100	No SLC					6060	10200	8050	8210
Antimony	T	mg/kg-dry	10	0	ECO Soil	0.3	0	0.18	0.37	ND	ND		
Arsenic	T	mg/kg-dry	10	100	ECO Soil	31	0			1.9	5.7	4	4.2
Barium	T	mg/kg-dry	10	100	ECO Soil	330	40			106	570	328	307
Beryllium	T	mg/kg-dry	10	100	ECO Soil	30	0			0.59	1.8	0.88	0.69
Boron	T	mg/kg-dry	10	50	ECO Soil	0.5	100	0.32	1.60	ND	5.6	2.2	2
Cadmium	T	mg/kg-dry	10	80	ECO Soil	0.4	50	0.03	0.03	ND	0.97	0.39	0.33
Calcium	T	mg/kg-dry	10	100	No SLC					1480	3160	2270	2190
Chromium	T	mg/kg-dry	10	100	ECO Soil	7.9	100			9.8	21.7	17.4	18.5
Cobalt	T	mg/kg-dry	10	100	ECO Soil	32	0			4.6	13.9	8.8	8.9

"No SLC" indicates that there is not a Screening Level Criterion for this medium specified for the RI/FS.
"HH Soil (HQ=1)" EPA Region 6 RBSLs Human Health Residential Soil (HQ=1)
"Eco Soil" EPA Region 6 Tier 1-3 RBSLs Ecological Soil
Median Value determined using 1/2 the Reporting Limit value for Non-Detects if greater than 50% of the values were detected.
Mean Value calculated using 1/2 the Reporting Limit for Non-Detects if greater than 50% of the values were detected.

T = Total Fraction
D = Filtered Fraction (0.45 micron filter)
A = Filtered Fraction (0.1 micron filter)
ND = Non-Detected Value

Table 7-82
Soil 0-24 inches Random
RI/FS Soil Area 9 - Red River Riparian along Mine Site
Summary of Results

Analyte	Sample Fraction	Units	Total Number of Samples	Percent Detects (%)	SLC	SLC Value	Percent Above SLC	Min RL for ND	Max RL for ND	Min Value	Max Value	Mean Value	Median Value
Copper	T	mg/kg-dry	10	100	ECO Soil	54	60			44.2	77.5	59.4	58.9
Iron	T	mg/kg-dry	10	100	No SLC					12300	26800	21100	21600
Lead	T	mg/kg-dry	10	100	ECO Soil	15	100			22.8	58.7	48.2	50.9
Magnesium	T	mg/kg-dry	10	100	No SLC					2540	4460	3740	3770
Manganese	T	mg/kg-dry	10	100	ECO Soil	152	100			296	964	554	509
Mercury	T	mg/kg-dry	10	20	ECO Soil	0.1	0	0.02	0.03	ND	0.022		
Molybdenum	T	mg/kg-dry	10	100	ECO Soil	2	100			9.8	54.6	25.3	20.6
Nickel	T	mg/kg-dry	10	100	ECO Soil	48	0			12.8	42.8	22.1	20.7
Potassium	T	mg/kg-dry	10	100	No SLC					993	2280	1820	1900
Selenium	T	mg/kg-dry	10	80	ECO Soil	1	87.5	0.69	0.79	ND	2.4	1.2	1.2
Silver	T	mg/kg-dry	10	80	ECO Soil	2	0	0.26	0.31	ND	0.83	0.29	0.25
Sodium	T	mg/kg-dry	10	40	No SLC			93.10	179.00	ND	136		
Thallium	T	mg/kg-dry	10	100	ECO Soil	1	0			0.11	0.2	0.15	0.16
Vanadium	T	mg/kg-dry	10	100	ECO Soil	2	100			11.8	29.1	22.7	24.3
Zinc	T	mg/kg-dry	10	100	ECO Soil	120	60			73	327	148	136
Pesticides-PCBs													
Aroclor 1016	T	mg/kg-dry	2	0	No SLC			0.04	0.04	ND	ND		
Aroclor 1221	T	mg/kg-dry	2	0	No SLC			0.07	0.07	ND	ND		
Aroclor 1232	T	mg/kg-dry	2	0	No SLC			0.04	0.04	ND	ND		
Aroclor 1242	T	mg/kg-dry	2	0	No SLC			0.04	0.04	ND	ND		
Aroclor 1248	T	mg/kg-dry	2	0	ECO Soil	10	0	0.04	0.04	ND	ND		
Aroclor 1254	T	mg/kg-dry	2	0	ECO Soil	10	0	0.04	0.04	ND	ND		
Aroclor 1260	T	mg/kg-dry	2	0	ECO Soil	10	0	0.04	0.04	ND	ND		
Semi-Volatile Organics													
1,1`-Biphenyl	T	mg/kg-dry	2	0	ECO Soil	60	0	0.37	0.37	ND	ND		
2,4,5-Trichlorophenol	T	mg/kg-dry	2	0	No SLC			0.92	0.92	ND	ND		
2,4,6-Trichlorophenol	T	mg/kg-dry	2	0	No SLC			0.37	0.37	ND	ND		
2,4-Dichlorophenol	T	mg/kg-dry	2	0	No SLC			0.37	0.37	ND	ND		
2,4-Dimethylphenol	T	mg/kg-dry	2	0	No SLC			0.37	0.37	ND	ND		
2,4-Dinitrophenol	T	mg/kg-dry	2	0	No SLC			0.92	0.92	ND	ND		
2,4-Dinitrotoluene	T	mg/kg-dry	2	0	No SLC			0.37	0.37	ND	ND		
2,6-Dinitrotoluene	T	mg/kg-dry	2	0	ECO Soil	0.033	0	0.37	0.37	ND	ND		

"No SLC" indicates that there is not a Screening Level Criterion for this medium specified for the RI/FS.
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"Eco Soil" EPA Region 6 Tier 1-3 RBSLs Ecological Soil
Median Value determined using 1/2 the Reporting Limit value for Non-Detects if greater than 50% of the values were detected.
Mean Value calculated using 1/2 the Reporting Limit for Non-Detects if greater than 50% of the values were detected.

T = Total Fraction
D = Filtered Fraction (0.45 micron filter)
A = Filtered Fraction (0.1 micron filter)
ND = Non-Detected Value

Table 7-82
Soil 0-24 inches Random
RI/FS Soil Area 9 - Red River Riparian along Mine Site
Summary of Results

Analyte	Sample Fraction	Units	Total Number of Samples	Percent Detects (%)	SLC	SLC Value	Percent Above SLC	Min RL for ND	Max RL for ND	Min Value	Max Value	Mean Value	Median Value
2-Chloronaphthalene	T	mg/kg-dry	2	0	No SLC			0.37	0.37	ND	ND		
2-Chlorophenol	T	mg/kg-dry	2	0	ECO Soil	20	0	0.37	0.37	ND	ND		
2-Methylnaphthalene	T	mg/kg-dry	2	0	ECO Soil	3.2	0	0.37	0.37	ND	ND		
2-Methylphenol	T	mg/kg-dry	2	0	No SLC			0.37	0.37	ND	ND		
2-Nitroaniline	T	mg/kg-dry	2	0	No SLC			0.92	0.92	ND	ND		
2-Nitrophenol	T	mg/kg-dry	2	0	No SLC			0.37	0.37	ND	ND		
3,3-Dichlorobenzidine	T	mg/kg-dry	2	0	No SLC			0.37	0.37	ND	ND		
3-Nitroaniline	T	mg/kg-dry	2	0	No SLC			0.92	0.92	ND	ND		
4,6-Dinitro-2-methylphenol	T	mg/kg-dry	2	0	No SLC			0.92	0.92	ND	ND		
4-Bromophenyl phenyl ether	T	mg/kg-dry	2	0	No SLC			0.37	0.37	ND	ND		
4-Chloro-3-methylphenol	T	mg/kg-dry	2	0	ECO Soil	8	0	0.37	0.37	ND	ND		
4-Chloroaniline	T	mg/kg-dry	2	0	No SLC			0.37	0.37	ND	ND		
4-Chlorophenyl phenyl ether	T	mg/kg-dry	2	0	No SLC			0.37	0.37	ND	ND		
4-Methylphenol	T	mg/kg-dry	2	0	No SLC			0.37	0.37	ND	ND		
4-Nitroaniline	T	mg/kg-dry	2	0	No SLC			0.92	0.92	ND	ND		
4-Nitrophenol	T	mg/kg-dry	2	0	No SLC			0.92	0.92	ND	ND		
Acenaphthene	T	mg/kg-dry	2	0	ECO Soil	20	0	0.37	0.37	ND	ND		
Acenaphthylene	T	mg/kg-dry	2	0	No SLC			0.37	0.37	ND	ND		
Anthracene	T	mg/kg-dry	2	0	ECO Soil	10	0	0.37	0.37	ND	ND		
Benzo(a)anthracene	T	mg/kg-dry	2	0	ECO Soil	5.2	0	0.37	0.37	ND	ND		
Benzo(a)pyrene	T	mg/kg-dry	2	0	ECO Soil	1	0	0.37	0.37	ND	ND		
Benzo(b)fluoranthene	T	mg/kg-dry	2	0	ECO Soil	59.8	0	0.37	0.37	ND	ND		
Benzo(g,h,i)perylene	T	mg/kg-dry	2	0	ECO Soil	119	0	0.37	0.37	ND	ND		
Benzo(k)fluoranthene	T	mg/kg-dry	2	0	ECO Soil	148	0	0.37	0.37	ND	ND		
Bis(2-chloroethoxy)methane	T	mg/kg-dry	2	0	No SLC			0.37	0.37	ND	ND		
Bis(2-chloroethyl)ether	T	mg/kg-dry	2	0	No SLC			0.37	0.37	ND	ND		
Carbazole	T	mg/kg-dry	2	0	No SLC			0.37	0.37	ND	ND		
Chrysene	T	mg/kg-dry	2	0	ECO Soil	4.7	0	0.37	0.37	ND	ND		
Dibenz(a,h)anthracene	T	mg/kg-dry	2	0	ECO Soil	18.4	0	0.37	0.37	ND	ND		
Dibenzofuran	T	mg/kg-dry	2	0	No SLC			0.37	0.37	ND	ND		
Dichlorodiisopropyl ether	T	mg/kg-dry	2	0	No SLC			0.37	0.37	ND	ND		
Fluoranthene	T	mg/kg-dry	2	0	ECO Soil	10	0	0.37	0.37	ND	ND		

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"Eco Soil" EPA Region 6 Tier 1-3 RBSLs Ecological Soil
Median Value determined using 1/2 the Reporting Limit value for Non-Detects if greater than 50% of the values were detected.
Mean Value calculated using 1/2 the Reporting Limit for Non-Detects if greater than 50% of the values were detected.

T = Total Fraction
D = Filtered Fraction (0.45 micron filter)
A = Filtered Fraction (0.1 micron filter)
ND = Non-Detected Value

Table 7-82
Soil 0-24 inches Random
RI/FS Soil Area 9 - Red River Riparian along Mine Site
Summary of Results

Analyte	Sample Fraction	Units	Total Number of Samples	Percent Detects (%)	SLC	SLC Value	Percent Above SLC	Min RL for ND	Max RL for ND	Min Value	Max Value	Mean Value	Median Value
Fluorene	T	mg/kg-dry	2	0	ECO Soil	30	0	0.37	0.37	ND	ND		
Hexachlorobenzene	T	mg/kg-dry	2	0	No SLC			0.37	0.37	ND	ND		
Hexachlorobutadiene	T	mg/kg-dry	2	0	No SLC			0.37	0.37	ND	ND		
Hexachlorocyclopentadiene	T	mg/kg-dry	2	0	No SLC			0.37	0.37	ND	ND		
Hexachloroethane	T	mg/kg-dry	2	0	No SLC			0.37	0.37	ND	ND		
Indeno(1,2,3-cd)pyrene	T	mg/kg-dry	2	0	ECO Soil	109	0	0.37	0.37	ND	ND		
Isophorone	T	mg/kg-dry	2	0	ECO Soil	139	0	0.37	0.37	ND	ND		
Naphthalene	T	mg/kg-dry	2	0	ECO Soil	5	0	0.37	0.37	ND	ND		
Nitrobenzene	T	mg/kg-dry	2	0	No SLC			0.37	0.37	ND	ND		
N-Nitrosodi-n-propylamine	T	mg/kg-dry	2	0	ECO Soil	0.54	0	0.37	0.37	ND	ND		
N-Nitrosodiphenylamine	T	mg/kg-dry	2	0	ECO Soil	20	0	0.37	0.37	ND	ND		
Pentachlorophenol	T	mg/kg-dry	2	0	No SLC			0.92	0.92	ND	ND		
Phenanthrene	T	mg/kg-dry	2	0	ECO Soil	5	0	0.37	0.37	ND	ND		
Phenol	T	mg/kg-dry	2	50	ECO Soil	30	0	0.37	0.37	ND	0.08	0.13	0.13
Pyrene	T	mg/kg-dry	2	0	ECO Soil	10	0	0.37	0.37	ND	ND		
Volatile Organics													
1,1,1-Trichloroethane	T	mg/kg-dry	2	0	ECO Soil	0.1	0	0.01	0.01	ND	ND		
1,1,2,2-Tetrachloroethane	T	mg/kg-dry	2	0	No SLC			0.01	0.01	ND	ND		
1,1,2-Trichloro-1,2,2-trifluoroethane	T	mg/kg-dry	2	0	No SLC			0.01	0.01	ND	ND		
1,1,2-Trichloroethane	T	mg/kg-dry	2	0	No SLC			0.01	0.01	ND	ND		
1,1-Dichloroethane	T	mg/kg-dry	2	0	ECO Soil	20.1	0	0.01	0.01	ND	ND		
1,1-Dichloroethene	T	mg/kg-dry	2	0	No SLC			0.01	0.01	ND	ND		
1,2,4-Trichlorobenzene	T	mg/kg-dry	2	0	No SLC			0.01	0.01	ND	ND		
1,2-Dibromo-3-chloropropane	T	mg/kg-dry	2	0	No SLC			0.01	0.01	ND	ND		
1,2-Dichlorobenzene	T	mg/kg-dry	2	0	No SLC			0.01	0.01	ND	ND		
1,2-Dichloroethane	T	mg/kg-dry	2	0	No SLC			0.01	0.01	ND	ND		
1,2-Dichloroethene (total)	T	mg/kg-dry	2	0	No SLC			0.01	0.01	ND	ND		
1,2-Dichloropropane	T	mg/kg-dry	2	0	No SLC			0.01	0.01	ND	ND		
1,3-Dichlorobenzene	T	mg/kg-dry	2	0	No SLC			0.01	0.01	ND	ND		
1,4-Dichlorobenzene	T	mg/kg-dry	2	0	No SLC			0.01	0.01	ND	ND		
2-Butanone	T	mg/kg-dry	2	0	ECO Soil	89.6	0	0.01	0.01	ND	ND		
2-Hexanone	T	mg/kg-dry	2	0	ECO Soil	12.6	0	0.01	0.01	ND	ND		

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"HH Soil (HQ=1)" EPA Region 6 RBSLs Human Health Residential Soil (HQ=1)
"Eco Soil" EPA Region 6 Tier 1-3 RBSLs Ecological Soil
Median Value determined using 1/2 the Reporting Limit value for Non-Detects if greater than 50% of the values were detected.
Mean Value calculated using 1/2 the Reporting Limit for Non-Detects if greater than 50% of the values were detected.

T = Total Fraction
D = Filtered Fraction (0.45 micron filter)
A = Filtered Fraction (0.1 micron filter)
ND = Non-Detected Value

Table 7-82

Soil 0-24 inches Random

RI/FS Soil Area 9 - Red River Riparian along Mine Site

Summary of Results

Analyte	Sample Fraction	Units	Total Number of Samples	Percent Detects (%)	SLC	SLC Value	Percent Above SLC	Min RL for ND	Max RL for ND	Min Value	Max Value	Mean Value	Median Value
4-Methyl-2-pentanone	T	mg/kg-dry	2	0	ECO Soil	443	0	0.01	0.01	ND	ND		
Benzene	T	mg/kg-dry	2	0	ECO Soil	0.5	0	0.01	0.01	ND	ND		
Bromodichloromethane	T	mg/kg-dry	2	0	No SLC			0.01	0.01	ND	ND		
Bromoform	T	mg/kg-dry	2	0	No SLC			0.01	0.01	ND	ND		
Bromomethane	T	mg/kg-dry	2	0	No SLC			0.01	0.01	ND	ND		
Carbon tetrachloride	T	mg/kg-dry	2	0	ECO Soil	1000	0	0.01	0.01	ND	ND		
Chlorobenzene	T	mg/kg-dry	2	0	ECO Soil	40	0	0.01	0.01	ND	ND		
Chloroethane	T	mg/kg-dry	2	0	No SLC			0.01	0.01	ND	ND		
Chloroform	T	mg/kg-dry	2	0	No SLC			0.01	0.01	ND	ND		
Chloromethane	T	mg/kg-dry	2	0	ECO Soil	10.4	0	0.01	0.01	ND	ND		
cis-1,2-Dichloroethene	T	mg/kg-dry	2	0	No SLC			0.01	0.01	ND	ND		
cis-1,3-Dichloropropene	T	mg/kg-dry	2	0	No SLC			0.01	0.01	ND	ND		
Dibromochloromethane	T	mg/kg-dry	2	0	No SLC			0.01	0.01	ND	ND		
Dichlorodifluoromethane	T	mg/kg-dry	2	0	ECO Soil	39.5	0	0.01	0.01	ND	ND		
Ethylbenzene	T	mg/kg-dry	2	0	ECO Soil	5	0	0.01	0.01	ND	ND		
Styrene	T	mg/kg-dry	2	0	ECO Soil	300	0	0.01	0.01	ND	ND		
Tetrachloroethene	T	mg/kg-dry	2	0	No SLC			0.01	0.01	ND	ND		
Toluene	T	mg/kg-dry	2	0	ECO Soil	200	0	0.01	0.01	ND	ND		
Total Xylene	T	mg/kg-dry	2	0	ECO Soil	5	0	0.01	0.01	ND	ND		
trans-1,2-Dichloroethene	T	mg/kg-dry	2	0	No SLC			0.01	0.01	ND	ND		
trans-1,3-Dichloropropene	T	mg/kg-dry	2	0	No SLC			0.01	0.01	ND	ND		
Trichloroethene	T	mg/kg-dry	2	0	No SLC			0.01	0.01	ND	ND		
Trichlorofluoromethane	T	mg/kg-dry	2	0	ECO Soil	16.4	0	0.01	0.01	ND	ND		
Vinyl chloride	T	mg/kg-dry	2	0	No SLC			0.01	0.01	ND	ND		

"No SLC" indicates that there is not a Screening Level Criterion for this medium specified for the RI/FS.
"HH Soil (HQ=1)" EPA Region 6 RBSLs Human Health Residential Soil (HQ=1)
"Eco Soil" EPA Region 6 Tier 1-3 RBSLs Ecological Soil
Median Value determined using 1/2 the Reporting Limit value for Non-Detects if greater than 50% of the values were detected.
Mean Value calculated using 1/2 the Reporting Limit for Non-Detects if greater than 50% of the values were detected.

T = Total Fraction
D = Filtered Fraction (0.45 micron filter)
A = Filtered Fraction (0.1 micron filter)
ND = Non-Detected Value

Table 7-83

Soil 0-6 inches Non-Random

RI/FS Soil Area 9 - Red River Riparian along Mine Site

Summary of Results

Analyte	Sample Fraction	Units	Total Number of Samples	Percent Detects (%)	SLC	SLC Value	Percent Above SLC	Min RL for ND	Max RL for ND	Min Value	Max Value	Mean Value	Median Value
Inorganics													
Cation-Exchange Capacity	T	meq/100g	4	100	No SLC					17.5	52.7	33.3	31.4
Chloride	T	mg/kg-dry	4	50	No SLC			2.20	2.40	ND	4.2	2.2	1.9
Fluoride	T	mg/kg-dry	4	75	HH Soil (HQ=1)	3700	0	0.24	0.24	ND	0.39	0.28	0.31
Nitrate	T	mg/kg-dry	4	100	No SLC					3.2	9	5.4	4.6
Organic Soils	T	%	4	100	No SLC					4.5	17.2	10.1	9.4
pH	T	SU	4	100	No SLC					7	8	7.6	7.6
Phosphorus	T	mg/kg-dry	4	100	No SLC					619	2140	1400	1430
Sodium Absorption Ratio	T	ratio	4	100	No SLC					0.03	1.6	0.44	0.07
Solids, Percent	T	%	4	100	No SLC					84	92.5	87.7	87.1
Specific Conductance	T	umhos/cm	4	100	No SLC					68.8	138	107	112
Sulfate	T	mg/kg-dry	4	100	No SLC					3.7	9.2	6.7	7
Total Kjeldahl Nitrogen	T	mg/kg-dry	4	100	No SLC					604	3500	2100	2150
Total Organic Carbon	T	mg/kg-dry	4	100	No SLC					8880	126000	61700	55900
Metals													
Aluminum	T	mg/kg-dry	4	100	HH Soil (HQ=1)	76000	0			7180	12700	9700	9460
Antimony	T	mg/kg-dry	4	0	HH Soil (HQ=1)	31	0	0.44	0.51	ND	ND		
Arsenic	T	mg/kg-dry	4	100	HH Soil (HQ=1)	0.39	100			3.6	4.6	4.1	4.2
Barium	T	mg/kg-dry	4	100	HH Soil (HQ=1)	5500	0			225	356	270	249
Beryllium	T	mg/kg-dry	4	100	HH Soil (HQ=1)	150	0			0.72	0.98	0.81	0.76
Boron	T	mg/kg-dry	4	100	HH Soil (HQ=1)	5500	0			3.3	13.1	6.8	5.5
Cadmium	T	mg/kg-dry	4	50	HH Soil (HQ=1)	39	0	0.06	0.07	ND	0.49	0.22	0.19
Calcium	T	mg/kg-dry	4	100	No SLC					2650	13700	7520	6860
Chromium	T	mg/kg-dry	4	100	HH Soil (HQ=1)	210	0			16.8	34.9	26.2	26.6
Cobalt	T	mg/kg-dry	4	100	HH Soil (HQ=1)	900	0			7.7	9.3	8.8	9.1
Copper	T	mg/kg-dry	4	100	HH Soil (HQ=1)	2900	0			43.6	125	68	51.8
Iron	T	mg/kg-dry	4	100	HH Soil (HQ=1)	23000	25			19800	40500	25300	20400
Lead	T	mg/kg-dry	4	100	HH Soil (HQ=1)	400	0			47.4	101	63.4	52.6
Magnesium	T	mg/kg-dry	4	100	No SLC					3960	5260	4770	4930
Manganese	T	mg/kg-dry	4	100	HH Soil (HQ=1)	3200	0			418	508	470	477
Mercury	T	mg/kg-dry	4	100	HH Soil (HQ=1)	23	0			0.023	0.07	0.039	0.031
Molybdenum	T	mg/kg-dry	4	75	HH Soil (HQ=1)	390	0	49.20	49.20	ND	47.7	36.6	37

"No SLC" indicates that there is not a Screening Level Criterion for this medium specified for the RI/FS.
"HH Soil (HQ=1)" EPA Region 6 RBSLs Human Health Residential Soil (HQ=1)
"Eco Soil" EPA Region 6 Tier 1-3 RBSLs Ecological Soil
Median Value determined using 1/2 the Reporting Limit value for Non-Detects if greater than 50% of the values were detected.
Mean Value calculated using 1/2 the Reporting Limit for Non-Detects if greater than 50% of the values were detected.

T = Total Fraction
D = Filtered Fraction (0.45 micron filter)
A = Filtered Fraction (0.1 micron filter)
ND = Non-Detected Value

Table 7-83

Soil 0-6 inches Non-Random

RI/FS Soil Area 9 - Red River Riparian along Mine Site

Summary of Results

Analyte	Sample Fraction	Units	Total Number of Samples	Percent Detects (%)	SLC	SLC Value	Percent Above SLC	Min RL for ND	Max RL for ND	Min Value	Max Value	Mean Value	Median Value
Nickel	T	mg/kg-dry	4	100	HH Soil (HQ=1)	1600	0			14.7	20.2	17.5	17.5
Potassium	T	mg/kg-dry	4	100	No SLC					2410	4030	3110	2990
Selenium	T	mg/kg-dry	4	100	HH Soil (HQ=1)	390	0			0.63	0.83	0.72	0.72
Silver	T	mg/kg-dry	4	100	HH Soil (HQ=1)	390	0			0.3	0.91	0.62	0.63
Sodium	T	mg/kg-dry	4	100	No SLC					148	361	244	234
Thallium	T	mg/kg-dry	4	100	HH Soil (HQ=1)	5.5	0			0.13	0.27	0.18	0.16
Vanadium	T	mg/kg-dry	4	100	HH Soil (HQ=1)	78	0			20.2	33.2	25.3	24
Zinc	T	mg/kg-dry	4	100	HH Soil (HQ=1)	23000	0			96.1	294	176	157

"No SLC" indicates that there is not a Screening Level Criterion for this medium specified for the RI/FS.
"HH Soil (HQ=1)" EPA Region 6 RBSLs Human Health Residential Soil (HQ=1)
"Eco Soil" EPA Region 6 Tier 1-3 RBSLs Ecological Soil
Median Value determined using 1/2 the Reporting Limit value for Non-Detects if greater than 50% of the values were detected.
Mean Value calculated using 1/2 the Reporting Limit for Non-Detects if greater than 50% of the values were detected.

T = Total Fraction
D = Filtered Fraction (0.45 micron filter)
A = Filtered Fraction (0.1 micron filter)
ND = Non-Detected Value

Table 7-84

Soil 0-24 inches Non-Random

RI/FS Soil Area 9 - Red River Riparian along Mine Site

Summary of Results

Analyte	Sample Fraction	Units	Total Number of Samples	Percent Detects (%)	SLC	SLC Value	Percent Above SLC	Min RL for ND	Max RL for ND	Min Value	Max Value	Mean Value	Median Value
Inorganics													
Cation-Exchange Capacity	T	meq/100g	4	100	No SLC					18.4	29.5	23	22
Chloride	T	mg/kg-dry	4	25	No SLC			2.20	2.30	ND	13.8		
Fluoride	T	mg/kg-dry	4	75	No SLC			0.23	0.23	ND	1.5	0.69	0.57
Nitrate	T	mg/kg-dry	4	100	No SLC					2.3	3.4	2.7	2.6
Organic Soils	T	%	4	100	No SLC					3.7	9.3	5.6	4.6
pH	T	SU	4	100	No SLC					5.5	7.9	7.1	7.6
Phosphorus	T	mg/kg-dry	4	100	No SLC					613	1960	1230	1180
Sodium Absorption Ratio	T	ratio	4	100	No SLC					0.03	1.4	0.4	0.065
Solids, Percent	T	%	4	100	No SLC					89.4	95.2	92.9	93.5
Specific Conductance	T	umhos/cm	4	100	No SLC					82	191	116	95.7
Sulfate	T	mg/kg-dry	4	100	No SLC					4.2	59.1	20.3	9
Total Kjeldahl Nitrogen	T	mg/kg-dry	4	100	No SLC					471	1900	1030	874
Total Organic Carbon	T	mg/kg-dry	4	100	No SLC					10500	79500	32100	19200
Metals													
Aluminum	T	mg/kg-dry	4	100	No SLC					7670	13700	9300	7920
Antimony	T	mg/kg-dry	4	0	ECO Soil	0.3	0	0.41	0.47	ND	ND		
Arsenic	T	mg/kg-dry	4	100	ECO Soil	31	0			3.7	5.8	4.7	4.5
Barium	T	mg/kg-dry	4	100	ECO Soil	330	25			218	356	269	251
Beryllium	T	mg/kg-dry	4	100	ECO Soil	30	0			0.66	1.1	0.81	0.73
Boron	T	mg/kg-dry	4	100	ECO Soil	0.5	100			2.6	8.7	4.7	3.8
Cadmium	T	mg/kg-dry	4	25	ECO Soil	0.4	0	0.06	0.07	ND	0.072		
Calcium	T	mg/kg-dry	4	100	No SLC					2930	9160	4960	3870
Chromium	T	mg/kg-dry	4	100	ECO Soil	7.9	100			17.5	29.8	24	24.3
Cobalt	T	mg/kg-dry	4	100	ECO Soil	32	0			7.7	12.7	9.2	8.2
Copper	T	mg/kg-dry	4	100	ECO Soil	54	25			38.3	135	66.6	46.6
Iron	T	mg/kg-dry	4	100	No SLC					19000	39200	24400	19800
Lead	T	mg/kg-dry	4	100	ECO Soil	15	100			38.9	108	60.2	46.9
Magnesium	T	mg/kg-dry	4	100	No SLC					3860	6160	4780	4550
Manganese	T	mg/kg-dry	4	100	ECO Soil	152	100			342	738	459	378
Mercury	T	mg/kg-dry	4	25	ECO Soil	0.1	0	0.02	0.02	ND	0.041		
Molybdenum	T	mg/kg-dry	4	75	ECO Soil	2	100	35.50	35.50	ND	62.5	33.4	26.8

"No SLC" indicates that there is not a Screening Level Criterion for this medium specified for the RI/FS.
"HH Soil (HQ=1)" EPA Region 6 RBSLs Human Health Residential Soil (HQ=1)
"Eco Soil" EPA Region 6 Tier 1-3 RBSLs Ecological Soil
Median Value determined using 1/2 the Reporting Limit value for Non-Detects if greater than 50% of the values were detected.
Mean Value calculated using 1/2 the Reporting Limit for Non-Detects if greater than 50% of the values were detected.

T = Total Fraction
D = Filtered Fraction (0.45 micron filter)
A = Filtered Fraction (0.1 micron filter)
ND = Non-Detected Value

Table 7-84

Soil 0-24 inches Non-Random

RI/FS Soil Area 9 - Red River Riparian along Mine Site

Summary of Results

Analyte	Sample Fraction	Units	Total Number of Samples	Percent Detects (%)	SLC	SLC Value	Percent Above SLC	Min RL for ND	Max RL for ND	Min Value	Max Value	Mean Value	Median Value
Nickel	T	mg/kg-dry	4	100	ECO Soil	48	0			15	23	17.7	16.4
Potassium	T	mg/kg-dry	4	100	No SLC					2210	3740	2690	2400
Selenium	T	mg/kg-dry	4	100	ECO Soil	1	0			0.66	0.78	0.71	0.7
Silver	T	mg/kg-dry	4	100	ECO Soil	2	0			0.28	0.94	0.5	0.39
Sodium	T	mg/kg-dry	4	100	No SLC					181	364	252	231
Thallium	T	mg/kg-dry	4	100	ECO Soil	1	0			0.12	0.27	0.17	0.14
Vanadium	T	mg/kg-dry	4	100	ECO Soil	2	100			19.6	33	24.1	21.9
Zinc	T	mg/kg-dry	4	100	ECO Soil	120	50			88.3	152	123	125

"No SLC" indicates that there is not a Screening Level Criterion for this medium specified for the RI/FS.
"HH Soil (HQ=1)" EPA Region 6 RBSLs Human Health Residential Soil (HQ=1)
"Eco Soil" EPA Region 6 Tier 1-3 RBSLs Ecological Soil
Median Value determined using 1/2 the Reporting Limit value for Non-Detects if greater than 50% of the values were detected.
Mean Value calculated using 1/2 the Reporting Limit for Non-Detects if greater than 50% of the values were detected.

T = Total Fraction
D = Filtered Fraction (0.45 micron filter)
A = Filtered Fraction (0.1 micron filter)
ND = Non-Detected Value

Table 7-85
Soil 0-24 inches SPLP Random
RI/FS Soil Area 9 - Red River Riparian along Mine Site
Summary of Results

Analyte	Sample Fraction	Units	Total Number of Samples	Percent Detects (%)	SLC	SLC Value	Percent Above SLC	Min RL for ND	Max RL for ND	Min Value	Max Value	Mean Value	Median Value
Inorganics													
Bicarbonate (as CaCO3)	T	mg/L	2	100	No SLC					4.1	4.6	4.3	4.3
Carbonate (as CaCO3)	T	mg/L	2	0	No SLC			1.00	1.00	ND	ND		
Chloride	T	mg/L	2	50	No SLC			1.00	1.00	ND	13.8	7.2	7.2
Cyanide	T	mg/L	2	0	No SLC			0.01	0.01	ND	ND		
Fluoride	T	mg/L	2	100	No SLC					0.46	0.46	0.46	0.46
Hydroxide (as CaCO3)	T	mg/L	2	0	No SLC			1.00	1.00	ND	ND		
Nitrate	T	mg/L	2	0	No SLC			0.40	1.00	ND	ND		
Nitrite	T	mg/L	2	0	No SLC			0.01	0.01	ND	ND		
Phosphate, Ortho As P	T	mg/L	2	100	No SLC					0.23	9.5	4.9	4.9
Phosphorus	T	mg/L	2	100	No SLC					0.055	0.083	0.069	0.069
Sulfate	T	mg/L	2	100	No SLC					6.2	22.6	14.4	14.4
Total Alkalinity	T	mg/L	2	100	No SLC					4.1	4.6	4.3	4.3
Total Kjeldahl Nitrogen	T	mg/L	2	0	No SLC			0.24	0.24	ND	ND		
Metals													
Aluminum	T	mg/L	2	100	No SLC					0.89	2.8	1.9	1.9
Antimony	T	mg/L	2	0	ECO Soil	0.3	0	0.00	0.00	ND	ND		
Arsenic	T	mg/L	2	0	ECO Soil	31	0	0.00	0.00	ND	ND		
Barium	T	mg/L	2	0	ECO Soil	330	0	0.10	0.12	ND	ND		
Beryllium	T	mg/L	2	0	ECO Soil	30	0	0.00	0.00	ND	ND		
Boron	T	mg/L	2	0	ECO Soil	0.5	0	0.06	0.09	ND	ND		
Cadmium	T	mg/L	2	0	ECO Soil	0.4	0	0.00	0.00	ND	ND		
Calcium	T	mg/L	2	100	No SLC					6.5	18.2	12.4	12.4
Chromium	T	mg/L	2	50	ECO Soil	7.9	0	0.00	0.00	ND	0.0019	0.0014	0.0014
Cobalt	T	mg/L	2	0	ECO Soil	32	0	0.00	0.00	ND	ND		
Copper	T	mg/L	2	0	ECO Soil	54	0	0.02	0.03	ND	ND		
Iron	T	mg/L	2	100	No SLC					1	2.7	1.9	1.9
Lead	T	mg/L	2	100	ECO Soil	15	0			0.0042	0.0065	0.0053	0.0053
Magnesium	T	mg/L	2	100	No SLC					1.2	3.3	2.2	2.2
Manganese	T	mg/L	2	100	ECO Soil	152	0			0.032	0.038	0.035	0.035
Mercury	T	mg/L	2	0	ECO Soil	0.1	0	0.01	0.01	ND	ND		
Molybdenum	T	mg/L	2	100	ECO Soil	2	0			0.003	0.017	0.0097	0.0097

"No SLC" indicates that there is not a Screening Level Criterion for this medium specified for the RI/FS.
"HH Soil (HQ=1)" EPA Region 6 RBSLs Human Health Residential Soil (HQ=1)
"Eco Soil" EPA Region 6 Tier 1-3 RBSLs Ecological Soil
Median Value determined using 1/2 the Reporting Limit value for Non-Detects if greater than 50% of the values were detected.
Mean Value calculated using 1/2 the Reporting Limit for Non-Detects if greater than 50% of the values were detected.

T = Total Fraction
D = Filtered Fraction (0.45 micron filter)
A = Filtered Fraction (0.1 micron filter)
ND = Non-Detected Value

Table 7-85

Soil 0-24 inches SPLP Random

RI/FS Soil Area 9 - Red River Riparian along Mine Site

Summary of Results

Analyte	Sample Fraction	Units	Total Number of Samples	Percent Detects (%)	SLC	SLC Value	Percent Above SLC	Min RL for ND	Max RL for ND	Min Value	Max Value	Mean Value	Median Value
Nickel	T	mg/L	2	100	ECO Soil	48	0			0.0036	0.0046	0.0041	0.0041
Potassium	T	mg/L	2	50	No SLC			1.70	1.70	ND	2.7	1.8	1.8
Selenium	T	mg/L	2	50	ECO Soil	1	0	0.00	0.00	ND	0.0023	0.0016	0.0016
Silver	T	mg/L	2	0	ECO Soil	2	0	0.00	0.00	ND	ND		
Thallium	T	mg/L	2	0	ECO Soil	1	0	0.00	0.00	ND	ND		
Vanadium	T	mg/L	2	50	ECO Soil	2	0	0.00	0.00	ND	0.0013	0.00075	0.00075
Zinc	T	mg/L	2	0	ECO Soil	120	0	0.02	0.04	ND	ND		

"No SLC" indicates that there is not a Screening Level Criterion for this medium specified for the RI/FS.
"HH Soil (HQ=1)" EPA Region 6 RBSLs Human Health Residential Soil (HQ=1)
"Eco Soil" EPA Region 6 Tier 1-3 RBSLs Ecological Soil
Median Value determined using 1/2 the Reporting Limit value for Non-Detects if greater than 50% of the values were detected.
Mean Value calculated using 1/2 the Reporting Limit for Non-Detects if greater than 50% of the values were detected.

T = Total Fraction
D = Filtered Fraction (0.45 micron filter)
A = Filtered Fraction (0.1 micron filter)
ND = Non-Detected Value

Table 7-86
Soil 3-4 feet Non-Random
RI/FS Soil Area 9 - Hunt's Pond Soil
Summary of Results

Analyte	Sample Fraction	Units	Total Number of Samples	Percent Detects (%)	SLC	SLC Value	Percent Above SLC	Min RL for ND	Max RL for ND	Min Value	Max Value	Mean Value	Median Value
Inorganics													
Cation-Exchange Capacity	T	meq/100g	4	100	No SLC					9.5	17.4	14.1	14.7
Chloride	T	mg/kg-dry	4	100	No SLC					4.4	21.6	10.4	7.8
Fluoride	T	mg/kg-dry	4	100	No SLC					2.5	4.7	3.5	3.4
Nitrate	T	mg/kg-dry	4	75	No SLC			2.30	2.30	ND	5.3	3.9	4.5
Organic Soils	T	%	4	100	No SLC					2	4.2	3.1	3.1
pH	T	SU	4	100	No SLC					7.2	8.1	7.6	7.5
Phosphorus	T	mg/kg-dry	4	100	No SLC					126	437	260	238
Sodium Absorption Ratio	T	ratio	4	100	No SLC					0.1	0.95	0.55	0.58
Solids, Percent	T	%	4	100	No SLC					88.3	99.6	94.4	94.8
Specific Conductance	T	umhos/cm	4	100	No SLC					166	1360	531	299
Sulfate	T	mg/kg-dry	4	100	No SLC					30.7	783	242	77
Total Kjeldahl Nitrogen	T	mg/kg-dry	4	100	No SLC					235	641	465	493
Total Organic Carbon	T	mg/kg-dry	4	100	No SLC					2150	9710	6450	6980
Metals													
Aluminum	T	mg/kg-dry	4	100	No SLC					4830	7530	6370	6560
Antimony	T	mg/kg-dry	4	0	No SLC			0.38	0.42	ND	ND		
Arsenic	T	mg/kg-dry	4	100	No SLC					2.3	3.9	3.3	3.5
Barium	T	mg/kg-dry	4	100	No SLC					57.3	137	107	117
Beryllium	T	mg/kg-dry	4	100	No SLC					0.44	0.69	0.61	0.65
Boron	T	mg/kg-dry	4	0	No SLC			0.20	0.51	ND	ND		
Cadmium	T	mg/kg-dry	4	100	No SLC					0.18	0.42	0.28	0.26
Calcium	T	mg/kg-dry	4	100	No SLC					1800	3850	3030	3240
Chromium	T	mg/kg-dry	4	100	No SLC					11.9	21.9	16.3	15.8
Cobalt	T	mg/kg-dry	4	100	No SLC					3.8	6.8	5.7	6
Copper	T	mg/kg-dry	4	100	No SLC					19.4	48.4	37.6	41.3
Iron	T	mg/kg-dry	4	100	No SLC					11700	18600	15900	16600
Lead	T	mg/kg-dry	4	100	No SLC					18.3	48.4	33.3	33.3
Magnesium	T	mg/kg-dry	4	100	No SLC					3160	4850	4000	4000
Manganese	T	mg/kg-dry	4	100	No SLC					278	385	336	340
Mercury	T	mg/kg-dry	4	0	No SLC			0.02	0.02	ND	ND		
Molybdenum	T	mg/kg-dry	4	100	No SLC					9.7	47.7	25.7	22.7

"No SLC" indicates that there is not a Screening Level Criterion for this medium specified for the RI/FS.
"HH Soil (HQ=1)" EPA Region 6 RBSLs Human Health Residential Soil (HQ=1)
"Eco Soil" EPA Region 6 Tier 1-3 RBSLs Ecological Soil
Median Value determined using 1/2 the Reporting Limit value for Non-Detects if greater than 50% of the values were detected.
Mean Value calculated using 1/2 the Reporting Limit for Non-Detects if greater than 50% of the values were detected.

T = Total Fraction
D = Filtered Fraction (0.45 micron filter)
A = Filtered Fraction (0.1 micron filter)
ND = Non-Detected Value

Table 7-86
Soil 3-4 feet Non-Random
RI/FS Soil Area 9 - Hunt's Pond Soil
Summary of Results

Analyte	Sample Fraction	Units	Total Number of Samples	Percent Detects (%)	SLC	SLC Value	Percent Above SLC	Min RL for ND	Max RL for ND	Min Value	Max Value	Mean Value	Median Value
Nickel	T	mg/kg-dry	4	100	No SLC					10.9	18.2	15.3	16
Potassium	T	mg/kg-dry	4	100	No SLC					1220	1520	1360	1360
Selenium	T	mg/kg-dry	4	0	No SLC			0.67	0.73	ND	ND		
Silver	T	mg/kg-dry	4	25	No SLC			0.09	0.11	ND	0.32		
Sodium	T	mg/kg-dry	4	0	No SLC			60.90	175.00	ND	ND		
Thallium	T	mg/kg-dry	4	75	No SLC			0.10	0.10	ND	0.14	0.1	0.11
Vanadium	T	mg/kg-dry	4	100	No SLC					12.7	21.8	17.4	17.6
Zinc	T	mg/kg-dry	4	100	No SLC					51.2	84.2	71.6	75.5

"No SLC" indicates that there is not a Screening Level Criterion for this medium specified for the RI/FS.
"HH Soil (HQ=1)" EPA Region 6 RBSLs Human Health Residential Soil (HQ=1)
"Eco Soil" EPA Region 6 Tier 1-3 RBSLs Ecological Soil
Median Value determined using 1/2 the Reporting Limit value for Non-Detects if greater than 50% of the values were detected.
Mean Value calculated using 1/2 the Reporting Limit for Non-Detects if greater than 50% of the values were detected.

T = Total Fraction
D = Filtered Fraction (0.45 micron filter)
A = Filtered Fraction (0.1 micron filter)
ND = Non-Detected Value

Table 7-87

Soil 0-6 inches Non-Random

RI/FS Soil Area 9 - Soils Collected at Private Residences

Summary of Results

Analyte	Sample Fraction	Units	Total Number of Samples	Percent Detects (%)	SLC	SLC Value	Percent Above SLC	Min RL for ND	Max RL for ND	Min Value	Max Value	Mean Value	Median Value
Inorganics													
Cation-Exchange Capacity	T	meq/100g	11	100	No SLC					10.1	34	22.4	21.1
Chloride	T	mg/kg-dry	11	100	No SLC					3.4	24.1	7.8	5.6
Fluoride	T	mg/kg-dry	11	100	HH Soil (HQ=1)	3700	0			0.39	3.8	1.3	1.1
Nitrate	T	mg/kg-dry	11	100	No SLC					2.5	19.4	6	3.8
Organic Soils	T	%	11	100	No SLC					1.7	13.2	5.6	4.6
pH	T	SU	11	100	No SLC					7.1	9	7.8	7.7
Phosphorus	T	mg/kg-dry	11	100	No SLC					185	593	382	373
Sodium Absorption Ratio	T	ratio	11	90.9	No SLC			0.05	0.05	ND	0.84	0.17	0.1
Solids, Percent	T	%	11	100	No SLC					70	96.4	91.3	93.1
Specific Conductance	T	umhos/cm	11	100	No SLC					66.2	704	188	137
Sulfate	T	mg/kg-dry	11	100	No SLC					2.1	232	49.5	15.6
Total Kjeldahl Nitrogen	T	mg/kg-dry	11	100	No SLC					308	3150	1380	1070
Total Organic Carbon	T	mg/kg-dry	11	100	No SLC					4060	46700	19700	15200
Metals													
Aluminum	T	mg/kg-dry	11	100	HH Soil (HQ=1)	76000	0			4370	14700	8630	8120
Antimony	T	mg/kg-dry	11	100	HH Soil (HQ=1)	31	0			0.74	1	0.8	0.78
Arsenic	T	mg/kg-dry	11	100	HH Soil (HQ=1)	0.39	100			2.4	9.8	4.5	3.6
Barium	T	mg/kg-dry	11	100	HH Soil (HQ=1)	5500	0			64.5	330	157	136
Beryllium	T	mg/kg-dry	11	100	HH Soil (HQ=1)	150	0			0.47	1.9	0.95	0.88
Boron	T	mg/kg-dry	11	9.1	HH Soil (HQ=1)	5500	0	0.18	0.54	ND	4.4		
Cadmium	T	mg/kg-dry	11	100	HH Soil (HQ=1)	39	0			0.23	1.3	0.61	0.57
Calcium	T	mg/kg-dry	11	100	No SLC					2200	8200	3960	2920
Chromium	T	mg/kg-dry	11	100	HH Soil (HQ=1)	210	0			8.3	30.1	17.8	19.6
Cobalt	T	mg/kg-dry	11	100	HH Soil (HQ=1)	900	0			3.7	14.5	8.2	8.3
Copper	T	mg/kg-dry	11	100	HH Soil (HQ=1)	2900	0			12.8	115	42.5	39.5
Iron	T	mg/kg-dry	11	100	HH Soil (HQ=1)	23000	27.3			10100	38500	19300	16900
Lead	T	mg/kg-dry	11	100	HH Soil (HQ=1)	400	0			28	126	51.7	42.1
Magnesium	T	mg/kg-dry	11	100	No SLC					1630	6660	3710	4040
Manganese	T	mg/kg-dry	11	100	HH Soil (HQ=1)	3200	0			314	989	617	579
Mercury	T	mg/kg-dry	11	9.1	HH Soil (HQ=1)	23	0	0.02	0.02	ND	0.028		
Molybdenum	T	mg/kg-dry	11	100	HH Soil (HQ=1)	390	0			4.9	114	30.6	16.8

"No SLC" indicates that there is not a Screening Level Criterion for this medium specified for the RI/FS.
"HH Soil (HQ=1)" EPA Region 6 RBSLs Human Health Residential Soil (HQ=1)
"Eco Soil" EPA Region 6 Tier 1-3 RBSLs Ecological Soil
Median Value determined using 1/2 the Reporting Limit value for Non-Detects if greater than 50% of the values were detected.
Mean Value calculated using 1/2 the Reporting Limit for Non-Detects if greater than 50% of the values were detected.

T = Total Fraction
D = Filtered Fraction (0.45 micron filter)
A = Filtered Fraction (0.1 micron filter)
ND = Non-Detected Value

Table 7-87

Soil 0-6 inches Non-Random

RI/FS Soil Area 9 - Soils Collected at Private Residences

Summary of Results

Analyte	Sample Fraction	Units	Total Number of Samples	Percent Detects (%)	SLC	SLC Value	Percent Above SLC	Min RL for ND	Max RL for ND	Min Value	Max Value	Mean Value	Median Value
Nickel	T	mg/kg-dry	11	100	HH Soil (HQ=1)	1600	0			6.3	39.2	19.1	19.7
Potassium	T	mg/kg-dry	11	100	No SLC					1490	4230	2550	2330
Selenium	T	mg/kg-dry	11	27.3	HH Soil (HQ=1)	390	0	0.70	0.75	ND	1.7		
Silver	T	mg/kg-dry	11	63.6	HH Soil (HQ=1)	390	0	0.10	0.74	ND	0.78	0.26	0.2
Sodium	T	mg/kg-dry	11	0	No SLC			59.70	222.00	ND	ND		
Thallium	T	mg/kg-dry	11	100	HH Soil (HQ=1)	5.5	0			0.15	0.45	0.24	0.22
Vanadium	T	mg/kg-dry	11	100	HH Soil (HQ=1)	78	0			13.4	31.9	20.8	19
Zinc	T	mg/kg-dry	11	100	HH Soil (HQ=1)	23000	0			58.8	267	128	108

"No SLC" indicates that there is not a Screening Level Criterion for this medium specified for the RI/FS.
"HH Soil (HQ=1)" EPA Region 6 RBSLs Human Health Residential Soil (HQ=1)
"Eco Soil" EPA Region 6 Tier 1-3 RBSLs Ecological Soil
Median Value determined using 1/2 the Reporting Limit value for Non-Detects if greater than 50% of the values were detected.
Mean Value calculated using 1/2 the Reporting Limit for Non-Detects if greater than 50% of the values were detected.

T = Total Fraction
D = Filtered Fraction (0.45 micron filter)
A = Filtered Fraction (0.1 micron filter)
ND = Non-Detected Value

Table 7-88
Soil Variable Depth Biased
RI/FS Groundwater Area 1 - Subsurface Soil Collected from Borehole MMW-50A
Summary of Results

Analyte	Sample Fraction	Units	Total Number of Samples	Percent Detects (%)	SLC	SLC Value	Percent Above SLC	Min RL for ND	Max RL for ND	Min Value	Max Value	Mean Value	Median Value
Inorganics													
Fluoride	T	mg/Kg-dry	3	100	No SLC					0.87	1.4	1.2	1.4
pH	T	SU	3	100	No SLC					4	4.4	4.2	4.2
Solids, Percent	T	%	3	100	No SLC					93.7	95	94.2	94
Sulfate	T	mg/Kg-dry	3	100	No SLC					90.2	205	143	134
Total Organic Carbon	T	mg/Kg-dry	3	33.3	No SLC			532.00	534.00	ND	585		
Metals													
Aluminum	T	mg/Kg-dry	3	100	No SLC					419	3720	1900	1560
Antimony	T	mg/Kg-dry	3	0	No SLC			0.33	1.90	ND	ND		
Arsenic	T	mg/Kg-dry	3	66.7	No SLC			0.30	0.30	ND	11.9	4.5	1.6
Barium	T	mg/Kg-dry	3	100	No SLC					0.65	70.1	31.5	23.8
Beryllium	T	mg/Kg-dry	3	100	No SLC					0.1	1.1	0.46	0.17
Boron	T	mg/Kg-dry	3	33.3	No SLC			0.50	1.90	ND	8.4		
Cadmium	T	mg/Kg-dry	3	100	No SLC					0.083	0.57	0.37	0.47
Calcium	T	mg/Kg-dry	3	100	No SLC					61.7	271	132	64.3
Chromium	T	mg/Kg-dry	3	66.7	No SLC			0.84	0.84	ND	29.8	12.4	7
Cobalt	T	mg/Kg-dry	3	100	No SLC					0.27	2.9	1.4	0.88
Copper	T	mg/Kg-dry	3	100	No SLC					40	139	91.8	96.4
Iron	T	mg/Kg-dry	3	100	No SLC					2200	65900	26800	12200
Lead	T	mg/Kg-dry	3	100	No SLC					7	19.2	11.8	9.1
Magnesium	T	mg/Kg-dry	3	100	No SLC					15.7	1600	866	981
Manganese	T	mg/Kg-dry	3	100	No SLC					5.4	66.2	33.2	27.9
Mercury	T	mg/Kg-dry	3	0	No SLC			0.02	0.02	ND	ND		
Molybdenum	T	mg/Kg-dry	3	100	No SLC					15.6	93.2	47.4	33.5
Nickel	T	mg/Kg-dry	3	100	No SLC					0.23	5.8	2.9	2.7
Potassium	T	mg/Kg-dry	3	100	No SLC					460	3780	1670	772
Selenium	T	mg/Kg-dry	3	0	No SLC			0.50	0.51	ND	ND		
Silver	T	mg/Kg-dry	3	0	No SLC			0.21	0.56	ND	ND		
Sodium	T	mg/Kg-dry	3	0	No SLC			53.90	74.00	ND	ND		
Thallium	T	mg/Kg-dry	3	66.7	No SLC			0.39	0.39	ND	5.3	2.1	0.77
Vanadium	T	mg/Kg-dry	3	100	No SLC					1.7	36.2	15.5	8.5
Zinc	T	mg/Kg-dry	3	100	No SLC					18.4	62.7	36.8	29.4

"No SLC" indicates that there is not a Screening Level Criterion for this medium specified for the RI/FS.
"HH Soil (HQ=1)" EPA Region 6 RBSLs Human Health Residential Soil (HQ=1)
"Eco Soil" EPA Region 6 Tier 1-3 RBSLs Ecological Soil
Median Value determined using 1/2 the Reporting Limit value for Non-Detects if greater than 50% of the values were detected.
Mean Value calculated using 1/2 the Reporting Limit for Non-Detects if greater than 50% of the values were detected.

T = Total Fraction
D = Filtered Fraction (0.45 micron filter)
A = Filtered Fraction (0.1 micron filter)
ND = Non-Detected Value

Table 7-89
Soil 0-6 inches Non-Random
RI/FS Goathill Campground
Summary of Results

Analyte	Sample Fraction	Units	Total Number of Samples	Percent Detects (%)	SLC	SLC Value	Percent Above SLC	Min RL for ND	Max RL for ND	Min Value	Max Value	Mean Value	Median Value
Inorganics													
Cation-Exchange Capacity	T	meq/100g	5	100	No SLC					5.7	12.5	9.3	8.8
Chloride	T	mg/kg-dry	5	100	No SLC					2.7	11.9	5.9	4.3
Fluoride	T	mg/kg-dry	5	100	HH Soil (HQ=1)	3700	0			0.24	0.87	0.5	0.42
Nitrate	T	mg/kg-dry	5	0	No SLC			2.10	2.30	ND	ND		
Organic Soils	T	%	5	100	No SLC					1.4	4.9	3.3	2.9
pH	T	SU	5	100	No SLC					5.6	7.4	6.5	6.5
Phosphorus	T	mg/kg-dry	5	100	No SLC					136	677	397	307
Sodium Absorption Ratio	T	ratio	5	100	No SLC					0.16	1.9	0.56	0.22
Solids, Percent	T	%	5	100	No SLC					90.2	96.1	93.5	94.5
Specific Conductance	T	umhos/cm	5	100	No SLC					28.4	180	117	142
Sulfate	T	mg/kg-dry	5	100	No SLC					9	40.6	24.8	30.6
Total Kjeldahl Nitrogen	T	mg/kg-dry	5	100	No SLC					91	629	412	372
Total Organic Carbon	T	mg/kg-dry	5	100	No SLC					1680	30100	15600	15300
Metals													
Aluminum	T	mg/kg-dry	5	100	HH Soil (HQ=1)	76000	0			5290	9150	7280	7280
Antimony	T	mg/kg-dry	5	0	HH Soil (HQ=1)	31	0	0.25	0.27	ND	ND		
Arsenic	T	mg/kg-dry	5	100	HH Soil (HQ=1)	0.39	100			2.5	4.7	3.9	3.9
Barium	T	mg/kg-dry	5	100	HH Soil (HQ=1)	5500	0			100	230	167	178
Beryllium	T	mg/kg-dry	5	100	HH Soil (HQ=1)	150	0			0.31	0.58	0.5	0.53
Boron	T	mg/kg-dry	5	60	HH Soil (HQ=1)	5500	0	0.84	1.60	ND	2.1	1.4	1.9
Cadmium	T	mg/kg-dry	5	0	HH Soil (HQ=1)	39	0	0.03	0.04	ND	ND		
Calcium	T	mg/kg-dry	5	100	No SLC					2060	3330	2690	2720
Chromium	T	mg/kg-dry	5	100	HH Soil (HQ=1)	210	0			13.6	21	18	18.8
Cobalt	T	mg/kg-dry	5	100	HH Soil (HQ=1)	900	0			3.4	6.3	5.5	6
Copper	T	mg/kg-dry	5	100	HH Soil (HQ=1)	2900	0			23.8	55.3	42.5	44.3
Iron	T	mg/kg-dry	5	100	HH Soil (HQ=1)	23000	20			14200	24800	20800	22700
Lead	T	mg/kg-dry	5	100	HH Soil (HQ=1)	400	0			43	88.7	61	51.3
Magnesium	T	mg/kg-dry	5	100	No SLC					2780	4250	3710	3860
Manganese	T	mg/kg-dry	5	100	HH Soil (HQ=1)	3200	0			210	438	346	337
Mercury	T	mg/kg-dry	5	0	HH Soil (HQ=1)	23	0	0.02	0.02	ND	ND		
Molybdenum	T	mg/kg-dry	5	100	HH Soil (HQ=1)	390	0			19	194	70.7	49.1

"No SLC" indicates that there is not a Screening Level Criterion for this medium specified for the RI/FS.
"HH Soil (HQ=1)" EPA Region 6 RBSLs Human Health Residential Soil (HQ=1)
"Eco Soil" EPA Region 6 Tier 1-3 RBSLs Ecological Soil
Median Value determined using 1/2 the Reporting Limit value for Non-Detects if greater than 50% of the values were detected.
Mean Value calculated using 1/2 the Reporting Limit for Non-Detects if greater than 50% of the values were detected.

T = Total Fraction
D = Filtered Fraction (0.45 micron filter)
A = Filtered Fraction (0.1 micron filter)
ND = Non-Detected Value

Table 7-89
Soil 0-6 inches Non-Random
RI/FS Goathill Campground
Summary of Results

Analyte	Sample Fraction	Units	Total Number of Samples	Percent Detects (%)	SLC	SLC Value	Percent Above SLC	Min RL for ND	Max RL for ND	Min Value	Max Value	Mean Value	Median Value
Nickel	T	mg/kg-dry	5	100	HH Soil (HQ=1)	1600	0			8.6	13.9	12.2	12.6
Potassium	T	mg/kg-dry	5	100	No SLC					1860	3150	2410	2250
Selenium	T	mg/kg-dry	5	40	HH Soil (HQ=1)	390	0	0.66	0.69	ND	0.79		
Silver	T	mg/kg-dry	5	100	HH Soil (HQ=1)	390	0			0.19	0.45	0.32	0.31
Sodium	T	mg/kg-dry	5	0	No SLC			129.00	192.00	ND	ND		
Thallium	T	mg/kg-dry	5	100	HH Soil (HQ=1)	5.5	0			0.12	0.21	0.16	0.14
Vanadium	T	mg/kg-dry	5	100	HH Soil (HQ=1)	78	0			17.9	26.3	23	23.7
Zinc	T	mg/kg-dry	5	100	HH Soil (HQ=1)	23000	0			37.5	95.1	70.5	74

"No SLC" indicates that there is not a Screening Level Criterion for this medium specified for the RI/FS.
"HH Soil (HQ=1)" EPA Region 6 RBSLs Human Health Residential Soil (HQ=1)
"Eco Soil" EPA Region 6 Tier 1-3 RBSLs Ecological Soil
Median Value determined using 1/2 the Reporting Limit value for Non-Detects if greater than 50% of the values were detected.
Mean Value calculated using 1/2 the Reporting Limit for Non-Detects if greater than 50% of the values were detected.

T = Total Fraction
D = Filtered Fraction (0.45 micron filter)
A = Filtered Fraction (0.1 micron filter)
ND = Non-Detected Value

Table 7-90
Soil 0-6 inches Non-Random
RI/FS Eagle Rock Lake Campground
Summary of Results

Analyte	Sample Fraction	Units	Total Number of Samples	Percent Detects (%)	SLC	SLC Value	Percent Above SLC	Min RL for ND	Max RL for ND	Min Value	Max Value	Mean Value	Median Value
Inorganics													
Cation-Exchange Capacity	T	meq/100g	5	100	No SLC					9.8	34.4	17.6	14.3
Chloride	T	mg/kg-dry	5	100	No SLC					2.9	36	12.7	5.6
Fluoride	T	mg/kg-dry	5	100	HH Soil (HQ=1)	3700	0			0.23	0.43	0.37	0.39
Nitrate	T	mg/kg-dry	5	100	No SLC					2.4	57.6	16.1	8.4
Organic Soils	T	%	5	100	No SLC					2.9	12.9	5.7	4.3
pH	T	SU	5	100	No SLC					6.5	7.1	6.9	6.9
Phosphorus	T	mg/kg-dry	5	100	No SLC					633	1120	791	776
Sodium Absorption Ratio	T	ratio	5	100	No SLC					0.05	0.26	0.13	0.13
Solids, Percent	T	%	5	100	No SLC					88.4	94.8	92.9	94
Specific Conductance	T	umhos/cm	5	100	No SLC					17	602	179	69.9
Sulfate	T	mg/kg-dry	5	100	No SLC					14.1	93.3	43.7	33
Total Kjeldahl Nitrogen	T	mg/kg-dry	5	100	No SLC					360	2990	1230	895
Total Organic Carbon	T	mg/kg-dry	5	100	No SLC					11700	85500	29600	16200
Metals													
Aluminum	T	mg/kg-dry	5	100	HH Soil (HQ=1)	76000	0			7110	11800	8960	8370
Antimony	T	mg/kg-dry	5	0	HH Soil (HQ=1)	31	0	0.25	0.27	ND	ND		
Arsenic	T	mg/kg-dry	5	100	HH Soil (HQ=1)	0.39	100			2.7	5.7	3.9	3.6
Barium	T	mg/kg-dry	5	100	HH Soil (HQ=1)	5500	0			109	341	195	150
Beryllium	T	mg/kg-dry	5	100	HH Soil (HQ=1)	150	0			0.57	1.4	0.9	0.7
Boron	T	mg/kg-dry	5	20	HH Soil (HQ=1)	5500	0	0.21	0.63	ND	7.1		
Cadmium	T	mg/kg-dry	5	100	HH Soil (HQ=1)	39	0			0.23	1.6	0.65	0.4
Calcium	T	mg/kg-dry	5	100	No SLC					2330	6920	3410	2570
Chromium	T	mg/kg-dry	5	100	HH Soil (HQ=1)	210	0			15.3	21.3	17.8	16.5
Cobalt	T	mg/kg-dry	5	100	HH Soil (HQ=1)	900	0			5.5	22.1	10.3	8.4
Copper	T	mg/kg-dry	5	100	HH Soil (HQ=1)	2900	0			28.4	105	59.4	53.8
Iron	T	mg/kg-dry	5	100	HH Soil (HQ=1)	23000	20			15000	25900	18800	18200
Lead	T	mg/kg-dry	5	100	HH Soil (HQ=1)	400	0			31.1	84	53.7	50.1
Magnesium	T	mg/kg-dry	5	100	No SLC					3150	4190	3830	3920
Manganese	T	mg/kg-dry	5	100	HH Soil (HQ=1)	3200	0			427	1720	702	464
Mercury	T	mg/kg-dry	5	20	HH Soil (HQ=1)	23	0	0.02	0.02	ND	0.039		
Molybdenum	T	mg/kg-dry	5	100	HH Soil (HQ=1)	390	0			11.9	33.1	26.2	28.1

"No SLC" indicates that there is not a Screening Level Criterion for this medium specified for the RI/FS.
"HH Soil (HQ=1)" EPA Region 6 RBSLs Human Health Residential Soil (HQ=1)
"Eco Soil" EPA Region 6 Tier 1-3 RBSLs Ecological Soil
Median Value determined using 1/2 the Reporting Limit value for Non-Detects if greater than 50% of the values were detected.
Mean Value calculated using 1/2 the Reporting Limit for Non-Detects if greater than 50% of the values were detected.

T = Total Fraction
D = Filtered Fraction (0.45 micron filter)
A = Filtered Fraction (0.1 micron filter)
ND = Non-Detected Value

Table 7-90
Soil 0-6 inches Non-Random
RI/FS Eagle Rock Lake Campground
Summary of Results

Analyte	Sample Fraction	Units	Total Number of Samples	Percent Detects (%)	SLC	SLC Value	Percent Above SLC	Min RL for ND	Max RL for ND	Min Value	Max Value	Mean Value	Median Value
Nickel	T	mg/kg-dry	5	100	HH Soil (HQ=1)	1600	0			15.1	46.1	25.2	19.8
Potassium	T	mg/kg-dry	5	100	No SLC					1560	2440	2180	2400
Selenium	T	mg/kg-dry	5	20	HH Soil (HQ=1)	390	0	0.66	0.72	ND	0.99		
Silver	T	mg/kg-dry	5	100	HH Soil (HQ=1)	390	0			0.2	0.59	0.38	0.33
Sodium	T	mg/kg-dry	5	20	No SLC			28.10	33.10	ND	37.6		
Thallium	T	mg/kg-dry	5	100	HH Soil (HQ=1)	5.5	0			0.12	0.23	0.16	0.14
Vanadium	T	mg/kg-dry	5	100	HH Soil (HQ=1)	78	0			19.9	25.5	22.4	22.5
Zinc	T	mg/kg-dry	5	100	HH Soil (HQ=1)	23000	0			106	304	163	142

"No SLC" indicates that there is not a Screening Level Criterion for this medium specified for the RI/FS.
"HH Soil (HQ=1)" EPA Region 6 RBSLs Human Health Residential Soil (HQ=1)
"Eco Soil" EPA Region 6 Tier 1-3 RBSLs Ecological Soil
Median Value determined using 1/2 the Reporting Limit value for Non-Detects if greater than 50% of the values were detected.
Mean Value calculated using 1/2 the Reporting Limit for Non-Detects if greater than 50% of the values were detected.

T = Total Fraction
D = Filtered Fraction (0.45 micron filter)
A = Filtered Fraction (0.1 micron filter)
ND = Non-Detected Value

Table 7-91
Soil 0-6 inches Random
RI/FS Reference Lower Cabresto Creek Riparian
Summary of Results

Analyte	Sample Fraction	Units	Total Number of Samples	Percent Detects (%)	SLC	SLC Value	Percent Above SLC	Min RL for ND	Max RL for ND	Min Value	Max Value	Mean Value	Median Value
Inorganics													
Cation-Exchange Capacity	T	meq/100g	16	100	No SLC					8.2	38.6	20.8	17.9
Chloride	T	mg/kg-dry	16	93.8	No SLC			2.50	2.50	ND	51.9	10.8	6
Fluoride	T	mg/kg-dry	16	100	HH Soil (HQ=1)	3700	0			0.23	0.84	0.45	0.46
Nitrate	T	mg/kg-dry	16	81.3	No SLC			2.50	2.90	ND	18.7	8.3	8.3
Organic Soils	T	%	16	100	No SLC					2	15.9	6.4	5.2
pH	T	SU	16	100	No SLC					5.3	7.9	7.1	7.2
Phosphorus	T	mg/kg-dry	16	100	No SLC					351	1090	586	539
Sodium Absorption Ratio	T	ratio	16	100	No SLC					0.04	0.56	0.17	0.12
Solids, Percent	T	%	16	100	No SLC					70.1	94.6	83.9	84.3
Specific Conductance	T	umhos/cm	16	100	No SLC					19.7	748	151	66.7
Sulfate	T	mg/kg-dry	16	100	No SLC					7.2	590	82.7	23.8
Total Kjeldahl Nitrogen	T	mg/kg-dry	16	100	No SLC					329	4890	1450	1020
Total Organic Carbon	T	mg/kg-dry	16	100	No SLC					6410	72700	31200	25200
Metals													
Aluminum	T	mg/kg-dry	16	100	HH Soil (HQ=1)	76000	0			3850	11200	7670	7260
Antimony	T	mg/kg-dry	16	0	HH Soil (HQ=1)	31	0	0.17	0.30	ND	ND		
Arsenic	T	mg/kg-dry	16	100	HH Soil (HQ=1)	0.39	100			2.2	5.3	3.2	2.8
Barium	T	mg/kg-dry	16	100	HH Soil (HQ=1)	5500	0			22.9	132	65.7	64.4
Beryllium	T	mg/kg-dry	16	100	HH Soil (HQ=1)	150	0			0.61	1.2	0.81	0.76
Boron	T	mg/kg-dry	16	31.3	HH Soil (HQ=1)	5500	0	0.22	2.20	ND	9.2		
Cadmium	T	mg/kg-dry	16	93.8	HH Soil (HQ=1)	39	0	0.03	0.03	ND	0.53	0.18	0.15
Calcium	T	mg/kg-dry	16	100	No SLC					1430	9040	4170	3550
Chromium	T	mg/kg-dry	16	100	HH Soil (HQ=1)	210	0			7.7	24.9	16	16.1
Cobalt	T	mg/kg-dry	16	100	HH Soil (HQ=1)	900	0			3	7.8	5.7	5.7
Copper	T	mg/kg-dry	16	87.5	HH Soil (HQ=1)	2900	0	12.60	13.10	ND	227	29.5	14
Iron	T	mg/kg-dry	16	100	HH Soil (HQ=1)	23000	0			10600	21500	15900	16200
Lead	T	mg/kg-dry	16	100	HH Soil (HQ=1)	400	0			15.2	34.5	22.5	22.8
Magnesium	T	mg/kg-dry	16	100	No SLC					1790	5200	3780	3650
Manganese	T	mg/kg-dry	16	100	HH Soil (HQ=1)	3200	0			202	609	379	357
Mercury	T	mg/kg-dry	16	6.3	HH Soil (HQ=1)	23	0	0.02	0.02	ND	0.024		
Molybdenum	T	mg/kg-dry	16	93.8	HH Soil (HQ=1)	390	0	1.00	1.00	ND	41	5.6	2.4

"No SLC" indicates that there is not a Screening Level Criterion for this medium specified for the RI/FS.
"HH Soil (HQ=1)" EPA Region 6 RBSLs Human Health Residential Soil (HQ=1)
"Eco Soil" EPA Region 6 Tier 1-3 RBSLs Ecological Soil
Median Value determined using 1/2 the Reporting Limit value for Non-Detects if greater than 50% of the values were detected.
Mean Value calculated using 1/2 the Reporting Limit for Non-Detects if greater than 50% of the values were detected.

T = Total Fraction
D = Filtered Fraction (0.45 micron filter)
A = Filtered Fraction (0.1 micron filter)
ND = Non-Detected Value

Table 7-91

Soil 0-6 inches Random

RI/FS Reference Lower Cabresto Creek Riparian

Summary of Results

Analyte	Sample Fraction	Units	Total Number of Samples	Percent Detects (%)	SLC	SLC Value	Percent Above SLC	Min RL for ND	Max RL for ND	Min Value	Max Value	Mean Value	Median Value
Nickel	T	mg/kg-dry	16	100	HH Soil (HQ=1)	1600	0			5.6	18.3	13.2	12.5
Potassium	T	mg/kg-dry	16	100	No SLC					1180	3950	1910	1680
Selenium	T	mg/kg-dry	16	18.8	HH Soil (HQ=1)	390	0	0.30	1.10	ND	1.4		
Silver	T	mg/kg-dry	16	31.3	HH Soil (HQ=1)	390	0	0.11	0.16	ND	0.31		
Sodium	T	mg/kg-dry	16	0	No SLC			29.30	81.50	ND	ND		
Thallium	T	mg/kg-dry	16	75	HH Soil (HQ=1)	5.5	0	0.09	0.12	ND	0.26	0.12	0.11
Vanadium	T	mg/kg-dry	16	100	HH Soil (HQ=1)	78	0			9.9	30.3	21.2	20.6
Zinc	T	mg/kg-dry	16	100	HH Soil (HQ=1)	23000	0			63.9	156	104	97.8

"No SLC" indicates that there is not a Screening Level Criterion for this medium specified for the RI/FS.
"HH Soil (HQ=1)" EPA Region 6 RBSLs Human Health Residential Soil (HQ=1)
"Eco Soil" EPA Region 6 Tier 1-3 RBSLs Ecological Soil
Median Value determined using 1/2 the Reporting Limit value for Non-Detects if greater than 50% of the values were detected.
Mean Value calculated using 1/2 the Reporting Limit for Non-Detects if greater than 50% of the values were detected.

T = Total Fraction
D = Filtered Fraction (0.45 micron filter)
A = Filtered Fraction (0.1 micron filter)
ND = Non-Detected Value

Table 7-92

Soil 0-24 inches Random

RI/FS Reference Lower Cabresto Creek Riparian

Summary of Results

Analyte	Sample Fraction	Units	Total Number of Samples	Percent Detects (%)	SLC	SLC Value	Percent Above SLC	Min RL for ND	Max RL for ND	Min Value	Max Value	Mean Value	Median Value
Inorganics													
Cation-Exchange Capacity	T	meq/100g	16	100	No SLC					7.8	24.1	16.3	16.8
Chloride	T	mg/kg-dry	16	100	No SLC					2.5	39.4	10.3	5.4
Fluoride	T	mg/kg-dry	16	100	No SLC					0.22	1.5	0.55	0.43
Nitrate	T	mg/kg-dry	16	75	No SLC			2.30	2.80	ND	12.6	5.5	4.7
Organic Soils	T	%	16	100	No SLC					0.78	8.5	3.9	3.7
pH	T	SU	16	100	No SLC					5.8	8	7.2	7.1
Phosphorus	T	mg/kg-dry	16	100	No SLC					34.8	577	438	454
Sodium Absorption Ratio	T	ratio	16	100	No SLC					0.05	0.81	0.21	0.14
Solids, Percent	T	%	16	100	No SLC					72	94.3	86.6	88
Specific Conductance	T	umhos/cm	16	100	No SLC					18.4	829	145	66.5
Sulfate	T	mg/kg-dry	16	100	No SLC					7.9	727	101	20.9
Total Kjeldahl Nitrogen	T	mg/kg-dry	16	100	No SLC					205	1820	799	702
Total Organic Carbon	T	mg/kg-dry	16	100	No SLC					3210	44900	17600	12800
Metals													
Aluminum	T	mg/kg-dry	16	100	No SLC					4970	10300	6960	6980
Antimony	T	mg/kg-dry	16	0	ECO Soil	0.3	0	0.17	0.29	ND	ND		
Arsenic	T	mg/kg-dry	16	100	ECO Soil	31	0			1.7	11.5	3.2	2.8
Barium	T	mg/kg-dry	16	100	ECO Soil	330	0			25.2	84.6	50.6	50.5
Beryllium	T	mg/kg-dry	16	100	ECO Soil	30	0			0.49	1.1	0.73	0.69
Boron	T	mg/kg-dry	16	18.8	ECO Soil	0.5	100	0.22	2.40	ND	6.3		
Cadmium	T	mg/kg-dry	16	81.3	ECO Soil	0.4	0	0.03	0.03	ND	0.34	0.12	0.096
Calcium	T	mg/kg-dry	16	100	No SLC					1710	4940	3100	2780
Chromium	T	mg/kg-dry	16	100	ECO Soil	7.9	93.8			5.5	18.8	14.6	14.8
Cobalt	T	mg/kg-dry	16	100	ECO Soil	32	0			1.9	7	5.2	5.3
Copper	T	mg/kg-dry	16	87.5	ECO Soil	54	0	11.00	11.30	ND	25.9	13.5	13.2
Iron	T	mg/kg-dry	16	100	No SLC					12000	18100	14700	14400
Lead	T	mg/kg-dry	16	100	ECO Soil	15	75			11.5	29.9	19.3	18.6
Magnesium	T	mg/kg-dry	16	100	No SLC					1200	4510	3630	3530
Manganese	T	mg/kg-dry	16	100	ECO Soil	152	100			171	531	333	332
Mercury	T	mg/kg-dry	16	0	ECO Soil	0.1	0	0.02	0.02	ND	ND		
Molybdenum	T	mg/kg-dry	16	93.8	ECO Soil	2	46.7	0.99	0.99	ND	9.9	3.1	1.4

"No SLC" indicates that there is not a Screening Level Criterion for this medium specified for the RI/FS.
"HH Soil (HQ=1)" EPA Region 6 RBSLs Human Health Residential Soil (HQ=1)
"Eco Soil" EPA Region 6 Tier 1-3 RBSLs Ecological Soil
Median Value determined using 1/2 the Reporting Limit value for Non-Detects if greater than 50% of the values were detected.
Mean Value calculated using 1/2 the Reporting Limit for Non-Detects if greater than 50% of the values were detected.

T = Total Fraction
D = Filtered Fraction (0.45 micron filter)
A = Filtered Fraction (0.1 micron filter)
ND = Non-Detected Value

Table 7-92

Soil 0-24 inches Random

RI/FS Reference Lower Cabresto Creek Riparian

Summary of Results

Analyte	Sample Fraction	Units	Total Number of Samples	Percent Detects (%)	SLC	SLC Value	Percent Above SLC	Min RL for ND	Max RL for ND	Min Value	Max Value	Mean Value	Median Value
Nickel	T	mg/kg-dry	16	100	ECO Soil	48	0			3.7	16.1	12	12.7
Potassium	T	mg/kg-dry	16	100	No SLC					1110	2070	1590	1600
Selenium	T	mg/kg-dry	16	18.8	ECO Soil	1	66.7	0.49	0.95	ND	1.5		
Silver	T	mg/kg-dry	16	18.8	ECO Soil	2	0	0.11	0.16	ND	0.5		
Sodium	T	mg/kg-dry	16	0	No SLC			29.50	139.00	ND	ND		
Thallium	T	mg/kg-dry	16	56.3	ECO Soil	1	0	0.09	0.11	ND	0.19	0.087	0.09
Vanadium	T	mg/kg-dry	16	100	ECO Soil	2	100			7.3	26.5	19	18.8
Zinc	T	mg/kg-dry	16	100	ECO Soil	120	0			53.1	106	87.2	90.1

"No SLC" indicates that there is not a Screening Level Criterion for this medium specified for the RI/FS.
"HH Soil (HQ=1)" EPA Region 6 RBSLs Human Health Residential Soil (HQ=1)
"Eco Soil" EPA Region 6 Tier 1-3 RBSLs Ecological Soil
Median Value determined using 1/2 the Reporting Limit value for Non-Detects if greater than 50% of the values were detected.
Mean Value calculated using 1/2 the Reporting Limit for Non-Detects if greater than 50% of the values were detected.

T = Total Fraction
D = Filtered Fraction (0.45 micron filter)
A = Filtered Fraction (0.1 micron filter)
ND = Non-Detected Value

Table 7-93
Soil 0-24 inches SPLP Random
RI/FS Reference Lower Cabresto Creek Riparian
Summary of Results

Analyte	Sample Fraction	Units	Total Number of Samples	Percent Detects (%)	SLC	SLC Value	Percent Above SLC	Min RL for ND	Max RL for ND	Min Value	Max Value	Mean Value	Median Value
Inorganics													
Bicarbonate (as CaCO3)	T	mg/L	2	100	No SLC					1.7	16.6	9.2	9.2
Carbonate (as CaCO3)	T	mg/L	2	50	No SLC			1.00	1.00	ND	5.4	3	3
Chloride	T	mg/L	2	100	No SLC					4.6	4.8	4.7	4.7
Cyanide	T	mg/L	2	0	No SLC			0.01	0.01	ND	ND		
Fluoride	T	mg/L	2	100	No SLC					0.31	0.35	0.33	0.33
Hydroxide (as CaCO3)	T	mg/L	2	0	No SLC			1.00	1.00	ND	ND		
Nitrate	T	mg/L	2	0	No SLC			0.40	0.40	ND	ND		
Nitrite	T	mg/L	2	0	No SLC			0.01	0.01	ND	ND		
Phosphate, Ortho As P	T	mg/L	2	50	No SLC			0.01	0.01	ND	1.1	0.55	0.55
Phosphorus	T	mg/L	2	100	No SLC					0.056	0.058	0.057	0.057
Sulfate	T	mg/L	2	100	No SLC					7.6	8	7.8	7.8
Total Alkalinity	T	mg/L	2	100	No SLC					1.7	22	11.9	11.9
Total Kjeldahl Nitrogen	T	mg/L	2	0	No SLC			0.24	0.24	ND	ND		
Metals													
Aluminum	T	mg/L	2	100	No SLC					1.2	2.7	2	2
Antimony	T	mg/L	2	0	ECO Soil	0.3	0	0.00	0.00	ND	ND		
Arsenic	T	mg/L	2	0	ECO Soil	31	0	0.00	0.00	ND	ND		
Barium	T	mg/L	2	50	ECO Soil	330	0	0.09	0.09	ND	0.21	0.13	0.13
Beryllium	T	mg/L	2	0	ECO Soil	30	0	0.00	0.00	ND	ND		
Boron	T	mg/L	2	0	ECO Soil	0.5	0	0.08	0.20	ND	ND		
Cadmium	T	mg/L	2	0	ECO Soil	0.4	0	0.00	0.00	ND	ND		
Calcium	T	mg/L	2	100	No SLC					5.7	11.8	8.8	8.8
Chromium	T	mg/L	2	50	ECO Soil	7.9	0	0.00	0.00	ND	0.0024	0.0016	0.0016
Cobalt	T	mg/L	2	0	ECO Soil	32	0	0.00	0.00	ND	ND		
Copper	T	mg/L	2	0	ECO Soil	54	0	0.02	0.02	ND	ND		
Iron	T	mg/L	2	100	No SLC					1.1	2	1.5	1.5
Lead	T	mg/L	2	100	ECO Soil	15	0			0.0018	0.0034	0.0026	0.0026
Magnesium	T	mg/L	2	100	No SLC					1.2	2.4	1.8	1.8
Manganese	T	mg/L	2	100	ECO Soil	152	0			0.022	0.026	0.024	0.024
Mercury	T	mg/L	2	0	ECO Soil	0.1	0	0.01	0.01	ND	ND		
Molybdenum	T	mg/L	2	100	ECO Soil	2	0			0.0013	0.0016	0.0014	0.0014

"No SLC" indicates that there is not a Screening Level Criterion for this medium specified for the RI/FS.
"HH Soil (HQ=1)" EPA Region 6 RBSLs Human Health Residential Soil (HQ=1)
"Eco Soil" EPA Region 6 Tier 1-3 RBSLs Ecological Soil
Median Value determined using 1/2 the Reporting Limit value for Non-Detects if greater than 50% of the values were detected.
Mean Value calculated using 1/2 the Reporting Limit for Non-Detects if greater than 50% of the values were detected.

T = Total Fraction
D = Filtered Fraction (0.45 micron filter)
A = Filtered Fraction (0.1 micron filter)
ND = Non-Detected Value

Table 7-93
Soil 0-24 inches SPLP Random
RI/FS Reference Lower Cabresto Creek Riparian
Summary of Results

Analyte	Sample Fraction	Units	Total Number of Samples	Percent Detects (%)	SLC	SLC Value	Percent Above SLC	Min RL for ND	Max RL for ND	Min Value	Max Value	Mean Value	Median Value
Nickel	T	mg/L	2	100	ECO Soil	48	0			0.001	0.0023	0.0017	0.0017
Potassium	T	mg/L	2	100	No SLC					3.5	5.8	4.6	4.6
Selenium	T	mg/L	2	0	ECO Soil	1	0	0.00	0.00	ND	ND		
Silver	T	mg/L	2	0	ECO Soil	2	0	0.00	0.00	ND	ND		
Thallium	T	mg/L	2	0	ECO Soil	1	0	0.00	0.00	ND	ND		
Vanadium	T	mg/L	2	100	ECO Soil	2	0			0.0014	0.0029	0.0021	0.0021
Zinc	T	mg/L	2	50	ECO Soil	120	0	0.03	0.03	ND	0.057	0.036	0.036

"No SLC" indicates that there is not a Screening Level Criterion for this medium specified for the RI/FS.
"HH Soil (HQ=1)" EPA Region 6 RBSLs Human Health Residential Soil (HQ=1)
"Eco Soil" EPA Region 6 Tier 1-3 RBSLs Ecological Soil
Median Value determined using 1/2 the Reporting Limit value for Non-Detects if greater than 50% of the values were detected.
Mean Value calculated using 1/2 the Reporting Limit for Non-Detects if greater than 50% of the values were detected.

T = Total Fraction
D = Filtered Fraction (0.45 micron filter)
A = Filtered Fraction (0.1 micron filter)
ND = Non-Detected Value

Table 7-94
Soil 0-6 inches Random
RI/FS Soil Area 16 - Red River Riparian along Tailings Facility
Summary of Results

Analyte	Sample Fraction	Units	Total Number of Samples	Percent Detects (%)	SLC	SLC Value	Percent Above SLC	Min RL for ND	Max RL for ND	Min Value	Max Value	Mean Value	Median Value
Inorganics													
Cation-Exchange Capacity	T	meq/100g	10	100	No SLC					5.4	24	14	14.1
Chloride	T	mg/kg-dry	10	100	No SLC					2.2	81.8	21.7	12.9
Fluoride	T	mg/kg-dry	10	100	HH Soil (HQ=1)	3700	0			0.42	2.4	1.3	1.1
Nitrate	T	mg/kg-dry	10	30	No SLC			2.10	2.60	ND	7.1		
Organic Soils	T	%	10	100	No SLC					1.6	6.5	3.6	3.5
pH	T	SU	10	100	No SLC					5.2	8.2	6.7	6.8
Phosphorus	T	mg/kg-dry	10	100	No SLC					382	944	660	635
Sodium Absorption Ratio	T	ratio	10	100	No SLC					0.06	3.1	0.93	0.72
Solids, Percent	T	%	10	100	No SLC					75.9	97.4	85.3	85.2
Specific Conductance	T	umhos/cm	10	100	No SLC					29.5	1010	261	185
Sulfate	T	mg/kg-dry	10	100	No SLC					19.4	761	321	362
Total Kjeldahl Nitrogen	T	mg/kg-dry	10	100	No SLC					136	3870	1150	639
Total Organic Carbon	T	mg/kg-dry	10	100	No SLC					2070	20700	9950	9170
Metals													
Aluminum	T	mg/kg-dry	10	100	HH Soil (HQ=1)	76000	0			5410	12200	8300	8170
Antimony	T	mg/kg-dry	10	0	HH Soil (HQ=1)	31	0	0.19	0.33	ND	ND		
Arsenic	T	mg/kg-dry	10	100	HH Soil (HQ=1)	0.39	100			2.3	4.4	3.4	3.6
Barium	T	mg/kg-dry	10	100	HH Soil (HQ=1)	5500	0			102	472	318	298
Beryllium	T	mg/kg-dry	10	100	HH Soil (HQ=1)	150	0			0.56	1.3	0.86	0.79
Boron	T	mg/kg-dry	10	30	HH Soil (HQ=1)	5500	0	0.23	1.50	ND	2.3		
Cadmium	T	mg/kg-dry	10	90	HH Soil (HQ=1)	39	0	0.03	0.03	ND	1	0.41	0.31
Calcium	T	mg/kg-dry	10	100	No SLC					1280	4900	2430	2200
Chromium	T	mg/kg-dry	10	100	HH Soil (HQ=1)	210	0			12.9	21.5	17.5	17.1
Cobalt	T	mg/kg-dry	10	100	HH Soil (HQ=1)	900	0			6	16.5	10.9	10.2
Copper	T	mg/kg-dry	10	100	HH Soil (HQ=1)	2900	0			33.2	72.5	52	54
Iron	T	mg/kg-dry	10	100	HH Soil (HQ=1)	23000	0			14200	22900	19700	19100
Lead	T	mg/kg-dry	10	100	HH Soil (HQ=1)	400	0			26.2	60.1	42.3	42.5
Magnesium	T	mg/kg-dry	10	100	No SLC					2770	4810	3460	3470
Manganese	T	mg/kg-dry	10	100	HH Soil (HQ=1)	3200	0			373	1070	690	634
Mercury	T	mg/kg-dry	10	10	HH Soil (HQ=1)	23	0	0.02	0.02	ND	0.022		
Molybdenum	T	mg/kg-dry	10	100	HH Soil (HQ=1)	390	0			10.5	31.8	19.5	15.8

"No SLC" indicates that there is not a Screening Level Criterion for this medium specified for the RI/FS.
"HH Soil (HQ=1)" EPA Region 6 RBSLs Human Health Residential Soil (HQ=1)
"Eco Soil" EPA Region 6 Tier 1-3 RBSLs Ecological Soil
Median Value determined using 1/2 the Reporting Limit value for Non-Detects if greater than 50% of the values were detected.
Mean Value calculated using 1/2 the Reporting Limit for Non-Detects if greater than 50% of the values were detected.

T = Total Fraction
D = Filtered Fraction (0.45 micron filter)
A = Filtered Fraction (0.1 micron filter)
ND = Non-Detected Value

Table 7-94
Soil 0-6 inches Random
RI/FS Soil Area 16 - Red River Riparian along Tailings Facility
Summary of Results

Analyte	Sample Fraction	Units	Total Number of Samples	Percent Detects (%)	SLC	SLC Value	Percent Above SLC	Min RL for ND	Max RL for ND	Min Value	Max Value	Mean Value	Median Value
Nickel	T	mg/kg-dry	10	100	HH Soil (HQ=1)	1600	0			16.6	44	26.3	23.9
Potassium	T	mg/kg-dry	10	100	No SLC					1390	2300	1760	1750
Selenium	T	mg/kg-dry	10	100	HH Soil (HQ=1)	390	0			0.61	1.5	0.97	0.87
Silver	T	mg/kg-dry	10	80	HH Soil (HQ=1)	390	0	0.12	0.13	ND	0.36	0.19	0.18
Sodium	T	mg/kg-dry	10	40	No SLC			71.50	169.00	ND	410		
Thallium	T	mg/kg-dry	10	100	HH Soil (HQ=1)	5.5	0			0.091	0.18	0.13	0.14
Vanadium	T	mg/kg-dry	10	100	HH Soil (HQ=1)	78	0			14.8	29.7	23.8	22.9
Zinc	T	mg/kg-dry	10	100	HH Soil (HQ=1)	23000	0			106	350	190	165
Pesticides-PCBs													
Aroclor 1016	T	mg/kg-dry	1	0	No SLC			0.03	0.03	ND	ND		
Aroclor 1221	T	mg/kg-dry	1	0	No SLC			0.07	0.07	ND	ND		
Aroclor 1232	T	mg/kg-dry	1	0	No SLC			0.03	0.03	ND	ND		
Aroclor 1242	T	mg/kg-dry	1	0	No SLC			0.03	0.03	ND	ND		
Aroclor 1248	T	mg/kg-dry	1	0	HH Soil (HQ=1)	0.22	0	0.03	0.03	ND	ND		
Aroclor 1254	T	mg/kg-dry	1	0	HH Soil (HQ=1)	0.22	0	0.03	0.03	ND	ND		
Aroclor 1260	T	mg/kg-dry	1	0	HH Soil (HQ=1)	0.22	0	0.03	0.03	ND	ND		
Semi-Volatile Organics													
1,1`-Biphenyl	T	mg/kg-dry	2	0	HH Soil (HQ=1)	3000	0	0.34	0.39	ND	ND		
2,4,5-Trichlorophenol	T	mg/kg-dry	2	0	No SLC			0.86	0.98	ND	ND		
2,4,6-Trichlorophenol	T	mg/kg-dry	2	0	No SLC			0.34	0.39	ND	ND		
2,4-Dichlorophenol	T	mg/kg-dry	2	0	No SLC			0.34	0.39	ND	ND		
2,4-Dimethylphenol	T	mg/kg-dry	2	0	No SLC			0.34	0.39	ND	ND		
2,4-Dinitrophenol	T	mg/kg-dry	2	0	No SLC			0.86	0.98	ND	ND		
2,4-Dinitrotoluene	T	mg/kg-dry	2	0	No SLC			0.34	0.39	ND	ND		
2,6-Dinitrotoluene	T	mg/kg-dry	2	0	HH Soil (HQ=1)	61	0	0.34	0.39	ND	ND		
2-Chloronaphthalene	T	mg/kg-dry	2	0	No SLC			0.34	0.39	ND	ND		
2-Chlorophenol	T	mg/kg-dry	2	0	HH Soil (HQ=1)	64	0	0.34	0.39	ND	ND		
2-Methylnaphthalene	T	mg/kg-dry	2	0	No SLC			0.34	0.39	ND	ND		
2-Methylphenol	T	mg/kg-dry	2	0	No SLC			0.34	0.39	ND	ND		
2-Nitroaniline	T	mg/kg-dry	2	0	No SLC			0.86	0.98	ND	ND		
2-Nitrophenol	T	mg/kg-dry	2	0	No SLC			0.34	0.39	ND	ND		
3,3-Dichlorobenzidine	T	mg/kg-dry	2	0	No SLC			0.34	0.39	ND	ND		

"No SLC" indicates that there is not a Screening Level Criterion for this medium specified for the RI/FS.
"HH Soil (HQ=1)" EPA Region 6 RBSLs Human Health Residential Soil (HQ=1)
"Eco Soil" EPA Region 6 Tier 1-3 RBSLs Ecological Soil
Median Value determined using 1/2 the Reporting Limit value for Non-Detects if greater than 50% of the values were detected.
Mean Value calculated using 1/2 the Reporting Limit for Non-Detects if greater than 50% of the values were detected.

T = Total Fraction
D = Filtered Fraction (0.45 micron filter)
A = Filtered Fraction (0.1 micron filter)
ND = Non-Detected Value

Table 7-94
Soil 0-6 inches Random
RI/FS Soil Area 16 - Red River Riparian along Tailings Facility
Summary of Results

Analyte	Sample Fraction	Units	Total Number of Samples	Percent Detects (%)	SLC	SLC Value	Percent Above SLC	Min RL for ND	Max RL for ND	Min Value	Max Value	Mean Value	Median Value
3-Nitroaniline	T	mg/kg-dry	2	0	No SLC			0.86	0.98	ND	ND		
4,6-Dinitro-2-methylphenol	T	mg/kg-dry	2	0	No SLC			0.86	0.98	ND	ND		
4-Bromophenyl phenyl ether	T	mg/kg-dry	2	0	No SLC			0.34	0.39	ND	ND		
4-Chloro-3-methylphenol	T	mg/kg-dry	2	0	No SLC			0.34	0.39	ND	ND		
4-Chloroaniline	T	mg/kg-dry	2	0	No SLC			0.34	0.39	ND	ND		
4-Chlorophenyl phenyl ether	T	mg/kg-dry	2	0	No SLC			0.34	0.39	ND	ND		
4-Methylphenol	T	mg/kg-dry	2	0	No SLC			0.34	0.39	ND	ND		
4-Nitroaniline	T	mg/kg-dry	2	0	No SLC			0.86	0.98	ND	ND		
4-Nitrophenol	T	mg/kg-dry	2	0	No SLC			0.86	0.98	ND	ND		
Acenaphthene	T	mg/kg-dry	2	0	HH Soil (HQ=1)	3700	0	0.34	0.39	ND	ND		
Acenaphthylene	T	mg/kg-dry	2	0	No SLC			0.34	0.39	ND	ND		
Anthracene	T	mg/kg-dry	2	0	HH Soil (HQ=1)	22000	0	0.34	0.39	ND	ND		
Benzo(a)anthracene	T	mg/kg-dry	2	0	HH Soil (HQ=1)	0.62	0	0.34	0.39	ND	ND		
Benzo(a)pyrene	T	mg/kg-dry	2	0	HH Soil (HQ=1)	0.062	0	0.34	0.39	ND	ND		
Benzo(b)fluoranthene	T	mg/kg-dry	2	0	HH Soil (HQ=1)	0.62	0	0.34	0.39	ND	ND		
Benzo(g,h,i)perylene	T	mg/kg-dry	2	0	No SLC			0.34	0.39	ND	ND		
Benzo(k)fluoranthene	T	mg/kg-dry	2	0	HH Soil (HQ=1)	6.2	0	0.34	0.39	ND	ND		
Bis(2-chloroethoxy)methane	T	mg/kg-dry	2	0	No SLC			0.34	0.39	ND	ND		
Bis(2-chloroethyl)ether	T	mg/kg-dry	2	0	No SLC			0.34	0.39	ND	ND		
Carbazole	T	mg/kg-dry	2	0	HH Soil (HQ=1)	24	0	0.34	0.39	ND	ND		
Chrysene	T	mg/kg-dry	2	0	HH Soil (HQ=1)	62	0	0.34	0.39	ND	ND		
Dibenz(a,h)anthracene	T	mg/kg-dry	2	0	HH Soil (HQ=1)	0.062	0	0.34	0.39	ND	ND		
Dibenzofuran	T	mg/kg-dry	2	0	HH Soil (HQ=1)	150	0	0.34	0.39	ND	ND		
Dichlorodiisopropyl ether	T	mg/kg-dry	2	0	No SLC			0.34	0.39	ND	ND		
Fluoranthene	T	mg/kg-dry	2	0	HH Soil (HQ=1)	2300	0	0.34	0.39	ND	ND		
Fluorene	T	mg/kg-dry	2	0	HH Soil (HQ=1)	2600	0	0.34	0.39	ND	ND		
Hexachlorobenzene	T	mg/kg-dry	2	0	No SLC			0.34	0.39	ND	ND		
Hexachlorobutadiene	T	mg/kg-dry	2	0	No SLC			0.34	0.39	ND	ND		
Hexachlorocyclopentadiene	T	mg/kg-dry	2	0	No SLC			0.34	0.39	ND	ND		
Hexachloroethane	T	mg/kg-dry	2	0	No SLC			0.34	0.39	ND	ND		
Indeno(1,2,3-cd)pyrene	T	mg/kg-dry	2	0	HH Soil (HQ=1)	0.62	0	0.34	0.39	ND	ND		
Isophorone	T	mg/kg-dry	2	0	HH Soil (HQ=1)	510	0	0.34	0.39	ND	ND		

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"HH Soil (HQ=1)" EPA Region 6 RBSLs Human Health Residential Soil (HQ=1)
"Eco Soil" EPA Region 6 Tier 1-3 RBSLs Ecological Soil
Median Value determined using 1/2 the Reporting Limit value for Non-Detects if greater than 50% of the values were detected.
Mean Value calculated using 1/2 the Reporting Limit for Non-Detects if greater than 50% of the values were detected.

T = Total Fraction
D = Filtered Fraction (0.45 micron filter)
A = Filtered Fraction (0.1 micron filter)
ND = Non-Detected Value

Table 7-94
Soil 0-6 inches Random
RI/FS Soil Area 16 - Red River Riparian along Tailings Facility
Summary of Results

Analyte	Sample Fraction	Units	Total Number of Samples	Percent Detects (%)	SLC	SLC Value	Percent Above SLC	Min RL for ND	Max RL for ND	Min Value	Max Value	Mean Value	Median Value
Naphthalene	T	mg/kg-dry	2	0	HH Soil (HQ=1)	120	0	0.34	0.39	ND	ND		
Nitrobenzene	T	mg/kg-dry	2	0	No SLC			0.34	0.39	ND	ND		
N-Nitrosodi-n-propylamine	T	mg/kg-dry	2	0	HH Soil (HQ=1)	0.07	0	0.34	0.39	ND	ND		
N-Nitrosodiphenylamine	T	mg/kg-dry	2	0	HH Soil (HQ=1)	99	0	0.34	0.39	ND	ND		
Pentachlorophenol	T	mg/kg-dry	2	0	No SLC			0.86	0.98	ND	ND		
Phenanthrene	T	mg/kg-dry	2	0	No SLC			0.34	0.39	ND	ND		
Phenol	T	mg/kg-dry	2	0	HH Soil (HQ=1)	18000	0	0.34	0.39	ND	ND		
Pyrene	T	mg/kg-dry	2	0	HH Soil (HQ=1)	2300	0	0.34	0.39	ND	ND		
Volatile Organics													
1,1,1-Trichloroethane	T	mg/kg-dry	2	0	HH Soil (HQ=1)	1400	0	0.01	0.01	ND	ND		
1,1,2,2-Tetrachloroethane	T	mg/kg-dry	2	0	No SLC			0.01	0.01	ND	ND		
1,1,2-Trichloro-1,2,2-trifluoroethane	T	mg/kg-dry	2	0	No SLC			0.01	0.01	ND	ND		
1,1,2-Trichloroethane	T	mg/kg-dry	2	0	No SLC			0.01	0.01	ND	ND		
1,1-Dichloroethane	T	mg/kg-dry	2	0	HH Soil (HQ=1)	590	0	0.01	0.01	ND	ND		
1,1-Dichloroethene	T	mg/kg-dry	2	0	HH Soil (HQ=1)	280	0	0.01	0.01	ND	ND		
1,2,4-Trichlorobenzene	T	mg/kg-dry	2	0	No SLC			0.01	0.01	ND	ND		
1,2-Dibromo-3-chloropropane	T	mg/kg-dry	2	0	No SLC			0.01	0.01	ND	ND		
1,2-Dichlorobenzene	T	mg/kg-dry	2	0	No SLC			0.01	0.01	ND	ND		
1,2-Dichloroethane	T	mg/kg-dry	2	0	No SLC			0.01	0.01	ND	ND		
1,2-Dichloroethene (total)	T	mg/kg-dry	2	0	No SLC			0.01	0.01	ND	ND		
1,2-Dichloropropane	T	mg/kg-dry	2	0	No SLC			0.01	0.01	ND	ND		
1,3-Dichlorobenzene	T	mg/kg-dry	2	0	No SLC			0.01	0.01	ND	ND		
1,4-Dichlorobenzene	T	mg/kg-dry	2	0	No SLC			0.01	0.01	ND	ND		
2-Butanone	T	mg/kg-dry	2	50	HH Soil (HQ=1)	32000	0	0.01	0.01	ND	0.001	0.0033	0.0033
2-Hexanone	T	mg/kg-dry	2	0	No SLC			0.01	0.01	ND	ND		
4-Methyl-2-pentanone	T	mg/kg-dry	2	0	HH Soil (HQ=1)	5800	0	0.01	0.01	ND	ND		
Benzene	T	mg/kg-dry	2	0	HH Soil (HQ=1)	0.66	0	0.01	0.01	ND	ND		
Bromodichloromethane	T	mg/kg-dry	2	0	No SLC			0.01	0.01	ND	ND		
Bromoform	T	mg/kg-dry	2	0	No SLC			0.01	0.01	ND	ND		
Bromomethane	T	mg/kg-dry	2	0	No SLC			0.01	0.01	ND	ND		
Carbon tetrachloride	T	mg/kg-dry	2	0	HH Soil (HQ=1)	0.24	0	0.01	0.01	ND	ND		
Chlorobenzene	T	mg/kg-dry	2	0	HH Soil (HQ=1)	320	0	0.01	0.01	ND	ND		

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"HH Soil (HQ=1)" EPA Region 6 RBSLs Human Health Residential Soil (HQ=1)
"Eco Soil" EPA Region 6 Tier 1-3 RBSLs Ecological Soil
Median Value determined using 1/2 the Reporting Limit value for Non-Detects if greater than 50% of the values were detected.
Mean Value calculated using 1/2 the Reporting Limit for Non-Detects if greater than 50% of the values were detected.

T = Total Fraction
D = Filtered Fraction (0.45 micron filter)
A = Filtered Fraction (0.1 micron filter)
ND = Non-Detected Value

Table 7-94
Soil 0-6 inches Random
RI/FS Soil Area 16 - Red River Riparian along Tailings Facility
Summary of Results

Analyte	Sample Fraction	Units	Total Number of Samples	Percent Detects (%)	SLC	SLC Value	Percent Above SLC	Min RL for ND	Max RL for ND	Min Value	Max Value	Mean Value	Median Value
Chloroethane	T	mg/kg-dry	2	0	No SLC			0.01	0.01	ND	ND		
Chloroform	T	mg/kg-dry	2	0	No SLC			0.01	0.01	ND	ND		
Chloromethane	T	mg/kg-dry	2	0	HH Soil (HQ=1)	1.2	0	0.01	0.01	ND	ND		
cis-1,2-Dichloroethene	T	mg/kg-dry	2	0	No SLC			0.01	0.01	ND	ND		
cis-1,3-Dichloropropene	T	mg/kg-dry	2	0	No SLC			0.01	0.01	ND	ND		
Dibromochloromethane	T	mg/kg-dry	2	0	No SLC			0.01	0.01	ND	ND		
Dichlorodifluoromethane	T	mg/kg-dry	2	0	HH Soil (HQ=1)	94	0	0.01	0.01	ND	ND		
Ethylbenzene	T	mg/kg-dry	2	0	HH Soil (HQ=1)	230	0	0.01	0.01	ND	ND		
Styrene	T	mg/kg-dry	2	0	HH Soil (HQ=1)	1700	0	0.01	0.01	ND	ND		
Tetrachloroethene	T	mg/kg-dry	2	0	HH Soil (HQ=1)	0.55	0	0.01	0.01	ND	ND		
Toluene	T	mg/kg-dry	2	0	HH Soil (HQ=1)	520	0	0.01	0.01	ND	ND		
Total Xylene	T	mg/kg-dry	2	0	HH Soil (HQ=1)	210	0	0.01	0.01	ND	ND		
trans-1,2-Dichloroethene	T	mg/kg-dry	2	0	No SLC			0.01	0.01	ND	ND		
trans-1,3-Dichloropropene	T	mg/kg-dry	2	0	No SLC			0.01	0.01	ND	ND		
Trichloroethene	T	mg/kg-dry	2	0	HH Soil (HQ=1)	0.043	0	0.01	0.01	ND	ND		
Trichlorofluoromethane	T	mg/kg-dry	2	0	HH Soil (HQ=1)	390	0	0.01	0.01	ND	ND		
Vinyl chloride	T	mg/kg-dry	2	0	No SLC			0.01	0.01	ND	ND		

"No SLC" indicates that there is not a Screening Level Criterion for this medium specified for the RI/FS.
"HH Soil (HQ=1)" EPA Region 6 RBSLs Human Health Residential Soil (HQ=1)
"Eco Soil" EPA Region 6 Tier 1-3 RBSLs Ecological Soil
Median Value determined using 1/2 the Reporting Limit value for Non-Detects if greater than 50% of the values were detected.
Mean Value calculated using 1/2 the Reporting Limit for Non-Detects if greater than 50% of the values were detected.

T = Total Fraction
D = Filtered Fraction (0.45 micron filter)
A = Filtered Fraction (0.1 micron filter)
ND = Non-Detected Value

Table 7-95

Soil 0-24 inches Random

RI/FS Soil Area 16 - Red River Riparian along Tailings Facility

Summary of Results

Analyte	Sample Fraction	Units	Total Number of Samples	Percent Detects (%)	SLC	SLC Value	Percent Above SLC	Min RL for ND	Max RL for ND	Min Value	Max Value	Mean Value	Median Value
Inorganics													
Cation-Exchange Capacity	T	meq/100g	10	100	No SLC					4.5	20.2	13.6	14.2
Chloride	T	mg/kg-dry	10	100	No SLC					2.5	26.5	11.2	9.2
Fluoride	T	mg/kg-dry	10	100	No SLC					0.53	3	1.4	1.3
Nitrate	T	mg/kg-dry	10	20	No SLC			2.20	2.80	ND	4.8		
Organic Soils	T	%	10	100	No SLC					1.4	4.8	2.8	3.1
pH	T	SU	10	100	No SLC					5.5	7.9	6.8	6.9
Phosphorus	T	mg/kg-dry	10	100	No SLC					365	771	598	646
Sodium Absorption Ratio	T	ratio	10	100	No SLC					0.19	2	0.77	0.5
Solids, Percent	T	%	10	100	No SLC					72.6	94.9	83	81.6
Specific Conductance	T	umhos/cm	10	100	No SLC					18.7	306	139	116
Sulfate	T	mg/kg-dry	10	100	No SLC					21.8	413	196	156
Total Kjeldahl Nitrogen	T	mg/kg-dry	10	100	No SLC					65	3580	744	515
Total Organic Carbon	T	mg/kg-dry	10	100	No SLC					215	13000	5770	6870
Metals													
Aluminum	T	mg/kg-dry	10	100	No SLC					4450	11300	7760	8140
Antimony	T	mg/kg-dry	10	0	ECO Soil	0.3	0	0.22	0.32	ND	ND		
Arsenic	T	mg/kg-dry	10	100	ECO Soil	31	0			2.3	3.8	3.1	3.1
Barium	T	mg/kg-dry	10	100	ECO Soil	330	10			80.8	358	209	229
Beryllium	T	mg/kg-dry	10	100	ECO Soil	30	0			0.45	1.3	0.76	0.76
Boron	T	mg/kg-dry	10	20	ECO Soil	0.5	100	0.22	1.90	ND	2.3		
Cadmium	T	mg/kg-dry	10	90	ECO Soil	0.4	22.2	0.02	0.02	ND	1.2	0.34	0.15
Calcium	T	mg/kg-dry	10	100	No SLC					1190	3420	2170	2170
Chromium	T	mg/kg-dry	10	100	ECO Soil	7.9	100			10.9	21.2	16.1	15.9
Cobalt	T	mg/kg-dry	10	100	ECO Soil	32	0			5.2	17.1	9.5	9.5
Copper	T	mg/kg-dry	10	100	ECO Soil	54	20			26.6	76.9	42.7	42.3
Iron	T	mg/kg-dry	10	100	No SLC					12500	23600	17300	17000
Lead	T	mg/kg-dry	10	100	ECO Soil	15	100			21.4	45.2	35.4	37.5
Magnesium	T	mg/kg-dry	10	100	No SLC					2310	4210	3210	3150
Manganese	T	mg/kg-dry	10	100	ECO Soil	152	100			333	1170	605	524
Mercury	T	mg/kg-dry	10	0	ECO Soil	0.1	0	0.02	0.02	ND	ND		
Molybdenum	T	mg/kg-dry	10	100	ECO Soil	2	100			8.9	64.2	20.6	16.5

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"HH Soil (HQ=1)" EPA Region 6 RBSLs Human Health Residential Soil (HQ=1)
"Eco Soil" EPA Region 6 Tier 1-3 RBSLs Ecological Soil
Median Value determined using 1/2 the Reporting Limit value for Non-Detects if greater than 50% of the values were detected.
Mean Value calculated using 1/2 the Reporting Limit for Non-Detects if greater than 50% of the values were detected.

T = Total Fraction
D = Filtered Fraction (0.45 micron filter)
A = Filtered Fraction (0.1 micron filter)
ND = Non-Detected Value

Table 7-95
Soil 0-24 inches Random
RI/FS Soil Area 16 - Red River Riparian along Tailings Facility
Summary of Results

Analyte	Sample Fraction	Units	Total Number of Samples	Percent Detects (%)	SLC	SLC Value	Percent Above SLC	Min RL for ND	Max RL for ND	Min Value	Max Value	Mean Value	Median Value
Nickel	T	mg/kg-dry	10	100	ECO Soil	48	0			14.3	43.6	22.1	19
Potassium	T	mg/kg-dry	10	100	No SLC					1130	2300	1560	1470
Selenium	T	mg/kg-dry	10	60	ECO Soil	1	16.7	0.59	0.74	ND	1.4	0.72	0.83
Silver	T	mg/kg-dry	10	80	ECO Soil	2	0	0.11	0.13	ND	0.31	0.19	0.21
Sodium	T	mg/kg-dry	10	30	No SLC			51.70	253.00	ND	222		
Thallium	T	mg/kg-dry	10	100	ECO Soil	1	0			0.088	0.17	0.13	0.14
Vanadium	T	mg/kg-dry	10	100	ECO Soil	2	100			13.1	30.8	21.8	21.4
Zinc	T	mg/kg-dry	10	100	ECO Soil	120	50			81.4	359	150	120
Pesticides-PCBs													
Aroclor 1016	T	mg/kg-dry	1	0	No SLC			0.04	0.04	ND	ND		
Aroclor 1221	T	mg/kg-dry	1	0	No SLC			0.07	0.07	ND	ND		
Aroclor 1232	T	mg/kg-dry	1	0	No SLC			0.04	0.04	ND	ND		
Aroclor 1242	T	mg/kg-dry	1	0	No SLC			0.04	0.04	ND	ND		
Aroclor 1248	T	mg/kg-dry	1	0	ECO Soil	10	0	0.04	0.04	ND	ND		
Aroclor 1254	T	mg/kg-dry	1	0	ECO Soil	10	0	0.04	0.04	ND	ND		
Aroclor 1260	T	mg/kg-dry	1	0	ECO Soil	10	0	0.04	0.04	ND	ND		
Semi-Volatile Organics													
1,1`-Biphenyl	T	mg/kg-dry	2	0	ECO Soil	60	0	0.35	0.37	ND	ND		
2,4,5-Trichlorophenol	T	mg/kg-dry	2	0	No SLC			0.87	0.92	ND	ND		
2,4,6-Trichlorophenol	T	mg/kg-dry	2	0	No SLC			0.35	0.37	ND	ND		
2,4-Dichlorophenol	T	mg/kg-dry	2	0	No SLC			0.35	0.37	ND	ND		
2,4-Dimethylphenol	T	mg/kg-dry	2	0	No SLC			0.35	0.37	ND	ND		
2,4-Dinitrophenol	T	mg/kg-dry	2	0	No SLC			0.87	0.92	ND	ND		
2,4-Dinitrotoluene	T	mg/kg-dry	2	0	No SLC			0.35	0.37	ND	ND		
2,6-Dinitrotoluene	T	mg/kg-dry	2	0	ECO Soil	0.033	0	0.35	0.37	ND	ND		
2-Chloronaphthalene	T	mg/kg-dry	2	0	No SLC			0.35	0.37	ND	ND		
2-Chlorophenol	T	mg/kg-dry	2	0	ECO Soil	20	0	0.35	0.37	ND	ND		
2-Methylnaphthalene	T	mg/kg-dry	2	0	ECO Soil	3.2	0	0.35	0.37	ND	ND		
2-Methylphenol	T	mg/kg-dry	2	0	No SLC			0.35	0.37	ND	ND		
2-Nitroaniline	T	mg/kg-dry	2	0	No SLC			0.87	0.92	ND	ND		
2-Nitrophenol	T	mg/kg-dry	2	0	No SLC			0.35	0.37	ND	ND		
3,3-Dichlorobenzidine	T	mg/kg-dry	2	0	No SLC			0.35	0.37	ND	ND		

"No SLC" indicates that there is not a Screening Level Criterion for this medium specified for the RI/FS.
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A = Filtered Fraction (0.1 micron filter)
ND = Non-Detected Value

Table 7-95
Soil 0-24 inches Random
RI/FS Soil Area 16 - Red River Riparian along Tailings Facility
Summary of Results

Analyte	Sample Fraction	Units	Total Number of Samples	Percent Detects (%)	SLC	SLC Value	Percent Above SLC	Min RL for ND	Max RL for ND	Min Value	Max Value	Mean Value	Median Value
3-Nitroaniline	T	mg/kg-dry	2	0	No SLC			0.87	0.92	ND	ND		
4,6-Dinitro-2-methylphenol	T	mg/kg-dry	2	0	No SLC			0.87	0.92	ND	ND		
4-Bromophenyl phenyl ether	T	mg/kg-dry	2	0	No SLC			0.35	0.37	ND	ND		
4-Chloro-3-methylphenol	T	mg/kg-dry	2	0	ECO Soil	8	0	0.35	0.37	ND	ND		
4-Chloroaniline	T	mg/kg-dry	2	0	No SLC			0.35	0.37	ND	ND		
4-Chlorophenyl phenyl ether	T	mg/kg-dry	2	0	No SLC			0.35	0.37	ND	ND		
4-Methylphenol	T	mg/kg-dry	2	0	No SLC			0.35	0.37	ND	ND		
4-Nitroaniline	T	mg/kg-dry	2	0	No SLC			0.87	0.92	ND	ND		
4-Nitrophenol	T	mg/kg-dry	2	0	No SLC			0.87	0.92	ND	ND		
Acenaphthene	T	mg/kg-dry	2	0	ECO Soil	20	0	0.35	0.37	ND	ND		
Acenaphthylene	T	mg/kg-dry	2	0	No SLC			0.35	0.37	ND	ND		
Anthracene	T	mg/kg-dry	2	0	ECO Soil	10	0	0.35	0.37	ND	ND		
Benzo(a)anthracene	T	mg/kg-dry	2	0	ECO Soil	5.2	0	0.35	0.37	ND	ND		
Benzo(a)pyrene	T	mg/kg-dry	2	0	ECO Soil	1	0	0.35	0.37	ND	ND		
Benzo(b)fluoranthene	T	mg/kg-dry	2	0	ECO Soil	59.8	0	0.35	0.37	ND	ND		
Benzo(g,h,i)perylene	T	mg/kg-dry	2	0	ECO Soil	119	0	0.35	0.37	ND	ND		
Benzo(k)fluoranthene	T	mg/kg-dry	2	0	ECO Soil	148	0	0.35	0.37	ND	ND		
Bis(2-chloroethoxy)methane	T	mg/kg-dry	2	0	No SLC			0.35	0.37	ND	ND		
Bis(2-chloroethyl)ether	T	mg/kg-dry	2	0	No SLC			0.35	0.37	ND	ND		
Carbazole	T	mg/kg-dry	2	0	No SLC			0.35	0.37	ND	ND		
Chrysene	T	mg/kg-dry	2	0	ECO Soil	4.7	0	0.35	0.37	ND	ND		
Dibenz(a,h)anthracene	T	mg/kg-dry	2	0	ECO Soil	18.4	0	0.35	0.37	ND	ND		
Dibenzofuran	T	mg/kg-dry	2	0	No SLC			0.35	0.37	ND	ND		
Dichlorodiisopropyl ether	T	mg/kg-dry	2	0	No SLC			0.35	0.37	ND	ND		
Fluoranthene	T	mg/kg-dry	2	0	ECO Soil	10	0	0.35	0.37	ND	ND		
Fluorene	T	mg/kg-dry	2	0	ECO Soil	30	0	0.35	0.37	ND	ND		
Hexachlorobenzene	T	mg/kg-dry	2	0	No SLC			0.35	0.37	ND	ND		
Hexachlorobutadiene	T	mg/kg-dry	2	0	No SLC			0.35	0.37	ND	ND		
Hexachlorocyclopentadiene	T	mg/kg-dry	2	0	No SLC			0.35	0.37	ND	ND		
Hexachloroethane	T	mg/kg-dry	2	0	No SLC			0.35	0.37	ND	ND		
Indeno(1,2,3-cd)pyrene	T	mg/kg-dry	2	0	ECO Soil	109	0	0.35	0.37	ND	ND		
Isophorone	T	mg/kg-dry	2	0	ECO Soil	139	0	0.35	0.37	ND	ND		

"No SLC" indicates that there is not a Screening Level Criterion for this medium specified for the RI/FS.
"HH Soil (HQ=1)" EPA Region 6 RBSLs Human Health Residential Soil (HQ=1)
"Eco Soil" EPA Region 6 Tier 1-3 RBSLs Ecological Soil
Median Value determined using 1/2 the Reporting Limit value for Non-Detects if greater than 50% of the values were detected.
Mean Value calculated using 1/2 the Reporting Limit for Non-Detects if greater than 50% of the values were detected.

T = Total Fraction
D = Filtered Fraction (0.45 micron filter)
A = Filtered Fraction (0.1 micron filter)
ND = Non-Detected Value

Table 7-95
Soil 0-24 inches Random
RI/FS Soil Area 16 - Red River Riparian along Tailings Facility
Summary of Results

Analyte	Sample Fraction	Units	Total Number of Samples	Percent Detects (%)	SLC	SLC Value	Percent Above SLC	Min RL for ND	Max RL for ND	Min Value	Max Value	Mean Value	Median Value
Naphthalene	T	mg/kg-dry	2	0	ECO Soil	5	0	0.35	0.37	ND	ND		
Nitrobenzene	T	mg/kg-dry	2	0	No SLC			0.35	0.37	ND	ND		
N-Nitrosodi-n-propylamine	T	mg/kg-dry	2	0	ECO Soil	0.54	0	0.35	0.37	ND	ND		
N-Nitrosodiphenylamine	T	mg/kg-dry	2	0	ECO Soil	20	0	0.35	0.37	ND	ND		
Pentachlorophenol	T	mg/kg-dry	2	0	No SLC			0.87	0.92	ND	ND		
Phenanthrene	T	mg/kg-dry	2	0	ECO Soil	5	0	0.35	0.37	ND	ND		
Phenol	T	mg/kg-dry	2	0	ECO Soil	30	0	0.35	0.37	ND	ND		
Pyrene	T	mg/kg-dry	2	0	ECO Soil	10	0	0.35	0.37	ND	ND		
Volatile Organics													
1,1,1-Trichloroethane	T	mg/kg-dry	2	0	ECO Soil	0.1	0	0.01	0.01	ND	ND		
1,1,2,2-Tetrachloroethane	T	mg/kg-dry	2	0	No SLC			0.01	0.01	ND	ND		
1,1,2-Trichloro-1,2,2-trifluoroethane	T	mg/kg-dry	2	0	No SLC			0.01	0.01	ND	ND		
1,1,2-Trichloroethane	T	mg/kg-dry	2	0	No SLC			0.01	0.01	ND	ND		
1,1-Dichloroethane	T	mg/kg-dry	2	0	ECO Soil	20.1	0	0.01	0.01	ND	ND		
1,1-Dichloroethene	T	mg/kg-dry	2	0	No SLC			0.01	0.01	ND	ND		
1,2,4-Trichlorobenzene	T	mg/kg-dry	2	0	No SLC			0.01	0.01	ND	ND		
1,2-Dibromo-3-chloropropane	T	mg/kg-dry	2	0	No SLC			0.01	0.01	ND	ND		
1,2-Dichlorobenzene	T	mg/kg-dry	2	0	No SLC			0.01	0.01	ND	ND		
1,2-Dichloroethane	T	mg/kg-dry	2	0	No SLC			0.01	0.01	ND	ND		
1,2-Dichloroethene (total)	T	mg/kg-dry	2	0	No SLC			0.01	0.01	ND	ND		
1,2-Dichloropropane	T	mg/kg-dry	2	0	No SLC			0.01	0.01	ND	ND		
1,3-Dichlorobenzene	T	mg/kg-dry	2	0	No SLC			0.01	0.01	ND	ND		
1,4-Dichlorobenzene	T	mg/kg-dry	2	0	No SLC			0.01	0.01	ND	ND		
2-Butanone	T	mg/kg-dry	2	50	ECO Soil	89.6	0	0.01	0.01	ND	0.003	0.0037	0.0037
2-Hexanone	T	mg/kg-dry	2	0	ECO Soil	12.6	0	0.01	0.01	ND	ND		
4-Methyl-2-pentanone	T	mg/kg-dry	2	0	ECO Soil	443	0	0.01	0.01	ND	ND		
Benzene	T	mg/kg-dry	2	0	ECO Soil	0.5	0	0.01	0.01	ND	ND		
Bromodichloromethane	T	mg/kg-dry	2	0	No SLC			0.01	0.01	ND	ND		
Bromoform	T	mg/kg-dry	2	0	No SLC			0.01	0.01	ND	ND		
Bromomethane	T	mg/kg-dry	2	0	No SLC			0.01	0.01	ND	ND		
Carbon tetrachloride	T	mg/kg-dry	2	0	ECO Soil	1000	0	0.01	0.01	ND	ND		
Chlorobenzene	T	mg/kg-dry	2	0	ECO Soil	40	0	0.01	0.01	ND	ND		

"No SLC" indicates that there is not a Screening Level Criterion for this medium specified for the RI/FS.
"HH Soil (HQ=1)" EPA Region 6 RBSLs Human Health Residential Soil (HQ=1)
"Eco Soil" EPA Region 6 Tier 1-3 RBSLs Ecological Soil
Median Value determined using 1/2 the Reporting Limit value for Non-Detects if greater than 50% of the values were detected.
Mean Value calculated using 1/2 the Reporting Limit for Non-Detects if greater than 50% of the values were detected.

T = Total Fraction
D = Filtered Fraction (0.45 micron filter)
A = Filtered Fraction (0.1 micron filter)
ND = Non-Detected Value

Table 7-95

Soil 0-24 inches Random

RI/FS Soil Area 16 - Red River Riparian along Tailings Facility

Summary of Results

Analyte	Sample Fraction	Units	Total Number of Samples	Percent Detects (%)	SLC	SLC Value	Percent Above SLC	Min RL for ND	Max RL for ND	Min Value	Max Value	Mean Value	Median Value
Chloroethane	T	mg/kg-dry	2	0	No SLC			0.01	0.01	ND	ND		
Chloroform	T	mg/kg-dry	2	0	No SLC			0.01	0.01	ND	ND		
Chloromethane	T	mg/kg-dry	2	0	ECO Soil	10.4	0	0.01	0.01	ND	ND		
cis-1,2-Dichloroethene	T	mg/kg-dry	2	0	No SLC			0.01	0.01	ND	ND		
cis-1,3-Dichloropropene	T	mg/kg-dry	2	0	No SLC			0.01	0.01	ND	ND		
Dibromochloromethane	T	mg/kg-dry	2	0	No SLC			0.01	0.01	ND	ND		
Dichlorodifluoromethane	T	mg/kg-dry	2	0	ECO Soil	39.5	0	0.01	0.01	ND	ND		
Ethylbenzene	T	mg/kg-dry	2	0	ECO Soil	5	0	0.01	0.01	ND	ND		
Styrene	T	mg/kg-dry	2	0	ECO Soil	300	0	0.01	0.01	ND	ND		
Tetrachloroethene	T	mg/kg-dry	2	0	No SLC			0.01	0.01	ND	ND		
Toluene	T	mg/kg-dry	2	0	ECO Soil	200	0	0.01	0.01	ND	ND		
Total Xylene	T	mg/kg-dry	2	0	ECO Soil	5	0	0.01	0.01	ND	ND		
trans-1,2-Dichloroethene	T	mg/kg-dry	2	0	No SLC			0.01	0.01	ND	ND		
trans-1,3-Dichloropropene	T	mg/kg-dry	2	0	No SLC			0.01	0.01	ND	ND		
Trichloroethene	T	mg/kg-dry	2	0	No SLC			0.01	0.01	ND	ND		
Trichlorofluoromethane	T	mg/kg-dry	2	0	ECO Soil	16.4	0	0.01	0.01	ND	ND		
Vinyl chloride	T	mg/kg-dry	2	0	No SLC			0.01	0.01	ND	ND		

"No SLC" indicates that there is not a Screening Level Criterion for this medium specified for the RI/FS.
"HH Soil (HQ=1)" EPA Region 6 RBSLs Human Health Residential Soil (HQ=1)
"Eco Soil" EPA Region 6 Tier 1-3 RBSLs Ecological Soil
Median Value determined using 1/2 the Reporting Limit value for Non-Detects if greater than 50% of the values were detected.
Mean Value calculated using 1/2 the Reporting Limit for Non-Detects if greater than 50% of the values were detected.

T = Total Fraction
D = Filtered Fraction (0.45 micron filter)
A = Filtered Fraction (0.1 micron filter)
ND = Non-Detected Value

Table 7-96

Soil 0-6 inches Biased

RI/FS Soil Area 16 - Red River Riparian along Tailings Facility

Summary of Results

Analyte	Sample Fraction	Units	Total Number of Samples	Percent Detects (%)	SLC	SLC Value	Percent Above SLC	Min RL for ND	Max RL for ND	Min Value	Max Value	Mean Value	Median Value
Inorganics													
Cation-Exchange Capacity	T	meq/100g	1	100	No SLC					20.9	20.9	20.9	20.9
Chloride	T	mg/kg-dry	1	100	No SLC					9.8	9.8	9.8	9.8
Fluoride	T	mg/kg-dry	1	100	HH Soil (HQ=1)	3700	0			1.6	1.6	1.6	1.6
Nitrate	T	mg/kg-dry	1	100	No SLC					14.6	14.6	14.6	14.6
Organic Soils	T	%	1	100	No SLC					3	3	3	3
pH	T	SU	1	100	No SLC					5.4	5.4	5.4	5.4
Phosphorus	T	mg/kg-dry	1	100	No SLC					970	970	970	970
Sodium Absorption Ratio	T	ratio	1	100	No SLC					0.23	0.23	0.23	0.23
Solids, Percent	T	%	1	100	No SLC					90.5	90.5	90.5	90.5
Specific Conductance	T	umhos/cm	1	100	No SLC					527	527	527	527
Sulfate	T	mg/kg-dry	1	100	No SLC					294	294	294	294
Total Kjeldahl Nitrogen	T	mg/kg-dry	1	100	No SLC					625	625	625	625
Total Organic Carbon	T	mg/kg-dry	1	100	No SLC					10400	10400	10400	10400
Metals													
Aluminum	T	mg/kg-dry	1	100	HH Soil (HQ=1)	76000	0			7320	7320	7320	7320
Antimony	T	mg/kg-dry	1	0	HH Soil (HQ=1)	31	0	0.53	0.53	ND	ND		
Arsenic	T	mg/kg-dry	1	100	HH Soil (HQ=1)	0.39	100			3.3	3.3	3.3	3.3
Barium	T	mg/kg-dry	1	100	HH Soil (HQ=1)	5500	0			280	280	280	280
Beryllium	T	mg/kg-dry	1	100	HH Soil (HQ=1)	150	0			0.62	0.62	0.62	0.62
Boron	T	mg/kg-dry	1	100	HH Soil (HQ=1)	5500	0			5.3	5.3	5.3	5.3
Cadmium	T	mg/kg-dry	1	100	HH Soil (HQ=1)	39	0			0.1	0.1	0.1	0.1
Calcium	T	mg/kg-dry	1	100	No SLC					1960	1960	1960	1960
Chromium	T	mg/kg-dry	1	100	HH Soil (HQ=1)	210	0			17.2	17.2	17.2	17.2
Cobalt	T	mg/kg-dry	1	100	HH Soil (HQ=1)	900	0			6.8	6.8	6.8	6.8
Copper	T	mg/kg-dry	1	100	HH Soil (HQ=1)	2900	0			44.2	44.2	44.2	44.2
Iron	T	mg/kg-dry	1	100	HH Soil (HQ=1)	23000	0			18500	18500	18500	18500
Lead	T	mg/kg-dry	1	100	HH Soil (HQ=1)	400	0			42.2	42.2	42.2	42.2
Magnesium	T	mg/kg-dry	1	100	No SLC					3680	3680	3680	3680
Manganese	T	mg/kg-dry	1	100	HH Soil (HQ=1)	3200	0			315	315	315	315
Mercury	T	mg/kg-dry	1	0	HH Soil (HQ=1)	23	0	0.02	0.02	ND	ND		
Molybdenum	T	mg/kg-dry	1	100	HH Soil (HQ=1)	390	0			31.7	31.7	31.7	31.7

"No SLC" indicates that there is not a Screening Level Criterion for this medium specified for the RI/FS.
"HH Soil (HQ=1)" EPA Region 6 RBSLs Human Health Residential Soil (HQ=1)
"Eco Soil" EPA Region 6 Tier 1-3 RBSLs Ecological Soil
Median Value determined using 1/2 the Reporting Limit value for Non-Detects if greater than 50% of the values were detected.
Mean Value calculated using 1/2 the Reporting Limit for Non-Detects if greater than 50% of the values were detected.

T = Total Fraction
D = Filtered Fraction (0.45 micron filter)
A = Filtered Fraction (0.1 micron filter)
ND = Non-Detected Value

Table 7-96

Soil 0-6 inches Biased

RI/FS Soil Area 16 - Red River Riparian along Tailings Facility

Summary of Results

Analyte	Sample Fraction	Units	Total Number of Samples	Percent Detects (%)	SLC	SLC Value	Percent Above SLC	Min RL for ND	Max RL for ND	Min Value	Max Value	Mean Value	Median Value
Nickel	T	mg/kg-dry	1	100	HH Soil (HQ=1)	1600	0			13	13	13	13
Potassium	T	mg/kg-dry	1	100	No SLC					1890	1890	1890	1890
Selenium	T	mg/kg-dry	1	100	HH Soil (HQ=1)	390	0			0.72	0.72	0.72	0.72
Silver	T	mg/kg-dry	1	0	HH Soil (HQ=1)	390	0	0.18	0.18	ND	ND		
Sodium	T	mg/kg-dry	1	0	No SLC			81.90	81.90	ND	ND		
Thallium	T	mg/kg-dry	1	100	HH Soil (HQ=1)	5.5	0			0.11	0.11	0.11	0.11
Vanadium	T	mg/kg-dry	1	100	HH Soil (HQ=1)	78	0			21.2	21.2	21.2	21.2
Zinc	T	mg/kg-dry	1	100	HH Soil (HQ=1)	23000	0			81.6	81.6	81.6	81.6

"No SLC" indicates that there is not a Screening Level Criterion for this medium specified for the RI/FS.
"HH Soil (HQ=1)" EPA Region 6 RBSLs Human Health Residential Soil (HQ=1)
"Eco Soil" EPA Region 6 Tier 1-3 RBSLs Ecological Soil
Median Value determined using 1/2 the Reporting Limit value for Non-Detects if greater than 50% of the values were detected.
Mean Value calculated using 1/2 the Reporting Limit for Non-Detects if greater than 50% of the values were detected.

T = Total Fraction
D = Filtered Fraction (0.45 micron filter)
A = Filtered Fraction (0.1 micron filter)
ND = Non-Detected Value

Table 7-97

Soil 0-24 inches Biased

RI/FS Soil Area 16 - Red River Riparian along Tailings Facility

Summary of Results

Analyte	Sample Fraction	Units	Total Number of Samples	Percent Detects (%)	SLC	SLC Value	Percent Above SLC	Min RL for ND	Max RL for ND	Min Value	Max Value	Mean Value	Median Value
Inorganics													
Cation-Exchange Capacity	T	meq/100g	1	100	No SLC					9.5	9.5	9.5	9.5
Chloride	T	mg/kg-dry	1	100	No SLC					13.5	13.5	13.5	13.5
Fluoride	T	mg/kg-dry	1	100	No SLC					2.3	2.3	2.3	2.3
Nitrate	T	mg/kg-dry	1	100	No SLC					11	11	11	11
Organic Soils	T	%	1	100	No SLC					2.8	2.8	2.8	2.8
pH	T	SU	1	100	No SLC					5	5	5	5
Phosphorus	T	mg/kg-dry	1	100	No SLC					1010	1010	1010	1010
Sodium Absorption Ratio	T	ratio	1	100	No SLC					0.45	0.45	0.45	0.45
Solids, Percent	T	%	1	100	No SLC					92.8	92.8	92.8	92.8
Specific Conductance	T	umhos/cm	1	100	No SLC					775	775	775	775
Sulfate	T	mg/kg-dry	1	100	No SLC					388	388	388	388
Total Kjeldahl Nitrogen	T	mg/kg-dry	1	100	No SLC					602	602	602	602
Total Organic Carbon	T	mg/kg-dry	1	100	No SLC					7900	7900	7900	7900
Metals													
Aluminum	T	mg/kg-dry	1	100	No SLC					6490	6490	6490	6490
Antimony	T	mg/kg-dry	1	0	ECO Soil	0.3	0	0.52	0.52	ND	ND		
Arsenic	T	mg/kg-dry	1	100	ECO Soil	31	0			3.5	3.5	3.5	3.5
Barium	T	mg/kg-dry	1	100	ECO Soil	330	0			235	235	235	235
Beryllium	T	mg/kg-dry	1	100	ECO Soil	30	0			0.56	0.56	0.56	0.56
Boron	T	mg/kg-dry	1	100	ECO Soil	0.5	100			4.5	4.5	4.5	4.5
Cadmium	T	mg/kg-dry	1	100	ECO Soil	0.4	0			0.084	0.084	0.084	0.084
Calcium	T	mg/kg-dry	1	100	No SLC					1980	1980	1980	1980
Chromium	T	mg/kg-dry	1	100	ECO Soil	7.9	100			15.2	15.2	15.2	15.2
Cobalt	T	mg/kg-dry	1	100	ECO Soil	32	0			6.4	6.4	6.4	6.4
Copper	T	mg/kg-dry	1	100	ECO Soil	54	0			38.6	38.6	38.6	38.6
Iron	T	mg/kg-dry	1	100	No SLC					16900	16900	16900	16900
Lead	T	mg/kg-dry	1	100	ECO Soil	15	100			37.2	37.2	37.2	37.2
Magnesium	T	mg/kg-dry	1	100	No SLC					3400	3400	3400	3400
Manganese	T	mg/kg-dry	1	100	ECO Soil	152	100			295	295	295	295
Mercury	T	mg/kg-dry	1	0	ECO Soil	0.1	0	0.02	0.02	ND	ND		
Molybdenum	T	mg/kg-dry	1	100	ECO Soil	2	100			27.7	27.7	27.7	27.7

"No SLC" indicates that there is not a Screening Level Criterion for this medium specified for the RI/FS.
"HH Soil (HQ=1)" EPA Region 6 RBSLs Human Health Residential Soil (HQ=1)
"Eco Soil" EPA Region 6 Tier 1-3 RBSLs Ecological Soil
Median Value determined using 1/2 the Reporting Limit value for Non-Detects if greater than 50% of the values were detected.
Mean Value calculated using 1/2 the Reporting Limit for Non-Detects if greater than 50% of the values were detected.

T = Total Fraction
D = Filtered Fraction (0.45 micron filter)
A = Filtered Fraction (0.1 micron filter)
ND = Non-Detected Value

Table 7-97

Soil 0-24 inches Biased

RI/FS Soil Area 16 - Red River Riparian along Tailings Facility

Summary of Results

Analyte	Sample Fraction	Units	Total Number of Samples	Percent Detects (%)	SLC	SLC Value	Percent Above SLC	Min RL for ND	Max RL for ND	Min Value	Max Value	Mean Value	Median Value
Nickel	T	mg/kg-dry	1	100	ECO Soil	48	0			13.2	13.2	13.2	13.2
Potassium	T	mg/kg-dry	1	100	No SLC					1770	1770	1770	1770
Selenium	T	mg/kg-dry	1	100	ECO Soil	1	0			0.55	0.55	0.55	0.55
Silver	T	mg/kg-dry	1	100	ECO Soil	2	0			0.18	0.18	0.18	0.18
Sodium	T	mg/kg-dry	1	0	No SLC			108.00	108.00	ND	ND		
Thallium	T	mg/kg-dry	1	100	ECO Soil	1	0			0.11	0.11	0.11	0.11
Vanadium	T	mg/kg-dry	1	100	ECO Soil	2	100			17.3	17.3	17.3	17.3
Zinc	T	mg/kg-dry	1	100	ECO Soil	120	0			73.9	73.9	73.9	73.9

"No SLC" indicates that there is not a Screening Level Criterion for this medium specified for the RI/FS.
"HH Soil (HQ=1)" EPA Region 6 RBSLs Human Health Residential Soil (HQ=1)
"Eco Soil" EPA Region 6 Tier 1-3 RBSLs Ecological Soil
Median Value determined using 1/2 the Reporting Limit value for Non-Detects if greater than 50% of the values were detected.
Mean Value calculated using 1/2 the Reporting Limit for Non-Detects if greater than 50% of the values were detected.

T = Total Fraction
D = Filtered Fraction (0.45 micron filter)
A = Filtered Fraction (0.1 micron filter)
ND = Non-Detected Value

Table 7-98

Soil 0-6 inches Non-Random

RI/FS Soil Area 16 - Red River Riparian along Tailings Facility

Summary of Results

Analyte	Sample Fraction	Units	Total Number of Samples	Percent Detects (%)	SLC	SLC Value	Percent Above SLC	Min RL for ND	Max RL for ND	Min Value	Max Value	Mean Value	Median Value
Inorganics													
Cation-Exchange Capacity	T	meq/100g	5	100	No SLC					15.8	43.4	32.9	35.5
Chloride	T	mg/kg-dry	5	60	No SLC			2.30	2.40	ND	59.8	24.2	2.4
Fluoride	T	mg/kg-dry	5	100	HH Soil (HQ=1)	3700	0			0.27	3	1.5	0.68
Organic Soils	T	%	5	100	No SLC					4.5	42.5	13.9	6
pH	T	SU	5	100	No SLC					7.3	8.7	8.1	8.2
Phosphorus	T	mg/kg-dry	5	100	No SLC					27.3	58.5	40.2	41.6
Sodium Absorption Ratio	T	ratio	5	100	No SLC					0.02	0.74	0.32	0.18
Solids, Percent	T	%	5	100	No SLC					24.6	87.5	64.5	84.7
Specific Conductance	T	umhos/cm	5	100	No SLC					146	4620	1720	286
Sulfate	T	mg/kg-dry	5	100	No SLC					5.8	2130	687	9.7
Total Kjeldahl Nitrogen	T	mg/kg-dry	5	100	No SLC					759	10700	3250	1600
Total Organic Carbon	T	mg/kg-dry	5	100	No SLC					7280	167000	52700	21500
Metals													
Aluminum	T	mg/kg-dry	5	100	HH Soil (HQ=1)	76000	0			7460	32100	17700	13600
Antimony	T	mg/kg-dry	5	0	HH Soil (HQ=1)	31	0	0.55	2.00	ND	ND		
Arsenic	T	mg/kg-dry	5	100	HH Soil (HQ=1)	0.39	100			2.1	3.6	2.6	2.4
Barium	T	mg/kg-dry	5	100	HH Soil (HQ=1)	5500	0			160	293	222	204
Beryllium	T	mg/kg-dry	5	80	HH Soil (HQ=1)	150	0	0.64	0.64	ND	1.6	0.97	0.91
Boron	T	mg/kg-dry	5	100	HH Soil (HQ=1)	5500	0			5.7	24.1	12.2	10.4
Cadmium	T	mg/kg-dry	5	0	HH Soil (HQ=1)	39	0	0.03	0.12	ND	ND		
Calcium	T	mg/kg-dry	5	100	No SLC					5020	43000	14900	7900
Chromium	T	mg/kg-dry	5	100	HH Soil (HQ=1)	210	0			16.1	25.8	19.8	18.1
Cobalt	T	mg/kg-dry	5	100	HH Soil (HQ=1)	900	0			7.6	16	11	9.9
Copper	T	mg/kg-dry	5	100	HH Soil (HQ=1)	2900	0			27.2	38.7	32.5	32.1
Iron	T	mg/kg-dry	5	100	HH Soil (HQ=1)	23000	40			16100	29400	22400	21200
Lead	T	mg/kg-dry	5	100	HH Soil (HQ=1)	400	0			19.7	33.4	25.9	23.3
Magnesium	T	mg/kg-dry	5	100	No SLC					4010	10200	6040	4590
Manganese	T	mg/kg-dry	5	100	HH Soil (HQ=1)	3200	0			396	875	670	773
Mercury	T	mg/kg-dry	5	80	HH Soil (HQ=1)	23	0	0.04	0.04	ND	0.13	0.047	0.027
Molybdenum	T	mg/kg-dry	5	100	HH Soil (HQ=1)	390	0			0.86	82.8	33.4	5.1
Nickel	T	mg/kg-dry	5	100	HH Soil (HQ=1)	1600	0			13.3	29.6	20.9	21.7

"No SLC" indicates that there is not a Screening Level Criterion for this medium specified for the RI/FS.
"HH Soil (HQ=1)" EPA Region 6 RBSLs Human Health Residential Soil (HQ=1)
"Eco Soil" EPA Region 6 Tier 1-3 RBSLs Ecological Soil
Median Value determined using 1/2 the Reporting Limit value for Non-Detects if greater than 50% of the values were detected.
Mean Value calculated using 1/2 the Reporting Limit for Non-Detects if greater than 50% of the values were detected.

T = Total Fraction
D = Filtered Fraction (0.45 micron filter)
A = Filtered Fraction (0.1 micron filter)
ND = Non-Detected Value

Table 7-98

Soil 0-6 inches Non-Random

RI/FS Soil Area 16 - Red River Riparian along Tailings Facility

Summary of Results

Analyte	Sample Fraction	Units	Total Number of Samples	Percent Detects (%)	SLC	SLC Value	Percent Above SLC	Min RL for ND	Max RL for ND	Min Value	Max Value	Mean Value	Median Value
Potassium	T	mg/kg-dry	5	100	No SLC					1820	7390	3950	3070
Selenium	T	mg/kg-dry	5	40	HH Soil (HQ=1)	390	0	0.33	0.75	ND	1.8		
Silver	T	mg/kg-dry	5	60	HH Soil (HQ=1)	390	0	0.23	0.36	ND	0.37	0.23	0.24
Sodium	T	mg/kg-dry	5	100	No SLC					354	914	622	585
Thallium	T	mg/kg-dry	5	60	HH Soil (HQ=1)	5.5	0	0.25	0.41	ND	0.3	0.21	0.2
Vanadium	T	mg/kg-dry	5	100	HH Soil (HQ=1)	78	0			19.4	43.1	31	29.5
Zinc	T	mg/kg-dry	5	100	HH Soil (HQ=1)	23000	0			68.3	86.3	80.7	83.5

"No SLC" indicates that there is not a Screening Level Criterion for this medium specified for the RI/FS.
"HH Soil (HQ=1)" EPA Region 6 RBSLs Human Health Residential Soil (HQ=1)
"Eco Soil" EPA Region 6 Tier 1-3 RBSLs Ecological Soil
Median Value determined using 1/2 the Reporting Limit value for Non-Detects if greater than 50% of the values were detected.
Mean Value calculated using 1/2 the Reporting Limit for Non-Detects if greater than 50% of the values were detected.

T = Total Fraction
D = Filtered Fraction (0.45 micron filter)
A = Filtered Fraction (0.1 micron filter)
ND = Non-Detected Value

Table 7-99

Soil 0-24 inches Non-Random

RI/FS Soil Area 16 - Red River Riparian along Tailings Facility

Summary of Results

Analyte	Sample Fraction	Units	Total Number of Samples	Percent Detects (%)	SLC	SLC Value	Percent Above SLC	Min RL for ND	Max RL for ND	Min Value	Max Value	Mean Value	Median Value
Inorganics													
Cation-Exchange Capacity	T	meq/100g	5	100	No SLC					6.4	44.6	28.4	38.3
Chloride	T	mg/kg-dry	5	40	No SLC			2.10	2.30	ND	14		
Fluoride	T	mg/kg-dry	5	100	No SLC					0.38	2.5	1.2	0.92
Organic Soils	T	%	5	100	No SLC					2.6	10.6	6.2	5.1
pH	T	SU	5	100	No SLC					7.7	8.9	8.4	8.5
Phosphorus	T	mg/kg-dry	5	100	No SLC					16	44	30.4	31.2
Sodium Absorption Ratio	T	ratio	5	100	No SLC					0.04	0.6	0.34	0.44
Solids, Percent	T	%	5	100	No SLC					54.1	95.8	77.6	89.6
Specific Conductance	T	umhos/cm	5	100	No SLC					82.5	2010	649	337
Sulfate	T	mg/kg-dry	5	100	No SLC					4	697	182	7.1
Total Kjeldahl Nitrogen	T	mg/kg-dry	5	100	No SLC					536	2190	1210	813
Total Organic Carbon	T	mg/kg-dry	5	100	No SLC					7570	58200	27700	15700
Metals													
Aluminum	T	mg/kg-dry	5	100	No SLC					5670	27600	14600	13400
Antimony	T	mg/kg-dry	5	0	ECO Soil	0.3	0	0.48	0.82	ND	ND		
Arsenic	T	mg/kg-dry	5	100	ECO Soil	31	0			2.2	2.9	2.5	2.6
Barium	T	mg/kg-dry	5	100	ECO Soil	330	0			128	262	189	182
Beryllium	T	mg/kg-dry	5	100	ECO Soil	30	0			0.52	1.5	0.96	0.9
Boron	T	mg/kg-dry	5	100	ECO Soil	0.5	100			2.2	11.4	7.4	7.4
Cadmium	T	mg/kg-dry	5	0	ECO Soil	0.4	0	0.03	0.06	ND	ND		
Calcium	T	mg/kg-dry	5	100	No SLC					2640	10500	6880	7760
Chromium	T	mg/kg-dry	5	100	ECO Soil	7.9	100			13.3	24.9	19.5	18.4
Cobalt	T	mg/kg-dry	5	100	ECO Soil	32	0			4.4	17.7	10.7	10.3
Copper	T	mg/kg-dry	5	100	ECO Soil	54	0			27.2	39.2	34	36
Iron	T	mg/kg-dry	5	100	No SLC					14000	29900	20900	20400
Lead	T	mg/kg-dry	5	100	ECO Soil	15	100			18.9	36.9	26.9	24.6
Magnesium	T	mg/kg-dry	5	100	No SLC					3330	8860	5610	5170
Manganese	T	mg/kg-dry	5	100	ECO Soil	152	100			216	780	446	459
Mercury	T	mg/kg-dry	5	80	ECO Soil	0.1	25	0.02	0.02	ND	0.13	0.051	0.04
Molybdenum	T	mg/kg-dry	5	100	ECO Soil	2	80			0.99	89.8	24.2	4.1
Nickel	T	mg/kg-dry	5	100	ECO Soil	48	0			12.2	32.6	21.5	20.1

"No SLC" indicates that there is not a Screening Level Criterion for this medium specified for the RI/FS.
"HH Soil (HQ=1)" EPA Region 6 RBSLs Human Health Residential Soil (HQ=1)
"Eco Soil" EPA Region 6 Tier 1-3 RBSLs Ecological Soil
Median Value determined using 1/2 the Reporting Limit value for Non-Detects if greater than 50% of the values were detected.
Mean Value calculated using 1/2 the Reporting Limit for Non-Detects if greater than 50% of the values were detected.

T = Total Fraction
D = Filtered Fraction (0.45 micron filter)
A = Filtered Fraction (0.1 micron filter)
ND = Non-Detected Value

Table 7-99

Soil 0-24 inches Non-Random

RI/FS Soil Area 16 - Red River Riparian along Tailings Facility

Summary of Results

Analyte	Sample Fraction	Units	Total Number of Samples	Percent Detects (%)	SLC	SLC Value	Percent Above SLC	Min RL for ND	Max RL for ND	Min Value	Max Value	Mean Value	Median Value
Potassium	T	mg/kg-dry	5	100	No SLC					2040	6230	3400	3170
Selenium	T	mg/kg-dry	5	80	ECO Soil	1	25	0.32	0.32	ND	1.1	0.51	0.43
Silver	T	mg/kg-dry	5	80	ECO Soil	2	0	0.17	0.17	ND	0.43	0.23	0.15
Sodium	T	mg/kg-dry	5	100	No SLC					302	884	514	419
Thallium	T	mg/kg-dry	5	60	ECO Soil	1	0	0.16	0.16	ND	0.26	0.14	0.14
Vanadium	T	mg/kg-dry	5	100	ECO Soil	2	100			16.5	46	31.8	31.1
Zinc	T	mg/kg-dry	5	100	ECO Soil	120	0			64.4	93.4	79	79.1

"No SLC" indicates that there is not a Screening Level Criterion for this medium specified for the RI/FS.
"HH Soil (HQ=1)" EPA Region 6 RBSLs Human Health Residential Soil (HQ=1)
"Eco Soil" EPA Region 6 Tier 1-3 RBSLs Ecological Soil
Median Value determined using 1/2 the Reporting Limit value for Non-Detects if greater than 50% of the values were detected.
Mean Value calculated using 1/2 the Reporting Limit for Non-Detects if greater than 50% of the values were detected.

T = Total Fraction
D = Filtered Fraction (0.45 micron filter)
A = Filtered Fraction (0.1 micron filter)
ND = Non-Detected Value

Table 7-100
Soil 0-24 inches SPLP Random
RI/FS Soil Area 16 - Red River Riparian along Tailings Facility
Summary of Results

Analyte	Sample Fraction	Units	Total Number of Samples	Percent Detects (%)	SLC	SLC Value	Percent Above SLC	Min RL for ND	Max RL for ND	Min Value	Max Value	Mean Value	Median Value
Inorganics													
Bicarbonate (as CaCO3)	T	mg/L	2	100	No SLC					3.2	8.7	5.9	5.9
Carbonate (as CaCO3)	T	mg/L	2	0	No SLC			1.00	1.00	ND	ND		
Chloride	T	mg/L	2	100	No SLC					0.83	0.92	0.88	0.88
Cyanide	T	mg/L	2	0	No SLC			0.01	0.01	ND	ND		
Fluoride	T	mg/L	2	100	No SLC					0.43	0.99	0.71	0.71
Hydroxide (as CaCO3)	T	mg/L	2	0	No SLC			1.00	1.00	ND	ND		
Nitrate	T	mg/L	2	0	No SLC			0.40	0.40	ND	ND		
Nitrite	T	mg/L	2	0	No SLC			0.01	0.01	ND	ND		
Phosphate, Ortho As P	T	mg/L	2	50	No SLC			0.01	0.01	ND	0.014	0.0095	0.0095
Phosphorus	T	mg/L	2	100	No SLC					0.021	0.043	0.032	0.032
Sulfate	T	mg/L	2	100	No SLC					2.6	4.2	3.4	3.4
Total Alkalinity	T	mg/L	2	100	No SLC					3.2	8.7	5.9	5.9
Total Kjeldahl Nitrogen	T	mg/L	2	0	No SLC			0.24	0.24	ND	ND		
Metals													
Aluminum	T	mg/L	2	100	No SLC					0.41	0.46	0.44	0.44
Antimony	T	mg/L	2	50	ECO Soil	0.3	0	0.00	0.00	ND	0.00062	0.00051	0.00051
Arsenic	T	mg/L	2	0	ECO Soil	31	0	0.00	0.00	ND	ND		
Barium	T	mg/L	2	0	ECO Soil	330	0	0.02	0.04	ND	ND		
Beryllium	T	mg/L	2	0	ECO Soil	30	0	0.00	0.00	ND	ND		
Boron	T	mg/L	2	0	ECO Soil	0.5	0	0.04	0.04	ND	ND		
Cadmium	T	mg/L	2	0	ECO Soil	0.4	0	0.00	0.00	ND	ND		
Calcium	T	mg/L	2	100	No SLC					5.1	5.4	5.2	5.2
Chromium	T	mg/L	2	0	ECO Soil	7.9	0	0.00	0.00	ND	ND		
Cobalt	T	mg/L	2	0	ECO Soil	32	0	0.00	0.00	ND	ND		
Copper	T	mg/L	2	50	ECO Soil	54	0	0.02	0.02	ND	0.007	0.0082	0.0082
Iron	T	mg/L	2	100	No SLC					0.42	0.43	0.43	0.43
Lead	T	mg/L	2	100	ECO Soil	15	0			0.0015	0.0016	0.0015	0.0015
Magnesium	T	mg/L	2	100	No SLC					0.9	1.1	0.98	0.98
Manganese	T	mg/L	2	100	ECO Soil	152	0			0.016	0.024	0.02	0.02
Mercury	T	mg/L	2	0	ECO Soil	0.1	0	0.01	0.01	ND	ND		
Molybdenum	T	mg/L	2	100	ECO Soil	2	0			0.0078	0.018	0.013	0.013

"No SLC" indicates that there is not a Screening Level Criterion for this medium specified for the RI/FS.
"HH Soil (HQ=1)" EPA Region 6 RBSLs Human Health Residential Soil (HQ=1)
"Eco Soil" EPA Region 6 Tier 1-3 RBSLs Ecological Soil
Median Value determined using 1/2 the Reporting Limit value for Non-Detects if greater than 50% of the values were detected.
Mean Value calculated using 1/2 the Reporting Limit for Non-Detects if greater than 50% of the values were detected.

T = Total Fraction
D = Filtered Fraction (0.45 micron filter)
A = Filtered Fraction (0.1 micron filter)
ND = Non-Detected Value

Table 7-100

Soil 0-24 inches SPLP Random

RI/FS Soil Area 16 - Red River Riparian along Tailings Facility

Summary of Results

Analyte	Sample Fraction	Units	Total Number of Samples	Percent Detects (%)	SLC	SLC Value	Percent Above SLC	Min RL for ND	Max RL for ND	Min Value	Max Value	Mean Value	Median Value
Nickel	T	mg/L	2	100	ECO Soil	48	0			0.00079	0.0011	0.00095	0.00095
Potassium	T	mg/L	2	0	No SLC			1.30	1.70	ND	ND		
Selenium	T	mg/L	2	0	ECO Soil	1	0	0.00	0.00	ND	ND		
Silver	T	mg/L	2	0	ECO Soil	2	0	0.00	0.00	ND	ND		
Thallium	T	mg/L	2	0	ECO Soil	1	0	0.00	0.00	ND	ND		
Vanadium	T	mg/L	2	100	ECO Soil	2	0			0.00053	0.00075	0.00064	0.00064
Zinc	T	mg/L	2	50	ECO Soil	120	0	0.02	0.02	ND	0.01	0.0094	0.0094

"No SLC" indicates that there is not a Screening Level Criterion for this medium specified for the RI/FS.
"HH Soil (HQ=1)" EPA Region 6 RBSLs Human Health Residential Soil (HQ=1)
"Eco Soil" EPA Region 6 Tier 1-3 RBSLs Ecological Soil
Median Value determined using 1/2 the Reporting Limit value for Non-Detects if greater than 50% of the values were detected.
Mean Value calculated using 1/2 the Reporting Limit for Non-Detects if greater than 50% of the values were detected.

T = Total Fraction
D = Filtered Fraction (0.45 micron filter)
A = Filtered Fraction (0.1 micron filter)
ND = Non-Detected Value

Table 7-101
Tailings Random
RI/FS Soil Area 14 - Tailings Impoundments
Summary of Results

Analyte	Sample Fraction	Units	Total Number of Samples	Percent Detects (%)	SLC	SLC Value	Percent Above SLC	Min RL for ND	Max RL for ND	Min Value	Max Value	Mean Value	Median Value
Inorganics													
Cation-Exchange Capacity	T	meq/100g	10	100	No SLC					6.2	20.8	15.3	16.6
Chloride	T	mg/kg-dry	10	80	No SLC			2.10	2.20	ND	5	2.9	3.1
Fluoride	T	mg/kg-dry	10	100	No SLC					0.96	2.3	1.5	1.6
Nitrate	T	mg/kg-dry	10	20	No SLC			2.10	2.20	ND	2.8		
Organic Soils	T	%	10	100	No SLC					0.5	1.6	1	1.1
pH	T	SU	10	100	No SLC					7.6	8	7.8	7.8
Phosphorus	T	mg/kg-dry	10	100	No SLC					76.5	1690	961	1040
Sodium Absorption Ratio	T	ratio	10	90	No SLC			0.03	0.03	ND	0.21	0.097	0.1
Solids, Percent	T	%	10	100	No SLC					93.8	98.7	96.3	96.9
Specific Conductance	T	umhos/cm	10	100	No SLC					740	2350	1560	1500
Sulfate	T	mg/kg-dry	10	100	No SLC					197	2620	923	576
Total Kjeldahl Nitrogen	T	mg/kg-dry	10	50	No SLC			19.10	25.80	ND	140	32.9	20.1
Total Organic Carbon	T	mg/kg-dry	10	30	No SLC			103.00	107.00	ND	1710		
Metals													
Aluminum	T	mg/kg-dry	10	100	No SLC					3260	11700	9040	9640
Antimony	T	mg/kg-dry	10	10	No SLC			0.41	0.50	ND	0.68		
Arsenic	T	mg/kg-dry	10	10	No SLC			0.86	2.20	ND	3.8		
Barium	T	mg/kg-dry	10	100	No SLC					15.9	156	98.6	103
Beryllium	T	mg/kg-dry	10	100	No SLC					0.54	1.4	0.95	0.99
Boron	T	mg/kg-dry	10	0	No SLC			0.54	1.20	ND	ND		
Cadmium	T	mg/kg-dry	10	100	No SLC					0.66	2.1	1.3	1.1
Calcium	T	mg/kg-dry	10	100	No SLC					8200	20500	16100	17600
Chromium	T	mg/kg-dry	10	100	No SLC					6.1	49.6	33.9	38.4
Cobalt	T	mg/kg-dry	10	100	No SLC					3.5	20	11.3	10.3
Copper	T	mg/kg-dry	10	100	No SLC					57.6	295	159	145
Iron	T	mg/kg-dry	10	100	No SLC					7390	27100	17700	18700
Lead	T	mg/kg-dry	10	100	No SLC					28.1	141	64.3	50.8
Magnesium	T	mg/kg-dry	10	100	No SLC					1830	9220	7230	8260
Manganese	T	mg/kg-dry	10	100	No SLC					401	803	468	422
Mercury	T	mg/kg-dry	10	0	No SLC			0.02	0.02	ND	ND		
Molybdenum	T	mg/kg-dry	10	100	No SLC					102	334	189	156

"No SLC" indicates that there is not a Screening Level Criterion for this medium specified for the RI/FS.
"HH Soil (HQ=1)" EPA Region 6 RBSLs Human Health Residential Soil (HQ=1)
"Eco Soil" EPA Region 6 Tier 1-3 RBSLs Ecological Soil
Median Value determined using 1/2 the Reporting Limit value for Non-Detects if greater than 50% of the values were detected.
Mean Value calculated using 1/2 the Reporting Limit for Non-Detects if greater than 50% of the values were detected.

T = Total Fraction
D = Filtered Fraction (0.45 micron filter)
A = Filtered Fraction (0.1 micron filter)
ND = Non-Detected Value

Table 7-101
Tailings Random
RI/FS Soil Area 14 - Tailings Impoundments
Summary of Results

Analyte	Sample Fraction	Units	Total Number of Samples	Percent Detects (%)	SLC	SLC Value	Percent Above SLC	Min RL for ND	Max RL for ND	Min Value	Max Value	Mean Value	Median Value
Nickel	T	mg/kg-dry	10	100	No SLC					5.3	44.3	28.4	30.6
Potassium	T	mg/kg-dry	10	100	No SLC					1020	5420	4090	4700
Selenium	T	mg/kg-dry	10	100	No SLC					0.39	1.3	0.84	0.84
Silver	T	mg/kg-dry	10	100	No SLC					0.22	1.2	0.58	0.53
Sodium	T	mg/kg-dry	10	100	No SLC					92.3	423	241	237
Thallium	T	mg/kg-dry	10	90	No SLC			0.09	0.09	ND	0.44	0.32	0.36
Uranium	T	mg/kg	10	100	No SLC					0.73	2.9	1.2	0.91
Vanadium	T	mg/kg-dry	10	100	No SLC					9.1	47.2	35.7	40.3
Zinc	T	mg/kg-dry	10	100	No SLC					84.8	308	155	134

"No SLC" indicates that there is not a Screening Level Criterion for this medium specified for the RI/FS.
"HH Soil (HQ=1)" EPA Region 6 RBSLs Human Health Residential Soil (HQ=1)
"Eco Soil" EPA Region 6 Tier 1-3 RBSLs Ecological Soil
Median Value determined using 1/2 the Reporting Limit value for Non-Detects if greater than 50% of the values were detected.
Mean Value calculated using 1/2 the Reporting Limit for Non-Detects if greater than 50% of the values were detected.

T = Total Fraction
D = Filtered Fraction (0.45 micron filter)
A = Filtered Fraction (0.1 micron filter)
ND = Non-Detected Value

Table 7-102
Tailings SPLP Random
RI/FS Soil Area 14 - Tailings Impoundments
Summary of Results

Analyte	Sample Fraction	Units	Total Number of Samples	Percent Detects (%)	SLC	SLC Value	Percent Above SLC	Min RL for ND	Max RL for ND	Min Value	Max Value	Mean Value	Median Value
Inorganics													
Bicarbonate (as CaCO3)	T	mg/L	3	0	No SLC			25.00	26.40	ND	ND		
Carbonate (as CaCO3)	T	mg/L	3	0	No SLC			1.00	1.00	ND	ND		
Chloride	T	mg/L	3	0	No SLC			0.52	0.56	ND	ND		
Cyanide	T	mg/L	3	0	No SLC			0.01	0.01	ND	ND		
Fluoride	T	mg/L	3	100	No SLC					0.35	0.53	0.43	0.4
Hydroxide (as CaCO3)	T	mg/L	3	0	No SLC			1.00	1.00	ND	ND		
Nitrate	T	mg/L	3	0	No SLC			0.24	0.29	ND	ND		
Nitrite	T	mg/L	3	33.3	No SLC			0.01	0.01	ND	0.0088		
Phosphate, Ortho As P	T	mg/L	3	0	No SLC			0.01	0.01	ND	ND		
Phosphorus	T	mg/L	3	0	No SLC			0.01	0.01	ND	ND		
Sulfate	T	mg/L	3	100	No SLC					43.3	260	131	88.3
Total Alkalinity	T	mg/L	3	0	No SLC			25.00	26.40	ND	ND		
Total Kjeldahl Nitrogen	T	mg/L	3	0	No SLC			0.24	0.24	ND	ND		
Metals													
Aluminum	T	mg/L	3	66.7	No SLC			0.03	0.03	ND	0.2	0.092	0.066
Antimony	T	mg/L	3	0	No SLC			0.00	0.00	ND	ND		
Arsenic	T	mg/L	3	0	No SLC			0.00	0.00	ND	ND		
Barium	T	mg/L	3	100	No SLC					0.026	0.11	0.062	0.056
Beryllium	T	mg/L	3	0	No SLC			0.00	0.00	ND	ND		
Boron	T	mg/L	3	0	No SLC			0.00	0.01	ND	ND		
Cadmium	T	mg/L	3	66.7	No SLC			0.00	0.00	ND	0.00038	0.00023	0.00021
Calcium	T	mg/L	3	100	No SLC					20.1	105	54	36.8
Chromium	T	mg/L	3	0	No SLC			0.00	0.00	ND	ND		
Cobalt	T	mg/L	3	0	No SLC			0.00	0.00	ND	ND		
Copper	T	mg/L	3	66.7	No SLC			0.00	0.00	ND	0.0028	0.0018	0.0023
Iron	T	mg/L	3	0	No SLC			0.02	0.02	ND	ND		
Lead	T	mg/L	3	0	No SLC			0.00	0.00	ND	ND		
Magnesium	T	mg/L	3	100	No SLC					1.1	1.7	1.5	1.7
Manganese	T	mg/L	3	66.7	No SLC			0.00	0.00	ND	0.0075	0.0037	0.0028
Mercury	T	mg/L	3	0	No SLC			0.01	0.01	ND	ND		
Molybdenum	T	mg/L	3	100	No SLC					0.4	1.4	0.95	1

"No SLC" indicates that there is not a Screening Level Criterion for this medium specified for the RI/FS.
"HH Soil (HQ=1)" EPA Region 6 RBSLs Human Health Residential Soil (HQ=1)
"Eco Soil" EPA Region 6 Tier 1-3 RBSLs Ecological Soil
Median Value determined using 1/2 the Reporting Limit value for Non-Detects if greater than 50% of the values were detected.
Mean Value calculated using 1/2 the Reporting Limit for Non-Detects if greater than 50% of the values were detected.

T = Total Fraction
D = Filtered Fraction (0.45 micron filter)
A = Filtered Fraction (0.1 micron filter)
ND = Non-Detected Value

Table 7-102
Tailings SPLP Random
RI/FS Soil Area 14 - Tailings Impoundments
Summary of Results

Analyte	Sample Fraction	Units	Total Number of Samples	Percent Detects (%)	SLC	SLC Value	Percent Above SLC	Min RL for ND	Max RL for ND	Min Value	Max Value	Mean Value	Median Value
Nickel	T	mg/L	3	33.3	No SLC			0.00	0.00	ND	0.0014		
Potassium	T	mg/L	3	100	No SLC					2.2	3.5	2.9	3
Selenium	T	mg/L	3	0	No SLC			0.00	0.00	ND	ND		
Silver	T	mg/L	3	0	No SLC			0.00	0.00	ND	ND		
Sodium	T	mg/L	3	33.3	No SLC			0.32	0.64	ND	0.54		
Thallium	T	mg/L	3	66.7	No SLC			0.00	0.00	ND	0.00012	0.000097	0.00011
Vanadium	T	mg/L	3	33.3	No SLC			0.00	0.00	ND	0.00069		
Zinc	T	mg/L	3	0	No SLC			0.00	0.00	ND	ND		

"No SLC" indicates that there is not a Screening Level Criterion for this medium specified for the RI/FS.
"HH Soil (HQ=1)" EPA Region 6 RBSLs Human Health Residential Soil (HQ=1)
"Eco Soil" EPA Region 6 Tier 1-3 RBSLs Ecological Soil
Median Value determined using 1/2 the Reporting Limit value for Non-Detects if greater than 50% of the values were detected.
Mean Value calculated using 1/2 the Reporting Limit for Non-Detects if greater than 50% of the values were detected.

T = Total Fraction
D = Filtered Fraction (0.45 micron filter)
A = Filtered Fraction (0.1 micron filter)
ND = Non-Detected Value

Table 7-103
Soil 0-6 inches Biased
RI/FS Soil Area 17 - Soils South of Tailings
Summary of Results

Analyte	Sample Fraction	Units	Total Number of Samples	Percent Detects (%)	SLC	SLC Value	Percent Above SLC	Min RL for ND	Max RL for ND	Min Value	Max Value	Mean Value	Median Value
Inorganics													
Cation-Exchange Capacity	T	meq/100g	41	100	No SLC					8.1	73.8	32.2	30
Chloride	T	mg/kg-dry	42	92.9	No SLC			2.10	2.20	ND	234	24.8	9.3
Fluoride	T	mg/kg-dry	42	85.7	HH Soil (HQ=1)	3700	0	0.11	0.14	ND	228	7.2	0.77
Nitrate	T	mg/kg-dry	42	66.7	No SLC			2.10	9.90	ND	445	26	2.7
Organic Soils	T	%	42	100	No SLC					1.2	30.4	7.4	4.5
pH	T	SU	42	100	No SLC					6.7	8.7	7.8	7.7
Phosphorus	T	mg/kg-dry	42	100	No SLC					60.3	3220	550	234
Sodium Absorption Ratio	T	ratio	41	85.4	No SLC			0.03	0.07	ND	3.2	0.44	0.27
Solids, Percent	T	%	42	100	No SLC					20.4	99.1	85.8	92.5
Specific Conductance	T	umhos/cm	42	100	No SLC					41.6	7370	941	350
Sulfate	T	mg/kg-dry	42	97.6	No SLC			2.10	2.10	ND	9810	927	89.8
Total Kjeldahl Nitrogen	T	mg/kg-dry	42	100	No SLC					130	34300	2600	1120
Total Organic Carbon	T	mg/kg-dry	42	100	No SLC					768	292000	34200	15900
Metals													
Aluminum	T	mg/kg-dry	42	100	HH Soil (HQ=1)	76000	0			6880	28400	14000	12700
Antimony	T	mg/kg-dry	42	0	HH Soil (HQ=1)	31	0	0.37	2.40	ND	ND		
Arsenic	T	mg/kg-dry	42	100	HH Soil (HQ=1)	0.39	100			0.98	5.8	3.2	3.2
Barium	T	mg/kg-dry	42	100	HH Soil (HQ=1)	5500	0			45.8	380	151	147
Beryllium	T	mg/kg-dry	42	100	HH Soil (HQ=1)	150	0			0.47	1.8	0.91	0.81
Boron	T	mg/kg-dry	42	54.8	HH Soil (HQ=1)	5500	0	0.17	7.00	ND	28	5.4	3.1
Cadmium	T	mg/kg-dry	42	83.3	HH Soil (HQ=1)	39	0	0.18	0.86	ND	1.3	0.46	0.44
Calcium	T	mg/kg-dry	42	100	No SLC					2560	51100	10100	6470
Chromium	T	mg/kg-dry	42	100	HH Soil (HQ=1)	210	0			11.3	30.4	19.7	20.2
Cobalt	T	mg/kg-dry	42	100	HH Soil (HQ=1)	900	0			5.4	14.4	8.7	8.3
Copper	T	mg/kg-dry	42	100	HH Soil (HQ=1)	2900	0			18.8	59.2	28.6	25.9
Iron	T	mg/kg-dry	42	100	HH Soil (HQ=1)	23000	11.9			12900	63100	19300	17900
Lead	T	mg/kg-dry	42	100	HH Soil (HQ=1)	400	0			11	55.5	23.3	20
Magnesium	T	mg/kg-dry	42	100	No SLC					3270	8840	4900	4730
Manganese	T	mg/kg-dry	42	100	HH Soil (HQ=1)	3200	0			201	2180	588	491
Mercury	T	mg/kg-dry	42	35.7	HH Soil (HQ=1)	23	0	0.01	0.05	ND	0.095		
Molybdenum	T	mg/kg-dry	42	83.3	HH Soil (HQ=1)	390	2.9	0.75	3.40	ND	596	38.9	4.5

"No SLC" indicates that there is not a Screening Level Criterion for this medium specified for the RI/FS.
"HH Soil (HQ=1)" EPA Region 6 RBSLs Human Health Residential Soil (HQ=1)
"Eco Soil" EPA Region 6 Tier 1-3 RBSLs Ecological Soil
Median Value determined using 1/2 the Reporting Limit value for Non-Detects if greater than 50% of the values were detected.
Mean Value calculated using 1/2 the Reporting Limit for Non-Detects if greater than 50% of the values were detected.

T = Total Fraction
D = Filtered Fraction (0.45 micron filter)
A = Filtered Fraction (0.1 micron filter)
ND = Non-Detected Value

Table 7-103
Soil 0-6 inches Biased
RI/FS Soil Area 17 - Soils South of Tailings
Summary of Results

Analyte	Sample Fraction	Units	Total Number of Samples	Percent Detects (%)	SLC	SLC Value	Percent Above SLC	Min RL for ND	Max RL for ND	Min Value	Max Value	Mean Value	Median Value
Nickel	T	mg/kg-dry	42	100	HH Soil (HQ=1)	1600	0			11.2	40.7	20.4	18.8
Potassium	T	mg/kg-dry	42	100	No SLC					1060	6520	2540	2300
Selenium	T	mg/kg-dry	42	69	HH Soil (HQ=1)	390	0	0.28	0.96	ND	3	0.68	0.53
Silver	T	mg/kg-dry	42	26.2	HH Soil (HQ=1)	390	0	0.10	0.62	ND	0.51		
Sodium	T	mg/kg-dry	42	40.5	No SLC			16.30	383.00	ND	2320		
Thallium	T	mg/kg-dry	42	81	HH Soil (HQ=1)	5.5	0	0.08	0.43	ND	0.28	0.15	0.15
Vanadium	T	mg/kg-dry	42	100	HH Soil (HQ=1)	78	0			17.2	40.9	26.7	27.2
Zinc	T	mg/kg-dry	42	100	HH Soil (HQ=1)	23000	0			46.7	262	90.8	76.8

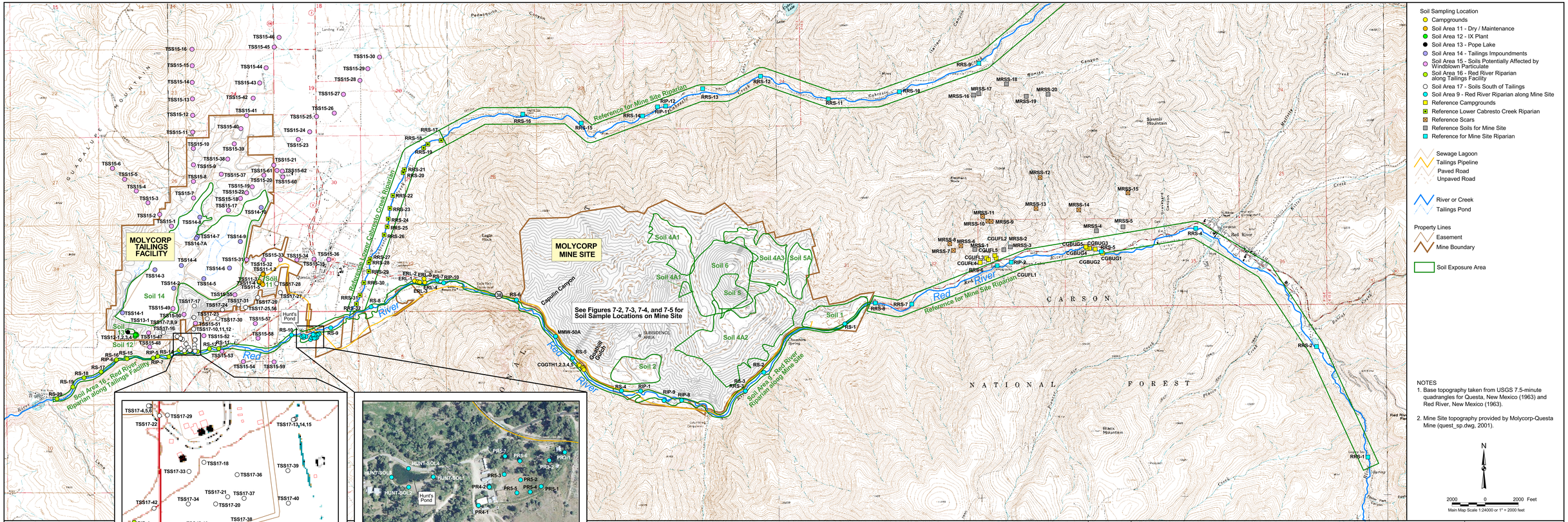
"No SLC" indicates that there is not a Screening Level Criterion for this medium specified for the RI/FS.
"HH Soil (HQ=1)" EPA Region 6 RBSLs Human Health Residential Soil (HQ=1)
"Eco Soil" EPA Region 6 Tier 1-3 RBSLs Ecological Soil
Median Value determined using 1/2 the Reporting Limit value for Non-Detects if greater than 50% of the values were detected.
Mean Value calculated using 1/2 the Reporting Limit for Non-Detects if greater than 50% of the values were detected.

T = Total Fraction
D = Filtered Fraction (0.45 micron filter)
A = Filtered Fraction (0.1 micron filter)
ND = Non-Detected Value

SECTION 7

SOILS

FIGURES



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MOLYCORP - QUESTA MINE RI/FS

TAILINGS AREA, RED RIVER RIPARIAN AND REFERENCE MINE SITE SOILS

PROJECT: 22236244

FIGURE 7-1

Preliminary Site Characterization Report

Soil 4A3

Soil 4A2

Soil 5A

Soil 1

MSS1-107
MSS1-108
MSS1-109
MSS1-106
MSS1-105
MSS1-103
MSS1-102
MSS1-97
MSS1-101
MSS1-98
MSS1-99
MSS1-100
MSS1-96
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MSS1-71
MSS1-42
MSS1-39
MSS1-75
MSS1-41
MSS1-35
MSS1-70
MSS1-115
MSS1-116
MSS1-54
MSS1-53
MSS1-114
MSS1-44
MSS1-74
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MSS1-45
MSS1-34
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MSS1-31
MSS1-29
MSS1-26
MSS1-30
MSS1-27R
MSS1-81
MSS1-80
MSS1-82
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MSS1-14
MSS1-17R
MSS1-16
MSS1-15
MSS1-19
MSS1-20R
MSS1-11
MSS1-13
MSS1-6
MSS1-8
MSS1-113
MSS1-9
MSS1-86
MSS1-88
MSS1-87
MSS1-10
MSS1-7
MSS1-84
MSS1-85
MSS1-83
MSS1-110
MSS1-104

Soil Sample Location
Mill Tailings Location
Gulch
River
Creek
Soil Exposure Area
Boundary
Easement
Pipeline
Paved Road
Unpaved Road
Buildings
Drifts

N

200 0 200 Feet

Scale 1:2400 or 1" = 200 feet

NOTES
1. Base topography taken from USGS 7.5-minute quadrangles for Questa, New Mexico (1963) and Red River, New Mexico (1963) and .

2. Mine Site topography provided by Molycorp-Questa Mine (quest_sp.dwg, 2001).

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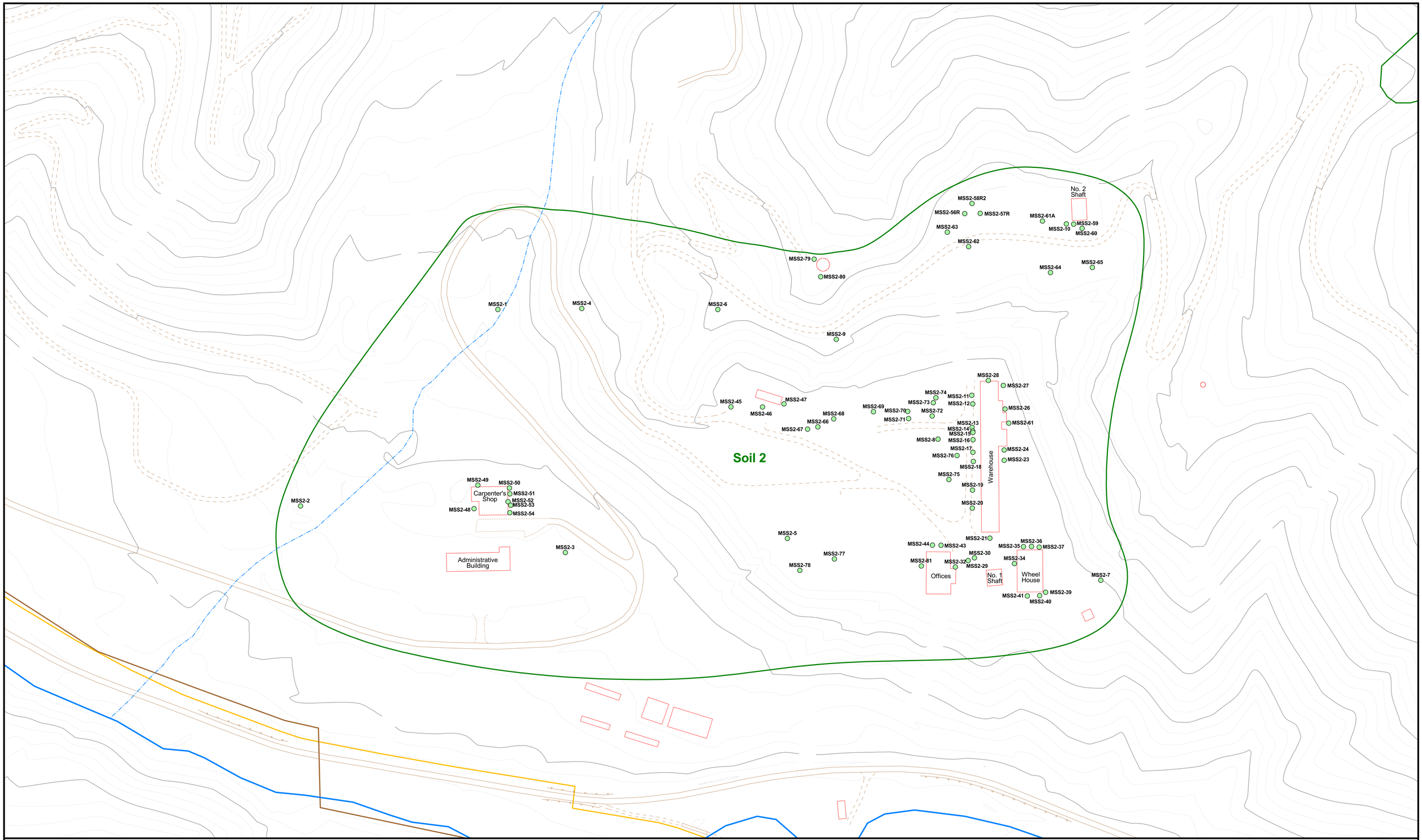
FILE NAME: soils_techmemo.apr	SOIL EXPOSURE AREA 1 SAMPLING LOCATIONS	**Figure 7-2**
DRAWN BY: Denver/GIS		*Preliminary Site Characterization Report*
DATE: 3/14/2005		



Soil Sample Location

Gulch
River

Soil Exposure Area

Boundary
Easement
Pipeline
Paved Road
Unpaved Road
Buildings
Drifts

N

150 0 150 Feet

Scale 1:1800 or 1" = 150 feet

NOTES
1. Base topography taken from USGS 7.5-minute quadrangles for Questa, New Mexico (1963) and Red River, New Mexico (1963) and .

2. Mine Site topography provided by Molycorp-Questa Mine (quest_sp.dwg, 2001).

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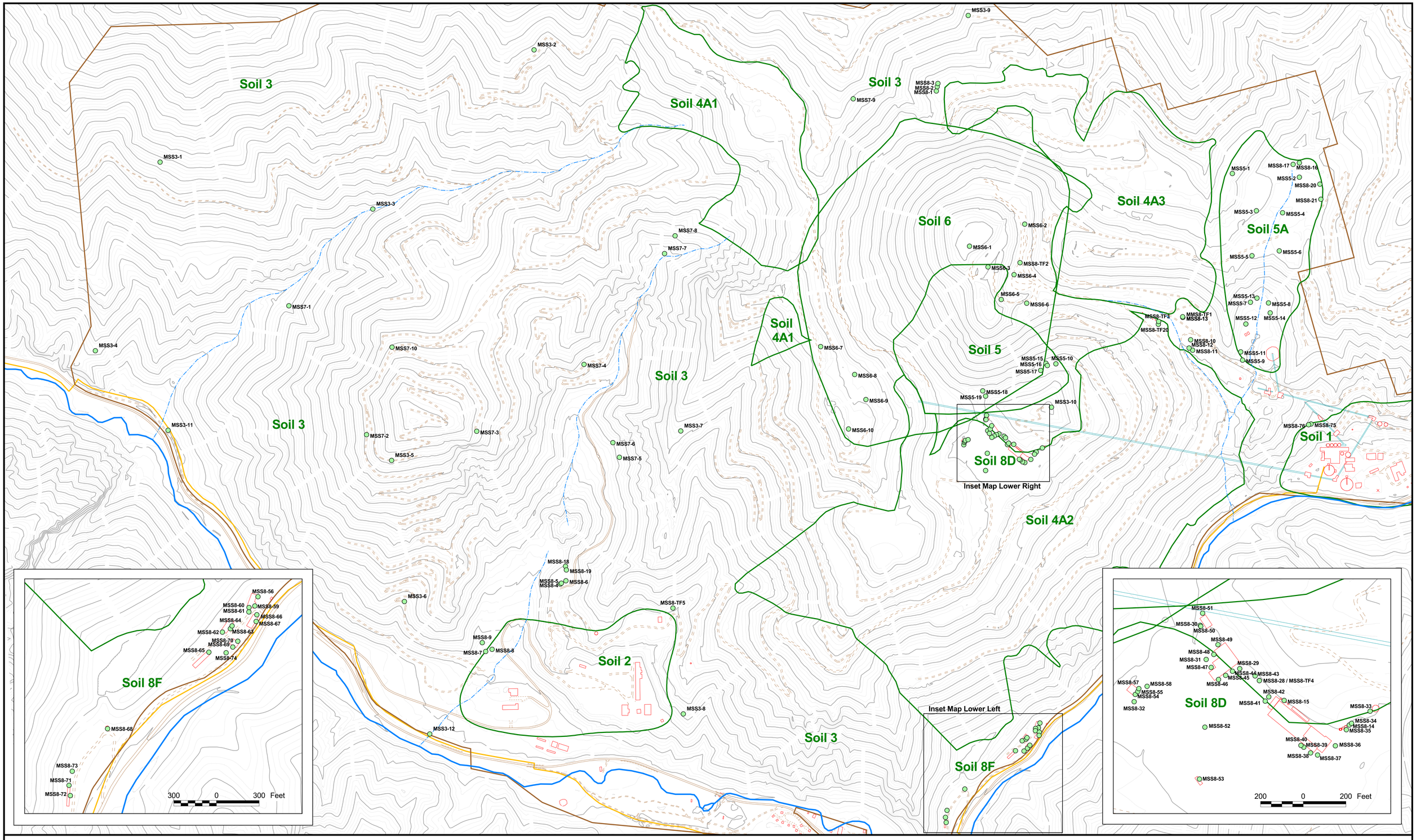
SOIL EXPOSURE AREA 2 SAMPLING LOCATIONS

Figure 7-3

Preliminary Site Characterization Report



Soil Sample Location
Gulch
River
Creek
Soil Exposure Area

Boundary
Easement
Pipeline
Paved Road
Unpaved Road
Buildings
Drifts

N

600 0 600 Feet
Main Map Scale
1:7200 or 1" = 600 feet

NOTES
1. Base topography taken from USGS 7.5-minute quadrangles for Questa, New Mexico (1963) and Red River, New Mexico (1963) and .
2. Mine Site topography provided by Molycorp-Questa Mine (quest_sp.dwg, 2001).

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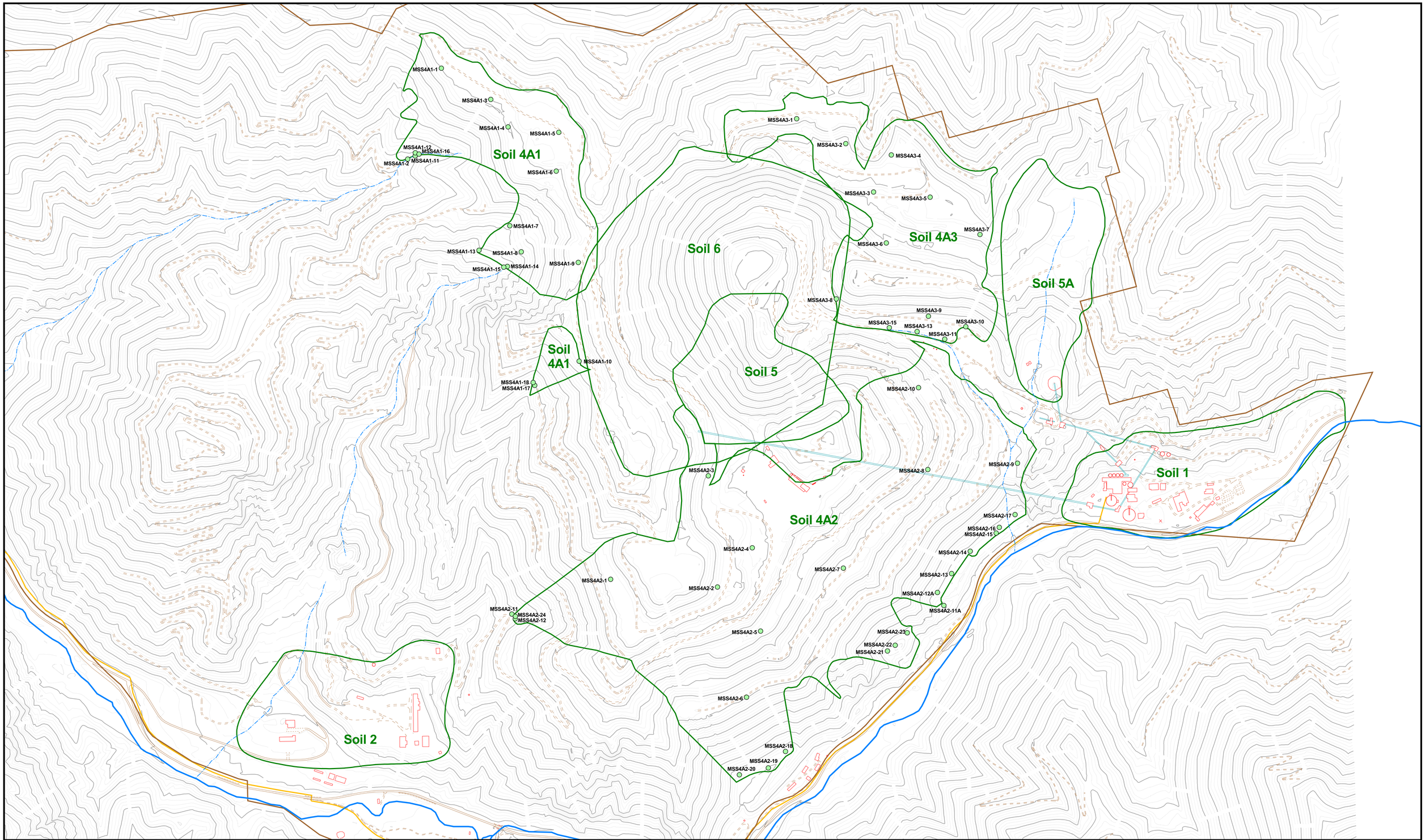
SOIL EXPOSURE AREAS 3, 5, 6, 7, AND 8 SAMPLING LOCATIONS

Figure 7-4

Preliminary Site Characterization Report



- Soil Sample Location
- Gulch
- River
- Soil Exposure Area
- Boundary
- Easement
- Pipeline
- Paved Road
- Unpaved Road
- Buildings
- Drifts

N

600 0 600 Feet

Scale 1:7200 or 1" = 600 feet

NOTES
1. Base topography taken from USGS 7.5-minute quadrangles for Questa, New Mexico (1963) and Red River, New Mexico (1963) and .
2. Mine Site topography provided by Molycorp-Questa Mine (quest_sp.dwg, 2001).

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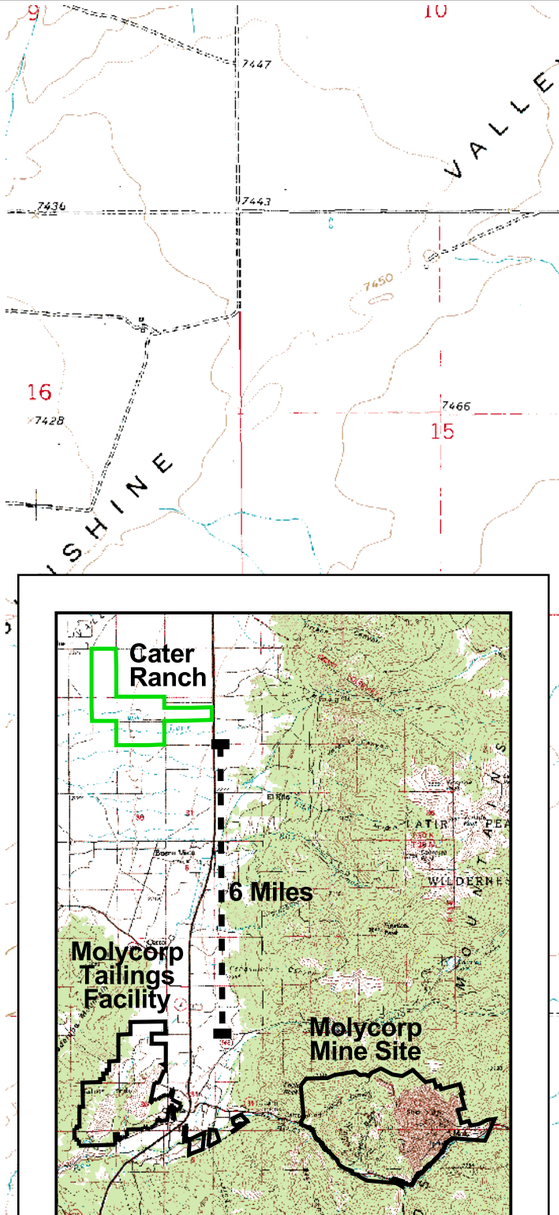
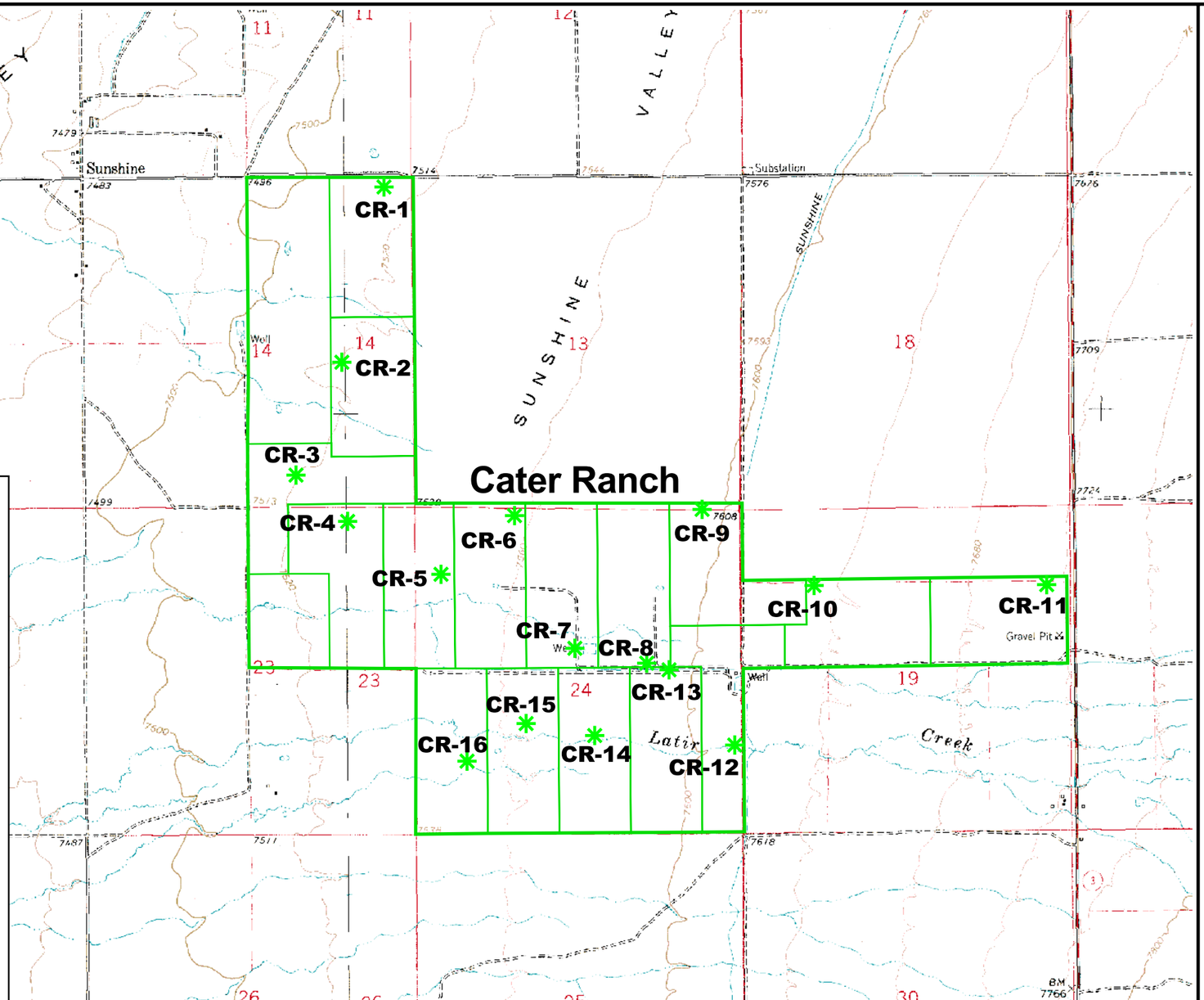
SOIL EXPOSURE AREAS 4A1, 4A2, AND 4A3 SAMPLING LOCATIONS

PROJECT 22236244.00300

Figure 7-5

Preliminary Site Characterization Report





Reference Soils at Cater Ranch

Sampling Area

Cater Ranch Boundary

NOTES
1. Base topography taken from USGS 15-minute quadrangle for Wheeler Peak, New Mexico (1963)

N

2000 0 2000 Feet

Scale 1:24000 or 1" = 2000 feet

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TAILINGS FACILITY REFERENCE AREA SOIL SAMPLING LOCATIONS - CATER RANCH

Figure 7-6

Preliminary Site Characterization Report

Figure 7-7
Mean Concentrations in Soils Collected at Soil Area 1 - Mill Site,
Above the Mine Site Reference Area, or Cabresto Creek Reference Area

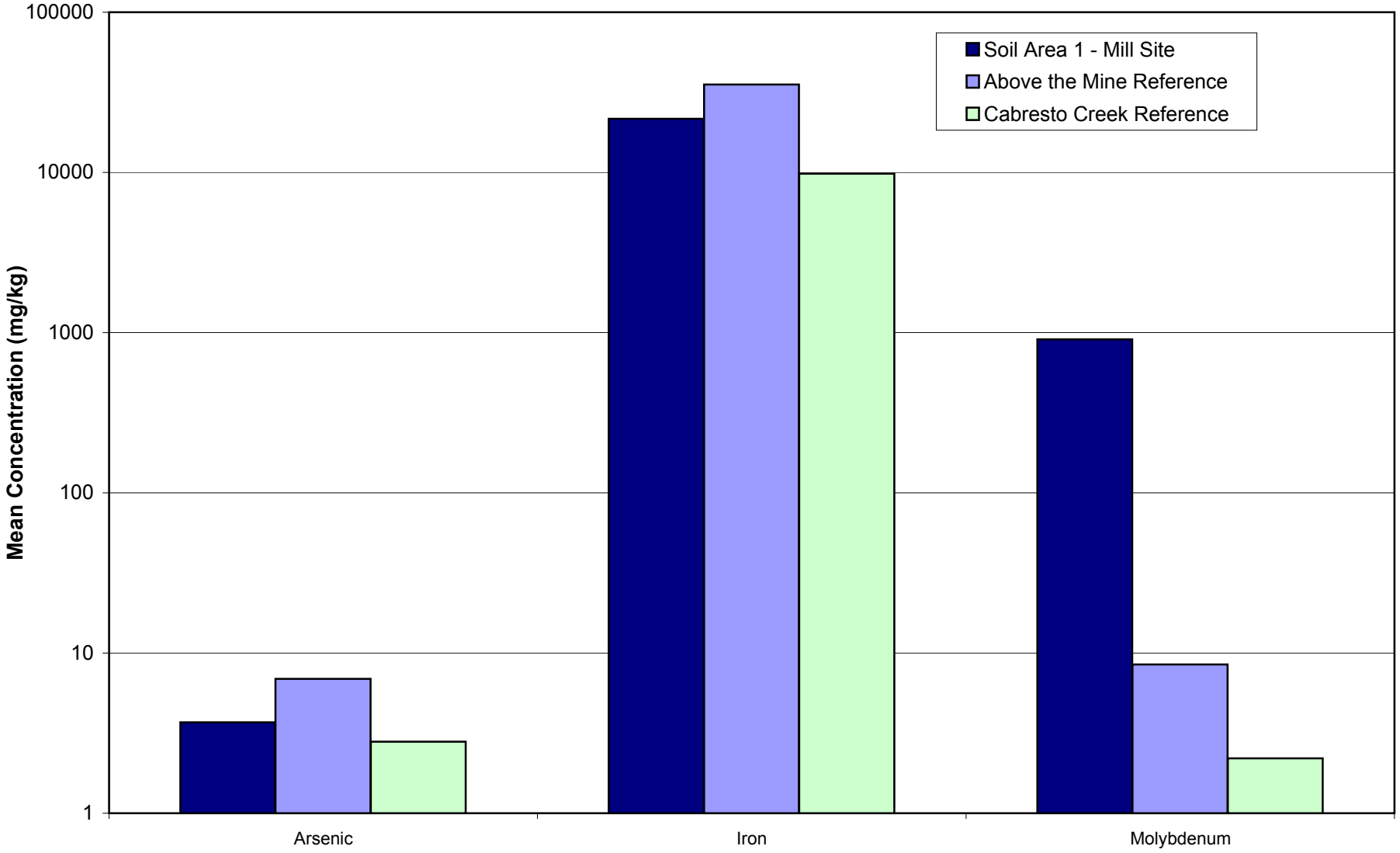

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Figure 7-8
Mean Concentrations in Soils Collected at Soil Area 2 - Administrative Building, M & E, Above the Mine Site Reference Area, or Cabresto Creek Reference Area

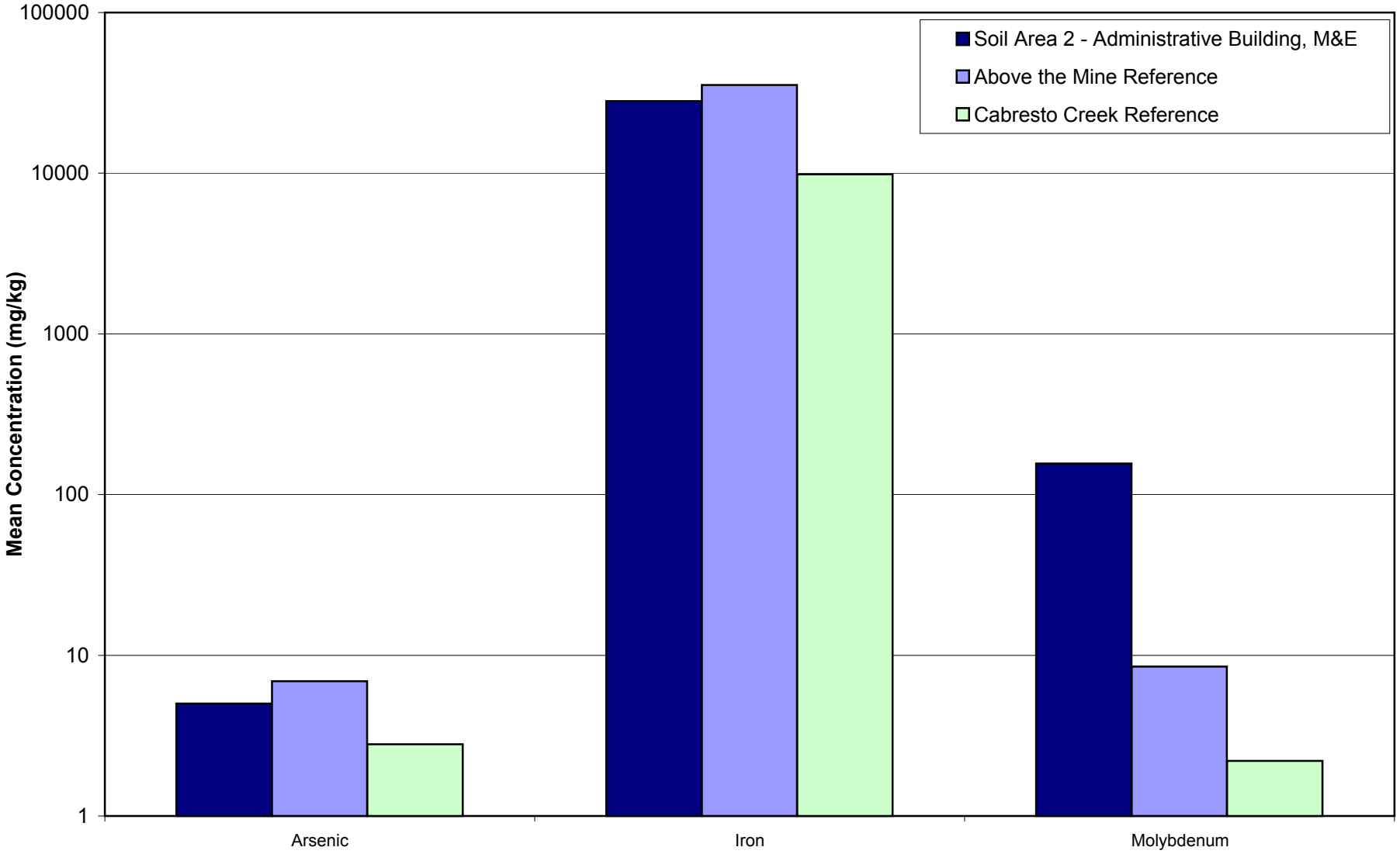

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Figure 7-9
Mean Concentrations in Soils Collected at Soil Area 3 - Mine Site Soils, Above the Mine Site Reference Area, or Cabresto Creek Reference Area

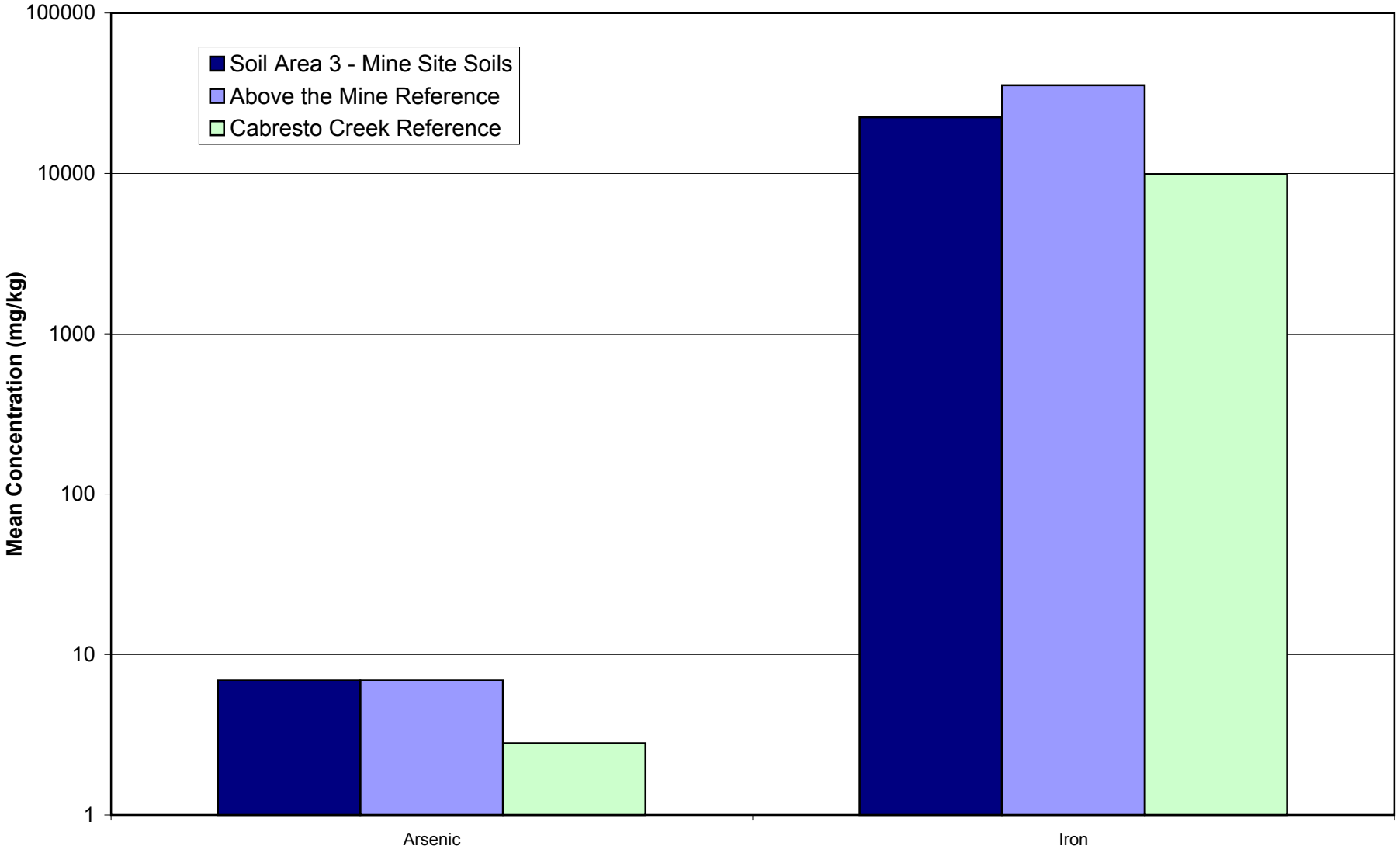

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Figure 7-10
Mean Concentrations in Soils Collected at Soil Area 4A1 - Capulin and Goathill North and South Rock Piles, Above the Mine Site Reference Area, or Cabresto Creek Reference Area

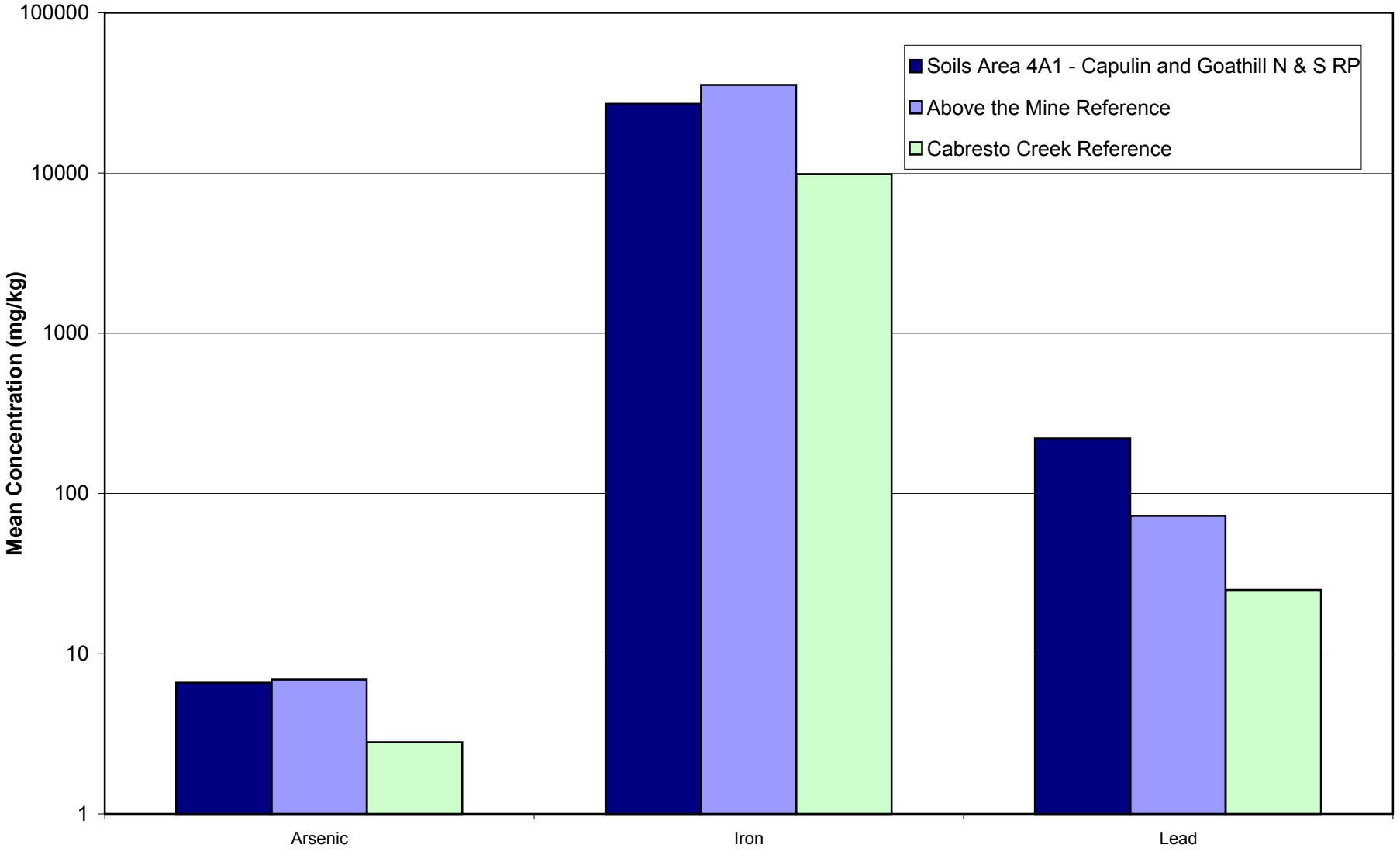

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Figure 7-11
Mean Concentrations in Soils Collected at Soil Area 4A2 - Sugar Shack South, West, and Middle and Sulphur Gulch Rock Piles, Above the Mine Site Reference Area, or Cabresto Creek Reference Area

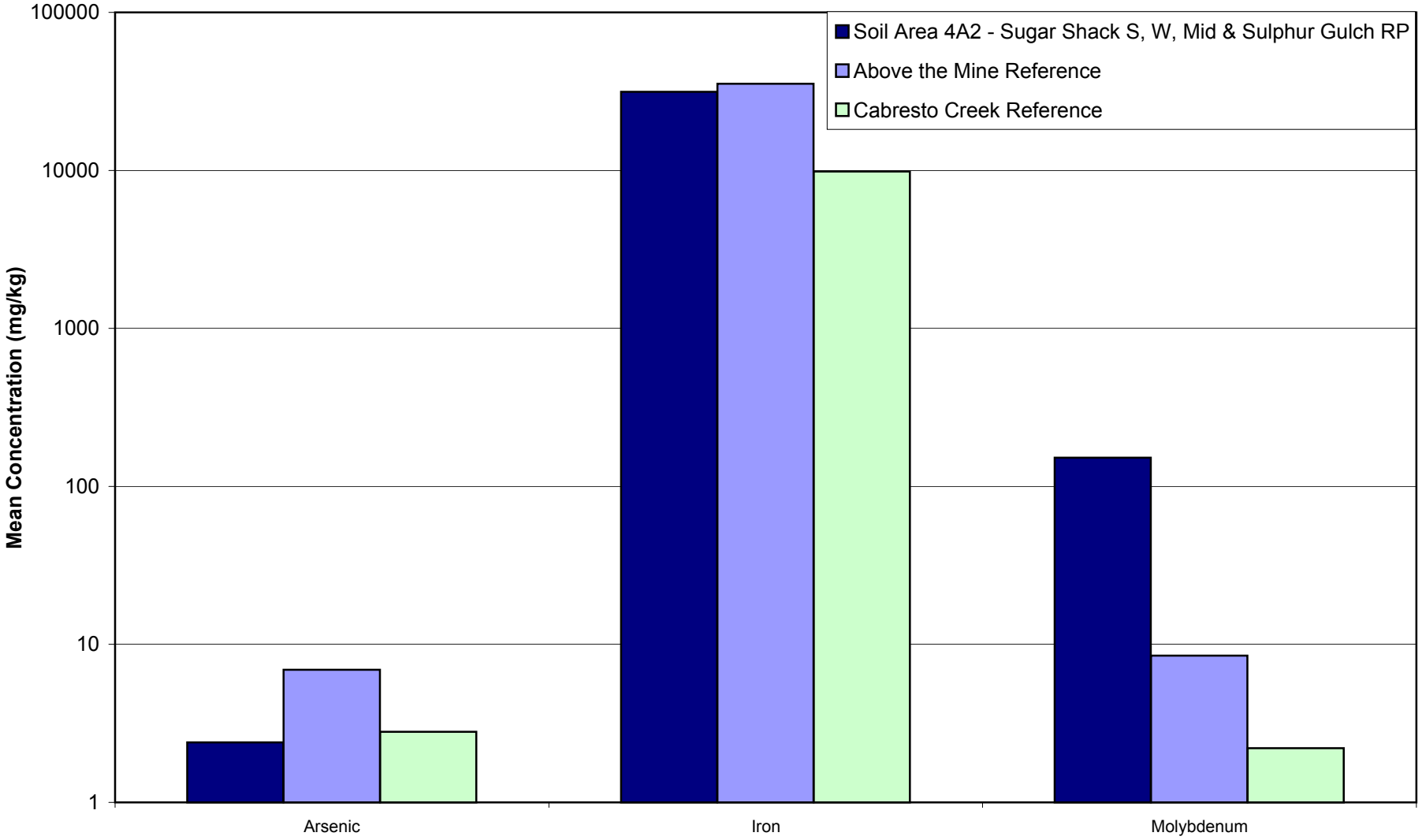

Figure 7-12
Mean Concentrations in Soils Collected at Soil Area 4A3 - Sulphur Gulch North and Blind Gulch Rock Piles, Above the Mine Site Reference Area, or Cabresto Creek Reference Area

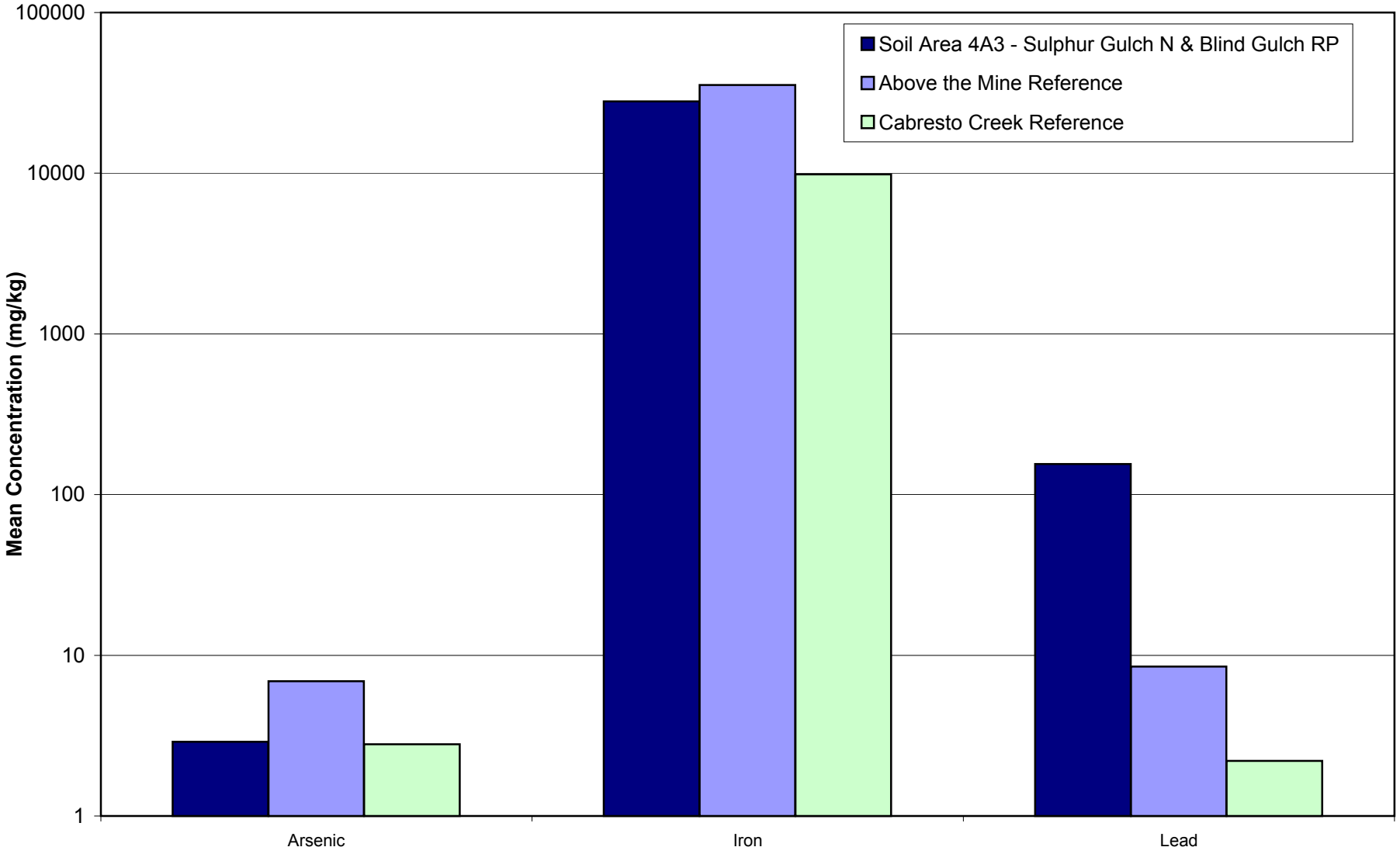

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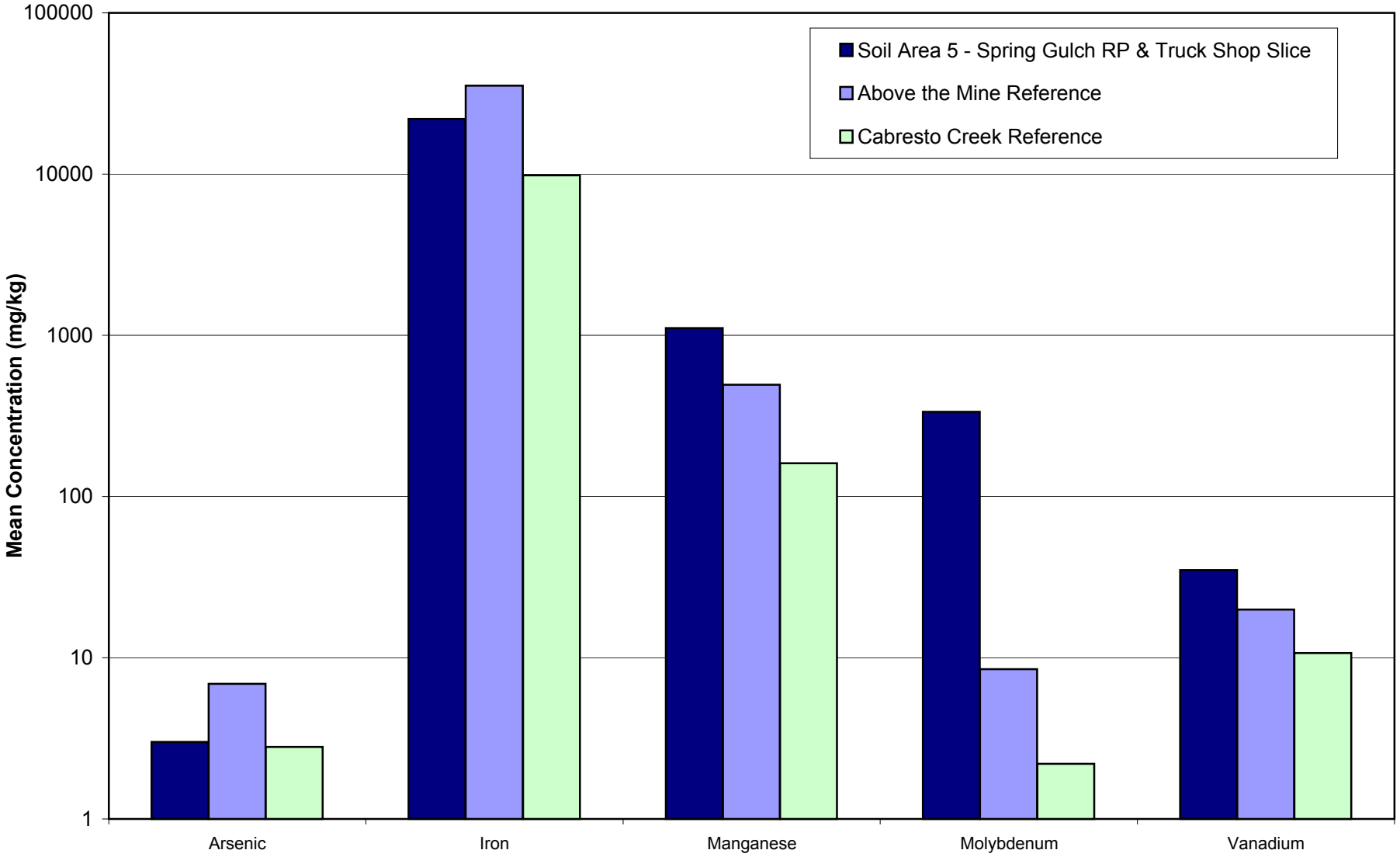
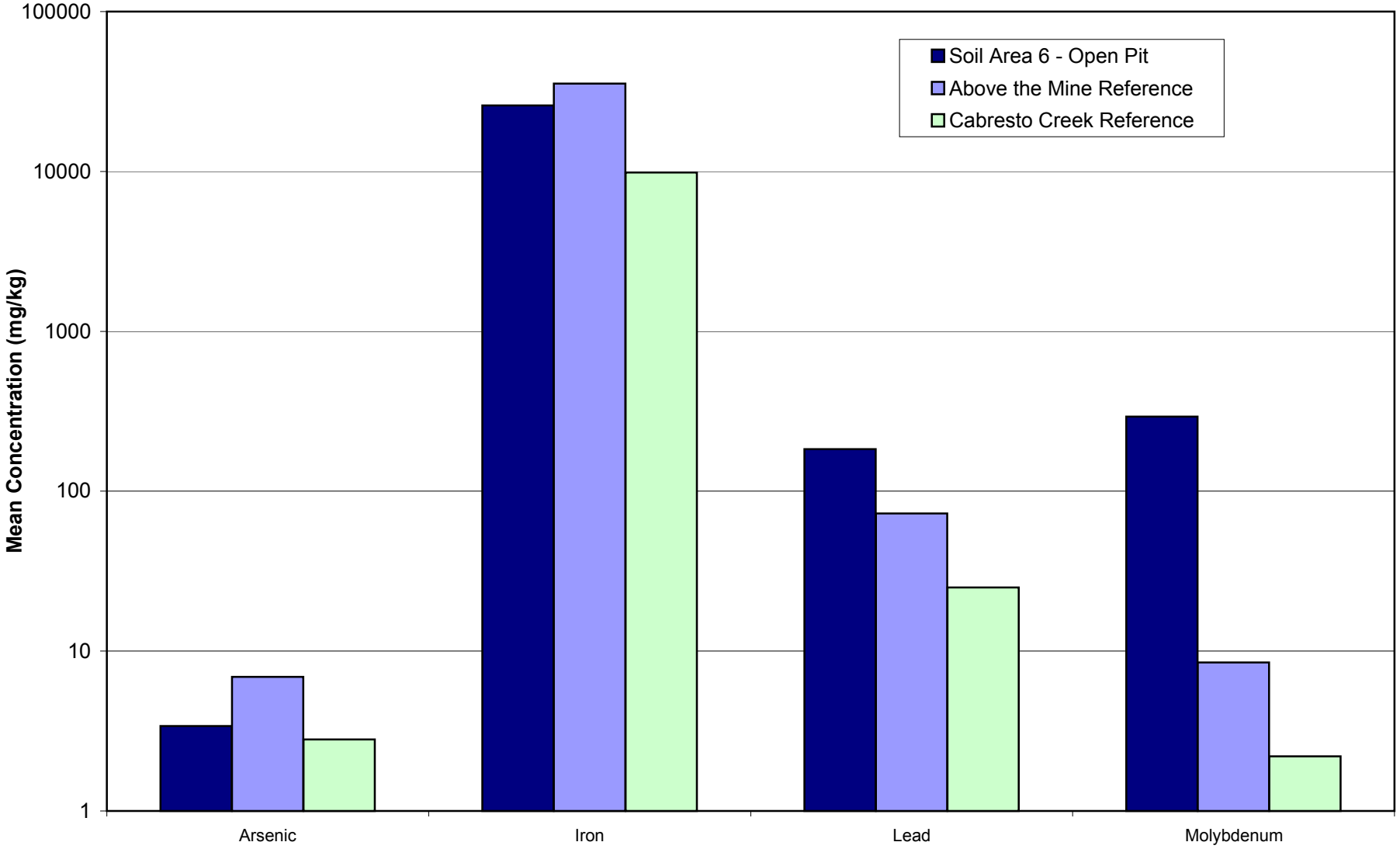
Figure 7-13
Mean Concentrations in Soils Collected at Soil Area 5 -Spring Gulch Rock Pile and Truck Shop Slice Area, Above the Mine Site Reference Area, or Cabresto Creek Reference Area



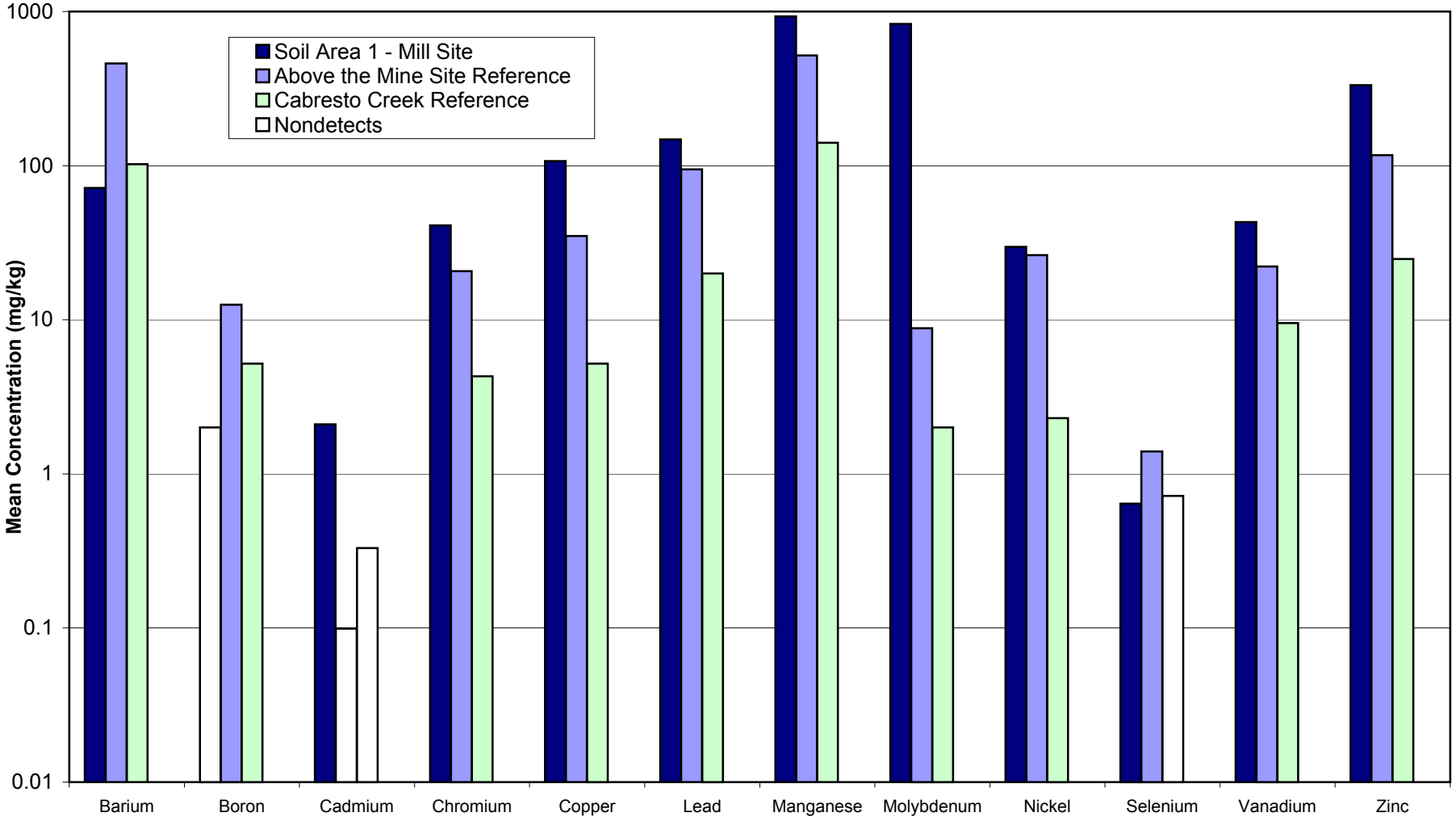
R:\Projects\22236242_Prelim_Site_Charact\Task_01\6.0_Proj_Deliv\Section 07 Soils\Figures\7-7 thru 7-14 Graphs_SS1 to SS6 and reference S1 032305.xls

Figure 7-14
Mean Concentrations in Soils Collected at Soil Area 6 - Open Pit,
Above the Mine Site Reference Area, or Cabresto Creek Reference Area



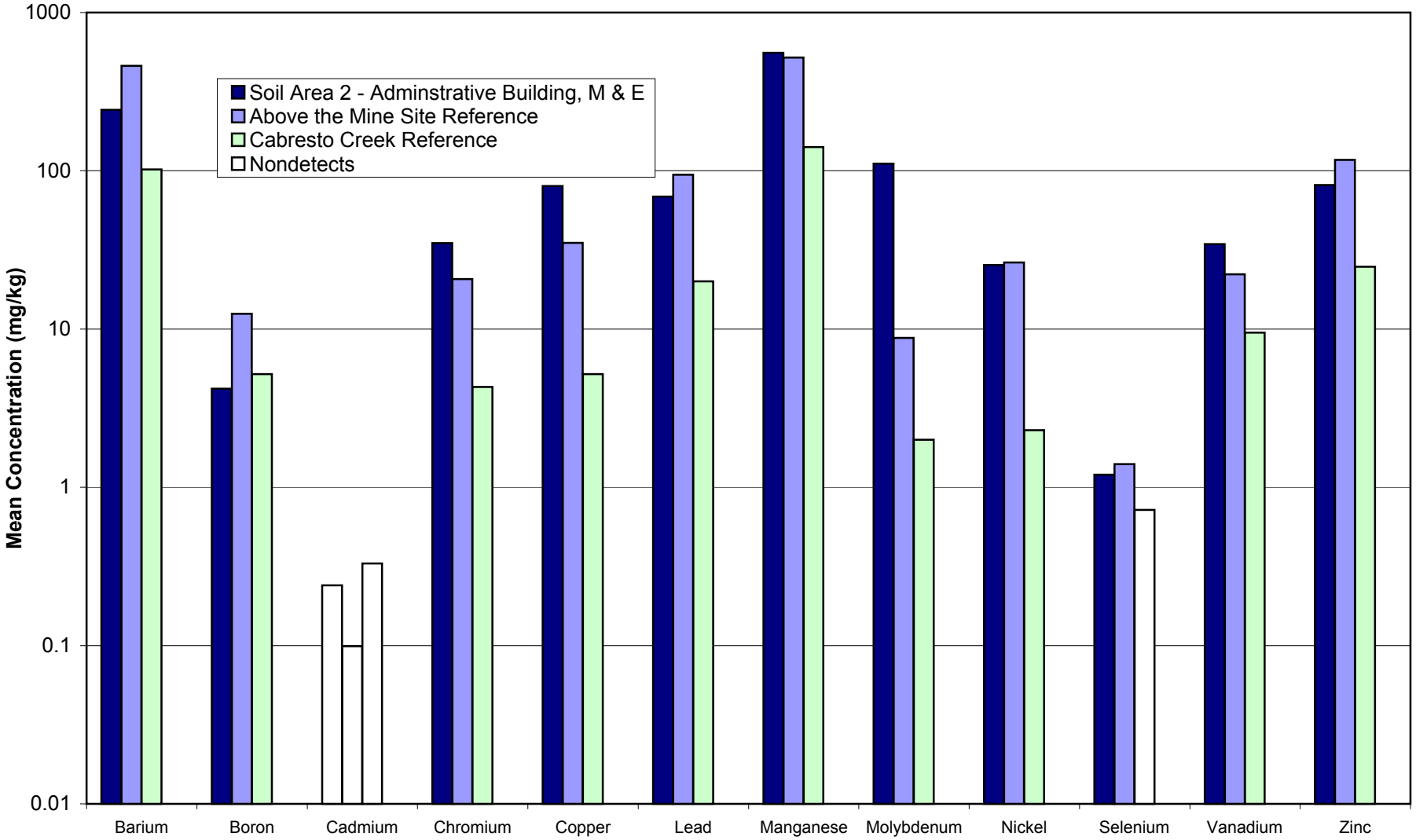
R:\Projects\22236242_Prelim_Site_Charact\Task_01\6.0_Proj_Deliv\Section 07 Soils\Figures\7-7 thru 7-14 Graphs_SS1 to SS6 and reference S1 032305.xls

Figure 7-15
Mean Concentrations in Soils Collected at Soil Area 1 - Mill Site, Above the Mine Site Reference Area, or Cabresto Creek Reference Area



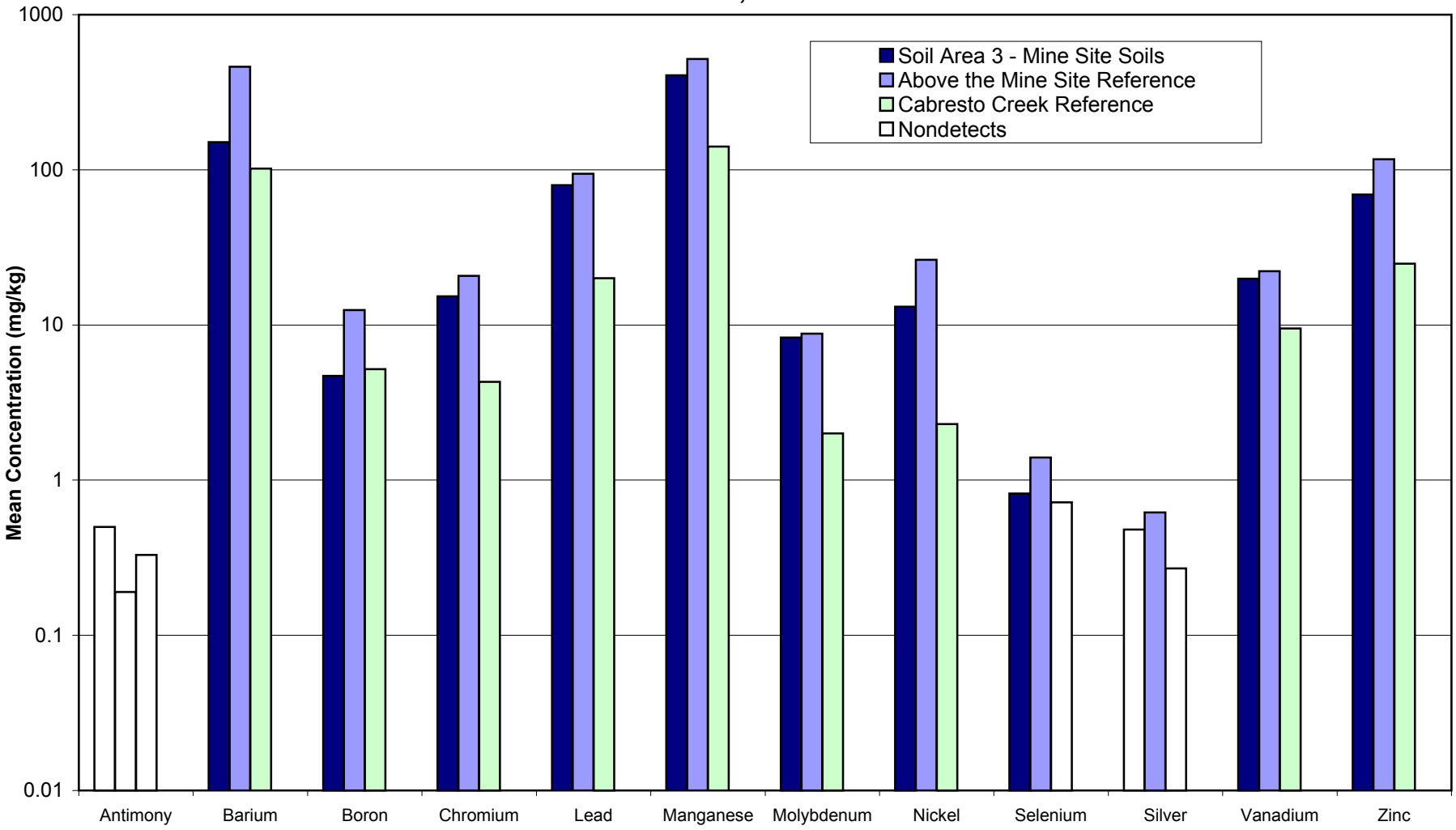
Note: A white bar indicates that 50% or more of the values were not detected, and a mean was not calculated. In these cases, the maximum detected value or the maximum reporting limit, whichever was greater, was plotted.

Figure 7-16
Mean Concentrations in Soils Collected at Soil Area 2 - Adminstrative Building, M & E, Above the Mine Site Reference Area, or Cabresto Creek Reference Area



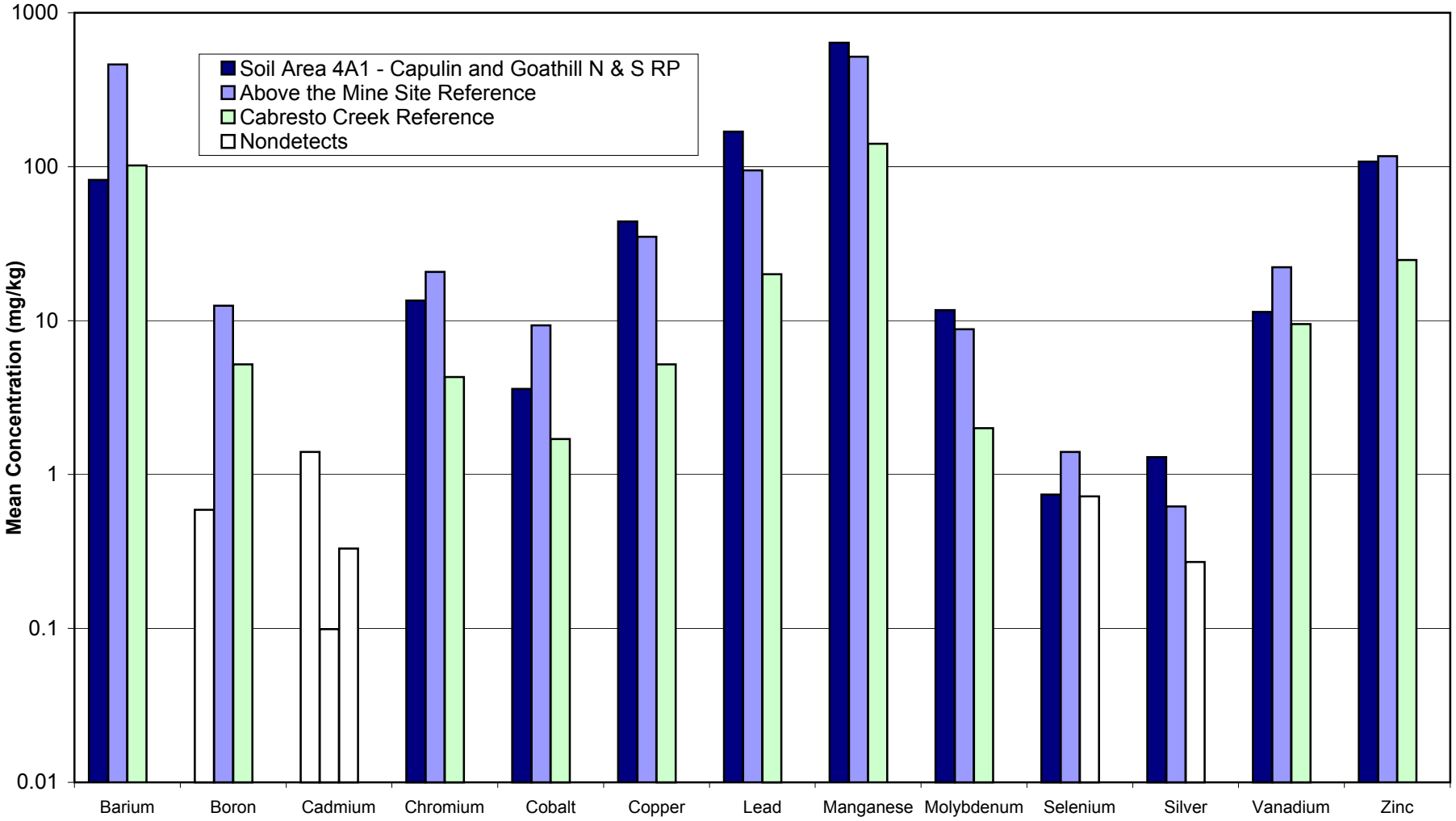
Note: A white bar indicates that 50% or more of the values were not detected, and a mean was not calculated. In these cases, the maximum detected value or the maximum reporting limit, whichever was greater, was plotted.

Figure 7-17
Mean Concentrations in Soils Collected at Soil Area 3 - Mine Site Soils, Above the Mine Site Reference Area, or Cabresto Creek Reference Area



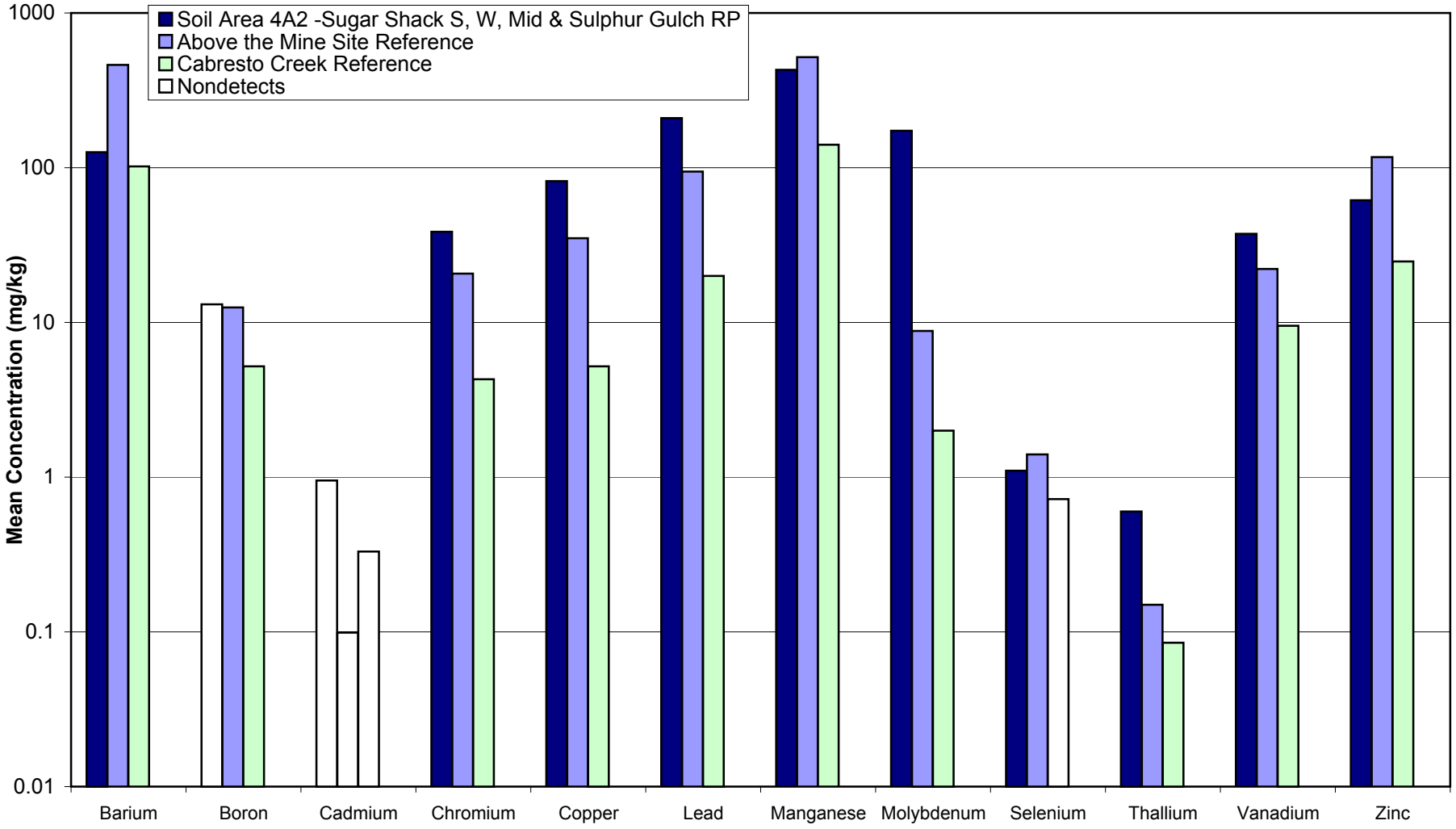
Note: A white bar indicates that 50% or more of the values were not detected, and a mean was not calculated. In these cases, the maximum detected value or the maximum reporting limit, whichever was greater, was plotted.

Figure 7-18
Mean Concentrations in Soils Collected at Soil Area 4A1 - Capulin and Goathill North and South Rock Piles, Above the Mine Site Reference Area, or Cabresto Creek Reference Area



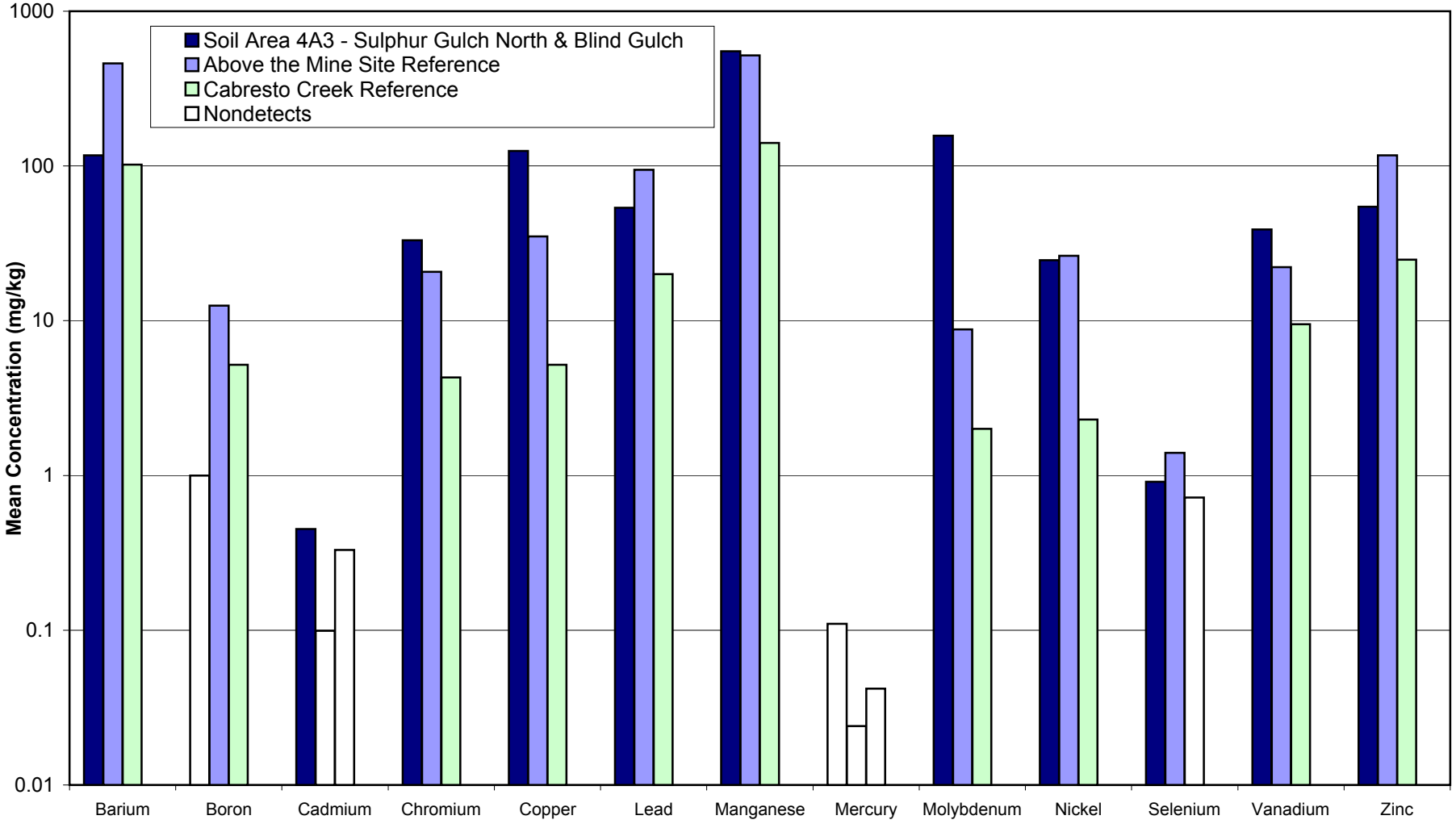
Note: A white bar indicates that 50% or more of the values were not detected, and a mean was not calculated. In these cases, the maximum detected value or the maximum reporting limit, whichever was greater, was plotted.

Figure 7-19
Mean Concentrations in Soils Collected at Soil Area 4A2 - Sugar Shack South, West, and Middle Rock Piles, Above the Mine Site Reference Area, or Cabresto Creek Reference Area



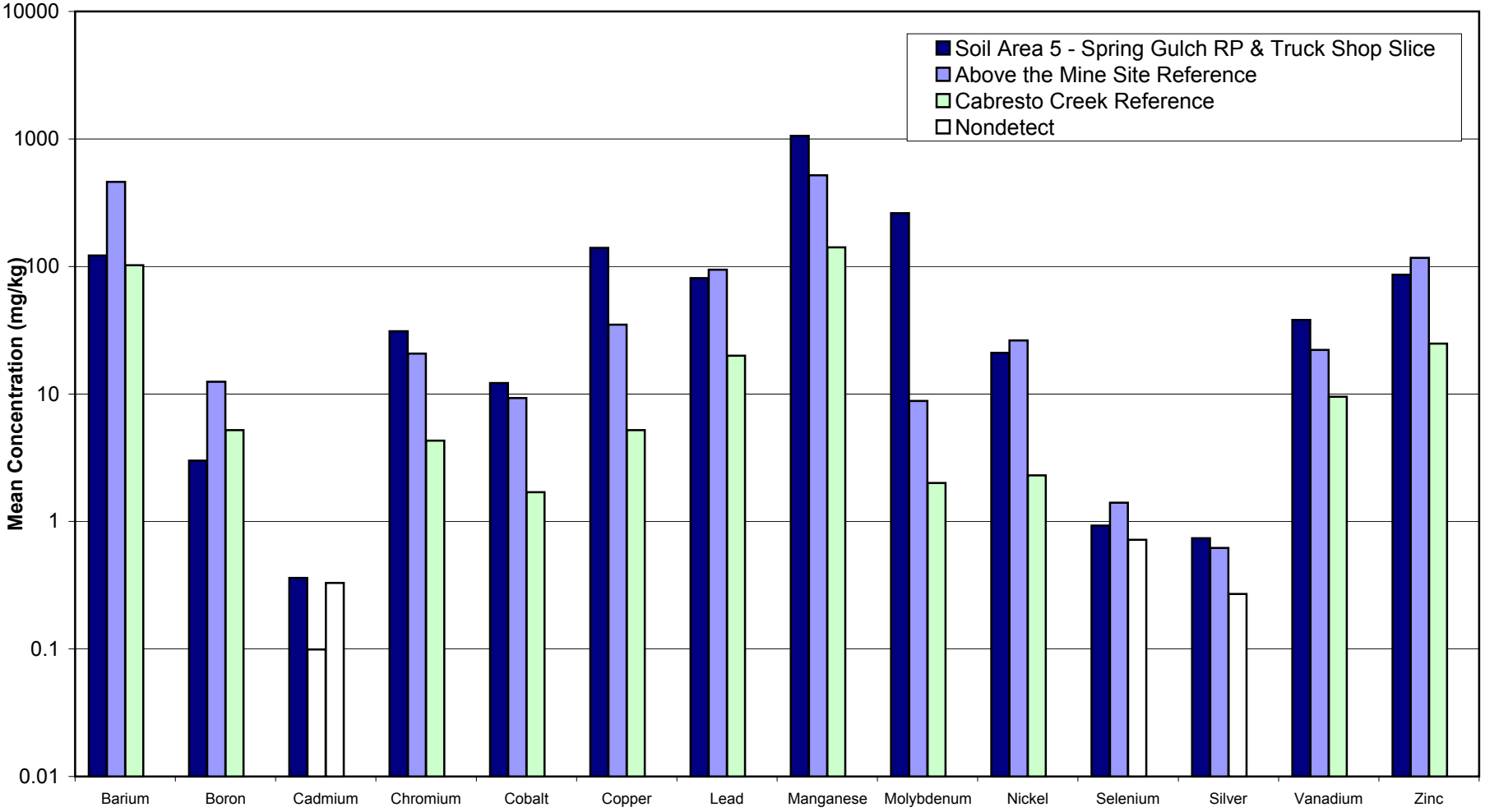
Note: A white bar indicates that 50% or more of the values were not detected, and a mean was not calculated. In these cases, the maximum detected value or the maximum reporting limit, whichever was greater, was plotted.

Figure 7-20
Mean Concentrations in Soils Collected at Soil Area 4A3 - Sulphur Gulch North and Blind Gulch Rock Piles, Above the Mine Site Reference Area, or Cabresto Creek Reference Area



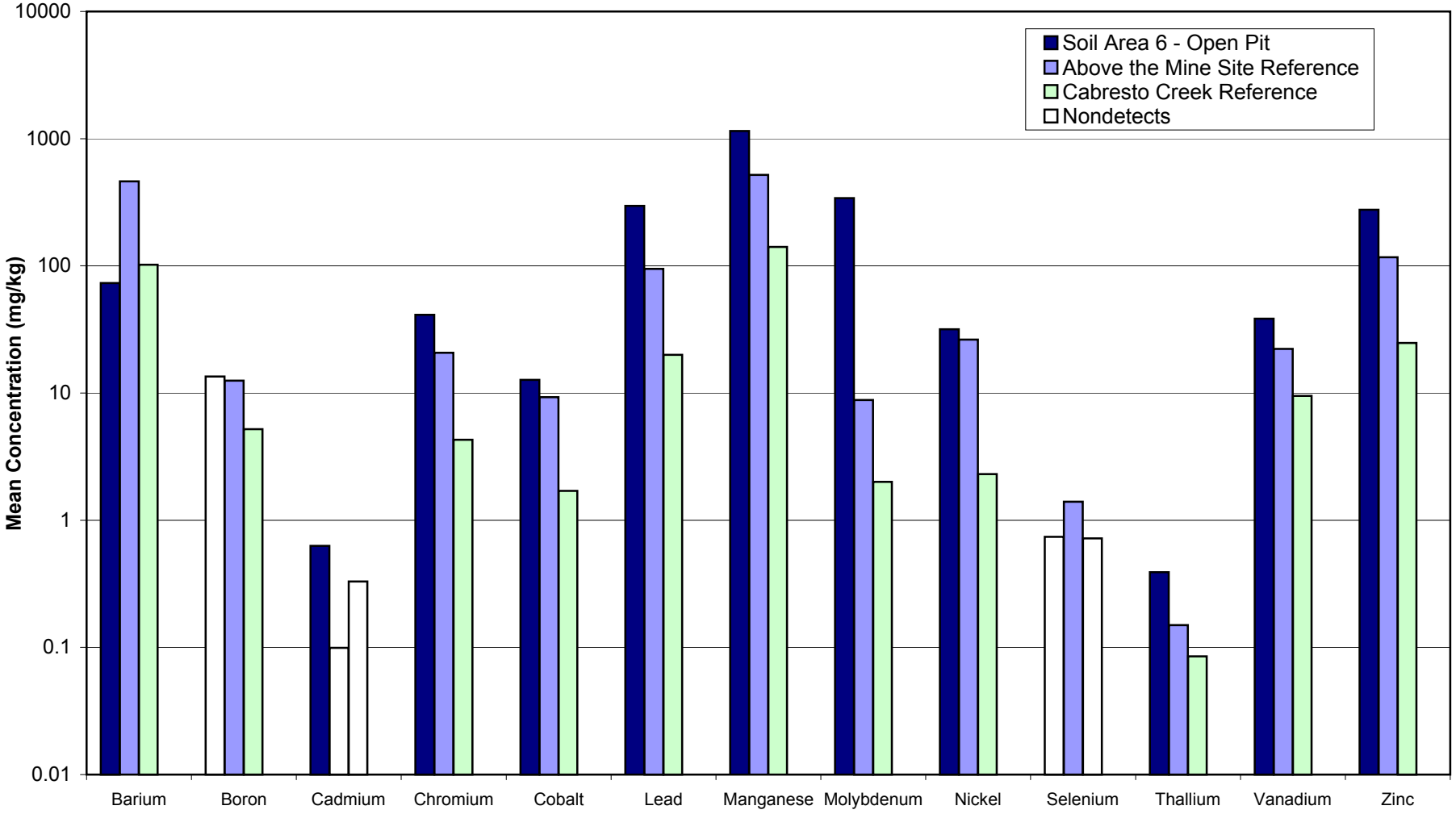
Note: A white bar indicates that 50% or more of the values were not detected, and a mean was not calculated. In these cases, the maximum detected value or the maximum reporting limit, whichever was greater, was plotted.

Figure 7-21
Mean Concentrations in Soils Collected at Soil Area 5 - Spring Gulch Rock Pile and Truck Shop Slice Area, Above Mine Site Reference Area, or Cabresto Creek Reference Area



Note: A white bar indicates that 50% or more of the values were not detected, and a mean was not calculated. In these cases, the maximum detected value or the maximum reporting limit, whichever was greater, was plotted.

Figure 7-22
Mean Concentrations in Soils Collected at Soil Area 6 - Open Pit,
Above the Mine Site Reference Area, or Cabresto Creek Reference Area



Note: A white bar indicates that 50% or more of the values were not detected, and a mean was not calculated. In these cases, the maximum detected value or the maximum reporting limit, whichever was greater, was plotted.

Figure 7-23
Mean Concentrations in Scar Samples Collected from Soil Area 7 - Mine Site Scars and from Reference Scars

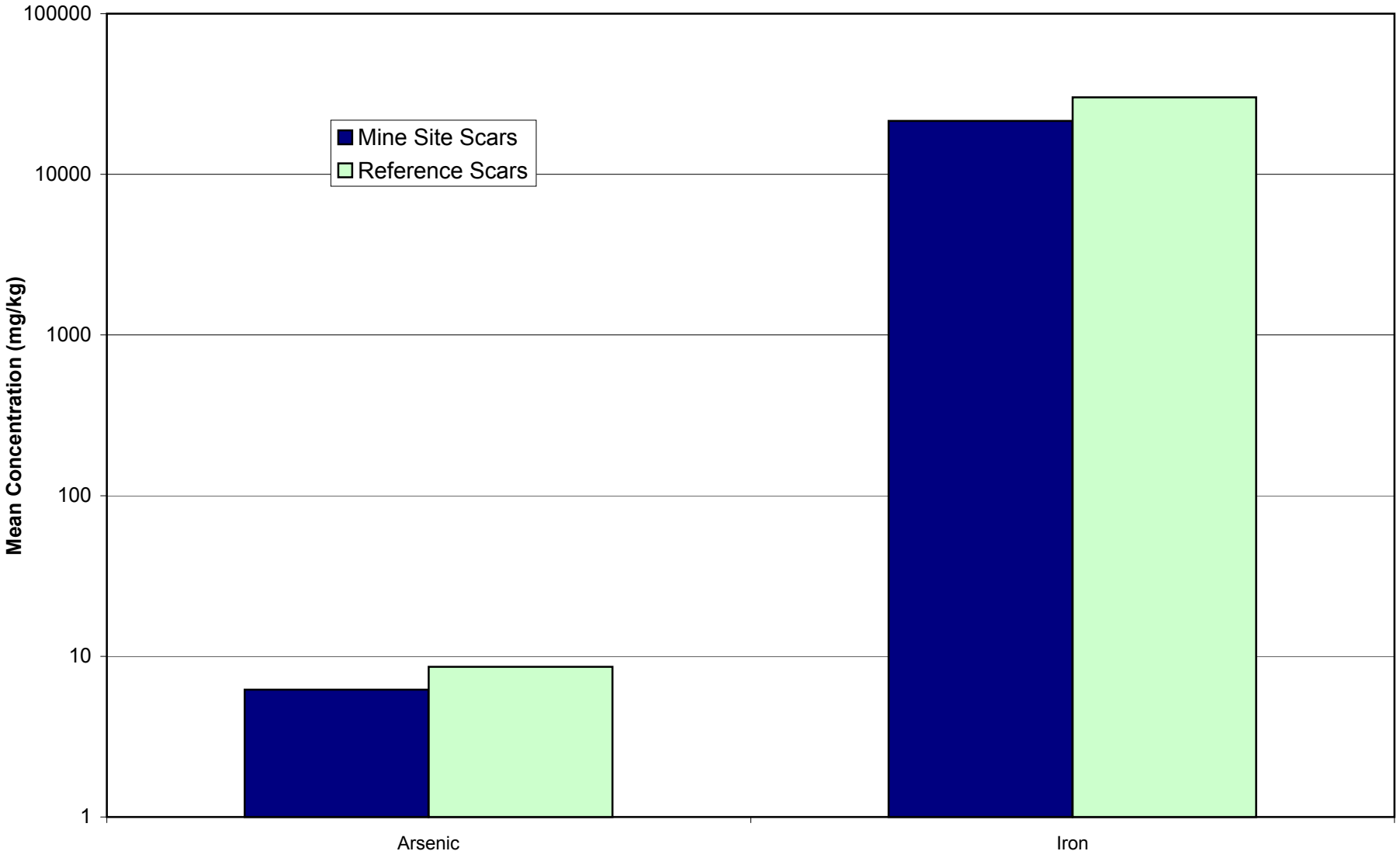


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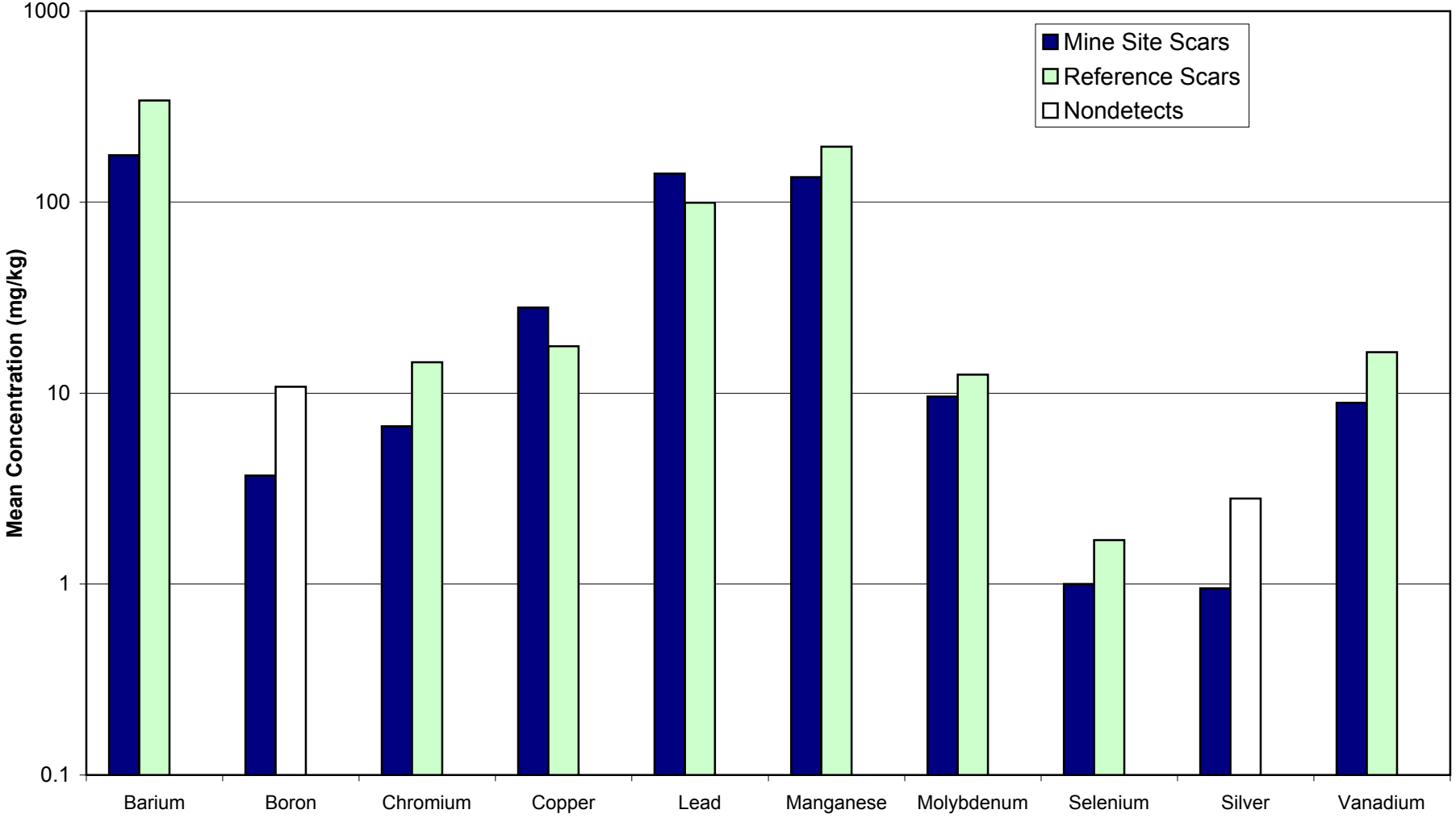
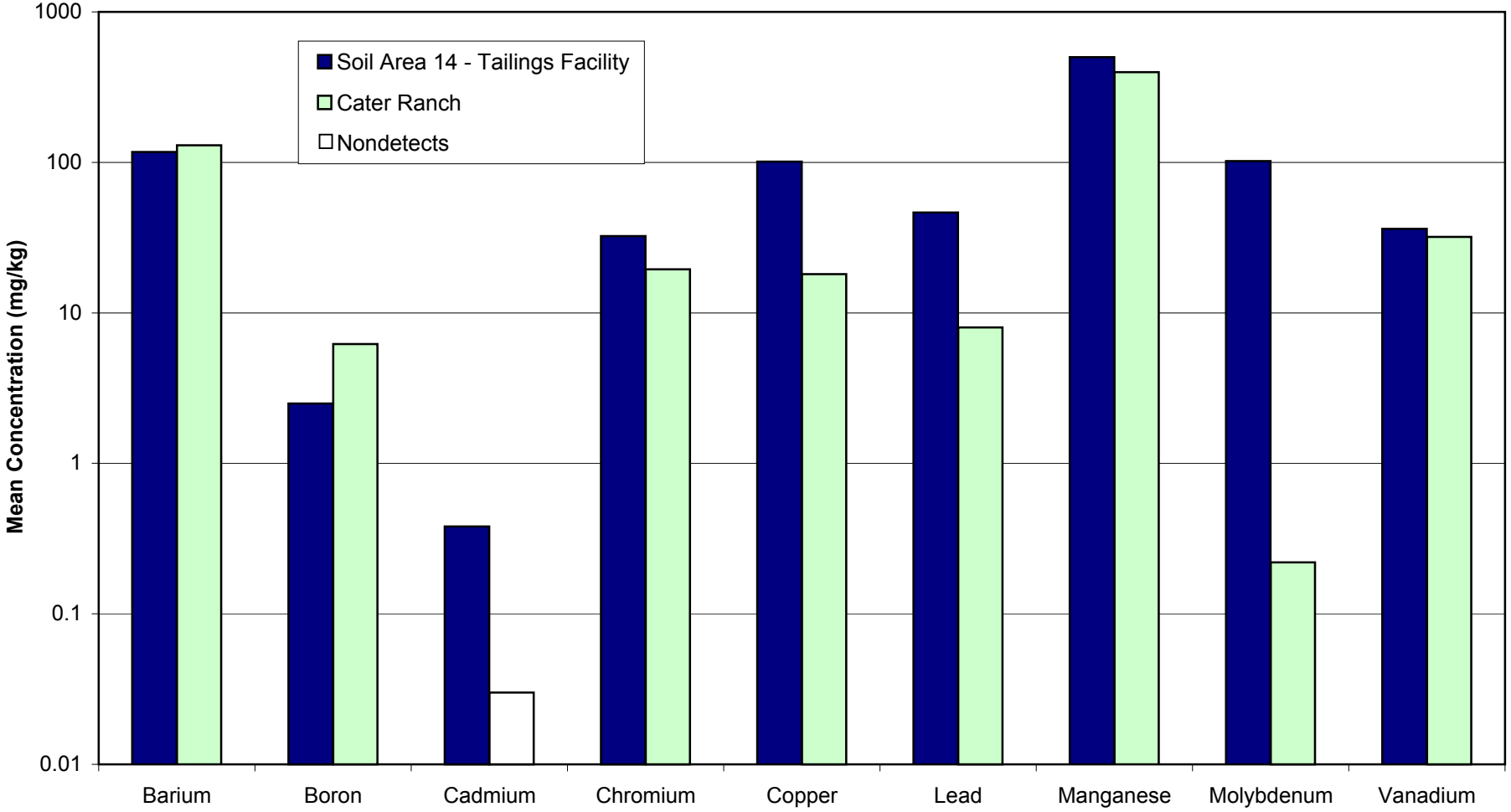
Figure 7-24
Mean Concentrations in Scar Samples Collected from Soil Area 7 -
Mine Site Scars and from Reference Scars



Note: A white bar indicates that 50% or more of the values were not detected, and a mean was not calculated. In these cases, the maximum detected value or the maximum reporting limit, whichever was greater, was plotted.

Figure 7-25
Mean Concentrations in Soils Collected at Soil Area 14 - Tailings Facility and Cater Ranch Reference Area



Note: A white bar indicates that 50% or more of the values were not detected, and a mean was not calculated. In these cases, the maximum detected value or the maximum reporting limit, whichever was greater, was plotted.

Figure 7-26
Mean Concentrations in the 0-6 inch Riparian Soils Collected at Soil Area 9 - Red River Riparian, Red River Reference Riparian Area, and Upper Cabresto Creek Reference Area

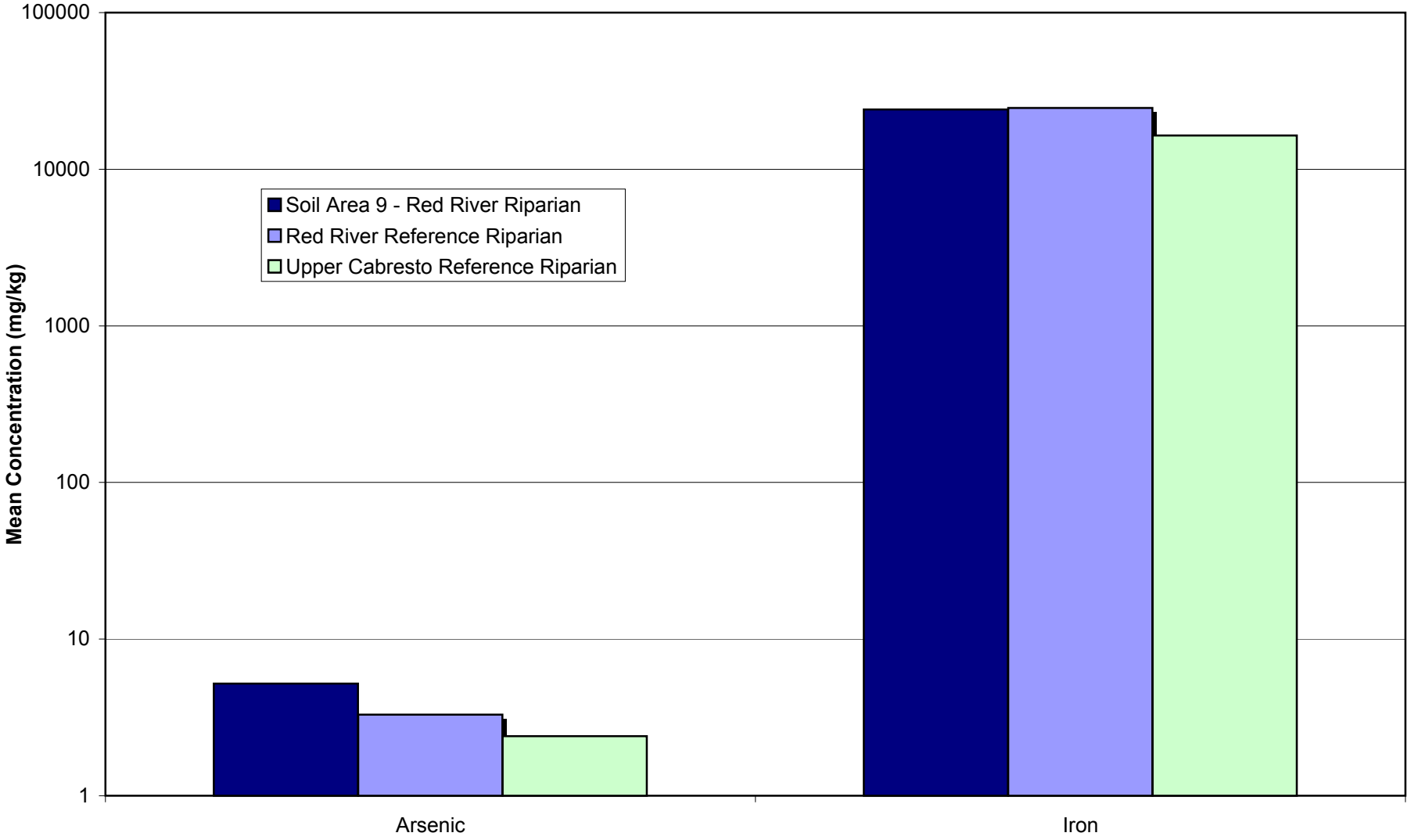
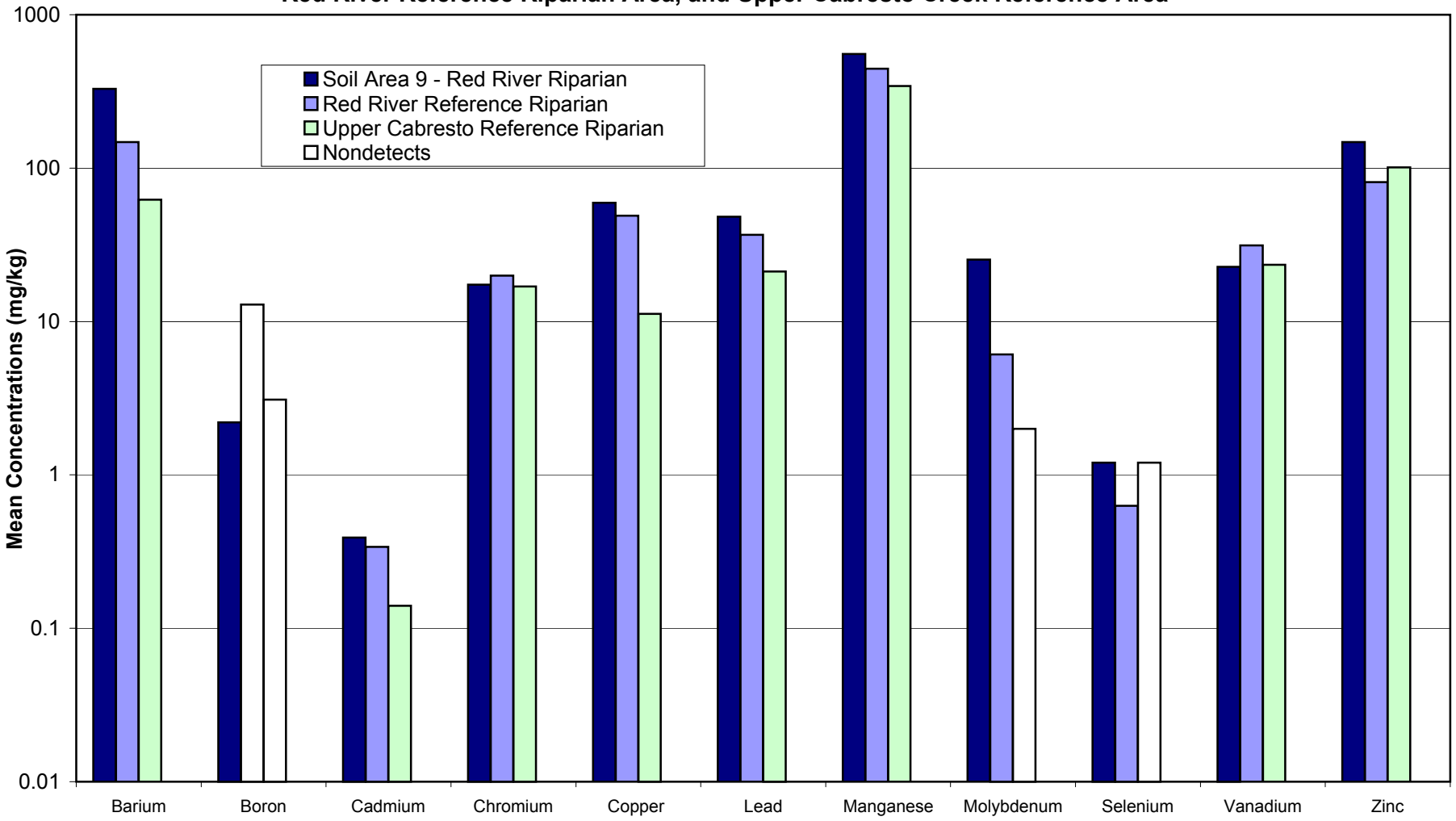


Figure 7-27
Mean Concentrations in the 0-24 inch Riparian Soils Collected at Soil Area 9 - Red River Riparian, Red River Reference Riparian Area, and Upper Cabresto Creek Reference Area



Note: A white bar indicates that 50% or more of the values were not detected, and a mean was not calculated. In these cases, the maximum detected value or the maximum reporting limit, whichever was greater, was plotted.

Figure 7-28
Mean Concentrations in the 0-6 inch Riparian Soils Collected at Soil Area 16 - Red River Riparian Along Tailings Facility and Lower Cabresto Creek Reference Riparian Area

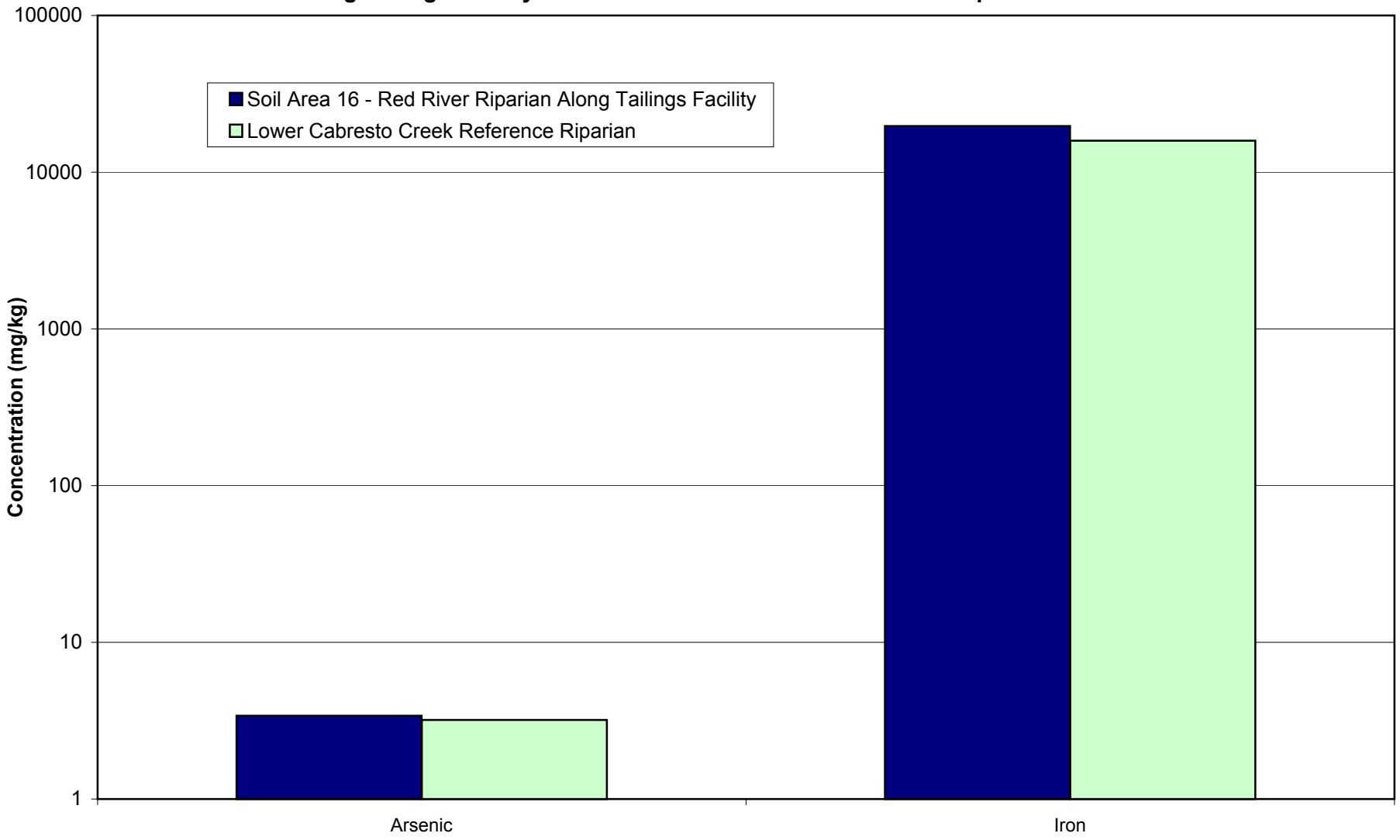
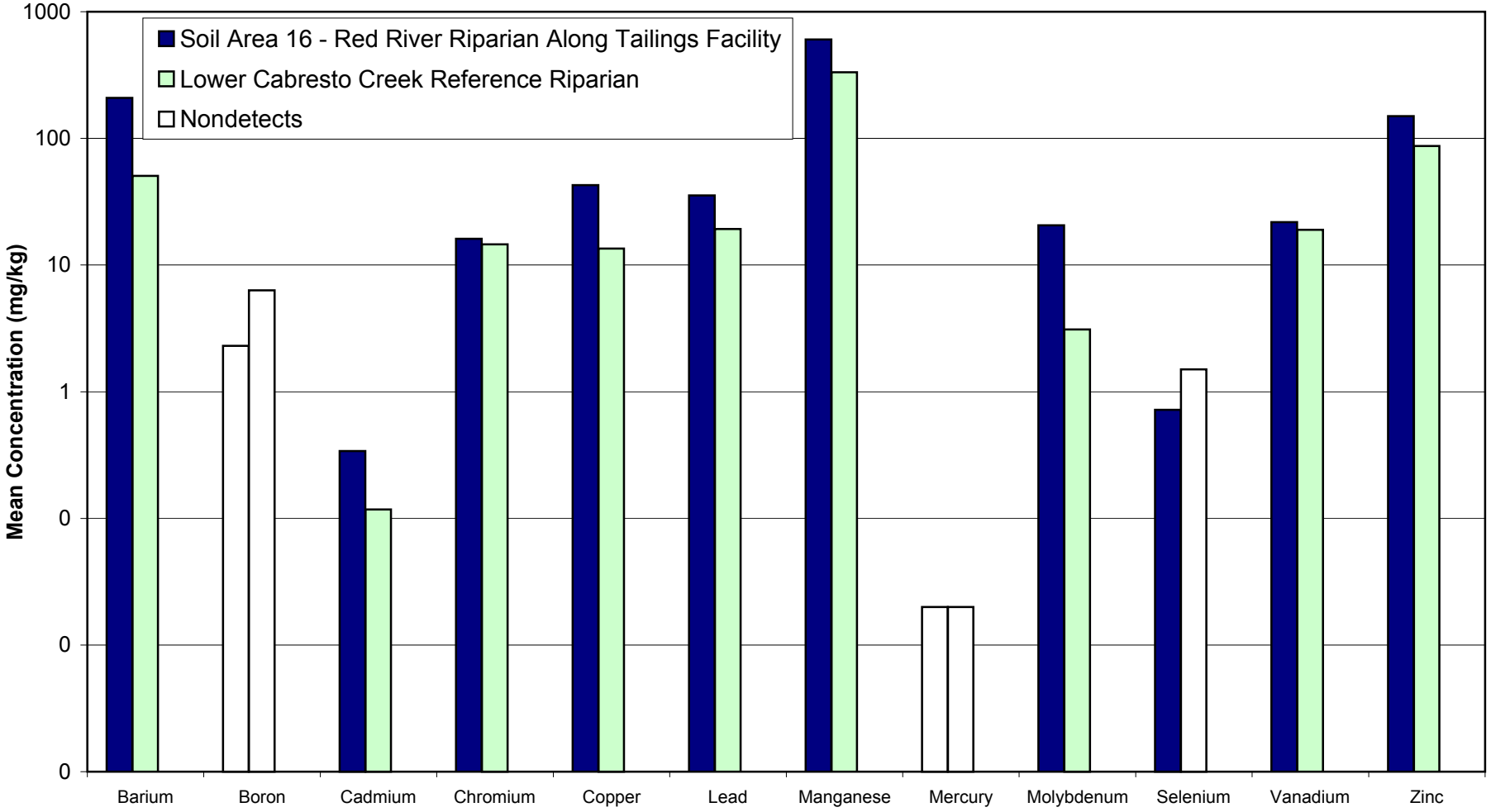


Figure 7-29
Mean Concentrations in the 0-24 inch Riparian Soils Collected at Soil Area 16 - Red River Riparian Along Tailings Facility and Lower Cabresto Creek Reference Riparian Area



Note: A white bar indicates that 50% or more of the values were not detected, and a mean was not calculated. In these cases, the maximum detected value or the maximum reporting limit, whichever was greater, was plotted.

Figure 7-30
Mean Concentrations in Soils Collected at Soil Area 17 - South of Tailings and Cater Ranch Reference Area

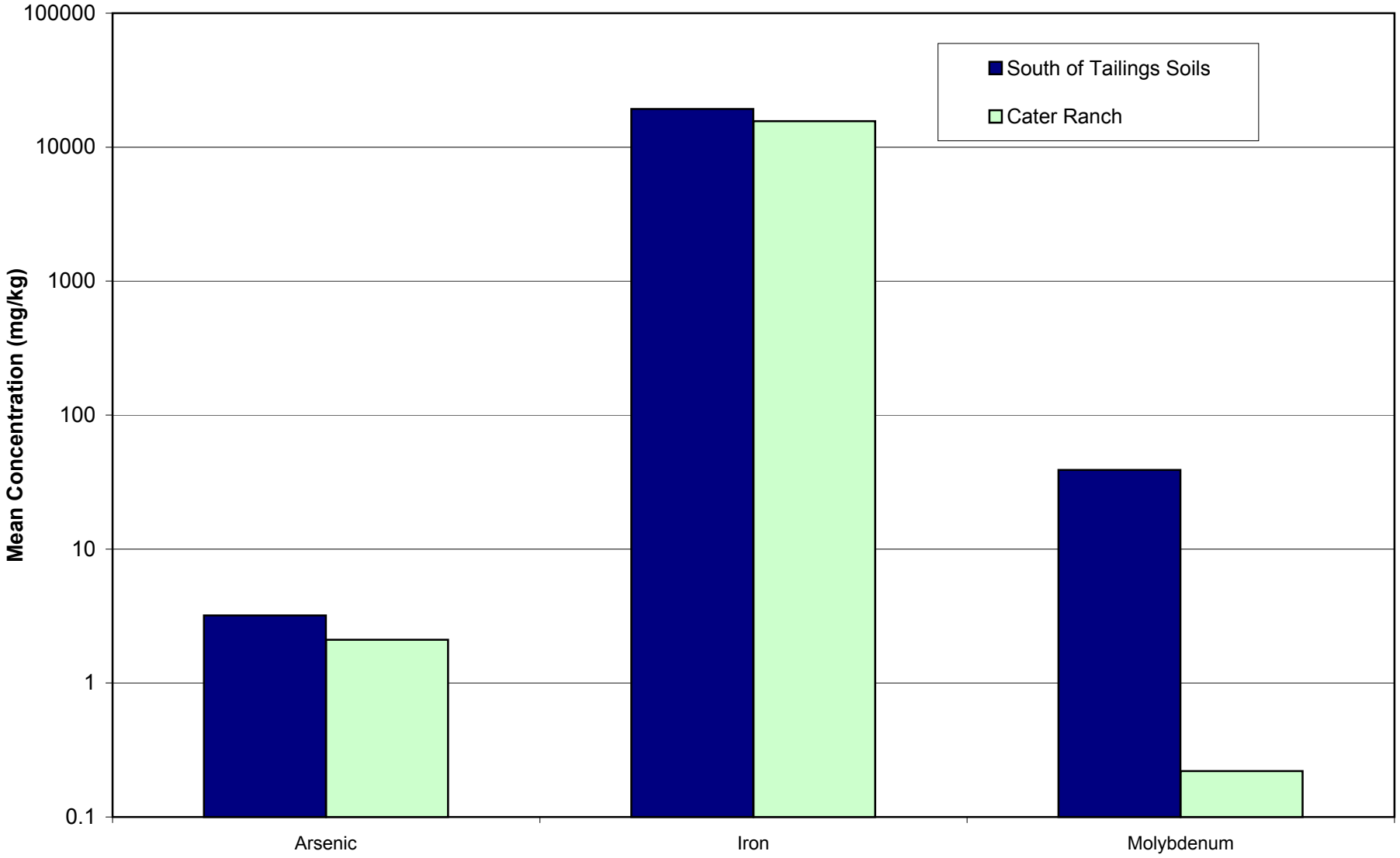


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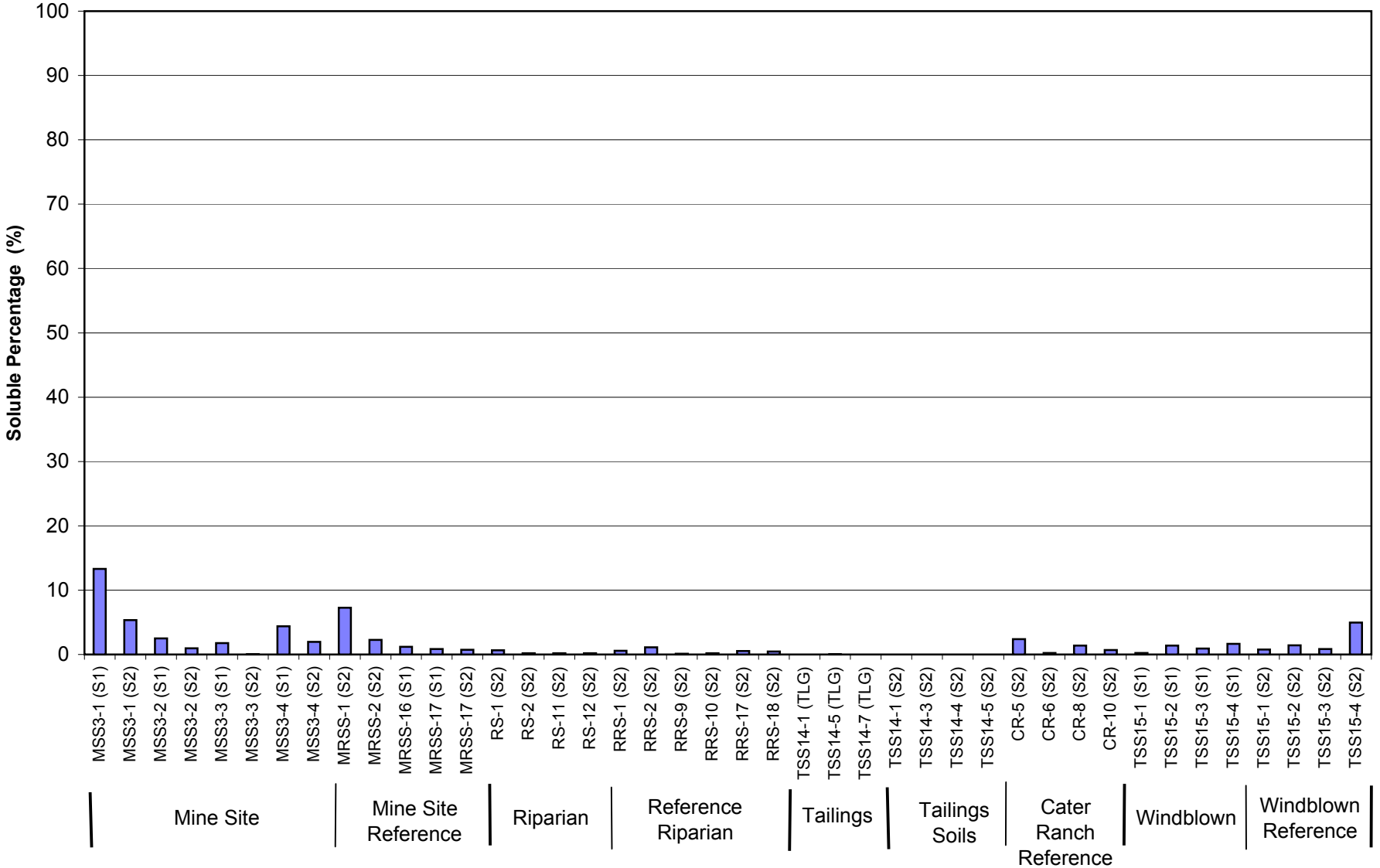
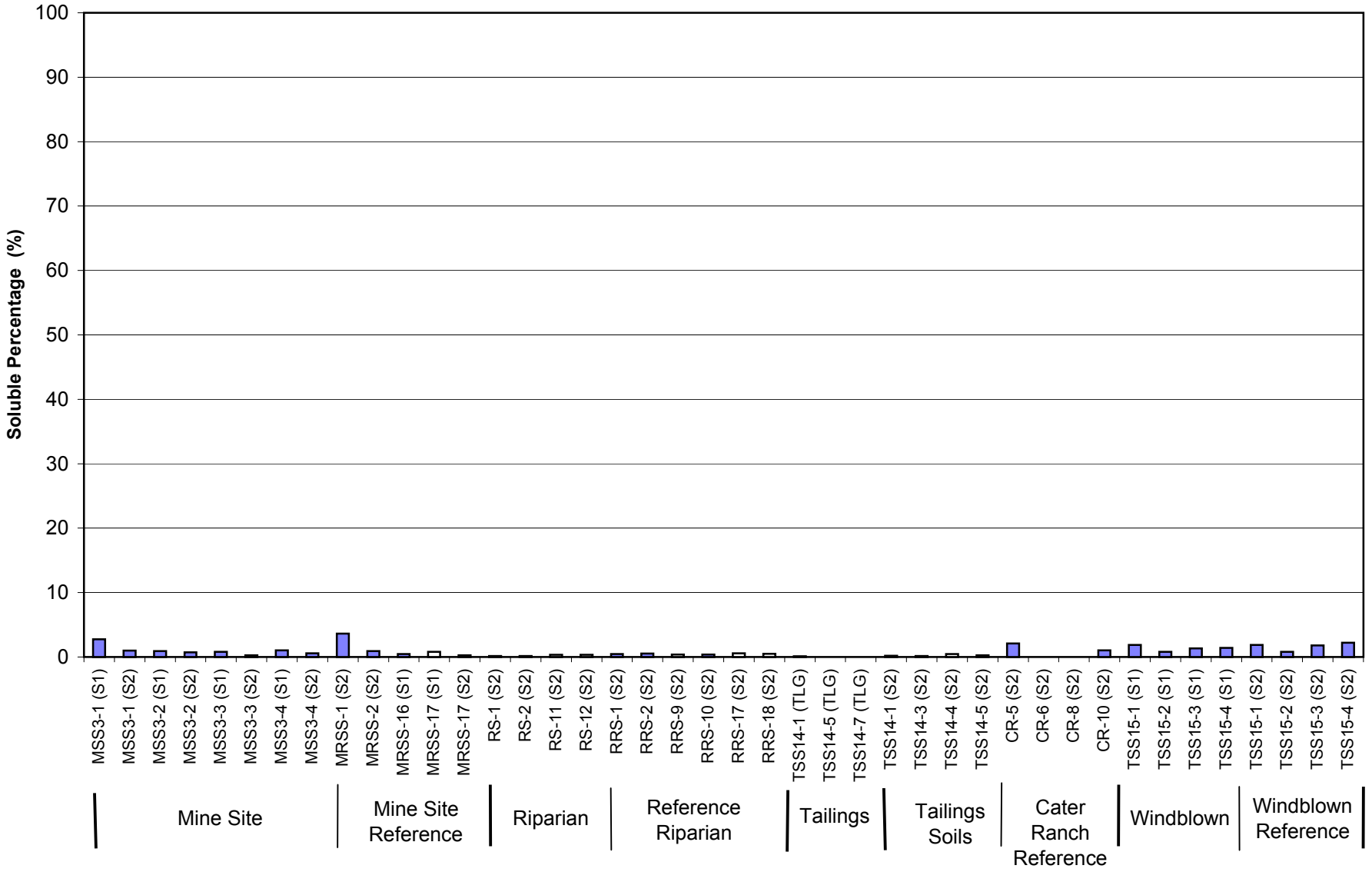
Figure 7-31
Soluble Percentage of Aluminum in Select Soils



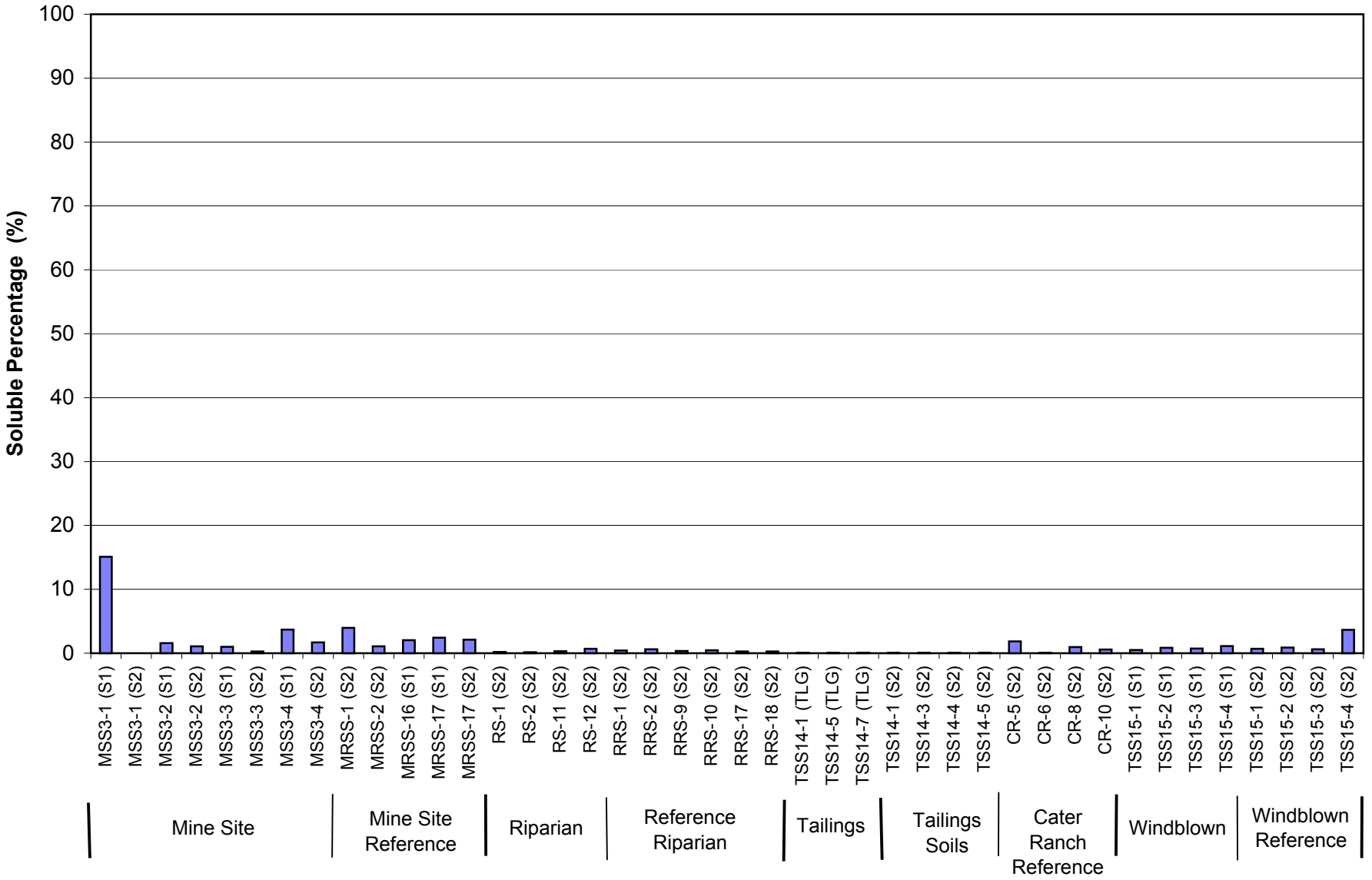
Note: A white bar indicates that the analyte concentration in either the soil or leachate sample was below detection, and the reporting limit is plotted. No bar indicates that the concentrations in both samples were below detection.

Figure 7-32
Soluble Percentage of Arsenic in Select Soils



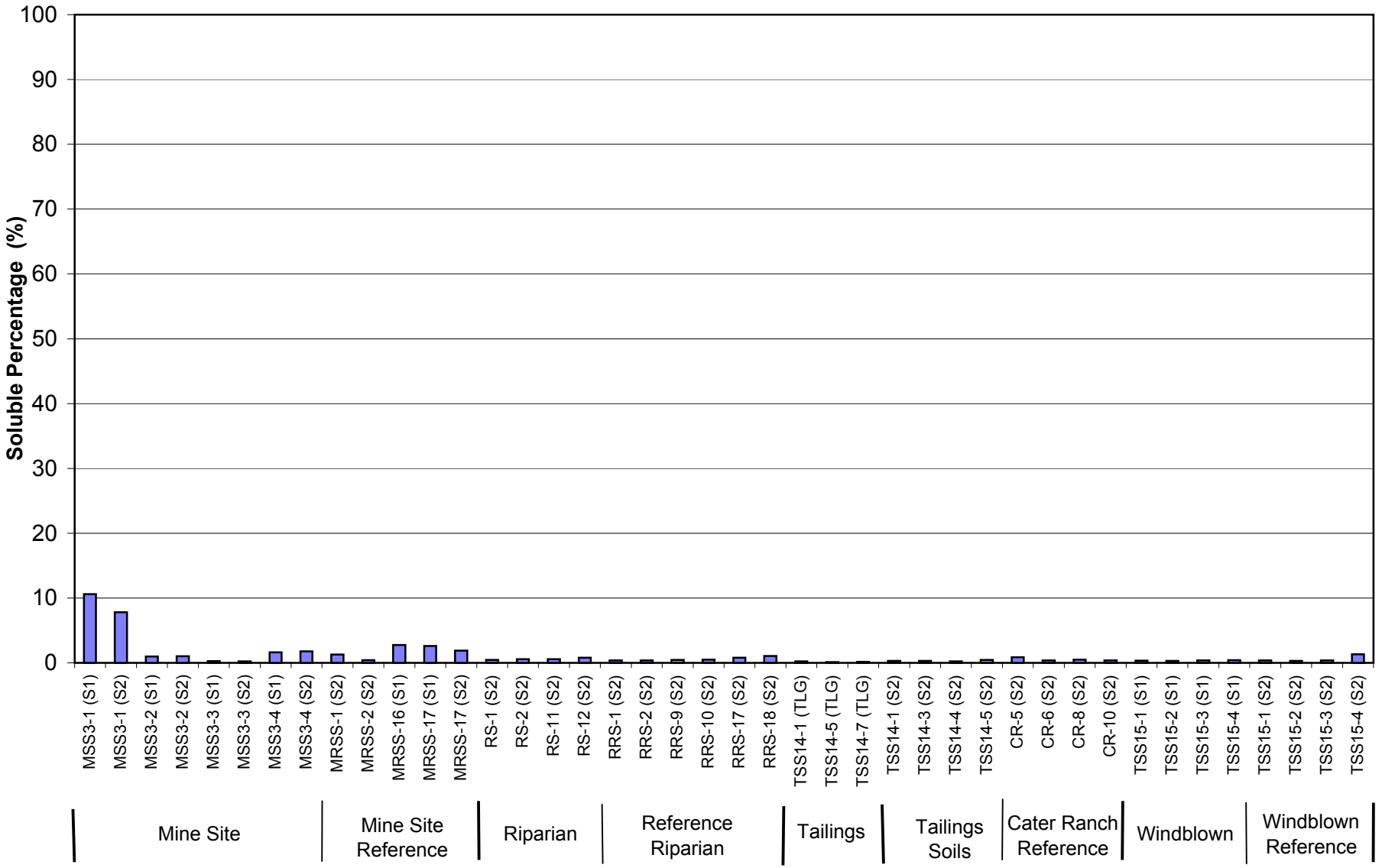
Note: A white bar indicates that the analyte concentration in either the soil or leachate sample was below detection, and the reporting limit is plotted. No bar indicates that the concentrations in both samples were below detection.

Figure 7-33
Soluble Percentage of Chromium in Select Soils



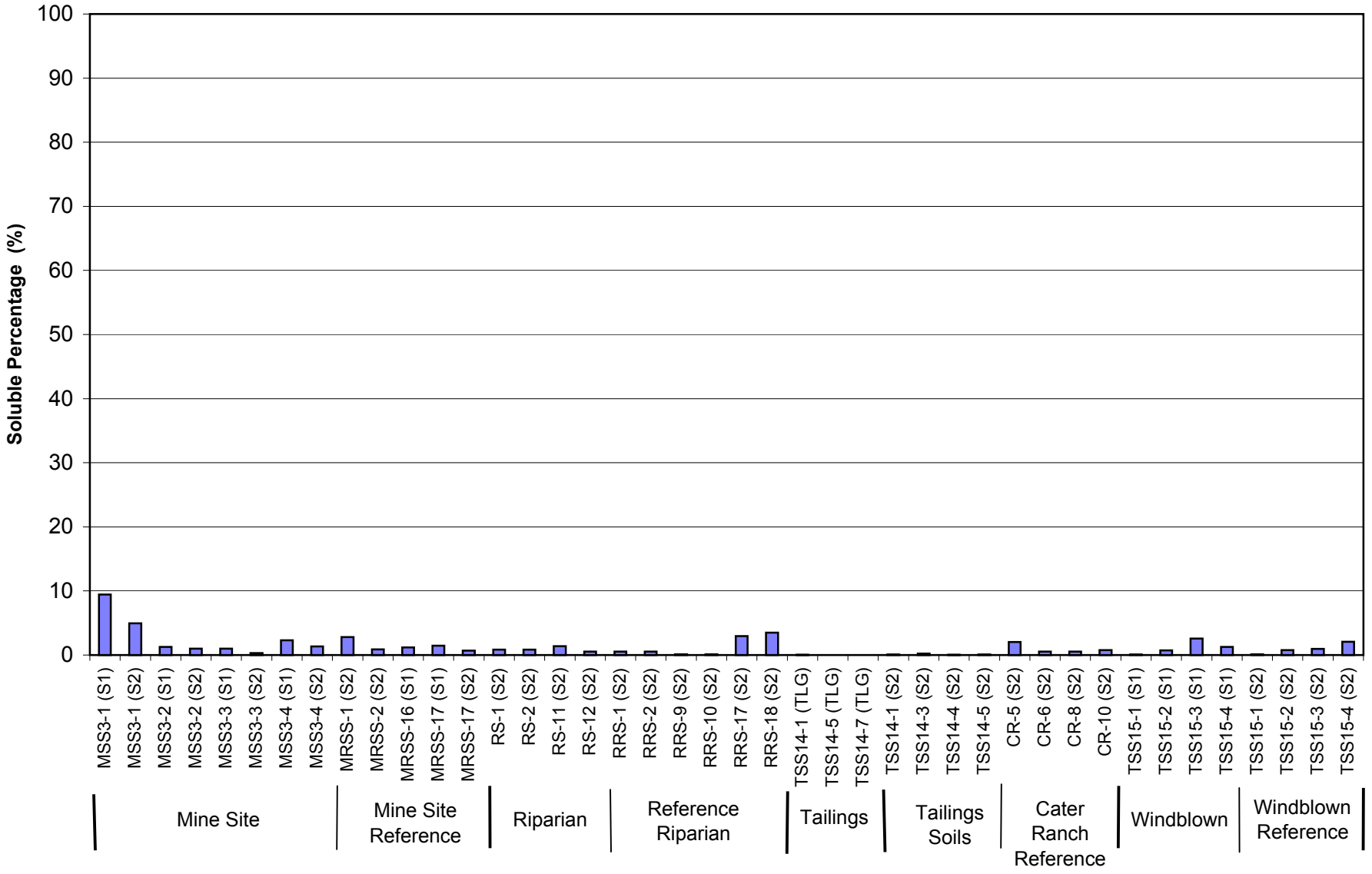
Note: A white bar indicates that the analyte concentration in either the soil or leachate sample was below detection, and the reporting limit is plotted. No bar indicates that the concentrations in both samples were below detection.

Figure 7-34
Soluble Percentage of Cobalt in Select Soils



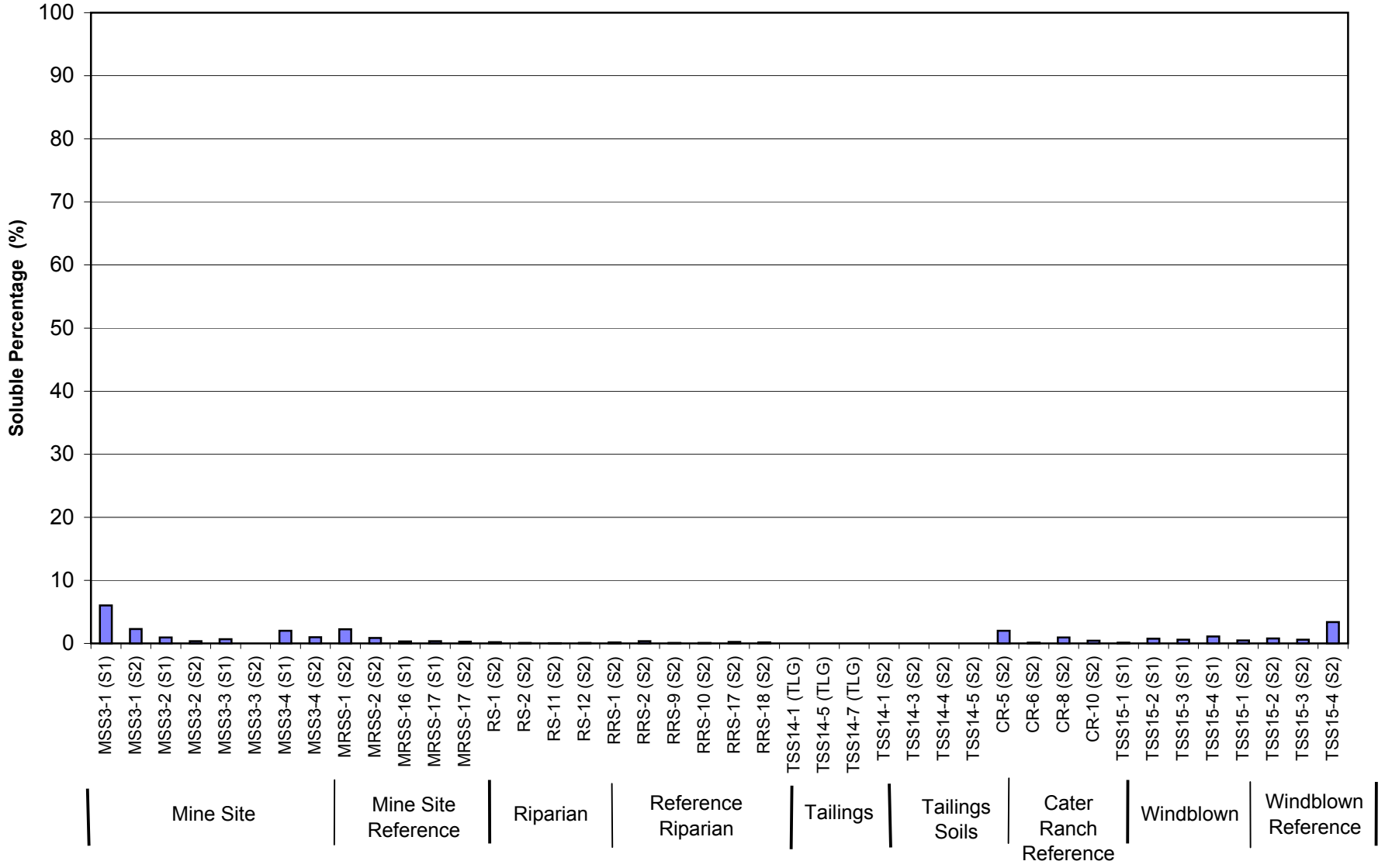
Note: A white bar indicates that the analyte concentration in either the soil or leachate sample was below detection, and the reporting limit is plotted. No bar indicates that the concentrations in both samples were below detection.

Figure 7-35
Soluble Percentage of Copper in Select Soils



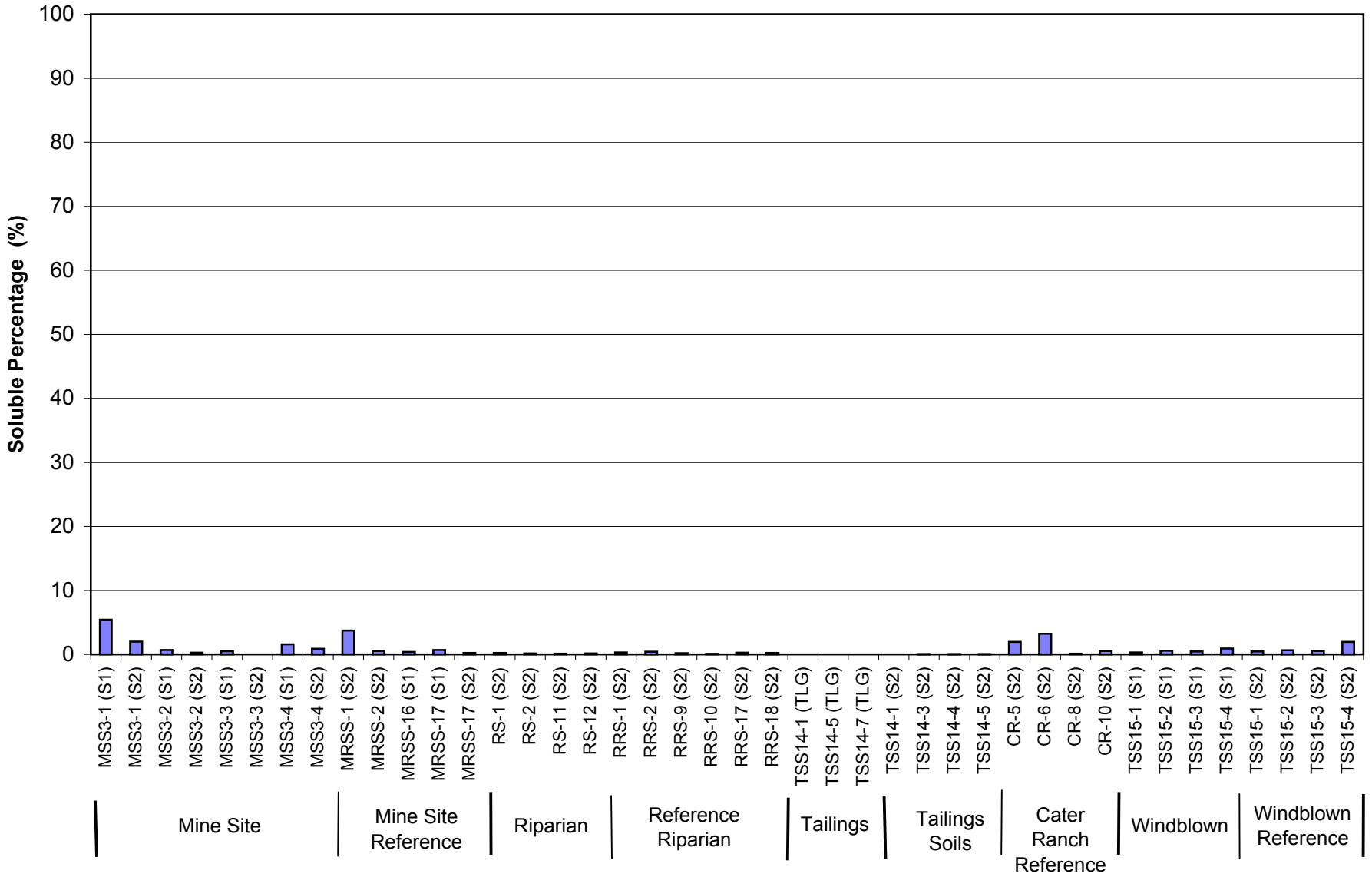
Note: A white bar indicates that the analyte concentration in either the soil or leachate sample was below detection, and the reporting limit is plotted. No bar indicates that the concentrations in both samples were below detection.

Figure 7-36
Soluble Percentage of Iron in Select Soils



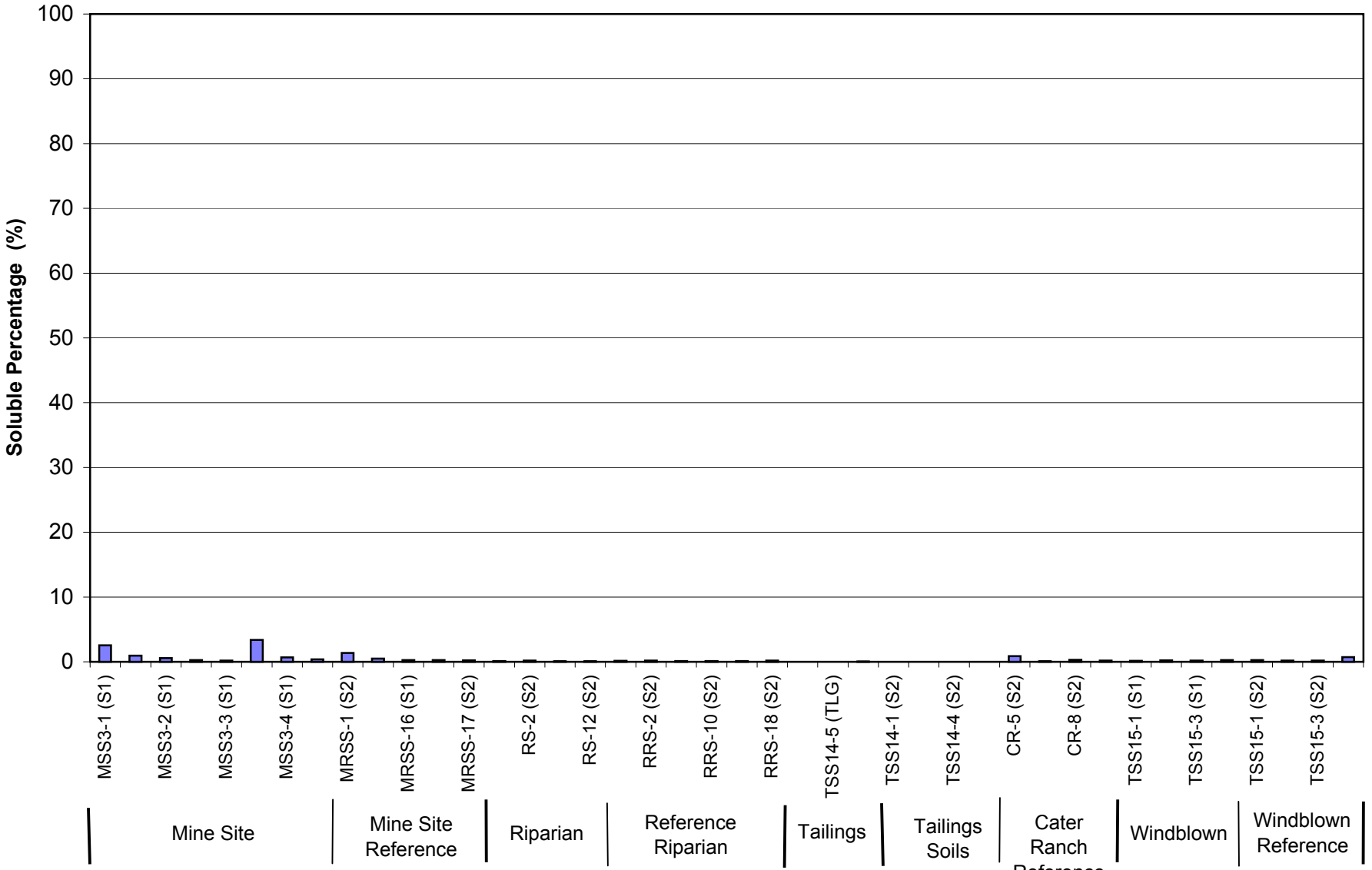
Note: A white bar indicates that the analyte concentration in either the soil or leachate sample was below detection, and the reporting limit is plotted. No bar indicates that the concentrations in both samples were below detection.

Figure 7-37
Soluble Percentage of Lead in Select Soils



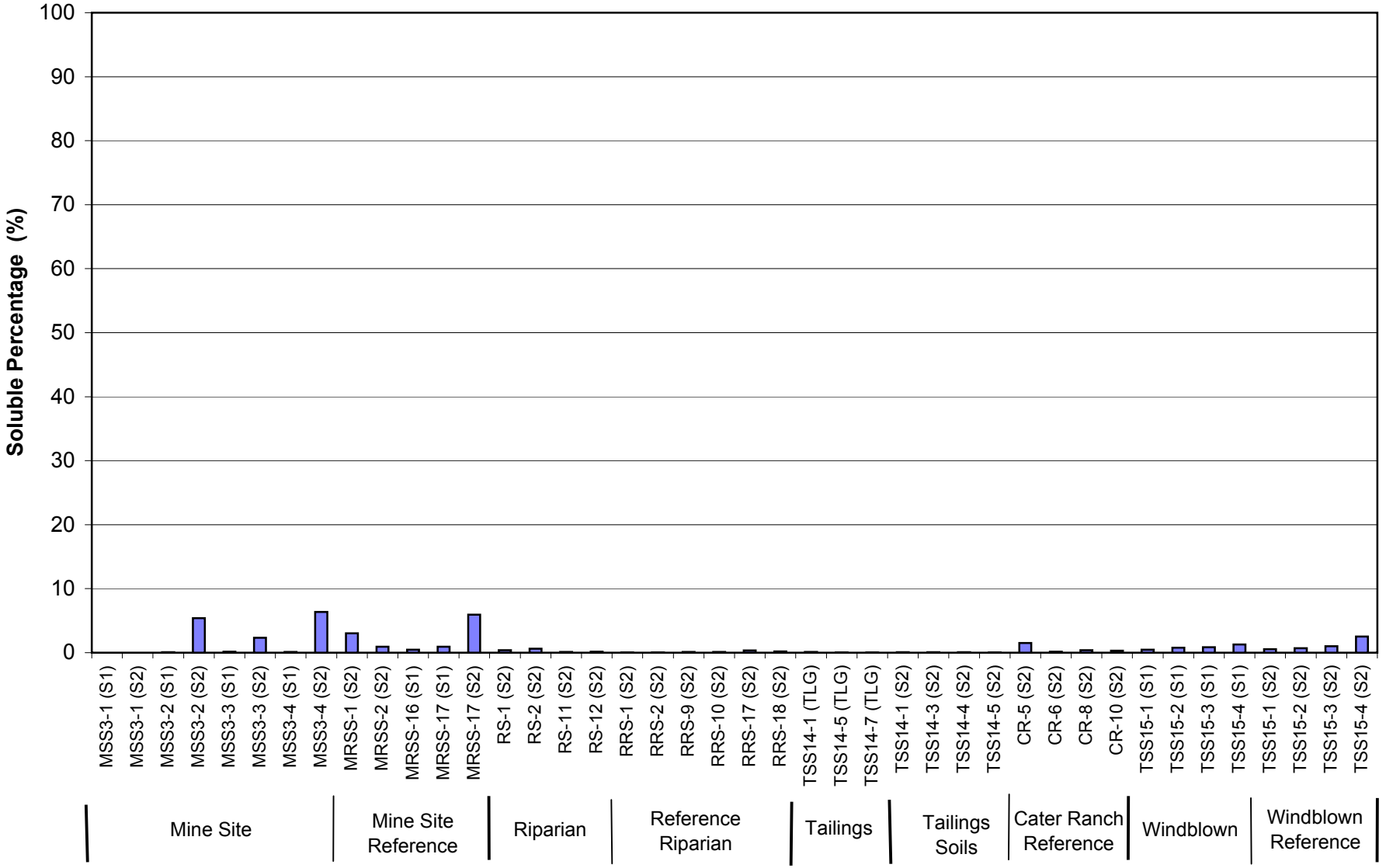
Note: A white bar indicates that the analyte concentration in either the soil or leachate sample was below detection, and the reporting limit is plotted. No bar indicates that the concentrations in both samples were below detection.

Figure 7-38
Soluble Percentage of Manganese in Select Soils



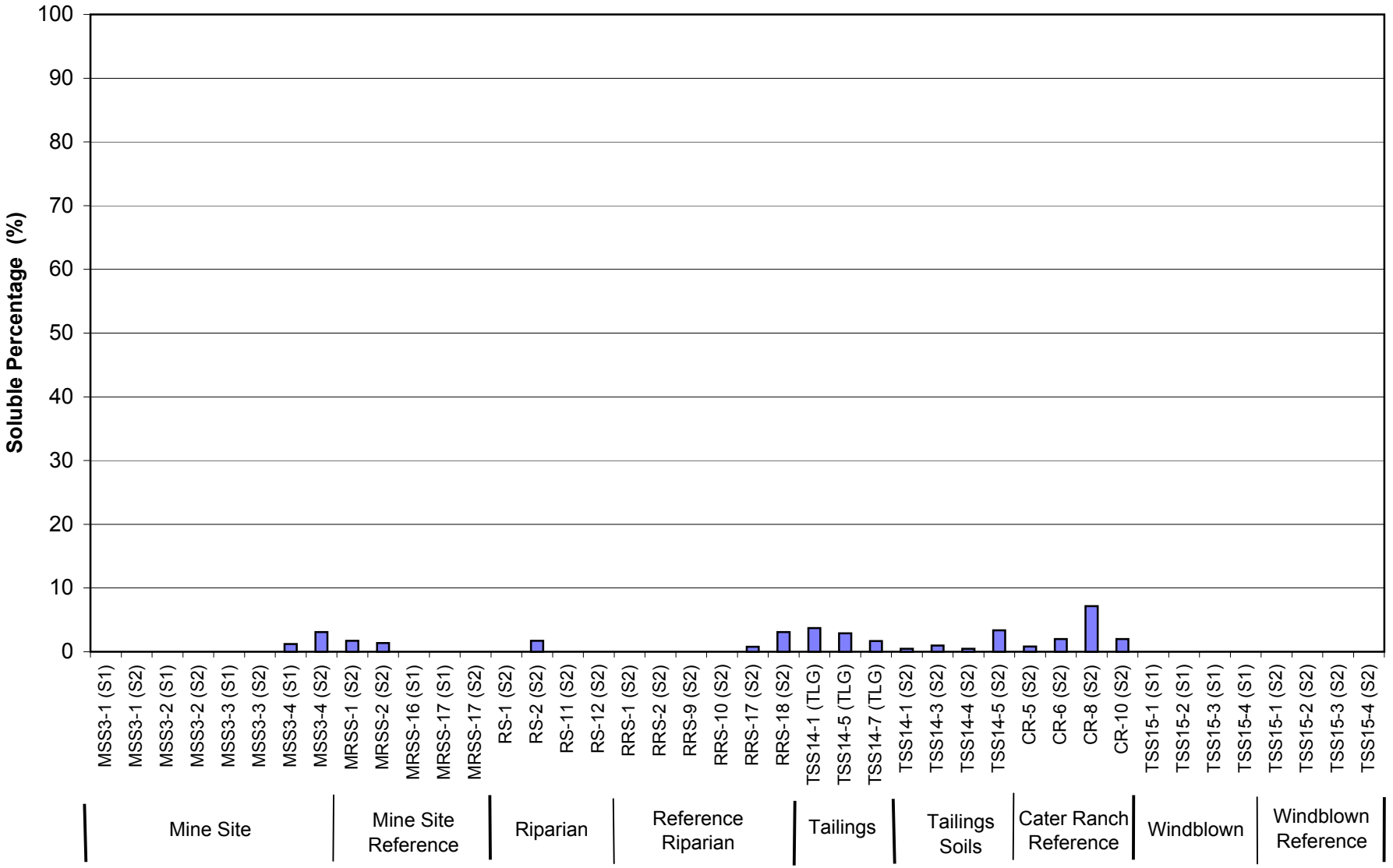
Note: A white bar indicates that the analyte concentration in either the soil or leachate sample was below detection, and the reporting limit is plotted. No bar indicates that the concentrations in both samples were below detection.

Figure 7-39
Soluble Percentage of Nickel in Select Soils



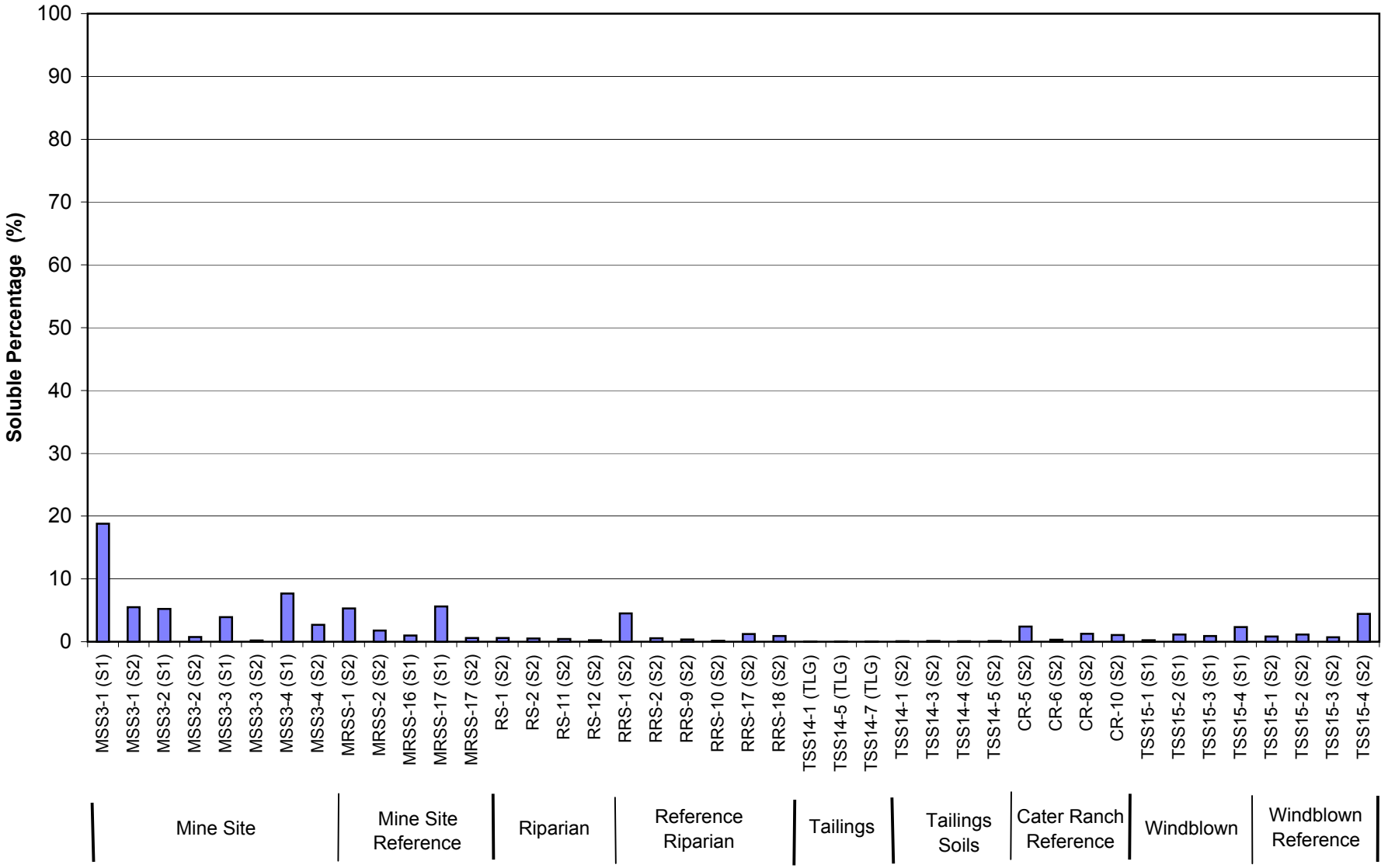
Note: A white bar indicates that the analyte concentration in either the soil or leachate sample was below detection, and the reporting limit is plotted. No bar indicates that the concentrations in both samples were below detection.

Figure 7-40
Soluble Percentage of Silver in Select Soils



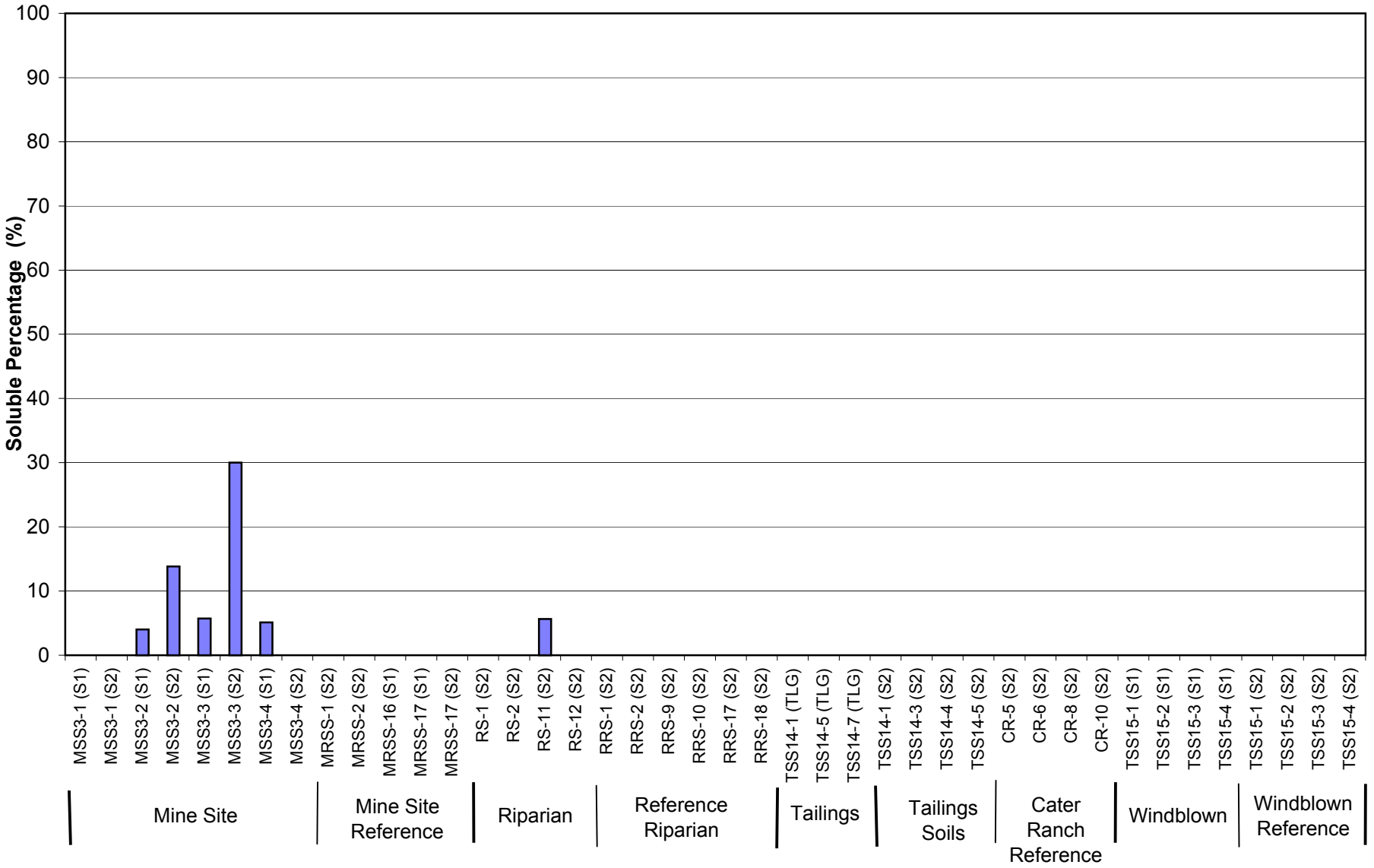
Note: A white bar indicates that the analyte concentration in either the soil or leachate sample was below detection, and the reporting limit is plotted. No bar indicates that the concentrations in both samples were below detection.

Figure 7-41
Soluble Percentage of Zinc in Select Soils



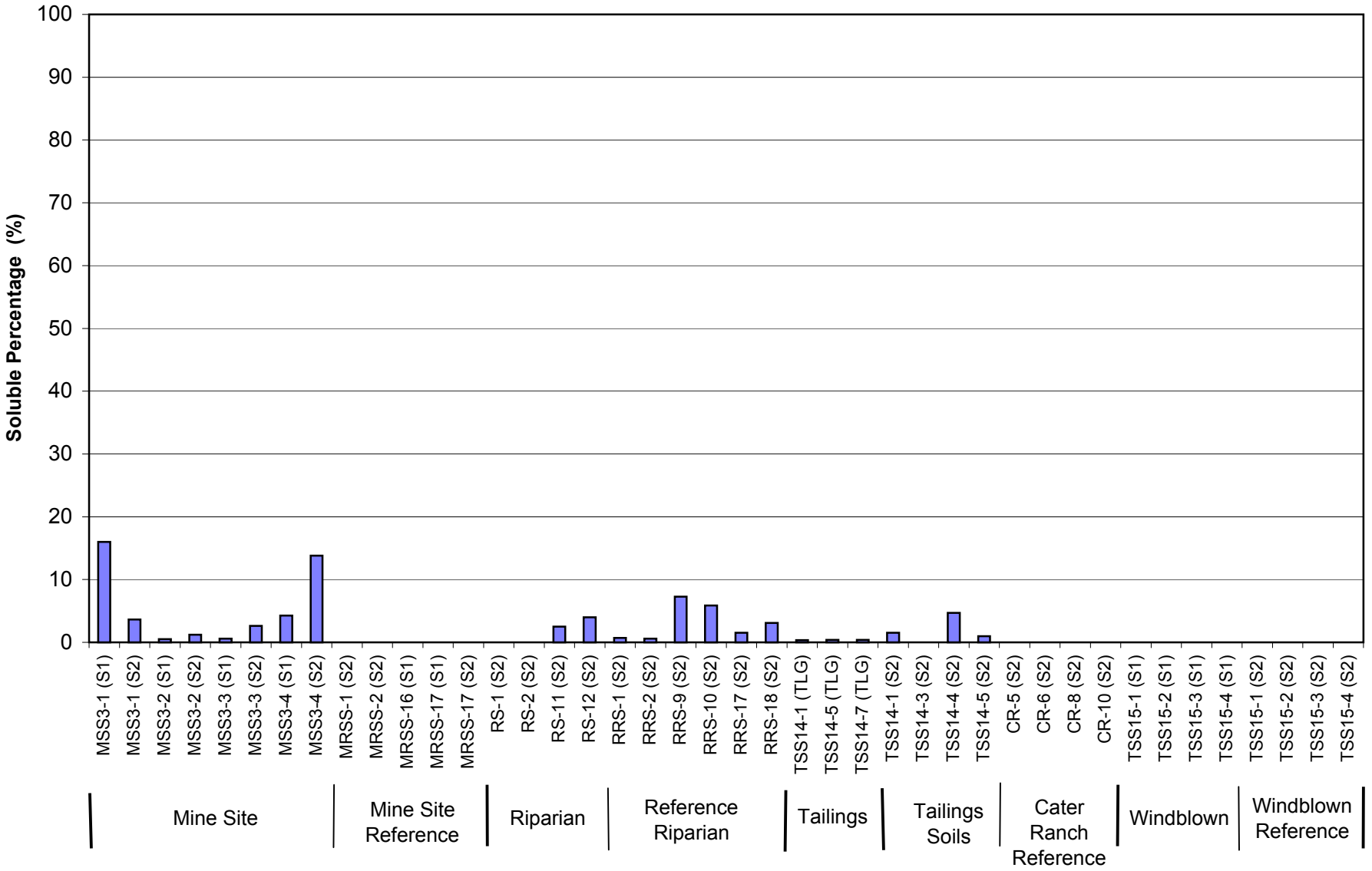
Note: A white bar indicates that the analyte concentration in either the soil or leachate sample was below detection, and the reporting limit is plotted. No bar indicates that the concentrations in both samples were below detection.

Figure 7-42
Soluble Percentage of Antimony in Select Soils



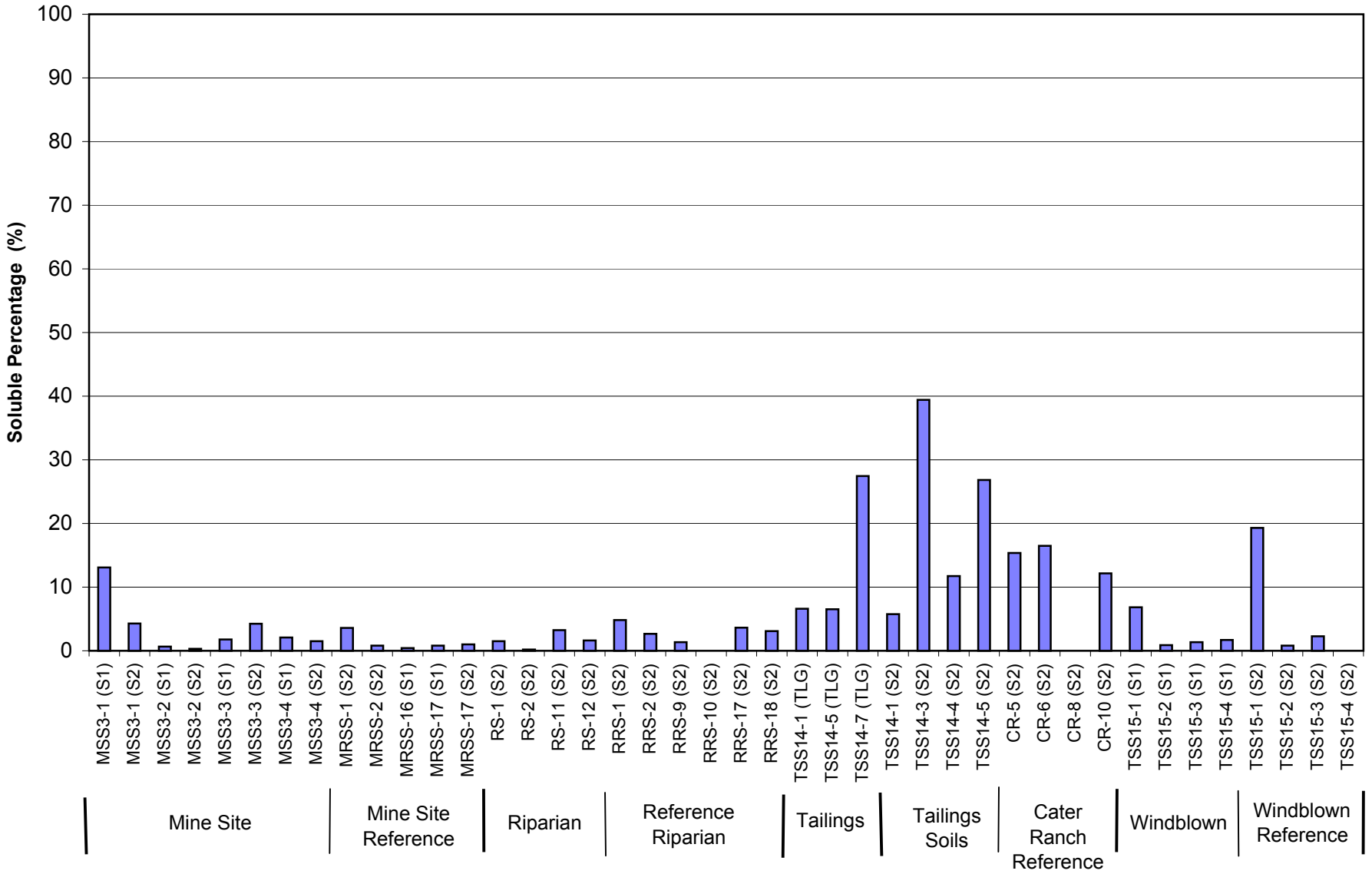
Note: A white bar indicates that the analyte concentration in either the soil or leachate sample was below detection, and the reporting limit is plotted. No bar indicates that the concentrations in both samples were below detection.

Figure 7-43
Soluble Percentage of Cadmium in Select Soils



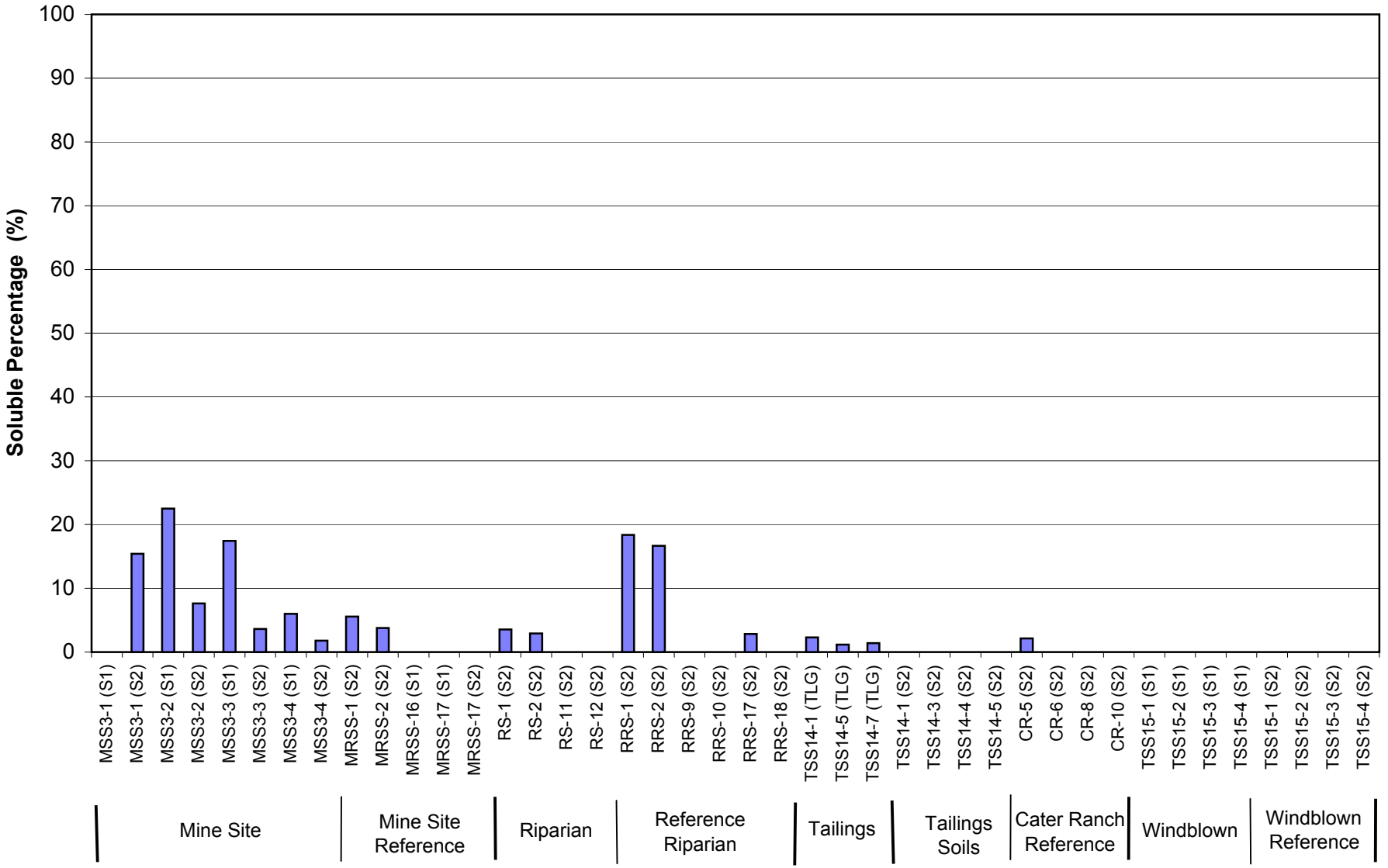
Note: A white bar indicates that the analyte concentration in either the soil or leachate sample was below detection, and the reporting limit is plotted. No bar indicates that the concentrations in both samples were below detection.

Figure 7-44
Soluble Percentage of Molybdenum in Select Soils



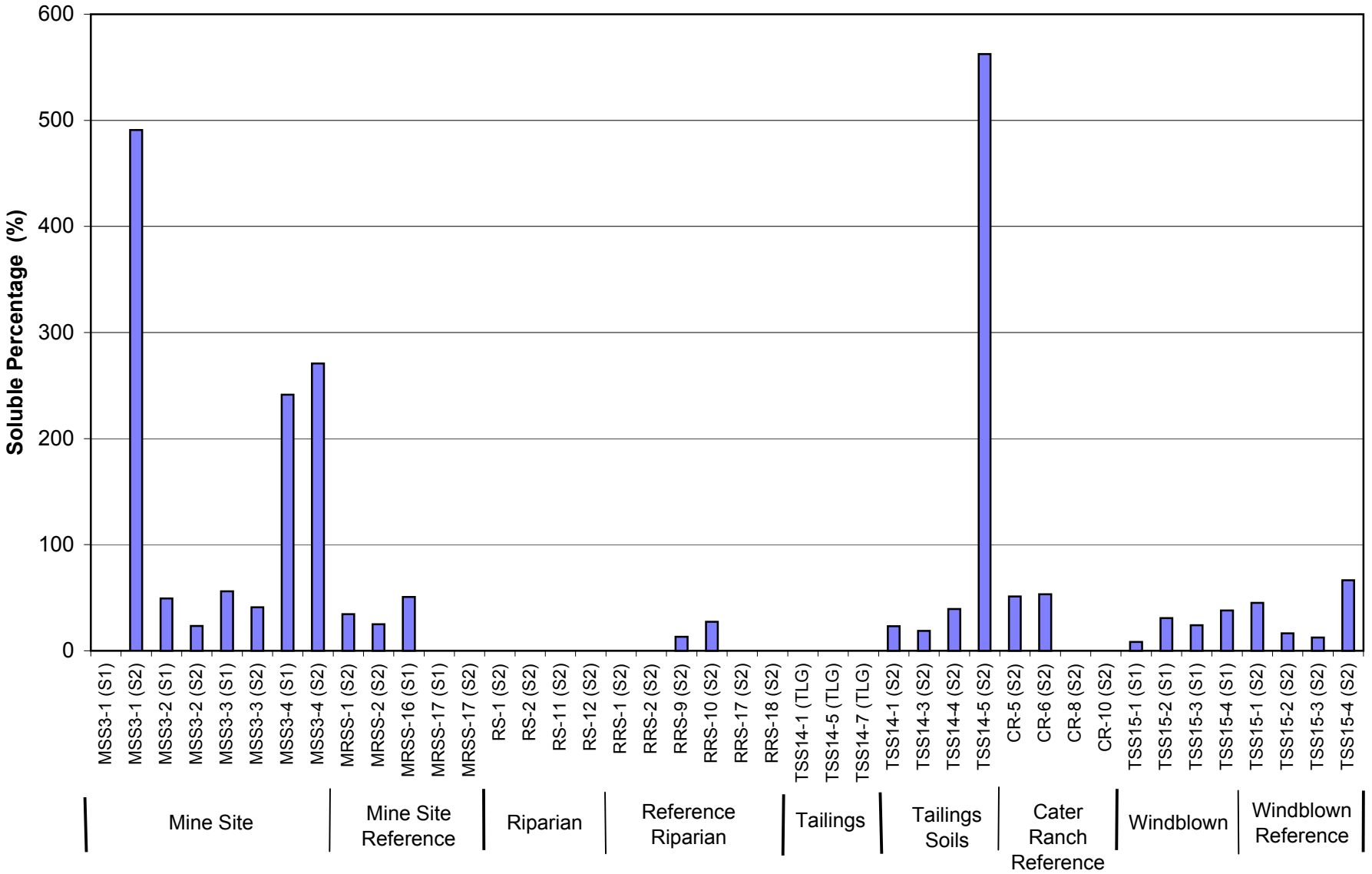
Note: A white bar indicates that the analyte concentration in either the soil or leachate sample was below detection, and the reporting limit is plotted. No bar indicates that the concentrations in both samples were below detection.

Figure 7-45
Soluble Percentage of Selenium in Select Soils



Note: A white bar indicates that the analyte concentration in either the soil or leachate sample was below detection, and the reporting limit is plotted. No bar indicates that the concentrations in both samples were below detection.

Figure 7-46
Soluble Percentage of Boron in Select Soils



Note: A white bar indicates that the analyte concentration in either the soil or leachate sample was below detection, and the reporting limit is plotted. No bar indicates that the concentrations in both samples were below detection.

Figure 7-47
Chloride Concentrations in SPLP Leachates

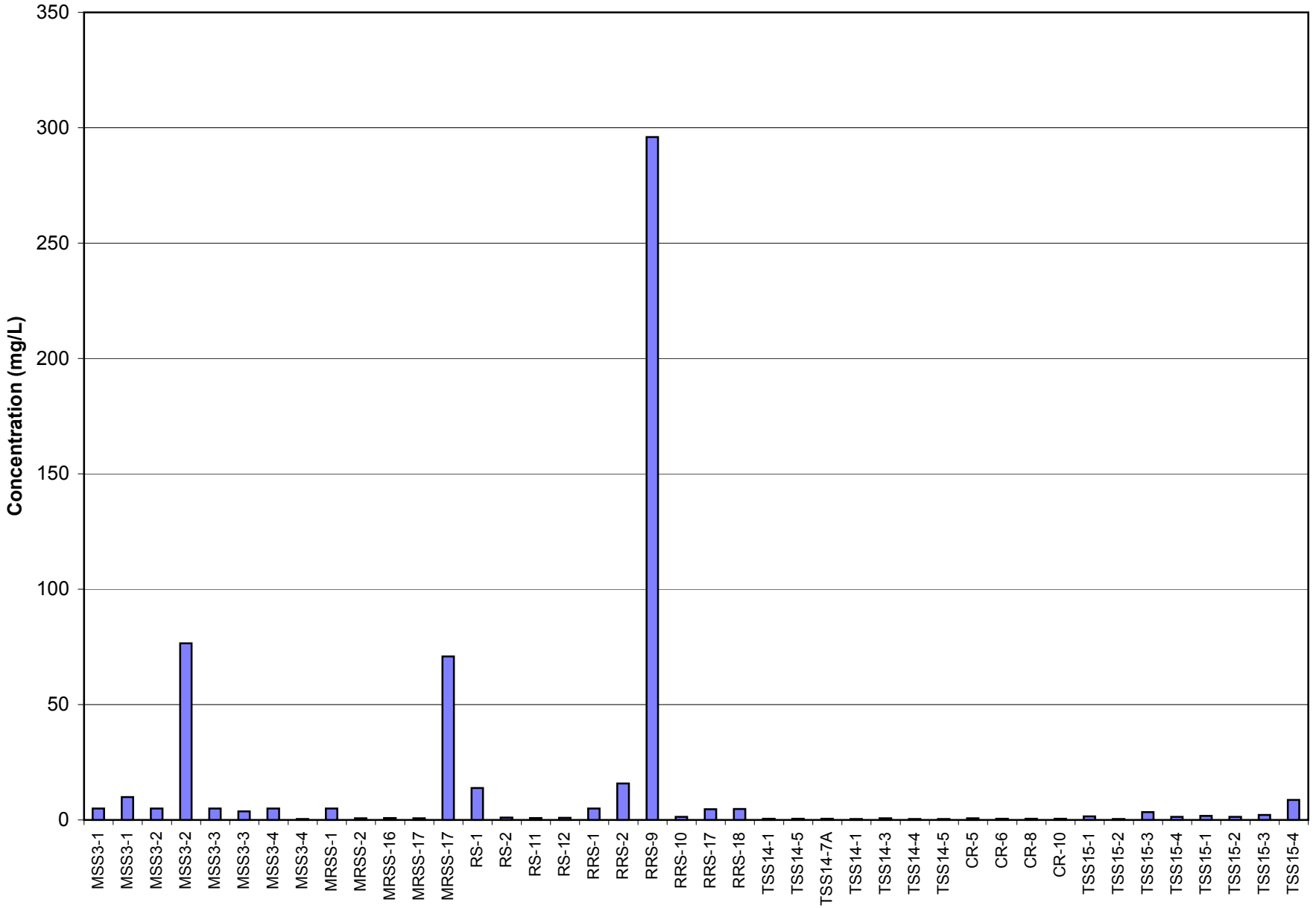


Figure 7-48
Fluoride Concentrations in SPLP Leachates

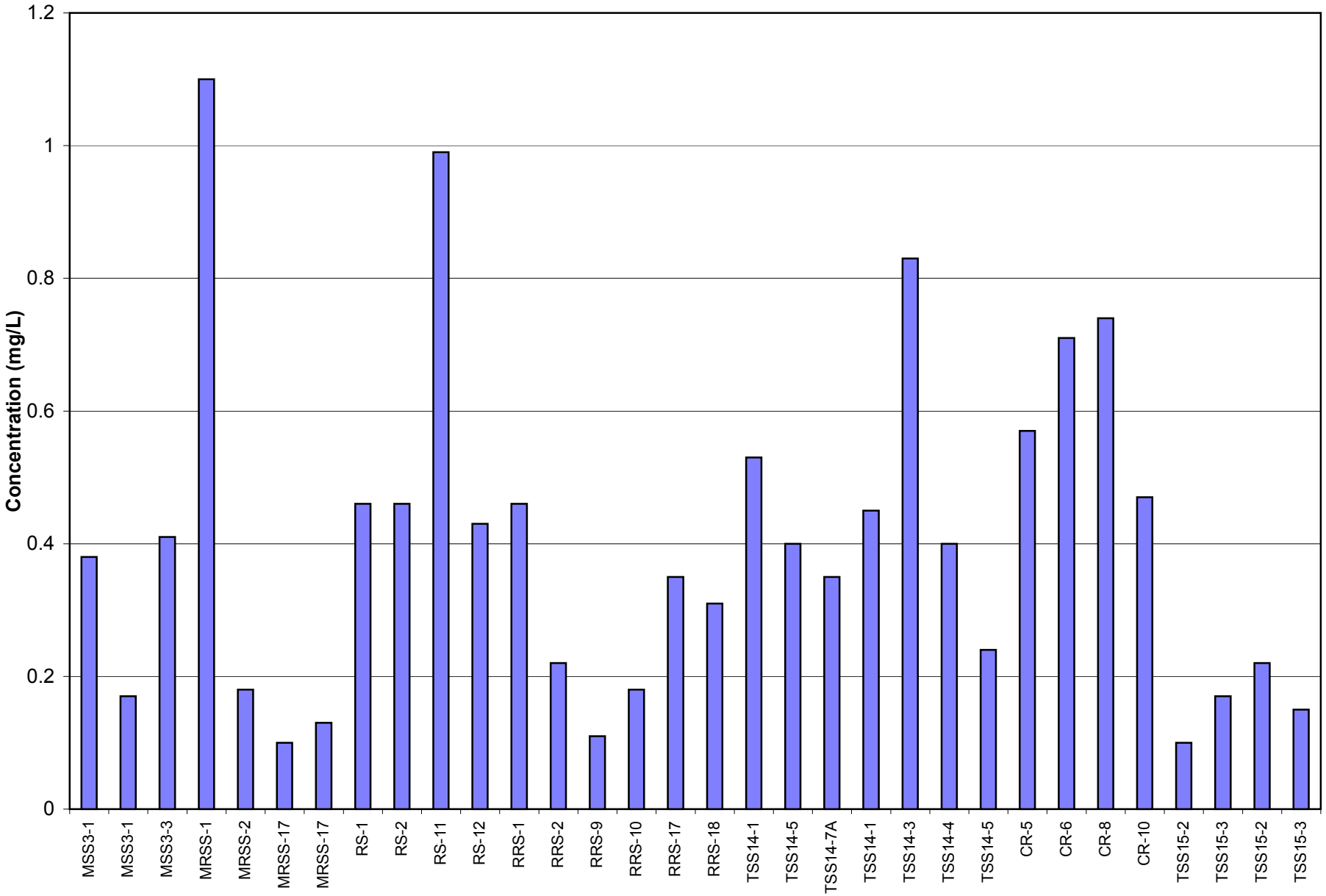


Figure 7-49
Sulfate Concentrations in SPLP Leachates

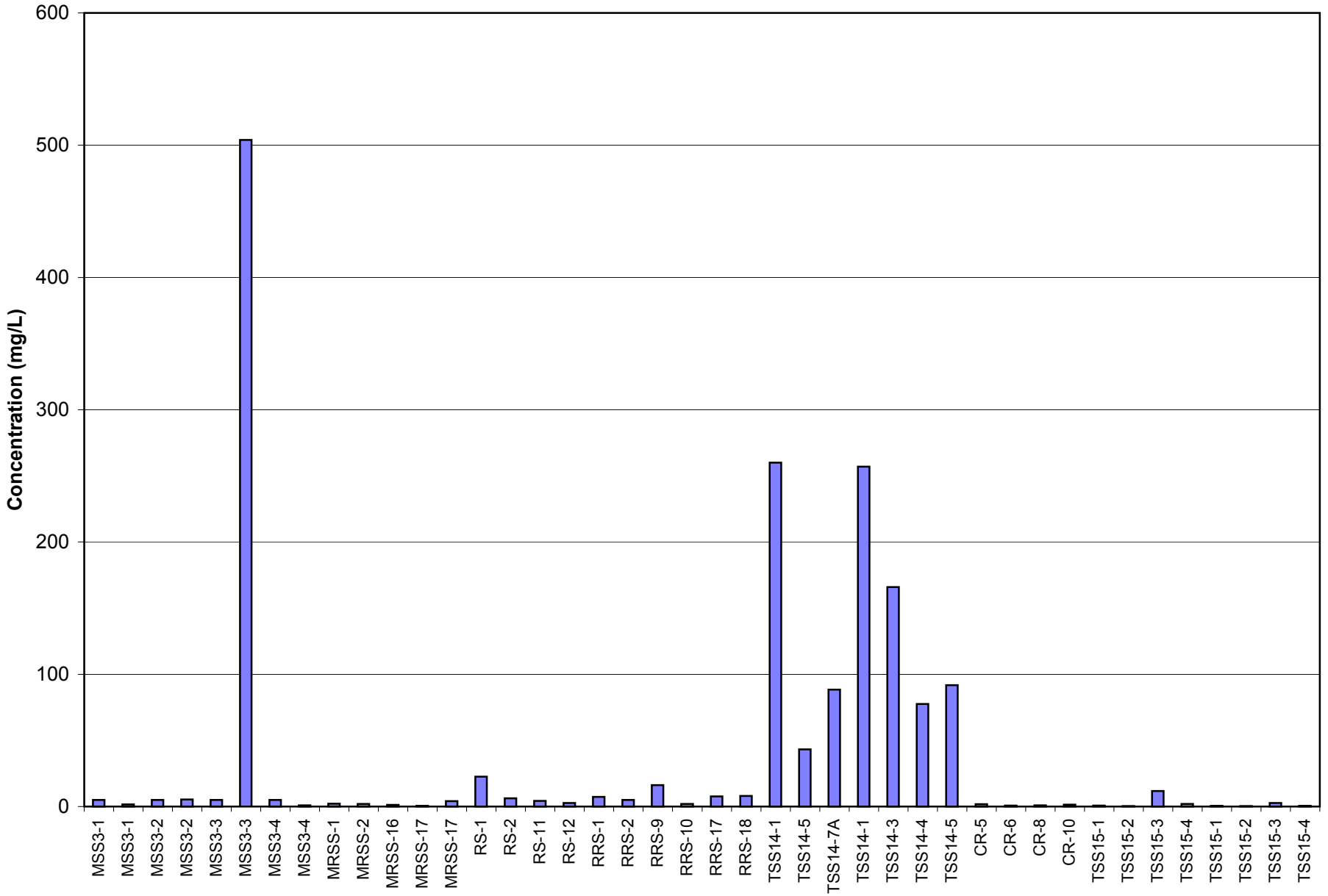
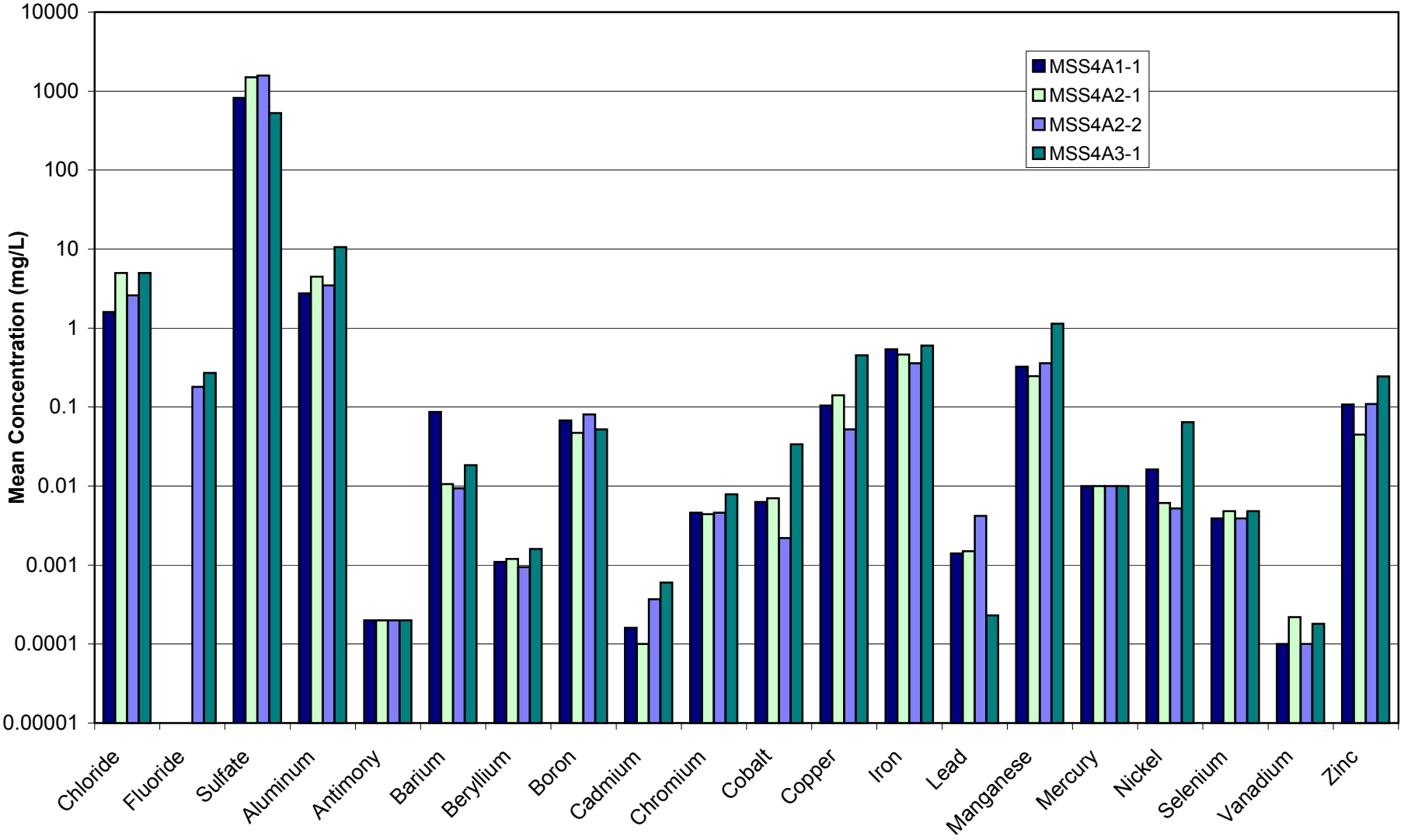


Figure 7-50
Analyte Concentrations in SPLP Leachates from Bulk Rock Pile Samples



Note: No bars are shown for two fluoride results that were rejected.

APPENDIX A-7

SOILS

VALIDATED ANALYTICAL RESULTS

Appendix A-7a
Soil - Biased 0-6 inches
Validated Analytical Results

Parameter	Units	Fraction	MSS1-100		MSS1-101		MSS1-102		MSS1-103		MSS1-104		MSS1-104	
Sample Date			1/16/2003		1/16/2003		1/19/2003		1/16/2003		1/9/2003		1/10/2003	
Sample ID			MSS1-100-T01N-SOL		MSS1-101-T01N-SOL		MSS1-102-T01N-SOL		MSS1-103-T01N-SOL		MSS1-104-T01N-SOL		MSS1-104-T01N-SOL	
Exposure Area			SS1		SS1		SS1		SS1		SS1		SS1	
General Chemistry														
Ammonia	mg/kg-dry	T	9.7	:	12.9	:	10.4	:	9.3	:	22.8	:	-	
Chloride	mg/kg-dry	T	71.9	:	1290.	:	3.1	:	<2.2	:	7.3	:	-	
Fluoride	mg/kg-dry	T	2.8	J	1.9	J	0.97	J	0.54	J	0.37	J	-	
Nitrate	mg/kg-dry	T	27.1	J	12.1	J	2.5	J	2.1	J	13.3	J	-	
Phosphorus	mg/kg-dry	T	1480.	:	2010.	:	1450.	:	788.	:	1190.	:	-	
Sulfate	mg/kg-dry	T	2840.	:	4390.	:	688.	:	126.	:	32.7	:	-	
Total Kjeldahl Nitrogen	mg/kg-dry	T	51.2	:	53.5	:	123.	:	68.6	:	1220.	:	-	
Total Organic Carbon	mg/kg-dry	T	138.	J	1760.	J	668.	J	366.	J	4650.	J	-	
Laboratory Parameters														
pH	SU	T	8.2	:	6.8	:	7.9	:	8.4	:	7.8	:	-	
Solids, Percent	%	T	95.9	:	93.8	:	97.9	:	95.	:	86.9	:	89.5	:
Specific Conductance	umhos/cm	T	2160.	J	4650.	J	1090.	J	497.	J	273.	:	-	
Geotechnical														
Organic Soils	%	T	1.4	:	2.	:	1.8	:	1.2	:	6.1	:	-	
Physical Properties														
Cation-Exchange Capacity	meq/100g	T	15.	:	14.6	:	13.8	:	11.4	:	18.6	:	-	
Sodium Absorption Ratio	ratio	T	0.26	:	5.54	:	0.11	:	0.2	:	0.2	:	-	
Metals														
Aluminum	mg/kg-dry	T	13100.	:	14300.	:	11400.	:	10200.	:	15500.	:	-	
Antimony	mg/kg-dry	T	<0.27	J	<0.28	J	<0.25	J	<0.29	J	<0.33	J	-	
Arsenic	mg/kg-dry	T	2.1	J	1.8	J	2.1	J	1.5	J	3.7	J	-	
Barium	mg/kg-dry	T	84.2	:	96.9	:	119.	:	59.6	:	92.	:	-	
Beryllium	mg/kg-dry	T	2.1	:	2.5	:	1.1	:	0.91	:	1.1	:	-	
Boron	mg/kg-dry	T	<0.23	:	<0.23	:	<0.56	:	<1.1	:	4.4	:	-	
Cadmium	mg/kg-dry	T	0.85	:	0.75	:	0.5	:	0.4	:	0.58	J	-	
Calcium	mg/kg-dry	T	17700.	:	23300.	:	12400.	:	13400.	:	10400.	:	-	
Chromium	mg/kg-dry	T	46.1	J	50.3	J	47.8	J	23.	J	69.9	J	-	
Cobalt	mg/kg-dry	T	6.7	:	4.9	:	7.3	:	8.	:	14.4	:	-	
Copper	mg/kg-dry	T	146.	J	180.	J	105.	J	63.	J	87.5	J	-	
Iron	mg/kg-dry	T	17000.	:	20300.	:	14900.	:	14400.	:	29700.	:	-	
Lead	mg/kg-dry	T	69.2	:	53.	:	52.7	:	38.7	:	87.6	:	-	
Magnesium	mg/kg-dry	T	8880.	:	10100.	:	7270.	:	5680.	:	11100.	:	-	
Manganese	mg/kg-dry	T	1320.	:	591.	:	816.	:	503.	:	860.	:	-	

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T = Total Fraction

Appendix A-7a
Soil - Biased 0-6 inches
Validated Analytical Results

Parameter	Units	Exposure Area Fraction	Site ID / Sample Date / Sample ID		MSS1-100 1/16/2003 MSS1-100-T01N-SOL SS1		MSS1-101 1/16/2003 MSS1-101-T01N-SOL SS1		MSS1-102 1/19/2003 MSS1-102-T01N-SOL SS1		MSS1-103 1/16/2003 MSS1-103-T01N-SOL SS1		MSS1-104 1/9/2003 MSS1-104-T01N-SOL SS1		MSS1-104 1/10/2003 MSS1-104-T01N-SOL SS1	
Mercury	mg/kg-dry	T			<0.017	:	<0.016	:	<0.015	:	<0.016	:	0.034	:	-	
Molybdenum	mg/kg-dry	T			2350.	:	6590.	:	837.	:	719.	:	1970.	:	-	
Nickel	mg/kg-dry	T			28.5	:	35.6	:	26.8	:	16.2	:	43.9	:	-	
Potassium	mg/kg-dry	T			4740.	J	5910.	J	2870.	J	2050.	J	3630.	J	-	
Selenium	mg/kg-dry	T			1.1	J	1.5	J	0.93	J	<0.78	J	0.96	J	-	
Silver	mg/kg-dry	T			1.	:	1.4	:	0.51	:	0.21	J	0.7	:	-	
Sodium	mg/kg-dry	T			<27.3	:	754.	:	<31.3	:	<26.9	:	<36.1	:	-	
Thallium	mg/kg-dry	T			0.6	:	0.85	:	0.32	:	0.21	:	0.31	:	-	
Vanadium	mg/kg-dry	T			52.6	:	74.8	:	39.3	:	33.	:	68.3	:	-	
Zinc	mg/kg-dry	T			148.	:	174.	:	123.	:	105.	:	171.	:	-	
Volatile Organics																
1,1,1-Trichloroethane	mg/kg-dry	T			<0.006	:	<0.006	:	<0.009	:	<0.005	:	-		<0.009	:
1,1,2,2-Tetrachloroethane	mg/kg-dry	T			<0.006	:	<0.006	:	<0.009	:	<0.005	:	-		<0.009	:
1,1,2-Trichloro-1,2,2-trifluoroethane	mg/kg-dry	T			<0.006	:	<0.006	:	<0.009	:	<0.005	:	-		<0.009	:
1,1,2-Trichloroethane	mg/kg-dry	T			<0.006	:	<0.006	:	<0.009	:	<0.005	:	-		<0.009	:
1,1-Dichloroethane	mg/kg-dry	T			<0.006	:	<0.006	:	<0.009	:	<0.005	:	-		<0.009	:
1,1-Dichloroethene	mg/kg-dry	T			<0.006	:	<0.006	:	<0.009	:	<0.005	:	-		<0.009	:
1,2,4-Trichlorobenzene	mg/kg-dry	T			<0.006	:	<0.006	:	<0.009	:	<0.005	:	-		<0.009	:
1,2-Dibromo-3-chloropropane	mg/kg-dry	T			<0.006	:	<0.006	:	<0.009	:	<0.005	:	-		<0.009	:
1,2-Dichlorobenzene	mg/kg-dry	T			<0.006	:	<0.006	:	<0.009	:	<0.005	:	-		<0.009	:
1,2-Dichloroethane	mg/kg-dry	T			<0.006	:	<0.006	:	<0.009	:	<0.005	:	-		<0.009	:
1,2-Dichloroethene (total)	mg/kg-dry	T			<0.006	:	<0.006	:	<0.009	:	<0.005	:	-		<0.009	:
1,2-Dichloropropane	mg/kg-dry	T			<0.006	:	<0.006	:	<0.009	:	<0.005	:	-		<0.009	:
1,3-Dichlorobenzene	mg/kg-dry	T			<0.006	:	<0.006	:	<0.009	:	<0.005	:	-		<0.009	:
1,4-Dichlorobenzene	mg/kg-dry	T			<0.006	:	<0.006	:	<0.009	:	<0.005	:	-		<0.009	:
2-Butanone	mg/kg-dry	T			<0.006	:	0.002	J	<0.009	:	0.002	J	-		<0.009	:
2-Hexanone	mg/kg-dry	T			<0.006	:	<0.006	:	<0.009	:	<0.005	:	-		<0.009	:
4-Methyl-2-pentanone	mg/kg-dry	T			<0.006	:	<0.006	:	<0.009	:	<0.005	:	-		<0.009	:
Acetone	mg/kg-dry	T			0.002	J	0.014	:	0.002	J	0.004	J	-		0.003	J
Benzene	mg/kg-dry	T			<0.006	:	<0.006	:	<0.009	:	<0.005	:	-		<0.009	:
Bromodichloromethane	mg/kg-dry	T			<0.006	:	<0.006	:	<0.009	:	<0.005	:	-		<0.009	:
Bromoform	mg/kg-dry	T			<0.006	:	<0.006	:	<0.009	:	<0.005	:	-		<0.009	:
Bromomethane	mg/kg-dry	T			<0.006	:	<0.006	:	<0.009	:	<0.005	:	-		<0.009	:
Carbon disulfide	mg/kg-dry	T			<0.006	:	0.002	J	<0.009	:	<0.005	:	-		<0.009	:

J = Qualified as estimated during data validation
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T = Total Fraction

Appendix A-7a
Soil - Biased 0-6 inches
Validated Analytical Results

Parameter	Units	Exposure Area Fraction	Site ID / Sample Date / Sample ID					
			MSS1-100 1/16/2003 MSS1-100-T01N-SOL	MSS1-101 1/16/2003 MSS1-101-T01N-SOL	MSS1-102 1/19/2003 MSS1-102-T01N-SOL	MSS1-103 1/16/2003 MSS1-103-T01N-SOL	MSS1-104 1/9/2003 MSS1-104-T01N-SOL	MSS1-104 1/10/2003 MSS1-104-T01N-SOL
			SS1	SS1	SS1	SS1	SS1	SS1
Carbon tetrachloride	mg/kg-dry	T	<0.006 :	<0.006 :	<0.009 :	<0.005 :	-	<0.009 :
Chlorobenzene	mg/kg-dry	T	<0.006 :	<0.006 :	<0.009 :	<0.005 :	-	<0.009 :
Chloroethane	mg/kg-dry	T	<0.006 :	<0.006 :	<0.009 :	<0.005 :	-	<0.009 :
Chloroform	mg/kg-dry	T	<0.006 :	<0.006 :	<0.009 :	<0.005 :	-	<0.009 :
Chloromethane	mg/kg-dry	T	<0.006 :	<0.006 :	<0.009 :	<0.005 :	-	<0.009 :
cis-1,2-Dichloroethene	mg/kg-dry	T	<0.006 :	<0.006 :	<0.009 :	<0.005 :	-	<0.009 :
cis-1,3-Dichloropropene	mg/kg-dry	T	<0.006 :	<0.006 :	<0.009 :	<0.005 :	-	<0.009 :
Dibromochloromethane	mg/kg-dry	T	<0.006 :	<0.006 :	<0.009 :	<0.005 :	-	<0.009 :
Dichlorodifluoromethane	mg/kg-dry	T	<0.006 :	<0.006 :	<0.009 :	<0.005 :	-	<0.009 :
Ethylbenzene	mg/kg-dry	T	<0.006 :	<0.006 :	<0.009 :	<0.005 :	-	0.002 J
Methylene chloride	mg/kg-dry	T	<0.006 :	<0.006 :	<0.009 :	<0.005 :	-	<0.009 :
Styrene	mg/kg-dry	T	<0.006 :	<0.006 :	<0.009 :	<0.005 :	-	<0.009 :
Tetrachloroethene	mg/kg-dry	T	<0.006 :	<0.006 :	<0.009 :	<0.005 :	-	<0.009 :
Toluene	mg/kg-dry	T	<0.006 :	<0.006 :	<0.009 :	<0.005 :	-	<0.009 :
Total Xylene	mg/kg-dry	T	<0.006 :	<0.006 :	<0.009 :	<0.005 :	-	0.018 :
trans-1,2-Dichloroethene	mg/kg-dry	T	<0.006 :	<0.006 :	<0.009 :	<0.005 :	-	<0.009 :
trans-1,3-Dichloropropene	mg/kg-dry	T	<0.006 :	<0.006 :	<0.009 :	<0.005 :	-	<0.009 :
Trichloroethene	mg/kg-dry	T	<0.006 :	<0.006 :	<0.009 :	<0.005 :	-	<0.009 :
Trichlorofluoromethane	mg/kg-dry	T	<0.006 :	<0.006 :	<0.009 :	<0.005 :	-	<0.009 :
Vinyl chloride	mg/kg-dry	T	<0.006 :	<0.006 :	<0.009 :	<0.005 :	-	<0.009 :
Semi-Volatile Organics								
1,1`-Biphenyl	mg/kg-dry	T	<0.34 :	<0.7 :	<0.34 :	<0.35 :	<0.38 :	-
2,4,5-Trichlorophenol	mg/kg-dry	T	<0.86 :	<1.8 :	<0.85 :	<0.87 :	<0.95 :	-
2,4,6-Trichlorophenol	mg/kg-dry	T	<0.34 :	<0.7 :	<0.34 :	<0.35 :	<0.38 :	-
2,4-Dichlorophenol	mg/kg-dry	T	<0.34 :	<0.7 :	<0.34 :	<0.35 :	<0.38 :	-
2,4-Dimethylphenol	mg/kg-dry	T	<0.34 :	<0.7 :	<0.34 :	<0.35 :	<0.38 :	-
2,4-Dinitrophenol	mg/kg-dry	T	<0.86 J	<1.8 J	<0.85 :	<0.87 J	<0.95 :	-
2,4-Dinitrotoluene	mg/kg-dry	T	<0.34 :	<0.7 :	<0.34 :	<0.35 :	<0.38 :	-
2,6-Dinitrotoluene	mg/kg-dry	T	<0.34 :	<0.7 :	<0.34 :	<0.35 :	<0.38 :	-
2-Chloronaphthalene	mg/kg-dry	T	<0.34 :	<0.7 :	<0.34 :	<0.35 :	<0.38 :	-
2-Chlorophenol	mg/kg-dry	T	<0.34 :	<0.7 :	<0.34 :	<0.35 :	<0.38 :	-
2-Methylnaphthalene	mg/kg-dry	T	<0.34 :	<0.7 :	<0.34 :	<0.35 :	<0.38 :	-
2-Methylphenol	mg/kg-dry	T	<0.34 :	<0.7 :	<0.34 :	<0.35 :	<0.38 :	-
2-Nitroaniline	mg/kg-dry	T	<0.86 :	<1.8 :	<0.85 :	<0.87 :	<0.95 :	-

J = Qualified as estimated during data validation
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T = Total Fraction

Appendix A-7a
Soil - Biased 0-6 inches
Validated Analytical Results

Parameter	Units	Exposure Area Fraction	Site ID / Sample Date / Sample ID / Exposure Area																	
			MSS1-100 / 1/16/2003 / MSS1-100-T01N-SOL / SS1		MSS1-101 / 1/16/2003 / MSS1-101-T01N-SOL / SS1		MSS1-102 / 1/19/2003 / MSS1-102-T01N-SOL / SS1		MSS1-103 / 1/16/2003 / MSS1-103-T01N-SOL / SS1		MSS1-104 / 1/9/2003 / MSS1-104-T01N-SOL / SS1		MSS1-104 / 1/10/2003 / MSS1-104-T01N-SOL / SS1	
2-Nitrophenol	mg/kg-dry	T	<0.34	:	<0.7	:	<0.34	:	<0.35	:	<0.38	:	-	
3,3-Dichlorobenzidine	mg/kg-dry	T	<0.34	:	<0.7	:	<0.34	:	<0.35	:	<0.38	:	-	
3-Nitroaniline	mg/kg-dry	T	<0.86	:	<1.8	:	<0.85	J	<0.87	:	<0.95	:	-	
4,6-Dinitro-2-methylphenol	mg/kg-dry	T	<0.86	:	<1.8	:	<0.85	:	<0.87	:	<0.95	:	-	
4-Bromophenyl phenyl ether	mg/kg-dry	T	<0.34	:	<0.7	:	<0.34	:	<0.35	:	<0.38	:	-	
4-Chloro-3-methylphenol	mg/kg-dry	T	<0.34	:	<0.7	:	<0.34	:	<0.35	:	<0.38	:	-	
4-Chloroaniline	mg/kg-dry	T	<0.34	:	<0.7	:	<0.34	:	<0.35	:	<0.38	:	-	
4-Chlorophenyl phenyl ether	mg/kg-dry	T	<0.34	:	<0.7	:	<0.34	:	<0.35	:	<0.38	:	-	
4-Methylphenol	mg/kg-dry	T	<0.34	:	<0.7	:	<0.34	:	<0.35	:	<0.38	:	-	
4-Nitroaniline	mg/kg-dry	T	<0.86	:	<1.8	J	<0.85	J	<0.87	:	<0.95	:	-	
4-Nitrophenol	mg/kg-dry	T	<0.86	:	<1.8	:	<0.85	:	<0.87	:	<0.95	:	-	
Acenaphthene	mg/kg-dry	T	<0.34	:	<0.7	:	<0.34	:	<0.35	:	<0.38	:	-	
Acenaphthylene	mg/kg-dry	T	<0.34	:	<0.7	:	<0.34	:	<0.35	:	<0.38	:	-	
Anthracene	mg/kg-dry	T	<0.34	:	<0.7	:	<0.34	:	<0.35	:	<0.38	:	-	
Benzaldehyde	mg/kg-dry	T	0.048	J	0.25	J	<0.34	:	0.035	J	<0.38	:	-	
Benzo(a)anthracene	mg/kg-dry	T	<0.34	:	<0.7	:	<0.34	:	<0.35	:	<0.38	:	-	
Benzo(a)pyrene	mg/kg-dry	T	<0.34	:	<0.7	:	<0.34	:	<0.35	:	<0.38	:	-	
Benzo(b)fluoranthene	mg/kg-dry	T	<0.34	:	<0.7	:	<0.34	:	<0.35	:	<0.38	:	-	
Benzo(g,h,i)perylene	mg/kg-dry	T	<0.34	:	<0.7	:	<0.34	:	<0.35	:	<0.38	J	-	
Benzo(k)fluoranthene	mg/kg-dry	T	<0.34	:	<0.7	:	<0.34	:	<0.35	:	<0.38	:	-	
Bis(2-chloroethoxy)methane	mg/kg-dry	T	<0.34	:	<0.7	:	<0.34	:	<0.35	:	<0.38	:	-	
Bis(2-chloroethyl)ether	mg/kg-dry	T	<0.34	:	<0.7	:	<0.34	:	<0.35	:	<0.38	:	-	
Bis(2-ethylhexyl)phthalate	mg/kg-dry	T	0.24	J	0.94	:	<0.34	:	<0.35	:	0.06	J	-	
Butyl benzyl phthalate	mg/kg-dry	T	<0.34	:	<0.7	:	<0.34	:	<0.35	:	<0.38	:	-	
Carbazole	mg/kg-dry	T	<0.34	:	<0.7	:	<0.34	:	<0.35	:	<0.38	:	-	
Chrysene	mg/kg-dry	T	<0.34	:	<0.7	:	<0.34	:	<0.35	:	0.38	:	-	
Dibenz(a,h)anthracene	mg/kg-dry	T	<0.34	:	<0.7	:	<0.34	:	<0.35	:	<0.38	J	-	
Dibenzofuran	mg/kg-dry	T	<0.34	:	<0.7	:	<0.34	:	<0.35	:	<0.38	:	-	
Dichlorodiisopropyl ether	mg/kg-dry	T	<0.34	:	<0.7	:	<0.34	:	<0.35	:	<0.38	:	-	
Diethylphthalate	mg/kg-dry	T	<0.34	:	<0.7	:	<0.34	:	<0.35	:	<0.38	:	-	
Dimethylphthalate	mg/kg-dry	T	<0.34	:	<0.7	:	<0.34	:	<0.35	:	<0.38	:	-	
Di-n-Butyl phthalate	mg/kg-dry	T	0.03	J	0.078	J	<0.34	:	<0.35	:	0.024	J	-	
Di-n-Octyl phthalate	mg/kg-dry	T	<0.34	:	<0.7	:	<0.34	:	<0.35	:	<0.38	:	-	
Fluoranthene	mg/kg-dry	T	<0.34	:	<0.7	:	<0.34	:	<0.35	:	<0.38	:	-	

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Appendix A-7a
Soil - Biased 0-6 inches
Validated Analytical Results

Parameter	Units	Fraction	MSS1-100	MSS1-101	MSS1-102	MSS1-103	MSS1-104	MSS1-104
		Site ID	MSS1-100	MSS1-101	MSS1-102	MSS1-103	MSS1-104	MSS1-104
		Sample Date	1/16/2003	1/16/2003	1/19/2003	1/16/2003	1/9/2003	1/10/2003
		Sample ID	MSS1-100-T01N-SOL	MSS1-101-T01N-SOL	MSS1-102-T01N-SOL	MSS1-103-T01N-SOL	MSS1-104-T01N-SOL	MSS1-104-T01N-SOL
		Exposure Area	SS1	SS1	SS1	SS1	SS1	SS1
Fluorene	mg/kg-dry	T	<0.34 :	<0.7 :	<0.34 :	<0.35 :	<0.38 :	-
Hexachlorobenzene	mg/kg-dry	T	<0.34 :	<0.7 :	<0.34 :	<0.35 :	<0.38 :	-
Hexachlorobutadiene	mg/kg-dry	T	<0.34 :	<0.7 :	<0.34 :	<0.35 :	<0.38 :	-
Hexachlorocyclopentadiene	mg/kg-dry	T	<0.34 :	<0.7 :	<0.34 :	<0.35 :	<0.38 J	-
Hexachloroethane	mg/kg-dry	T	<0.34 :	<0.7 :	<0.34 :	<0.35 :	<0.38 :	-
Indeno(1,2,3-cd)pyrene	mg/kg-dry	T	<0.34 :	<0.7 :	<0.34 :	<0.35 :	<0.38 J	-
Isophorone	mg/kg-dry	T	<0.34 :	<0.7 :	<0.34 :	<0.35 :	<0.38 :	-
Naphthalene	mg/kg-dry	T	<0.34 :	<0.7 :	<0.34 :	<0.35 :	<0.38 :	-
Nitrobenzene	mg/kg-dry	T	<0.34 :	<0.7 :	<0.34 :	<0.35 :	<0.38 :	-
N-Nitrosodi-n-propylamine	mg/kg-dry	T	<0.34 :	<0.7 :	<0.34 :	<0.35 :	<0.38 :	-
N-Nitrosodiphenylamine	mg/kg-dry	T	<0.34 :	0.063 J	<0.34 :	<0.35 :	<0.38 :	-
Pentachlorophenol	mg/kg-dry	T	<0.86 :	<1.8 :	<0.85 :	<0.87 :	<0.95 J	-
Phenanthrene	mg/kg-dry	T	<0.34 :	<0.7 :	<0.34 :	<0.35 :	<0.38 :	-
Phenol	mg/kg-dry	T	<0.34 :	<0.7 :	<0.34 :	<0.35 :	<0.38 :	-
Pyrene	mg/kg-dry	T	<0.34 :	<0.7 :	<0.34 :	<0.35 :	<0.38 :	-
Pesticides-PCBs								
Aroclor 1016	mg/kg-dry	T	<0.034 :	<0.035 :	<0.034 :	<0.035 :	<0.038 :	-
Aroclor 1221	mg/kg-dry	T	<0.07 :	<0.071 :	<0.068 :	<0.07 :	<0.077 :	-
Aroclor 1232	mg/kg-dry	T	<0.034 :	<0.035 :	<0.034 :	<0.035 :	<0.038 :	-
Aroclor 1242	mg/kg-dry	T	<0.034 :	<0.035 :	<0.034 :	<0.035 :	<0.038 :	-
Aroclor 1248	mg/kg-dry	T	<0.034 :	<0.035 :	<0.034 :	<0.035 :	<0.038 :	-
Aroclor 1254	mg/kg-dry	T	<0.034 :	<0.035 :	0.68 :	<0.035 :	0.21 J	-
Aroclor 1260	mg/kg-dry	T	<0.034 :	<0.035 :	<0.034 :	<0.035 :	0.46 :	-

J = Qualified as estimated during data validation
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T = Total Fraction

Appendix A-7a
Soil - Biased 0-6 inches
Validated Analytical Results

Parameter	Units	Exposure Area Fraction	Site ID	MSS1-105	MSS1-106	MSS1-107	MSS1-108	MSS1-108	MSS1-109
			Sample Date	1/19/2003	1/19/2003	1/19/2003	1/19/2003	1/19/2003	1/19/2003
			Sample ID	MSS1-105-T01N-SOL	MSS1-106-T01N-SOL	MSS1-107-T01N-SOL	MSS1-108-T01N-SOL DL	MSS1-108-T01N-SOL	MSS1-109-T01N-SOL
			Exposure Area	SS1	SS1	SS1	SS1	SS1	SS1
General Chemistry									
Ammonia	mg/kg-dry	T		10.9 :	10.8 :	<7.7 :	-	14.9 :	28.8 :
Chloride	mg/kg-dry	T		2.8 :	11.6 :	<2.1 :	-	<2.2 :	<2.3 :
Fluoride	mg/kg-dry	T		13.4 J	3.5 J	0.44 J	-	1.5 J	1.2 J
Nitrate	mg/kg-dry	T		<2.1 J	<2.1 J	<2.1 J	-	<2.2 J	<2.3 J
Phosphorus	mg/kg-dry	T		725. :	1250. :	1700. :	-	872. :	1030. :
Sulfate	mg/kg-dry	T		22.8 :	1230. J	580. J	-	301. :	112. :
Total Kjeldahl Nitrogen	mg/kg-dry	T		77.9 J	75.7 J	137. J	-	199. :	153. :
Total Organic Carbon	mg/kg-dry	T		<104. J	7000. J	3250. J	-	38800. J	29900. J
Laboratory Parameters									
pH	SU	T		7.4 :	7.2 :	7.3 :	-	8.5 :	8. :
Solids, Percent	%	T		96.5 :	96.7 :	96.5 :	-	93.1 :	88.4 :
Specific Conductance	umhos/cm	T		134. J	1760. J	1340. J	-	253. J	254. J
Geotechnical									
Organic Soils	%	T		1.1 :	1.7 :	2.6 :	-	3.9 :	3.1 :
Physical Properties									
Cation-Exchange Capacity	meq/100g	T		9.2 :	11.9 :	15.1 :	-	14.5 :	16.1 :
Sodium Absorption Ratio	ratio	T		0.33 :	0.88 :	0.04 :	-	<0.02 :	<0.03 :
Metals									
Aluminum	mg/kg-dry	T		7900. :	13200. :	18000. :	-	10700. :	11300. :
Antimony	mg/kg-dry	T		<0.28 J	<0.27 J	<0.29 J	-	<0.29 J	<0.33 J
Arsenic	mg/kg-dry	T		3.6 J	3.4 J	4.1 J	-	2.7 J	2.4 J
Barium	mg/kg-dry	T		22.4 :	112. :	173. :	-	64.5 :	128. :
Beryllium	mg/kg-dry	T		1.5 :	1.4 :	1.7 :	-	2.9 :	2.4 :
Boron	mg/kg-dry	T		<0.25 :	<0.25 J	<0.25 J	-	<0.27 :	<0.3 :
Cadmium	mg/kg-dry	T		0.19 :	0.77 :	4. :	-	1.9 :	1.7 :
Calcium	mg/kg-dry	T		5150. :	10900. :	19500. :	-	12100. :	13400. :
Chromium	mg/kg-dry	T		10.5 J	58.9 J	78.9 J	-	24.5 J	30.2 J
Cobalt	mg/kg-dry	T		4.1 :	12.8 :	13.5 :	-	5.5 :	5.8 :
Copper	mg/kg-dry	T		93.4 :	202. :	222. :	-	257. J	234. J
Iron	mg/kg-dry	T		9310. :	23700. :	24500. :	-	14500. :	15000. :
Lead	mg/kg-dry	T		47.1 :	100. :	127. :	-	176. :	184. :
Magnesium	mg/kg-dry	T		1890. :	8800. :	11500. :	-	4730. :	5310. :
Manganese	mg/kg-dry	T		714. :	907. :	1410. :	-	956. :	897. :

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T = Total Fraction

Appendix A-7a
Soil - Biased 0-6 inches
Validated Analytical Results

		Site ID	MSS1-105	MSS1-106	MSS1-107	MSS1-108	MSS1-108	MSS1-109
		Sample Date	1/19/2003	1/19/2003	1/19/2003	1/19/2003	1/19/2003	1/19/2003
		Sample ID	MSS1-105-T01N-SOL	MSS1-106-T01N-SOL	MSS1-107-T01N-SOL	MSS1-108-T01N-SOL DL	MSS1-108-T01N-SOL	MSS1-109-T01N-SOL
		Exposure Area	SS1	SS1	SS1	SS1	SS1	SS1
Parameter	**Units**	**Fraction**						
Mercury	mg/kg-dry	T	<0.017 :	<0.017 :	<0.016 :	-	0.047 :	<0.016 :
Molybdenum	mg/kg-dry	T	407. :	507. :	1450. :	-	1610. :	1960. :
Nickel	mg/kg-dry	T	8.2 :	34. :	44.4 :	-	14.8 :	17.2 :
Potassium	mg/kg-dry	T	1810. J	4410. J	4900. J	-	2940. J	3160. J
Selenium	mg/kg-dry	T	<0.75 J	0.94 J	<0.77 J	-	<0.76 J	0.96 J
Silver	mg/kg-dry	T	0.47 :	0.75 :	1.2 :	-	2. :	1.7 :
Sodium	mg/kg-dry	T	<73.2 :	<95.5 :	<30. :	-	<58.5 :	<45.8 :
Thallium	mg/kg-dry	T	0.25 :	0.43 :	0.51 :	-	0.36 :	0.36 :
Vanadium	mg/kg-dry	T	12.9 :	48.4 :	61.8 :	-	33.7 :	38.8 :
Zinc	mg/kg-dry	T	83.9 :	167. :	839. :	-	288. :	269. :
Volatile Organics								
1,1,1-Trichloroethane	mg/kg-dry	T	<0.007 :	0.008 :	<0.008 :	-	<0.011 :	<0.009 :
1,1,2,2-Tetrachloroethane	mg/kg-dry	T	<0.007 :	<0.007 :	<0.008 :	-	<0.011 :	<0.009 :
1,1,2-Trichloro-1,2,2-trifluoroethane	mg/kg-dry	T	<0.007 :	<0.007 :	<0.008 :	-	<0.011 :	<0.009 :
1,1,2-Trichloroethane	mg/kg-dry	T	<0.007 :	<0.007 :	<0.008 :	-	<0.011 :	<0.009 :
1,1-Dichloroethane	mg/kg-dry	T	<0.007 :	<0.007 :	<0.008 :	-	<0.011 :	<0.009 :
1,1-Dichloroethene	mg/kg-dry	T	<0.007 :	<0.007 :	<0.008 :	-	<0.011 :	<0.009 :
1,2,4-Trichlorobenzene	mg/kg-dry	T	<0.007 :	<0.007 :	<0.008 :	-	<0.011 :	<0.009 :
1,2-Dibromo-3-chloropropane	mg/kg-dry	T	<0.007 :	<0.007 :	<0.008 :	-	<0.011 :	<0.009 :
1,2-Dichlorobenzene	mg/kg-dry	T	<0.007 :	<0.007 :	<0.008 :	-	<0.011 :	<0.009 :
1,2-Dichloroethane	mg/kg-dry	T	<0.007 :	<0.007 :	<0.008 :	-	<0.011 :	<0.009 :
1,2-Dichloroethene (total)	mg/kg-dry	T	<0.007 :	<0.007 :	<0.008 :	-	<0.011 :	<0.009 :
1,2-Dichloropropane	mg/kg-dry	T	<0.007 :	<0.007 :	<0.008 :	-	<0.011 :	<0.009 :
1,3-Dichlorobenzene	mg/kg-dry	T	<0.007 :	<0.007 :	<0.008 :	-	<0.011 :	<0.009 :
1,4-Dichlorobenzene	mg/kg-dry	T	<0.007 :	<0.007 :	<0.008 :	-	<0.011 :	<0.009 :
2-Butanone	mg/kg-dry	T	<0.007 :	0.004 J	<0.008 :	-	0.001 J	0.002 J
2-Hexanone	mg/kg-dry	T	<0.007 :	<0.007 :	<0.008 :	-	<0.011 :	<0.009 :
4-Methyl-2-pentanone	mg/kg-dry	T	<0.007 :	<0.007 :	<0.008 :	-	<0.011 :	<0.009 :
Acetone	mg/kg-dry	T	0.001 J	0.01 :	0.001 J	-	0.004 J	0.011 :
Benzene	mg/kg-dry	T	<0.007 :	<0.007 :	<0.008 :	-	<0.011 :	<0.009 :
Bromodichloromethane	mg/kg-dry	T	<0.007 :	<0.007 :	<0.008 :	-	<0.011 :	<0.009 :
Bromoform	mg/kg-dry	T	<0.007 :	<0.007 :	<0.008 :	-	<0.011 :	<0.009 :
Bromomethane	mg/kg-dry	T	<0.007 :	<0.007 :	<0.008 :	-	<0.011 :	<0.009 :
Carbon disulfide	mg/kg-dry	T	<0.007 :	<0.007 :	<0.008 :	-	<0.011 :	<0.009 :

J = Qualified as estimated during data validation
R = Qualified as rejected value from data validation and results are considered unusable for any purpose
T = Total Fraction

Appendix A-7a
Soil - Biased 0-6 inches
Validated Analytical Results

Parameter	Units	Exposure Area Fraction	Site ID	MSS1-105		MSS1-106		MSS1-107		MSS1-108		MSS1-108		MSS1-109	
			Sample Date	1/19/2003		1/19/2003		1/19/2003		1/19/2003		1/19/2003		1/19/2003	
			Sample ID	MSS1-105-T01N-SOL		MSS1-106-T01N-SOL		MSS1-107-T01N-SOL		MSS1-108-T01N-SOL DL		MSS1-108-T01N-SOL		MSS1-109-T01N-SOL	
			Exposure Area	SS1		SS1		SS1		SS1		SS1		SS1	
Carbon tetrachloride	mg/kg-dry	T		<0.007	:	<0.007	:	<0.008	:	-		<0.011	:	<0.009	:
Chlorobenzene	mg/kg-dry	T		<0.007	:	<0.007	:	<0.008	:	-		<0.011	:	<0.009	:
Chloroethane	mg/kg-dry	T		<0.007	:	<0.007	:	<0.008	:	-		<0.011	:	<0.009	:
Chloroform	mg/kg-dry	T		<0.007	:	<0.007	:	<0.008	:	-		<0.011	:	<0.009	:
Chloromethane	mg/kg-dry	T		<0.007	:	<0.007	:	<0.008	:	-		<0.011	:	<0.009	:
cis-1,2-Dichloroethene	mg/kg-dry	T		<0.007	:	<0.007	:	<0.008	:	-		<0.011	:	<0.009	:
cis-1,3-Dichloropropene	mg/kg-dry	T		<0.007	:	<0.007	:	<0.008	:	-		<0.011	:	<0.009	:
Dibromochloromethane	mg/kg-dry	T		<0.007	:	<0.007	:	<0.008	:	-		<0.011	:	<0.009	:
Dichlorodifluoromethane	mg/kg-dry	T		<0.007	:	<0.007	:	<0.008	:	-		<0.011	:	<0.009	:
Ethylbenzene	mg/kg-dry	T		<0.007	:	<0.007	:	<0.008	:	-		<0.011	:	<0.009	:
Methylene chloride	mg/kg-dry	T		<0.007	:	0.001	J	<0.008	:	-		<0.011	:	<0.009	:
Styrene	mg/kg-dry	T		<0.007	:	<0.007	:	<0.008	:	-		<0.011	:	<0.009	:
Tetrachloroethene	mg/kg-dry	T		<0.007	:	0.0007	J	<0.008	:	-		<0.011	:	<0.009	:
Toluene	mg/kg-dry	T		<0.007	:	0.001	J	<0.008	:	-		<0.011	:	<0.009	:
Total Xylene	mg/kg-dry	T		<0.007	:	0.001	J	<0.008	:	-		<0.011	:	0.014	:
trans-1,2-Dichloroethene	mg/kg-dry	T		<0.007	:	<0.007	:	<0.008	:	-		<0.011	:	<0.009	:
trans-1,3-Dichloropropene	mg/kg-dry	T		<0.007	:	<0.007	:	<0.008	:	-		<0.011	:	<0.009	:
Trichloroethene	mg/kg-dry	T		<0.007	:	<0.007	:	<0.008	:	-		<0.011	:	<0.009	:
Trichlorofluoromethane	mg/kg-dry	T		<0.007	:	<0.007	:	<0.008	:	-		<0.011	:	<0.009	:
Vinyl chloride	mg/kg-dry	T		<0.007	:	<0.007	:	<0.008	:	-		<0.011	:	<0.009	:
Semi-Volatile Organics															
1,1`-Biphenyl	mg/kg-dry	T		<0.34	:	0.036	J	<0.34	:	-		<3.5	:	<7.5	:
2,4,5-Trichlorophenol	mg/kg-dry	T		<0.86	:	<0.86	:	<0.86	:	-		<8.9	:	<19.	:
2,4,6-Trichlorophenol	mg/kg-dry	T		<0.34	:	<0.34	:	<0.34	:	-		<3.5	:	<7.5	:
2,4-Dichlorophenol	mg/kg-dry	T		<0.34	:	<0.34	:	<0.34	:	-		<3.5	:	<7.5	:
2,4-Dimethylphenol	mg/kg-dry	T		<0.34	:	<0.34	:	<0.34	:	-		<3.5	:	<7.5	:
2,4-Dinitrophenol	mg/kg-dry	T		<0.86	:	<0.86	:	<0.86	:	-		<8.9	:	<19.	:
2,4-Dinitrotoluene	mg/kg-dry	T		<0.34	:	<0.34	:	<0.34	:	-		<3.5	J	<7.5	J
2,6-Dinitrotoluene	mg/kg-dry	T		<0.34	:	<0.34	:	<0.34	:	-		<3.5	:	<7.5	:
2-Chloronaphthalene	mg/kg-dry	T		<0.34	:	<0.34	:	<0.34	:	-		<3.5	:	<7.5	:
2-Chlorophenol	mg/kg-dry	T		<0.34	:	<0.34	:	<0.34	:	-		<3.5	:	<7.5	:
2-Methylnaphthalene	mg/kg-dry	T		<0.34	:	0.31	J	<0.34	:	-		<3.5	:	<7.5	:
2-Methylphenol	mg/kg-dry	T		<0.34	:	<0.34	:	<0.34	:	-		<3.5	:	<7.5	:
2-Nitroaniline	mg/kg-dry	T		<0.86	:	<0.86	:	<0.86	:	-		<8.9	:	<19.	:

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T = Total Fraction

Appendix A-7a
Soil - Biased 0-6 inches
Validated Analytical Results

Parameter	Units	Exposure Area Fraction	Site ID	Sample Date	Sample ID	Exposure Area																	
			MSS1-105	1/19/2003	MSS1-105-T01N-SOL	SS1		MSS1-106	1/19/2003	MSS1-106-T01N-SOL	SS1		MSS1-107	1/19/2003	MSS1-107-T01N-SOL	SS1		MSS1-108	1/19/2003	MSS1-108-T01N-SOL DL	SS1		MSS1-108	1/19/2003	MSS1-108-T01N-SOL	SS1		MSS1-109	1/19/2003	MSS1-109-T01N-SOL	SS1	
2-Nitrophenol	mg/kg-dry	T	<0.34	:		<0.34	:		<0.34	:		-		<3.5	:		<7.5	:	
3,3-Dichlorobenzidine	mg/kg-dry	T	<0.34	:		<0.34	:		<0.34	:		-		<3.5	:		<7.5	J	
3-Nitroaniline	mg/kg-dry	T	<0.86	J		<0.86	J		<0.86	J		-		<8.9	J		<19.	J	
4,6-Dinitro-2-methylphenol	mg/kg-dry	T	<0.86	:		<0.86	:		<0.86	:		-		<8.9	J		<19.	J	
4-Bromophenyl phenyl ether	mg/kg-dry	T	<0.34	:		<0.34	:		<0.34	:		-		<3.5	J		<7.5	J	
4-Chloro-3-methylphenol	mg/kg-dry	T	<0.34	:		<0.34	:		<0.34	:		-		<3.5	:		<7.5	:	
4-Chloroaniline	mg/kg-dry	T	<0.34	:		<0.34	:		<0.34	:		-		<3.5	:		<7.5	:	
4-Chlorophenyl phenyl ether	mg/kg-dry	T	<0.34	:		<0.34	:		<0.34	:		-		<3.5	:		<7.5	:	
4-Methylphenol	mg/kg-dry	T	<0.34	:		<0.34	:		<0.34	:		-		<3.5	:		<7.5	:	
4-Nitroaniline	mg/kg-dry	T	<0.86	:		<0.86	:		<0.86	:		-		<8.9	J		<19.	J	
4-Nitrophenol	mg/kg-dry	T	<0.86	:		<0.86	:		<0.86	:		-		<8.9	J		<19.	J	
Acenaphthene	mg/kg-dry	T	<0.34	:		<0.34	:		<0.34	:		-		<3.5	:		4.	J	
Acenaphthylene	mg/kg-dry	T	<0.34	:		<0.34	:		<0.34	:		-		<3.5	:		<7.5	:	
Anthracene	mg/kg-dry	T	<0.34	:		<0.34	:		<0.34	:		-		<3.5	J		2.2	J	
Benzaldehyde	mg/kg-dry	T	<0.34	:		<0.34	:		<0.34	:		-		<3.5	:		<7.5	:	
Benzo(a)anthracene	mg/kg-dry	T	<0.34	:		<0.34	:		<0.34	:		-		<3.5	:		<7.5	J	
Benzo(a)pyrene	mg/kg-dry	T	<0.34	:		<0.34	:		<0.34	:		-		<3.5	:		<7.5	:	
Benzo(b)fluoranthene	mg/kg-dry	T	<0.34	:		<0.34	:		<0.34	:		-		<3.5	:		<7.5	:	
Benzo(g,h,i)perylene	mg/kg-dry	T	<0.34	:		<0.34	:		<0.34	:		-		<3.5	J		<7.5	J	
Benzo(k)fluoranthene	mg/kg-dry	T	<0.34	:		<0.34	:		<0.34	:		-		<3.5	:		<7.5	:	
Bis(2-chloroethoxy)methane	mg/kg-dry	T	<0.34	:		<0.34	:		<0.34	:		-		<3.5	:		<7.5	:	
Bis(2-chloroethyl)ether	mg/kg-dry	T	<0.34	:		<0.34	:		<0.34	:		-		<3.5	:		<7.5	:	
Bis(2-ethylhexyl)phthalate	mg/kg-dry	T	0.016	J		<0.34	:		0.14	J		-		<3.5	:		<7.5	J	
Butyl benzyl phthalate	mg/kg-dry	T	<0.34	:		<0.34	:		<0.34	:		-		<3.5	:		<7.5	J	
Carbazole	mg/kg-dry	T	<0.34	:		<0.34	:		<0.34	:		-		<3.5	J		<7.5	J	
Chrysene	mg/kg-dry	T	<0.34	:		<0.34	:		<0.34	:		-		<3.5	:		<7.5	J	
Dibenz(a,h)anthracene	mg/kg-dry	T	<0.34	:		<0.34	:		<0.34	:		-		<3.5	:		<7.5	:	
Dibenzofuran	mg/kg-dry	T	<0.34	:		0.07	J		<0.34	:		-		<3.5	:		3.9	J	
Dichlorodiisopropyl ether	mg/kg-dry	T	<0.34	:		<0.34	:		<0.34	:		-		<3.5	:		<7.5	:	
Diethylphthalate	mg/kg-dry	T	<0.34	:		<0.34	:		<0.34	:		-		<3.5	:		<7.5	:	
Dimethylphthalate	mg/kg-dry	T	<0.34	:		<0.34	:		<0.34	:		-		<3.5	:		<7.5	:	
Di-n-Butyl phthalate	mg/kg-dry	T	<0.34	:		<0.34	:		<0.34	:		-		<3.5	J		<7.5	J	
Di-n-Octyl phthalate	mg/kg-dry	T	<0.34	:		<0.34	:		<0.34	:		-		<3.5	:		<7.5	:	
Fluoranthene	mg/kg-dry	T	<0.34	:		<0.34	:		<0.34	:		-		<3.5	J		<7.5	J	

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T = Total Fraction

Appendix A-7a
Soil - Biased 0-6 inches
Validated Analytical Results

Parameter	Units	Exposure Area Fraction	Site ID / Sample Date / Sample ID											
			MSS1-105 1/19/2003 MSS1-105-T01N-SOL SS1		MSS1-106 1/19/2003 MSS1-106-T01N-SOL SS1		MSS1-107 1/19/2003 MSS1-107-T01N-SOL SS1		MSS1-108 1/19/2003 MSS1-108-T01N-SOL DL SS1		MSS1-108 1/19/2003 MSS1-108-T01N-SOL SS1		MSS1-109 1/19/2003 MSS1-109-T01N-SOL SS1	
Fluorene	mg/kg-dry	T	<0.34	:	0.14	J	<0.34	:	-		<3.5	:	7.3	J
Hexachlorobenzene	mg/kg-dry	T	<0.34	:	<0.34	:	<0.34	:	-		<3.5	J	<7.5	J
Hexachlorobutadiene	mg/kg-dry	T	<0.34	:	<0.34	:	<0.34	:	-		<3.5	:	<7.5	:
Hexachlorocyclopentadiene	mg/kg-dry	T	<0.34	:	<0.34	:	<0.34	:	-		<3.5	:	<7.5	:
Hexachloroethane	mg/kg-dry	T	<0.34	:	<0.34	:	<0.34	:	-		<3.5	:	<7.5	:
Indeno(1,2,3-cd)pyrene	mg/kg-dry	T	<0.34	:	<0.34	:	<0.34	:	-		<3.5	:	<7.5	:
Isophorone	mg/kg-dry	T	<0.34	:	<0.34	:	<0.34	:	-		<3.5	:	<7.5	:
Naphthalene	mg/kg-dry	T	<0.34	:	<0.34	:	<0.34	:	-		<3.5	:	10.	:
Nitrobenzene	mg/kg-dry	T	<0.34	:	<0.34	:	<0.34	:	-		<3.5	:	<7.5	:
N-Nitrosodi-n-propylamine	mg/kg-dry	T	<0.34	:	<0.34	:	<0.34	:	-		<3.5	:	<7.5	:
N-Nitrosodiphenylamine	mg/kg-dry	T	<0.34	:	<0.34	:	<0.34	:	-		<3.5	:	24.	:
Pentachlorophenol	mg/kg-dry	T	<0.86	:	<0.86	:	<0.86	:	-		<8.9	J	<19.	J
Phenanthrene	mg/kg-dry	T	<0.34	:	0.38	:	<0.34	:	-		<3.5	J	31.	:
Phenol	mg/kg-dry	T	<0.34	:	<0.34	:	<0.34	:	-		<3.5	:	<7.5	:
Pyrene	mg/kg-dry	T	<0.34	:	0.054	J	0.024	J	-		<3.5	:	3.6	J
Pesticides-PCBs														
Aroclor 1016	mg/kg-dry	T	<0.034	:	<0.034	:	<0.034	:	-		<0.071	:	<0.038	J
Aroclor 1221	mg/kg-dry	T	<0.07	:	<0.069	:	<0.07	:	-		<0.14	:	<0.076	J
Aroclor 1232	mg/kg-dry	T	<0.034	:	<0.034	:	<0.034	:	-		<0.071	:	<0.038	J
Aroclor 1242	mg/kg-dry	T	<0.034	:	<0.034	:	<0.034	:	-		<0.071	:	<0.038	J
Aroclor 1248	mg/kg-dry	T	<0.034	:	<0.034	:	<0.034	:	1.7	:	-		<0.038	J
Aroclor 1254	mg/kg-dry	T	0.021	J	0.022	J	0.031	J	2.	:	-		<0.038	J
Aroclor 1260	mg/kg-dry	T	<0.034	:	<0.034	:	<0.034	:	-		<0.071	:	<0.038	J

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Appendix A-7a
Soil - Biased 0-6 inches
Validated Analytical Results

Parameter	Units	Fraction	MSS1-11	MSS1-110	MSS1-111	MSS1-112	MSS1-112	MSS1-113
Site ID			MSS1-11	MSS1-110	MSS1-111	MSS1-112	MSS1-112	MSS1-113
Sample Date			10/16/2002	1/19/2003	1/19/2003	2/9/2003	4/8/2003	2/9/2003
Sample ID			MSS1-11-T01N-SOL	MSS1-110-T01N-SOL	MSS1-111-T01N-SOL	MSS1-12-T01N-SOL	MSS1-112R-T01N-SOLRE	MSS1-13-T01N-SOL
Exposure Area			SS1	SS1	SS1	SS1	SS1	SS1
General Chemistry								
Ammonia	mg/kg-dry	T	13.7 :	22.5 :	15.1 :	25.4 :	-	38.3 :
Chloride	mg/kg-dry	T	27.4 J	16.4 :	13. :	4.3 :	-	5.3 :
Fluoride	mg/kg-dry	T	0.99 J	1.1 J	1.5 J	0.53 J	-	1. J
Nitrate	mg/kg-dry	T	6.1 J	<2.1 J	5.4 J	<2.2 J	-	9.7 J
Phosphorus	mg/kg-dry	T	682. J	1310. :	2490. :	1260. :	-	1390. :
Sulfate	mg/kg-dry	T	198. J	113. :	4600. J	58.1 :	-	128. :
Total Kjeldahl Nitrogen	mg/kg-dry	T	144. :	234. :	40.2 :	308. :	-	405. :
Total Organic Carbon	mg/kg-dry	T	3030. J	8510. J	<106. J	4810. J	-	7350. J
Laboratory Parameters								
pH	SU	T	7.5 :	8. :	7.2 :	6.8 :	-	7.6 :
Solids, Percent	%	T	95.1 :	97.1 :	95. :	93.9 :	-	92.4 :
Specific Conductance	umhos/cm	T	214. :	214. J	2180. J	411. :	-	450. :
Geotechnical								
Organic Soils	%	T	1.52 J	4. :	1.7 :	3. :	-	3.9 :
Physical Properties								
Cation-Exchange Capacity	meq/100g	T	10. :	9.6 :	9.4 :	20.2 :	-	28.7 :
Sodium Absorption Ratio	ratio	T	0.75 :	0.56 :	0.3 :	0.15 :	-	0.27 :
Metals								
Aluminum	mg/kg-dry	T	9160. :	11900. :	14600. :	13700. J	-	15900. :
Antimony	mg/kg-dry	T	<0.22 J	<0.23 J	0.32 J	<0.27 J	-	<0.27 J
Arsenic	mg/kg-dry	T	3.8 :	3.3 J	1.1 J	4.9 J	-	4.8 J
Barium	mg/kg-dry	T	69.9 :	76.6 :	113. :	62.8 J	-	102. :
Beryllium	mg/kg-dry	T	0.71 :	0.76 :	2. :	1.7 J	-	1.6 :
Boron	mg/kg-dry	T	1.5 :	<2.4 :	<0.27 :	7.6 :	-	9.5 J
Cadmium	mg/kg-dry	T	0.28 J	0.16 J	1.1 :	1.3 J	-	0.67 J
Calcium	mg/kg-dry	T	6330. :	10500. :	25100. :	10300. J	-	13600. :
Chromium	mg/kg-dry	T	33.7 :	52.5 J	44.2 J	39.3 J	-	39.5 J
Cobalt	mg/kg-dry	T	9.2 :	11.1 :	8.3 :	11.7 J	-	17.5 :
Copper	mg/kg-dry	T	57.3 :	63.7 J	178. :	121. J	-	102. J
Iron	mg/kg-dry	T	20600. :	24000. :	19200. :	22200. J	-	27500. :
Lead	mg/kg-dry	T	74.9 :	41. :	65.5 :	162. J	-	98.3 :
Magnesium	mg/kg-dry	T	6460. :	8890. :	9850. :	9710. J	-	10300. :
Manganese	mg/kg-dry	T	512. J	581. :	552. :	1950. :	-	1690. :

J = Qualified as estimated during data validation
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Appendix A-7a
Soil - Biased 0-6 inches
Validated Analytical Results

Parameter	Units	Exposure Area Fraction	Site ID / Sample Date / Sample ID													
			MSS1-11 10/16/2002 MSS1-11-T01N-SOL SS1		MSS1-110 1/19/2003 MSS1-110-T01N-SOL SS1		MSS1-111 1/19/2003 MSS1-111-T01N-SOL SS1		MSS1-112 2/9/2003 MSS1-12-T01N-SOL SS1		MSS1-112 4/8/2003 MSS1-112R-T01N-SOLRE SS1		MSS1-113 2/9/2003 MSS1-13-T01N-SOL SS1	
Mercury	mg/kg-dry	T	<0.015	:	<0.015	:	<0.018	:	<0.017	:	-		0.017	:
Molybdenum	mg/kg-dry	T	375.	:	543.	:	5450.	:	396.	J	-		367.	:
Nickel	mg/kg-dry	T	25.5	J	34.2	:	35.2	:	28.4	J	-		32.	:
Potassium	mg/kg-dry	T	2390.	J	2750.	J	5830.	J	2790.	J	-		2950.	J
Selenium	mg/kg-dry	T	0.77	J	<0.62	J	1.3	J	1.	J	-		<0.72	J
Silver	mg/kg-dry	T	0.39	:	0.3	:	1.2	:	1.6	:	-		0.83	:
Sodium	mg/kg-dry	T	93.4	:	<32.1	:	<32.5	:	<28.3	:	-		<28.1	:
Thallium	mg/kg-dry	T	0.18	:	0.21	:	0.57	:	0.31	:	-		0.32	:
Vanadium	mg/kg-dry	T	36.	:	46.3	:	72.	:	40.2	J	-		45.6	:
Zinc	mg/kg-dry	T	111.	J	93.9	:	218.	:	224.	J	-		159.	:
Volatile Organics														
1,1,1-Trichloroethane	mg/kg-dry	T	<0.009	:	<0.008	:	<0.011	:	-		<0.007	:	-	
1,1,2,2-Tetrachloroethane	mg/kg-dry	T	<0.009	:	<0.008	:	<0.011	:	-		<0.007	:	-	
1,1,2-Trichloro-1,2,2-trifluoroethane	mg/kg-dry	T	<0.009	:	<0.008	:	<0.011	:	-		<0.007	:	-	
1,1,2-Trichloroethane	mg/kg-dry	T	<0.009	:	<0.008	:	<0.011	:	-		<0.007	:	-	
1,1-Dichloroethane	mg/kg-dry	T	<0.009	:	<0.008	:	<0.011	:	-		<0.007	:	-	
1,1-Dichloroethene	mg/kg-dry	T	<0.009	:	<0.008	:	<0.011	:	-		<0.007	:	-	
1,2,4-Trichlorobenzene	mg/kg-dry	T	<0.009	:	<0.008	:	<0.011	:	-		<0.007	:	-	
1,2-Dibromo-3-chloropropane	mg/kg-dry	T	<0.009	:	<0.008	:	<0.011	:	-		<0.007	:	-	
1,2-Dichlorobenzene	mg/kg-dry	T	<0.009	:	<0.008	:	<0.011	:	-		<0.007	:	-	
1,2-Dichloroethane	mg/kg-dry	T	<0.009	:	<0.008	:	<0.011	:	-		<0.007	:	-	
1,2-Dichloroethene (total)	mg/kg-dry	T	<0.009	:	<0.008	:	<0.011	:	-		<0.007	:	-	
1,2-Dichloropropane	mg/kg-dry	T	<0.009	:	<0.008	:	<0.011	:	-		<0.007	:	-	
1,3-Dichlorobenzene	mg/kg-dry	T	<0.009	:	<0.008	:	<0.011	:	-		<0.007	:	-	
1,4-Dichlorobenzene	mg/kg-dry	T	<0.009	:	<0.008	:	<0.011	:	-		<0.007	:	-	
2-Butanone	mg/kg-dry	T	<0.009	:	0.008	J	<0.011	:	-		<0.007	:	-	
2-Hexanone	mg/kg-dry	T	<0.009	:	<0.008	:	<0.011	:	-		<0.007	:	-	
4-Methyl-2-pentanone	mg/kg-dry	T	<0.009	:	<0.008	:	<0.011	:	-		<0.007	:	-	
Acetone	mg/kg-dry	T	0.007	J	0.024	J	0.012	:	-		<0.007	:	-	
Benzene	mg/kg-dry	T	<0.009	:	<0.008	:	<0.011	:	-		<0.007	:	-	
Bromodichloromethane	mg/kg-dry	T	<0.009	:	<0.008	:	<0.011	:	-		<0.007	:	-	
Bromoform	mg/kg-dry	T	<0.009	:	<0.008	:	<0.011	:	-		<0.007	:	-	
Bromomethane	mg/kg-dry	T	<0.009	J	<0.008	:	<0.011	:	-		<0.007	:	-	
Carbon disulfide	mg/kg-dry	T	<0.009	:	0.005	J	<0.011	:	-		<0.007	:	-	

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T = Total Fraction

Appendix A-7a
Soil - Biased 0-6 inches
Validated Analytical Results

Parameter	Units	Exposure Area Fraction	Site ID / Sample Date / Sample ID					
			MSS1-11 10/16/2002 MSS1-11-T01N-SOL	MSS1-110 1/19/2003 MSS1-110-T01N-SOL	MSS1-111 1/19/2003 MSS1-111-T01N-SOL	MSS1-112 2/9/2003 MSS1-12-T01N-SOL	MSS1-112 4/8/2003 MSS1-112R-T01N-SOLRE	MSS1-113 2/9/2003 MSS1-13-T01N-SOL
			SS1	SS1	SS1	SS1	SS1	SS1
Carbon tetrachloride	mg/kg-dry	T	<0.009 :	<0.008 :	<0.011 :	-	<0.007 :	-
Chlorobenzene	mg/kg-dry	T	<0.009 :	<0.008 :	<0.011 :	-	<0.007 :	-
Chloroethane	mg/kg-dry	T	<0.009 :	<0.008 :	<0.011 :	-	<0.007 :	-
Chloroform	mg/kg-dry	T	<0.009 :	<0.008 :	<0.011 :	-	<0.007 :	-
Chloromethane	mg/kg-dry	T	<0.009 J	<0.008 :	<0.011 :	-	<0.007 :	-
cis-1,2-Dichloroethene	mg/kg-dry	T	<0.009 :	<0.008 :	<0.011 :	-	<0.007 :	-
cis-1,3-Dichloropropene	mg/kg-dry	T	<0.009 :	<0.008 :	<0.011 :	-	<0.007 :	-
Dibromochloromethane	mg/kg-dry	T	<0.009 :	<0.008 :	<0.011 :	-	<0.007 :	-
Dichlorodifluoromethane	mg/kg-dry	T	<0.009 J	<0.008 :	<0.011 :	-	<0.007 :	-
Ethylbenzene	mg/kg-dry	T	<0.009 :	0.006 J	<0.011 :	-	<0.007 :	-
Methylene chloride	mg/kg-dry	T	<0.009 :	<0.008 :	<0.011 :	-	<0.007 :	-
Styrene	mg/kg-dry	T	<0.009 :	<0.008 :	<0.011 :	-	<0.007 :	-
Tetrachloroethene	mg/kg-dry	T	<0.009 :	<0.008 :	<0.011 :	-	<0.007 :	-
Toluene	mg/kg-dry	T	<0.009 :	<0.008 :	<0.011 :	-	<0.007 :	-
Total Xylene	mg/kg-dry	T	<0.009 :	0.064 J	<0.011 :	-	<0.007 :	-
trans-1,2-Dichloroethene	mg/kg-dry	T	<0.009 :	<0.008 :	<0.011 :	-	<0.007 :	-
trans-1,3-Dichloropropene	mg/kg-dry	T	<0.009 :	<0.008 :	<0.011 :	-	<0.007 :	-
Trichloroethene	mg/kg-dry	T	<0.009 :	<0.008 :	<0.011 :	-	<0.007 :	-
Trichlorofluoromethane	mg/kg-dry	T	<0.009 :	<0.008 :	<0.011 :	-	<0.007 :	-
Vinyl chloride	mg/kg-dry	T	<0.009 J	<0.008 :	<0.011 :	-	<0.007 :	-
Semi-Volatile Organics								
1,1`-Biphenyl	mg/kg-dry	T	<0.35 :	<1.7 :	<0.35 :	<0.35 :	-	<0.36 :
2,4,5-Trichlorophenol	mg/kg-dry	T	<0.87 :	<4.3 :	<0.87 :	<0.88 :	-	<0.9 :
2,4,6-Trichlorophenol	mg/kg-dry	T	<0.35 :	<1.7 :	<0.35 :	<0.35 :	-	<0.36 :
2,4-Dichlorophenol	mg/kg-dry	T	<0.35 :	<1.7 :	<0.35 :	<0.35 :	-	<0.36 :
2,4-Dimethylphenol	mg/kg-dry	T	<0.35 :	<1.7 :	<0.35 :	<0.35 :	-	<0.36 :
2,4-Dinitrophenol	mg/kg-dry	T	<0.87 J	<4.3 :	<0.87 :	<0.88 J	-	<0.9 J
2,4-Dinitrotoluene	mg/kg-dry	T	<0.35 :	<1.7 :	<0.35 :	<0.35 :	-	<0.36 :
2,6-Dinitrotoluene	mg/kg-dry	T	<0.35 :	<1.7 :	<0.35 :	<0.35 :	-	<0.36 :
2-Chloronaphthalene	mg/kg-dry	T	<0.35 :	<1.7 :	<0.35 :	<0.35 :	-	<0.36 :
2-Chlorophenol	mg/kg-dry	T	<0.35 :	<1.7 :	<0.35 :	<0.35 :	-	<0.36 :
2-Methylnaphthalene	mg/kg-dry	T	<0.35 :	0.3 J	<0.35 :	<0.35 :	-	<0.36 :
2-Methylphenol	mg/kg-dry	T	<0.35 :	<1.7 :	<0.35 :	<0.35 :	-	<0.36 :
2-Nitroaniline	mg/kg-dry	T	<0.87 :	<4.3 :	<0.87 :	<0.88 :	-	<0.9 :

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Appendix A-7a
Soil - Biased 0-6 inches
Validated Analytical Results

Parameter	Units	Site ID / Sample Date / Sample ID / Exposure Area / Fraction	MSS1-11 10/16/2002 MSS1-11-T01N-SOL SS1		MSS1-110 1/19/2003 MSS1-110-T01N-SOL SS1		MSS1-111 1/19/2003 MSS1-111-T01N-SOL SS1		MSS1-112 2/9/2003 MSS1-12-T01N-SOL SS1		MSS1-112 4/8/2003 MSS1-112R-T01N-SOLRE SS1		MSS1-113 2/9/2003 MSS1-13-T01N-SOL SS1	
2-Nitrophenol	mg/kg-dry	T	<0.35	:	<1.7	:	<0.35	:	<0.35	:	-		<0.36	:
3,3-Dichlorobenzidine	mg/kg-dry	T	<0.35	:	<1.7	:	<0.35	:	<0.35	:	-		<0.36	:
3-Nitroaniline	mg/kg-dry	T	<0.87	:	<4.3	J	<0.87	:	<0.88	:	-		<0.9	:
4,6-Dinitro-2-methylphenol	mg/kg-dry	T	<0.87	:	<4.3	:	<0.87	:	<0.88	:	-		<0.9	:
4-Bromophenyl phenyl ether	mg/kg-dry	T	<0.35	:	<1.7	:	<0.35	:	<0.35	:	-		<0.36	:
4-Chloro-3-methylphenol	mg/kg-dry	T	<0.35	:	<1.7	:	<0.35	:	<0.35	:	-		<0.36	:
4-Chloroaniline	mg/kg-dry	T	<0.35	:	<1.7	:	<0.35	:	<0.35	:	-		<0.36	:
4-Chlorophenyl phenyl ether	mg/kg-dry	T	<0.35	:	<1.7	:	<0.35	:	<0.35	:	-		<0.36	:
4-Methylphenol	mg/kg-dry	T	<0.35	:	<1.7	:	<0.35	:	<0.35	:	-		<0.36	:
4-Nitroaniline	mg/kg-dry	T	<0.87	:	<4.3	J	<0.87	:	<0.88	J	-		<0.9	J
4-Nitrophenol	mg/kg-dry	T	<0.87	:	<4.3	:	<0.87	:	<0.88	:	-		<0.9	:
Acenaphthene	mg/kg-dry	T	<0.35	:	<1.7	:	<0.35	:	<0.35	:	-		<0.36	:
Acenaphthylene	mg/kg-dry	T	<0.35	:	<1.7	:	<0.35	:	<0.35	:	-		<0.36	:
Anthracene	mg/kg-dry	T	<0.35	J	<1.7	:	<0.35	:	<0.35	:	-		<0.36	:
Benzaldehyde	mg/kg-dry	T	<0.35	J	<1.7	:	<0.35	J	<0.35	:	-		0.03	J
Benzo(a)anthracene	mg/kg-dry	T	<0.35	:	<1.7	:	<0.35	:	<0.35	:	-		<0.36	:
Benzo(a)pyrene	mg/kg-dry	T	<0.35	:	<1.7	:	<0.35	:	<0.35	:	-		<0.36	:
Benzo(b)fluoranthene	mg/kg-dry	T	<0.35	:	<1.7	:	<0.35	:	<0.35	:	-		<0.36	:
Benzo(g,h,i)perylene	mg/kg-dry	T	<0.35	:	<1.7	:	<0.35	:	<0.35	:	-		<0.36	:
Benzo(k)fluoranthene	mg/kg-dry	T	<0.35	:	<1.7	:	<0.35	:	<0.35	:	-		<0.36	:
Bis(2-chloroethoxy)methane	mg/kg-dry	T	<0.35	:	<1.7	:	<0.35	:	<0.35	:	-		<0.36	:
Bis(2-chloroethyl)ether	mg/kg-dry	T	<0.35	:	<1.7	:	<0.35	:	<0.35	:	-		<0.36	:
Bis(2-ethylhexyl)phthalate	mg/kg-dry	T	0.074	J	0.11	J	0.13	J	<0.35	:	-		<0.36	:
Butyl benzyl phthalate	mg/kg-dry	T	<0.35	:	<1.7	:	<0.35	:	<0.35	:	-		<0.36	:
Carbazole	mg/kg-dry	T	<0.35	:	<1.7	:	<0.35	:	<0.35	:	-		<0.36	:
Chrysene	mg/kg-dry	T	<0.35	:	<1.7	:	<0.35	:	<0.35	:	-		<0.36	:
Dibenz(a,h)anthracene	mg/kg-dry	T	<0.35	:	<1.7	:	<0.35	:	<0.35	:	-		<0.36	:
Dibenzofuran	mg/kg-dry	T	<0.35	:	<1.7	:	<0.35	:	<0.35	:	-		<0.36	:
Dichlorodiisopropyl ether	mg/kg-dry	T	<0.35	:	<1.7	:	<0.35	:	<0.35	:	-		<0.36	:
Diethylphthalate	mg/kg-dry	T	<0.35	:	<1.7	:	<0.35	:	<0.35	:	-		<0.36	:
Dimethylphthalate	mg/kg-dry	T	<0.35	:	<1.7	:	<0.35	:	<0.35	:	-		<0.36	:
Di-n-Butyl phthalate	mg/kg-dry	T	<0.35	:	<1.7	:	0.023	J	<0.35	:	-		<0.36	:
Di-n-Octyl phthalate	mg/kg-dry	T	<0.35	:	<1.7	:	<0.35	:	<0.35	:	-		<0.36	:
Fluoranthene	mg/kg-dry	T	<0.35	:	<1.7	:	<0.35	:	<0.35	:	-		<0.36	:

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R = Qualified as rejected value from data validation and results are considered unusable for any purpose
T = Total Fraction

Appendix A-7a
Soil - Biased 0-6 inches
Validated Analytical Results

Parameter	Units	Fraction	Site ID	Sample Date	Sample ID	Exposure Area
			MSS1-11	10/16/2002	MSS1-11-T01N-SOL	SS1
			MSS1-110	1/19/2003	MSS1-110-T01N-SOL	SS1
			MSS1-111	1/19/2003	MSS1-111-T01N-SOL	SS1
			MSS1-112	2/9/2003	MSS1-12-T01N-SOL	SS1
			MSS1-112	4/8/2003	MSS1-112R-T01N-SOLRE	SS1
			MSS1-113	2/9/2003	MSS1-13-T01N-SOL	SS1
Fluorene	mg/kg-dry	T	<0.35 :	<1.7 :	<0.35 :	<0.35 :	-	<0.36 :
Hexachlorobenzene	mg/kg-dry	T	<0.35 :	<1.7 :	<0.35 :	<0.35 :	-	<0.36 :
Hexachlorobutadiene	mg/kg-dry	T	<0.35 :	<1.7 :	<0.35 :	<0.35 :	-	<0.36 :
Hexachlorocyclopentadiene	mg/kg-dry	T	<0.35 :	<1.7 :	<0.35 :	<0.35 :	-	<0.36 :
Hexachloroethane	mg/kg-dry	T	<0.35 :	<1.7 :	<0.35 :	<0.35 :	-	<0.36 :
Indeno(1,2,3-cd)pyrene	mg/kg-dry	T	<0.35 :	<1.7 :	<0.35 :	<0.35 :	-	<0.36 :
Isophorone	mg/kg-dry	T	<0.35 :	<1.7 :	<0.35 :	<0.35 :	-	<0.36 :
Naphthalene	mg/kg-dry	T	<0.35 :	<1.7 :	<0.35 :	<0.35 :	-	<0.36 :
Nitrobenzene	mg/kg-dry	T	<0.35 :	<1.7 :	<0.35 :	<0.35 :	-	<0.36 :
N-Nitrosodi-n-propylamine	mg/kg-dry	T	<0.35 :	<1.7 :	<0.35 :	<0.35 :	-	<0.36 :
N-Nitrosodiphenylamine	mg/kg-dry	T	<0.35 :	<1.7 :	<0.35 :	<0.35 :	-	<0.36 :
Pentachlorophenol	mg/kg-dry	T	<0.87 J	<4.3 :	<0.87 :	<0.88 :	-	<0.9 :
Phenanthrene	mg/kg-dry	T	<0.35 :	<1.7 :	<0.35 :	0.032 J	-	<0.36 :
Phenol	mg/kg-dry	T	<0.35 :	<1.7 :	<0.35 :	<0.35 :	-	<0.36 :
Pyrene	mg/kg-dry	T	<0.35 :	<1.7 :	<0.35 :	<0.35 :	-	<0.36 :
Pesticides-PCBs								
Aroclor 1016	mg/kg-dry	T	<0.035 :	<0.034 :	<0.035 :	<0.035 :	-	<0.036 :
Aroclor 1221	mg/kg-dry	T	<0.07 :	<0.069 :	<0.071 :	<0.071 :	-	<0.073 :
Aroclor 1232	mg/kg-dry	T	<0.035 :	<0.034 :	<0.035 :	<0.035 :	-	<0.036 :
Aroclor 1242	mg/kg-dry	T	<0.035 :	<0.034 :	<0.035 :	<0.035 :	-	<0.036 :
Aroclor 1248	mg/kg-dry	T	<0.035 :	0.22 :	<0.035 :	<0.035 :	-	0.15 J
Aroclor 1254	mg/kg-dry	T	0.031 J	0.18 J	<0.035 :	<0.035 :	-	0.38 :
Aroclor 1260	mg/kg-dry	T	<0.035 :	<0.034 :	<0.035 :	<0.035 :	-	<0.036 :

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Appendix A-7a
Soil - Biased 0-6 inches
Validated Analytical Results

Parameter	Units	Fraction	MSS1-113		MSS1-12		MSS1-13		MSS1-14		MSS1-15		MSS1-15	
Sample Date			4/8/2003		10/16/2002		10/16/2002		10/16/2002		10/17/2002		10/24/2002	
Sample ID			MSS1-113R-T01N-SOL		MSS1-12-T01N-SOL		MSS1-13-T01N-SOL		MSS1-14-T01N-SOL		MSS1-15-T01N-SOL		MSS1-15-T01N-SOL	
Exposure Area			SS1		SS1		SS1		SS1		SS1		SS1	
General Chemistry														
Ammonia	mg/kg-dry	T	-		30.3	:	20.5	:	15.7	:	28.7	J	-	
Chloride	mg/kg-dry	T	-		16.1	J	4.3	J	14.1	J	42.5	J	-	
Fluoride	mg/kg-dry	T	-		0.89	J	0.5	J	0.14	J	2.1	J	-	
Nitrate	mg/kg-dry	T	-		5.5	J	2.4	J	<2.1	J	20.6	J	-	
Phosphorus	mg/kg-dry	T	-		720.	J	672.	J	656.	J	835.	J	-	
Sulfate	mg/kg-dry	T	-		164.	J	28.2	J	199.	J	2370.	J	-	
Total Kjeldahl Nitrogen	mg/kg-dry	T	-		189.	:	259.	:	320.	:	439.	:	-	
Total Organic Carbon	mg/kg-dry	T	-		5810.	J	14700.	J	11800.	J	18400.	J	-	
Laboratory Parameters														
pH	SU	T	-		7.8	:	7.8	:	7.1	:	6.6	:	-	
Solids, Percent	%	T	80.4	:	96.5	:	94.1	:	96.2	:	91.5	:	88.9	:
Specific Conductance	umhos/cm	T	-		176.	:	88.4	:	219.	:	801.	:	-	
Geotechnical														
Organic Soils	%	T	-		1.79	J	2.47	J	3.07	J	2.96	J	-	
Physical Properties														
Cation-Exchange Capacity	meq/100g	T	-		8.7	:	14.7	:	7.8	:	23.	:	-	
Sodium Absorption Ratio	ratio	T	-		0.82	:	0.17	:	0.49	:	1.8	:	-	
Metals														
Aluminum	mg/kg-dry	T	-		11400.	:	11100.	:	9500.	:	9690.	:	-	
Antimony	mg/kg-dry	T	-		<0.22	J	<0.24	J	<0.38	J	<0.27	J	-	
Arsenic	mg/kg-dry	T	-		4.1	:	5.3	:	4.6	:	5.1	:	-	
Barium	mg/kg-dry	T	-		90.1	:	99.2	:	97.3	:	124.	:	-	
Beryllium	mg/kg-dry	T	-		0.92	:	0.75	:	1.	:	0.96	:	-	
Boron	mg/kg-dry	T	-		<0.22	J	<1.4	J	<0.74	J	1.5	J	-	
Cadmium	mg/kg-dry	T	-		0.81	:	0.82	:	1.9	:	1.3	:	-	
Calcium	mg/kg-dry	T	-		9010.	:	6530.	:	9060.	:	11800.	:	-	
Chromium	mg/kg-dry	T	-		44.7	:	32.8	:	23.	:	30.5	:	-	
Cobalt	mg/kg-dry	T	-		9.7	:	8.7	:	4.4	:	8.5	:	-	
Copper	mg/kg-dry	T	-		75.4	:	61.	:	86.9	:	116.	:	-	
Iron	mg/kg-dry	T	-		22200.	:	20400.	:	14100.	:	21200.	:	-	
Lead	mg/kg-dry	T	-		80.1	:	75.1	:	141.	:	130.	J	-	
Magnesium	mg/kg-dry	T	-		6710.	:	5800.	:	4380.	:	5980.	:	-	
Manganese	mg/kg-dry	T	-		594.	J	542.	J	534.	J	664.	J	-	

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Appendix A-7a
Soil - Biased 0-6 inches
Validated Analytical Results

Parameter	Units	Exposure Area Fraction	Site ID	Sample Date	Sample ID	Exposure Area
			MSS1-113	4/8/2003	MSS1-113R-T01N-SOL	SS1
			MSS1-12	10/16/2002	MSS1-12-T01N-SOL	SS1
			MSS1-13	10/16/2002	MSS1-13-T01N-SOL	SS1
			MSS1-14	10/16/2002	MSS1-14-T01N-SOL	SS1
			MSS1-15	10/17/2002	MSS1-15-T01N-SOL	SS1
			MSS1-15	10/24/2002	MSS1-15-T01N-SOL	SS1
Mercury	mg/kg-dry	T	-	<0.016 :	<0.016 :	<0.017 :	0.14 :	-
Molybdenum	mg/kg-dry	T	-	969. :	547. :	2990. :	1680. :	-
Nickel	mg/kg-dry	T	-	24.9 J	22.3 J	14.9 J	23.1 J	-
Potassium	mg/kg-dry	T	-	2640. J	2160. J	2640. J	2590. J	-
Selenium	mg/kg-dry	T	-	<0.6 J	<0.64 J	0.72 J	<0.72 :	-
Silver	mg/kg-dry	T	-	0.43 :	0.29 :	0.85 :	0.68 :	-
Sodium	mg/kg-dry	T	-	<285. :	<122. :	<263. :	288. :	-
Thallium	mg/kg-dry	T	-	0.24 :	0.2 :	0.31 :	0.29 :	-
Vanadium	mg/kg-dry	T	-	44.1 :	38.8 :	46.1 :	42.2 :	-
Zinc	mg/kg-dry	T	-	169. J	158. J	259. J	229. :	-
Volatile Organics								
1,1,1-Trichloroethane	mg/kg-dry	T	<0.015 :	<0.008 :	<0.012 :	<0.007 :	-	<0.01 :
1,1,2,2-Tetrachloroethane	mg/kg-dry	T	<0.015 :	<0.008 :	<0.012 :	<0.007 :	-	<0.01 :
1,1,2-Trichloro-1,2,2-trifluoroethane	mg/kg-dry	T	<0.015 :	<0.008 :	<0.012 :	<0.007 :	-	<0.01 :
1,1,2-Trichloroethane	mg/kg-dry	T	<0.015 :	<0.008 :	<0.012 :	<0.007 :	-	<0.01 :
1,1-Dichloroethane	mg/kg-dry	T	<0.015 :	<0.008 :	<0.012 :	<0.007 :	-	<0.01 :
1,1-Dichloroethene	mg/kg-dry	T	<0.015 :	<0.008 :	<0.012 :	<0.007 :	-	<0.01 :
1,2,4-Trichlorobenzene	mg/kg-dry	T	<0.015 :	<0.008 :	<0.012 :	<0.007 :	-	<0.01 :
1,2-Dibromo-3-chloropropane	mg/kg-dry	T	<0.015 :	<0.008 :	<0.012 :	<0.007 :	-	<0.01 :
1,2-Dichlorobenzene	mg/kg-dry	T	<0.015 :	<0.008 :	<0.012 :	<0.007 :	-	<0.01 :
1,2-Dichloroethane	mg/kg-dry	T	<0.015 :	<0.008 :	<0.012 :	<0.007 :	-	<0.01 :
1,2-Dichloroethene (total)	mg/kg-dry	T	<0.015 :	<0.008 :	<0.012 :	<0.007 :	-	<0.01 :
1,2-Dichloropropane	mg/kg-dry	T	<0.015 :	<0.008 :	<0.012 :	<0.007 :	-	<0.01 :
1,3-Dichlorobenzene	mg/kg-dry	T	<0.015 :	<0.008 :	<0.012 :	<0.007 :	-	<0.01 :
1,4-Dichlorobenzene	mg/kg-dry	T	<0.015 :	<0.008 :	<0.012 :	<0.007 :	-	<0.01 :
2-Butanone	mg/kg-dry	T	<0.015 :	<0.008 :	<0.012 :	<0.007 :	-	<0.01 J
2-Hexanone	mg/kg-dry	T	<0.015 :	<0.008 :	<0.012 :	<0.007 :	-	<0.01 J
4-Methyl-2-pentanone	mg/kg-dry	T	<0.015 :	<0.008 :	<0.012 :	<0.007 :	-	<0.01 J
Acetone	mg/kg-dry	T	<0.015 :	0.006 J	<0.012 :	0.002 J	-	<0.01 :
Benzene	mg/kg-dry	T	<0.015 :	<0.008 :	<0.012 :	<0.007 :	-	<0.01 :
Bromodichloromethane	mg/kg-dry	T	<0.015 :	<0.008 :	<0.012 :	<0.007 :	-	<0.01 :
Bromoform	mg/kg-dry	T	<0.015 :	<0.008 :	<0.012 :	<0.007 :	-	<0.01 :
Bromomethane	mg/kg-dry	T	<0.015 :	<0.008 :	<0.012 :	<0.007 :	-	<0.01 :
Carbon disulfide	mg/kg-dry	T	<0.015 :	<0.008 :	<0.012 :	<0.007 :	-	<0.01 :

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T = Total Fraction

Appendix A-7a
Soil - Biased 0-6 inches
Validated Analytical Results

Parameter	Units	Site ID / Sample Date / Sample ID / Exposure Area / Fraction	MSS1-113 4/8/2003 MSS1-113R-T01N-SOL SS1		MSS1-12 10/16/2002 MSS1-12-T01N-SOL SS1		MSS1-13 10/16/2002 MSS1-13-T01N-SOL SS1		MSS1-14 10/16/2002 MSS1-14-T01N-SOL SS1		MSS1-15 10/17/2002 MSS1-15-T01N-SOL SS1		MSS1-15 10/24/2002 MSS1-15-T01N-SOL SS1	
Carbon tetrachloride	mg/kg-dry	T	<0.015	:	<0.008	:	<0.012	:	<0.007	:	-		<0.01	:
Chlorobenzene	mg/kg-dry	T	<0.015	:	<0.008	:	<0.012	:	<0.007	:	-		<0.01	:
Chloroethane	mg/kg-dry	T	<0.015	:	<0.008	:	<0.012	:	<0.007	:	-		<0.01	:
Chloroform	mg/kg-dry	T	<0.015	:	<0.008	:	<0.012	:	<0.007	:	-		<0.01	:
Chloromethane	mg/kg-dry	T	<0.015	:	<0.008	:	<0.012	:	<0.007	:	-		<0.01	:
cis-1,2-Dichloroethene	mg/kg-dry	T	<0.015	:	<0.008	:	<0.012	:	<0.007	:	-		<0.01	:
cis-1,3-Dichloropropene	mg/kg-dry	T	<0.015	:	<0.008	:	<0.012	:	<0.007	:	-		<0.01	:
Dibromochloromethane	mg/kg-dry	T	<0.015	:	<0.008	:	<0.012	:	<0.007	:	-		<0.01	:
Dichlorodifluoromethane	mg/kg-dry	T	<0.015	:	<0.008	:	<0.012	:	<0.007	:	-		<0.01	:
Ethylbenzene	mg/kg-dry	T	<0.015	:	<0.008	:	<0.012	:	<0.007	:	-		<0.01	:
Methylene chloride	mg/kg-dry	T	<0.015	:	<0.008	:	<0.012	:	<0.007	:	-		<0.01	:
Styrene	mg/kg-dry	T	<0.015	:	<0.008	:	<0.012	:	<0.007	:	-		<0.01	:
Tetrachloroethene	mg/kg-dry	T	<0.015	:	<0.008	:	<0.012	:	<0.007	:	-		<0.01	:
Toluene	mg/kg-dry	T	<0.015	:	0.001	J	<0.012	:	<0.007	:	-		<0.01	:
Total Xylene	mg/kg-dry	T	<0.015	:	<0.008	:	<0.012	:	<0.007	:	-		0.001	J
trans-1,2-Dichloroethene	mg/kg-dry	T	<0.015	:	<0.008	:	<0.012	:	<0.007	:	-		<0.01	:
trans-1,3-Dichloropropene	mg/kg-dry	T	<0.015	:	<0.008	:	<0.012	:	<0.007	:	-		<0.01	:
Trichloroethene	mg/kg-dry	T	<0.015	:	<0.008	:	<0.012	:	<0.007	:	-		<0.01	:
Trichlorofluoromethane	mg/kg-dry	T	<0.015	:	<0.008	:	<0.012	:	<0.007	:	-		<0.01	:
Vinyl chloride	mg/kg-dry	T	<0.015	:	<0.008	:	<0.012	:	<0.007	:	-		<0.01	:
Semi-Volatile Organics														
1,1`-Biphenyl	mg/kg-dry	T	-		<0.34	:	<0.35	:	<0.34	:	<0.72	:	-	
2,4,5-Trichlorophenol	mg/kg-dry	T	-		<0.86	:	<0.88	:	<0.86	:	<1.8	:	-	
2,4,6-Trichlorophenol	mg/kg-dry	T	-		<0.34	:	<0.35	:	<0.34	:	<0.72	:	-	
2,4-Dichlorophenol	mg/kg-dry	T	-		<0.34	:	<0.35	:	<0.34	:	<0.72	:	-	
2,4-Dimethylphenol	mg/kg-dry	T	-		<0.34	:	<0.35	:	<0.34	:	<0.72	:	-	
2,4-Dinitrophenol	mg/kg-dry	T	-		<0.86	:	<0.88	:	<0.86	:	<1.8	:	-	
2,4-Dinitrotoluene	mg/kg-dry	T	-		<0.34	:	<0.35	:	<0.34	:	<0.72	:	-	
2,6-Dinitrotoluene	mg/kg-dry	T	-		<0.34	:	<0.35	:	<0.34	:	<0.72	:	-	
2-Chloronaphthalene	mg/kg-dry	T	-		<0.34	:	<0.35	:	<0.34	:	<0.72	:	-	
2-Chlorophenol	mg/kg-dry	T	-		<0.34	:	<0.35	:	<0.34	:	<0.72	:	-	
2-Methylnaphthalene	mg/kg-dry	T	-		<0.34	:	<0.35	:	<0.34	:	<0.72	:	-	
2-Methylphenol	mg/kg-dry	T	-		<0.34	:	<0.35	:	<0.34	:	<0.72	:	-	
2-Nitroaniline	mg/kg-dry	T	-		<0.86	:	<0.88	:	<0.86	:	<1.8	:	-	

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T = Total Fraction

Appendix A-7a
Soil - Biased 0-6 inches
Validated Analytical Results

Parameter	Units	Exposure Area Fraction	Site ID	Sample Date	Sample ID	Exposure Area
			MSS1-113	4/8/2003	MSS1-113R-T01N-SOL	SS1
			MSS1-12	10/16/2002	MSS1-12-T01N-SOL	SS1
			MSS1-13	10/16/2002	MSS1-13-T01N-SOL	SS1
			MSS1-14	10/16/2002	MSS1-14-T01N-SOL	SS1
			MSS1-15	10/17/2002	MSS1-15-T01N-SOL	SS1
			MSS1-15	10/24/2002	MSS1-15-T01N-SOL	SS1
2-Nitrophenol	mg/kg-dry	T	-	<0.34 :	<0.35 :	<0.34 :	<0.72 :	-
3,3-Dichlorobenzidine	mg/kg-dry	T	-	<0.34 :	<0.35 :	<0.34 J	<0.72 :	-
3-Nitroaniline	mg/kg-dry	T	-	<0.86 :	<0.88 :	<0.86 :	<1.8 :	-
4,6-Dinitro-2-methylphenol	mg/kg-dry	T	-	<0.86 :	<0.88 :	<0.86 :	<1.8 :	-
4-Bromophenyl phenyl ether	mg/kg-dry	T	-	<0.34 :	<0.35 :	<0.34 :	<0.72 :	-
4-Chloro-3-methylphenol	mg/kg-dry	T	-	<0.34 :	<0.35 :	<0.34 :	<0.72 :	-
4-Chloroaniline	mg/kg-dry	T	-	<0.34 :	<0.35 :	<0.34 :	<0.72 :	-
4-Chlorophenyl phenyl ether	mg/kg-dry	T	-	<0.34 :	<0.35 :	<0.34 :	<0.72 :	-
4-Methylphenol	mg/kg-dry	T	-	<0.34 :	<0.35 :	<0.34 :	<0.72 :	-
4-Nitroaniline	mg/kg-dry	T	-	<0.86 :	<0.88 :	<0.86 :	<1.8 :	-
4-Nitrophenol	mg/kg-dry	T	-	<0.86 :	<0.88 :	<0.86 :	<1.8 :	-
Acenaphthene	mg/kg-dry	T	-	<0.34 :	<0.35 :	<0.34 :	<0.72 :	-
Acenaphthylene	mg/kg-dry	T	-	<0.34 :	<0.35 :	<0.34 :	<0.72 :	-
Anthracene	mg/kg-dry	T	-	<0.34 J	<0.35 J	<0.34 J	0.062 J	-
Benzaldehyde	mg/kg-dry	T	-	<0.34 J	<0.35 J	<0.34 J	4.7 :	-
Benzo(a)anthracene	mg/kg-dry	T	-	<0.34 :	0.046 J	<0.34 J	1. :	-
Benzo(a)pyrene	mg/kg-dry	T	-	<0.34 :	<0.35 :	<0.34 J	0.93 :	-
Benzo(b)fluoranthene	mg/kg-dry	T	-	<0.34 :	<0.35 :	<0.34 J	0.9 :	-
Benzo(g,h,i)perylene	mg/kg-dry	T	-	<0.34 :	0.024 J	<0.34 J	0.45 J	-
Benzo(k)fluoranthene	mg/kg-dry	T	-	<0.34 J	<0.35 J	<0.34 J	1.5 :	-
Bis(2-chloroethoxy)methane	mg/kg-dry	T	-	<0.34 :	<0.35 :	<0.34 :	<0.72 :	-
Bis(2-chloroethyl)ether	mg/kg-dry	T	-	<0.34 :	<0.35 :	<0.34 :	<0.72 :	-
Bis(2-ethylhexyl)phthalate	mg/kg-dry	T	-	0.1 J	0.12 J	1.2 J	0.63 J	-
Butyl benzyl phthalate	mg/kg-dry	T	-	0.025 J	0.039 J	<0.34 J	<0.72 :	-
Carbazole	mg/kg-dry	T	-	<0.34 :	<0.35 :	<0.34 :	0.051 J	-
Chrysene	mg/kg-dry	T	-	<0.34 :	0.066 J	<0.34 J	1.5 :	-
Dibenz(a,h)anthracene	mg/kg-dry	T	-	<0.34 :	<0.35 :	<0.34 J	0.11 J	-
Dibenzofuran	mg/kg-dry	T	-	<0.34 :	<0.35 :	<0.34 :	<0.72 :	-
Dichlorodiisopropyl ether	mg/kg-dry	T	-	<0.34 :	<0.35 :	<0.34 :	<0.72 :	-
Diethylphthalate	mg/kg-dry	T	-	<0.34 :	<0.35 :	<0.34 :	<0.72 :	-
Dimethylphthalate	mg/kg-dry	T	-	<0.34 :	<0.35 :	<0.34 :	<0.72 :	-
Di-n-Butyl phthalate	mg/kg-dry	T	-	0.024 J	0.021 J	<0.34 :	<0.72 :	-
Di-n-Octyl phthalate	mg/kg-dry	T	-	<0.34 :	<0.35 :	<0.34 J	<0.72 :	-
Fluoranthene	mg/kg-dry	T	-	<0.34 :	0.056 J	<0.34 :	1.2 :	-

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T = Total Fraction

Appendix A-7a
Soil - Biased 0-6 inches
Validated Analytical Results

Parameter	Units	Site ID / Sample Date / Sample ID / Exposure Area / Fraction	MSS1-113 4/8/2003 MSS1-113R-T01N-SOL SS1		MSS1-12 10/16/2002 MSS1-12-T01N-SOL SS1		MSS1-13 10/16/2002 MSS1-13-T01N-SOL SS1		MSS1-14 10/16/2002 MSS1-14-T01N-SOL SS1		MSS1-15 10/17/2002 MSS1-15-T01N-SOL SS1		MSS1-15 10/24/2002 MSS1-15-T01N-SOL SS1	
Fluorene	mg/kg-dry	T	-		<0.34	:	<0.35	:	<0.34	:	<0.72	:	-	
Hexachlorobenzene	mg/kg-dry	T	-		<0.34	:	<0.35	:	<0.34	:	<0.72	:	-	
Hexachlorobutadiene	mg/kg-dry	T	-		<0.34	:	<0.35	:	<0.34	:	<0.72	:	-	
Hexachlorocyclopentadiene	mg/kg-dry	T	-		<0.34	:	<0.35	:	<0.34	:	<0.72	:	-	
Hexachloroethane	mg/kg-dry	T	-		<0.34	:	<0.35	:	<0.34	:	<0.72	:	-	
Indeno(1,2,3-cd)pyrene	mg/kg-dry	T	-		<0.34	:	0.023	J	<0.34	J	0.44	J	-	
Isophorone	mg/kg-dry	T	-		<0.34	:	<0.35	:	<0.34	:	<0.72	:	-	
Naphthalene	mg/kg-dry	T	-		<0.34	:	<0.35	:	<0.34	:	<0.72	:	-	
Nitrobenzene	mg/kg-dry	T	-		<0.34	:	<0.35	:	<0.34	:	<0.72	:	-	
N-Nitrosodi-n-propylamine	mg/kg-dry	T	-		<0.34	:	<0.35	:	<0.34	:	<0.72	:	-	
N-Nitrosodiphenylamine	mg/kg-dry	T	-		<0.34	:	<0.35	:	<0.34	:	<0.72	:	-	
Pentachlorophenol	mg/kg-dry	T	-		<0.86	J	<0.88	J	<0.86	J	<1.8	:	-	
Phenanthrene	mg/kg-dry	T	-		<0.34	:	<0.35	:	<0.34	:	0.19	J	-	
Phenol	mg/kg-dry	T	-		<0.34	:	<0.35	:	<0.34	:	<0.72	:	-	
Pyrene	mg/kg-dry	T	-		<0.34	:	0.068	J	0.16	J	1.2	:	-	
Pesticides-PCBs														
Aroclor 1016	mg/kg-dry	T	-		<0.034	:	<0.035	:	<0.034	J	<0.036	J	-	
Aroclor 1221	mg/kg-dry	T	-		<0.07	:	<0.071	:	<0.07	J	<0.073	J	-	
Aroclor 1232	mg/kg-dry	T	-		<0.034	:	<0.035	:	<0.034	J	<0.036	J	-	
Aroclor 1242	mg/kg-dry	T	-		<0.034	:	<0.035	:	<0.034	J	<0.036	J	-	
Aroclor 1248	mg/kg-dry	T	-		<0.034	:	<0.035	:	<0.034	J	<0.036	J	-	
Aroclor 1254	mg/kg-dry	T	-		0.071	:	0.063	:	0.055	J	0.18	J	-	
Aroclor 1260	mg/kg-dry	T	-		<0.034	:	<0.035	:	<0.034	J	<0.036	J	-	

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Appendix A-7a
Soil - Biased 0-6 inches
Validated Analytical Results

Parameter	Units	Fraction	MSS1-16	MSS1-16	MSS1-16	MSS1-17R	MSS1-17R	MSS1-17R
Sample Date			10/17/2002	10/17/2002	10/22/2002	10/17/2002	1/7/2003	1/8/2003
Sample ID			MSS1-16-T01N-SOLD L	MSS1-16-T01N-SOL	MSS1-16-T01N-SOL	MSS1-17-T01N-SOL	MSS1-17R-T01N-SOL	MSS1-17R-T01N-SOL
Exposure Area			SS1	SS1	SS1	SS1	SS1	SS1
General Chemistry								
Ammonia	mg/kg-dry	T	-	19.6 J	-	-	2.8 :	-
Chloride	mg/kg-dry	T	-	161. J	-	-	64.5 :	-
Fluoride	mg/kg-dry	T	-	1.3 J	-	-	1. J	-
Nitrate	mg/kg-dry	T	-	6.4 J	-	-	11.8 J	-
Phosphorus	mg/kg-dry	T	-	289. J	-	-	965. :	-
Sulfate	mg/kg-dry	T	-	642. J	-	-	198. :	-
Total Kjeldahl Nitrogen	mg/kg-dry	T	-	266. :	-	-	141. :	-
Total Organic Carbon	mg/kg-dry	T	-	13400. J	-	-	2960. J	-
Laboratory Parameters								
pH	SU	T	-	6.4 :	-	-	7.6 :	-
Solids, Percent	%	T	-	93.8 :	97.2 :	95.2 :	95.9 :	96.1 :
Specific Conductance	umhos/cm	T	-	681. :	-	-	686. :	-
Geotechnical								
Organic Soils	%	T	-	2.64 J	-	-	1.5 :	-
Physical Properties								
Cation-Exchange Capacity	meq/100g	T	-	21.1 :	-	-	8.5 :	-
Sodium Absorption Ratio	ratio	T	-	1.75 :	-	-	1.1 :	-
Metals								
Aluminum	mg/kg-dry	T	-	10600. :	-	-	10000. :	-
Antimony	mg/kg-dry	T	-	<0.27 J	-	-	<0.24 J	-
Arsenic	mg/kg-dry	T	-	8.6 :	-	-	3. J	-
Barium	mg/kg-dry	T	-	128. :	-	-	72.2 :	-
Beryllium	mg/kg-dry	T	-	0.87 :	-	-	0.77 :	-
Boron	mg/kg-dry	T	-	1.6 J	-	-	2.9 J	-
Cadmium	mg/kg-dry	T	-	1.5 :	-	-	<0.037 J	-
Calcium	mg/kg-dry	T	-	10200. :	-	-	8270. :	-
Chromium	mg/kg-dry	T	-	35.4 :	-	-	41.3 J	-
Cobalt	mg/kg-dry	T	-	11.4 :	-	-	11.3 J	-
Copper	mg/kg-dry	T	-	95.4 :	-	-	55.6 J	-
Iron	mg/kg-dry	T	-	22400. :	-	-	22500. :	-
Lead	mg/kg-dry	T	-	115. :	-	-	49.1 :	-
Magnesium	mg/kg-dry	T	-	6940. :	-	-	7360. :	-
Manganese	mg/kg-dry	T	-	651. J	-	-	555. :	-

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Appendix A-7a
Soil - Biased 0-6 inches
Validated Analytical Results

Parameter	Units	Fraction	MSS1-16		MSS1-16		MSS1-16		MSS1-17R		MSS1-17R		MSS1-17R	
Sample Date			10/17/2002		10/17/2002		10/22/2002		10/17/2002		1/7/2003		1/8/2003	
Sample ID			MSS1-16-T01N-SOLD L		MSS1-16-T01N-SOL		MSS1-16-T01N-SOL		MSS1-17-T01N-SOL		MSS1-17R-T01N-SOL		MSS1-17R-T01N-SOL	
Exposure Area			SS1		SS1		SS1		SS1		SS1		SS1	
Mercury	mg/kg-dry	T	-		<0.017	:	-		-		<0.017	:	-	
Molybdenum	mg/kg-dry	T	-		901.	:	-		-		259.	:	-	
Nickel	mg/kg-dry	T	-		28.2	J	-		-		27.5	:	-	
Potassium	mg/kg-dry	T	-		3050.	J	-		-		2370.	J	-	
Selenium	mg/kg-dry	T	-		<0.65	:	-		-		<0.64	J	-	
Silver	mg/kg-dry	T	-		0.54	:	-		-		0.23	:	-	
Sodium	mg/kg-dry	T	-		269.	:	-		-		<88.2	:	-	
Thallium	mg/kg-dry	T	-		0.27	:	-		-		0.17	:	-	
Vanadium	mg/kg-dry	T	-		41.4	:	-		-		40.7	:	-	
Zinc	mg/kg-dry	T	-		286.	:	-		-		89.	:	-	
Volatile Organics														
1,1,1-Trichloroethane	mg/kg-dry	T	-		-		<0.012	:	-		-		<0.01	:
1,1,2,2-Tetrachloroethane	mg/kg-dry	T	-		-		<0.012	:	-		-		<0.01	:
1,1,2-Trichloro-1,2,2-trifluoroethane	mg/kg-dry	T	-		-		<0.012	:	-		-		<0.01	:
1,1,2-Trichloroethane	mg/kg-dry	T	-		-		<0.012	:	-		-		<0.01	:
1,1-Dichloroethane	mg/kg-dry	T	-		-		<0.012	:	-		-		<0.01	:
1,1-Dichloroethene	mg/kg-dry	T	-		-		<0.012	:	-		-		<0.01	:
1,2,4-Trichlorobenzene	mg/kg-dry	T	-		-		<0.012	:	-		-		<0.01	:
1,2-Dibromo-3-chloropropane	mg/kg-dry	T	-		-		<0.012	:	-		-		<0.01	:
1,2-Dichlorobenzene	mg/kg-dry	T	-		-		<0.012	:	-		-		<0.01	:
1,2-Dichloroethane	mg/kg-dry	T	-		-		<0.012	:	-		-		<0.01	:
1,2-Dichloroethene (total)	mg/kg-dry	T	-		-		<0.012	:	-		-		<0.01	:
1,2-Dichloropropane	mg/kg-dry	T	-		-		<0.012	:	-		-		<0.01	:
1,3-Dichlorobenzene	mg/kg-dry	T	-		-		<0.012	:	-		-		<0.01	:
1,4-Dichlorobenzene	mg/kg-dry	T	-		-		<0.012	:	-		-		<0.01	:
2-Butanone	mg/kg-dry	T	-		-		<0.012	:	-		-		<0.01	:
2-Hexanone	mg/kg-dry	T	-		-		<0.012	:	-		-		<0.01	:
4-Methyl-2-pentanone	mg/kg-dry	T	-		-		<0.012	:	-		-		<0.01	:
Acetone	mg/kg-dry	T	-		-		0.005	J	-		-		<0.01	:
Benzene	mg/kg-dry	T	-		-		<0.012	:	-		-		<0.01	:
Bromodichloromethane	mg/kg-dry	T	-		-		<0.012	:	-		-		<0.01	:
Bromoform	mg/kg-dry	T	-		-		<0.012	:	-		-		<0.01	:
Bromomethane	mg/kg-dry	T	-		-		<0.012	:	-		-		<0.01	:
Carbon disulfide	mg/kg-dry	T	-		-		<0.012	:	-		-		<0.01	:

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Appendix A-7a
Soil - Biased 0-6 inches
Validated Analytical Results

Parameter	Units	Site ID / Sample Date / Sample ID / Exposure Area / Fraction	MSS1-16 10/17/2002 MSS1-16-T01N-SOLDL SS1		MSS1-16 10/17/2002 MSS1-16-T01N-SOL SS1		MSS1-16 10/22/2002 MSS1-16-T01N-SOL SS1		MSS1-17R 10/17/2002 MSS1-17-T01N-SOL SS1		MSS1-17R 1/7/2003 MSS1-17R-T01N-SOL SS1		MSS1-17R 1/8/2003 MSS1-17R-T01N-SOL SS1	
Carbon tetrachloride	mg/kg-dry	T	-		-		<0.012	:	-		-		<0.01	:
Chlorobenzene	mg/kg-dry	T	-		-		<0.012	:	-		-		<0.01	:
Chloroethane	mg/kg-dry	T	-		-		<0.012	:	-		-		<0.01	:
Chloroform	mg/kg-dry	T	-		-		<0.012	:	-		-		<0.01	:
Chloromethane	mg/kg-dry	T	-		-		<0.012	:	-		-		<0.01	:
cis-1,2-Dichloroethene	mg/kg-dry	T	-		-		<0.012	:	-		-		<0.01	:
cis-1,3-Dichloropropene	mg/kg-dry	T	-		-		<0.012	:	-		-		<0.01	:
Dibromochloromethane	mg/kg-dry	T	-		-		<0.012	:	-		-		<0.01	:
Dichlorodifluoromethane	mg/kg-dry	T	-		-		<0.012	:	-		-		<0.01	:
Ethylbenzene	mg/kg-dry	T	-		-		0.006	J	-		-		<0.01	:
Methylene chloride	mg/kg-dry	T	-		-		<0.012	:	-		-		<0.01	:
Styrene	mg/kg-dry	T	-		-		<0.012	:	-		-		<0.01	:
Tetrachloroethene	mg/kg-dry	T	-		-		<0.012	:	-		-		<0.01	:
Toluene	mg/kg-dry	T	-		-		<0.012	:	-		-		<0.01	:
Total Xylene	mg/kg-dry	T	-		-		0.031	:	-		-		0.001	J
trans-1,2-Dichloroethene	mg/kg-dry	T	-		-		<0.012	:	-		-		<0.01	:
trans-1,3-Dichloropropene	mg/kg-dry	T	-		-		<0.012	:	-		-		<0.01	:
Trichloroethene	mg/kg-dry	T	-		-		<0.012	:	-		-		<0.01	:
Trichlorofluoromethane	mg/kg-dry	T	-		-		<0.012	:	-		-		<0.01	:
Vinyl chloride	mg/kg-dry	T	-		-		<0.012	:	-		-		<0.01	:
Semi-Volatile Organics														
1,1`-Biphenyl	mg/kg-dry	T	-		<0.7	:	-		-		<0.34	:	-	
2,4,5-Trichlorophenol	mg/kg-dry	T	-		<1.8	:	-		-		<0.86	:	-	
2,4,6-Trichlorophenol	mg/kg-dry	T	-		<0.7	:	-		-		<0.34	:	-	
2,4-Dichlorophenol	mg/kg-dry	T	-		<0.7	:	-		-		<0.34	:	-	
2,4-Dimethylphenol	mg/kg-dry	T	-		<0.7	:	-		-		<0.34	:	-	
2,4-Dinitrophenol	mg/kg-dry	T	-		<1.8	:	-		-		<0.86	:	-	
2,4-Dinitrotoluene	mg/kg-dry	T	-		<0.7	:	-		-		<0.34	:	-	
2,6-Dinitrotoluene	mg/kg-dry	T	-		<0.7	:	-		-		<0.34	:	-	
2-Chloronaphthalene	mg/kg-dry	T	-		<0.7	:	-		-		<0.34	:	-	
2-Chlorophenol	mg/kg-dry	T	-		<0.7	:	-		-		<0.34	:	-	
2-Methylnaphthalene	mg/kg-dry	T	-		<0.7	:	-		-		<0.34	:	-	
2-Methylphenol	mg/kg-dry	T	-		<0.7	:	-		-		<0.34	:	-	
2-Nitroaniline	mg/kg-dry	T	-		<1.8	:	-		-		<0.86	:	-	

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Appendix A-7a
Soil - Biased 0-6 inches
Validated Analytical Results

Parameter	Units	Exposure Area Fraction	Site ID / Sample Date / Sample ID											
			MSS1-16 10/17/2002 MSS1-16-T01N-SOLDL SS1		MSS1-16 10/17/2002 MSS1-16-T01N-SOL SS1		MSS1-16 10/22/2002 MSS1-16-T01N-SOL SS1		MSS1-17R 10/17/2002 MSS1-17-T01N-SOL SS1		MSS1-17R 1/7/2003 MSS1-17R-T01N-SOL SS1		MSS1-17R 1/8/2003 MSS1-17R-T01N-SOL SS1	
2-Nitrophenol	mg/kg-dry	T	-		<0.7	:	-		-		<0.34	:	-	
3,3-Dichlorobenzidine	mg/kg-dry	T	-		<0.7	:	-		-		<0.34	:	-	
3-Nitroaniline	mg/kg-dry	T	-		<1.8	:	-		-		<0.86	:	-	
4,6-Dinitro-2-methylphenol	mg/kg-dry	T	-		<1.8	:	-		-		<0.86	:	-	
4-Bromophenyl phenyl ether	mg/kg-dry	T	-		<0.7	:	-		-		<0.34	:	-	
4-Chloro-3-methylphenol	mg/kg-dry	T	-		<0.7	:	-		-		<0.34	:	-	
4-Chloroaniline	mg/kg-dry	T	-		<0.7	:	-		-		<0.34	:	-	
4-Chlorophenyl phenyl ether	mg/kg-dry	T	-		<0.7	:	-		-		<0.34	:	-	
4-Methylphenol	mg/kg-dry	T	-		<0.7	:	-		-		<0.34	:	-	
4-Nitroaniline	mg/kg-dry	T	-		<1.8	:	-		-		<0.86	:	-	
4-Nitrophenol	mg/kg-dry	T	-		<1.8	:	-		-		<0.86	:	-	
Acenaphthene	mg/kg-dry	T	-		<0.7	:	-		-		<0.34	:	-	
Acenaphthylene	mg/kg-dry	T	-		<0.7	:	-		-		<0.34	:	-	
Anthracene	mg/kg-dry	T	-		<0.7	:	-		-		<0.34	:	-	
Benzaldehyde	mg/kg-dry	T	-		<0.7	:	-		-		<0.34	J	-	
Benzo(a)anthracene	mg/kg-dry	T	-		0.051	J	-		-		<0.34	:	-	
Benzo(a)pyrene	mg/kg-dry	T	-		<0.7	:	-		-		<0.34	:	-	
Benzo(b)fluoranthene	mg/kg-dry	T	-		<0.7	:	-		-		<0.34	:	-	
Benzo(g,h,i)perylene	mg/kg-dry	T	-		<0.7	:	-		-		<0.34	:	-	
Benzo(k)fluoranthene	mg/kg-dry	T	-		<0.7	:	-		-		<0.34	:	-	
Bis(2-chloroethoxy)methane	mg/kg-dry	T	-		<0.7	:	-		-		<0.34	:	-	
Bis(2-chloroethyl)ether	mg/kg-dry	T	-		<0.7	:	-		-		<0.34	:	-	
Bis(2-ethylhexyl)phthalate	mg/kg-dry	T	-		0.63	J	-		-		0.12	J	-	
Butyl benzyl phthalate	mg/kg-dry	T	-		<0.7	:	-		-		<0.34	:	-	
Carbazole	mg/kg-dry	T	-		<0.7	:	-		-		<0.34	:	-	
Chrysene	mg/kg-dry	T	-		0.076	J	-		-		<0.34	:	-	
Dibenz(a,h)anthracene	mg/kg-dry	T	-		<0.7	:	-		-		<0.34	:	-	
Dibenzofuran	mg/kg-dry	T	-		<0.7	:	-		-		<0.34	:	-	
Dichlorodiisopropyl ether	mg/kg-dry	T	-		<0.7	:	-		-		<0.34	:	-	
Diethylphthalate	mg/kg-dry	T	-		<0.7	:	-		-		<0.34	:	-	
Dimethylphthalate	mg/kg-dry	T	-		<0.7	:	-		-		<0.34	:	-	
Di-n-Butyl phthalate	mg/kg-dry	T	-		<0.7	:	-		-		<0.34	:	-	
Di-n-Octyl phthalate	mg/kg-dry	T	-		<0.7	:	-		-		<0.34	:	-	
Fluoranthene	mg/kg-dry	T	-		0.069	J	-		-		<0.34	:	-	

J = Qualified as estimated during data validation
R = Qualified as rejected value from data validation and results are considered unusable for any purpose
T = Total Fraction

Appendix A-7a
Soil - Biased 0-6 inches
Validated Analytical Results

Parameter	Units	Fraction	Site ID	MSS1-16	MSS1-16	MSS1-16	MSS1-17R	MSS1-17R	MSS1-17R
			Sample Date	10/17/2002	10/17/2002	10/22/2002	10/17/2002	1/7/2003	1/8/2003
			Sample ID	MSS1-16-T01N-SOLDL	MSS1-16-T01N-SOL	MSS1-16-T01N-SOL	MSS1-17-T01N-SOL	MSS1-17R-T01N-SOL	MSS1-17R-T01N-SOL
			Exposure Area	SS1	SS1	SS1	SS1	SS1	SS1
Fluorene	mg/kg-dry	T		-	<0.7 :	-	-	<0.34 :	-
Hexachlorobenzene	mg/kg-dry	T		-	<0.7 :	-	-	<0.34 :	-
Hexachlorobutadiene	mg/kg-dry	T		-	<0.7 :	-	-	<0.34 :	-
Hexachlorocyclopentadiene	mg/kg-dry	T		-	<0.7 :	-	-	<0.34 :	-
Hexachloroethane	mg/kg-dry	T		-	<0.7 :	-	-	<0.34 :	-
Indeno(1,2,3-cd)pyrene	mg/kg-dry	T		-	<0.7 :	-	-	<0.34 :	-
Isophorone	mg/kg-dry	T		-	<0.7 :	-	-	<0.34 :	-
Naphthalene	mg/kg-dry	T		-	<0.7 :	-	-	<0.34 :	-
Nitrobenzene	mg/kg-dry	T		-	<0.7 :	-	-	<0.34 :	-
N-Nitrosodi-n-propylamine	mg/kg-dry	T		-	<0.7 :	-	-	<0.34 :	-
N-Nitrosodiphenylamine	mg/kg-dry	T		-	<0.7 :	-	-	<0.34 :	-
Pentachlorophenol	mg/kg-dry	T		-	<1.8 :	-	-	<0.86 J	-
Phenanthrene	mg/kg-dry	T		-	<0.7 :	-	-	<0.34 :	-
Phenol	mg/kg-dry	T		-	<0.7 :	-	-	<0.34 :	-
Pyrene	mg/kg-dry	T		-	0.081 J	-	-	<0.34 :	-
Pesticides-PCBs									
Aroclor 1016	mg/kg-dry	T		-	<0.07 J	-	-	<0.034 :	-
Aroclor 1221	mg/kg-dry	T		-	<0.14 J	-	-	<0.07 :	-
Aroclor 1232	mg/kg-dry	T		-	<0.07 J	-	-	<0.034 :	-
Aroclor 1242	mg/kg-dry	T		-	<0.07 J	-	-	<0.034 :	-
Aroclor 1248	mg/kg-dry	T		2.1 J	-	-	-	0.071 J	-
Aroclor 1254	mg/kg-dry	T		-	<0.07 J	-	-	0.11 :	-
Aroclor 1260	mg/kg-dry	T		-	<0.07 J	-	-	<0.034 :	-

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Appendix A-7a
Soil - Biased 0-6 inches
Validated Analytical Results

Parameter	Units	Exposure Area Fraction	Site ID	MSS1-19	MSS1-19	MSS1-19	MSS1-19	MSS1-20R	MSS1-20R
			Sample Date	10/17/2002	10/17/2002	10/17/2002	10/22/2002	10/17/2002	1/7/2003
			Sample ID	MSS1-19-T01N-SOLRE	MSS1-19-T01N-SOLDL	MSS1-19-T01N-SOL	MSS1-19-T01N-SOL	MSS1-20-T01N-SOL	MSS1-20R-T01N-SOL
			Exposure Area	SS1	SS1	SS1	SS1	SS1	SS1
General Chemistry									
Ammonia	mg/kg-dry	T		-	-	17.1 J	-	35.6 :	6.7 :
Chloride	mg/kg-dry	T		-	-	18.5 J	-	91.4 J	53.7 :
Fluoride	mg/kg-dry	T		-	-	0.57 J	-	0.22 J	0.66 J
Nitrate	mg/kg-dry	T		-	-	4.9 J	-	15.1 J	8. J
Phosphorus	mg/kg-dry	T		-	-	242. J	-	743. J	767. :
Sulfate	mg/kg-dry	T		-	-	94. J	-	537. J	1220. :
Total Kjeldahl Nitrogen	mg/kg-dry	T		-	-	156. :	-	183. :	150. :
Total Organic Carbon	mg/kg-dry	T		-	-	1500. J	-	3960. J	2720. J
Laboratory Parameters									
pH	SU	T		-	-	6.2 :	-	7.9 :	7.5 :
Solids, Percent	%	T		-	-	95.1 :	96.3 :	93.5 :	91.8 :
Specific Conductance	umhos/cm	T		-	-	107. :	-	355. :	1670. :
Geotechnical									
Organic Soils	%	T		-	-	1.82 J	-	2.09 J	1.8 :
Physical Properties									
Cation-Exchange Capacity	meq/100g	T		-	-	19.9 :	-	12.1 :	10.5 :
Sodium Absorption Ratio	ratio	T		-	-	1.15 :	-	7.46 :	3.76 :
Metals									
Aluminum	mg/kg-dry	T		-	-	7810. :	-	8150. :	8470. :
Antimony	mg/kg-dry	T		-	-	<0.26 J	-	<0.25 J	<0.27 J
Arsenic	mg/kg-dry	T		-	-	4.1 :	-	3.8 :	3.5 J
Barium	mg/kg-dry	T		-	-	144. :	-	168. :	212. :
Beryllium	mg/kg-dry	T		-	-	0.63 :	-	0.58 :	0.6 :
Boron	mg/kg-dry	T		-	-	<0.41 J	-	<2.6 :	3.8 J
Cadmium	mg/kg-dry	T		-	-	0.2 J	-	0.12 J	<0.038 J
Calcium	mg/kg-dry	T		-	-	5440. :	-	5340. :	5420. :
Chromium	mg/kg-dry	T		-	-	24.2 :	-	23.7 :	27.8 J
Cobalt	mg/kg-dry	T		-	-	9. :	-	7.4 :	7.9 :
Copper	mg/kg-dry	T		-	-	54.5 :	-	48.3 :	45.1 J
Iron	mg/kg-dry	T		-	-	19700. :	-	17900. :	19300. :
Lead	mg/kg-dry	T		-	-	56.8 :	-	48.8 :	54. :
Magnesium	mg/kg-dry	T		-	-	5230. :	-	4800. :	5050. :
Manganese	mg/kg-dry	T		-	-	481. J	-	414. J	411. :

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Appendix A-7a
Soil - Biased 0-6 inches
Validated Analytical Results

Parameter	Units	Site ID / Sample Date / Sample ID / Exposure Area / Fraction	MSS1-19 10/17/2002 MSS1-19-T01N-SOLRE SS1 T		MSS1-19 10/17/2002 MSS1-19-T01N-SOLDL SS1 T		MSS1-19 10/17/2002 MSS1-19-T01N-SOL SS1 T		MSS1-19 10/22/2002 MSS1-19-T01N-SOL SS1 T		MSS1-20R 10/17/2002 MSS1-20-T01N-SOL SS1 T		MSS1-20R 1/7/2003 MSS1-20R-T01N-SOL SS1 T	
Mercury	mg/kg-dry	T	-		-		<0.015	:	-		0.02	:	<0.017	:
Molybdenum	mg/kg-dry	T	-		-		272.	:	-		222.	:	220.	:
Nickel	mg/kg-dry	T	-		-		20.5	J	-		18.8	J	20.8	:
Potassium	mg/kg-dry	T	-		-		2140.	J	-		2150.	J	2310.	J
Selenium	mg/kg-dry	T	-		-		<0.69	:	-		0.72	J	<0.73	J
Silver	mg/kg-dry	T	-		-		<0.24	:	-		0.37	:	0.15	:
Sodium	mg/kg-dry	T	-		-		145.	:	-		548.	:	522.	:
Thallium	mg/kg-dry	T	-		-		0.17	:	-		0.15	:	0.14	:
Vanadium	mg/kg-dry	T	-		-		28.1	:	-		26.	:	28.6	:
Zinc	mg/kg-dry	T	-		-		105.	:	-		87.5	J	83.1	:
Volatile Organics														
1,1,1-Trichloroethane	mg/kg-dry	T	-		-		-		<0.009	:	<0.006	:	-	
1,1,2,2-Tetrachloroethane	mg/kg-dry	T	-		-		-		<0.009	:	<0.006	:	-	
1,1,2-Trichloro-1,2,2-trifluoroethane	mg/kg-dry	T	-		-		-		<0.009	:	<0.006	:	-	
1,1,2-Trichloroethane	mg/kg-dry	T	-		-		-		<0.009	:	<0.006	:	-	
1,1-Dichloroethane	mg/kg-dry	T	-		-		-		<0.009	:	<0.006	:	-	
1,1-Dichloroethene	mg/kg-dry	T	-		-		-		<0.009	:	<0.006	:	-	
1,2,4-Trichlorobenzene	mg/kg-dry	T	-		-		-		<0.009	:	<0.006	:	-	
1,2-Dibromo-3-chloropropane	mg/kg-dry	T	-		-		-		<0.009	:	<0.006	:	-	
1,2-Dichlorobenzene	mg/kg-dry	T	-		-		-		<0.009	:	<0.006	:	-	
1,2-Dichloroethane	mg/kg-dry	T	-		-		-		<0.009	:	<0.006	:	-	
1,2-Dichloroethene (total)	mg/kg-dry	T	-		-		-		<0.009	:	<0.006	:	-	
1,2-Dichloropropane	mg/kg-dry	T	-		-		-		<0.009	:	<0.006	:	-	
1,3-Dichlorobenzene	mg/kg-dry	T	-		-		-		<0.009	:	<0.006	:	-	
1,4-Dichlorobenzene	mg/kg-dry	T	-		-		-		<0.009	:	<0.006	:	-	
2-Butanone	mg/kg-dry	T	-		-		-		<0.009	:	<0.006	:	-	
2-Hexanone	mg/kg-dry	T	-		-		-		<0.009	:	<0.006	:	-	
4-Methyl-2-pentanone	mg/kg-dry	T	-		-		-		<0.009	:	<0.006	:	-	
Acetone	mg/kg-dry	T	-		-		-		0.002	J	0.004	J	-	
Benzene	mg/kg-dry	T	-		-		-		<0.009	:	<0.006	:	-	
Bromodichloromethane	mg/kg-dry	T	-		-		-		<0.009	:	<0.006	:	-	
Bromoform	mg/kg-dry	T	-		-		-		<0.009	:	<0.006	:	-	
Bromomethane	mg/kg-dry	T	-		-		-		<0.009	:	<0.006	:	-	
Carbon disulfide	mg/kg-dry	T	-		-		-		<0.009	:	<0.006	:	-	

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T = Total Fraction

Appendix A-7a
Soil - Biased 0-6 inches
Validated Analytical Results

Parameter	Units	Site ID / Sample Date / Sample ID / Exposure Area / Fraction	MSS1-19 10/17/2002 MSS1-19-T01N-SOLRE SS1	MSS1-19 10/17/2002 MSS1-19-T01N-SOLDL SS1	MSS1-19 10/17/2002 MSS1-19-T01N-SOL SS1	MSS1-19 10/22/2002 MSS1-19-T01N-SOL SS1	MSS1-20R 10/17/2002 MSS1-20-T01N-SOL SS1	MSS1-20R 1/7/2003 MSS1-20R-T01N-SOL SS1
Carbon tetrachloride	mg/kg-dry	T	-	-	-	<0.009 :	<0.006 :	-
Chlorobenzene	mg/kg-dry	T	-	-	-	<0.009 :	<0.006 :	-
Chloroethane	mg/kg-dry	T	-	-	-	<0.009 :	<0.006 :	-
Chloroform	mg/kg-dry	T	-	-	-	<0.009 :	<0.006 :	-
Chloromethane	mg/kg-dry	T	-	-	-	<0.009 :	<0.006 :	-
cis-1,2-Dichloroethene	mg/kg-dry	T	-	-	-	<0.009 :	<0.006 :	-
cis-1,3-Dichloropropene	mg/kg-dry	T	-	-	-	<0.009 :	<0.006 :	-
Dibromochloromethane	mg/kg-dry	T	-	-	-	<0.009 :	<0.006 :	-
Dichlorodifluoromethane	mg/kg-dry	T	-	-	-	<0.009 :	<0.006 :	-
Ethylbenzene	mg/kg-dry	T	-	-	-	<0.009 :	<0.006 :	-
Methylene chloride	mg/kg-dry	T	-	-	-	<0.009 :	<0.006 :	-
Styrene	mg/kg-dry	T	-	-	-	<0.009 :	<0.006 :	-
Tetrachloroethene	mg/kg-dry	T	-	-	-	<0.009 :	<0.006 :	-
Toluene	mg/kg-dry	T	-	-	-	<0.009 :	<0.006 :	-
Total Xylene	mg/kg-dry	T	-	-	-	0.001 J	0.001 J	-
trans-1,2-Dichloroethene	mg/kg-dry	T	-	-	-	<0.009 :	<0.006 :	-
trans-1,3-Dichloropropene	mg/kg-dry	T	-	-	-	<0.009 :	<0.006 :	-
Trichloroethene	mg/kg-dry	T	-	-	-	<0.009 :	<0.006 :	-
Trichlorofluoromethane	mg/kg-dry	T	-	-	-	<0.009 :	<0.006 :	-
Vinyl chloride	mg/kg-dry	T	-	-	-	<0.009 :	<0.006 :	-
Semi-Volatile Organics								
1,1`-Biphenyl	mg/kg-dry	T	<0.35 :	-	-	-	<0.35 :	<0.36 :
2,4,5-Trichlorophenol	mg/kg-dry	T	<0.87 :	-	-	-	<0.88 :	<0.9 :
2,4,6-Trichlorophenol	mg/kg-dry	T	<0.35 :	-	-	-	<0.35 :	<0.36 :
2,4-Dichlorophenol	mg/kg-dry	T	<0.35 :	-	-	-	<0.35 :	<0.36 :
2,4-Dimethylphenol	mg/kg-dry	T	<0.35 :	-	-	-	<0.35 :	<0.36 :
2,4-Dinitrophenol	mg/kg-dry	T	<0.87 :	-	-	-	<0.88 :	<0.9 :
2,4-Dinitrotoluene	mg/kg-dry	T	<0.35 :	-	-	-	<0.35 :	<0.36 :
2,6-Dinitrotoluene	mg/kg-dry	T	<0.35 :	-	-	-	<0.35 :	<0.36 :
2-Chloronaphthalene	mg/kg-dry	T	<0.35 :	-	-	-	<0.35 :	<0.36 :
2-Chlorophenol	mg/kg-dry	T	<0.35 :	-	-	-	<0.35 :	<0.36 :
2-Methylnaphthalene	mg/kg-dry	T	<0.35 :	-	-	-	<0.35 :	<0.36 :
2-Methylphenol	mg/kg-dry	T	<0.35 :	-	-	-	<0.35 :	<0.36 :
2-Nitroaniline	mg/kg-dry	T	<0.87 :	-	-	-	<0.88 :	<0.9 :

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Appendix A-7a
Soil - Biased 0-6 inches
Validated Analytical Results

Parameter	Units	Fraction						
		Site ID	MSS1-19	MSS1-19	MSS1-19	MSS1-19	MSS1-20R	MSS1-20R
		Sample Date	10/17/2002	10/17/2002	10/17/2002	10/22/2002	10/17/2002	1/7/2003
		Sample ID	MSS1-19-T01N-SOLRE	MSS1-19-T01N-SOLDL	MSS1-19-T01N-SOL	MSS1-19-T01N-SOL	MSS1-20-T01N-SOL	MSS1-20R-T01N-SOL
		Exposure Area	SS1	SS1	SS1	SS1	SS1	SS1
2-Nitrophenol	mg/kg-dry	T	<0.35 :	-	-	-	<0.35 :	<0.36 :
3,3-Dichlorobenzidine	mg/kg-dry	T	<0.35 J	-	-	-	<0.35 :	<0.36 J
3-Nitroaniline	mg/kg-dry	T	<0.87 :	-	-	-	<0.88 :	<0.9 :
4,6-Dinitro-2-methylphenol	mg/kg-dry	T	<0.87 :	-	-	-	<0.88 J	<0.9 :
4-Bromophenyl phenyl ether	mg/kg-dry	T	<0.35 :	-	-	-	<0.35 :	<0.36 :
4-Chloro-3-methylphenol	mg/kg-dry	T	<0.35 :	-	-	-	<0.35 :	<0.36 :
4-Chloroaniline	mg/kg-dry	T	<0.35 :	-	-	-	<0.35 :	<0.36 :
4-Chlorophenyl phenyl ether	mg/kg-dry	T	<0.35 :	-	-	-	<0.35 :	<0.36 :
4-Methylphenol	mg/kg-dry	T	<0.35 :	-	-	-	<0.35 :	<0.36 :
4-Nitroaniline	mg/kg-dry	T	<0.87 :	-	-	-	<0.88 :	<0.9 :
4-Nitrophenol	mg/kg-dry	T	<0.87 :	-	-	-	<0.88 :	<0.9 :
Acenaphthene	mg/kg-dry	T	<0.35 :	-	-	-	<0.35 :	<0.36 :
Acenaphthylene	mg/kg-dry	T	<0.35 :	-	-	-	<0.35 :	<0.36 :
Anthracene	mg/kg-dry	T	<0.35 :	-	-	-	<0.35 J	<0.36 :
Benzaldehyde	mg/kg-dry	T	<0.35 :	-	-	-	0.056 J	<0.36 J
Benzo(a)anthracene	mg/kg-dry	T	<0.35 J	-	-	-	0.02 J	<0.36 :
Benzo(a)pyrene	mg/kg-dry	T	<0.35 :	-	-	-	<0.35 :	<0.36 :
Benzo(b)fluoranthene	mg/kg-dry	T	<0.35 :	-	-	-	<0.35 :	<0.36 :
Benzo(g,h,i)perylene	mg/kg-dry	T	<0.35 :	-	-	-	<0.35 :	<0.36 :
Benzo(k)fluoranthene	mg/kg-dry	T	<0.35 :	-	-	-	<0.35 J	<0.36 :
Bis(2-chloroethoxy)methane	mg/kg-dry	T	<0.35 :	-	-	-	<0.35 :	<0.36 :
Bis(2-chloroethyl)ether	mg/kg-dry	T	<0.35 :	-	-	-	<0.35 :	<0.36 :
Bis(2-ethylhexyl)phthalate	mg/kg-dry	T	0.074 J	-	-	-	0.062 J	0.063 J
Butyl benzyl phthalate	mg/kg-dry	T	<0.35 J	-	-	-	<0.35 J	<0.36 :
Carbazole	mg/kg-dry	T	<0.35 :	-	-	-	<0.35 :	<0.36 :
Chrysene	mg/kg-dry	T	0.022 J	-	-	-	0.028 J	0.02 J
Dibenz(a,h)anthracene	mg/kg-dry	T	<0.35 :	-	-	-	<0.35 :	<0.36 :
Dibenzofuran	mg/kg-dry	T	<0.35 :	-	-	-	<0.35 :	<0.36 :
Dichlorodiisopropyl ether	mg/kg-dry	T	<0.35 :	-	-	-	<0.35 :	<0.36 :
Diethylphthalate	mg/kg-dry	T	<0.35 :	-	-	-	<0.35 :	<0.36 :
Dimethylphthalate	mg/kg-dry	T	<0.35 :	-	-	-	<0.35 :	<0.36 :
Di-n-Butyl phthalate	mg/kg-dry	T	<0.35 :	-	-	-	0.017 J	0.017 J
Di-n-Octyl phthalate	mg/kg-dry	T	<0.35 :	-	-	-	<0.35 :	<0.36 :
Fluoranthene	mg/kg-dry	T	<0.35 :	-	-	-	0.023 J	0.022 J

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T = Total Fraction

Appendix A-7a
Soil - Biased 0-6 inches
Validated Analytical Results

Parameter	Units	Exposure Area Fraction	Site ID / Sample Date / Sample ID / Exposure Area					
			MSS1-19 10/17/2002 MSS1-19-T01N-SOLRE SS1	MSS1-19 10/17/2002 MSS1-19-T01N-SOLDL SS1	MSS1-19 10/17/2002 MSS1-19-T01N-SOL SS1	MSS1-19 10/22/2002 MSS1-19-T01N-SOL SS1	MSS1-20R 10/17/2002 MSS1-20-T01N-SOL SS1	MSS1-20R 1/7/2003 MSS1-20R-T01N-SOL SS1
Fluorene	mg/kg-dry	T	<0.35 :	-	-	-	<0.35 :	<0.36 :
Hexachlorobenzene	mg/kg-dry	T	<0.35 :	-	-	-	<0.35 :	<0.36 :
Hexachlorobutadiene	mg/kg-dry	T	<0.35 :	-	-	-	<0.35 :	<0.36 :
Hexachlorocyclopentadiene	mg/kg-dry	T	<0.35 :	-	-	-	<0.35 :	<0.36 :
Hexachloroethane	mg/kg-dry	T	<0.35 :	-	-	-	<0.35 :	<0.36 :
Indeno(1,2,3-cd)pyrene	mg/kg-dry	T	<0.35 :	-	-	-	<0.35 :	<0.36 :
Isophorone	mg/kg-dry	T	<0.35 :	-	-	-	<0.35 :	<0.36 :
Naphthalene	mg/kg-dry	T	<0.35 :	-	-	-	<0.35 :	<0.36 :
Nitrobenzene	mg/kg-dry	T	<0.35 :	-	-	-	<0.35 :	<0.36 :
N-Nitrosodi-n-propylamine	mg/kg-dry	T	<0.35 :	-	-	-	<0.35 :	<0.36 :
N-Nitrosodiphenylamine	mg/kg-dry	T	<0.35 :	-	-	-	<0.35 :	<0.36 :
Pentachlorophenol	mg/kg-dry	T	<0.87 :	-	-	-	<0.88 :	<0.9 :
Phenanthrene	mg/kg-dry	T	<0.35 :	-	-	-	<0.35 :	<0.36 :
Phenol	mg/kg-dry	T	<0.35 :	-	-	-	<0.35 :	<0.36 :
Pyrene	mg/kg-dry	T	<0.35 J	-	-	-	0.019 J	0.024 J
Pesticides-PCBs								
Aroclor 1016	mg/kg-dry	T	-	-	<0.17 J	-	-	<0.036 :
Aroclor 1221	mg/kg-dry	T	-	-	<0.35 J	-	-	<0.073 :
Aroclor 1232	mg/kg-dry	T	-	-	<0.17 J	-	-	<0.036 :
Aroclor 1242	mg/kg-dry	T	-	-	<0.17 J	-	-	<0.036 :
Aroclor 1248	mg/kg-dry	T	-	5.5 J	-	-	-	1.3 J
Aroclor 1254	mg/kg-dry	T	-	-	<0.17 J	-	-	<0.036 :
Aroclor 1260	mg/kg-dry	T	-	-	<0.17 J	-	-	<0.036 :

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Appendix A-7a
Soil - Biased 0-6 inches
Validated Analytical Results

Parameter	Units	Fraction	Site ID: MSS1-20R Sample Date: 1/8/2003 Sample ID: MSS1-20R-T01N-SOL Exposure Area: SS1	MSS1-21 10/17/2002 MSS1-21-T01N-SOL SS1	MSS1-22 10/17/2002 MSS1-22-T01N-SOL SS1	MSS1-23 10/17/2002 MSS1-23-T01N-SOL SS1	MSS1-26 10/17/2002 MSS1-26-T01N-SOL SS1	MSS1-27R 10/17/2002 MSS1-27-T01N-SOL SS1
General Chemistry								
Ammonia	mg/kg-dry	T	-	15. :	<7.7 :	31.5 :	<7.9 J	-
Chloride	mg/kg-dry	T	-	5.1 J	3.2 J	436. J	128. J	-
Fluoride	mg/kg-dry	T	-	1.7 J	0.97 J	1.4 J	0.95 :	-
Nitrate	mg/kg-dry	T	-	2.7 J	2.2 J	14.8 J	25.2 J	-
Phosphorus	mg/kg-dry	T	-	265. J	679. J	1060. J	793. J	-
Sulfate	mg/kg-dry	T	-	40.7 J	13.6 J	536. J	1470. J	-
Total Kjeldahl Nitrogen	mg/kg-dry	T	-	230. :	78.2 :	164. :	109. :	-
Total Organic Carbon	mg/kg-dry	T	-	3940. J	1380. J	4610. J	2780. J	-
Laboratory Parameters								
pH	SU	T	-	8.4 :	9.1 :	7.7 :	8.1 :	-
Solids, Percent	%	T	90.3 :	95.8 :	96.1 :	94.9 :	97.3 :	88.8 :
Specific Conductance	umhos/cm	T	-	65.2 :	57.7 :	837. :	579. :	-
Geotechnical								
Organic Soils	%	T	-	2.89 J	2.47 J	2.5 J	1.58 J	-
Physical Properties								
Cation-Exchange Capacity	meq/100g	T	-	9.5 :	9.6 :	16.5 :	7.6 :	-
Sodium Absorption Ratio	ratio	T	-	0.84 :	4.56 :	4.41 :	1.69 :	-
Metals								
Aluminum	mg/kg-dry	T	-	12200. :	13100. J	14400. :	11500. :	-
Antimony	mg/kg-dry	T	-	<0.24 J	<0.23 J	<0.24 J	<0.21 J	-
Arsenic	mg/kg-dry	T	-	4.5 :	4.3 :	4.6 :	3.2 J	-
Barium	mg/kg-dry	T	-	152. :	66.5 J	108. :	86.5 :	-
Beryllium	mg/kg-dry	T	-	0.91 :	1.1 J	1.2 :	0.98 :	-
Boron	mg/kg-dry	T	-	<1.5 J	<1.7 J	<2.2 :	<0.89 J	-
Cadmium	mg/kg-dry	T	-	0.37 J	0.5 J	0.4 J	0.79 :	-
Calcium	mg/kg-dry	T	-	8030. :	15700. J	14400. :	11300. :	-
Chromium	mg/kg-dry	T	-	35.1 :	33.7 J	50.8 :	36.4 :	-
Cobalt	mg/kg-dry	T	-	11.3 :	14.5 J	15.8 :	11.3 :	-
Copper	mg/kg-dry	T	-	68.5 :	89.6 J	95.2 :	102. :	-
Iron	mg/kg-dry	T	-	23500. :	22400. J	27800. :	20800. :	-
Lead	mg/kg-dry	T	-	73.5 :	67.5 J	83.8 :	91.1 :	-
Magnesium	mg/kg-dry	T	-	7940. :	9180. J	10800. :	7300. :	-
Manganese	mg/kg-dry	T	-	751. J	908. J	933. J	850. J	-

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Appendix A-7a
Soil - Biased 0-6 inches
Validated Analytical Results

Parameter	Units	Exposure Area Fraction	Site ID / Sample Date / Sample ID		MSS1-20R 1/8/2003 MSS1-20R-T01N-SOL SS1		MSS1-21 10/17/2002 MSS1-21-T01N-SOL SS1		MSS1-22 10/17/2002 MSS1-22-T01N-SOL SS1		MSS1-23 10/17/2002 MSS1-23-T01N-SOL SS1		MSS1-26 10/17/2002 MSS1-26-T01N-SOL SS1		MSS1-27R 10/17/2002 MSS1-27-T01N-SOL SS1	
Mercury	mg/kg-dry	T		-		0.056	:	0.21	:	0.022	:	<0.015	:	-	
Molybdenum	mg/kg-dry	T		-		201.	:	126.	J	508.	:	598.	:	-	
Nickel	mg/kg-dry	T		-		28.1	J	27.	J	36.2	J	26.9	J	-	
Potassium	mg/kg-dry	T		-		2510.	J	2690.	J	3380.	J	2770.	J	-	
Selenium	mg/kg-dry	T		-		<0.65	J	<0.61	J	0.81	J	0.62	J	-	
Silver	mg/kg-dry	T		-		0.33	J	0.2	J	0.61	:	0.79	J	-	
Sodium	mg/kg-dry	T		-		<205.	:	<362.	:	611.	:	575.	:	-	
Thallium	mg/kg-dry	T		-		0.22	:	0.29	:	0.3	:	0.23	:	-	
Vanadium	mg/kg-dry	T		-		38.9	:	40.	J	54.	:	41.5	:	-	
Zinc	mg/kg-dry	T		-		126.	J	127.	J	146.	J	160.	J	-	
Volatile Organics															
1,1,1-Trichloroethane	mg/kg-dry	T		<0.01	:	<0.004	:	<0.008	:	<0.009	:	<0.009	:	-	
1,1,2,2-Tetrachloroethane	mg/kg-dry	T		<0.01	:	<0.004	:	<0.008	:	<0.009	:	<0.009	:	-	
1,1,2-Trichloro-1,2,2-trifluoroethane	mg/kg-dry	T		<0.01	:	<0.004	:	<0.008	:	<0.009	:	<0.009	:	-	
1,1,2-Trichloroethane	mg/kg-dry	T		<0.01	:	<0.004	:	<0.008	:	<0.009	:	<0.009	:	-	
1,1-Dichloroethane	mg/kg-dry	T		<0.01	:	<0.004	:	<0.008	:	<0.009	:	<0.009	:	-	
1,1-Dichloroethene	mg/kg-dry	T		<0.01	:	<0.004	:	<0.008	:	<0.009	:	<0.009	:	-	
1,2,4-Trichlorobenzene	mg/kg-dry	T		<0.01	:	<0.004	:	<0.008	:	<0.009	:	<0.009	:	-	
1,2-Dibromo-3-chloropropane	mg/kg-dry	T		<0.01	:	<0.004	:	<0.008	:	<0.009	:	<0.009	:	-	
1,2-Dichlorobenzene	mg/kg-dry	T		<0.01	:	<0.004	:	<0.008	:	<0.009	:	<0.009	:	-	
1,2-Dichloroethane	mg/kg-dry	T		<0.01	:	<0.004	:	<0.008	:	<0.009	:	<0.009	:	-	
1,2-Dichloroethene (total)	mg/kg-dry	T		<0.01	:	<0.004	:	<0.008	:	<0.009	:	<0.009	:	-	
1,2-Dichloropropane	mg/kg-dry	T		<0.01	:	<0.004	:	<0.008	:	<0.009	:	<0.009	:	-	
1,3-Dichlorobenzene	mg/kg-dry	T		<0.01	:	<0.004	:	<0.008	:	<0.009	:	<0.009	:	-	
1,4-Dichlorobenzene	mg/kg-dry	T		<0.01	:	<0.004	:	<0.008	:	<0.009	:	<0.009	:	-	
2-Butanone	mg/kg-dry	T		0.003	J	<0.004	:	<0.008	:	<0.009	:	<0.009	:	-	
2-Hexanone	mg/kg-dry	T		<0.01	:	<0.004	:	<0.008	:	<0.009	:	<0.009	:	-	
4-Methyl-2-pentanone	mg/kg-dry	T		0.002	J	<0.004	:	<0.008	:	<0.009	:	<0.009	:	-	
Acetone	mg/kg-dry	T		0.02	:	<0.004	:	0.001	J	0.003	J	0.002	J	-	
Benzene	mg/kg-dry	T		<0.01	:	<0.004	:	<0.008	:	<0.009	:	<0.009	:	-	
Bromodichloromethane	mg/kg-dry	T		<0.01	:	<0.004	:	<0.008	:	<0.009	:	<0.009	:	-	
Bromoform	mg/kg-dry	T		<0.01	:	<0.004	:	<0.008	:	<0.009	:	<0.009	:	-	
Bromomethane	mg/kg-dry	T		<0.01	J	<0.004	:	<0.008	J	<0.009	:	<0.009	J	-	
Carbon disulfide	mg/kg-dry	T		0.002	J	<0.004	:	<0.008	:	<0.009	:	<0.009	:	-	

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Appendix A-7a
Soil - Biased 0-6 inches
Validated Analytical Results

Parameter	Units	Exposure Area Fraction	Site ID / Sample Date / Sample ID		MSS1-20R 1/8/2003 MSS1-20R-T01N-SOL SS1		MSS1-21 10/17/2002 MSS1-21-T01N-SOL SS1		MSS1-22 10/17/2002 MSS1-22-T01N-SOL SS1		MSS1-23 10/17/2002 MSS1-23-T01N-SOL SS1		MSS1-26 10/17/2002 MSS1-26-T01N-SOL SS1		MSS1-27R 10/17/2002 MSS1-27-T01N-SOL SS1	
Carbon tetrachloride	mg/kg-dry	T		<0.01	:	<0.004	:	<0.008	:	<0.009	:	<0.009	:	-	
Chlorobenzene	mg/kg-dry	T		<0.01	:	<0.004	:	<0.008	:	<0.009	:	<0.009	:	-	
Chloroethane	mg/kg-dry	T		<0.01	:	<0.004	:	<0.008	:	<0.009	:	<0.009	:	-	
Chloroform	mg/kg-dry	T		<0.01	:	<0.004	:	<0.008	:	<0.009	:	<0.009	:	-	
Chloromethane	mg/kg-dry	T		<0.01	:	<0.004	J	<0.008	J	<0.009	:	<0.009	J	-	
cis-1,2-Dichloroethene	mg/kg-dry	T		<0.01	:	<0.004	:	<0.008	:	<0.009	:	<0.009	:	-	
cis-1,3-Dichloropropene	mg/kg-dry	T		<0.01	:	<0.004	:	<0.008	:	<0.009	:	<0.009	:	-	
Dibromochloromethane	mg/kg-dry	T		<0.01	:	<0.004	:	<0.008	:	<0.009	:	<0.009	:	-	
Dichlorodifluoromethane	mg/kg-dry	T		<0.01	:	<0.004	J	<0.008	J	<0.009	:	<0.009	J	-	
Ethylbenzene	mg/kg-dry	T		0.004	J	<0.004	:	<0.008	:	0.007	J	<0.009	:	-	
Methylene chloride	mg/kg-dry	T		<0.01	:	<0.004	:	<0.008	:	<0.009	:	<0.009	:	-	
Styrene	mg/kg-dry	T		<0.01	:	<0.004	:	<0.008	:	<0.009	:	<0.009	:	-	
Tetrachloroethene	mg/kg-dry	T		<0.01	:	<0.004	:	<0.008	:	<0.009	:	<0.009	:	-	
Toluene	mg/kg-dry	T		<0.01	:	<0.004	:	<0.008	:	0.001	J	<0.009	:	-	
Total Xylene	mg/kg-dry	T		0.022	:	<0.004	:	<0.008	:	0.051	:	<0.009	:	-	
trans-1,2-Dichloroethene	mg/kg-dry	T		<0.01	:	<0.004	:	<0.008	:	<0.009	:	<0.009	:	-	
trans-1,3-Dichloropropene	mg/kg-dry	T		<0.01	:	<0.004	:	<0.008	:	<0.009	:	<0.009	:	-	
Trichloroethene	mg/kg-dry	T		<0.01	:	<0.004	:	<0.008	:	<0.009	:	<0.009	:	-	
Trichlorofluoromethane	mg/kg-dry	T		<0.01	:	<0.004	:	<0.008	:	<0.009	:	<0.009	:	-	
Vinyl chloride	mg/kg-dry	T		<0.01	:	<0.004	:	<0.008	J	<0.009	:	<0.009	J	-	
Semi-Volatile Organics															
1,1`-Biphenyl	mg/kg-dry	T		-		<0.34	J	<0.34	J	<0.35	:	<0.34	J	-	
2,4,5-Trichlorophenol	mg/kg-dry	T		-		<0.86	:	<0.86	:	<0.87	:	<0.86	:	-	
2,4,6-Trichlorophenol	mg/kg-dry	T		-		<0.34	:	<0.34	:	<0.35	:	<0.34	:	-	
2,4-Dichlorophenol	mg/kg-dry	T		-		<0.34	:	<0.34	:	<0.35	:	<0.34	:	-	
2,4-Dimethylphenol	mg/kg-dry	T		-		<0.34	:	<0.34	:	<0.35	:	<0.34	:	-	
2,4-Dinitrophenol	mg/kg-dry	T		-		<0.86	:	<0.86	:	<0.87	:	<0.86	:	-	
2,4-Dinitrotoluene	mg/kg-dry	T		-		<0.34	:	<0.34	:	<0.35	:	<0.34	:	-	
2,6-Dinitrotoluene	mg/kg-dry	T		-		<0.34	:	<0.34	:	<0.35	:	<0.34	:	-	
2-Chloronaphthalene	mg/kg-dry	T		-		<0.34	:	<0.34	:	<0.35	:	<0.34	:	-	
2-Chlorophenol	mg/kg-dry	T		-		<0.34	:	<0.34	:	<0.35	:	<0.34	:	-	
2-Methylnaphthalene	mg/kg-dry	T		-		<0.34	:	<0.34	:	<0.35	:	<0.34	:	-	
2-Methylphenol	mg/kg-dry	T		-		<0.34	:	<0.34	:	<0.35	:	<0.34	:	-	
2-Nitroaniline	mg/kg-dry	T		-		<0.86	:	<0.86	:	<0.87	:	<0.86	:	-	

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Appendix A-7a
Soil - Biased 0-6 inches
Validated Analytical Results

Parameter	Units	Exposure Area Fraction	Site ID	MSS1-20R	MSS1-21	MSS1-22	MSS1-23	MSS1-26	MSS1-27R
			Sample Date	1/8/2003	10/17/2002	10/17/2002	10/17/2002	10/17/2002	10/17/2002
			Sample ID	MSS1-20R-T01N-SOL	MSS1-21-T01N-SOL	MSS1-22-T01N-SOL	MSS1-23-T01N-SOL	MSS1-26-T01N-SOL	MSS1-27-T01N-SOL
			Exposure Area	SS1	SS1	SS1	SS1	SS1	SS1
2-Nitrophenol	mg/kg-dry	T		-	<0.34 :	<0.34 :	<0.35 :	<0.34 :	-
3,3-Dichlorobenzidine	mg/kg-dry	T		-	<0.34 :	<0.34 :	<0.35 :	<0.34 :	-
3-Nitroaniline	mg/kg-dry	T		-	<0.86 :	<0.86 :	<0.87 :	<0.86 :	-
4,6-Dinitro-2-methylphenol	mg/kg-dry	T		-	<0.86 :	<0.86 :	<0.87 J	<0.86 :	-
4-Bromophenyl phenyl ether	mg/kg-dry	T		-	<0.34 :	<0.34 :	<0.35 :	<0.34 :	-
4-Chloro-3-methylphenol	mg/kg-dry	T		-	<0.34 :	<0.34 :	<0.35 :	<0.34 :	-
4-Chloroaniline	mg/kg-dry	T		-	<0.34 :	<0.34 :	<0.35 :	<0.34 :	-
4-Chlorophenyl phenyl ether	mg/kg-dry	T		-	<0.34 :	<0.34 :	<0.35 :	<0.34 :	-
4-Methylphenol	mg/kg-dry	T		-	<0.34 :	<0.34 :	<0.35 :	<0.34 :	-
4-Nitroaniline	mg/kg-dry	T		-	<0.86 :	<0.86 :	<0.87 :	<0.86 :	-
4-Nitrophenol	mg/kg-dry	T		-	<0.86 :	<0.86 :	<0.87 :	<0.86 :	-
Acenaphthene	mg/kg-dry	T		-	<0.34 :	<0.34 :	<0.35 :	<0.34 :	-
Acenaphthylene	mg/kg-dry	T		-	<0.34 :	<0.34 :	<0.35 :	<0.34 :	-
Anthracene	mg/kg-dry	T		-	<0.34 J	<0.34 J	<0.35 J	<0.34 J	-
Benzaldehyde	mg/kg-dry	T		-	<0.34 J	<0.34 J	0.048 J	<0.34 J	-
Benzo(a)anthracene	mg/kg-dry	T		-	<0.34 :	<0.34 :	0.03 J	<0.34 :	-
Benzo(a)pyrene	mg/kg-dry	T		-	<0.34 :	<0.34 :	0.021 J	<0.34 :	-
Benzo(b)fluoranthene	mg/kg-dry	T		-	<0.34 :	<0.34 :	0.026 J	<0.34 :	-
Benzo(g,h,i)perylene	mg/kg-dry	T		-	<0.34 :	<0.34 :	<0.35 :	<0.34 :	-
Benzo(k)fluoranthene	mg/kg-dry	T		-	<0.34 :	0.018 J	0.024 J	<0.34 :	-
Bis(2-chloroethoxy)methane	mg/kg-dry	T		-	<0.34 :	<0.34 :	<0.35 :	<0.34 :	-
Bis(2-chloroethyl)ether	mg/kg-dry	T		-	<0.34 :	<0.34 :	<0.35 :	<0.34 :	-
Bis(2-ethylhexyl)phthalate	mg/kg-dry	T		-	0.032 J	0.058 J	0.083 J	0.049 J	-
Butyl benzyl phthalate	mg/kg-dry	T		-	<0.34 :	0.024 J	<0.35 J	<0.34 :	-
Carbazole	mg/kg-dry	T		-	<0.34 :	<0.34 :	<0.35 :	<0.34 :	-
Chrysene	mg/kg-dry	T		-	<0.34 :	0.019 J	0.032 J	<0.34 :	-
Dibenz(a,h)anthracene	mg/kg-dry	T		-	<0.34 J	<0.34 J	<0.35 :	<0.34 J	-
Dibenzofuran	mg/kg-dry	T		-	<0.34 :	<0.34 :	<0.35 :	<0.34 :	-
Dichlorodiisopropyl ether	mg/kg-dry	T		-	<0.34 :	<0.34 :	<0.35 :	<0.34 :	-
Diethylphthalate	mg/kg-dry	T		-	<0.34 :	<0.34 :	<0.35 :	<0.34 :	-
Dimethylphthalate	mg/kg-dry	T		-	<0.34 :	<0.34 :	<0.35 :	<0.34 :	-
Di-n-Butyl phthalate	mg/kg-dry	T		-	<0.34 :	0.027 J	<0.35 :	<0.34 :	-
Di-n-Octyl phthalate	mg/kg-dry	T		-	<0.34 :	0.016 J	<0.35 :	<0.34 :	-
Fluoranthene	mg/kg-dry	T		-	<0.34 :	<0.34 :	0.038 J	<0.34 :	-

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Appendix A-7a
Soil - Biased 0-6 inches
Validated Analytical Results

Parameter	Units	Exposure Area Fraction	Site ID / Sample Date / Sample ID		MSS1-20R 1/8/2003 MSS1-20R-T01N-SOL SS1		MSS1-21 10/17/2002 MSS1-21-T01N-SOL SS1		MSS1-22 10/17/2002 MSS1-22-T01N-SOL SS1		MSS1-23 10/17/2002 MSS1-23-T01N-SOL SS1		MSS1-26 10/17/2002 MSS1-26-T01N-SOL SS1		MSS1-27R 10/17/2002 MSS1-27-T01N-SOL SS1	
Fluorene	mg/kg-dry	T		-	<0.34	:	<0.34	:	<0.35	:	<0.34	:	-	
Hexachlorobenzene	mg/kg-dry	T		-	<0.34	:	<0.34	:	<0.35	:	<0.34	:	-	
Hexachlorobutadiene	mg/kg-dry	T		-	<0.34	:	<0.34	:	<0.35	:	<0.34	:	-	
Hexachlorocyclopentadiene	mg/kg-dry	T		-	<0.34	:	<0.34	:	<0.35	:	<0.34	:	-	
Hexachloroethane	mg/kg-dry	T		-	<0.34	:	<0.34	:	<0.35	:	<0.34	:	-	
Indeno(1,2,3-cd)pyrene	mg/kg-dry	T		-	<0.34	:	<0.34	:	<0.35	:	<0.34	:	-	
Isophorone	mg/kg-dry	T		-	<0.34	:	<0.34	:	<0.35	:	<0.34	:	-	
Naphthalene	mg/kg-dry	T		-	<0.34	:	<0.34	:	<0.35	:	<0.34	:	-	
Nitrobenzene	mg/kg-dry	T		-	<0.34	:	<0.34	:	<0.35	:	<0.34	:	-	
N-Nitrosodi-n-propylamine	mg/kg-dry	T		-	<0.34	:	<0.34	:	<0.35	:	<0.34	:	-	
N-Nitrosodiphenylamine	mg/kg-dry	T		-	<0.34	:	<0.34	:	<0.35	:	<0.34	:	-	
Pentachlorophenol	mg/kg-dry	T		-	<0.86	:	<0.86	:	<0.87	:	<0.86	:	-	
Phenanthrene	mg/kg-dry	T		-	<0.34	:	<0.34	:	<0.35	:	<0.34	:	-	
Phenol	mg/kg-dry	T		-	<0.34	:	<0.34	:	<0.35	:	<0.34	:	-	
Pyrene	mg/kg-dry	T		-	<0.34	J	0.02	J	0.04	J	<0.34	J	-	
Pesticides-PCBs														
Aroclor 1016	mg/kg-dry	T		-	<0.034	:	-		-		-		-	
Aroclor 1221	mg/kg-dry	T		-	<0.07	:	-		-		-		-	
Aroclor 1232	mg/kg-dry	T		-	<0.034	:	-		-		-		-	
Aroclor 1242	mg/kg-dry	T		-	<0.034	:	-		-		-		-	
Aroclor 1248	mg/kg-dry	T		-	<0.034	:	-		-		-		-	
Aroclor 1254	mg/kg-dry	T		-	0.82	J	-		-		-		-	
Aroclor 1260	mg/kg-dry	T		-	0.39	:	-		-		-		-	

J = Qualified as estimated during data validation
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T = Total Fraction

Appendix A-7a
Soil - Biased 0-6 inches
Validated Analytical Results

Parameter	Units	Exposure Area Fraction	Site ID	MSS1-27R	MSS1-27R	MSS1-28	MSS1-29	MSS1-30	MSS1-31
			Sample Date	1/7/2003	1/8/2003	10/21/2002	10/21/2002	10/21/2002	10/21/2002
			Sample ID	MSS1-27R-T01N-SOL	MSS1-27R-T01N-SOL	MSS1-28-T02N-SOL	MSS1-29-T01N-SOL	MSS1-30-T01N-SOL	MSS1-31-T01N-SOL
			Exposure Area	SS1	SS1	SS1	SS1	SS1	SS1
General Chemistry									
Ammonia	mg/kg-dry	T		4.3 :	-	39.9 :	45.8 :	53.7 :	16.1 :
Chloride	mg/kg-dry	T		250. :	-	<26.7 :	51.8 :	377. :	29.2 :
Fluoride	mg/kg-dry	T		0.79 J	-	1.7 J	2.4 J	2.6 J	1.6 J
Nitrate	mg/kg-dry	T		21.3 J	-	7.5 :	14.8 :	43.7 J	<2.1 J
Phosphorus	mg/kg-dry	T		1090. :	-	725. J	120. J	111. J	741. J
Sulfate	mg/kg-dry	T		856. :	-	2300. :	2140. :	4930. J	1050. J
Total Kjeldahl Nitrogen	mg/kg-dry	T		215. :	-	199. :	342. :	265. :	193. J
Total Organic Carbon	mg/kg-dry	T		3900. J	-	3590. J	5580. J	5550. J	10700. J
Laboratory Parameters									
pH	SU	T		6.6 :	-	7.2 :	7.3 :	7.3 :	7.4 :
Solids, Percent	%	T		92.4 :	95.6 :	93.7 :	93.1 :	96.5 :	97. :
Specific Conductance	umhos/cm	T		1700. :	-	1050. :	1170. :	1710. :	764. :
Geotechnical									
Organic Soils	%	T		1.9 :	-	2.19 J	2.49 J	1.97 J	2.46 J
Physical Properties									
Cation-Exchange Capacity	meq/100g	T		12.1 :	-	16.6 :	18.4 :	12.7 :	2.4 :
Sodium Absorption Ratio	ratio	T		2.75 :	-	0.72 :	0.94 :	1.79 :	0.55 :
Metals									
Aluminum	mg/kg-dry	T		13500. :	-	10300. :	17300. :	14600. :	10500. :
Antimony	mg/kg-dry	T		<0.25 J	-	<0.23 J	<0.25 J	<0.24 J	<0.26 J
Arsenic	mg/kg-dry	T		3.3 J	-	4.7 :	4.8 :	4.3 :	3.7 :
Barium	mg/kg-dry	T		84.7 :	-	165. :	108. :	96.6 :	124. :
Beryllium	mg/kg-dry	T		1. :	-	0.9 :	1.4 :	1.2 :	1. :
Boron	mg/kg-dry	T		3.5 J	-	<2.4 :	3.9 :	3.7 :	2.1 :
Cadmium	mg/kg-dry	T		0.26 J	-	0.91 :	0.96 :	1.9 :	1.5 :
Calcium	mg/kg-dry	T		10800. :	-	7290. :	10100. :	11300. :	7830. :
Chromium	mg/kg-dry	T		55.4 J	-	24.9 :	49.4 :	38.3 :	39.3 :
Cobalt	mg/kg-dry	T		14.3 :	-	7.8 :	14.7 :	10.6 :	10.2 :
Copper	mg/kg-dry	T		87.3 J	-	75.1 :	105. :	96.4 :	95.7 :
Iron	mg/kg-dry	T		26900. :	-	19100. :	28800. :	24400. :	23400. :
Lead	mg/kg-dry	T		84.4 :	-	355. :	107. :	140. :	74.9 :
Magnesium	mg/kg-dry	T		10100. :	-	5510. :	10600. :	8950. :	6950. :
Manganese	mg/kg-dry	T		772. :	-	849. J	1090. J	1170. J	761. J

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T = Total Fraction

Appendix A-7a
Soil - Biased 0-6 inches
Validated Analytical Results

Parameter	Units	Exposure Area Fraction	Site ID	Sample Date	Sample ID	Exposure Area
			MSS1-27R	1/7/2003	MSS1-27R-T01N-SOL	SS1
			MSS1-27R	1/8/2003	MSS1-27R-T01N-SOL	SS1
			MSS1-28	10/21/2002	MSS1-28-T02N-SOL	SS1
			MSS1-29	10/21/2002	MSS1-29-T01N-SOL	SS1
			MSS1-30	10/21/2002	MSS1-30-T01N-SOL	SS1
			MSS1-31	10/21/2002	MSS1-31-T01N-SOL	SS1
Mercury	mg/kg-dry	T	<0.018 :	-	0.076 :	<0.016 :	<0.015 :	<0.016 :
Molybdenum	mg/kg-dry	T	650. :	-	1150. :	502. :	1570. :	1240. :
Nickel	mg/kg-dry	T	36.9 :	-	20.5 J	35.7 J	28.6 J	32.6 J
Potassium	mg/kg-dry	T	3060. J	-	2570. J	3110. J	3180. J	2270. J
Selenium	mg/kg-dry	T	<0.67 J	-	0.94 J	<0.67 J	1.1 J	0.7 J
Silver	mg/kg-dry	T	0.55 :	-	0.98 :	0.92 :	1.6 :	0.63 :
Sodium	mg/kg-dry	T	<354. :	-	175. :	67.9 J	481. :	<134. :
Thallium	mg/kg-dry	T	0.26 :	-	0.19 :	0.27 :	0.23 :	0.21 :
Vanadium	mg/kg-dry	T	53.5 :	-	26.2 :	52.5 :	42.8 :	43. :
Zinc	mg/kg-dry	T	126. :	-	167. J	158. J	242. J	144. J
Volatile Organics								
1,1,1-Trichloroethane	mg/kg-dry	T	-	<0.006 :	<0.013 :	<0.009 :	<0.012 :	<0.008 :
1,1,2,2-Tetrachloroethane	mg/kg-dry	T	-	<0.006 :	<0.013 :	<0.009 :	<0.012 :	<0.008 :
1,1,2-Trichloro-1,2,2-trifluoroethane	mg/kg-dry	T	-	<0.006 :	<0.013 :	<0.009 :	<0.012 :	<0.008 :
1,1,2-Trichloroethane	mg/kg-dry	T	-	<0.006 :	<0.013 :	<0.009 :	<0.012 :	<0.008 :
1,1-Dichloroethane	mg/kg-dry	T	-	<0.006 :	<0.013 :	<0.009 :	<0.012 :	<0.008 :
1,1-Dichloroethene	mg/kg-dry	T	-	<0.006 :	<0.013 :	<0.009 :	<0.012 :	<0.008 :
1,2,4-Trichlorobenzene	mg/kg-dry	T	-	<0.006 :	<0.013 :	<0.009 :	<0.012 :	<0.008 :
1,2-Dibromo-3-chloropropane	mg/kg-dry	T	-	<0.006 :	<0.013 :	<0.009 :	<0.012 :	<0.008 :
1,2-Dichlorobenzene	mg/kg-dry	T	-	<0.006 :	<0.013 :	<0.009 :	<0.012 :	<0.008 :
1,2-Dichloroethane	mg/kg-dry	T	-	<0.006 :	<0.013 :	<0.009 :	<0.012 :	<0.008 :
1,2-Dichloroethene (total)	mg/kg-dry	T	-	<0.006 :	<0.013 :	<0.009 :	<0.012 :	<0.008 :
1,2-Dichloropropane	mg/kg-dry	T	-	<0.006 :	<0.013 :	<0.009 :	<0.012 :	<0.008 :
1,3-Dichlorobenzene	mg/kg-dry	T	-	<0.006 :	<0.013 :	<0.009 :	<0.012 :	<0.008 :
1,4-Dichlorobenzene	mg/kg-dry	T	-	<0.006 :	<0.013 :	<0.009 :	<0.012 :	<0.008 :
2-Butanone	mg/kg-dry	T	-	<0.006 :	<0.013 :	<0.009 :	<0.012 :	0.012 :
2-Hexanone	mg/kg-dry	T	-	<0.006 :	<0.013 :	<0.009 :	<0.012 :	<0.008 :
4-Methyl-2-pentanone	mg/kg-dry	T	-	<0.006 :	<0.013 :	<0.009 :	<0.012 :	<0.008 :
Acetone	mg/kg-dry	T	-	<0.006 :	<0.013 :	<0.009 :	<0.012 :	0.004 J
Benzene	mg/kg-dry	T	-	<0.006 :	<0.013 :	<0.009 :	<0.012 :	<0.008 :
Bromodichloromethane	mg/kg-dry	T	-	<0.006 :	<0.013 :	<0.009 :	<0.012 :	<0.008 :
Bromoform	mg/kg-dry	T	-	<0.006 :	<0.013 :	<0.009 :	<0.012 :	<0.008 :
Bromomethane	mg/kg-dry	T	-	<0.006 :	<0.013 :	<0.009 :	<0.012 :	<0.008 :
Carbon disulfide	mg/kg-dry	T	-	<0.006 :	<0.013 :	<0.009 :	<0.012 :	<0.008 :

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T = Total Fraction

Appendix A-7a
Soil - Biased 0-6 inches
Validated Analytical Results

Parameter	Units	Site ID / Sample Date / Sample ID / Exposure Area / Fraction	MSS1-27R 1/7/2003 MSS1-27R-T01N-SOL SS1		MSS1-27R 1/8/2003 MSS1-27R-T01N-SOL SS1		MSS1-28 10/21/2002 MSS1-28-T02N-SOL SS1		MSS1-29 10/21/2002 MSS1-29-T01N-SOL SS1		MSS1-30 10/21/2002 MSS1-30-T01N-SOL SS1		MSS1-31 10/21/2002 MSS1-31-T01N-SOL SS1	
Carbon tetrachloride	mg/kg-dry	T	-		<0.006	:	<0.013	:	<0.009	:	<0.012	:	<0.008	:
Chlorobenzene	mg/kg-dry	T	-		<0.006	:	<0.013	:	<0.009	:	<0.012	:	<0.008	:
Chloroethane	mg/kg-dry	T	-		<0.006	:	<0.013	:	<0.009	:	<0.012	:	<0.008	:
Chloroform	mg/kg-dry	T	-		<0.006	:	<0.013	:	<0.009	:	<0.012	:	<0.008	:
Chloromethane	mg/kg-dry	T	-		<0.006	:	<0.013	J	<0.009	J	<0.012	J	<0.008	J
cis-1,2-Dichloroethene	mg/kg-dry	T	-		<0.006	:	<0.013	:	<0.009	:	<0.012	:	<0.008	:
cis-1,3-Dichloropropene	mg/kg-dry	T	-		<0.006	:	<0.013	:	<0.009	:	<0.012	:	<0.008	:
Dibromochloromethane	mg/kg-dry	T	-		<0.006	:	<0.013	:	<0.009	:	<0.012	:	<0.008	:
Dichlorodifluoromethane	mg/kg-dry	T	-		<0.006	:	<0.013	J	<0.009	J	<0.012	J	<0.008	J
Ethylbenzene	mg/kg-dry	T	-		<0.006	:	<0.013	:	<0.009	:	<0.012	:	0.002	J
Methylene chloride	mg/kg-dry	T	-		<0.006	:	0.002	J	<0.009	:	<0.012	:	<0.008	:
Styrene	mg/kg-dry	T	-		<0.006	:	<0.013	:	<0.009	:	<0.012	:	<0.008	:
Tetrachloroethene	mg/kg-dry	T	-		<0.006	:	<0.013	:	<0.009	:	<0.012	:	<0.008	:
Toluene	mg/kg-dry	T	-		<0.006	:	<0.013	:	<0.009	:	<0.012	:	<0.008	:
Total Xylene	mg/kg-dry	T	-		0.001	J	<0.013	:	0.001	J	0.001	J	0.013	:
trans-1,2-Dichloroethene	mg/kg-dry	T	-		<0.006	:	<0.013	:	<0.009	:	<0.012	:	<0.008	:
trans-1,3-Dichloropropene	mg/kg-dry	T	-		<0.006	:	<0.013	:	<0.009	:	<0.012	:	<0.008	:
Trichloroethene	mg/kg-dry	T	-		<0.006	:	<0.013	:	<0.009	:	<0.012	:	<0.008	:
Trichlorofluoromethane	mg/kg-dry	T	-		<0.006	:	<0.013	:	<0.009	:	<0.012	:	<0.008	:
Vinyl chloride	mg/kg-dry	T	-		<0.006	:	<0.013	:	<0.009	:	<0.012	:	<0.008	J
Semi-Volatile Organics														
1,1`-Biphenyl	mg/kg-dry	T	<0.36	:	-		<0.35	:	<0.36	:	<0.34	:	<0.34	:
2,4,5-Trichlorophenol	mg/kg-dry	T	<0.9	:	-		<0.88	:	<0.89	:	<0.86	:	<0.86	:
2,4,6-Trichlorophenol	mg/kg-dry	T	<0.36	:	-		<0.35	:	<0.36	:	<0.34	:	<0.34	:
2,4-Dichlorophenol	mg/kg-dry	T	<0.36	:	-		<0.35	:	<0.36	:	<0.34	:	<0.34	:
2,4-Dimethylphenol	mg/kg-dry	T	<0.36	:	-		<0.35	:	<0.36	:	<0.34	:	<0.34	:
2,4-Dinitrophenol	mg/kg-dry	T	<0.9	:	-		<0.88	:	<0.89	:	<0.86	J	<0.86	J
2,4-Dinitrotoluene	mg/kg-dry	T	<0.36	:	-		<0.35	:	<0.36	:	<0.34	:	<0.34	:
2,6-Dinitrotoluene	mg/kg-dry	T	<0.36	:	-		<0.35	:	<0.36	:	<0.34	:	<0.34	:
2-Chloronaphthalene	mg/kg-dry	T	<0.36	:	-		<0.35	:	<0.36	:	<0.34	:	<0.34	:
2-Chlorophenol	mg/kg-dry	T	<0.36	:	-		<0.35	:	<0.36	:	<0.34	:	<0.34	:
2-Methylnaphthalene	mg/kg-dry	T	<0.36	:	-		<0.35	:	<0.36	:	<0.34	:	<0.34	:
2-Methylphenol	mg/kg-dry	T	<0.36	:	-		<0.35	:	<0.36	:	<0.34	:	<0.34	:
2-Nitroaniline	mg/kg-dry	T	<0.9	:	-		<0.88	:	<0.89	:	<0.86	:	<0.86	:

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T = Total Fraction

Appendix A-7a
Soil - Biased 0-6 inches
Validated Analytical Results

Site ID			MSS1-27R		MSS1-27R	MSS1-28		MSS1-29		MSS1-30		MSS1-31	
Sample Date			1/7/2003		1/8/2003	10/21/2002		10/21/2002		10/21/2002		10/21/2002	
Sample ID			MSS1-27R-T01N-SOL		MSS1-27R-T01N-SO L	MSS1-28-T02N-SOL		MSS1-29-T01N-SOL		MSS1-30-T01N-SOL		MSS1-31-T01N-SOL	
Exposure Area			SS1		SS1	SS1		SS1		SS1		SS1	
Parameter	**Units**	**Fraction**											
2-Nitrophenol	mg/kg-dry	T	<0.36	:	-	<0.35	:	<0.36	:	<0.34	:	<0.34	:
3,3-Dichlorobenzidine	mg/kg-dry	T	<0.36	:	-	<0.35	:	<0.36	:	<0.34	:	<0.34	:
3-Nitroaniline	mg/kg-dry	T	<0.9	:	-	<0.88	:	<0.89	:	<0.86	:	<0.86	:
4,6-Dinitro-2-methylphenol	mg/kg-dry	T	<0.9	:	-	<0.88	:	<0.89	:	<0.86	:	<0.86	:
4-Bromophenyl phenyl ether	mg/kg-dry	T	<0.36	:	-	<0.35	:	<0.36	:	<0.34	:	<0.34	:
4-Chloro-3-methylphenol	mg/kg-dry	T	<0.36	:	-	<0.35	:	<0.36	:	<0.34	:	<0.34	:
4-Chloroaniline	mg/kg-dry	T	<0.36	:	-	<0.35	:	<0.36	:	<0.34	:	<0.34	:
4-Chlorophenyl phenyl ether	mg/kg-dry	T	<0.36	:	-	<0.35	:	<0.36	:	<0.34	:	<0.34	:
4-Methylphenol	mg/kg-dry	T	<0.36	:	-	<0.35	:	<0.36	:	<0.34	:	<0.34	:
4-Nitroaniline	mg/kg-dry	T	<0.9	:	-	<0.88	:	<0.89	:	<0.86	:	<0.86	:
4-Nitrophenol	mg/kg-dry	T	<0.9	:	-	<0.88	J	<0.89	J	<0.86	:	<0.86	J
Acenaphthene	mg/kg-dry	T	<0.36	:	-	<0.35	:	<0.36	:	<0.34	:	<0.34	:
Acenaphthylene	mg/kg-dry	T	<0.36	:	-	<0.35	:	<0.36	:	<0.34	:	<0.34	:
Anthracene	mg/kg-dry	T	<0.36	:	-	<0.35	:	<0.36	:	<0.34	:	<0.34	:
Benzaldehyde	mg/kg-dry	T	<0.36	J	-	<0.35	:	<0.36	:	<0.34	:	<0.34	J
Benzo(a)anthracene	mg/kg-dry	T	<0.36	:	-	0.03	J	0.019	J	<0.34	:	<0.34	:
Benzo(a)pyrene	mg/kg-dry	T	<0.36	:	-	0.03	J	<0.36	:	<0.34	:	<0.34	:
Benzo(b)fluoranthene	mg/kg-dry	T	<0.36	:	-	0.025	J	<0.36	:	<0.34	:	<0.34	:
Benzo(g,h,i)perylene	mg/kg-dry	T	<0.36	:	-	0.027	J	<0.36	:	<0.34	:	<0.34	:
Benzo(k)fluoranthene	mg/kg-dry	T	<0.36	:	-	0.038	J	<0.36	:	<0.34	:	<0.34	:
Bis(2-chloroethoxy)methane	mg/kg-dry	T	<0.36	:	-	<0.35	:	<0.36	:	<0.34	:	<0.34	:
Bis(2-chloroethyl)ether	mg/kg-dry	T	<0.36	:	-	<0.35	:	<0.36	:	<0.34	:	<0.34	:
Bis(2-ethylhexyl)phthalate	mg/kg-dry	T	<0.36	:	-	<0.35	:	0.085	J	0.089	J	0.86	:
Butyl benzyl phthalate	mg/kg-dry	T	<0.36	:	-	<0.35	:	<0.36	:	<0.34	:	<0.34	:
Carbazole	mg/kg-dry	T	<0.36	:	-	<0.35	:	<0.36	:	<0.34	:	<0.34	:
Chrysene	mg/kg-dry	T	<0.36	:	-	0.037	J	0.021	J	<0.34	:	<0.34	:
Dibenz(a,h)anthracene	mg/kg-dry	T	<0.36	:	-	<0.35	:	<0.36	:	<0.34	:	<0.34	:
Dibenzofuran	mg/kg-dry	T	<0.36	:	-	<0.35	:	<0.36	:	<0.34	:	<0.34	:
Dichlorodiisopropyl ether	mg/kg-dry	T	<0.36	:	-	<0.35	J	<0.36	J	<0.34	J	<0.34	:
Diethylphthalate	mg/kg-dry	T	<0.36	:	-	<0.35	:	<0.36	:	<0.34	:	<0.34	:
Dimethylphthalate	mg/kg-dry	T	<0.36	:	-	<0.35	:	<0.36	:	<0.34	:	<0.34	:
Di-n-Butyl phthalate	mg/kg-dry	T	<0.36	:	-	<0.35	:	<0.36	:	<0.34	:	0.057	J
Di-n-Octyl phthalate	mg/kg-dry	T	0.031	J	-	<0.35	:	<0.36	:	<0.34	:	<0.34	J
Fluoranthene	mg/kg-dry	T	<0.36	:	-	0.048	J	0.029	J	<0.34	:	<0.34	:

J = Qualified as estimated during data validation
R = Qualified as rejected value from data validation and results are considered unusable for any purpose
T = Total Fraction

Appendix A-7a
Soil - Biased 0-6 inches
Validated Analytical Results

Parameter	Units	Fraction						
		Site ID	MSS1-27R	MSS1-27R	MSS1-28	MSS1-29	MSS1-30	MSS1-31
		Sample Date	1/7/2003	1/8/2003	10/21/2002	10/21/2002	10/21/2002	10/21/2002
		Sample ID	MSS1-27R-T01N-SOL	MSS1-27R-T01N-SO L	MSS1-28-T02N-SOL	MSS1-29-T01N-SOL	MSS1-30-T01N-SOL	MSS1-31-T01N-SOL
		Exposure Area	SS1	SS1	SS1	SS1	SS1	SS1
Fluorene	mg/kg-dry	T	<0.36 :	-	<0.35 :	<0.36 :	<0.34 :	<0.34 :
Hexachlorobenzene	mg/kg-dry	T	<0.36 :	-	<0.35 :	<0.36 :	<0.34 :	<0.34 :
Hexachlorobutadiene	mg/kg-dry	T	<0.36 :	-	<0.35 :	<0.36 :	<0.34 :	<0.34 :
Hexachlorocyclopentadiene	mg/kg-dry	T	<0.36 :	-	<0.35 :	<0.36 :	<0.34 :	<0.34 :
Hexachloroethane	mg/kg-dry	T	<0.36 :	-	<0.35 :	<0.36 :	<0.34 :	<0.34 :
Indeno(1,2,3-cd)pyrene	mg/kg-dry	T	<0.36 :	-	0.022 J	<0.36 :	<0.34 :	<0.34 :
Isophorone	mg/kg-dry	T	<0.36 :	-	<0.35 :	<0.36 :	<0.34 :	<0.34 :
Naphthalene	mg/kg-dry	T	<0.36 :	-	<0.35 :	<0.36 :	<0.34 :	<0.34 :
Nitrobenzene	mg/kg-dry	T	<0.36 :	-	<0.35 :	<0.36 :	<0.34 :	<0.34 :
N-Nitrosodi-n-propylamine	mg/kg-dry	T	<0.36 :	-	<0.35 :	<0.36 :	<0.34 :	<0.34 :
N-Nitrosodiphenylamine	mg/kg-dry	T	<0.36 :	-	<0.35 :	<0.36 :	<0.34 :	<0.34 :
Pentachlorophenol	mg/kg-dry	T	<0.9 :	-	<0.88 J	<0.89 J	<0.86 J	<0.86 :
Phenanthrene	mg/kg-dry	T	<0.36 :	-	0.032 J	0.019 J	<0.34 :	0.017 J
Phenol	mg/kg-dry	T	<0.36 :	-	<0.35 :	<0.36 :	<0.34 :	<0.34 :
Pyrene	mg/kg-dry	T	<0.36 :	-	0.054 J	0.03 J	<0.34 :	0.02 J
Pesticides-PCBs								
Aroclor 1016	mg/kg-dry	T	<0.036 :	-	-	<0.035 :	-	<0.034 :
Aroclor 1221	mg/kg-dry	T	<0.073 :	-	-	<0.072 :	-	<0.069 :
Aroclor 1232	mg/kg-dry	T	<0.036 :	-	-	<0.035 :	-	<0.034 :
Aroclor 1242	mg/kg-dry	T	<0.036 :	-	-	<0.035 :	-	<0.034 :
Aroclor 1248	mg/kg-dry	T	0.22 J	-	-	<0.035 :	-	<0.034 :
Aroclor 1254	mg/kg-dry	T	0.89 :	-	-	0.39 J	-	0.26 J
Aroclor 1260	mg/kg-dry	T	<0.036 :	-	-	0.054 :	-	<0.034 :

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Appendix A-7a
Soil - Biased 0-6 inches
Validated Analytical Results

Parameter	Units	Exposure Area Fraction	Site ID	MSS1-32	MSS1-32	MSS1-33	MSS1-34	MSS1-35	MSS1-35
			Sample Date	10/21/2002	10/21/2002	10/21/2002	10/21/2002	10/22/2002	10/22/2002
			Sample ID	MSS1-32-T01N-SOLD L	MSS1-32-T01N-SOL	MSS1-33-T01N-SOL	MSS1-34-T01N-SOL	MSS1-35-T01N-SOLD L	MSS1-35-T01N-SOL
			Exposure Area	SS1	SS1	SS1	SS1	SS1	SS1
General Chemistry									
Ammonia	mg/kg-dry	T		-	22.6 :	16.3 :	18.7 :	-	16.9 J
Chloride	mg/kg-dry	T		-	61.1 :	291. J	44. :	-	76.6 :
Fluoride	mg/kg-dry	T		-	1.4 J	3.1 J	1.6 J	-	2.5 J
Nitrate	mg/kg-dry	T		-	<2.1 J	8.1 J	4.7 J	-	15.1 J
Phosphorus	mg/kg-dry	T		-	223. J	684. J	516. J	-	818. J
Sulfate	mg/kg-dry	T		-	481. J	357. J	287. J	-	2690. J
Total Kjeldahl Nitrogen	mg/kg-dry	T		-	279. :	168. J	201. J	-	204. :
Total Organic Carbon	mg/kg-dry	T		-	4090. J	5650. J	4630. J	-	3900. J
Laboratory Parameters									
pH	SU	T		-	7.5 :	8.5 :	8.6 :	-	7.5 :
Solids, Percent	%	T		-	94.1 :	91.8 :	94.6 :	-	94. :
Specific Conductance	umhos/cm	T		-	679. :	713. :	343. :	-	1190. :
Geotechnical									
Organic Soils	%	T		-	2.54 J	1.58 J	1.77 J	-	2.1 J
Physical Properties									
Cation-Exchange Capacity	meq/100g	T		-	18.5 :	1.9 :	2. :	-	30.5 J
Sodium Absorption Ratio	ratio	T		-	0.61 :	10.84 :	3.63 :	-	0.65 :
Metals									
Aluminum	mg/kg-dry	T		-	17000. :	7340. :	8170. :	-	15100. :
Antimony	mg/kg-dry	T		-	<0.25 J	<0.26 J	<0.24 J	-	<0.22 J
Arsenic	mg/kg-dry	T		-	5.8 :	4.6 :	3.3 :	-	4.5 :
Barium	mg/kg-dry	T		-	109. :	188. :	60.2 :	-	89.9 :
Beryllium	mg/kg-dry	T		-	1.4 :	0.79 :	1.1 :	-	1.6 J
Boron	mg/kg-dry	T		-	2.9 :	6.7 :	2.3 :	-	<0.21 J
Cadmium	mg/kg-dry	T		-	1.1 :	2.4 :	1.8 :	-	1.3 :
Calcium	mg/kg-dry	T		-	12600. :	10200. :	6450. :	-	13200. :
Chromium	mg/kg-dry	T		-	46.1 :	71.3 :	24.5 :	-	44.4 J
Cobalt	mg/kg-dry	T		-	12.4 :	9.6 :	6.9 :	-	12.4 J
Copper	mg/kg-dry	T		-	96.9 :	298. :	98.9 :	-	112. :
Iron	mg/kg-dry	T		-	27500. :	41200. :	16100. :	-	24000. J
Lead	mg/kg-dry	T		-	117. :	148. :	117. :	-	101. J
Magnesium	mg/kg-dry	T		-	10500. :	5220. :	4410. :	-	9470. :
Manganese	mg/kg-dry	T		-	1000. J	935. J	979. J	-	1090. J

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T = Total Fraction

Appendix A-7a
Soil - Biased 0-6 inches
Validated Analytical Results

Parameter	Units	Exposure Area Fraction	Site ID	MSS1-32	MSS1-32	MSS1-33	MSS1-34	MSS1-35	MSS1-35
			Sample Date	10/21/2002	10/21/2002	10/21/2002	10/21/2002	10/22/2002	10/22/2002
			Sample ID	MSS1-32-T01N-SOLD L	MSS1-32-T01N-SOL	MSS1-33-T01N-SOL	MSS1-34-T01N-SOL	MSS1-35-T01N-SOLD L	MSS1-35-T01N-SOL
			Exposure Area	SS1	SS1	SS1	SS1	SS1	SS1
Mercury	mg/kg-dry	T		-	<0.017 :	0.028 :	<0.017 :	-	<0.016 :
Molybdenum	mg/kg-dry	T		-	1640. :	934. :	451. :	-	1680. :
Nickel	mg/kg-dry	T		-	33. J	60. J	17.4 J	-	33.3 J
Potassium	mg/kg-dry	T		-	3610. J	3210. J	1870. J	-	3610. J
Selenium	mg/kg-dry	T		-	0.95 :	<0.69 J	0.79 J	-	1.1 J
Silver	mg/kg-dry	T		-	1.1 :	1. :	0.99 :	-	1.3 :
Sodium	mg/kg-dry	T		-	182. :	664. :	272. :	-	61.1 J
Thallium	mg/kg-dry	T		-	0.37 :	0.15 :	0.17 :	-	0.32 :
Vanadium	mg/kg-dry	T		-	47.8 :	35.6 :	26.9 :	-	44.2 J
Zinc	mg/kg-dry	T		-	180. J	372. J	218. J	-	184. J
Volatile Organics									
1,1,1-Trichloroethane	mg/kg-dry	T		-	<0.016 :	<0.008 :	<0.01 :	-	<0.024 :
1,1,2,2-Tetrachloroethane	mg/kg-dry	T		-	<0.016 :	<0.008 :	<0.01 :	-	<0.024 :
1,1,2-Trichloro-1,2,2-trifluoroethane	mg/kg-dry	T		-	<0.016 :	<0.008 :	<0.01 :	-	<0.024 :
1,1,2-Trichloroethane	mg/kg-dry	T		-	<0.016 :	<0.008 :	<0.01 :	-	<0.024 :
1,1-Dichloroethane	mg/kg-dry	T		-	<0.016 :	<0.008 :	<0.01 :	-	<0.024 :
1,1-Dichloroethene	mg/kg-dry	T		-	<0.016 :	<0.008 :	<0.01 :	-	<0.024 :
1,2,4-Trichlorobenzene	mg/kg-dry	T		-	<0.016 :	<0.008 :	<0.01 :	-	<0.024 :
1,2-Dibromo-3-chloropropane	mg/kg-dry	T		-	<0.016 :	<0.008 :	<0.01 :	-	<0.024 :
1,2-Dichlorobenzene	mg/kg-dry	T		-	<0.016 :	<0.008 :	<0.01 :	-	<0.024 :
1,2-Dichloroethane	mg/kg-dry	T		-	<0.016 :	<0.008 :	<0.01 :	-	<0.024 :
1,2-Dichloroethene (total)	mg/kg-dry	T		-	<0.016 :	<0.008 :	<0.01 :	-	<0.024 :
1,2-Dichloropropane	mg/kg-dry	T		-	<0.016 :	<0.008 :	<0.01 :	-	<0.024 :
1,3-Dichlorobenzene	mg/kg-dry	T		-	<0.016 :	<0.008 :	<0.01 :	-	<0.024 :
1,4-Dichlorobenzene	mg/kg-dry	T		-	<0.016 :	<0.008 :	<0.01 :	-	<0.024 :
2-Butanone	mg/kg-dry	T		-	<0.016 :	<0.008 :	<0.01 :	-	<0.024 :
2-Hexanone	mg/kg-dry	T		-	<0.016 :	<0.008 :	<0.01 :	-	<0.024 :
4-Methyl-2-pentanone	mg/kg-dry	T		-	<0.016 :	<0.008 :	<0.01 :	-	<0.024 :
Acetone	mg/kg-dry	T		-	0.018 :	0.001 J	<0.01 :	-	0.005 J
Benzene	mg/kg-dry	T		-	<0.016 :	<0.008 :	<0.01 :	-	<0.024 :
Bromodichloromethane	mg/kg-dry	T		-	<0.016 :	<0.008 :	<0.01 :	-	<0.024 :
Bromoform	mg/kg-dry	T		-	<0.016 :	<0.008 :	<0.01 :	-	<0.024 :
Bromomethane	mg/kg-dry	T		-	<0.016 :	<0.008 :	<0.01 :	-	<0.024 :
Carbon disulfide	mg/kg-dry	T		-	<0.016 :	<0.008 :	<0.01 :	-	<0.024 :

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T = Total Fraction

Appendix A-7a
Soil - Biased 0-6 inches
Validated Analytical Results

Parameter	Units	Exposure Area Fraction	Site ID / Sample Date / Sample ID					
			MSS1-32 10/21/2002 MSS1-32-T01N-SOLD L SS1	MSS1-32 10/21/2002 MSS1-32-T01N-SOL SS1	MSS1-33 10/21/2002 MSS1-33-T01N-SOL SS1	MSS1-34 10/21/2002 MSS1-34-T01N-SOL SS1	MSS1-35 10/22/2002 MSS1-35-T01N-SOLD L SS1	MSS1-35 10/22/2002 MSS1-35-T01N-SOL SS1
Carbon tetrachloride	mg/kg-dry	T	-	<0.016 :	<0.008 :	<0.01 :	-	<0.024 :
Chlorobenzene	mg/kg-dry	T	-	<0.016 :	<0.008 :	<0.01 :	-	<0.024 :
Chloroethane	mg/kg-dry	T	-	<0.016 :	<0.008 :	<0.01 :	-	<0.024 :
Chloroform	mg/kg-dry	T	-	<0.016 :	<0.008 :	<0.01 :	-	<0.024 :
Chloromethane	mg/kg-dry	T	-	<0.016 J	<0.008 J	<0.01 J	-	<0.024 J
cis-1,2-Dichloroethene	mg/kg-dry	T	-	<0.016 :	<0.008 :	<0.01 :	-	<0.024 :
cis-1,3-Dichloropropene	mg/kg-dry	T	-	<0.016 :	<0.008 :	<0.01 :	-	<0.024 :
Dibromochloromethane	mg/kg-dry	T	-	<0.016 :	<0.008 :	<0.01 :	-	<0.024 :
Dichlorodifluoromethane	mg/kg-dry	T	-	<0.016 J	<0.008 J	<0.01 J	-	<0.024 J
Ethylbenzene	mg/kg-dry	T	-	<0.016 :	0.001 J	<0.01 :	-	<0.024 :
Methylene chloride	mg/kg-dry	T	-	<0.016 :	0.001 J	<0.01 :	-	<0.024 :
Styrene	mg/kg-dry	T	-	<0.016 :	<0.008 :	<0.01 :	-	<0.024 :
Tetrachloroethene	mg/kg-dry	T	-	<0.016 :	<0.008 :	<0.01 :	-	<0.024 :
Toluene	mg/kg-dry	T	-	<0.016 :	<0.008 :	<0.01 :	-	<0.024 :
Total Xylene	mg/kg-dry	T	-	0.008 J	0.012 :	0.003 J	-	0.005 J
trans-1,2-Dichloroethene	mg/kg-dry	T	-	<0.016 :	<0.008 :	<0.01 :	-	<0.024 :
trans-1,3-Dichloropropene	mg/kg-dry	T	-	<0.016 :	<0.008 :	<0.01 :	-	<0.024 :
Trichloroethene	mg/kg-dry	T	-	<0.016 :	<0.008 :	<0.01 :	-	<0.024 :
Trichlorofluoromethane	mg/kg-dry	T	-	<0.016 :	<0.008 :	<0.01 :	-	<0.024 :
Vinyl chloride	mg/kg-dry	T	-	<0.016 :	<0.008 J	<0.01 J	-	<0.024 J
Semi-Volatile Organics								
1,1`-Biphenyl	mg/kg-dry	T	-	<0.35 :	<0.36 :	<0.35 :	-	<0.35 :
2,4,5-Trichlorophenol	mg/kg-dry	T	-	<0.88 :	<0.9 :	<0.87 :	-	<0.88 :
2,4,6-Trichlorophenol	mg/kg-dry	T	-	<0.35 :	<0.36 :	<0.35 :	-	<0.35 :
2,4-Dichlorophenol	mg/kg-dry	T	-	<0.35 :	<0.36 :	<0.35 :	-	<0.35 :
2,4-Dimethylphenol	mg/kg-dry	T	-	<0.35 :	<0.36 :	<0.35 :	-	<0.35 :
2,4-Dinitrophenol	mg/kg-dry	T	-	<0.88 :	<0.9 J	<0.87 J	-	<0.88 J
2,4-Dinitrotoluene	mg/kg-dry	T	-	<0.35 :	<0.36 :	<0.35 :	-	<0.35 :
2,6-Dinitrotoluene	mg/kg-dry	T	-	<0.35 :	<0.36 :	<0.35 :	-	<0.35 :
2-Chloronaphthalene	mg/kg-dry	T	-	<0.35 :	<0.36 :	<0.35 :	-	<0.35 :
2-Chlorophenol	mg/kg-dry	T	-	<0.35 :	<0.36 :	<0.35 :	-	<0.35 :
2-Methylnaphthalene	mg/kg-dry	T	-	0.016 J	<0.36 :	<0.35 :	-	<0.35 :
2-Methylphenol	mg/kg-dry	T	-	<0.35 :	<0.36 :	<0.35 :	-	<0.35 :
2-Nitroaniline	mg/kg-dry	T	-	<0.88 :	<0.9 :	<0.87 :	-	<0.88 :

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Appendix A-7a
Soil - Biased 0-6 inches
Validated Analytical Results

Parameter	Units	Exposure Area Fraction	Site ID	MSS1-32	MSS1-32	MSS1-33	MSS1-34	MSS1-35	MSS1-35
			Sample Date	10/21/2002	10/21/2002	10/21/2002	10/21/2002	10/22/2002	10/22/2002
			Sample ID	MSS1-32-T01N-SOLD L	MSS1-32-T01N-SOL	MSS1-33-T01N-SOL	MSS1-34-T01N-SOL	MSS1-35-T01N-SOLD L	MSS1-35-T01N-SOL
			Exposure Area	SS1	SS1	SS1	SS1	SS1	SS1
2-Nitrophenol	mg/kg-dry	T		-	<0.35 :	<0.36 :	<0.35 :	-	<0.35 :
3,3-Dichlorobenzidine	mg/kg-dry	T		-	<0.35 :	<0.36 :	<0.35 :	-	<0.35 :
3-Nitroaniline	mg/kg-dry	T		-	<0.88 :	<0.9 :	<0.87 :	-	<0.88 :
4,6-Dinitro-2-methylphenol	mg/kg-dry	T		-	<0.88 :	<0.9 :	<0.87 :	-	<0.88 J
4-Bromophenyl phenyl ether	mg/kg-dry	T		-	<0.35 :	<0.36 :	<0.35 :	-	<0.35 :
4-Chloro-3-methylphenol	mg/kg-dry	T		-	<0.35 :	<0.36 :	<0.35 :	-	<0.35 :
4-Chloroaniline	mg/kg-dry	T		-	<0.35 :	<0.36 :	<0.35 :	-	<0.35 :
4-Chlorophenyl phenyl ether	mg/kg-dry	T		-	<0.35 :	<0.36 :	<0.35 :	-	<0.35 :
4-Methylphenol	mg/kg-dry	T		-	<0.35 :	<0.36 :	<0.35 :	-	<0.35 :
4-Nitroaniline	mg/kg-dry	T		-	<0.88 :	<0.9 :	<0.87 :	-	<0.88 J
4-Nitrophenol	mg/kg-dry	T		-	<0.88 J	<0.9 J	<0.87 J	-	<0.88 J
Acenaphthene	mg/kg-dry	T		-	0.096 J	<0.36 :	<0.35 :	-	<0.35 :
Acenaphthylene	mg/kg-dry	T		-	<0.35 :	<0.36 :	<0.35 :	-	<0.35 :
Anthracene	mg/kg-dry	T		-	0.16 J	<0.36 :	<0.35 :	-	<0.35 :
Benzaldehyde	mg/kg-dry	T		-	<0.35 :	<0.36 J	<0.35 J	-	<0.35 J
Benzo(a)anthracene	mg/kg-dry	T		-	0.45 :	<0.36 :	<0.35 :	-	0.029 J
Benzo(a)pyrene	mg/kg-dry	T		-	0.32 J	<0.36 :	<0.35 :	-	<0.35 :
Benzo(b)fluoranthene	mg/kg-dry	T		-	0.48 :	<0.36 :	<0.35 :	-	<0.35 :
Benzo(g,h,i)perylene	mg/kg-dry	T		-	0.15 J	<0.36 :	<0.35 :	-	<0.35 :
Benzo(k)fluoranthene	mg/kg-dry	T		-	0.31 J	<0.36 :	<0.35 :	-	<0.35 :
Bis(2-chloroethoxy)methane	mg/kg-dry	T		-	<0.35 :	<0.36 :	<0.35 :	-	<0.35 :
Bis(2-chloroethyl)ether	mg/kg-dry	T		-	<0.35 :	<0.36 :	<0.35 :	-	<0.35 :
Bis(2-ethylhexyl)phthalate	mg/kg-dry	T		-	0.086 J	0.93 :	1.1 :	-	0.15 J
Butyl benzyl phthalate	mg/kg-dry	T		-	<0.35 :	0.042 J	<0.35 :	-	<0.35 :
Carbazole	mg/kg-dry	T		-	0.12 J	<0.36 :	<0.35 :	-	<0.35 :
Chrysene	mg/kg-dry	T		-	0.47 :	<0.36 :	<0.35 :	-	0.035 J
Dibenz(a,h)anthracene	mg/kg-dry	T		-	0.052 J	<0.36 :	<0.35 :	-	<0.35 :
Dibenzofuran	mg/kg-dry	T		-	0.052 J	<0.36 :	<0.35 :	-	<0.35 :
Dichlorodiisopropyl ether	mg/kg-dry	T		-	<0.35 J	<0.36 :	<0.35 :	-	<0.35 :
Diethylphthalate	mg/kg-dry	T		-	<0.35 :	<0.36 :	<0.35 :	-	<0.35 :
Dimethylphthalate	mg/kg-dry	T		-	<0.35 :	<0.36 :	<0.35 :	-	0.068 J
Di-n-Butyl phthalate	mg/kg-dry	T		-	<0.35 :	0.029 J	<0.35 :	-	0.07 J
Di-n-Octyl phthalate	mg/kg-dry	T		-	<0.35 :	<0.36 J	<0.35 J	-	<0.35 :
Fluoranthene	mg/kg-dry	T		-	0.95 :	<0.36 :	<0.35 :	-	0.048 J

J = Qualified as estimated during data validation
R = Qualified as rejected value from data validation and results are considered unusable for any purpose
T = Total Fraction

Appendix A-7a
Soil - Biased 0-6 inches
Validated Analytical Results

		Site ID	MSS1-32	MSS1-32	MSS1-33	MSS1-34	MSS1-35	MSS1-35
		Sample Date	10/21/2002	10/21/2002	10/21/2002	10/21/2002	10/22/2002	10/22/2002
		Sample ID	MSS1-32-T01N-SOLDL	MSS1-32-T01N-SOL	MSS1-33-T01N-SOL	MSS1-34-T01N-SOL	MSS1-35-T01N-SOLDL	MSS1-35-T01N-SOL
		Exposure Area	SS1	SS1	SS1	SS1	SS1	SS1
Parameter	**Units**	**Fraction**						
Fluorene	mg/kg-dry	T	-	0.086 J	<0.36 :	<0.35 :	-	<0.35 :
Hexachlorobenzene	mg/kg-dry	T	-	<0.35 :	<0.36 :	<0.35 :	-	<0.35 :
Hexachlorobutadiene	mg/kg-dry	T	-	<0.35 :	<0.36 :	<0.35 :	-	<0.35 :
Hexachlorocyclopentadiene	mg/kg-dry	T	-	<0.35 :	<0.36 :	<0.35 :	-	<0.35 :
Hexachloroethane	mg/kg-dry	T	-	<0.35 :	<0.36 :	<0.35 :	-	<0.35 :
Indeno(1,2,3-cd)pyrene	mg/kg-dry	T	-	0.15 J	<0.36 :	<0.35 :	-	<0.35 :
Isophorone	mg/kg-dry	T	-	<0.35 :	<0.36 :	<0.35 :	-	<0.35 :
Naphthalene	mg/kg-dry	T	-	<0.35 :	<0.36 :	<0.35 :	-	<0.35 :
Nitrobenzene	mg/kg-dry	T	-	<0.35 :	<0.36 :	<0.35 :	-	<0.35 :
N-Nitrosodi-n-propylamine	mg/kg-dry	T	-	<0.35 :	<0.36 :	<0.35 :	-	<0.35 :
N-Nitrosodiphenylamine	mg/kg-dry	T	-	<0.35 :	<0.36 :	<0.35 :	-	<0.35 :
Pentachlorophenol	mg/kg-dry	T	-	<0.88 J	<0.9 :	<0.87 :	-	<0.88 J
Phenanthrene	mg/kg-dry	T	-	0.67 :	<0.36 :	<0.35 :	-	0.028 J
Phenol	mg/kg-dry	T	-	<0.35 :	<0.36 :	<0.35 :	-	<0.35 :
Pyrene	mg/kg-dry	T	-	0.82 :	<0.36 :	<0.35 :	-	0.046 J
Pesticides-PCBs								
Aroclor 1016	mg/kg-dry	T	-	<0.1 :	-	<0.035 :	-	<0.1 :
Aroclor 1221	mg/kg-dry	T	-	<0.21 :	-	<0.07 :	-	<0.21 :
Aroclor 1232	mg/kg-dry	T	-	<0.1 :	-	<0.035 :	-	<0.1 :
Aroclor 1242	mg/kg-dry	T	-	<0.1 :	-	<0.035 :	-	<0.1 :
Aroclor 1248	mg/kg-dry	T	-	<0.1 :	-	<0.035 :	4.5 :	-
Aroclor 1254	mg/kg-dry	T	3.5 J	-	-	0.89 :	-	<0.1 :
Aroclor 1260	mg/kg-dry	T	-	<0.1 :	-	<0.035 :	-	<0.1 :

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T = Total Fraction

Appendix A-7a
Soil - Biased 0-6 inches
Validated Analytical Results

Parameter	Units	Exposure Area Fraction	Site ID	MSS1-36	MSS1-36	MSS1-37	MSS1-38	MSS1-39	MSS1-40
			Sample Date	10/22/2002	10/22/2002	10/22/2002	10/22/2002	10/22/2002	10/22/2002
			Sample ID	MSS1-36-T01N-SOLDL	MSS1-36-T01N-SOL	MSS1-37-T01N-SOL	MSS1-38-T01N-SOL	MSS1-39-T01N-SOL	MSS1-40-T01N-SOL
			Exposure Area	SS1	SS1	SS1	SS1	SS1	SS1
General Chemistry									
Ammonia	mg/kg-dry	T	-	20.9 :	88.2 :	19.9 :	22.3 :	29.4 :	
Chloride	mg/kg-dry	T	-	211. J	339. J	<26.8 :	318. J	34. :	
Fluoride	mg/kg-dry	T	-	3.5 J	3.8 J	3.5 J	3.7 J	1. J	
Nitrate	mg/kg-dry	T	-	12.7 J	9.1 J	3.1 J	11.5 J	12.6 J	
Phosphorus	mg/kg-dry	T	-	878. J	1000. J	454. J	504. J	894. J	
Sulfate	mg/kg-dry	T	-	1450. J	520. J	2410. J	630. J	1020. J	
Total Kjeldahl Nitrogen	mg/kg-dry	T	-	318. :	366. J	66.7 :	147. :	307. :	
Total Organic Carbon	mg/kg-dry	T	-	4730. J	9520. J	<108. J	3120. J	5870. J	
Laboratory Parameters									
pH	SU	T	-	6.9 :	7.8 :	7.6 :	7.7 :	7.8 :	
Solids, Percent	%	T	-	92.9 :	93. :	93.3 :	95.7 :	94.5 :	
Specific Conductance	umhos/cm	T	-	918. :	725. :	859. :	881. :	865. :	
Geotechnical									
Organic Soils	%	T	-	1.81 J	3.04 J	1.02 J	1.4 J	3.09 J	
Physical Properties									
Cation-Exchange Capacity	meq/100g	T	-	39.1 :	41.2 :	42.7 :	31.3 :	41.3 :	
Sodium Absorption Ratio	ratio	T	-	6.44 :	11.89 :	0.87 :	4.35 :	1.25 :	
Metals									
Aluminum	mg/kg-dry	T	-	12500. :	15100. :	12100. :	10000. :	16800. :	
Antimony	mg/kg-dry	T	-	<0.22 J	0.47 J	<0.23 J	<0.24 J	<0.23 J	
Arsenic	mg/kg-dry	T	-	8.7 :	7. :	8.6 :	5.3 :	5. :	
Barium	mg/kg-dry	T	-	75.5 :	98.8 :	65.4 :	63.5 :	96. :	
Beryllium	mg/kg-dry	T	-	1. :	1.2 :	0.88 :	1. :	1.4 :	
Boron	mg/kg-dry	T	-	<0.23 J	<2.8 J	<0.22 J	<0.82 J	<0.21 J	
Cadmium	mg/kg-dry	T	-	1.8 :	2.1 :	0.98 :	1.7 :	1.1 :	
Calcium	mg/kg-dry	T	-	10900. :	14100. :	6900. :	8660. :	12600. :	
Chromium	mg/kg-dry	T	-	78.3 :	67. :	36.5 :	36. :	51.7 :	
Cobalt	mg/kg-dry	T	-	13.7 :	16.7 :	7. :	9.6 :	14. :	
Copper	mg/kg-dry	T	-	189. :	181. :	157. :	115. :	107. :	
Iron	mg/kg-dry	T	-	47400. :	33400. :	28200. :	20000. :	25500. :	
Lead	mg/kg-dry	T	-	247. :	662. :	66.7 :	115. :	108. :	
Magnesium	mg/kg-dry	T	-	9610. :	11400. :	6210. :	7030. :	11000. :	
Manganese	mg/kg-dry	T	-	1110. J	1010. J	531. J	850. J	903. J	

J = Qualified as estimated during data validation

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T = Total Fraction

Appendix A-7a
Soil - Biased 0-6 inches
Validated Analytical Results

Parameter	Units	Exposure Area Fraction	Site ID	MSS1-36	MSS1-36	MSS1-37	MSS1-38	MSS1-39	MSS1-40
			Sample Date	10/22/2002	10/22/2002	10/22/2002	10/22/2002	10/22/2002	10/22/2002
			Sample ID	MSS1-36-T01N-SOLD L	MSS1-36-T01N-SOL	MSS1-37-T01N-SOL	MSS1-38-T01N-SOL	MSS1-39-T01N-SOL	MSS1-40-T01N-SOL
			Exposure Area	SS1	SS1	SS1	SS1	SS1	SS1
Mercury	mg/kg-dry	T		-	0.028 :	0.043 :	<0.016 :	0.017 :	<0.016 :
Molybdenum	mg/kg-dry	T		-	3830. :	1960. :	7450. :	2280. :	767. :
Nickel	mg/kg-dry	T		-	55.6 J	51.6 J	30.6 J	29.8 J	34.9 J
Potassium	mg/kg-dry	T		-	3480. J	4080. J	2420. J	2910. J	3440. J
Selenium	mg/kg-dry	T		-	1.2 J	<0.68 J	1.4 J	0.83 J	<0.61 J
Silver	mg/kg-dry	T		-	1.9 :	1.7 :	1.4 :	1.4 :	1. :
Sodium	mg/kg-dry	T		-	537. :	611. :	779. :	434. :	60.8 J
Thallium	mg/kg-dry	T		-	0.31 :	0.3 :	0.21 :	0.22 :	0.28 :
Vanadium	mg/kg-dry	T		-	46. :	51.4 :	40.4 :	33.5 :	49.9 :
Zinc	mg/kg-dry	T		-	212. J	198. J	113. J	186. J	179. J
Volatile Organics									
1,1,1-Trichloroethane	mg/kg-dry	T		-	<0.005 :	<0.006 :	<0.007 :	<0.007 :	<0.01 :
1,1,2,2-Tetrachloroethane	mg/kg-dry	T		-	<0.005 :	<0.006 :	<0.007 :	<0.007 :	<0.01 :
1,1,2-Trichloro-1,2,2-trifluoroethane	mg/kg-dry	T		-	<0.005 :	<0.006 :	<0.007 :	<0.007 :	<0.01 :
1,1,2-Trichloroethane	mg/kg-dry	T		-	<0.005 :	<0.006 :	<0.007 :	<0.007 :	<0.01 :
1,1-Dichloroethane	mg/kg-dry	T		-	<0.005 :	<0.006 :	<0.007 :	<0.007 :	<0.01 :
1,1-Dichloroethene	mg/kg-dry	T		-	<0.005 :	<0.006 :	<0.007 :	<0.007 :	<0.01 :
1,2,4-Trichlorobenzene	mg/kg-dry	T		-	<0.005 :	<0.006 :	<0.007 :	<0.007 :	<0.01 :
1,2-Dibromo-3-chloropropane	mg/kg-dry	T		-	<0.005 :	<0.006 :	<0.007 :	<0.007 :	<0.01 :
1,2-Dichlorobenzene	mg/kg-dry	T		-	<0.005 :	<0.006 :	<0.007 :	<0.007 :	<0.01 :
1,2-Dichloroethane	mg/kg-dry	T		-	<0.005 :	<0.006 :	<0.007 :	<0.007 :	<0.01 :
1,2-Dichloroethene (total)	mg/kg-dry	T		-	<0.005 :	<0.006 :	<0.007 :	<0.007 :	<0.01 :
1,2-Dichloropropane	mg/kg-dry	T		-	<0.005 :	<0.006 :	<0.007 :	<0.007 :	<0.01 :
1,3-Dichlorobenzene	mg/kg-dry	T		-	<0.005 :	<0.006 :	<0.007 :	<0.007 :	<0.01 :
1,4-Dichlorobenzene	mg/kg-dry	T		-	<0.005 :	<0.006 :	<0.007 :	<0.007 :	<0.01 :
2-Butanone	mg/kg-dry	T		-	<0.005 :	<0.006 :	<0.007 :	<0.007 :	<0.01 :
2-Hexanone	mg/kg-dry	T		-	<0.005 :	<0.006 :	<0.007 :	<0.007 :	<0.01 :
4-Methyl-2-pentanone	mg/kg-dry	T		-	<0.005 :	<0.006 :	<0.007 :	<0.007 :	<0.01 :
Acetone	mg/kg-dry	T		-	0.0008 J	0.002 J	0.002 J	0.002 J	0.002 J
Benzene	mg/kg-dry	T		-	<0.005 :	<0.006 :	<0.007 :	<0.007 :	<0.01 :
Bromodichloromethane	mg/kg-dry	T		-	<0.005 :	<0.006 :	<0.007 :	<0.007 :	<0.01 :
Bromoform	mg/kg-dry	T		-	<0.005 :	<0.006 :	<0.007 :	<0.007 :	<0.01 :
Bromomethane	mg/kg-dry	T		-	<0.005 :	<0.006 :	<0.007 :	<0.007 :	<0.01 :
Carbon disulfide	mg/kg-dry	T		-	<0.005 :	<0.006 :	<0.007 :	<0.007 :	<0.01 :

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R = Qualified as rejected value from data validation and results are considered unusable for any purpose
T = Total Fraction

Appendix A-7a
Soil - Biased 0-6 inches
Validated Analytical Results

Parameter	Units	Exposure Area Fraction	Site ID	MSS1-36	MSS1-36	MSS1-37	MSS1-38	MSS1-39	MSS1-40
			Sample Date	10/22/2002	10/22/2002	10/22/2002	10/22/2002	10/22/2002	10/22/2002
			Sample ID	MSS1-36-T01N-SOLD L	MSS1-36-T01N-SOL	MSS1-37-T01N-SOL	MSS1-38-T01N-SOL	MSS1-39-T01N-SOL	MSS1-40-T01N-SOL
			Exposure Area	SS1	SS1	SS1	SS1	SS1	SS1
Carbon tetrachloride	mg/kg-dry	T		-	<0.005 :	<0.006 :	<0.007 :	<0.007 :	<0.01 :
Chlorobenzene	mg/kg-dry	T		-	<0.005 :	<0.006 :	<0.007 :	<0.007 :	<0.01 :
Chloroethane	mg/kg-dry	T		-	<0.005 :	<0.006 :	<0.007 :	<0.007 :	<0.01 :
Chloroform	mg/kg-dry	T		-	<0.005 :	<0.006 :	<0.007 :	<0.007 :	<0.01 :
Chloromethane	mg/kg-dry	T		-	<0.005 J	<0.006 J	<0.007 J	<0.007 J	<0.01 J
cis-1,2-Dichloroethene	mg/kg-dry	T		-	<0.005 :	<0.006 :	<0.007 :	<0.007 :	<0.01 :
cis-1,3-Dichloropropene	mg/kg-dry	T		-	<0.005 :	<0.006 :	<0.007 :	<0.007 :	<0.01 :
Dibromochloromethane	mg/kg-dry	T		-	<0.005 :	<0.006 :	<0.007 :	<0.007 :	<0.01 :
Dichlorodifluoromethane	mg/kg-dry	T		-	<0.005 J	<0.006 J	<0.007 J	<0.007 J	<0.01 J
Ethylbenzene	mg/kg-dry	T		-	<0.005 :	0.0008 J	<0.007 :	0.002 J	<0.01 :
Methylene chloride	mg/kg-dry	T		-	0.0008 J	<0.006 :	<0.007 :	<0.007 :	<0.01 :
Styrene	mg/kg-dry	T		-	<0.005 :	<0.006 :	<0.007 :	<0.007 :	<0.01 :
Tetrachloroethene	mg/kg-dry	T		-	<0.005 :	<0.006 :	<0.007 :	<0.007 :	<0.01 :
Toluene	mg/kg-dry	T		-	<0.005 :	<0.006 :	<0.007 :	<0.007 :	<0.01 :
Total Xylene	mg/kg-dry	T		-	0.0008 J	0.007 :	<0.007 :	0.009 :	<0.01 :
trans-1,2-Dichloroethene	mg/kg-dry	T		-	<0.005 :	<0.006 :	<0.007 :	<0.007 :	<0.01 :
trans-1,3-Dichloropropene	mg/kg-dry	T		-	<0.005 :	<0.006 :	<0.007 :	<0.007 :	<0.01 :
Trichloroethene	mg/kg-dry	T		-	<0.005 :	<0.006 :	<0.007 :	<0.007 :	<0.01 :
Trichlorofluoromethane	mg/kg-dry	T		-	<0.005 :	<0.006 :	<0.007 :	<0.007 :	<0.01 :
Vinyl chloride	mg/kg-dry	T		-	<0.005 J	<0.006 J	<0.007 :	<0.007 :	<0.01 :
Semi-Volatile Organics									
1,1`-Biphenyl	mg/kg-dry	T		-	<0.35 :	<0.35 :	<0.35 :	<0.34 :	<0.35 :
2,4,5-Trichlorophenol	mg/kg-dry	T		-	<0.89 :	<0.89 :	<0.89 :	<0.86 :	<0.88 :
2,4,6-Trichlorophenol	mg/kg-dry	T		-	<0.35 :	<0.35 :	<0.35 :	<0.34 :	<0.35 :
2,4-Dichlorophenol	mg/kg-dry	T		-	<0.35 :	<0.35 :	<0.35 :	<0.34 :	<0.35 :
2,4-Dimethylphenol	mg/kg-dry	T		-	<0.35 :	<0.35 :	<0.35 :	<0.34 :	<0.35 :
2,4-Dinitrophenol	mg/kg-dry	T		-	<0.89 J	<0.89 J	<0.89 J	<0.86 J	<0.88 J
2,4-Dinitrotoluene	mg/kg-dry	T		-	<0.35 :	<0.35 :	<0.35 :	<0.34 :	<0.35 :
2,6-Dinitrotoluene	mg/kg-dry	T		-	<0.35 :	<0.35 :	<0.35 :	<0.34 :	<0.35 :
2-Chloronaphthalene	mg/kg-dry	T		-	<0.35 :	<0.35 :	<0.35 :	<0.34 :	<0.35 :
2-Chlorophenol	mg/kg-dry	T		-	<0.35 :	<0.35 :	<0.35 :	<0.34 :	<0.35 :
2-Methylnaphthalene	mg/kg-dry	T		-	<0.35 :	<0.35 :	<0.35 :	<0.34 :	<0.35 :
2-Methylphenol	mg/kg-dry	T		-	<0.35 :	<0.35 :	<0.35 :	<0.34 :	<0.35 :
2-Nitroaniline	mg/kg-dry	T		-	<0.89 :	<0.89 :	<0.89 :	<0.86 :	<0.88 :

J = Qualified as estimated during data validation
R = Qualified as rejected value from data validation and results are considered unusable for any purpose
T = Total Fraction

Appendix A-7a
Soil - Biased 0-6 inches
Validated Analytical Results

Parameter	Units	Exposure Area Fraction	Site ID	MSS1-36	MSS1-36	MSS1-37	MSS1-38	MSS1-39	MSS1-40
			Sample Date	10/22/2002	10/22/2002	10/22/2002	10/22/2002	10/22/2002	10/22/2002
			Sample ID	MSS1-36-T01N-SOLD L	MSS1-36-T01N-SOL	MSS1-37-T01N-SOL	MSS1-38-T01N-SOL	MSS1-39-T01N-SOL	MSS1-40-T01N-SOL
			Exposure Area	SS1	SS1	SS1	SS1	SS1	SS1
2-Nitrophenol	mg/kg-dry	T		-	<0.35 :	<0.35 :	<0.35 :	<0.34 :	<0.35 :
3,3-Dichlorobenzidine	mg/kg-dry	T		-	<0.35 :	<0.35 :	<0.35 :	<0.34 :	<0.35 :
3-Nitroaniline	mg/kg-dry	T		-	<0.89 :	<0.89 :	<0.89 :	<0.86 :	<0.88 :
4,6-Dinitro-2-methylphenol	mg/kg-dry	T		-	<0.89 :	<0.89 :	<0.89 J	<0.86 J	<0.88 :
4-Bromophenyl phenyl ether	mg/kg-dry	T		-	<0.35 :	<0.35 :	<0.35 :	<0.34 :	<0.35 :
4-Chloro-3-methylphenol	mg/kg-dry	T		-	<0.35 :	<0.35 :	<0.35 :	<0.34 :	<0.35 :
4-Chloroaniline	mg/kg-dry	T		-	<0.35 :	<0.35 :	<0.35 :	<0.34 :	<0.35 :
4-Chlorophenyl phenyl ether	mg/kg-dry	T		-	<0.35 :	<0.35 :	<0.35 :	<0.34 :	<0.35 :
4-Methylphenol	mg/kg-dry	T		-	<0.35 :	<0.35 :	<0.35 :	<0.34 :	<0.35 :
4-Nitroaniline	mg/kg-dry	T		-	<0.89 :	<0.89 :	<0.89 J	<0.86 J	<0.88 :
4-Nitrophenol	mg/kg-dry	T		-	<0.89 J	<0.89 J	<0.89 J	<0.86 J	<0.88 J
Acenaphthene	mg/kg-dry	T		-	<0.35 :	<0.35 :	<0.35 :	<0.34 :	<0.35 :
Acenaphthylene	mg/kg-dry	T		-	<0.35 :	<0.35 :	<0.35 :	<0.34 :	<0.35 :
Anthracene	mg/kg-dry	T		-	0.023 J	<0.35 :	<0.35 :	<0.34 :	<0.35 :
Benzaldehyde	mg/kg-dry	T		-	<0.35 J	<0.35 J	<0.35 J	<0.34 J	<0.35 J
Benzo(a)anthracene	mg/kg-dry	T		-	0.041 J	0.047 J	<0.35 :	<0.34 :	<0.35 :
Benzo(a)pyrene	mg/kg-dry	T		-	0.035 J	0.043 J	<0.35 :	<0.34 :	<0.35 :
Benzo(b)fluoranthene	mg/kg-dry	T		-	0.048 J	0.056 J	<0.35 :	<0.34 :	<0.35 :
Benzo(g,h,i)perylene	mg/kg-dry	T		-	0.018 J	0.029 J	<0.35 :	<0.34 :	<0.35 :
Benzo(k)fluoranthene	mg/kg-dry	T		-	0.035 J	0.045 J	<0.35 :	<0.34 :	<0.35 :
Bis(2-chloroethoxy)methane	mg/kg-dry	T		-	<0.35 :	<0.35 :	<0.35 :	<0.34 :	<0.35 :
Bis(2-chloroethyl)ether	mg/kg-dry	T		-	<0.35 :	<0.35 :	<0.35 :	<0.34 :	<0.35 :
Bis(2-ethylhexyl)phthalate	mg/kg-dry	T		-	0.23 J	0.49 :	0.038 J	0.057 J	0.031 J
Butyl benzyl phthalate	mg/kg-dry	T		-	<0.35 :	0.078 J	<0.35 :	<0.34 :	<0.35 :
Carbazole	mg/kg-dry	T		-	<0.35 :	<0.35 :	<0.35 :	<0.34 :	<0.35 :
Chrysene	mg/kg-dry	T		-	0.05 J	0.052 J	<0.35 :	<0.34 :	<0.35 :
Dibenz(a,h)anthracene	mg/kg-dry	T		-	<0.35 :	<0.35 :	<0.35 :	<0.34 :	<0.35 :
Dibenzofuran	mg/kg-dry	T		-	<0.35 :	<0.35 :	<0.35 :	<0.34 :	<0.35 :
Dichlorodiisopropyl ether	mg/kg-dry	T		-	<0.35 :	<0.35 :	<0.35 :	<0.34 :	<0.35 :
Diethylphthalate	mg/kg-dry	T		-	<0.35 :	<0.35 :	<0.35 :	<0.34 :	<0.35 :
Dimethylphthalate	mg/kg-dry	T		-	<0.35 :	<0.35 :	<0.35 :	<0.34 :	<0.35 :
Di-n-Butyl phthalate	mg/kg-dry	T		-	0.026 J	0.024 J	0.02 J	0.026 J	<0.35 :
Di-n-Octyl phthalate	mg/kg-dry	T		-	<0.35 J	0.073 J	<0.35 :	<0.34 :	<0.35 J
Fluoranthene	mg/kg-dry	T		-	0.099 J	0.096 J	<0.35 :	<0.34 :	<0.35 :

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Appendix A-7a
Soil - Biased 0-6 inches
Validated Analytical Results

Parameter	Units	Fraction	Site ID	MSS1-36	MSS1-36	MSS1-37	MSS1-38	MSS1-39	MSS1-40
			Sample Date	10/22/2002	10/22/2002	10/22/2002	10/22/2002	10/22/2002	10/22/2002
			Sample ID	MSS1-36-T01N-SOLDL	MSS1-36-T01N-SOL	MSS1-37-T01N-SOL	MSS1-38-T01N-SOL	MSS1-39-T01N-SOL	MSS1-40-T01N-SOL
			Exposure Area	SS1	SS1	SS1	SS1	SS1	SS1
Fluorene	mg/kg-dry	T		- :	<0.35 :	<0.35 :	<0.35 :	<0.34 :	<0.35 :
Hexachlorobenzene	mg/kg-dry	T		- :	<0.35 :	<0.35 :	<0.35 :	<0.34 :	<0.35 :
Hexachlorobutadiene	mg/kg-dry	T		- :	<0.35 :	<0.35 :	<0.35 :	<0.34 :	<0.35 :
Hexachlorocyclopentadiene	mg/kg-dry	T		- :	<0.35 :	<0.35 :	<0.35 :	<0.34 :	<0.35 :
Hexachloroethane	mg/kg-dry	T		- :	<0.35 :	<0.35 :	<0.35 :	<0.34 :	<0.35 :
Indeno(1,2,3-cd)pyrene	mg/kg-dry	T		- :	0.016 J	0.026 J	<0.35 :	<0.34 :	<0.35 :
Isophorone	mg/kg-dry	T		- :	<0.35 :	<0.35 :	<0.35 :	<0.34 :	<0.35 :
Naphthalene	mg/kg-dry	T		- :	<0.35 :	<0.35 :	<0.35 :	<0.34 :	<0.35 :
Nitrobenzene	mg/kg-dry	T		- :	<0.35 :	<0.35 :	<0.35 :	<0.34 :	<0.35 :
N-Nitrosodi-n-propylamine	mg/kg-dry	T		- :	<0.35 :	<0.35 :	<0.35 :	<0.34 :	<0.35 :
N-Nitrosodiphenylamine	mg/kg-dry	T		- :	<0.35 :	<0.35 :	<0.35 :	<0.34 :	<0.35 :
Pentachlorophenol	mg/kg-dry	T		- :	<0.89 :	<0.89 :	<0.89 J	<0.86 J	<0.88 :
Phenanthrene	mg/kg-dry	T		- :	0.095 J	0.046 J	<0.35 :	<0.34 :	<0.35 :
Phenol	mg/kg-dry	T		- :	<0.35 :	<0.35 :	<0.35 :	<0.34 :	<0.35 :
Pyrene	mg/kg-dry	T		- :	0.077 J	0.093 J	<0.35 :	<0.34 :	<0.35 :
Pesticides-PCBs									
Aroclor 1016	mg/kg-dry	T		- :	<0.035 :	<0.035 :	<0.035 :	<0.034 :	<0.035 :
Aroclor 1221	mg/kg-dry	T		- :	<0.072 :	<0.072 :	<0.072 :	<0.07 :	<0.071 :
Aroclor 1232	mg/kg-dry	T		- :	<0.035 :	<0.035 :	<0.035 :	<0.034 :	<0.035 :
Aroclor 1242	mg/kg-dry	T		- :	<0.035 :	<0.035 :	<0.035 :	<0.034 :	<0.035 :
Aroclor 1248	mg/kg-dry	T		1.8 :	-	<0.035 :	0.46 :	<0.034 :	<0.035 :
Aroclor 1254	mg/kg-dry	T		2.4 J	-	1.7 J	<0.035 :	0.86 J	0.23 J
Aroclor 1260	mg/kg-dry	T		- :	<0.035 :	0.28 :	<0.035 :	<0.034 :	<0.035 :

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Appendix A-7a
Soil - Biased 0-6 inches
Validated Analytical Results

Parameter	Units	Exposure Area Fraction	Site ID	Sample Date	Sample ID											
			MSS1-41	10/22/2002	MSS1-41-T01N-SOLDL	SS1	MSS1-41	10/22/2002	MSS1-41-T01N-SOL	SS1	MSS1-42	10/22/2002	MSS1-42-T01N-SOLDL	SS1	MSS1-42	10/22/2002	MSS1-42-T01N-SOL	SS1
General Chemistry																		
Ammonia	mg/kg-dry	T	-				15.4	:			-				25.	:		
Chloride	mg/kg-dry	T	-				<26.8	:			-				<27.5	:		
Fluoride	mg/kg-dry	T	-				7.8	J			-				2.2	J		
Nitrate	mg/kg-dry	T	-				<2.1	J			-				<2.2	J		
Phosphorus	mg/kg-dry	T	-				1060.	J			-				126.	J		
Sulfate	mg/kg-dry	T	-				973.	J			-				7030.	J		
Total Kjeldahl Nitrogen	mg/kg-dry	T	-				133.	J			-				90.2	J		
Total Organic Carbon	mg/kg-dry	T	-				2500.	J			-				2810.	J		
Laboratory Parameters																		
pH	SU	T	-				7.	:			-				7.2	:		
Solids, Percent	%	T	-				93.4	:			-				91.	:		
Solids, Percent - VOCs Only	%	T	-				-				-				-			
Specific Conductance	umhos/cm	T	-				1110.	J			-				1080.	J		
Geotechnical																		
Organic Soils	%	T	-				0.99	J			-				1.49	J		
Physical Properties																		
Cation-Exchange Capacity	meq/100g	T	-				1.4	:			-				2.3	:		
Sodium Absorption Ratio	ratio	T	-				0.19	:			-				0.15	:		
Metals																		
Aluminum	mg/kg-dry	T	-				12100.	:			-				9670.	:		
Antimony	mg/kg-dry	T	-				<0.24	J			-				<0.24	J		
Arsenic	mg/kg-dry	T	-				7.	:			-				8.9	:		
Barium	mg/kg-dry	T	-				91.	:			-				81.7	:		
Beryllium	mg/kg-dry	T	-				1.2	:			-				0.76	:		
Boron	mg/kg-dry	T	-				<0.22	:			-				<0.22	J		
Cadmium	mg/kg-dry	T	-				2.4	:			-				2.8	:		
Calcium	mg/kg-dry	T	-				15100.	:			-				27300.	:		
Chromium	mg/kg-dry	T	-				35.7	:			-				31.6	:		
Cobalt	mg/kg-dry	T	-				0.81	:			-				<0.13	:		
Copper	mg/kg-dry	T	-				169.	:			-				145.	:		
Iron	mg/kg-dry	T	-				22400.	:			-				17900.	:		
Lead	mg/kg-dry	T	-				166.	:			-				145.	:		
Magnesium	mg/kg-dry	T	-				7350.	:			-				5920.	:		

Parameter	Units	Exposure Area Fraction	Site ID	Sample Date	Sample ID											
			MSS1-43	1/10/2003	MSS1-43-T01N-SOLDL	SS1	MSS1-43	1/10/2003	MSS1-43-T01N-SOL	SS1						
General Chemistry																
Ammonia	mg/kg-dry	T	-				52.8	:								
Chloride	mg/kg-dry	T	-				11.2	:								
Fluoride	mg/kg-dry	T	-				250.	J								
Nitrate	mg/kg-dry	T	-				4.3	J								
Phosphorus	mg/kg-dry	T	-				952.	:								
Sulfate	mg/kg-dry	T	-				11000.	:								
Total Kjeldahl Nitrogen	mg/kg-dry	T	-				183.	:								
Total Organic Carbon	mg/kg-dry	T	-				2110.	J								
Laboratory Parameters																
pH	SU	T	-				5.	:								
Solids, Percent	%	T	-				88.5	:								
Solids, Percent - VOCs Only	%	T	-				89.2	:								
Specific Conductance	umhos/cm	T	-				2660.	:								
Geotechnical																
Organic Soils	%	T	-				2.1	:								
Physical Properties																
Cation-Exchange Capacity	meq/100g	T	-				10.1	:								
Sodium Absorption Ratio	ratio	T	-				0.08	:								
Metals																
Aluminum	mg/kg-dry	T	-				11900.	:								
Antimony	mg/kg-dry	T	-				<0.33	J								
Arsenic	mg/kg-dry	T	-				3.4	J								
Barium	mg/kg-dry	T	-				72.7	:								
Beryllium	mg/kg-dry	T	-				5.4	:								
Boron	mg/kg-dry	T	-				2.9	J								
Cadmium	mg/kg-dry	T	-				0.6	J								
Calcium	mg/kg-dry	T	-				18200.	:								
Chromium	mg/kg-dry	T	-				29.6	J								
Cobalt	mg/kg-dry	T	-				5.3	:								
Copper	mg/kg-dry	T	-				126.	J								
Iron	mg/kg-dry	T	-				25100.	:								
Lead	mg/kg-dry	T	-				119.	:								
Magnesium	mg/kg-dry	T	-				5100.	:								

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Appendix A-7a
Soil - Biased 0-6 inches
Validated Analytical Results

Parameter	Units	Exposure Area Fraction	Site ID / Sample Date / Sample ID									
			MSS1-41 10/22/2002 MSS1-41-T01N-SOLDL SS1		MSS1-41 10/22/2002 MSS1-41-T01N-SOL SS1		MSS1-42 10/22/2002 MSS1-42-T01N-SOLDL SS1		MSS1-42 10/22/2002 MSS1-42-T01N-SOL SS1		MSS1-43 1/10/2003 MSS1-43-T01N-SOLDL SS1		MSS1-43 1/10/2003 MSS1-43-T01N-SOL SS1	
Manganese	mg/kg-dry	T	-		844.	J	-		616.	J	-		463.	:
Mercury	mg/kg-dry	T	-		0.038	:	-		0.021	:	-		0.06	:
Molybdenum	mg/kg-dry	T	-		15600.	:	-		22900.	:	-		1320.	:
Nickel	mg/kg-dry	T	-		28.8	J	-		23.6	J	-		15.	:
Potassium	mg/kg-dry	T	-		2900.	J	-		1990.	J	-		3880.	J
Selenium	mg/kg-dry	T	-		2.6	J	-		3.2	J	-		1.6	J
Silver	mg/kg-dry	T	-		2.5	:	-		<0.27	:	-		2.1	:
Sodium	mg/kg-dry	T	-		385.	:	-		31.1	:	-		491.	:
Thallium	mg/kg-dry	T	-		0.5	:	-		0.5	:	-		0.45	:
Vanadium	mg/kg-dry	T	-		111.	:	-		125.	:	-		40.2	:
Zinc	mg/kg-dry	T	-		209.	J	-		201.	J	-		200.	:
Volatile Organics														
1,1,1-Trichloroethane	mg/kg-dry	T	-		<0.007	:	-		<0.008	:	-		<0.01	:
1,1,2,2-Tetrachloroethane	mg/kg-dry	T	-		<0.007	:	-		<0.008	:	-		<0.01	:
1,1,2-Trichloro-1,2,2-trifluoroethane	mg/kg-dry	T	-		<0.007	:	-		<0.008	:	-		<0.01	:
1,1,2-Trichloroethane	mg/kg-dry	T	-		<0.007	:	-		<0.008	:	-		<0.01	:
1,1-Dichloroethane	mg/kg-dry	T	-		<0.007	:	-		<0.008	:	-		<0.01	:
1,1-Dichloroethene	mg/kg-dry	T	-		<0.007	:	-		<0.008	:	-		<0.01	:
1,2,4-Trichlorobenzene	mg/kg-dry	T	-		<0.007	:	-		<0.008	:	-		<0.01	:
1,2-Dibromo-3-chloropropane	mg/kg-dry	T	-		<0.007	:	-		<0.008	:	-		<0.01	:
1,2-Dichlorobenzene	mg/kg-dry	T	-		<0.007	:	-		<0.008	:	-		<0.01	:
1,2-Dichloroethane	mg/kg-dry	T	-		<0.007	:	-		<0.008	:	-		<0.01	:
1,2-Dichloroethene (total)	mg/kg-dry	T	-		<0.007	:	-		<0.008	:	-		<0.01	:
1,2-Dichloropropane	mg/kg-dry	T	-		<0.007	:	-		<0.008	:	-		<0.01	:
1,3-Dichlorobenzene	mg/kg-dry	T	-		<0.007	:	-		<0.008	:	-		<0.01	:
1,4-Dichlorobenzene	mg/kg-dry	T	-		<0.007	:	-		<0.008	:	-		<0.01	:
2-Butanone	mg/kg-dry	T	-		<0.007	J	-		<0.008	J	-		0.003	J
2-Hexanone	mg/kg-dry	T	-		<0.007	J	-		<0.008	J	-		<0.01	:
4-Methyl-2-pentanone	mg/kg-dry	T	-		<0.007	:	-		<0.008	:	-		<0.01	:
Acetone	mg/kg-dry	T	-		0.001	J	-		0.001	J	-		<0.01	:
Benzene	mg/kg-dry	T	-		<0.007	:	-		<0.008	:	-		<0.01	:
Bromodichloromethane	mg/kg-dry	T	-		<0.007	:	-		<0.008	:	-		<0.01	:
Bromoform	mg/kg-dry	T	-		<0.007	:	-		<0.008	:	-		<0.01	:
Bromomethane	mg/kg-dry	T	-		<0.007	:	-		<0.008	:	-		<0.01	:

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Appendix A-7a
Soil - Biased 0-6 inches
Validated Analytical Results

Parameter	Units	Exposure Area Fraction	Site ID	Sample Date	Sample ID	Exposure Area											
			MSS1-41	10/22/2002	MSS1-41-T01N-SOLDL	SS1	MSS1-41	10/22/2002	MSS1-41-T01N-SOL	SS1	MSS1-42	10/22/2002	MSS1-42-T01N-SOLDL	SS1	MSS1-42	10/22/2002	MSS1-42-T01N-SOL	SS1
Carbon disulfide	mg/kg-dry	T	-				<0.007	:			-				<0.008	:		
Carbon tetrachloride	mg/kg-dry	T	-				<0.007	:			-				<0.008	:		
Chlorobenzene	mg/kg-dry	T	-				<0.007	:			-				<0.008	:		
Chloroethane	mg/kg-dry	T	-				<0.007	:			-				<0.008	:		
Chloroform	mg/kg-dry	T	-				<0.007	:			-				<0.008	:		
Chloromethane	mg/kg-dry	T	-				<0.007	J			-				<0.008	J		
cis-1,2-Dichloroethene	mg/kg-dry	T	-				<0.007	:			-				<0.008	:		
cis-1,3-Dichloropropene	mg/kg-dry	T	-				<0.007	:			-				<0.008	:		
Dibromochloromethane	mg/kg-dry	T	-				<0.007	:			-				<0.008	:		
Dichlorodifluoromethane	mg/kg-dry	T	-				<0.007	J			-				<0.008	J		
Ethylbenzene	mg/kg-dry	T	-				<0.007	:			-				<0.008	:		
Methylene chloride	mg/kg-dry	T	-				<0.007	:			-				<0.008	:		
Styrene	mg/kg-dry	T	-				<0.007	:			-				<0.008	:		
Tetrachloroethene	mg/kg-dry	T	-				<0.007	:			-				<0.008	:		
Toluene	mg/kg-dry	T	-				<0.007	:			-				<0.008	:		
Total Xylene	mg/kg-dry	T	-				0.012	:			-				<0.008	:		
trans-1,2-Dichloroethene	mg/kg-dry	T	-				<0.007	:			-				<0.008	:		
trans-1,3-Dichloropropene	mg/kg-dry	T	-				<0.007	:			-				<0.008	:		
Trichloroethene	mg/kg-dry	T	-				<0.007	:			-				<0.008	:		
Trichlorofluoromethane	mg/kg-dry	T	-				<0.007	:			-				<0.008	:		
Vinyl chloride	mg/kg-dry	T	-				<0.007	:			-				<0.008	:		
Semi-Volatile Organics																		
1,1`-Biphenyl	mg/kg-dry	T	-				<0.35	:			-				<0.36	:		
2,4,5-Trichlorophenol	mg/kg-dry	T	-				<0.89	:			-				<0.91	:		
2,4,6-Trichlorophenol	mg/kg-dry	T	-				<0.35	:			-				<0.36	:		
2,4-Dichlorophenol	mg/kg-dry	T	-				<0.35	:			-				<0.36	:		
2,4-Dimethylphenol	mg/kg-dry	T	-				<0.35	:			-				<0.36	:		
2,4-Dinitrophenol	mg/kg-dry	T	-				<0.89	:			-				<0.91	:		
2,4-Dinitrotoluene	mg/kg-dry	T	-				<0.35	:			-				<0.36	:		
2,6-Dinitrotoluene	mg/kg-dry	T	-				<0.35	:			-				<0.36	:		
2-Chloronaphthalene	mg/kg-dry	T	-				<0.35	:			-				<0.36	:		
2-Chlorophenol	mg/kg-dry	T	-				<0.35	:			-				<0.36	:		
2-Methylnaphthalene	mg/kg-dry	T	-				<0.35	:			-				<0.36	:		
2-Methylphenol	mg/kg-dry	T	-				<0.35	:			-				<0.36	:		

Parameter	Units	Exposure Area Fraction	Site ID	Sample Date	Sample ID	Exposure Area											
			MSS1-43	1/10/2003	MSS1-43-T01N-SOLDL	SS1	MSS1-43	1/10/2003	MSS1-43-T01N-SOL	SS1								
Carbon disulfide	mg/kg-dry	T	-				0.001	J										
Carbon tetrachloride	mg/kg-dry	T	-				<0.01	:										
Chlorobenzene	mg/kg-dry	T	-				<0.01	:										
Chloroethane	mg/kg-dry	T	-				<0.01	:										
Chloroform	mg/kg-dry	T	-				<0.01	:										
Chloromethane	mg/kg-dry	T	-				<0.01	:										
cis-1,2-Dichloroethene	mg/kg-dry	T	-				<0.01	:										
cis-1,3-Dichloropropene	mg/kg-dry	T	-				<0.01	:										
Dibromochloromethane	mg/kg-dry	T	-				<0.01	:										
Dichlorodifluoromethane	mg/kg-dry	T	-				<0.01	:										
Ethylbenzene	mg/kg-dry	T	-				<0.01	:										
Methylene chloride	mg/kg-dry	T	-				<0.01	:										
Styrene	mg/kg-dry	T	-				<0.01	:										
Tetrachloroethene	mg/kg-dry	T	-				<0.01	:										
Toluene	mg/kg-dry	T	-				<0.01	:										
Total Xylene	mg/kg-dry	T	-				<0.01	:										
trans-1,2-Dichloroethene	mg/kg-dry	T	-				<0.01	:										
trans-1,3-Dichloropropene	mg/kg-dry	T	-				<0.01	:										
Trichloroethene	mg/kg-dry	T	-				<0.01	:										
Trichlorofluoromethane	mg/kg-dry	T	-				<0.01	:										
Vinyl chloride	mg/kg-dry	T	-				<0.01	:										
Semi-Volatile Organics																		
1,1`-Biphenyl	mg/kg-dry	T	-				<0.37	:										
2,4,5-Trichlorophenol	mg/kg-dry	T	-				<0.94	:										
2,4,6-Trichlorophenol	mg/kg-dry	T	-				<0.37	:										
2,4-Dichlorophenol	mg/kg-dry	T	-				<0.37	:										
2,4-Dimethylphenol	mg/kg-dry	T	-				<0.37	:										
2,4-Dinitrophenol	mg/kg-dry	T	-				<0.94	J										
2,4-Dinitrotoluene	mg/kg-dry	T	-				<0.37	:										
2,6-Dinitrotoluene	mg/kg-dry	T	-				<0.37	:										
2-Chloronaphthalene	mg/kg-dry	T	-				<0.37	:										
2-Chlorophenol	mg/kg-dry	T	-				<0.37	:										
2-Methylnaphthalene	mg/kg-dry	T	-				<0.37	:										
2-Methylphenol	mg/kg-dry	T	-				<0.37	:										

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T = Total Fraction

Appendix A-7a
Soil - Biased 0-6 inches
Validated Analytical Results

Parameter	Units	Exposure Area Fraction	Site ID	Sample Date	Sample ID											
			MSS1-41	10/22/2002	MSS1-41-T01N-SOLDL	SS1	MSS1-41	10/22/2002	MSS1-41-T01N-SOL	SS1	MSS1-42	10/22/2002	MSS1-42-T01N-SOLDL	SS1	MSS1-42	10/22/2002	MSS1-42-T01N-SOL	SS1
2-Nitroaniline	mg/kg-dry	T	-				<0.89	:			-				<0.91	:		
2-Nitrophenol	mg/kg-dry	T	-				<0.35	:			-				<0.36	:		
3,3-Dichlorobenzidine	mg/kg-dry	T	-				<0.35	:			-				<0.36	:		
3-Nitroaniline	mg/kg-dry	T	-				<0.89	:			-				<0.91	:		
4,6-Dinitro-2-methylphenol	mg/kg-dry	T	-				<0.89	:			-				<0.91	:		
4-Bromophenyl phenyl ether	mg/kg-dry	T	-				<0.35	:			-				<0.36	:		
4-Chloro-3-methylphenol	mg/kg-dry	T	-				<0.35	:			-				<0.36	:		
4-Chloroaniline	mg/kg-dry	T	-				<0.35	:			-				<0.36	:		
4-Chlorophenyl phenyl ether	mg/kg-dry	T	-				<0.35	:			-				<0.36	:		
4-Methylphenol	mg/kg-dry	T	-				<0.35	:			-				<0.36	:		
4-Nitroaniline	mg/kg-dry	T	-				<0.89	:			-				<0.91	:		
4-Nitrophenol	mg/kg-dry	T	-				<0.89	:			-				<0.91	:		
Acenaphthene	mg/kg-dry	T	-				<0.35	:			-				<0.36	:		
Acenaphthylene	mg/kg-dry	T	-				<0.35	:			-				<0.36	:		
Anthracene	mg/kg-dry	T	-				<0.35	:			-				<0.36	:		
Benzaldehyde	mg/kg-dry	T	-				0.028	J			-				0.024	J		
Benzo(a)anthracene	mg/kg-dry	T	-				<0.35	:			-				<0.36	:		
Benzo(a)pyrene	mg/kg-dry	T	-				<0.35	:			-				<0.36	:		
Benzo(b)fluoranthene	mg/kg-dry	T	-				<0.35	:			-				<0.36	:		
Benzo(g,h,i)perylene	mg/kg-dry	T	-				<0.35	:			-				<0.36	:		
Benzo(k)fluoranthene	mg/kg-dry	T	-				<0.35	:			-				<0.36	:		
Bis(2-chloroethoxy)methane	mg/kg-dry	T	-				<0.35	:			-				<0.36	:		
Bis(2-chloroethyl)ether	mg/kg-dry	T	-				<0.35	:			-				<0.36	:		
Bis(2-ethylhexyl)phthalate	mg/kg-dry	T	-				0.2	J			-				0.31	J		
Butyl benzyl phthalate	mg/kg-dry	T	-				<0.35	:			-				<0.36	:		
Carbazole	mg/kg-dry	T	-				<0.35	:			-				<0.36	:		
Chrysene	mg/kg-dry	T	-				<0.35	:			-				<0.36	:		
Dibenz(a,h)anthracene	mg/kg-dry	T	-				<0.35	:			-				<0.36	:		
Dibenzofuran	mg/kg-dry	T	-				<0.35	:			-				<0.36	:		
Dichlorodiisopropyl ether	mg/kg-dry	T	-				<0.35	:			-				<0.36	:		
Diethylphthalate	mg/kg-dry	T	-				<0.35	:			-				<0.36	:		
Dimethylphthalate	mg/kg-dry	T	-				<0.35	:			-				0.021	J		
Di-n-Butyl phthalate	mg/kg-dry	T	-				0.43	:			-				0.29	J		
Di-n-Octyl phthalate	mg/kg-dry	T	-				<0.35	:			-				<0.36	:		

Parameter	Units	Exposure Area Fraction	Site ID	Sample Date	Sample ID											
			MSS1-43	1/10/2003	MSS1-43-T01N-SOLDL	SS1	MSS1-43	1/10/2003	MSS1-43-T01N-SOL	SS1						
2-Nitroaniline	mg/kg-dry	T	-				<0.94	:								
2-Nitrophenol	mg/kg-dry	T	-				<0.37	:								
3,3-Dichlorobenzidine	mg/kg-dry	T	-				<0.37	:								
3-Nitroaniline	mg/kg-dry	T	-				<0.94	:								
4,6-Dinitro-2-methylphenol	mg/kg-dry	T	-				<0.94	:								
4-Bromophenyl phenyl ether	mg/kg-dry	T	-				<0.37	:								
4-Chloro-3-methylphenol	mg/kg-dry	T	-				<0.37	:								
4-Chloroaniline	mg/kg-dry	T	-				<0.37	:								
4-Chlorophenyl phenyl ether	mg/kg-dry	T	-				<0.37	:								
4-Methylphenol	mg/kg-dry	T	-				<0.37	:								
4-Nitroaniline	mg/kg-dry	T	-				<0.94	:								
4-Nitrophenol	mg/kg-dry	T	-				<0.94	J								
Acenaphthene	mg/kg-dry	T	-				<0.37	:								
Acenaphthylene	mg/kg-dry	T	-				<0.37	:								
Anthracene	mg/kg-dry	T	-				<0.37	:								
Benzaldehyde	mg/kg-dry	T	-				0.21	J								
Benzo(a)anthracene	mg/kg-dry	T	-				<0.37	:								
Benzo(a)pyrene	mg/kg-dry	T	-				<0.37	:								
Benzo(b)fluoranthene	mg/kg-dry	T	-				<0.37	:								
Benzo(g,h,i)perylene	mg/kg-dry	T	-				<0.37	:								
Benzo(k)fluoranthene	mg/kg-dry	T	-				<0.37	:								
Bis(2-chloroethoxy)methane	mg/kg-dry	T	-				<0.37	:								
Bis(2-chloroethyl)ether	mg/kg-dry	T	-				<0.37	:								
Bis(2-ethylhexyl)phthalate	mg/kg-dry	T	-				0.047	J								
Butyl benzyl phthalate	mg/kg-dry	T	-				<0.37	:								
Carbazole	mg/kg-dry	T	-				<0.37	:								
Chrysene	mg/kg-dry	T	-				<0.37	:								
Dibenz(a,h)anthracene	mg/kg-dry	T	-				<0.37	J								
Dibenzofuran	mg/kg-dry	T	-				<0.37	:								
Dichlorodiisopropyl ether	mg/kg-dry	T	-				<0.37	:								
Diethylphthalate	mg/kg-dry	T	-				<0.37	:								
Dimethylphthalate	mg/kg-dry	T	-				<0.37	:								
Di-n-Butyl phthalate	mg/kg-dry	T	-				<0.37	:								
Di-n-Octyl phthalate	mg/kg-dry	T	-				<0.37	:								

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Appendix A-7a
Soil - Biased 0-6 inches
Validated Analytical Results

Parameter	Units	Exposure Area Fraction	Site ID / Sample Date / Sample ID											
			MSS1-41 10/22/2002 MSS1-41-T01N-SOLDL SS1		MSS1-41 10/22/2002 MSS1-41-T01N-SOL SS1		MSS1-42 10/22/2002 MSS1-42-T01N-SOLDL SS1		MSS1-42 10/22/2002 MSS1-42-T01N-SOL SS1		MSS1-43 1/10/2003 MSS1-43-T01N-SOLDL SS1		MSS1-43 1/10/2003 MSS1-43-T01N-SOL SS1	
Fluoranthene	mg/kg-dry	T	-		<0.35	:	-		<0.36	:	-		<0.37	:
Fluorene	mg/kg-dry	T	-		<0.35	:	-		<0.36	:	-		<0.37	:
Hexachlorobenzene	mg/kg-dry	T	-		<0.35	:	-		<0.36	:	-		<0.37	:
Hexachlorobutadiene	mg/kg-dry	T	-		<0.35	:	-		<0.36	:	-		<0.37	:
Hexachlorocyclopentadiene	mg/kg-dry	T	-		<0.35	:	-		<0.36	:	-		<0.37	:
Hexachloroethane	mg/kg-dry	T	-		<0.35	:	-		<0.36	:	-		<0.37	:
Indeno(1,2,3-cd)pyrene	mg/kg-dry	T	-		<0.35	:	-		<0.36	:	-		<0.37	:
Isophorone	mg/kg-dry	T	-		<0.35	:	-		<0.36	:	-		<0.37	:
Naphthalene	mg/kg-dry	T	-		<0.35	:	-		<0.36	:	-		<0.37	:
Nitrobenzene	mg/kg-dry	T	-		<0.35	:	-		<0.36	:	-		<0.37	:
N-Nitrosodi-n-propylamine	mg/kg-dry	T	-		<0.35	:	-		<0.36	:	-		<0.37	:
N-Nitrosodiphenylamine	mg/kg-dry	T	-		<0.35	:	-		<0.36	:	-		<0.37	:
Pentachlorophenol	mg/kg-dry	T	-		<0.89	:	-		<0.91	:	-		<0.94	J
Phenanthrene	mg/kg-dry	T	-		<0.35	:	-		<0.36	:	-		<0.37	:
Phenol	mg/kg-dry	T	-		<0.35	:	-		<0.36	:	-		<0.37	:
Pyrene	mg/kg-dry	T	-		<0.35	:	-		<0.36	:	-		<0.37	:
Pesticides-PCBs														
Aroclor 1016	mg/kg-dry	T	-		<0.71	:	-		<2.2	:	-		<0.075	:
Aroclor 1221	mg/kg-dry	T	-		<1.4	:	-		<4.4	:	-		<0.15	:
Aroclor 1232	mg/kg-dry	T	-		<0.71	:	-		<2.2	:	-		<0.075	:
Aroclor 1242	mg/kg-dry	T	-		<0.71	:	-		<2.2	:	-		<0.075	:
Aroclor 1248	mg/kg-dry	T	43.	:	40.	J	140.	:	-		4.9	:	-	
Aroclor 1254	mg/kg-dry	T	-		<0.71	:	-		<2.2	:	-		<0.075	:
Aroclor 1260	mg/kg-dry	T	-		<0.71	:	-		<2.2	:	-		<0.075	:

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Appendix A-7a
Soil - Biased 0-6 inches
Validated Analytical Results

Parameter	Units	Exposure Area Fraction	Site ID / Sample Date / Sample ID / Exposure Area											
			MSS1-44 1/10/2003 MSS1-44-T01N-SOL SS1		MSS1-45 1/8/2003 MSS1-45-T01N-SOL DL SS1		MSS1-45 1/8/2003 MSS1-45-T01N-SOL SS1		MSS1-46 1/8/2003 MSS1-46-T01N-SOL SS1		MSS1-47 1/8/2003 MSS1-47-T01N-SOLD L SS1		MSS1-47 1/8/2003 MSS1-47-T01N-SOL SS1	
General Chemistry														
Ammonia	mg/kg-dry	T	33.7	:	-		2.7	:	<2.5	:	-		25.5	:
Chloride	mg/kg-dry	T	31.8	:	-		20.3	:	4.4	:	-		4.8	:
Fluoride	mg/kg-dry	T	5.7	J	-		0.86	J	2.2	J	-		2.9	J
Nitrate	mg/kg-dry	T	6.6	J	-		14.2	J	<2.1	J	-		3.9	J
Phosphorus	mg/kg-dry	T	964.	:	-		812.	:	714.	:	-		695.	:
Sulfate	mg/kg-dry	T	10200.	:	-		754.	:	89.9	:	-		151.	:
Total Kjeldahl Nitrogen	mg/kg-dry	T	277.	:	-		87.7	:	82.9	:	-		179.	:
Total Organic Carbon	mg/kg-dry	T	3800.	J	-		<105.	J	1290.	J	-		4280.	J
Laboratory Parameters														
pH	SU	T	5.2	:	-		7.3	:	7.8	:	-		8.	:
Solids, Percent	%	T	93.8	:	-		95.9	:	95.8	:	-		93.1	:
Specific Conductance	umhos/cm	T	2880.	:	-		1310.	:	307.	:	-		360.	:
Geotechnical														
Organic Soils	%	T	2.4	:	-		1.1	:	1.	:	-		2.	:
Physical Properties														
Cation-Exchange Capacity	meq/100g	T	12.4	:	-		9.3	:	11.4	:	-		9.9	:
Sodium Absorption Ratio	ratio	T	0.06	:	-		0.46	:	0.35	:	-		0.43	:
Metals														
Aluminum	mg/kg-dry	T	14600.	:	-		9560.	:	8660.	:	-		9080.	:
Antimony	mg/kg-dry	T	<0.27	J	-		<0.29	J	<0.29	J	-		<0.3	J
Arsenic	mg/kg-dry	T	4.4	J	-		2.9	J	3.	J	-		14.1	J
Barium	mg/kg-dry	T	87.1	:	-		50.5	:	47.	:	-		56.	:
Beryllium	mg/kg-dry	T	4.3	:	-		0.99	:	1.3	:	-		1.1	:
Boron	mg/kg-dry	T	<2.7	:	-		1.1	:	<2.	:	-		3.1	:
Cadmium	mg/kg-dry	T	1.1	J	-		0.84	J	1.6	:	-		2.	:
Calcium	mg/kg-dry	T	15300.	:	-		7430.	:	8060.	:	-		11900.	:
Chromium	mg/kg-dry	T	40.	J	-		42.9	J	33.7	J	-		48.4	J
Cobalt	mg/kg-dry	T	9.8	:	-		8.6	:	7.1	:	-		12.4	:
Copper	mg/kg-dry	T	113.	J	-		98.5	J	100.	J	-		130.	J
Iron	mg/kg-dry	T	26700.	:	-		20900.	:	17300.	:	-		40900.	:
Lead	mg/kg-dry	T	114.	:	-		142.	:	127.	:	-		95.3	:
Magnesium	mg/kg-dry	T	7320.	:	-		6830.	:	5140.	:	-		5700.	:
Manganese	mg/kg-dry	T	932.	:	-		727.	:	926.	:	-		797.	:

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Appendix A-7a
Soil - Biased 0-6 inches
Validated Analytical Results

Parameter	Units	Exposure Area Fraction	Site ID	MSS1-44	MSS1-45	MSS1-45	MSS1-46	MSS1-47	MSS1-47
			Sample Date	1/10/2003	1/8/2003	1/8/2003	1/8/2003	1/8/2003	1/8/2003
			Sample ID	MSS1-44-T01N-SOL	MSS1-45-T01N-SOL DL	MSS1-45-T01N-SOL	MSS1-46-T01N-SOL	MSS1-47-T01N-SOLD L	MSS1-47-T01N-SOL
			Exposure Area	SS1	SS1	SS1	SS1	SS1	SS1
Mercury	mg/kg-dry	T		0.052 :	-	<0.015 :	<0.016 :	-	<0.018 :
Molybdenum	mg/kg-dry	T		943. :	-	2690. :	756. :	-	934. :
Nickel	mg/kg-dry	T		23.4 :	-	26.7 :	18.8 :	-	56. :
Potassium	mg/kg-dry	T		3900. J	-	2570. J	2490. J	-	2200. J
Selenium	mg/kg-dry	T		1.2 J	-	<0.77 J	<0.77 J	-	<0.79 J
Silver	mg/kg-dry	T		1.8 :	-	0.85 :	1.2 :	-	0.88 :
Sodium	mg/kg-dry	T		<253. :	-	<48.2 J	78.5 :	-	<40.3 J
Thallium	mg/kg-dry	T		0.37 :	-	0.22 :	0.17 :	-	0.18 :
Vanadium	mg/kg-dry	T		46.3 :	-	53.4 :	32. :	-	39.9 :
Zinc	mg/kg-dry	T		254. :	-	172. :	216. :	-	170. :
Volatile Organics									
1,1,1-Trichloroethane	mg/kg-dry	T		<0.011 :	-	<0.006 :	<0.014 :	-	<0.006 :
1,1,2,2-Tetrachloroethane	mg/kg-dry	T		<0.011 :	-	<0.006 :	<0.014 :	-	<0.006 :
1,1,2-Trichloro-1,2,2-trifluoroethane	mg/kg-dry	T		<0.011 :	-	<0.006 :	<0.014 :	-	<0.006 :
1,1,2-Trichloroethane	mg/kg-dry	T		<0.011 :	-	<0.006 :	<0.014 :	-	<0.006 :
1,1-Dichloroethane	mg/kg-dry	T		<0.011 :	-	<0.006 :	<0.014 :	-	<0.006 :
1,1-Dichloroethene	mg/kg-dry	T		<0.011 :	-	<0.006 :	<0.014 :	-	<0.006 :
1,2,4-Trichlorobenzene	mg/kg-dry	T		<0.011 :	-	<0.006 :	<0.014 :	-	<0.006 :
1,2-Dibromo-3-chloropropane	mg/kg-dry	T		<0.011 :	-	<0.006 :	<0.014 :	-	<0.006 :
1,2-Dichlorobenzene	mg/kg-dry	T		<0.011 :	-	<0.006 :	<0.014 :	-	<0.006 :
1,2-Dichloroethane	mg/kg-dry	T		<0.011 :	-	<0.006 :	<0.014 :	-	<0.006 :
1,2-Dichloroethene (total)	mg/kg-dry	T		<0.011 :	-	<0.006 :	<0.014 :	-	<0.006 :
1,2-Dichloropropane	mg/kg-dry	T		<0.011 :	-	<0.006 :	<0.014 :	-	<0.006 :
1,3-Dichlorobenzene	mg/kg-dry	T		<0.011 :	-	<0.006 :	<0.014 :	-	<0.006 :
1,4-Dichlorobenzene	mg/kg-dry	T		<0.011 :	-	<0.006 :	<0.014 :	-	<0.006 :
2-Butanone	mg/kg-dry	T		<0.011 :	-	0.002 J	<0.014 :	-	<0.006 :
2-Hexanone	mg/kg-dry	T		<0.011 :	-	<0.006 :	<0.014 :	-	<0.006 :
4-Methyl-2-pentanone	mg/kg-dry	T		<0.011 :	-	<0.006 :	<0.014 :	-	<0.006 :
Acetone	mg/kg-dry	T		0.01 J	-	0.009 :	<0.014 :	-	<0.006 :
Benzene	mg/kg-dry	T		<0.011 :	-	<0.006 :	<0.014 :	-	<0.006 :
Bromodichloromethane	mg/kg-dry	T		<0.011 :	-	<0.006 :	<0.014 :	-	<0.006 :
Bromoform	mg/kg-dry	T		<0.011 :	-	<0.006 :	<0.014 :	-	<0.006 :
Bromomethane	mg/kg-dry	T		<0.011 :	-	<0.006 :	<0.014 J	-	<0.006 :
Carbon disulfide	mg/kg-dry	T		<0.011 :	-	<0.006 :	<0.014 :	-	<0.006 :

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Appendix A-7a
Soil - Biased 0-6 inches
Validated Analytical Results

Parameter	Units	Exposure Area Fraction	Site ID / Sample Date / Sample ID / Exposure Area											
			MSS1-44	1/10/2003	MSS1-44-T01N-SOL	SS1	MSS1-45	1/8/2003	MSS1-45-T01N-SOL DL	SS1	MSS1-45	1/8/2003	MSS1-45-T01N-SOL	SS1
Carbon tetrachloride	mg/kg-dry	T	<0.011	:			-				<0.006	:		
Chlorobenzene	mg/kg-dry	T	<0.011	:			-				<0.006	:		
Chloroethane	mg/kg-dry	T	<0.011	:			-				<0.006	:		
Chloroform	mg/kg-dry	T	<0.011	:			-				<0.006	:		
Chloromethane	mg/kg-dry	T	<0.011	:			-				<0.006	:		
cis-1,2-Dichloroethene	mg/kg-dry	T	<0.011	:			-				<0.006	:		
cis-1,3-Dichloropropene	mg/kg-dry	T	<0.011	:			-				<0.006	:		
Dibromochloromethane	mg/kg-dry	T	<0.011	:			-				<0.006	:		
Dichlorodifluoromethane	mg/kg-dry	T	<0.011	:			-				<0.006	:		
Ethylbenzene	mg/kg-dry	T	<0.011	:			-				<0.006	:		
Methylene chloride	mg/kg-dry	T	<0.011	:			-				0.0007	J		
Styrene	mg/kg-dry	T	<0.011	:			-				<0.006	:		
Tetrachloroethene	mg/kg-dry	T	<0.011	:			-				<0.006	:		
Toluene	mg/kg-dry	T	<0.011	:			-				<0.006	:		
Total Xylene	mg/kg-dry	T	<0.011	:			-				<0.006	:		
trans-1,2-Dichloroethene	mg/kg-dry	T	<0.011	:			-				<0.006	:		
trans-1,3-Dichloropropene	mg/kg-dry	T	<0.011	:			-				<0.006	:		
Trichloroethene	mg/kg-dry	T	<0.011	:			-				<0.006	:		
Trichlorofluoromethane	mg/kg-dry	T	<0.011	:			-				<0.006	:		
Vinyl chloride	mg/kg-dry	T	<0.011	:			-				<0.006	:		
Semi-Volatile Organics														
1,1`-Biphenyl	mg/kg-dry	T	<0.35	:			-				<0.34	:		
2,4,5-Trichlorophenol	mg/kg-dry	T	<0.88	:			-				<0.86	:		
2,4,6-Trichlorophenol	mg/kg-dry	T	<0.35	:			-				<0.34	:		
2,4-Dichlorophenol	mg/kg-dry	T	<0.35	:			-				<0.34	:		
2,4-Dimethylphenol	mg/kg-dry	T	<0.35	:			-				<0.34	:		
2,4-Dinitrophenol	mg/kg-dry	T	<0.88	:			-				<0.86	J		
2,4-Dinitrotoluene	mg/kg-dry	T	<0.35	:			-				<0.34	:		
2,6-Dinitrotoluene	mg/kg-dry	T	<0.35	:			-				<0.34	:		
2-Chloronaphthalene	mg/kg-dry	T	<0.35	:			-				<0.34	:		
2-Chlorophenol	mg/kg-dry	T	<0.35	:			-				<0.34	:		
2-Methylnaphthalene	mg/kg-dry	T	<0.35	:			-				<0.34	:		
2-Methylphenol	mg/kg-dry	T	<0.35	:			-				<0.34	:		
2-Nitroaniline	mg/kg-dry	T	<0.88	:			-				<0.86	:		

Parameter	Units	Exposure Area Fraction	Site ID / Sample Date / Sample ID / Exposure Area											
			MSS1-46	1/8/2003	MSS1-46-T01N-SOL	SS1	MSS1-47	1/8/2003	MSS1-47-T01N-SOLD L	SS1	MSS1-47	1/8/2003	MSS1-47-T01N-SOL	SS1
Carbon tetrachloride	mg/kg-dry	T	<0.014	:			-				<0.006	:		
Chlorobenzene	mg/kg-dry	T	<0.014	:			-				<0.006	:		
Chloroethane	mg/kg-dry	T	<0.014	:			-				<0.006	:		
Chloroform	mg/kg-dry	T	<0.014	:			-				<0.006	:		
Chloromethane	mg/kg-dry	T	<0.014	:			-				<0.006	:		
cis-1,2-Dichloroethene	mg/kg-dry	T	<0.014	:			-				<0.006	:		
cis-1,3-Dichloropropene	mg/kg-dry	T	<0.014	:			-				<0.006	:		
Dibromochloromethane	mg/kg-dry	T	<0.014	:			-				<0.006	:		
Dichlorodifluoromethane	mg/kg-dry	T	<0.014	:			-				<0.006	:		
Ethylbenzene	mg/kg-dry	T	<0.014	:			-				<0.006	:		
Methylene chloride	mg/kg-dry	T	<0.014	:			-				<0.006	:		
Styrene	mg/kg-dry	T	<0.014	:			-				<0.006	:		
Tetrachloroethene	mg/kg-dry	T	<0.014	:			-				<0.006	:		
Toluene	mg/kg-dry	T	<0.014	:			-				<0.006	:		
Total Xylene	mg/kg-dry	T	<0.014	:			-				<0.006	:		
trans-1,2-Dichloroethene	mg/kg-dry	T	<0.014	:			-				<0.006	:		
trans-1,3-Dichloropropene	mg/kg-dry	T	<0.014	:			-				<0.006	:		
Trichloroethene	mg/kg-dry	T	<0.014	:			-				<0.006	:		
Trichlorofluoromethane	mg/kg-dry	T	<0.014	:			-				<0.006	:		
Vinyl chloride	mg/kg-dry	T	<0.014	:			-				<0.006	:		
Semi-Volatile Organics														
1,1`-Biphenyl	mg/kg-dry	T	<0.34	:			-				<0.36	:		
2,4,5-Trichlorophenol	mg/kg-dry	T	<0.86	:			-				<0.89	:		
2,4,6-Trichlorophenol	mg/kg-dry	T	<0.34	:			-				<0.36	:		
2,4-Dichlorophenol	mg/kg-dry	T	<0.34	:			-				<0.36	:		
2,4-Dimethylphenol	mg/kg-dry	T	<0.34	:			-				<0.36	:		
2,4-Dinitrophenol	mg/kg-dry	T	<0.86	:			-				<0.89	J		
2,4-Dinitrotoluene	mg/kg-dry	T	<0.34	:			-				<0.36	:		
2,6-Dinitrotoluene	mg/kg-dry	T	<0.34	:			-				<0.36	:		
2-Chloronaphthalene	mg/kg-dry	T	<0.34	:			-				<0.36	:		
2-Chlorophenol	mg/kg-dry	T	<0.34	:			-				<0.36	:		
2-Methylnaphthalene	mg/kg-dry	T	<0.34	:			-				<0.36	:		
2-Methylphenol	mg/kg-dry	T	<0.34	:			-				<0.36	:		
2-Nitroaniline	mg/kg-dry	T	<0.86	:			-				<0.89	:		

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Appendix A-7a
Soil - Biased 0-6 inches
Validated Analytical Results

Site ID			MSS1-44		MSS1-45	MSS1-45		MSS1-46		MSS1-47	MSS1-47	
Sample Date			1/10/2003		1/8/2003	1/8/2003		1/8/2003		1/8/2003	1/8/2003	
Sample ID			MSS1-44-T01N-SOL		MSS1-45-T01N-SOL DL	MSS1-45-T01N-SOL		MSS1-46-T01N-SOL		MSS1-47-T01N-SOLD L	MSS1-47-T01N-SOL	
Exposure Area			SS1		SS1	SS1		SS1		SS1	SS1	
Parameter	Units	Fraction										
2-Nitrophenol	mg/kg-dry	T	<0.35	:	-	<0.34	:	<0.34	:	-	<0.36	:
3,3-Dichlorobenzidine	mg/kg-dry	T	<0.35	:	-	<0.34	:	<0.34	:	-	<0.36	:
3-Nitroaniline	mg/kg-dry	T	<0.88	:	-	<0.86	:	<0.86	:	-	<0.89	:
4,6-Dinitro-2-methylphenol	mg/kg-dry	T	<0.88	:	-	<0.86	:	<0.86	:	-	<0.89	:
4-Bromophenyl phenyl ether	mg/kg-dry	T	<0.35	:	-	<0.34	:	<0.34	:	-	<0.36	:
4-Chloro-3-methylphenol	mg/kg-dry	T	<0.35	:	-	<0.34	:	<0.34	:	-	<0.36	:
4-Chloroaniline	mg/kg-dry	T	<0.35	:	-	<0.34	:	<0.34	:	-	<0.36	:
4-Chlorophenyl phenyl ether	mg/kg-dry	T	<0.35	:	-	<0.34	:	<0.34	:	-	<0.36	:
4-Methylphenol	mg/kg-dry	T	<0.35	:	-	<0.34	:	<0.34	:	-	<0.36	:
4-Nitroaniline	mg/kg-dry	T	<0.88	:	-	<0.86	:	<0.86	:	-	<0.89	:
4-Nitrophenol	mg/kg-dry	T	<0.88	:	-	<0.86	:	<0.86	:	-	<0.89	:
Acenaphthene	mg/kg-dry	T	<0.35	:	-	<0.34	:	<0.34	:	-	<0.36	:
Acenaphthylene	mg/kg-dry	T	<0.35	:	-	<0.34	:	<0.34	:	-	<0.36	:
Anthracene	mg/kg-dry	T	<0.35	:	-	<0.34	:	<0.34	:	-	<0.36	:
Benzaldehyde	mg/kg-dry	T	<0.35	:	-	<0.34	J	<0.34	J	-	<0.36	:
Benzo(a)anthracene	mg/kg-dry	T	0.025	J	-	<0.34	:	<0.34	:	-	<0.36	:
Benzo(a)pyrene	mg/kg-dry	T	<0.35	:	-	<0.34	:	<0.34	:	-	<0.36	:
Benzo(b)fluoranthene	mg/kg-dry	T	<0.35	:	-	<0.34	:	<0.34	:	-	<0.36	:
Benzo(g,h,i)perylene	mg/kg-dry	T	<0.35	J	-	<0.34	:	<0.34	:	-	<0.36	:
Benzo(k)fluoranthene	mg/kg-dry	T	<0.35	:	-	<0.34	:	<0.34	:	-	<0.36	:
Bis(2-chloroethoxy)methane	mg/kg-dry	T	<0.35	:	-	<0.34	:	<0.34	:	-	<0.36	:
Bis(2-chloroethyl)ether	mg/kg-dry	T	<0.35	:	-	<0.34	:	<0.34	:	-	<0.36	:
Bis(2-ethylhexyl)phthalate	mg/kg-dry	T	<0.35	:	-	0.54	:	0.066	J	-	0.55	:
Butyl benzyl phthalate	mg/kg-dry	T	<0.35	:	-	<0.34	:	<0.34	:	-	<0.36	:
Carbazole	mg/kg-dry	T	<0.35	:	-	<0.34	:	<0.34	:	-	<0.36	:
Chrysene	mg/kg-dry	T	0.037	J	-	<0.34	:	<0.34	:	-	<0.36	:
Dibenz(a,h)anthracene	mg/kg-dry	T	<0.35	J	-	<0.34	:	<0.34	:	-	<0.36	:
Dibenzofuran	mg/kg-dry	T	<0.35	:	-	<0.34	:	<0.34	:	-	<0.36	:
Dichlorodiisopropyl ether	mg/kg-dry	T	<0.35	:	-	<0.34	:	<0.34	:	-	<0.36	:
Diethylphthalate	mg/kg-dry	T	<0.35	:	-	<0.34	:	<0.34	:	-	<0.36	:
Dimethylphthalate	mg/kg-dry	T	<0.35	:	-	<0.34	:	<0.34	:	-	<0.36	:
Di-n-Butyl phthalate	mg/kg-dry	T	<0.35	:	-	0.19	J	<0.34	:	-	<0.36	:
Di-n-Octyl phthalate	mg/kg-dry	T	<0.35	:	-	<0.34	:	<0.34	:	-	<0.36	:
Fluoranthene	mg/kg-dry	T	0.055	J	-	<0.34	:	<0.34	:	-	0.038	J

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T = Total Fraction

Appendix A-7a
Soil - Biased 0-6 inches
Validated Analytical Results

Parameter	Units	Exposure Area Fraction	Site ID / Sample Date / Sample ID		MSS1-44 1/10/2003 MSS1-44-T01N-SOL SS1		MSS1-45 1/8/2003 MSS1-45-T01N-SOL DL SS1		MSS1-45 1/8/2003 MSS1-45-T01N-SOL SS1		MSS1-46 1/8/2003 MSS1-46-T01N-SOL SS1		MSS1-47 1/8/2003 MSS1-47-T01N-SOLDL SS1		MSS1-47 1/8/2003 MSS1-47-T01N-SOL SS1	
Fluorene	mg/kg-dry	T		<0.35	:	-	:	<0.34	:	<0.34	:	-	:	<0.36	:
Hexachlorobenzene	mg/kg-dry	T		<0.35	:	-	:	<0.34	:	<0.34	:	-	:	<0.36	:
Hexachlorobutadiene	mg/kg-dry	T		<0.35	:	-	:	<0.34	:	<0.34	:	-	:	<0.36	:
Hexachlorocyclopentadiene	mg/kg-dry	T		<0.35	J	-	:	<0.34	:	<0.34	:	-	:	<0.36	:
Hexachloroethane	mg/kg-dry	T		<0.35	:	-	:	<0.34	:	<0.34	:	-	:	<0.36	:
Indeno(1,2,3-cd)pyrene	mg/kg-dry	T		<0.35	J	-	:	<0.34	:	<0.34	:	-	:	<0.36	:
Isophorone	mg/kg-dry	T		<0.35	:	-	:	<0.34	:	<0.34	:	-	:	<0.36	:
Naphthalene	mg/kg-dry	T		<0.35	:	-	:	<0.34	:	<0.34	:	-	:	<0.36	:
Nitrobenzene	mg/kg-dry	T		<0.35	:	-	:	<0.34	:	<0.34	:	-	:	<0.36	:
N-Nitrosodi-n-propylamine	mg/kg-dry	T		<0.35	:	-	:	<0.34	:	<0.34	:	-	:	<0.36	:
N-Nitrosodiphenylamine	mg/kg-dry	T		<0.35	:	-	:	<0.34	:	<0.34	:	-	:	<0.36	:
Pentachlorophenol	mg/kg-dry	T		<0.88	J	-	:	<0.86	J	<0.86	:	-	:	<0.89	:
Phenanthrene	mg/kg-dry	T		0.039	J	-	:	<0.34	:	<0.34	:	-	:	<0.36	:
Phenol	mg/kg-dry	T		<0.35	:	-	:	<0.34	:	<0.34	:	-	:	<0.36	:
Pyrene	mg/kg-dry	T		0.044	J	-	:	<0.34	:	<0.34	:	-	:	0.024	J
Pesticides-PCBs																
Aroclor 1016	mg/kg-dry	T		<0.07	:	-	:	<0.69	:	<0.034	:	-	:	<0.035	:
Aroclor 1221	mg/kg-dry	T		<0.14	:	-	:	<1.4	:	<0.07	:	-	:	<0.072	:
Aroclor 1232	mg/kg-dry	T		<0.07	:	-	:	<0.69	:	<0.034	:	-	:	<0.035	:
Aroclor 1242	mg/kg-dry	T		<0.07	:	-	:	<0.69	:	<0.034	:	-	:	<0.035	:
Aroclor 1248	mg/kg-dry	T		2.8	:	37.	:	-		<0.034	:	-	:	<0.035	:
Aroclor 1254	mg/kg-dry	T		2.6	J	-	:	<0.69	:	1.1	:	2.6	:	-	
Aroclor 1260	mg/kg-dry	T		<0.07	:	-	:	<0.69	:	<0.034	:	-	:	<0.035	:

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Appendix A-7a
Soil - Biased 0-6 inches
Validated Analytical Results

Parameter	Units	Fraction	MSS1-48	MSS1-49	MSS1-49	MSS1-50	MSS1-51	MSS1-52
Sample Date			1/8/2003	1/8/2003	1/8/2003	1/8/2003	1/8/2003	1/10/2003
Sample ID			MSS1-48-T01N-SOL	MSS1-49-T01N-SOL DL	MSS1-49-T01N-SOL	MSS1-50-T01N-SOL	MSS1-51-T01N-SOL	MSS1-52-T01N-SOL
Exposure Area			SS1	SS1	SS1	SS1	SS1	SS1
General Chemistry								
Ammonia	mg/kg-dry	T	29.2 :	-	2.9 :	48.5 :	<2.5 :	12.8 :
Chloride	mg/kg-dry	T	11.1 :	-	4. J	16.4 :	2.6 :	13.6 :
Fluoride	mg/kg-dry	T	2.2 J	-	2.4 J	0.86 J	2.2 J	8.1 J
Nitrate	mg/kg-dry	T	7.1 J	-	<2.2 J	<2.2 J	<2.1 J	8.7 J
Phosphorus	mg/kg-dry	T	872. :	-	839. J	661. :	316. :	657. :
Sulfate	mg/kg-dry	T	862. :	-	136. J	413. :	46.9 :	3220. :
Total Kjeldahl Nitrogen	mg/kg-dry	T	96.4 :	-	175. :	193. :	97.2 :	199. :
Total Organic Carbon	mg/kg-dry	T	1250. J	-	4650. J	3550. J	1410. J	3670. J
Laboratory Parameters								
pH	SU	T	7.9 :	-	7.9 :	8.9 :	6.4 :	7. :
Solids, Percent	%	T	97.1 :	-	94.6 :	92.9 :	96.9 :	93. :
Solids, Percent - VOCs Only	%	T	-	-	-	-	-	92.9 :
Specific Conductance	umhos/cm	T	1340. :	-	428. :	814. :	193. :	1870. :
Geotechnical								
Organic Soils	%	T	1.5 :	-	2. :	2.9 :	0.9 :	1.2 :
Physical Properties								
Cation-Exchange Capacity	meq/100g	T	7.9 :	-	9.2 :	12.9 :	6.4 :	8.7 :
Sodium Absorption Ratio	ratio	T	1.22 :	-	0.24 :	0.39 :	0.31 :	0.09 :
Metals								
Aluminum	mg/kg-dry	T	10600. :	-	10600. :	8880. :	5620. :	11400. :
Antimony	mg/kg-dry	T	<0.29 J	-	<0.3 J	<0.29 J	<0.28 J	0.52 J
Arsenic	mg/kg-dry	T	2.8 J	-	3.9 J	2.8 J	1.8 J	2.8 J
Barium	mg/kg-dry	T	62.2 :	-	61.7 :	74.2 :	21.1 :	45.6 :
Beryllium	mg/kg-dry	T	1.1 :	-	1.2 J	1.1 :	1.4 :	3.3 :
Boron	mg/kg-dry	T	3.2 :	-	5. :	6.8 :	<1.5 :	<2.7 :
Cadmium	mg/kg-dry	T	1. J	-	1.4 :	7.3 :	3.3 :	2.2 :
Calcium	mg/kg-dry	T	9930. :	-	10800. :	32100. :	3000. :	8130. :
Chromium	mg/kg-dry	T	63.5 J	-	34.8 J	45.9 J	13.3 J	37.9 J
Cobalt	mg/kg-dry	T	9.7 :	-	9. J	8.2 :	3.3 :	7.5 :
Copper	mg/kg-dry	T	99.4 J	-	109. J	123. J	97.8 J	119. J
Iron	mg/kg-dry	T	24300. :	-	20400. :	26200. :	10700. :	19100. :
Lead	mg/kg-dry	T	114. :	-	121. J	429. :	204. :	163. :
Magnesium	mg/kg-dry	T	7420. :	-	6880. :	5260. :	1970. :	5510. :

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Appendix A-7a
Soil - Biased 0-6 inches
Validated Analytical Results

Parameter	Units	Exposure Area Fraction	Site ID	Sample Date	Sample ID	Exposure Area
			MSS1-48	1/8/2003	MSS1-48-T01N-SOL	SS1
			MSS1-49	1/8/2003	MSS1-49-T01N-SOL DL	SS1
			MSS1-49	1/8/2003	MSS1-49-T01N-SOL	SS1
			MSS1-50	1/8/2003	MSS1-50-T01N-SOL	SS1
			MSS1-51	1/8/2003	MSS1-51-T01N-SOL	SS1
			MSS1-52	1/10/2003	MSS1-52-T01N-SOL	SS1
Manganese	mg/kg-dry	T	792. :	-	1030. :	762. :	1760. :	1370. :
Mercury	mg/kg-dry	T	<0.017 :	-	0.029 :	<0.018 :	<0.017 :	0.036 :
Molybdenum	mg/kg-dry	T	687. :	-	1130. :	537. :	141. :	780. :
Nickel	mg/kg-dry	T	39.7 :	-	23.6 J	22.9 :	6.4 :	22.4 :
Potassium	mg/kg-dry	T	2690. J	-	2390. J	2170. J	1660. J	2890. J
Selenium	mg/kg-dry	T	<0.76 J	-	-	<0.78 J	<0.76 J	0.87 J
Silver	mg/kg-dry	T	1.1 :	-	1.2 :	1.3 :	1.3 :	1.3 :
Sodium	mg/kg-dry	T	<159. :	-	<49.5 :	<148. :	119. :	<165. :
Thallium	mg/kg-dry	T	0.18 :	-	0.21 :	0.15 :	0.12 :	0.29 :
Vanadium	mg/kg-dry	T	40.3 :	-	42.1 :	35.2 :	11.9 :	33.4 :
Zinc	mg/kg-dry	T	169. :	-	199. J	1110. :	289. :	295. :
Volatile Organics								
1,1,1-Trichloroethane	mg/kg-dry	T	<0.009 :	-	<0.007 :	<0.008 :	<0.007 :	<0.005 :
1,1,2,2-Tetrachloroethane	mg/kg-dry	T	<0.009 :	-	<0.007 :	<0.008 J	<0.007 :	<0.005 :
1,1,2-Trichloro-1,2,2-trifluoroethane	mg/kg-dry	T	<0.009 :	-	<0.007 :	<0.008 :	<0.007 :	<0.005 :
1,1,2-Trichloroethane	mg/kg-dry	T	<0.009 :	-	<0.007 :	<0.008 :	<0.007 :	<0.005 :
1,1-Dichloroethane	mg/kg-dry	T	<0.009 :	-	<0.007 :	<0.008 :	<0.007 :	<0.005 :
1,1-Dichloroethene	mg/kg-dry	T	<0.009 :	-	<0.007 :	<0.008 :	<0.007 :	<0.005 :
1,2,4-Trichlorobenzene	mg/kg-dry	T	<0.009 :	-	<0.007 :	<0.008 J	<0.007 :	<0.005 :
1,2-Dibromo-3-chloropropane	mg/kg-dry	T	<0.009 :	-	<0.007 :	<0.008 J	<0.007 :	<0.005 :
1,2-Dichlorobenzene	mg/kg-dry	T	<0.009 :	-	<0.007 :	<0.008 J	<0.007 :	<0.005 :
1,2-Dichloroethane	mg/kg-dry	T	<0.009 :	-	<0.007 :	<0.008 :	<0.007 :	<0.005 :
1,2-Dichloroethene (total)	mg/kg-dry	T	<0.009 :	-	<0.007 :	<0.008 :	<0.007 :	<0.005 :
1,2-Dichloropropane	mg/kg-dry	T	<0.009 :	-	<0.007 :	<0.008 :	<0.007 :	<0.005 :
1,3-Dichlorobenzene	mg/kg-dry	T	<0.009 :	-	<0.007 :	<0.008 J	<0.007 :	<0.005 :
1,4-Dichlorobenzene	mg/kg-dry	T	<0.009 :	-	<0.007 :	<0.008 J	<0.007 :	<0.005 :
2-Butanone	mg/kg-dry	T	<0.009 :	-	<0.007 :	<0.008 :	<0.007 :	<0.005 :
2-Hexanone	mg/kg-dry	T	<0.009 :	-	<0.007 :	<0.008 J	<0.007 :	<0.005 :
4-Methyl-2-pentanone	mg/kg-dry	T	<0.009 :	-	<0.007 :	<0.008 J	<0.007 :	<0.005 :
Acetone	mg/kg-dry	T	<0.009 :	-	0.004 J	0.013 :	<0.007 :	0.007 :
Benzene	mg/kg-dry	T	<0.009 :	-	<0.007 :	<0.008 :	<0.007 :	0.0006 J
Bromodichloromethane	mg/kg-dry	T	<0.009 :	-	<0.007 :	<0.008 :	<0.007 :	<0.005 :
Bromoform	mg/kg-dry	T	<0.009 :	-	<0.007 :	<0.008 :	<0.007 :	<0.005 :
Bromomethane	mg/kg-dry	T	<0.009 :	-	<0.007 J	<0.008 :	<0.007 J	<0.005 :

J = Qualified as estimated during data validation
R = Qualified as rejected value from data validation and results are considered unusable for any purpose
T = Total Fraction

Appendix A-7a
Soil - Biased 0-6 inches
Validated Analytical Results

Parameter	Units	Exposure Area Fraction	Site ID / Sample Date / Sample ID					
			MSS1-48 1/8/2003 MSS1-48-T01N-SOL SS1	MSS1-49 1/8/2003 MSS1-49-T01N-SOL DL SS1	MSS1-49 1/8/2003 MSS1-49-T01N-SOL SS1	MSS1-50 1/8/2003 MSS1-50-T01N-SOL SS1	MSS1-51 1/8/2003 MSS1-51-T01N-SOL SS1	MSS1-52 1/10/2003 MSS1-52-T01N-SOL SS1
Carbon disulfide	mg/kg-dry	T	<0.009 :	-	<0.007 :	<0.008 :	<0.007 :	0.0007 J
Carbon tetrachloride	mg/kg-dry	T	<0.009 :	-	<0.007 :	<0.008 :	<0.007 :	<0.005 :
Chlorobenzene	mg/kg-dry	T	<0.009 :	-	<0.007 :	<0.008 J	<0.007 :	<0.005 :
Chloroethane	mg/kg-dry	T	<0.009 :	-	<0.007 :	<0.008 :	<0.007 :	<0.005 :
Chloroform	mg/kg-dry	T	<0.009 :	-	<0.007 :	<0.008 :	<0.007 :	<0.005 :
Chloromethane	mg/kg-dry	T	<0.009 :	-	<0.007 :	<0.008 :	<0.007 :	<0.005 :
cis-1,2-Dichloroethene	mg/kg-dry	T	<0.009 :	-	<0.007 :	<0.008 :	<0.007 :	<0.005 :
cis-1,3-Dichloropropene	mg/kg-dry	T	<0.009 :	-	<0.007 :	<0.008 :	<0.007 :	<0.005 :
Dibromochloromethane	mg/kg-dry	T	<0.009 :	-	<0.007 :	<0.008 J	<0.007 :	<0.005 :
Dichlorodifluoromethane	mg/kg-dry	T	<0.009 :	-	<0.007 :	<0.008 :	<0.007 :	<0.005 :
Ethylbenzene	mg/kg-dry	T	<0.009 :	-	<0.007 :	0.005 J	<0.007 :	<0.005 :
Methylene chloride	mg/kg-dry	T	<0.009 :	-	<0.007 :	<0.008 :	<0.007 :	<0.005 :
Styrene	mg/kg-dry	T	<0.009 :	-	<0.007 :	<0.008 J	<0.007 :	<0.005 :
Tetrachloroethene	mg/kg-dry	T	<0.009 :	-	<0.007 :	<0.008 :	<0.007 :	<0.005 :
Toluene	mg/kg-dry	T	<0.009 :	-	<0.007 :	0.001 J	<0.007 :	0.0008 J
Total Xylene	mg/kg-dry	T	<0.009 :	-	0.002 J	0.018 :	<0.007 :	<0.005 :
trans-1,2-Dichloroethene	mg/kg-dry	T	<0.009 :	-	<0.007 :	<0.008 :	<0.007 :	<0.005 :
trans-1,3-Dichloropropene	mg/kg-dry	T	<0.009 :	-	<0.007 :	<0.008 :	<0.007 :	<0.005 :
Trichloroethene	mg/kg-dry	T	<0.009 :	-	<0.007 :	0.0008 J	<0.007 :	<0.005 :
Trichlorofluoromethane	mg/kg-dry	T	<0.009 :	-	<0.007 :	<0.008 :	<0.007 :	<0.005 :
Vinyl chloride	mg/kg-dry	T	<0.009 :	-	<0.007 :	<0.008 :	<0.007 :	<0.005 :
Semi-Volatile Organics								
1,1`-Biphenyl	mg/kg-dry	T	<0.34 :	-	<0.35 :	1.9 :	<0.34 :	<0.35 :
2,4,5-Trichlorophenol	mg/kg-dry	T	<0.86 :	-	<0.87 :	<1.3 :	<0.86 :	<0.89 :
2,4,6-Trichlorophenol	mg/kg-dry	T	<0.34 :	-	<0.35 :	<0.51 :	<0.34 :	<0.35 :
2,4-Dichlorophenol	mg/kg-dry	T	<0.34 :	-	<0.35 :	<0.51 :	<0.34 :	<0.35 :
2,4-Dimethylphenol	mg/kg-dry	T	<0.34 :	-	<0.35 :	<0.51 :	<0.34 :	<0.35 :
2,4-Dinitrophenol	mg/kg-dry	T	<0.86 J	-	<0.87 :	<1.3 :	<0.86 :	<0.89 :
2,4-Dinitrotoluene	mg/kg-dry	T	<0.34 :	-	<0.35 :	<0.51 :	<0.34 :	<0.35 :
2,6-Dinitrotoluene	mg/kg-dry	T	<0.34 :	-	<0.35 :	<0.51 :	<0.34 :	<0.35 :
2-Chloronaphthalene	mg/kg-dry	T	<0.34 :	-	<0.35 :	<0.51 :	<0.34 :	<0.35 :
2-Chlorophenol	mg/kg-dry	T	<0.34 :	-	<0.35 :	<0.51 :	<0.34 :	<0.35 :
2-Methylnaphthalene	mg/kg-dry	T	<0.34 :	-	0.034 J	3.7 :	<0.34 :	<0.35 :
2-Methylphenol	mg/kg-dry	T	<0.34 :	-	<0.35 :	<0.51 :	<0.34 :	<0.35 :

J = Qualified as estimated during data validation
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T = Total Fraction

Appendix A-7a
Soil - Biased 0-6 inches
Validated Analytical Results

Parameter	Units	Exposure Area Fraction	Site ID / Sample Date / Sample ID / Exposure Area											
			MSS1-48 1/8/2003 MSS1-48-T01N-SOL SS1		MSS1-49 1/8/2003 MSS1-49-T01N-SOL DL SS1		MSS1-49 1/8/2003 MSS1-49-T01N-SOL SS1		MSS1-50 1/8/2003 MSS1-50-T01N-SOL SS1		MSS1-51 1/8/2003 MSS1-51-T01N-SOL SS1		MSS1-52 1/10/2003 MSS1-52-T01N-SOL SS1	
2-Nitroaniline	mg/kg-dry	T	<0.86	:	-		<0.87	:	<1.3	:	<0.86	:	<0.89	:
2-Nitrophenol	mg/kg-dry	T	<0.34	:	-		<0.35	:	<0.51	:	<0.34	:	<0.35	:
3,3-Dichlorobenzidine	mg/kg-dry	T	<0.34	:	-		<0.35	J	<0.51	:	<0.34	:	<0.35	:
3-Nitroaniline	mg/kg-dry	T	<0.86	:	-		<0.87	:	<1.3	J	<0.86	:	<0.89	:
4,6-Dinitro-2-methylphenol	mg/kg-dry	T	<0.86	:	-		<0.87	J	<1.3	:	<0.86	:	<0.89	:
4-Bromophenyl phenyl ether	mg/kg-dry	T	<0.34	:	-		<0.35	J	<0.51	:	<0.34	:	<0.35	:
4-Chloro-3-methylphenol	mg/kg-dry	T	<0.34	:	-		<0.35	:	<0.51	:	<0.34	:	<0.35	:
4-Chloroaniline	mg/kg-dry	T	<0.34	:	-		<0.35	:	<0.51	J	<0.34	:	<0.35	:
4-Chlorophenyl phenyl ether	mg/kg-dry	T	<0.34	:	-		<0.35	:	<0.51	:	<0.34	:	<0.35	:
4-Methylphenol	mg/kg-dry	T	<0.34	:	-		<0.35	:	<0.51	:	<0.34	:	<0.35	:
4-Nitroaniline	mg/kg-dry	T	<0.86	:	-		<0.87	:	<1.3	J	<0.86	:	<0.89	:
4-Nitrophenol	mg/kg-dry	T	<0.86	:	-		<0.87	:	<1.3	:	<0.86	:	<0.89	:
Acenaphthene	mg/kg-dry	T	<0.34	:	-		<0.35	:	<0.51	:	<0.34	:	<0.35	:
Acenaphthylene	mg/kg-dry	T	<0.34	:	-		<0.35	:	<0.51	:	<0.34	:	<0.35	:
Anthracene	mg/kg-dry	T	<0.34	:	-		<0.35	J	<0.51	:	<0.34	:	<0.35	:
Benzaldehyde	mg/kg-dry	T	<0.34	:	-		<0.35	J	<0.51	:	<0.34	J	<0.35	:
Benzo(a)anthracene	mg/kg-dry	T	<0.34	:	-		<0.35	J	<0.51	:	<0.34	:	<0.35	:
Benzo(a)pyrene	mg/kg-dry	T	<0.34	:	-		<0.35	J	<0.51	:	<0.34	:	<0.35	:
Benzo(b)fluoranthene	mg/kg-dry	T	<0.34	:	-		<0.35	J	<0.51	:	<0.34	:	<0.35	:
Benzo(g,h,i)perylene	mg/kg-dry	T	<0.34	:	-		<0.35	J	<0.51	:	<0.34	:	<0.35	J
Benzo(k)fluoranthene	mg/kg-dry	T	<0.34	:	-		<0.35	J	<0.51	:	<0.34	:	<0.35	:
Bis(2-chloroethoxy)methane	mg/kg-dry	T	<0.34	:	-		<0.35	:	<0.51	:	<0.34	:	<0.35	:
Bis(2-chloroethyl)ether	mg/kg-dry	T	<0.34	:	-		<0.35	:	<0.51	:	<0.34	:	<0.35	:
Bis(2-ethylhexyl)phthalate	mg/kg-dry	T	0.056	J	-		0.063	J	0.26	J	<0.34	:	0.043	J
Butyl benzyl phthalate	mg/kg-dry	T	<0.34	:	-		<0.35	J	<0.51	:	<0.34	:	<0.35	:
Carbazole	mg/kg-dry	T	<0.34	:	-		<0.35	J	<0.51	:	<0.34	:	<0.35	:
Chrysene	mg/kg-dry	T	<0.34	:	-		<0.35	J	<0.51	:	<0.34	:	0.018	J
Dibenz(a,h)anthracene	mg/kg-dry	T	<0.34	:	-		<0.35	J	<0.51	:	<0.34	:	<0.35	J
Dibenzofuran	mg/kg-dry	T	<0.34	:	-		<0.35	:	<0.51	:	<0.34	:	<0.35	:
Dichlorodiisopropyl ether	mg/kg-dry	T	<0.34	:	-		<0.35	:	<0.51	:	<0.34	:	<0.35	:
Diethylphthalate	mg/kg-dry	T	<0.34	:	-		<0.35	:	<0.51	:	<0.34	:	<0.35	:
Dimethylphthalate	mg/kg-dry	T	<0.34	:	-		<0.35	:	<0.51	:	<0.34	:	<0.35	:
Di-n-Butyl phthalate	mg/kg-dry	T	<0.34	:	-		0.021	J	<0.51	:	0.019	J	<0.35	:
Di-n-Octyl phthalate	mg/kg-dry	T	<0.34	:	-		<0.35	J	0.12	J	<0.34	:	<0.35	:

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Appendix A-7a
Soil - Biased 0-6 inches
Validated Analytical Results

Parameter	Units	Exposure Area Fraction	Site ID / Sample Date / Sample ID / Exposure Area											
			MSS1-48 1/8/2003 MSS1-48-T01N-SOL SS1		MSS1-49 1/8/2003 MSS1-49-T01N-SOL DL SS1		MSS1-49 1/8/2003 MSS1-49-T01N-SOL SS1		MSS1-50 1/8/2003 MSS1-50-T01N-SOL SS1		MSS1-51 1/8/2003 MSS1-51-T01N-SOL SS1		MSS1-52 1/10/2003 MSS1-52-T01N-SOL SS1	
Fluoranthene	mg/kg-dry	T	<0.34	:	-		<0.35	J	<0.51	:	<0.34	:	0.021	J
Fluorene	mg/kg-dry	T	<0.34	:	-		<0.35	:	1.3	:	<0.34	:	<0.35	:
Hexachlorobenzene	mg/kg-dry	T	<0.34	:	-		<0.35	J	<0.51	:	<0.34	:	<0.35	:
Hexachlorobutadiene	mg/kg-dry	T	<0.34	:	-		<0.35	:	<0.51	:	<0.34	:	<0.35	:
Hexachlorocyclopentadiene	mg/kg-dry	T	<0.34	:	-		<0.35	:	<0.51	:	<0.34	:	<0.35	J
Hexachloroethane	mg/kg-dry	T	<0.34	:	-		<0.35	:	<0.51	:	<0.34	:	<0.35	:
Indeno(1,2,3-cd)pyrene	mg/kg-dry	T	<0.34	:	-		<0.35	J	<0.51	:	<0.34	:	<0.35	J
Isophorone	mg/kg-dry	T	<0.34	:	-		<0.35	:	<0.51	:	<0.34	:	<0.35	:
Naphthalene	mg/kg-dry	T	<0.34	:	-		<0.35	:	0.55	:	<0.34	:	<0.35	:
Nitrobenzene	mg/kg-dry	T	<0.34	:	-		<0.35	:	<0.51	:	<0.34	:	<0.35	:
N-Nitrosodi-n-propylamine	mg/kg-dry	T	<0.34	:	-		<0.35	:	<0.51	:	<0.34	:	<0.35	:
N-Nitrosodiphenylamine	mg/kg-dry	T	<0.34	:	-		<0.35	J	<0.51	:	<0.34	:	<0.35	:
Pentachlorophenol	mg/kg-dry	T	<0.86	:	-		<0.87	J	<1.3	:	<0.86	:	<0.89	J
Phenanthrene	mg/kg-dry	T	<0.34	:	-		0.023	J	2.7	:	<0.34	:	<0.35	:
Phenol	mg/kg-dry	T	<0.34	:	-		<0.35	:	<0.51	:	<0.34	:	<0.35	:
Pyrene	mg/kg-dry	T	<0.34	:	-		<0.35	J	0.29	J	<0.34	:	<0.35	:
Pesticides-PCBs														
Aroclor 1016	mg/kg-dry	T	<0.034	:	-		<0.035	:	<0.035	:	<0.034	:	<0.035	:
Aroclor 1221	mg/kg-dry	T	<0.069	:	-		<0.071	:	<0.072	:	<0.069	:	<0.072	:
Aroclor 1232	mg/kg-dry	T	<0.034	:	-		<0.035	:	<0.035	:	<0.034	:	<0.035	:
Aroclor 1242	mg/kg-dry	T	<0.034	:	-		<0.035	:	<0.035	:	<0.034	:	<0.035	:
Aroclor 1248	mg/kg-dry	T	<0.034	:	-		<0.035	:	0.15	J	<0.034	:	<0.035	:
Aroclor 1254	mg/kg-dry	T	0.39	:	2.3	:	-		0.22	:	1.3	:	0.39	J
Aroclor 1260	mg/kg-dry	T	<0.034	:	-		<0.035	:	<0.035	:	<0.034	:	<0.035	:

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Appendix A-7a
Soil - Biased 0-6 inches
Validated Analytical Results

Parameter	Units	Exposure Area Fraction	Site ID / Sample Date / Sample ID											
			MSS1-53 1/9/2003 MSS1-53-T01N-SOLDL SS1		MSS1-53 1/9/2003 MSS1-53-T01N-SOL SS1		MSS1-54 1/10/2003 MSS1-54-T01N-SOLDL SS1		MSS1-54 1/10/2003 MSS1-54-T01N-SOL SS1		MSS1-55 1/17/2003 MSS1-55-T01N-SOLRE SS1		MSS1-55 1/17/2003 MSS1-55-T01N-SOLD SS1	
General Chemistry														
Ammonia	mg/kg-dry	T	-		37.7	:	-		3.3	:	-		-	
Chloride	mg/kg-dry	T	-		21.5	:	-		7.	:	-		-	
Fluoride	mg/kg-dry	T	-		136.	J	-		2.7	J	-		-	
Nitrate	mg/kg-dry	T	-		<2.2	J	-		<2.3	J	-		-	
Phosphorus	mg/kg-dry	T	-		895.	:	-		590.	:	-		-	
Sulfate	mg/kg-dry	T	-		4720.	:	-		1190.	:	-		-	
Total Kjeldahl Nitrogen	mg/kg-dry	T	-		137.	:	-		46.2	:	-		-	
Total Organic Carbon	mg/kg-dry	T	-		3880.	J	-		2540.	J	-		-	
Laboratory Parameters														
pH	SU	T	-		5.8	:	-		7.6	:	-		-	
Solids, Percent	%	T	-		94.2	:	-		88.8	:	-		-	
Solids, Percent - VOCs Only	%	T	-		93.6	:	-		-		-		-	
Specific Conductance	umhos/cm	T	-		2400.	:	-		1170.	:	-		-	
Geotechnical														
Organic Soils	%	T	-		2.6	:	-		0.9	:	-		-	
Physical Properties														
Cation-Exchange Capacity	meq/100g	T	-		13.2	:	-		7.9	:	-		-	
Sodium Absorption Ratio	ratio	T	-		0.15	:	-		0.16	:	-		-	
Metals														
Aluminum	mg/kg-dry	T	-		11400.	:	-		7570.	:	-		-	
Antimony	mg/kg-dry	T	-		<0.31	J	-		0.5	J	-		-	
Arsenic	mg/kg-dry	T	-		5.4	J	-		2.	J	-		-	
Barium	mg/kg-dry	T	-		65.5	:	-		44.3	:	-		-	
Beryllium	mg/kg-dry	T	-		1.3	:	-		1.2	:	-		-	
Boron	mg/kg-dry	T	-		<1.1	:	-		<2.8	:	-		-	
Cadmium	mg/kg-dry	T	-		1.9	:	-		0.78	:	-		-	
Calcium	mg/kg-dry	T	-		8020.	:	-		10100.	:	-		-	
Chromium	mg/kg-dry	T	-		41.6	J	-		40.7	J	-		-	
Cobalt	mg/kg-dry	T	-		6.3	:	-		2.1	:	-		-	
Copper	mg/kg-dry	T	-		518.	J	-		249.	J	-		-	
Iron	mg/kg-dry	T	-		31100.	:	-		18900.	:	-		-	
Lead	mg/kg-dry	T	-		212.	:	-		111.	:	-		-	
Magnesium	mg/kg-dry	T	-		6790.	:	-		4630.	:	-		-	

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Appendix A-7a
Soil - Biased 0-6 inches
Validated Analytical Results

Parameter	Units	Exposure Area Fraction	Site ID	MSS1-53	MSS1-53	MSS1-54	MSS1-54	MSS1-55	MSS1-55
			Sample Date	1/9/2003	1/9/2003	1/10/2003	1/10/2003	1/17/2003	1/17/2003
			Sample ID	MSS1-53-T01N-SOLDL	MSS1-53-T01N-SOL	MSS1-54-T01N-SOLDL	MSS1-54-T01N-SOL	MSS1-55-T01N-SOLRE	MSS1-55-T01N-SOLDL
			Exposure Area	SS1	SS1	SS1	SS1	SS1	SS1
Manganese	mg/kg-dry	T		-	806. :	-	547. :	-	-
Mercury	mg/kg-dry	T		-	<0.018 :	-	<0.017 :	-	-
Molybdenum	mg/kg-dry	T		-	18100. :	-	10100. :	-	-
Nickel	mg/kg-dry	T		-	44.9 :	-	24.7 :	-	-
Potassium	mg/kg-dry	T		-	3300. J	-	2750. J	-	-
Selenium	mg/kg-dry	T		-	2.7 J	-	1.8 J	-	-
Silver	mg/kg-dry	T		-	1.8 :	-	1.5 :	-	-
Sodium	mg/kg-dry	T		-	<44.7 :	-	<88.8 :	-	-
Thallium	mg/kg-dry	T		-	0.32 :	-	0.32 :	-	-
Vanadium	mg/kg-dry	T		-	117. :	-	90.3 :	-	-
Zinc	mg/kg-dry	T		-	271. :	-	159. :	-	-
Volatile Organics									
1,1,1-Trichloroethane	mg/kg-dry	T		-	<0.009 :	-	<0.012 :	-	-
1,1,2,2-Tetrachloroethane	mg/kg-dry	T		-	<0.009 :	-	<0.012 :	-	-
1,1,2-Trichloro-1,2,2-trifluoroethane	mg/kg-dry	T		-	<0.009 :	-	<0.012 :	-	-
1,1,2-Trichloroethane	mg/kg-dry	T		-	<0.009 :	-	<0.012 :	-	-
1,1-Dichloroethane	mg/kg-dry	T		-	<0.009 :	-	<0.012 :	-	-
1,1-Dichloroethene	mg/kg-dry	T		-	<0.009 :	-	<0.012 :	-	-
1,2,4-Trichlorobenzene	mg/kg-dry	T		-	<0.009 :	-	<0.012 :	-	-
1,2-Dibromo-3-chloropropane	mg/kg-dry	T		-	<0.009 :	-	<0.012 :	-	-
1,2-Dichlorobenzene	mg/kg-dry	T		-	<0.009 :	-	<0.012 :	-	-
1,2-Dichloroethane	mg/kg-dry	T		-	<0.009 :	-	<0.012 :	-	-
1,2-Dichloroethene (total)	mg/kg-dry	T		-	<0.009 :	-	<0.012 :	-	-
1,2-Dichloropropane	mg/kg-dry	T		-	<0.009 :	-	<0.012 :	-	-
1,3-Dichlorobenzene	mg/kg-dry	T		-	<0.009 :	-	<0.012 :	-	-
1,4-Dichlorobenzene	mg/kg-dry	T		-	<0.009 :	-	<0.012 :	-	-
2-Butanone	mg/kg-dry	T		-	<0.009 J	-	0.004 J	-	-
2-Hexanone	mg/kg-dry	T		-	<0.009 :	-	<0.012 :	-	-
4-Methyl-2-pentanone	mg/kg-dry	T		-	<0.009 :	-	<0.012 :	-	-
Acetone	mg/kg-dry	T		-	<0.026 J	-	0.011 J	-	-
Benzene	mg/kg-dry	T		-	<0.009 :	-	<0.012 :	-	-
Bromodichloromethane	mg/kg-dry	T		-	<0.009 :	-	<0.012 :	-	-
Bromoform	mg/kg-dry	T		-	<0.009 :	-	<0.012 :	-	-
Bromomethane	mg/kg-dry	T		-	<0.009 :	-	<0.012 :	-	-

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Appendix A-7a
Soil - Biased 0-6 inches
Validated Analytical Results

Parameter	Units	Exposure Area Fraction	Site ID / Sample Date / Sample ID											
			MSS1-53 1/9/2003 MSS1-53-T01N-SOLDL SS1		MSS1-53 1/9/2003 MSS1-53-T01N-SOL SS1		MSS1-54 1/10/2003 MSS1-54-T01N-SOLDL SS1		MSS1-54 1/10/2003 MSS1-54-T01N-SOL SS1		MSS1-55 1/17/2003 MSS1-55-T01N-SOLRE SS1		MSS1-55 1/17/2003 MSS1-55-T01N-SOLD SS1	
Carbon disulfide	mg/kg-dry	T	-		0.001	J	-		0.007	J	-		-	
Carbon tetrachloride	mg/kg-dry	T	-		<0.009	:	-		<0.012	:	-		-	
Chlorobenzene	mg/kg-dry	T	-		<0.009	:	-		<0.012	:	-		-	
Chloroethane	mg/kg-dry	T	-		<0.009	:	-		<0.012	:	-		-	
Chloroform	mg/kg-dry	T	-		<0.009	:	-		<0.012	:	-		-	
Chloromethane	mg/kg-dry	T	-		<0.009	:	-		<0.012	:	-		-	
cis-1,2-Dichloroethene	mg/kg-dry	T	-		<0.009	:	-		<0.012	:	-		-	
cis-1,3-Dichloropropene	mg/kg-dry	T	-		<0.009	:	-		<0.012	:	-		-	
Dibromochloromethane	mg/kg-dry	T	-		<0.009	:	-		<0.012	:	-		-	
Dichlorodifluoromethane	mg/kg-dry	T	-		<0.009	:	-		<0.012	:	-		-	
Ethylbenzene	mg/kg-dry	T	-		<0.009	:	-		<0.012	:	-		-	
Methylene chloride	mg/kg-dry	T	-		<0.009	:	-		<0.012	:	-		-	
Styrene	mg/kg-dry	T	-		<0.009	:	-		<0.012	:	-		-	
Tetrachloroethene	mg/kg-dry	T	-		<0.009	:	-		<0.012	:	-		-	
Toluene	mg/kg-dry	T	-		<0.009	:	-		<0.012	:	-		-	
Total Xylene	mg/kg-dry	T	-		<0.009	:	-		<0.012	:	-		-	
trans-1,2-Dichloroethene	mg/kg-dry	T	-		<0.009	:	-		<0.012	:	-		-	
trans-1,3-Dichloropropene	mg/kg-dry	T	-		<0.009	:	-		<0.012	:	-		-	
Trichloroethene	mg/kg-dry	T	-		<0.009	:	-		<0.012	:	-		-	
Trichlorofluoromethane	mg/kg-dry	T	-		<0.009	:	-		<0.012	:	-		-	
Vinyl chloride	mg/kg-dry	T	-		<0.009	:	-		<0.012	:	-		-	
Semi-Volatile Organics														
1,1`-Biphenyl	mg/kg-dry	T	-		<0.35	:	-		<0.37	:	<1.8	:	-	
2,4,5-Trichlorophenol	mg/kg-dry	T	-		<0.88	:	-		<0.93	:	<4.5	:	-	
2,4,6-Trichlorophenol	mg/kg-dry	T	-		<0.35	:	-		<0.37	:	<1.8	:	-	
2,4-Dichlorophenol	mg/kg-dry	T	-		<0.35	:	-		<0.37	:	<1.8	:	-	
2,4-Dimethylphenol	mg/kg-dry	T	-		<0.35	:	-		<0.37	:	<1.8	:	-	
2,4-Dinitrophenol	mg/kg-dry	T	-		<0.88	:	-		<0.93	:	<4.5	J	-	
2,4-Dinitrotoluene	mg/kg-dry	T	-		<0.35	:	-		<0.37	:	<1.8	:	-	
2,6-Dinitrotoluene	mg/kg-dry	T	-		<0.35	:	-		<0.37	:	<1.8	:	-	
2-Chloronaphthalene	mg/kg-dry	T	-		<0.35	:	-		<0.37	:	<1.8	:	-	
2-Chlorophenol	mg/kg-dry	T	-		<0.35	:	-		<0.37	:	<1.8	:	-	
2-Methylnaphthalene	mg/kg-dry	T	-		<0.35	:	-		<0.37	:	<1.8	:	-	
2-Methylphenol	mg/kg-dry	T	-		<0.35	:	-		<0.37	:	<1.8	:	-	

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Appendix A-7a
Soil - Biased 0-6 inches
Validated Analytical Results

Parameter	Units	Fraction	MSS1-53	MSS1-53	MSS1-54	MSS1-54	MSS1-55	MSS1-55
Sample Date			1/9/2003	1/9/2003	1/10/2003	1/10/2003	1/17/2003	1/17/2003
Sample ID			MSS1-53-T01N-SOLDL	MSS1-53-T01N-SOL	MSS1-54-T01N-SOLDL	MSS1-54-T01N-SOL	MSS1-55-T01N-SOLRE	MSS1-55-T01N-SOLDL
Exposure Area			SS1	SS1	SS1	SS1	SS1	SS1
2-Nitroaniline	mg/kg-dry	T	-	<0.88	-	<0.93	<4.5	-
2-Nitrophenol	mg/kg-dry	T	-	<0.35	-	<0.37	<1.8	-
3,3-Dichlorobenzidine	mg/kg-dry	T	-	<0.35	-	<0.37	<1.8 J	-
3-Nitroaniline	mg/kg-dry	T	-	<0.88	-	<0.93	<4.5	-
4,6-Dinitro-2-methylphenol	mg/kg-dry	T	-	<0.88	-	<0.93	<4.5	-
4-Bromophenyl phenyl ether	mg/kg-dry	T	-	<0.35	-	<0.37	<1.8	-
4-Chloro-3-methylphenol	mg/kg-dry	T	-	<0.35	-	<0.37	<1.8	-
4-Chloroaniline	mg/kg-dry	T	-	<0.35	-	<0.37	<1.8	-
4-Chlorophenyl phenyl ether	mg/kg-dry	T	-	<0.35	-	<0.37	<1.8	-
4-Methylphenol	mg/kg-dry	T	-	<0.35	-	<0.37	<1.8	-
4-Nitroaniline	mg/kg-dry	T	-	<0.88	-	<0.93	<4.5 J	-
4-Nitrophenol	mg/kg-dry	T	-	<0.88	-	<0.93	<4.5	-
Acenaphthene	mg/kg-dry	T	-	<0.35	-	<0.37	<1.8	-
Acenaphthylene	mg/kg-dry	T	-	<0.35	-	<0.37	<1.8	-
Anthracene	mg/kg-dry	T	-	<0.35	-	<0.37	<1.8	-
Benzaldehyde	mg/kg-dry	T	-	0.57	-	<0.37	<1.8 J	-
Benzo(a)anthracene	mg/kg-dry	T	-	<0.35	-	<0.37	<1.8 J	-
Benzo(a)pyrene	mg/kg-dry	T	-	<0.35	-	<0.37	<1.8	-
Benzo(b)fluoranthene	mg/kg-dry	T	-	<0.35	-	<0.37	<1.8	-
Benzo(g,h,i)perylene	mg/kg-dry	T	-	<0.35	-	<0.37 J	<1.8	-
Benzo(k)fluoranthene	mg/kg-dry	T	-	<0.35	-	<0.37	<1.8	-
Bis(2-chloroethoxy)methane	mg/kg-dry	T	-	<0.35	-	<0.37	<1.8	-
Bis(2-chloroethyl)ether	mg/kg-dry	T	-	<0.35	-	<0.37	<1.8	-
Bis(2-ethylhexyl)phthalate	mg/kg-dry	T	-	0.13 J	-	0.074 J	0.7 J	-
Butyl benzyl phthalate	mg/kg-dry	T	-	<0.35	-	<0.37	<1.8 J	-
Carbazole	mg/kg-dry	T	-	<0.35	-	<0.37	<1.8	-
Chrysene	mg/kg-dry	T	-	<0.35	-	<0.37	<1.8 J	-
Dibenz(a,h)anthracene	mg/kg-dry	T	-	<0.35	-	<0.37 J	<1.8	-
Dibenzofuran	mg/kg-dry	T	-	<0.35	-	<0.37	<1.8	-
Dichlorodiisopropyl ether	mg/kg-dry	T	-	<0.35	-	<0.37	<1.8	-
Diethylphthalate	mg/kg-dry	T	-	<0.35	-	<0.37	<1.8	-
Dimethylphthalate	mg/kg-dry	T	-	<0.35	-	<0.37	<1.8	-
Di-n-Butyl phthalate	mg/kg-dry	T	-	0.064 J	-	<0.37	<1.8	-
Di-n-Octyl phthalate	mg/kg-dry	T	-	<0.35	-	<0.37	<1.8	-

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Appendix A-7a
Soil - Biased 0-6 inches
Validated Analytical Results

Parameter	Units	Exposure Area Fraction	Site ID / Sample Date / Sample ID											
			MSS1-53	1/9/2003	MSS1-53-T01N-SOLDL	SS1	MSS1-53	1/9/2003	MSS1-53-T01N-SOL	SS1	MSS1-54	1/10/2003	MSS1-54-T01N-SOLDL	SS1
Fluoranthene	mg/kg-dry	T	-				<0.35	:			-			
Fluorene	mg/kg-dry	T	-				<0.35	:			-			
Hexachlorobenzene	mg/kg-dry	T	-				<0.35	:			-			
Hexachlorobutadiene	mg/kg-dry	T	-				<0.35	:			-			
Hexachlorocyclopentadiene	mg/kg-dry	T	-				<0.35	:			-			
Hexachloroethane	mg/kg-dry	T	-				<0.35	:			-			
Indeno(1,2,3-cd)pyrene	mg/kg-dry	T	-				<0.35	:			-			
Isophorone	mg/kg-dry	T	-				<0.35	:			-			
Naphthalene	mg/kg-dry	T	-				<0.35	:			-			
Nitrobenzene	mg/kg-dry	T	-				<0.35	:			-			
N-Nitrosodi-n-propylamine	mg/kg-dry	T	-				<0.35	:			-			
N-Nitrosodiphenylamine	mg/kg-dry	T	-				<0.35	:			-			
Pentachlorophenol	mg/kg-dry	T	-				<0.88	:			-			
Phenanthrene	mg/kg-dry	T	-				<0.35	:			-			
Phenol	mg/kg-dry	T	-				<0.35	:			-			
Pyrene	mg/kg-dry	T	-				<0.35	:			-			
Pesticides-PCBs														
Aroclor 1016	mg/kg-dry	T	-				<0.35	:			-			
Aroclor 1221	mg/kg-dry	T	-				<0.71	:			-			
Aroclor 1232	mg/kg-dry	T	-				<0.35	:			-			
Aroclor 1242	mg/kg-dry	T	-				<0.35	:			-			
Aroclor 1248	mg/kg-dry	T	30.	:			-				3.	:		
Aroclor 1254	mg/kg-dry	T	-				<0.35	:			-			
Aroclor 1260	mg/kg-dry	T	-				<0.35	:			-			

Parameter	Units	Exposure Area Fraction	Site ID / Sample Date / Sample ID											
			MSS1-54	1/10/2003	MSS1-54-T01N-SOL	SS1	MSS1-55	1/17/2003	MSS1-55-T01N-SOLRE	SS1	MSS1-55	1/17/2003	MSS1-55-T01N-SOLDL	SS1
Fluoranthene	mg/kg-dry	T	<0.37	:			<1.8	:			-			
Fluorene	mg/kg-dry	T	<0.37	:			<1.8	:			-			
Hexachlorobenzene	mg/kg-dry	T	<0.37	:			<1.8	:			-			
Hexachlorobutadiene	mg/kg-dry	T	<0.37	:			<1.8	:			-			
Hexachlorocyclopentadiene	mg/kg-dry	T	<0.37	J			<1.8	:			-			
Hexachloroethane	mg/kg-dry	T	<0.37	:			<1.8	:			-			
Indeno(1,2,3-cd)pyrene	mg/kg-dry	T	<0.37	J			<1.8	:			-			
Isophorone	mg/kg-dry	T	<0.37	:			<1.8	:			-			
Naphthalene	mg/kg-dry	T	<0.37	:			<1.8	:			-			
Nitrobenzene	mg/kg-dry	T	<0.37	:			<1.8	:			-			
N-Nitrosodi-n-propylamine	mg/kg-dry	T	<0.37	:			<1.8	:			-			
N-Nitrosodiphenylamine	mg/kg-dry	T	<0.37	:			<1.8	:			-			
Pentachlorophenol	mg/kg-dry	T	<0.93	J			<4.5	:			-			
Phenanthrene	mg/kg-dry	T	0.037	J			<1.8	:			-			
Phenol	mg/kg-dry	T	<0.37	:			<1.8	:			-			
Pyrene	mg/kg-dry	T	<0.37	:			<1.8	J			-			
Pesticides-PCBs														
Aroclor 1016	mg/kg-dry	T	<0.074	:			-				-			
Aroclor 1221	mg/kg-dry	T	<0.15	:			-				-			
Aroclor 1232	mg/kg-dry	T	<0.074	:			-				-			
Aroclor 1242	mg/kg-dry	T	<0.074	:			-				-			
Aroclor 1248	mg/kg-dry	T	-				-				20.	:		
Aroclor 1254	mg/kg-dry	T	3.2	:			-				20.	:		
Aroclor 1260	mg/kg-dry	T	<0.074	:			-				-			

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Appendix A-7a
Soil - Biased 0-6 inches
Validated Analytical Results

Parameter	Units	Fraction	MSS1-55		MSS1-56	MSS1-56		MSS1-57	MSS1-57		MSS1-58
Sample Date			1/17/2003		1/8/2003	1/8/2003		1/8/2003	1/8/2003		1/9/2003
Sample ID			MSS1-55-T01N-SOL		MSS1-56-T01N-SOLRE	MSS1-56-T01N-SOL		MSS1-57-T01N-SOLDL	MSS1-57-T01N-SOL		MSS1-58-T01N-SOLDL
Exposure Area			SS1		SS1	SS1		SS1	SS1		SS1
General Chemistry											
Ammonia	mg/kg-dry	T	10.6	J	-	4.6	:	-	<2.6	:	-
Chloride	mg/kg-dry	T	22.9	:	-	3.	:	-	70.1	:	-
Fluoride	mg/kg-dry	T	1.9	J	-	3.7	J	-	2.	J	-
Nitrate	mg/kg-dry	T	<2.2	J	-	<2.2	J	-	2.6	J	-
Phosphorus	mg/kg-dry	T	1230.	:	-	815.	:	-	846.	:	-
Sulfate	mg/kg-dry	T	949.	:	-	1380.	:	-	1640.	:	-
Total Kjeldahl Nitrogen	mg/kg-dry	T	86.3	:	-	116.	:	-	73.6	:	-
Total Organic Carbon	mg/kg-dry	T	2440.	J	-	1640.	J	-	2530.	J	-
Laboratory Parameters											
pH	SU	T	7.7	:	-	6.	:	-	7.1	:	-
Solids, Percent	%	T	92.8	:	-	94.8	:	-	92.3	:	-
Solids, Percent - VOCs Only	%	T	92.8	:	-	-		-	-		-
Specific Conductance	umhos/cm	T	1310.	J	-	1560.	:	-	2020.	:	-
Geotechnical											
Organic Soils	%	T	1.5	:	-	2.7	:	-	1.8	:	-
Physical Properties											
Cation-Exchange Capacity	meq/100g	T	15.8	:	-	9.4	:	-	5.6	:	-
Sodium Absorption Ratio	ratio	T	0.76	:	-	0.03	:	-	1.3	:	-
Metals											
Aluminum	mg/kg-dry	T	11700.	:	-	7670.	:	-	8290.	:	-
Antimony	mg/kg-dry	T	<0.31	J	-	<0.31	J	-	<0.29	J	-
Arsenic	mg/kg-dry	T	3.2	J	-	11.8	J	-	7.1	J	-
Barium	mg/kg-dry	T	68.2	:	-	59.2	:	-	53.1	:	-
Beryllium	mg/kg-dry	T	0.91	:	-	0.79	:	-	0.76	:	-
Boron	mg/kg-dry	T	<0.29	J	-	<1.2	:	-	<0.98	:	-
Cadmium	mg/kg-dry	T	0.24	J	-	1.4	:	-	0.11	J	-
Calcium	mg/kg-dry	T	9100.	:	-	4680.	:	-	8760.	:	-
Chromium	mg/kg-dry	T	53.1	J	-	52.6	J	-	82.2	J	-
Cobalt	mg/kg-dry	T	10.7	:	-	<0.14	:	-	1.	:	-
Copper	mg/kg-dry	T	100.	J	-	601.	J	-	477.	J	-
Iron	mg/kg-dry	T	24600.	:	-	42700.	:	-	59100.	:	-
Lead	mg/kg-dry	T	69.1	:	-	768.	:	-	281.	:	-
Magnesium	mg/kg-dry	T	9530.	:	-	4370.	:	-	5860.	:	-

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Appendix A-7a
Soil - Biased 0-6 inches
Validated Analytical Results

Parameter	Units	Exposure Area Fraction	Site ID		Sample Date		Sample ID		Exposure Area	
			MSS1-55		1/17/2003		MSS1-55-T01N-SOL		SS1	
			MSS1-56		1/8/2003		MSS1-56-T01N-SOL RE		SS1	
			MSS1-56		1/8/2003		MSS1-56-T01N-SOL		SS1	
			MSS1-57		1/8/2003		MSS1-57-T01N-SOLD L		SS1	
			MSS1-57		1/8/2003		MSS1-57-T01N-SOL		SS1	
			MSS1-58		1/9/2003		MSS1-58-T01N-SOLD L		SS1	
Manganese	mg/kg-dry	T	622.	:	-		750.	:	-	
Mercury	mg/kg-dry	T	<0.017	:	-		0.019	:	-	
Molybdenum	mg/kg-dry	T	2740.	:	-		33500.	:	-	
Nickel	mg/kg-dry	T	35.1	:	-		32.2	:	-	
Potassium	mg/kg-dry	T	3180.	J	-		2730.	J	-	
Selenium	mg/kg-dry	T	<0.82	J	-		4.8	J	-	
Silver	mg/kg-dry	T	0.85	:	-		0.81	:	-	
Sodium	mg/kg-dry	T	<53.2	:	-		<29.5	:	-	
Thallium	mg/kg-dry	T	0.28	:	-		0.39	:	-	
Vanadium	mg/kg-dry	T	61.2	:	-		138.	:	-	
Zinc	mg/kg-dry	T	107.	:	-		341.	:	-	
Volatile Organics										
1,1,1-Trichloroethane	mg/kg-dry	T	<0.011	:	-		<0.006	:	-	
1,1,2,2-Tetrachloroethane	mg/kg-dry	T	<0.011	J	-		<0.006	:	-	
1,1,2-Trichloro-1,2,2-trifluoroethane	mg/kg-dry	T	<0.011	:	-		<0.006	:	-	
1,1,2-Trichloroethane	mg/kg-dry	T	<0.011	:	-		<0.006	:	-	
1,1-Dichloroethane	mg/kg-dry	T	<0.011	:	-		<0.006	:	-	
1,1-Dichloroethene	mg/kg-dry	T	<0.011	:	-		<0.006	:	-	
1,2,4-Trichlorobenzene	mg/kg-dry	T	<0.011	J	-		<0.006	:	-	
1,2-Dibromo-3-chloropropane	mg/kg-dry	T	<0.011	J	-		<0.006	:	-	
1,2-Dichlorobenzene	mg/kg-dry	T	<0.011	J	-		<0.006	:	-	
1,2-Dichloroethane	mg/kg-dry	T	<0.011	:	-		<0.006	:	-	
1,2-Dichloroethene (total)	mg/kg-dry	T	<0.011	:	-		<0.006	:	-	
1,2-Dichloropropane	mg/kg-dry	T	<0.011	:	-		<0.006	:	-	
1,3-Dichlorobenzene	mg/kg-dry	T	<0.011	J	-		<0.006	:	-	
1,4-Dichlorobenzene	mg/kg-dry	T	<0.011	J	-		<0.006	:	-	
2-Butanone	mg/kg-dry	T	0.007	J	-		<0.006	:	-	
2-Hexanone	mg/kg-dry	T	<0.011	J	-		<0.006	:	-	
4-Methyl-2-pentanone	mg/kg-dry	T	<0.011	J	-		<0.006	:	-	
Acetone	mg/kg-dry	T	0.031	:	-		0.002	J	-	
Benzene	mg/kg-dry	T	<0.011	:	-		<0.006	:	-	
Bromodichloromethane	mg/kg-dry	T	<0.011	:	-		<0.006	:	-	
Bromoform	mg/kg-dry	T	<0.011	J	-		<0.006	:	-	
Bromomethane	mg/kg-dry	T	<0.011	:	-		<0.006	J	-	

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R = Qualified as rejected value from data validation and results are considered unusable for any purpose
T = Total Fraction

Appendix A-7a
Soil - Biased 0-6 inches
Validated Analytical Results

Parameter	Units	Site ID / Sample Date / Sample ID / Exposure Area / Fraction	MSS1-55 1/17/2003 MSS1-55-T01N-SOL SS1 T		MSS1-56 1/8/2003 MSS1-56-T01N-SOL RE SS1 T		MSS1-56 1/8/2003 MSS1-56-T01N-SOL SS1 T		MSS1-57 1/8/2003 MSS1-57-T01N-SOLD L SS1 T		MSS1-57 1/8/2003 MSS1-57-T01N-SOL SS1 T		MSS1-58 1/9/2003 MSS1-58-T01N-SOLD L SS1 T	
Carbon disulfide	mg/kg-dry	T	0.002	J	-		<0.006	:	-		<0.006	:	-	
Carbon tetrachloride	mg/kg-dry	T	<0.011	:	-		<0.006	:	-		<0.006	:	-	
Chlorobenzene	mg/kg-dry	T	<0.011	J	-		<0.006	:	-		<0.006	:	-	
Chloroethane	mg/kg-dry	T	<0.011	:	-		<0.006	:	-		<0.006	:	-	
Chloroform	mg/kg-dry	T	<0.011	:	-		<0.006	:	-		<0.006	:	-	
Chloromethane	mg/kg-dry	T	<0.011	:	-		<0.006	:	-		<0.006	:	-	
cis-1,2-Dichloroethene	mg/kg-dry	T	<0.011	:	-		<0.006	:	-		<0.006	:	-	
cis-1,3-Dichloropropene	mg/kg-dry	T	<0.011	:	-		<0.006	:	-		<0.006	:	-	
Dibromochloromethane	mg/kg-dry	T	<0.011	:	-		<0.006	:	-		<0.006	:	-	
Dichlorodifluoromethane	mg/kg-dry	T	<0.011	:	-		<0.006	:	-		<0.006	:	-	
Ethylbenzene	mg/kg-dry	T	0.21	:	-		<0.006	:	-		<0.006	:	-	
Methylene chloride	mg/kg-dry	T	<0.011	:	-		<0.006	:	-		<0.006	:	-	
Styrene	mg/kg-dry	T	<0.011	J	-		<0.006	:	-		<0.006	:	-	
Tetrachloroethene	mg/kg-dry	T	<0.011	J	-		<0.006	:	-		<0.006	:	-	
Toluene	mg/kg-dry	T	0.003	J	-		0.0009	J	-		<0.006	:	-	
Total Xylene	mg/kg-dry	T	1.	:	-		<0.006	:	-		<0.006	:	-	
trans-1,2-Dichloroethene	mg/kg-dry	T	<0.011	:	-		<0.006	:	-		<0.006	:	-	
trans-1,3-Dichloropropene	mg/kg-dry	T	<0.011	:	-		<0.006	:	-		<0.006	:	-	
Trichloroethene	mg/kg-dry	T	<0.011	:	-		<0.006	:	-		<0.006	:	-	
Trichlorofluoromethane	mg/kg-dry	T	<0.011	:	-		<0.006	:	-		<0.006	:	-	
Vinyl chloride	mg/kg-dry	T	<0.011	:	-		<0.006	:	-		<0.006	:	-	
Semi-Volatile Organics														
1,1`-Biphenyl	mg/kg-dry	T	-		-		<0.35	:	-		<0.36	:	-	
2,4,5-Trichlorophenol	mg/kg-dry	T	-		-		<0.87	:	-		<0.9	:	-	
2,4,6-Trichlorophenol	mg/kg-dry	T	-		-		<0.35	:	-		<0.36	:	-	
2,4-Dichlorophenol	mg/kg-dry	T	-		-		<0.35	:	-		<0.36	:	-	
2,4-Dimethylphenol	mg/kg-dry	T	-		-		<0.35	:	-		<0.36	:	-	
2,4-Dinitrophenol	mg/kg-dry	T	-		-		<0.87	:	-		<0.9	:	-	
2,4-Dinitrotoluene	mg/kg-dry	T	-		-		<0.35	:	-		<0.36	:	-	
2,6-Dinitrotoluene	mg/kg-dry	T	-		-		<0.35	:	-		<0.36	:	-	
2-Chloronaphthalene	mg/kg-dry	T	-		-		<0.35	:	-		<0.36	:	-	
2-Chlorophenol	mg/kg-dry	T	-		-		<0.35	:	-		<0.36	:	-	
2-Methylnaphthalene	mg/kg-dry	T	-		-		<0.35	:	-		<0.36	:	-	
2-Methylphenol	mg/kg-dry	T	-		-		<0.35	:	-		<0.36	:	-	

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T = Total Fraction

Appendix A-7a
Soil - Biased 0-6 inches
Validated Analytical Results

Parameter	Units	Exposure Area Fraction	Site ID	MSS1-55	MSS1-56	MSS1-56	MSS1-57	MSS1-57	MSS1-58
			Sample Date	1/17/2003	1/8/2003	1/8/2003	1/8/2003	1/8/2003	1/9/2003
			Sample ID	MSS1-55-T01N-SOL	MSS1-56-T01N-SOL RE	MSS1-56-T01N-SOL	MSS1-57-T01N-SOLD L	MSS1-57-T01N-SOL	MSS1-58-T01N-SOLD L
			Exposure Area	SS1	SS1	SS1	SS1	SS1	SS1
2-Nitroaniline	mg/kg-dry	T		-	-	<0.87 :	-	<0.9 :	-
2-Nitrophenol	mg/kg-dry	T		-	-	<0.35 :	-	<0.36 :	-
3,3-Dichlorobenzidine	mg/kg-dry	T		-	<0.35 :	-	-	<0.36 :	-
3-Nitroaniline	mg/kg-dry	T		-	-	<0.87 :	-	<0.9 :	-
4,6-Dinitro-2-methylphenol	mg/kg-dry	T		-	-	<0.87 :	-	<0.9 :	-
4-Bromophenyl phenyl ether	mg/kg-dry	T		-	-	<0.35 :	-	<0.36 :	-
4-Chloro-3-methylphenol	mg/kg-dry	T		-	-	<0.35 :	-	<0.36 :	-
4-Chloroaniline	mg/kg-dry	T		-	-	<0.35 :	-	<0.36 :	-
4-Chlorophenyl phenyl ether	mg/kg-dry	T		-	-	<0.35 :	-	<0.36 :	-
4-Methylphenol	mg/kg-dry	T		-	-	<0.35 :	-	<0.36 :	-
4-Nitroaniline	mg/kg-dry	T		-	-	<0.87 :	-	<0.9 :	-
4-Nitrophenol	mg/kg-dry	T		-	-	<0.87 :	-	<0.9 :	-
Acenaphthene	mg/kg-dry	T		-	-	<0.35 :	-	<0.36 :	-
Acenaphthylene	mg/kg-dry	T		-	-	<0.35 :	-	<0.36 :	-
Anthracene	mg/kg-dry	T		-	-	<0.35 :	-	<0.36 :	-
Benzaldehyde	mg/kg-dry	T		-	-	<0.35 J	-	<0.36 J	-
Benzo(a)anthracene	mg/kg-dry	T		-	<0.35 :	-	-	<0.36 :	-
Benzo(a)pyrene	mg/kg-dry	T		-	-	<0.35 J	-	<0.36 :	-
Benzo(b)fluoranthene	mg/kg-dry	T		-	-	<0.35 J	-	<0.36 :	-
Benzo(g,h,i)perylene	mg/kg-dry	T		-	-	<0.35 J	-	<0.36 :	-
Benzo(k)fluoranthene	mg/kg-dry	T		-	-	<0.35 J	-	<0.36 :	-
Bis(2-chloroethoxy)methane	mg/kg-dry	T		-	-	<0.35 :	-	<0.36 :	-
Bis(2-chloroethyl)ether	mg/kg-dry	T		-	-	<0.35 :	-	<0.36 :	-
Bis(2-ethylhexyl)phthalate	mg/kg-dry	T		-	-	0.04 J	-	0.067 J	-
Butyl benzyl phthalate	mg/kg-dry	T		-	-	-	-	<0.36 :	-
Carbazole	mg/kg-dry	T		-	-	<0.35 :	-	<0.36 :	-
Chrysene	mg/kg-dry	T		-	<0.35 :	-	-	<0.36 :	-
Dibenz(a,h)anthracene	mg/kg-dry	T		-	-	<0.35 J	-	<0.36 :	-
Dibenzofuran	mg/kg-dry	T		-	-	<0.35 :	-	<0.36 :	-
Dichlorodiisopropyl ether	mg/kg-dry	T		-	-	<0.35 :	-	<0.36 :	-
Diethylphthalate	mg/kg-dry	T		-	-	<0.35 :	-	<0.36 :	-
Dimethylphthalate	mg/kg-dry	T		-	-	<0.35 :	-	<0.36 :	-
Di-n-Butyl phthalate	mg/kg-dry	T		-	-	<0.35 :	-	<0.36 :	-
Di-n-Octyl phthalate	mg/kg-dry	T		-	-	<0.35 J	-	<0.36 :	-

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T = Total Fraction

Appendix A-7a
Soil - Biased 0-6 inches
Validated Analytical Results

Parameter	Units	Site ID / Sample Date / Sample ID / Exposure Area / Fraction	MSS1-55 1/17/2003 MSS1-55-T01N-SOL SS1	MSS1-56 1/8/2003 MSS1-56-T01N-SOL RE SS1	MSS1-56 1/8/2003 MSS1-56-T01N-SOL SS1	MSS1-57 1/8/2003 MSS1-57-T01N-SOLD L SS1	MSS1-57 1/8/2003 MSS1-57-T01N-SOL SS1	MSS1-58 1/9/2003 MSS1-58-T01N-SOLD L SS1
Fluoranthene	mg/kg-dry	T	-	-	<0.35 :	-	<0.36 :	-
Fluorene	mg/kg-dry	T	-	-	<0.35 :	-	<0.36 :	-
Hexachlorobenzene	mg/kg-dry	T	-	-	<0.35 :	-	<0.36 :	-
Hexachlorobutadiene	mg/kg-dry	T	-	-	<0.35 :	-	<0.36 :	-
Hexachlorocyclopentadiene	mg/kg-dry	T	-	-	<0.35 :	-	<0.36 :	-
Hexachloroethane	mg/kg-dry	T	-	-	<0.35 :	-	<0.36 :	-
Indeno(1,2,3-cd)pyrene	mg/kg-dry	T	-	-	<0.35 J	-	<0.36 :	-
Isophorone	mg/kg-dry	T	-	-	<0.35 :	-	<0.36 :	-
Naphthalene	mg/kg-dry	T	-	-	<0.35 :	-	0.017 J	-
Nitrobenzene	mg/kg-dry	T	-	-	<0.35 :	-	<0.36 :	-
N-Nitrosodi-n-propylamine	mg/kg-dry	T	-	-	<0.35 :	-	<0.36 :	-
N-Nitrosodiphenylamine	mg/kg-dry	T	-	<0.35 :	<0.35 :	-	<0.36 :	-
Pentachlorophenol	mg/kg-dry	T	-	-	<0.87 :	-	<0.9 :	-
Phenanthrene	mg/kg-dry	T	-	-	<0.35 :	-	0.022 J	-
Phenol	mg/kg-dry	T	-	-	<0.35 :	-	<0.36 :	-
Pyrene	mg/kg-dry	T	-	-	<0.35 :	-	<0.36 :	-
Pesticides-PCBs								
Aroclor 1016	mg/kg-dry	T	<0.71 :	-	<0.035 :	-	<0.18 :	-
Aroclor 1221	mg/kg-dry	T	<1.4 :	-	<0.071 :	-	<0.36 :	-
Aroclor 1232	mg/kg-dry	T	<0.71 :	-	<0.035 :	-	<0.18 :	-
Aroclor 1242	mg/kg-dry	T	<0.71 :	-	<0.035 :	-	<0.18 :	-
Aroclor 1248	mg/kg-dry	T	-	-	<0.035 :	14. J	-	2.2 :
Aroclor 1254	mg/kg-dry	T	-	-	1.3 :	-	<0.18 :	-
Aroclor 1260	mg/kg-dry	T	<0.71 :	-	<0.035 :	-	<0.18 :	-

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T = Total Fraction

Appendix A-7a
Soil - Biased 0-6 inches
Validated Analytical Results

Parameter	Units	Exposure Area Fraction	Site ID	MSS1-58		MSS1-59		MSS1-59		MSS1-60		MSS1-60		MSS1-61	
			Sample Date	1/9/2003		1/19/2003		1/19/2003		1/19/2003		1/19/2003		1/8/2003	
			Sample ID	MSS1-58-T01N-SOL		MSS1-59-T01N-SOL DL		MSS1-59-T01N-SOL		MSS1-60-T01N-SOLD L		MSS1-60-T01N-SOL		MSS1-61-T01N-SOL	
			Exposure Area	SS1		SS1		SS1		SS1		SS1		SS1	
General Chemistry															
Ammonia	mg/kg-dry	T		19.2	:	-		14.2	:	-		13.8	:	7.7	J
Chloride	mg/kg-dry	T		82.	:	-		13.2	:	-		39.	:	6040.	:
Fluoride	mg/kg-dry	T		1.5	J	-		4.3	J	-		1.5	J	1.	J
Nitrate	mg/kg-dry	T		<2.1	J	-		<2.1	J	-		2.3	J	64.6	J
Phosphorus	mg/kg-dry	T		1060.	:	-		940.	:	-		882.	:	1190.	:
Sulfate	mg/kg-dry	T		3370.	:	-		2550.	J	-		1260.	J	7290.	:
Total Kjeldahl Nitrogen	mg/kg-dry	T		168.	:	-		107.	:	-		83.7	:	189.	:
Total Organic Carbon	mg/kg-dry	T		9860.	J	-		534.	J	-		5260.	J	178.	J
Laboratory Parameters															
pH	SU	T		7.2	:	-		7.2	:	-		7.9	:	7.5	:
Solids, Percent	%	T		99.	:	-		97.5	:	-		98.6	:	92.	:
Specific Conductance	umhos/cm	T		2180.	:	-		1900.	J	-		1500.	J	13200.	:
Geotechnical															
Organic Soils	%	T		1.5	:	-		1.4	:	-		0.8	:	1.9	:
Physical Properties															
Cation-Exchange Capacity	meq/100g	T		10.8	:	-		9.7	:	-		10.6	:	15.5	:
Sodium Absorption Ratio	ratio	T		4.4	:	-		0.63	:	-		0.9	:	42.62	:
Metals															
Aluminum	mg/kg-dry	T		10700.	:	-		10100.	:	-		6580.	:	16500.	:
Antimony	mg/kg-dry	T		<0.27	J	-		<0.29	J	-		<0.28	J	<0.3	J
Arsenic	mg/kg-dry	T		5.7	J	-		2.6	J	-		1.9	J	5.	J
Barium	mg/kg-dry	T		248.	:	-		58.8	:	-		64.1	:	119.	:
Beryllium	mg/kg-dry	T		0.47	:	-		1.4	:	-		0.44	:	1.4	:
Boron	mg/kg-dry	T		2.1	:	-		<0.24	J	-		<0.27	:	2.3	:
Cadmium	mg/kg-dry	T		0.2	:	-		0.69	:	-		0.067	:	<0.042	J
Calcium	mg/kg-dry	T		18400.	:	-		9180.	:	-		5750.	:	12700.	:
Chromium	mg/kg-dry	T		23.7	J	-		54.5	J	-		56.5	J	45.4	J
Cobalt	mg/kg-dry	T		<0.14	:	-		6.	:	-		4.7	:	16.9	:
Copper	mg/kg-dry	T		111.	J	-		103.	:	-		54.1	J	90.2	J
Iron	mg/kg-dry	T		17200.	:	-		22100.	:	-		17500.	:	30100.	:
Lead	mg/kg-dry	T		72.7	:	-		87.3	:	-		40.5	:	48.3	:
Magnesium	mg/kg-dry	T		3490.	:	-		7130.	:	-		5200.	:	11300.	:
Manganese	mg/kg-dry	T		263.	:	-		670.	:	-		396.	:	923.	:

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Appendix A-7a
Soil - Biased 0-6 inches
Validated Analytical Results

Parameter	Units	Exposure Area Fraction	Site ID	MSS1-58	MSS1-59	MSS1-59	MSS1-60	MSS1-60	MSS1-61
			Sample Date	1/9/2003	1/19/2003	1/19/2003	1/19/2003	1/19/2003	1/8/2003
			Sample ID	MSS1-58-T01N-SOL	MSS1-59-T01N-SOL DL	MSS1-59-T01N-SOL	MSS1-60-T01N-SOLD L	MSS1-60-T01N-SOL	MSS1-61-T01N-SOL
			Exposure Area	SS1	SS1	SS1	SS1	SS1	SS1
Mercury	mg/kg-dry	T		<0.017 :	-	0.032 :	-	<0.017 :	0.17 :
Molybdenum	mg/kg-dry	T		22300. :	-	6120. :	-	3790. :	537. :
Nickel	mg/kg-dry	T		18.6 :	-	28.2 :	-	31. :	36.2 :
Potassium	mg/kg-dry	T		1520. J	-	2500. J	-	1670. J	3550. J
Selenium	mg/kg-dry	T		0.81 J	-	1.6 J	-	<0.74 J	<0.81 J
Silver	mg/kg-dry	T		<0.14 :	-	1.5 :	-	0.56 :	0.74 :
Sodium	mg/kg-dry	T		912. :	-	<120. :	-	<104. :	6710. :
Thallium	mg/kg-dry	T		0.18 :	-	0.33 :	-	0.17 :	0.31 :
Vanadium	mg/kg-dry	T		119. :	-	62.8 :	-	46.6 :	53.5 :
Zinc	mg/kg-dry	T		69.3 :	-	165. :	-	82.6 :	132. :
Volatile Organics									
1,1,1-Trichloroethane	mg/kg-dry	T		<0.005 :	-	<0.011 :	-	<0.004 :	<0.022 :
1,1,2,2-Tetrachloroethane	mg/kg-dry	T		<0.005 :	-	<0.011 :	-	<0.004 :	<0.022 :
1,1,2-Trichloro-1,2,2-trifluoroethane	mg/kg-dry	T		<0.005 :	-	<0.011 :	-	<0.004 :	<0.022 :
1,1,2-Trichloroethane	mg/kg-dry	T		<0.005 :	-	<0.011 :	-	<0.004 :	<0.022 :
1,1-Dichloroethane	mg/kg-dry	T		<0.005 :	-	<0.011 :	-	<0.004 :	<0.022 :
1,1-Dichloroethene	mg/kg-dry	T		<0.005 :	-	<0.011 :	-	<0.004 :	<0.022 :
1,2,4-Trichlorobenzene	mg/kg-dry	T		<0.005 :	-	<0.011 :	-	<0.004 :	<0.022 :
1,2-Dibromo-3-chloropropane	mg/kg-dry	T		<0.005 :	-	<0.011 :	-	<0.004 :	<0.022 :
1,2-Dichlorobenzene	mg/kg-dry	T		<0.005 :	-	<0.011 :	-	<0.004 :	<0.022 :
1,2-Dichloroethane	mg/kg-dry	T		<0.005 :	-	<0.011 :	-	<0.004 :	<0.022 :
1,2-Dichloroethene (total)	mg/kg-dry	T		<0.005 :	-	<0.011 :	-	<0.004 :	<0.022 :
1,2-Dichloropropane	mg/kg-dry	T		<0.005 :	-	<0.011 :	-	<0.004 :	<0.022 :
1,3-Dichlorobenzene	mg/kg-dry	T		<0.005 :	-	<0.011 :	-	<0.004 :	<0.022 :
1,4-Dichlorobenzene	mg/kg-dry	T		<0.005 :	-	<0.011 :	-	<0.004 :	<0.022 :
2-Butanone	mg/kg-dry	T		0.005 J	-	0.004 J	-	0.002 J	<0.022 :
2-Hexanone	mg/kg-dry	T		<0.005 :	-	<0.011 :	-	<0.004 :	<0.022 :
4-Methyl-2-pentanone	mg/kg-dry	T		<0.005 :	-	<0.011 :	-	<0.004 :	<0.022 :
Acetone	mg/kg-dry	T		<0.005 :	-	0.01 J	-	0.011 :	0.012 J
Benzene	mg/kg-dry	T		<0.005 :	-	<0.011 :	-	0.0003 J	<0.022 :
Bromodichloromethane	mg/kg-dry	T		<0.005 :	-	<0.011 :	-	<0.004 :	<0.022 :
Bromoform	mg/kg-dry	T		<0.005 :	-	<0.011 :	-	<0.004 :	<0.022 :
Bromomethane	mg/kg-dry	T		<0.005 :	-	<0.011 :	-	<0.004 :	<0.022 :
Carbon disulfide	mg/kg-dry	T		0.002 J	-	<0.011 :	-	0.0004 J	<0.022 :

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T = Total Fraction

Appendix A-7a
Soil - Biased 0-6 inches
Validated Analytical Results

Parameter	Units	Exposure Area Fraction	Site ID / Sample Date / Sample ID					
			MSS1-58 1/9/2003 MSS1-58-T01N-SOL SS1	MSS1-59 1/19/2003 MSS1-59-T01N-SOL DL SS1	MSS1-59 1/19/2003 MSS1-59-T01N-SOL SS1	MSS1-60 1/19/2003 MSS1-60-T01N-SOLD L SS1	MSS1-60 1/19/2003 MSS1-60-T01N-SOL SS1	MSS1-61 1/8/2003 MSS1-61-T01N-SOL SS1
Carbon tetrachloride	mg/kg-dry	T	<0.005 :	-	<0.011 :	-	<0.004 :	<0.022 :
Chlorobenzene	mg/kg-dry	T	<0.005 :	-	<0.011 :	-	<0.004 :	<0.022 :
Chloroethane	mg/kg-dry	T	<0.005 :	-	<0.011 :	-	<0.004 :	<0.022 :
Chloroform	mg/kg-dry	T	<0.005 :	-	<0.011 :	-	<0.004 :	<0.022 :
Chloromethane	mg/kg-dry	T	<0.005 :	-	<0.011 :	-	<0.004 :	<0.022 :
cis-1,2-Dichloroethene	mg/kg-dry	T	<0.005 :	-	<0.011 :	-	<0.004 :	<0.022 :
cis-1,3-Dichloropropene	mg/kg-dry	T	<0.005 :	-	<0.011 :	-	<0.004 :	<0.022 :
Dibromochloromethane	mg/kg-dry	T	<0.005 :	-	<0.011 :	-	<0.004 :	<0.022 :
Dichlorodifluoromethane	mg/kg-dry	T	<0.005 :	-	<0.011 :	-	<0.004 :	<0.022 :
Ethylbenzene	mg/kg-dry	T	<0.005 :	-	<0.011 :	-	0.003 J	<0.022 :
Methylene chloride	mg/kg-dry	T	<0.005 :	-	<0.011 :	-	<0.004 :	<0.022 :
Styrene	mg/kg-dry	T	<0.005 :	-	<0.011 :	-	<0.004 :	<0.022 :
Tetrachloroethene	mg/kg-dry	T	<0.005 :	-	<0.011 :	-	<0.004 :	<0.022 :
Toluene	mg/kg-dry	T	<0.005 :	-	<0.011 :	-	0.0007 J	0.002 J
Total Xylene	mg/kg-dry	T	0.0006 J	-	<0.011 :	-	0.019 :	<0.022 :
trans-1,2-Dichloroethene	mg/kg-dry	T	<0.005 :	-	<0.011 :	-	<0.004 :	<0.022 :
trans-1,3-Dichloropropene	mg/kg-dry	T	<0.005 :	-	<0.011 :	-	<0.004 :	<0.022 :
Trichloroethene	mg/kg-dry	T	<0.005 :	-	<0.011 :	-	<0.004 :	<0.022 :
Trichlorofluoromethane	mg/kg-dry	T	<0.005 :	-	<0.011 :	-	<0.004 :	<0.022 :
Vinyl chloride	mg/kg-dry	T	<0.005 :	-	<0.011 :	-	<0.004 :	<0.022 :
Semi-Volatile Organics								
1,1`-Biphenyl	mg/kg-dry	T	<0.33 :	-	<0.34 J	-	<0.33 :	<0.36 :
2,4,5-Trichlorophenol	mg/kg-dry	T	<0.84 :	-	<0.85 J	-	<0.84 :	<0.9 :
2,4,6-Trichlorophenol	mg/kg-dry	T	<0.33 :	-	<0.34 J	-	<0.33 :	<0.36 :
2,4-Dichlorophenol	mg/kg-dry	T	<0.33 :	-	<0.34 :	-	<0.33 :	<0.36 :
2,4-Dimethylphenol	mg/kg-dry	T	<0.33 :	-	<0.34 :	-	<0.33 :	<0.36 :
2,4-Dinitrophenol	mg/kg-dry	T	<0.84 :	-	<0.85 J	-	<0.84 J	<0.9 J
2,4-Dinitrotoluene	mg/kg-dry	T	<0.33 :	-	<0.34 J	-	<0.33 :	<0.36 :
2,6-Dinitrotoluene	mg/kg-dry	T	<0.33 :	-	<0.34 J	-	<0.33 :	<0.36 :
2-Chloronaphthalene	mg/kg-dry	T	<0.33 :	-	<0.34 J	-	<0.33 :	<0.36 :
2-Chlorophenol	mg/kg-dry	T	<0.33 :	-	<0.34 :	-	<0.33 :	<0.36 :
2-Methylnaphthalene	mg/kg-dry	T	<0.33 :	-	<0.34 :	-	<0.33 :	<0.36 :
2-Methylphenol	mg/kg-dry	T	<0.33 :	-	<0.34 :	-	<0.33 :	<0.36 :
2-Nitroaniline	mg/kg-dry	T	<0.84 :	-	<0.85 J	-	<0.84 :	<0.9 :

J = Qualified as estimated during data validation
R = Qualified as rejected value from data validation and results are considered unusable for any purpose
T = Total Fraction

Appendix A-7a
Soil - Biased 0-6 inches
Validated Analytical Results

Parameter	Units	Exposure Area Fraction	Site ID / Sample Date / Sample ID											
			MSS1-58	1/9/2003	MSS1-58-T01N-SOL	MSS1-59	1/19/2003	MSS1-59-T01N-SOL DL	MSS1-59	1/19/2003	MSS1-59-T01N-SOL	MSS1-60	1/19/2003	MSS1-60-T01N-SOLD L
			SS1			SS1			SS1			SS1		
2-Nitrophenol	mg/kg-dry	T	<0.33	:		-			<0.34	:		-		
3,3-Dichlorobenzidine	mg/kg-dry	T	<0.33	:		-			<0.34	:		-		
3-Nitroaniline	mg/kg-dry	T	<0.84	:		-			<0.85	J		-		
4,6-Dinitro-2-methylphenol	mg/kg-dry	T	<0.84	:		-			<0.85	:		-		
4-Bromophenyl phenyl ether	mg/kg-dry	T	<0.33	:		-			<0.34	:		-		
4-Chloro-3-methylphenol	mg/kg-dry	T	<0.33	:		-			<0.34	:		-		
4-Chloroaniline	mg/kg-dry	T	<0.33	:		-			<0.34	:		-		
4-Chlorophenyl phenyl ether	mg/kg-dry	T	<0.33	:		-			<0.34	J		-		
4-Methylphenol	mg/kg-dry	T	<0.33	:		-			<0.34	:		-		
4-Nitroaniline	mg/kg-dry	T	<0.84	:		-			<0.85	J		-		
4-Nitrophenol	mg/kg-dry	T	<0.84	:		-			<0.85	J		-		
Acenaphthene	mg/kg-dry	T	<0.33	:		-			<0.34	J		-		
Acenaphthylene	mg/kg-dry	T	<0.33	:		-			<0.34	J		-		
Anthracene	mg/kg-dry	T	<0.33	:		-			<0.34	:		-		
Benzaldehyde	mg/kg-dry	T	0.027	J		-			0.019	J		-		
Benzo(a)anthracene	mg/kg-dry	T	<0.33	:		-			<0.34	:		-		
Benzo(a)pyrene	mg/kg-dry	T	<0.33	:		-			<0.34	:		-		
Benzo(b)fluoranthene	mg/kg-dry	T	<0.33	:		-			<0.34	:		-		
Benzo(g,h,i)perylene	mg/kg-dry	T	<0.33	:		-			<0.34	:		-		
Benzo(k)fluoranthene	mg/kg-dry	T	<0.33	:		-			<0.34	:		-		
Bis(2-chloroethoxy)methane	mg/kg-dry	T	<0.33	:		-			<0.34	:		-		
Bis(2-chloroethyl)ether	mg/kg-dry	T	<0.33	:		-			<0.34	:		-		
Bis(2-ethylhexyl)phthalate	mg/kg-dry	T	0.11	J		-			0.064	J		-		
Butyl benzyl phthalate	mg/kg-dry	T	<0.33	:		-			<0.34	:		-		
Carbazole	mg/kg-dry	T	<0.33	:		-			<0.34	:		-		
Chrysene	mg/kg-dry	T	<0.33	:		-			<0.34	:		-		
Dibenz(a,h)anthracene	mg/kg-dry	T	<0.33	:		-			<0.34	:		-		
Dibenzofuran	mg/kg-dry	T	<0.33	:		-			<0.34	J		-		
Dichlorodiisopropyl ether	mg/kg-dry	T	<0.33	:		-			<0.34	:		-		
Diethylphthalate	mg/kg-dry	T	<0.33	:		-			<0.34	J		-		
Dimethylphthalate	mg/kg-dry	T	<0.33	:		-			<0.34	J		-		
Di-n-Butyl phthalate	mg/kg-dry	T	<0.33	:		-			<0.34	:		-		
Di-n-Octyl phthalate	mg/kg-dry	T	<0.33	:		-			<0.34	:		-		
Fluoranthene	mg/kg-dry	T	<0.33	:		-			<0.34	:		-		

Parameter	Units	Exposure Area Fraction	Site ID / Sample Date / Sample ID											
			MSS1-60	1/19/2003	MSS1-60-T01N-SOL	MSS1-61	1/8/2003	MSS1-61-T01N-SOL						
			SS1			SS1								
2-Nitrophenol	mg/kg-dry	T	<0.33	:		<0.36	:							
3,3-Dichlorobenzidine	mg/kg-dry	T	<0.33	J		<0.36	:							
3-Nitroaniline	mg/kg-dry	T	<0.84	:		<0.9	:							
4,6-Dinitro-2-methylphenol	mg/kg-dry	T	<0.84	J		<0.9	:							
4-Bromophenyl phenyl ether	mg/kg-dry	T	<0.33	J		<0.36	:							
4-Chloro-3-methylphenol	mg/kg-dry	T	<0.33	:		<0.36	:							
4-Chloroaniline	mg/kg-dry	T	<0.33	:		<0.36	:							
4-Chlorophenyl phenyl ether	mg/kg-dry	T	<0.33	:		<0.36	:							
4-Methylphenol	mg/kg-dry	T	<0.33	:		<0.36	:							
4-Nitroaniline	mg/kg-dry	T	<0.84	:		<0.9	:							
4-Nitrophenol	mg/kg-dry	T	<0.84	:		<0.9	:							
Acenaphthene	mg/kg-dry	T	<0.33	:		<0.36	:							
Acenaphthylene	mg/kg-dry	T	<0.33	:		<0.36	:							
Anthracene	mg/kg-dry	T	<0.33	J		<0.36	:							
Benzaldehyde	mg/kg-dry	T	<0.33	J		<0.36	J							
Benzo(a)anthracene	mg/kg-dry	T	<0.33	J		<0.36	:							
Benzo(a)pyrene	mg/kg-dry	T	<0.33	J		<0.36	:							
Benzo(b)fluoranthene	mg/kg-dry	T	<0.33	J		<0.36	:							
Benzo(g,h,i)perylene	mg/kg-dry	T	<0.33	J		<0.36	:							
Benzo(k)fluoranthene	mg/kg-dry	T	<0.33	J		<0.36	:							
Bis(2-chloroethoxy)methane	mg/kg-dry	T	<0.33	:		<0.36	:							
Bis(2-chloroethyl)ether	mg/kg-dry	T	<0.33	:		<0.36	:							
Bis(2-ethylhexyl)phthalate	mg/kg-dry	T	<0.33	J		0.1	J							
Butyl benzyl phthalate	mg/kg-dry	T	<0.33	J		<0.36	:							
Carbazole	mg/kg-dry	T	<0.33	J		<0.36	:							
Chrysene	mg/kg-dry	T	<0.33	J		<0.36	:							
Dibenz(a,h)anthracene	mg/kg-dry	T	<0.33	J		<0.36	:							
Dibenzofuran	mg/kg-dry	T	<0.33	:		<0.36	:							
Dichlorodiisopropyl ether	mg/kg-dry	T	<0.33	:		<0.36	:							
Diethylphthalate	mg/kg-dry	T	<0.33	:		<0.36	:							
Dimethylphthalate	mg/kg-dry	T	<0.33	:		<0.36	:							
Di-n-Butyl phthalate	mg/kg-dry	T	0.048	J		<0.36	:							
Di-n-Octyl phthalate	mg/kg-dry	T	<0.33	J		<0.36	:							
Fluoranthene	mg/kg-dry	T	<0.33	J		<0.36	:							

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T = Total Fraction

Appendix A-7a
Soil - Biased 0-6 inches
Validated Analytical Results

Parameter	Units	Exposure Area Fraction	Site ID / Sample Date / Sample ID / Exposure Area											
			MSS1-58 / 1/9/2003 / MSS1-58-T01N-SOL / SS1		MSS1-59 / 1/19/2003 / MSS1-59-T01N-SOL DL / SS1		MSS1-59 / 1/19/2003 / MSS1-59-T01N-SOL / SS1		MSS1-60 / 1/19/2003 / MSS1-60-T01N-SOLDL / SS1		MSS1-60 / 1/19/2003 / MSS1-60-T01N-SOL / SS1		MSS1-61 / 1/8/2003 / MSS1-61-T01N-SOL / SS1	
Fluorene	mg/kg-dry	T	<0.33	:	-		<0.34	J	-		<0.33	:	<0.36	:
Hexachlorobenzene	mg/kg-dry	T	<0.33	:	-		<0.34	:	-		<0.33	J	<0.36	:
Hexachlorobutadiene	mg/kg-dry	T	<0.33	:	-		<0.34	:	-		<0.33	:	<0.36	:
Hexachlorocyclopentadiene	mg/kg-dry	T	<0.33	:	-		<0.34	J	-		<0.33	:	<0.36	:
Hexachloroethane	mg/kg-dry	T	<0.33	:	-		<0.34	:	-		<0.33	:	<0.36	:
Indeno(1,2,3-cd)pyrene	mg/kg-dry	T	<0.33	:	-		<0.34	:	-		<0.33	J	<0.36	:
Isophorone	mg/kg-dry	T	<0.33	:	-		<0.34	:	-		<0.33	:	<0.36	:
Naphthalene	mg/kg-dry	T	<0.33	:	-		<0.34	:	-		<0.33	:	<0.36	:
Nitrobenzene	mg/kg-dry	T	<0.33	:	-		<0.34	:	-		<0.33	:	<0.36	:
N-Nitrosodi-n-propylamine	mg/kg-dry	T	<0.33	:	-		<0.34	:	-		<0.33	:	<0.36	:
N-Nitrosodiphenylamine	mg/kg-dry	T	<0.33	:	-		<0.34	:	-		<0.33	J	<0.36	:
Pentachlorophenol	mg/kg-dry	T	<0.84	:	-		<0.85	:	-		<0.84	J	<0.9	J
Phenanthrene	mg/kg-dry	T	0.036	J	-		<0.34	:	-		<0.33	J	<0.36	:
Phenol	mg/kg-dry	T	<0.33	:	-		<0.34	:	-		<0.33	:	<0.36	:
Pyrene	mg/kg-dry	T	<0.33	:	-		0.02	J	-		<0.33	J	<0.36	:
Pesticides-PCBs														
Aroclor 1016	mg/kg-dry	T	<0.033	:	-		<0.067	:	-		<0.067	:	<0.036	:
Aroclor 1221	mg/kg-dry	T	<0.068	:	-		<0.14	:	-		<0.14	:	<0.073	:
Aroclor 1232	mg/kg-dry	T	<0.033	:	-		<0.067	:	-		<0.067	:	<0.036	:
Aroclor 1242	mg/kg-dry	T	<0.033	:	-		<0.067	:	-		<0.067	:	<0.036	:
Aroclor 1248	mg/kg-dry	T	-		4.8	:	-		-		0.84	:	0.094	:
Aroclor 1254	mg/kg-dry	T	<0.033	:	4.9	:	-		1.8	:	-		0.13	:
Aroclor 1260	mg/kg-dry	T	<0.033	:	-		<0.067	:	-		<0.067	:	<0.036	:

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Appendix A-7a
Soil - Biased 0-6 inches
Validated Analytical Results

Parameter	Units	Exposure Area Fraction	Site ID / Sample Date / Sample ID											
			MSS1-62 1/8/2003 MSS1-62-T01N-SOLDL SS1		MSS1-62 1/8/2003 MSS1-62-T01N-SOL SS1		MSS1-63 1/8/2003 MSS1-63-T01N-SOL SS1		MSS1-64 1/19/2003 MSS1-64-T01N-SOLRE SS1		MSS1-64 1/19/2003 MSS1-64-T01N-SOL SS1		MSS1-65 1/10/2003 MSS1-65-T01N-SOL SS1	
General Chemistry														
Ammonia	mg/kg-dry	T	-		82.8	:	6.8	:	-		25.	:	20.9	:
Chloride	mg/kg-dry	T	-		9.	:	176.	:	-		3.	:	32.4	:
Fluoride	mg/kg-dry	T	-		1.2	J	2.1	J	-		6.8	J	1.	J
Nitrate	mg/kg-dry	T	-		<2.5	J	6.2	J	-		<2.3	J	12.5	J
Phosphorus	mg/kg-dry	T	-		4130.	:	853.	:	-		1290.	:	1250.	:
Sulfate	mg/kg-dry	T	-		349.	:	3160.	:	-		2180.	:	361.	:
Total Kjeldahl Nitrogen	mg/kg-dry	T	-		482.	:	69.6	:	-		41.	:	206.	:
Total Organic Carbon	mg/kg-dry	T	-		17500.	J	<105.	J	-		<115.	J	6340.	J
Laboratory Parameters														
pH	SU	T	-		7.8	:	7.1	:	-		7.5	:	6.8	:
Solids, Percent	%	T	-		82.8	:	96.1	:	-		87.2	:	95.6	:
Specific Conductance	umhos/cm	T	-		649.	:	2150.	:	-		1600.	J	916.	:
Geotechnical														
Organic Soils	%	T	-		2.5	:	0.8	:	-		1.2	:	1.4	:
Physical Properties														
Cation-Exchange Capacity	meq/100g	T	-		18.	:	6.6	:	-		10.9	:	13.7	:
Sodium Absorption Ratio	ratio	T	-		1.23	:	1.07	:	-		0.08	:	2.81	:
Metals														
Aluminum	mg/kg-dry	T	-		15300.	:	8900.	:	-		10000.	:	14600.	:
Antimony	mg/kg-dry	T	-		<0.3	J	<0.3	J	-		<0.32	J	<0.3	J
Arsenic	mg/kg-dry	T	-		10.8	J	4.5	J	-		1.3	J	4.9	J
Barium	mg/kg-dry	T	-		152.	:	143.	:	-		107.	:	90.8	:
Beryllium	mg/kg-dry	T	-		1.5	:	0.77	:	-		1.3	:	1.1	:
Boron	mg/kg-dry	T	-		<0.53	:	<0.25	:	-		<0.29	:	6.	:
Cadmium	mg/kg-dry	T	-		2.	:	0.74	J	-		0.53	:	0.58	J
Calcium	mg/kg-dry	T	-		17300.	:	10800.	:	-		15700.	:	11700.	J
Chromium	mg/kg-dry	T	-		51.	J	69.	J	-		44.4	J	54.6	J
Cobalt	mg/kg-dry	T	-		<0.17	:	4.2	:	-		4.8	:	14.3	J
Copper	mg/kg-dry	T	-		299.	J	217.	J	-		156.	J	110.	J
Iron	mg/kg-dry	T	-		25900.	:	25600.	:	-		17100.	:	29100.	J
Lead	mg/kg-dry	T	-		293.	:	308.	:	-		39.6	:	79.5	J
Magnesium	mg/kg-dry	T	-		9640.	:	6620.	:	-		8400.	:	9770.	:
Manganese	mg/kg-dry	T	-		1320.	:	610.	:	-		474.	:	832.	J

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T = Total Fraction

Appendix A-7a
Soil - Biased 0-6 inches
Validated Analytical Results

Parameter	Units	Exposure Area Fraction	Site ID / Sample Date / Sample ID					
			MSS1-62 1/8/2003 MSS1-62-T01N-SOLD L SS1	MSS1-62 1/8/2003 MSS1-62-T01N-SOL SS1	MSS1-63 1/8/2003 MSS1-63-T01N-SOL SS1	MSS1-64 1/19/2003 MSS1-64-T01N-SOLR E SS1	MSS1-64 1/19/2003 MSS1-64-T01N-SOL SS1	MSS1-65 1/10/2003 MSS1-65-T01N-SOL SS1
Mercury	mg/kg-dry	T	-	9. :	0.015 :	-	<0.018 :	1.2 :
Molybdenum	mg/kg-dry	T	-	21700. :	10600. :	-	9550. :	906. J
Nickel	mg/kg-dry	T	-	37.2 :	42.7 :	-	31.9 :	35.9 J
Potassium	mg/kg-dry	T	-	4110. J	3010. J	-	5030. J	3590. J
Selenium	mg/kg-dry	T	-	3.9 J	1.9 J	-	1.7 J	<0.8 J
Silver	mg/kg-dry	T	-	2.1 :	2.3 :	-	1.4 :	0.78 J
Sodium	mg/kg-dry	T	-	<212. :	<162. :	-	<35.8 :	<204. :
Thallium	mg/kg-dry	T	-	0.74 :	0.32 :	-	0.52 :	0.27 :
Vanadium	mg/kg-dry	T	-	143. :	93.5 :	-	87.4 :	60.1 :
Zinc	mg/kg-dry	T	-	370. :	158. :	-	122. :	190. J
Volatile Organics								
1,1,1-Trichloroethane	mg/kg-dry	T	-	<0.01 :	<0.007 :	<0.009 :	-	<0.009 :
1,1,2,2-Tetrachloroethane	mg/kg-dry	T	-	<0.01 :	<0.007 J	<0.009 :	-	<0.009 :
1,1,2-Trichloro-1,2,2-trifluoroethane	mg/kg-dry	T	-	<0.01 :	<0.007 :	<0.009 :	-	<0.009 :
1,1,2-Trichloroethane	mg/kg-dry	T	-	<0.01 :	<0.007 :	<0.009 :	-	<0.009 :
1,1-Dichloroethane	mg/kg-dry	T	-	<0.01 :	<0.007 :	<0.009 :	-	<0.009 :
1,1-Dichloroethene	mg/kg-dry	T	-	<0.01 :	<0.007 :	<0.009 :	-	<0.009 :
1,2,4-Trichlorobenzene	mg/kg-dry	T	-	<0.01 :	<0.007 J	<0.009 :	-	<0.009 :
1,2-Dibromo-3-chloropropane	mg/kg-dry	T	-	<0.01 :	<0.007 J	<0.009 :	-	<0.009 :
1,2-Dichlorobenzene	mg/kg-dry	T	-	<0.01 :	<0.007 J	<0.009 :	-	<0.009 :
1,2-Dichloroethane	mg/kg-dry	T	-	<0.01 :	<0.007 :	<0.009 :	-	<0.009 :
1,2-Dichloroethene (total)	mg/kg-dry	T	-	<0.01 :	<0.007 :	<0.009 :	-	<0.009 :
1,2-Dichloropropane	mg/kg-dry	T	-	<0.01 :	<0.007 :	<0.009 :	-	<0.009 :
1,3-Dichlorobenzene	mg/kg-dry	T	-	<0.01 :	<0.007 :	<0.009 :	-	<0.009 :
1,4-Dichlorobenzene	mg/kg-dry	T	-	<0.01 :	<0.007 :	<0.009 :	-	<0.009 :
2-Butanone	mg/kg-dry	T	-	<0.01 :	0.004 J	<0.009 :	-	<0.009 :
2-Hexanone	mg/kg-dry	T	-	<0.01 :	<0.007 :	<0.009 :	-	<0.009 :
4-Methyl-2-pentanone	mg/kg-dry	T	-	<0.01 :	<0.007 :	<0.009 :	-	<0.009 :
Acetone	mg/kg-dry	T	-	<0.01 :	0.008 :	<0.009 :	-	<0.009 :
Benzene	mg/kg-dry	T	-	<0.01 :	0.0007 J	<0.009 :	-	<0.009 :
Bromodichloromethane	mg/kg-dry	T	-	<0.01 :	<0.007 :	<0.009 :	-	<0.009 :
Bromoform	mg/kg-dry	T	-	<0.01 :	<0.007 :	<0.009 :	-	<0.009 :
Bromomethane	mg/kg-dry	T	-	<0.01 :	<0.007 :	<0.009 :	-	<0.009 :
Carbon disulfide	mg/kg-dry	T	-	0.002 J	0.001 J	<0.009 :	-	<0.009 :

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T = Total Fraction

Appendix A-7a
Soil - Biased 0-6 inches
Validated Analytical Results

Parameter	Units	Exposure Area Fraction	Site ID / Sample Date / Sample ID					
			MSS1-62 1/8/2003 MSS1-62-T01N-SOLD L SS1	MSS1-62 1/8/2003 MSS1-62-T01N-SOL SS1	MSS1-63 1/8/2003 MSS1-63-T01N-SOL SS1	MSS1-64 1/19/2003 MSS1-64-T01N-SOLR E SS1	MSS1-64 1/19/2003 MSS1-64-T01N-SOL SS1	MSS1-65 1/10/2003 MSS1-65-T01N-SOL SS1
Carbon tetrachloride	mg/kg-dry	T	-	<0.01 :	<0.007 :	<0.009 :	-	<0.009 :
Chlorobenzene	mg/kg-dry	T	-	<0.01 :	<0.007 :	<0.009 :	-	<0.009 :
Chloroethane	mg/kg-dry	T	-	<0.01 :	<0.007 :	<0.009 :	-	<0.009 :
Chloroform	mg/kg-dry	T	-	<0.01 :	<0.007 :	<0.009 :	-	<0.009 :
Chloromethane	mg/kg-dry	T	-	<0.01 :	<0.007 :	<0.009 :	-	<0.009 :
cis-1,2-Dichloroethene	mg/kg-dry	T	-	<0.01 :	<0.007 :	<0.009 :	-	<0.009 :
cis-1,3-Dichloropropene	mg/kg-dry	T	-	<0.01 :	<0.007 :	<0.009 :	-	<0.009 :
Dibromochloromethane	mg/kg-dry	T	-	<0.01 :	<0.007 :	<0.009 :	-	<0.009 :
Dichlorodifluoromethane	mg/kg-dry	T	-	<0.01 :	<0.007 :	<0.009 :	-	<0.009 :
Ethylbenzene	mg/kg-dry	T	-	<0.01 :	<0.007 :	<0.009 :	-	<0.009 :
Methylene chloride	mg/kg-dry	T	-	<0.01 :	0.001 J	<0.009 :	-	<0.009 :
Styrene	mg/kg-dry	T	-	<0.01 :	<0.007 :	<0.009 :	-	<0.009 :
Tetrachloroethene	mg/kg-dry	T	-	0.004 J	<0.007 :	<0.009 :	-	<0.009 :
Toluene	mg/kg-dry	T	-	<0.01 :	0.0008 J	<0.009 :	-	<0.009 :
Total Xylene	mg/kg-dry	T	-	<0.01 :	<0.007 :	<0.009 :	-	0.001 J
trans-1,2-Dichloroethene	mg/kg-dry	T	-	<0.01 :	<0.007 :	<0.009 :	-	<0.009 :
trans-1,3-Dichloropropene	mg/kg-dry	T	-	<0.01 :	<0.007 :	<0.009 :	-	<0.009 :
Trichloroethene	mg/kg-dry	T	-	<0.01 :	<0.007 :	<0.009 :	-	<0.009 :
Trichlorofluoromethane	mg/kg-dry	T	-	<0.01 :	<0.007 :	<0.009 :	-	<0.009 :
Vinyl chloride	mg/kg-dry	T	-	<0.01 :	<0.007 :	<0.009 :	-	<0.009 :
Semi-Volatile Organics								
1,1`-Biphenyl	mg/kg-dry	T	-	<0.4 :	<0.34 :	-	<0.38 :	<0.34 :
2,4,5-Trichlorophenol	mg/kg-dry	T	-	<1. :	<0.86 :	-	<0.95 :	<0.86 :
2,4,6-Trichlorophenol	mg/kg-dry	T	-	<0.4 :	<0.34 :	-	<0.38 :	<0.34 :
2,4-Dichlorophenol	mg/kg-dry	T	-	<0.4 :	<0.34 :	-	<0.38 :	<0.34 :
2,4-Dimethylphenol	mg/kg-dry	T	-	<0.4 :	<0.34 :	-	<0.38 :	<0.34 :
2,4-Dinitrophenol	mg/kg-dry	T	-	<1. J	<0.86 J	-	<0.95 J	<0.86 :
2,4-Dinitrotoluene	mg/kg-dry	T	-	<0.4 :	<0.34 :	-	<0.38 :	<0.34 :
2,6-Dinitrotoluene	mg/kg-dry	T	-	<0.4 :	<0.34 :	-	<0.38 :	<0.34 :
2-Chloronaphthalene	mg/kg-dry	T	-	<0.4 :	<0.34 :	-	<0.38 :	<0.34 :
2-Chlorophenol	mg/kg-dry	T	-	<0.4 :	<0.34 :	-	<0.38 :	<0.34 :
2-Methylnaphthalene	mg/kg-dry	T	-	<0.4 :	<0.34 :	-	<0.38 :	<0.34 :
2-Methylphenol	mg/kg-dry	T	-	<0.4 :	<0.34 :	-	<0.38 :	<0.34 :
2-Nitroaniline	mg/kg-dry	T	-	<1. :	<0.86 :	-	<0.95 :	<0.86 :

J = Qualified as estimated during data validation
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T = Total Fraction

Appendix A-7a
Soil - Biased 0-6 inches
Validated Analytical Results

Parameter	Units	Exposure Area Fraction	Site ID / Sample Date / Sample ID					
			MSS1-62 1/8/2003 MSS1-62-T01N-SOLD L SS1	MSS1-62 1/8/2003 MSS1-62-T01N-SOL SS1	MSS1-63 1/8/2003 MSS1-63-T01N-SOL SS1	MSS1-64 1/19/2003 MSS1-64-T01N-SOLR E SS1	MSS1-64 1/19/2003 MSS1-64-T01N-SOL SS1	MSS1-65 1/10/2003 MSS1-65-T01N-SOL SS1
2-Nitrophenol	mg/kg-dry	T	-	<0.4 :	<0.34 :	-	<0.38 :	<0.34 :
3,3-Dichlorobenzidine	mg/kg-dry	T	-	<0.4 :	<0.34 :	-	<0.38 J	<0.34 :
3-Nitroaniline	mg/kg-dry	T	-	<1. :	<0.86 :	-	<0.95 :	<0.86 :
4,6-Dinitro-2-methylphenol	mg/kg-dry	T	-	<1. :	<0.86 :	-	<0.95 :	<0.86 :
4-Bromophenyl phenyl ether	mg/kg-dry	T	-	<0.4 :	<0.34 :	-	<0.38 :	<0.34 :
4-Chloro-3-methylphenol	mg/kg-dry	T	-	<0.4 :	<0.34 :	-	<0.38 :	<0.34 :
4-Chloroaniline	mg/kg-dry	T	-	<0.4 :	<0.34 :	-	<0.38 :	<0.34 :
4-Chlorophenyl phenyl ether	mg/kg-dry	T	-	<0.4 :	<0.34 :	-	<0.38 :	<0.34 :
4-Methylphenol	mg/kg-dry	T	-	<0.4 :	<0.34 :	-	<0.38 :	<0.34 :
4-Nitroaniline	mg/kg-dry	T	-	<1. :	<0.86 :	-	<0.95 :	<0.86 :
4-Nitrophenol	mg/kg-dry	T	-	<1. :	<0.86 :	-	<0.95 :	<0.86 :
Acenaphthene	mg/kg-dry	T	-	<0.4 :	<0.34 :	-	<0.38 :	<0.34 :
Acenaphthylene	mg/kg-dry	T	-	<0.4 :	<0.34 :	-	<0.38 :	<0.34 :
Anthracene	mg/kg-dry	T	-	<0.4 :	<0.34 :	-	<0.38 :	<0.34 :
Benzaldehyde	mg/kg-dry	T	-	<0.4 :	<0.34 :	-	<0.38 :	0.028 J
Benzo(a)anthracene	mg/kg-dry	T	-	<0.4 :	<0.34 :	-	<0.38 J	<0.34 :
Benzo(a)pyrene	mg/kg-dry	T	-	<0.4 :	<0.34 :	-	<0.38 :	<0.34 :
Benzo(b)fluoranthene	mg/kg-dry	T	-	<0.4 :	<0.34 :	-	<0.38 :	<0.34 :
Benzo(g,h,i)perylene	mg/kg-dry	T	-	<0.4 :	<0.34 :	-	<0.38 :	<0.34 :
Benzo(k)fluoranthene	mg/kg-dry	T	-	<0.4 :	<0.34 :	-	<0.38 :	<0.34 :
Bis(2-chloroethoxy)methane	mg/kg-dry	T	-	<0.4 :	<0.34 :	-	<0.38 :	<0.34 :
Bis(2-chloroethyl)ether	mg/kg-dry	T	-	<0.4 :	<0.34 :	-	<0.38 :	<0.34 :
Bis(2-ethylhexyl)phthalate	mg/kg-dry	T	-	0.62 :	0.13 J	-	<0.38 J	0.055 J
Butyl benzyl phthalate	mg/kg-dry	T	-	<0.4 :	<0.34 :	-	<0.38 J	<0.34 :
Carbazole	mg/kg-dry	T	-	<0.4 :	<0.34 :	-	<0.38 :	<0.34 :
Chrysene	mg/kg-dry	T	-	<0.4 :	<0.34 :	-	<0.38 J	<0.34 :
Dibenz(a,h)anthracene	mg/kg-dry	T	-	<0.4 :	<0.34 :	-	<0.38 :	<0.34 :
Dibenzofuran	mg/kg-dry	T	-	<0.4 :	<0.34 :	-	<0.38 :	<0.34 :
Dichlorodiisopropyl ether	mg/kg-dry	T	-	<0.4 :	<0.34 :	-	<0.38 :	<0.34 :
Diethylphthalate	mg/kg-dry	T	-	<0.4 :	<0.34 :	-	<0.38 :	<0.34 :
Dimethylphthalate	mg/kg-dry	T	-	<0.4 :	<0.34 :	-	<0.38 :	<0.34 :
Di-n-Butyl phthalate	mg/kg-dry	T	-	<0.4 :	<0.34 :	-	0.025 J	<0.34 :
Di-n-Octyl phthalate	mg/kg-dry	T	-	<0.4 :	<0.34 :	-	<0.38 :	<0.34 :
Fluoranthene	mg/kg-dry	T	-	<0.4 :	<0.34 :	-	<0.38 :	<0.34 :

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Appendix A-7a
Soil - Biased 0-6 inches
Validated Analytical Results

Parameter	Units	Exposure Area Fraction	Site ID / Sample Date / Sample ID					
			MSS1-62 1/8/2003 MSS1-62-T01N-SOLDL SS1	MSS1-62 1/8/2003 MSS1-62-T01N-SOL SS1	MSS1-63 1/8/2003 MSS1-63-T01N-SOL SS1	MSS1-64 1/19/2003 MSS1-64-T01N-SOLRE SS1	MSS1-64 1/19/2003 MSS1-64-T01N-SOL SS1	MSS1-65 1/10/2003 MSS1-65-T01N-SOL SS1
Fluorene	mg/kg-dry	T	-	<0.4 :	<0.34 :	-	<0.38 :	<0.34 :
Hexachlorobenzene	mg/kg-dry	T	-	<0.4 :	<0.34 :	-	<0.38 :	<0.34 :
Hexachlorobutadiene	mg/kg-dry	T	-	<0.4 :	<0.34 :	-	<0.38 :	<0.34 :
Hexachlorocyclopentadiene	mg/kg-dry	T	-	<0.4 :	<0.34 :	-	<0.38 :	<0.34 :
Hexachloroethane	mg/kg-dry	T	-	<0.4 :	<0.34 :	-	<0.38 :	<0.34 :
Indeno(1,2,3-cd)pyrene	mg/kg-dry	T	-	<0.4 :	<0.34 :	-	<0.38 :	<0.34 :
Isophorone	mg/kg-dry	T	-	<0.4 :	<0.34 :	-	<0.38 :	<0.34 :
Naphthalene	mg/kg-dry	T	-	<0.4 :	<0.34 :	-	<0.38 :	<0.34 :
Nitrobenzene	mg/kg-dry	T	-	<0.4 :	<0.34 :	-	<0.38 :	<0.34 :
N-Nitrosodi-n-propylamine	mg/kg-dry	T	-	<0.4 :	<0.34 :	-	<0.38 :	<0.34 :
N-Nitrosodiphenylamine	mg/kg-dry	T	-	<0.4 :	<0.34 :	-	<0.38 :	<0.34 :
Pentachlorophenol	mg/kg-dry	T	-	<1. :	<0.86 :	-	<0.95 :	<0.86 :
Phenanthrene	mg/kg-dry	T	-	<0.4 :	<0.34 :	-	0.028 J	<0.34 :
Phenol	mg/kg-dry	T	-	<0.4 :	<0.34 :	-	<0.38 :	<0.34 :
Pyrene	mg/kg-dry	T	-	0.031 J	<0.34 :	-	<0.38 J	<0.34 :
Pesticides-PCBs								
Aroclor 1016	mg/kg-dry	T	-	<0.04 :	<0.034 :	-	<0.038 :	<0.034 :
Aroclor 1221	mg/kg-dry	T	-	<0.081 :	<0.07 :	-	<0.077 :	<0.07 :
Aroclor 1232	mg/kg-dry	T	-	<0.04 :	<0.034 :	-	<0.038 :	<0.034 :
Aroclor 1242	mg/kg-dry	T	-	<0.04 :	<0.034 :	-	<0.038 :	<0.034 :
Aroclor 1248	mg/kg-dry	T	-	<0.04 :	0.23 :	-	<0.038 :	<0.034 :
Aroclor 1254	mg/kg-dry	T	4. :	-	0.45 :	-	0.021 J	0.15 J
Aroclor 1260	mg/kg-dry	T	-	<0.04 :	<0.034 :	-	<0.038 :	0.057 :

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Appendix A-7a
Soil - Biased 0-6 inches
Validated Analytical Results

Parameter	Units	Exposure Area Fraction	Site ID		Sample Date		Sample ID																	
			MSS1-66		1/8/2003		MSS1-66-T01N-SOL		MSS1-67		1/12/2003		MSS2-67-T01N-SOL		MSS1-68		1/19/2003		MSS1-68-T01N-SOL		MSS1-69		1/10/2003		MSS1-69-T01N-SOL
			SS1						SS1						SS1						SS1			
General Chemistry																								
Ammonia	mg/kg-dry	T	3.3	:					30.3	:					11.5	:					23.1	:		
Chloride	mg/kg-dry	T	42.	:					<2.3	:					5.5	:					2.7	:		
Fluoride	mg/kg-dry	T	3.1	J					0.81	J					1.4	J					0.89	J		
Nitrate	mg/kg-dry	T	<2.2	J					<2.3	J					<2.1	J					<2.3	J		
Phosphorus	mg/kg-dry	T	1010.	:					1000.	:					1540.	:					1440.	:		
Sulfate	mg/kg-dry	T	3660.	:					10.9	:					263.	J					10.7	:		
Total Kjeldahl Nitrogen	mg/kg-dry	T	96.2	:					209.	:					86.2	J					339.	:		
Total Organic Carbon	mg/kg-dry	T	1100.	J					10500.	J					2820.	J					5740.	J		
Laboratory Parameters																								
pH	SU	T	8.	:					7.3	:					7.7	:					7.6	:		
Solids, Percent	%	T	94.7	:					90.6	:					97.7	:					89.1	:		
Specific Conductance	umhos/cm	T	1920.	:					180.	:					660.	J					157.	:		
Geotechnical																								
Organic Soils	%	T	1.5	:					3.32	:					1.7	:					2.3	:		
Physical Properties																								
Cation-Exchange Capacity	meq/100g	T	9.6	:					9.1	:					7.7	:					19.2	:		
Sodium Absorption Ratio	ratio	T	0.76	:					0.05	:					0.38	:					0.09	:		
Metals																								
Aluminum	mg/kg-dry	T	11900.	:					13800.	:					12700.	:					17900.	:		
Antimony	mg/kg-dry	T	<0.3	J					<0.31	J					<0.27	J					<0.32	J		
Arsenic	mg/kg-dry	T	13.6	J					3.9	J					3.3	J					5.4	J		
Barium	mg/kg-dry	T	70.2	:					89.2	:					70.1	:					127.	:		
Beryllium	mg/kg-dry	T	1.	:					1.1	:					0.78	:					1.2	:		
Boron	mg/kg-dry	T	<0.27	:					3.9	:					<0.23	J					2.9	J		
Cadmium	mg/kg-dry	T	0.97	J					0.55	:					0.15	J					<0.042	J		
Calcium	mg/kg-dry	T	17200.	:					9200.	:					9220.	:					10300.	:		
Chromium	mg/kg-dry	T	80.1	J					49.6	J					83.8	J					75.3	J		
Cobalt	mg/kg-dry	T	<16.1	:					25.7	:					12.9	:					17.1	:		
Copper	mg/kg-dry	T	568.	J					66.7	J					68.1	:					82.5	J		
Iron	mg/kg-dry	T	45400.	:					26400.	:					24800.	:					33300.	:		
Lead	mg/kg-dry	T	267.	:					57.	:					42.9	:					61.7	:		
Magnesium	mg/kg-dry	T	8940.	:					10100.	:					10900.	:					12600.	:		
Manganese	mg/kg-dry	T	665.	:					909.	:					710.	:					971.	:		

Parameter	Units	Exposure Area Fraction	Site ID		Sample Date		Sample ID																	
			MSS1-70		1/9/2003		MSS1-70-T01N-SOL		MSS1-71		1/9/2003		MSS1-71-T01N-SOL											
			SS1						SS1															
General Chemistry																								
Ammonia	mg/kg-dry	T	21.9	:					9.9	:														
Chloride	mg/kg-dry	T	<2.2	:					3.	:														
Fluoride	mg/kg-dry	T	5.4	J					46.1	J														
Nitrate	mg/kg-dry	T	<2.2	J					<2.2	J														
Phosphorus	mg/kg-dry	T	876.	:					218.	:														
Sulfate	mg/kg-dry	T	36.1	:					184.	:														
Total Kjeldahl Nitrogen	mg/kg-dry	T	34.1	:					40.4	:														
Total Organic Carbon	mg/kg-dry	T	1550.	J					<106.	J														
Laboratory Parameters																								
pH	SU	T	7.6	:					7.2	:														
Solids, Percent	%	T	94.	:					94.5	:														
Specific Conductance	umhos/cm	T	160.	:					618.	:														
Geotechnical																								
Organic Soils	%	T	1.7	:					0.5	:														
Physical Properties																								
Cation-Exchange Capacity	meq/100g	T	9.5	:					5.	:														
Sodium Absorption Ratio	ratio	T	0.15	:					0.16	:														
Metals																								
Aluminum	mg/kg-dry	T	7660.	:					4590.	:														
Antimony	mg/kg-dry	T	<0.28	J					0.64	:														
Arsenic	mg/kg-dry	T	4.8	J					1.1	J														
Barium	mg/kg-dry	T	237.	:					39.2	:														
Beryllium	mg/kg-dry	T	1.1	:					0.36	:														
Boron	mg/kg-dry	T	2.1	J					1.6	:														
Cadmium	mg/kg-dry	T	0.35	J					1.1	:														
Calcium	mg/kg-dry	T	2070.	:					3090.	:														
Chromium	mg/kg-dry	T	20.	J					10.5	J														
Cobalt	mg/kg-dry	T	1.6	:					7.1	:														
Copper	mg/kg-dry	T	194.	J					114.	:														
Iron	mg/kg-dry	T	20300.	:					9360.	:														
Lead	mg/kg-dry	T	72.7	:					49.3	:														
Magnesium	mg/kg-dry	T	3760.	:					1660.	:														
Manganese	mg/kg-dry	T	226.	:					493.	:														

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T = Total Fraction

Appendix A-7a
Soil - Biased 0-6 inches
Validated Analytical Results

Parameter	Units	Exposure Area Fraction	Site ID		MSS1-66		MSS1-67		MSS1-68		MSS1-69		MSS1-70		MSS1-71	
			Sample Date		1/8/2003		1/12/2003		1/19/2003		1/10/2003		1/9/2003		1/9/2003	
			Sample ID		MSS1-66-T01N-SOL		MSS2-67-T01N-SOL		MSS1-68-T01N-SOL		MSS1-69-T01N-SOL		MSS1-70-T01N-SOL		MSS1-71-T01N-SOL	
			Exposure Area		SS1		SS1		SS1		SS1		SS1		SS1	
Mercury	mg/kg-dry	T			0.023	:	<0.017	:	<0.015	:	<0.018	:	<0.017	:	<0.016	:
Molybdenum	mg/kg-dry	T			38300.	:	417.	:	281.	:	431.	:	5330.	:	718.	:
Nickel	mg/kg-dry	T			58.5	:	36.3	:	39.9	:	52.7	:	22.4	:	12.5	:
Potassium	mg/kg-dry	T			2980.	J	3280.	J	3240.	J	4180.	J	2470.	J	947.	:
Selenium	mg/kg-dry	T			3.9	J	<0.83	J	<0.73	J	<0.85	J	1.3	J	<0.74	J
Silver	mg/kg-dry	T			<0.16	:	0.6	:	0.4	:	1.1	:	1.2	:	0.63	:
Sodium	mg/kg-dry	T			<32.9	J	<33.2	:	<29.8	:	<34.3	:	<133.	:	<32.4	:
Thallium	mg/kg-dry	T			0.41	:	0.27	:	0.18	:	0.28	:	0.17	:	<0.093	:
Vanadium	mg/kg-dry	T			145.	:	49.2	:	50.	:	66.	:	51.3	:	22.9	:
Zinc	mg/kg-dry	T			220.	:	118.	:	101.	:	128.	:	162.	:	108.	:
Volatile Organics																
1,1,1-Trichloroethane	mg/kg-dry	T			<0.01	:	<0.005	:	<0.004	:	<0.007	:	<0.004	:	<0.007	:
1,1,2,2-Tetrachloroethane	mg/kg-dry	T			<0.01	:	<0.005	:	<0.004	:	<0.007	:	<0.004	:	<0.007	:
1,1,2-Trichloro-1,2,2-trifluoroethane	mg/kg-dry	T			<0.01	:	<0.005	:	<0.004	:	<0.007	:	<0.004	:	<0.007	:
1,1,2-Trichloroethane	mg/kg-dry	T			<0.01	:	<0.005	:	<0.004	:	<0.007	:	<0.004	:	<0.007	:
1,1-Dichloroethane	mg/kg-dry	T			<0.01	:	<0.005	:	<0.004	:	<0.007	:	<0.004	:	<0.007	:
1,1-Dichloroethene	mg/kg-dry	T			<0.01	:	<0.005	:	<0.004	:	<0.007	:	<0.004	:	<0.007	:
1,2,4-Trichlorobenzene	mg/kg-dry	T			<0.01	:	<0.005	:	<0.004	:	<0.007	:	<0.004	:	<0.007	:
1,2-Dibromo-3-chloropropane	mg/kg-dry	T			<0.01	:	<0.005	:	<0.004	:	<0.007	:	<0.004	:	<0.007	:
1,2-Dichlorobenzene	mg/kg-dry	T			<0.01	:	<0.005	:	<0.004	:	<0.007	:	<0.004	:	<0.007	:
1,2-Dichloroethane	mg/kg-dry	T			<0.01	:	<0.005	:	<0.004	:	<0.007	:	<0.004	:	<0.007	:
1,2-Dichloroethene (total)	mg/kg-dry	T			<0.01	:	<0.005	:	<0.004	:	<0.007	:	<0.004	:	<0.007	:
1,2-Dichloropropane	mg/kg-dry	T			<0.01	:	<0.005	:	<0.004	:	<0.007	:	<0.004	:	<0.007	:
1,3-Dichlorobenzene	mg/kg-dry	T			<0.01	:	<0.005	:	<0.004	:	<0.007	:	<0.004	:	<0.007	:
1,4-Dichlorobenzene	mg/kg-dry	T			<0.01	:	<0.005	:	<0.004	:	<0.007	:	<0.004	:	<0.007	:
2-Butanone	mg/kg-dry	T			<0.01	:	0.003	J	0.002	J	<0.007	:	<0.004	:	<0.007	:
2-Hexanone	mg/kg-dry	T			<0.01	:	<0.005	:	<0.004	:	<0.007	:	<0.004	:	<0.007	:
4-Methyl-2-pentanone	mg/kg-dry	T			<0.01	:	<0.005	:	<0.004	:	<0.007	:	<0.004	:	<0.007	:
Acetone	mg/kg-dry	T			<0.01	:	0.004	J	0.007	:	0.006	J	<0.004	:	<0.007	:
Benzene	mg/kg-dry	T			<0.01	:	<0.005	:	<0.004	:	<0.007	:	<0.004	:	<0.007	:
Bromodichloromethane	mg/kg-dry	T			<0.01	:	<0.005	:	<0.004	:	<0.007	:	<0.004	:	<0.007	:
Bromoform	mg/kg-dry	T			<0.01	:	<0.005	:	<0.004	:	<0.007	:	<0.004	:	<0.007	:
Bromomethane	mg/kg-dry	T			<0.01	:	<0.005	:	<0.004	:	<0.007	:	<0.004	:	<0.007	:
Carbon disulfide	mg/kg-dry	T			<0.01	:	<0.005	:	<0.004	:	<0.007	:	0.0005	J	0.001	J

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T = Total Fraction

Appendix A-7a
Soil - Biased 0-6 inches
Validated Analytical Results

Parameter	Units	Exposure Area Fraction	Site ID	Sample Date	Sample ID	MSS1-66	MSS1-67	MSS1-68	MSS1-69	MSS1-70	MSS1-71
						1/8/2003	1/12/2003	1/19/2003	1/10/2003	1/9/2003	1/9/2003
						MSS1-66-T01N-SOL	MSS2-67-T01N-SOL	MSS1-68-T01N-SOL	MSS1-69-T01N-SOL	MSS1-70-T01N-SOL	MSS1-71-T01N-SOL
						SS1	SS1	SS1	SS1	SS1	SS1
Carbon tetrachloride	mg/kg-dry	T				<0.01 :	<0.005 :	<0.004 :	<0.007 :	<0.004 :	<0.007 :
Chlorobenzene	mg/kg-dry	T				<0.01 :	<0.005 :	<0.004 :	<0.007 :	<0.004 :	<0.007 :
Chloroethane	mg/kg-dry	T				<0.01 :	<0.005 :	<0.004 :	<0.007 :	<0.004 :	<0.007 :
Chloroform	mg/kg-dry	T				<0.01 :	<0.005 :	<0.004 :	<0.007 :	<0.004 :	<0.007 :
Chloromethane	mg/kg-dry	T				<0.01 :	<0.005 :	<0.004 :	<0.007 :	<0.004 :	<0.007 :
cis-1,2-Dichloroethene	mg/kg-dry	T				<0.01 :	<0.005 :	<0.004 :	<0.007 :	<0.004 :	<0.007 :
cis-1,3-Dichloropropene	mg/kg-dry	T				<0.01 :	<0.005 :	<0.004 :	<0.007 :	<0.004 :	<0.007 :
Dibromochloromethane	mg/kg-dry	T				<0.01 :	<0.005 :	<0.004 :	<0.007 :	<0.004 :	<0.007 :
Dichlorodifluoromethane	mg/kg-dry	T				<0.01 :	<0.005 :	<0.004 :	<0.007 :	<0.004 :	<0.007 :
Ethylbenzene	mg/kg-dry	T				<0.01 :	<0.005 :	<0.004 :	<0.007 :	0.0004 J	0.002 J
Methylene chloride	mg/kg-dry	T				<0.01 :	<0.005 :	<0.004 :	<0.007 :	<0.004 :	<0.007 :
Styrene	mg/kg-dry	T				<0.01 :	<0.005 :	<0.004 :	<0.007 :	<0.004 :	<0.007 :
Tetrachloroethene	mg/kg-dry	T				<0.01 :	<0.005 :	<0.004 :	<0.007 :	<0.004 :	<0.007 :
Toluene	mg/kg-dry	T				0.0009 J	<0.005 :	<0.004 :	0.0007 J	<0.004 :	<0.007 :
Total Xylene	mg/kg-dry	T				<0.01 :	0.001 J	<0.004 :	<0.007 :	0.002 J	0.005 J
trans-1,2-Dichloroethene	mg/kg-dry	T				<0.01 :	<0.005 :	<0.004 :	<0.007 :	<0.004 :	<0.007 :
trans-1,3-Dichloropropene	mg/kg-dry	T				<0.01 :	<0.005 :	<0.004 :	<0.007 :	<0.004 :	<0.007 :
Trichloroethene	mg/kg-dry	T				<0.01 :	<0.005 :	<0.004 :	<0.007 :	<0.004 :	<0.007 :
Trichlorofluoromethane	mg/kg-dry	T				<0.01 :	<0.005 :	<0.004 :	<0.007 :	<0.004 :	<0.007 :
Vinyl chloride	mg/kg-dry	T				<0.01 :	<0.005 :	<0.004 :	<0.007 :	<0.004 :	<0.007 :
Semi-Volatile Organics											
1,1`-Biphenyl	mg/kg-dry	T				0.017 J	<0.36 :	<0.34 :	<0.37 :	<0.35 :	<0.35 :
2,4,5-Trichlorophenol	mg/kg-dry	T				<0.87 :	<0.91 :	<0.85 :	<0.93 :	<0.88 :	<0.88 :
2,4,6-Trichlorophenol	mg/kg-dry	T				<0.35 :	<0.36 :	<0.34 :	<0.37 :	<0.35 :	<0.35 :
2,4-Dichlorophenol	mg/kg-dry	T				<0.35 :	<0.36 J	<0.34 :	<0.37 :	<0.35 :	<0.35 :
2,4-Dimethylphenol	mg/kg-dry	T				<0.35 :	<0.36 :	<0.34 :	<0.37 :	<0.35 :	<0.35 :
2,4-Dinitrophenol	mg/kg-dry	T				<0.87 J	<0.91 :	<0.85 J	<0.93 :	<0.88 :	<0.88 :
2,4-Dinitrotoluene	mg/kg-dry	T				<0.35 :	<0.36 :	<0.34 :	<0.37 :	<0.35 :	<0.35 :
2,6-Dinitrotoluene	mg/kg-dry	T				<0.35 :	<0.36 :	<0.34 :	<0.37 :	<0.35 :	<0.35 :
2-Chloronaphthalene	mg/kg-dry	T				<0.35 :	<0.36 :	<0.34 :	<0.37 :	<0.35 :	<0.35 :
2-Chlorophenol	mg/kg-dry	T				<0.35 :	<0.36 :	<0.34 :	<0.37 :	<0.35 :	<0.35 :
2-Methylnaphthalene	mg/kg-dry	T				0.026 J	<0.36 :	<0.34 :	<0.37 :	<0.35 :	<0.35 :
2-Methylphenol	mg/kg-dry	T				<0.35 :	<0.36 :	<0.34 :	<0.37 :	<0.35 :	<0.35 :
2-Nitroaniline	mg/kg-dry	T				<0.87 :	<0.91 :	<0.85 :	<0.93 :	<0.88 :	<0.88 :

J = Qualified as estimated during data validation
R = Qualified as rejected value from data validation and results are considered unusable for any purpose
T = Total Fraction

Appendix A-7a
Soil - Biased 0-6 inches
Validated Analytical Results

Parameter	Units	Exposure Area Fraction	Site ID / Sample Date / Sample ID		MSS1-66 1/8/2003 MSS1-66-T01N-SOL SS1		MSS1-67 1/12/2003 MSS2-67-T01N-SOL SS1		MSS1-68 1/19/2003 MSS1-68-T01N-SOL SS1		MSS1-69 1/10/2003 MSS1-69-T01N-SOL SS1		MSS1-70 1/9/2003 MSS1-70-T01N-SOL SS1		MSS1-71 1/9/2003 MSS1-71-T01N-SOL SS1	
2-Nitrophenol	mg/kg-dry	T			<0.35	:	<0.36	:	<0.34	:	<0.37	:	<0.35	:	<0.35	:
3,3-Dichlorobenzidine	mg/kg-dry	T			<0.35	:	<0.36	:	<0.34	:	<0.37	:	<0.35	:	<0.35	:
3-Nitroaniline	mg/kg-dry	T			<0.87	:	<0.91	:	<0.85	J	<0.93	:	<0.88	:	<0.88	:
4,6-Dinitro-2-methylphenol	mg/kg-dry	T			<0.87	:	<0.91	:	<0.85	J	<0.93	:	<0.88	:	<0.88	:
4-Bromophenyl phenyl ether	mg/kg-dry	T			<0.35	:	<0.36	:	<0.34	:	<0.37	:	<0.35	:	<0.35	:
4-Chloro-3-methylphenol	mg/kg-dry	T			<0.35	:	<0.36	:	<0.34	:	<0.37	:	<0.35	:	<0.35	:
4-Chloroaniline	mg/kg-dry	T			<0.35	:	<0.36	:	<0.34	J	<0.37	:	<0.35	:	<0.35	:
4-Chlorophenyl phenyl ether	mg/kg-dry	T			<0.35	:	<0.36	:	<0.34	:	<0.37	:	<0.35	:	<0.35	:
4-Methylphenol	mg/kg-dry	T			<0.35	:	<0.36	:	<0.34	:	<0.37	:	<0.35	:	<0.35	:
4-Nitroaniline	mg/kg-dry	T			<0.87	:	<0.91	:	<0.85	J	<0.93	:	<0.88	:	<0.88	:
4-Nitrophenol	mg/kg-dry	T			<0.87	:	<0.91	:	<0.85	:	<0.93	:	<0.88	:	<0.88	:
Acenaphthene	mg/kg-dry	T			<0.35	:	<0.36	:	<0.34	:	<0.37	:	<0.35	:	<0.35	:
Acenaphthylene	mg/kg-dry	T			<0.35	:	<0.36	:	<0.34	:	<0.37	:	<0.35	:	<0.35	:
Anthracene	mg/kg-dry	T			<0.35	:	<0.36	:	<0.34	:	<0.37	:	<0.35	:	<0.35	:
Benzaldehyde	mg/kg-dry	T			<0.35	:	<0.36	:	<0.34	:	<0.37	:	0.04	J	<0.35	:
Benzo(a)anthracene	mg/kg-dry	T			<0.35	:	<0.36	:	<0.34	:	<0.37	:	<0.35	:	<0.35	:
Benzo(a)pyrene	mg/kg-dry	T			<0.35	:	<0.36	:	<0.34	:	<0.37	:	<0.35	:	<0.35	:
Benzo(b)fluoranthene	mg/kg-dry	T			<0.35	:	<0.36	:	<0.34	:	<0.37	:	<0.35	:	<0.35	:
Benzo(g,h,i)perylene	mg/kg-dry	T			<0.35	:	<0.36	:	<0.34	:	<0.37	:	<0.35	:	<0.35	:
Benzo(k)fluoranthene	mg/kg-dry	T			<0.35	:	<0.36	:	<0.34	:	<0.37	:	<0.35	:	<0.35	:
Bis(2-chloroethoxy)methane	mg/kg-dry	T			<0.35	:	<0.36	:	<0.34	:	<0.37	:	<0.35	:	<0.35	:
Bis(2-chloroethyl)ether	mg/kg-dry	T			<0.35	:	<0.36	:	<0.34	:	<0.37	:	<0.35	:	<0.35	:
Bis(2-ethylhexyl)phthalate	mg/kg-dry	T			0.1	J	0.06	J	0.076	J	0.038	J	0.24	J	0.017	J
Butyl benzyl phthalate	mg/kg-dry	T			<0.35	:	0.073	J	<0.34	:	<0.37	:	<0.35	:	<0.35	:
Carbazole	mg/kg-dry	T			<0.35	:	<0.36	:	<0.34	:	<0.37	:	<0.35	:	<0.35	:
Chrysene	mg/kg-dry	T			<0.35	:	<0.36	:	<0.34	:	<0.37	:	<0.35	:	<0.35	:
Dibenz(a,h)anthracene	mg/kg-dry	T			<0.35	:	<0.36	:	<0.34	:	<0.37	J	<0.35	J	<0.35	J
Dibenzofuran	mg/kg-dry	T			<0.35	:	<0.36	:	<0.34	:	<0.37	:	<0.35	:	<0.35	:
Dichlorodiisopropyl ether	mg/kg-dry	T			<0.35	:	<0.36	:	<0.34	:	<0.37	:	<0.35	:	<0.35	:
Diethylphthalate	mg/kg-dry	T			<0.35	:	<0.36	:	<0.34	:	<0.37	:	<0.35	:	<0.35	:
Dimethylphthalate	mg/kg-dry	T			<0.35	:	<0.36	:	<0.34	:	<0.37	:	<0.35	:	<0.35	:
Di-n-Butyl phthalate	mg/kg-dry	T			<0.35	:	<0.36	:	<0.34	:	<0.37	:	<0.35	:	<0.35	:
Di-n-Octyl phthalate	mg/kg-dry	T			<0.35	:	<0.36	:	<0.34	J	<0.37	:	<0.35	:	<0.35	:
Fluoranthene	mg/kg-dry	T			<0.35	:	<0.36	:	<0.34	:	<0.37	:	<0.35	:	<0.35	:

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Appendix A-7a
Soil - Biased 0-6 inches
Validated Analytical Results

Parameter	Units	Exposure Area Fraction	Site ID / Sample Date / Sample ID / Exposure Area		MSS1-66 1/8/2003 MSS1-66-T01N-SOL SS1		MSS1-67 1/12/2003 MSS2-67-T01N-SOL SS1		MSS1-68 1/19/2003 MSS1-68-T01N-SOL SS1		MSS1-69 1/10/2003 MSS1-69-T01N-SOL SS1		MSS1-70 1/9/2003 MSS1-70-T01N-SOL SS1		MSS1-71 1/9/2003 MSS1-71-T01N-SOL SS1	
Fluorene	mg/kg-dry	T			<0.35	:	<0.36	:	<0.34	:	<0.37	:	<0.35	:	<0.35	:
Hexachlorobenzene	mg/kg-dry	T			<0.35	:	<0.36	:	<0.34	:	<0.37	:	<0.35	:	<0.35	:
Hexachlorobutadiene	mg/kg-dry	T			<0.35	:	<0.36	:	<0.34	:	<0.37	:	<0.35	:	<0.35	:
Hexachlorocyclopentadiene	mg/kg-dry	T			<0.35	:	<0.36	:	<0.34	:	<0.37	:	<0.35	:	<0.35	:
Hexachloroethane	mg/kg-dry	T			<0.35	:	<0.36	:	<0.34	:	<0.37	:	<0.35	:	<0.35	:
Indeno(1,2,3-cd)pyrene	mg/kg-dry	T			<0.35	:	<0.36	:	<0.34	:	<0.37	:	<0.35	:	<0.35	:
Isophorone	mg/kg-dry	T			<0.35	:	<0.36	:	<0.34	:	<0.37	:	<0.35	:	<0.35	:
Naphthalene	mg/kg-dry	T			<0.35	:	<0.36	:	<0.34	:	<0.37	:	<0.35	:	<0.35	:
Nitrobenzene	mg/kg-dry	T			<0.35	:	<0.36	:	<0.34	:	<0.37	:	<0.35	:	<0.35	:
N-Nitrosodi-n-propylamine	mg/kg-dry	T			<0.35	:	<0.36	:	<0.34	:	<0.37	:	<0.35	:	<0.35	:
N-Nitrosodiphenylamine	mg/kg-dry	T			<0.35	:	<0.36	:	<0.34	:	<0.37	:	<0.35	:	<0.35	:
Pentachlorophenol	mg/kg-dry	T			<0.87	:	<0.91	:	<0.85	J	<0.93	J	<0.88	:	<0.88	J
Phenanthrene	mg/kg-dry	T			0.13	J	<0.36	:	<0.34	:	<0.37	:	<0.35	J	<0.35	:
Phenol	mg/kg-dry	T			<0.35	:	<0.36	:	<0.34	:	<0.37	:	<0.35	:	<0.35	:
Pyrene	mg/kg-dry	T			0.036	J	<0.36	:	<0.34	:	<0.37	:	<0.35	:	<0.35	:
Pesticides-PCBs																
Aroclor 1016	mg/kg-dry	T			<0.035	:	<0.036	:	<0.034	:	<0.037	:	<0.035	:	<0.035	:
Aroclor 1221	mg/kg-dry	T			<0.07	:	<0.074	:	<0.068	:	<0.075	:	<0.071	:	<0.071	:
Aroclor 1232	mg/kg-dry	T			<0.035	:	<0.036	:	<0.034	:	<0.037	:	<0.035	:	<0.035	:
Aroclor 1242	mg/kg-dry	T			<0.035	:	<0.036	:	<0.034	:	<0.037	:	<0.035	:	<0.035	:
Aroclor 1248	mg/kg-dry	T			0.27	J	<0.036	:	<0.034	:	<0.037	:	0.12	J	0.078	J
Aroclor 1254	mg/kg-dry	T			0.76	:	0.067	:	0.03	J	0.053	:	0.31	:	0.22	:
Aroclor 1260	mg/kg-dry	T			<0.035	:	<0.036	:	<0.034	:	<0.037	:	<0.035	:	0.022	J

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Appendix A-7a
Soil - Biased 0-6 inches
Validated Analytical Results

Parameter	Units	Exposure Area Fraction	Site ID / Sample Date / Sample ID											
			MSS1-72 1/9/2003 MSS1-72-T01N-SOLDL SS1		MSS1-72 1/9/2003 MSS1-72-T01N-SOL SS1		MSS1-73 1/9/2003 MSS1-73-T01N-SOLDL SS1		MSS1-73 1/9/2003 MSS1-73-T01N-SOL SS1		MSS1-74 1/19/2003 MSS1-74-T01N-SOL SS1		MSS1-75 1/9/2003 MSS1-75-T01N-SOL SS1	
General Chemistry														
Ammonia	mg/kg-dry	T	-		18.6	:	-		24.9	:	13.8	:	22.6	:
Chloride	mg/kg-dry	T	-		4.5	:	-		412.	:	41.8	:	53.8	J
Fluoride	mg/kg-dry	T	-		2.5	J	-		1.2	J	1.1	J	<1.1	J
Nitrate	mg/kg-dry	T	-		<2.3	J	-		18.3	J	8.8	J	9.4	J
Phosphorus	mg/kg-dry	T	-		878.	:	-		1080.	:	1230.	:	803.	:
Sulfate	mg/kg-dry	T	-		5270.	:	-		5420.	:	1440.	J	253.	J
Total Kjeldahl Nitrogen	mg/kg-dry	T	-		54.1	:	-		112.	:	92.9	J	92.7	:
Total Organic Carbon	mg/kg-dry	T	-		409.	J	-		2860.	J	663.	J	<106.	J
Laboratory Parameters														
pH	SU	T	-		7.	:	-		7.	:	7.3	:	7.2	:
Solids, Percent	%	T	-		90.7	:	-		95.2	:	97.9	:	94.7	:
Specific Conductance	umhos/cm	T	-		1640.	:	-		2330.	:	1930.	J	2690.	:
Geotechnical														
Organic Soils	%	T	-		0.8	:	-		1.6	:	1.5	:	0.8	:
Physical Properties														
Cation-Exchange Capacity	meq/100g	T	-		10.6	:	-		13.7	:	12.5	:	9.	:
Sodium Absorption Ratio	ratio	T	-		0.07	:	-		0.94	:	0.42	:	2.64	:
Metals														
Aluminum	mg/kg-dry	T	-		11000.	:	-		11700.	:	10300.	:	8040.	:
Antimony	mg/kg-dry	T	-		<0.28	:	-		<0.3	:	<0.26	J	<0.31	J
Arsenic	mg/kg-dry	T	-		3.2	J	-		3.9	J	2.3	J	2.7	J
Barium	mg/kg-dry	T	-		95.	:	-		104.	:	52.7	:	62.3	:
Beryllium	mg/kg-dry	T	-		1.2	:	-		1.4	:	0.94	:	0.97	:
Boron	mg/kg-dry	T	-		1.5	:	-		2.3	:	<0.26	:	<2.5	:
Cadmium	mg/kg-dry	T	-		1.5	:	-		1.4	:	0.28	:	1.9	:
Calcium	mg/kg-dry	T	-		13400.	:	-		21300.	:	7330.	:	11300.	:
Chromium	mg/kg-dry	T	-		36.5	J	-		41.4	J	40.2	J	44.2	J
Cobalt	mg/kg-dry	T	-		11.7	:	-		10.5	:	9.2	:	9.9	:
Copper	mg/kg-dry	T	-		186.	:	-		228.	:	68.8	:	128.	J
Iron	mg/kg-dry	T	-		20600.	:	-		25400.	:	18500.	:	20200.	:
Lead	mg/kg-dry	T	-		388.	:	-		166.	:	50.5	:	165.	:
Magnesium	mg/kg-dry	T	-		6440.	:	-		7220.	:	7600.	:	4870.	:
Manganese	mg/kg-dry	T	-		879.	:	-		739.	:	659.	:	664.	:

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T = Total Fraction

Appendix A-7a
Soil - Biased 0-6 inches
Validated Analytical Results

Parameter	Units	Exposure Area Fraction	Site ID / Sample Date / Sample ID											
			MSS1-72 1/9/2003 MSS1-72-T01N-SOLDL SS1		MSS1-72 1/9/2003 MSS1-72-T01N-SOL SS1		MSS1-73 1/9/2003 MSS1-73-T01N-SOLDL SS1		MSS1-73 1/9/2003 MSS1-73-T01N-SOL SS1		MSS1-74 1/19/2003 MSS1-74-T01N-SOL SS1		MSS1-75 1/9/2003 MSS1-75-T01N-SOL SS1	
Mercury	mg/kg-dry	T	-		<0.017	:	-		0.15	:	<0.017	:	<0.018	:
Molybdenum	mg/kg-dry	T	-		1550.	:	-		3050.	:	376.	:	1460.	:
Nickel	mg/kg-dry	T	-		30.3	:	-		29.2	:	25.9	:	17.9	:
Potassium	mg/kg-dry	T	-		3830.	:	-		3640.	:	2440.	J	2930.	J
Selenium	mg/kg-dry	T	-		1.3	J	-		1.	J	<0.7	J	0.87	J
Silver	mg/kg-dry	T	-		2.5	:	-		1.9	:	0.48	:	1.9	:
Sodium	mg/kg-dry	T	-		<34.7	:	-		231.	:	<39.	:	530.	:
Thallium	mg/kg-dry	T	-		0.28	:	-		0.28	:	0.24	:	0.19	:
Vanadium	mg/kg-dry	T	-		45.4	:	-		59.7	:	38.2	:	35.5	:
Zinc	mg/kg-dry	T	-		260.	:	-		349.	:	105.	:	304.	:
Volatile Organics														
1,1,1-Trichloroethane	mg/kg-dry	T	-		<0.004	:	-		<0.005	:	<0.006	:	-	
1,1,2,2-Tetrachloroethane	mg/kg-dry	T	-		<0.004	:	-		<0.005	:	<0.006	:	-	
1,1,2-Trichloro-1,2,2-trifluoroethane	mg/kg-dry	T	-		<0.004	:	-		<0.005	:	<0.006	:	-	
1,1,2-Trichloroethane	mg/kg-dry	T	-		<0.004	:	-		<0.005	:	<0.006	:	-	
1,1-Dichloroethane	mg/kg-dry	T	-		<0.004	:	-		<0.005	:	<0.006	:	-	
1,1-Dichloroethene	mg/kg-dry	T	-		<0.004	:	-		<0.005	:	<0.006	:	-	
1,2,4-Trichlorobenzene	mg/kg-dry	T	-		<0.004	:	-		<0.005	:	<0.006	:	-	
1,2-Dibromo-3-chloropropane	mg/kg-dry	T	-		<0.004	:	-		<0.005	:	<0.006	:	-	
1,2-Dichlorobenzene	mg/kg-dry	T	-		<0.004	:	-		<0.005	:	<0.006	:	-	
1,2-Dichloroethane	mg/kg-dry	T	-		<0.004	:	-		<0.005	:	<0.006	:	-	
1,2-Dichloroethene (total)	mg/kg-dry	T	-		<0.004	:	-		<0.005	:	<0.006	:	-	
1,2-Dichloropropane	mg/kg-dry	T	-		<0.004	:	-		<0.005	:	<0.006	:	-	
1,3-Dichlorobenzene	mg/kg-dry	T	-		<0.004	:	-		<0.005	:	<0.006	:	-	
1,4-Dichlorobenzene	mg/kg-dry	T	-		<0.004	:	-		<0.005	:	<0.006	:	-	
2-Butanone	mg/kg-dry	T	-		<0.004	:	-		<0.005	J	<0.006	:	-	
2-Hexanone	mg/kg-dry	T	-		<0.004	:	-		<0.005	:	<0.006	:	-	
4-Methyl-2-pentanone	mg/kg-dry	T	-		<0.004	:	-		<0.005	:	<0.006	:	-	
Acetone	mg/kg-dry	T	-		<0.004	:	-		<0.005	J	<0.006	:	-	
Benzene	mg/kg-dry	T	-		<0.004	:	-		<0.005	:	<0.006	:	-	
Bromodichloromethane	mg/kg-dry	T	-		<0.004	:	-		<0.005	:	<0.006	:	-	
Bromoform	mg/kg-dry	T	-		<0.004	:	-		<0.005	:	<0.006	:	-	
Bromomethane	mg/kg-dry	T	-		<0.004	:	-		<0.005	:	<0.006	:	-	
Carbon disulfide	mg/kg-dry	T	-		<0.004	:	-		<0.005	:	<0.006	:	-	

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T = Total Fraction

Appendix A-7a
Soil - Biased 0-6 inches
Validated Analytical Results

Parameter	Units	Exposure Area Fraction	Site ID / Sample Date / Sample ID											
			MSS1-72 1/9/2003 MSS1-72-T01N-SOLDL SS1		MSS1-72 1/9/2003 MSS1-72-T01N-SOL SS1		MSS1-73 1/9/2003 MSS1-73-T01N-SOLDL SS1		MSS1-73 1/9/2003 MSS1-73-T01N-SOL SS1		MSS1-74 1/19/2003 MSS1-74-T01N-SOL SS1		MSS1-75 1/9/2003 MSS1-75-T01N-SOL SS1	
Carbon tetrachloride	mg/kg-dry	T	-		<0.004	:	-		<0.005	:	<0.006	:	-	
Chlorobenzene	mg/kg-dry	T	-		<0.004	:	-		<0.005	:	<0.006	:	-	
Chloroethane	mg/kg-dry	T	-		<0.004	:	-		<0.005	:	<0.006	:	-	
Chloroform	mg/kg-dry	T	-		<0.004	:	-		<0.005	:	<0.006	:	-	
Chloromethane	mg/kg-dry	T	-		<0.004	:	-		<0.005	:	<0.006	:	-	
cis-1,2-Dichloroethene	mg/kg-dry	T	-		<0.004	:	-		<0.005	:	<0.006	:	-	
cis-1,3-Dichloropropene	mg/kg-dry	T	-		<0.004	:	-		<0.005	:	<0.006	:	-	
Dibromochloromethane	mg/kg-dry	T	-		<0.004	:	-		<0.005	:	<0.006	:	-	
Dichlorodifluoromethane	mg/kg-dry	T	-		<0.004	:	-		<0.005	:	<0.006	:	-	
Ethylbenzene	mg/kg-dry	T	-		<0.004	:	-		<0.005	:	<0.006	:	-	
Methylene chloride	mg/kg-dry	T	-		<0.004	:	-		<0.005	:	<0.006	:	-	
Styrene	mg/kg-dry	T	-		<0.004	:	-		<0.005	:	<0.006	:	-	
Tetrachloroethene	mg/kg-dry	T	-		<0.004	:	-		<0.005	:	<0.006	:	-	
Toluene	mg/kg-dry	T	-		<0.004	:	-		<0.005	:	<0.006	:	-	
Total Xylene	mg/kg-dry	T	-		0.0005	J	-		0.001	J	<0.006	:	-	
trans-1,2-Dichloroethene	mg/kg-dry	T	-		<0.004	:	-		<0.005	:	<0.006	:	-	
trans-1,3-Dichloropropene	mg/kg-dry	T	-		<0.004	:	-		<0.005	:	<0.006	:	-	
Trichloroethene	mg/kg-dry	T	-		<0.004	:	-		<0.005	:	<0.006	:	-	
Trichlorofluoromethane	mg/kg-dry	T	-		<0.004	:	-		<0.005	:	<0.006	:	-	
Vinyl chloride	mg/kg-dry	T	-		<0.004	:	-		<0.005	:	<0.006	:	-	
Semi-Volatile Organics														
1,1`-Biphenyl	mg/kg-dry	T	-		<0.36	:	-		<0.35	:	<0.34	:	<0.35	:
2,4,5-Trichlorophenol	mg/kg-dry	T	-		<0.91	:	-		<0.87	:	<0.85	:	<0.87	:
2,4,6-Trichlorophenol	mg/kg-dry	T	-		<0.36	:	-		<0.35	:	<0.34	:	<0.35	:
2,4-Dichlorophenol	mg/kg-dry	T	-		<0.36	:	-		<0.35	:	<0.34	:	<0.35	:
2,4-Dimethylphenol	mg/kg-dry	T	-		<0.36	:	-		<0.35	:	<0.34	:	<0.35	:
2,4-Dinitrophenol	mg/kg-dry	T	-		<0.91	:	-		<0.87	:	<0.85	:	<0.87	:
2,4-Dinitrotoluene	mg/kg-dry	T	-		<0.36	:	-		<0.35	:	<0.34	:	<0.35	:
2,6-Dinitrotoluene	mg/kg-dry	T	-		<0.36	:	-		<0.35	:	<0.34	:	<0.35	:
2-Chloronaphthalene	mg/kg-dry	T	-		<0.36	:	-		<0.35	:	<0.34	:	<0.35	:
2-Chlorophenol	mg/kg-dry	T	-		<0.36	:	-		<0.35	:	<0.34	:	<0.35	:
2-Methylnaphthalene	mg/kg-dry	T	-		<0.36	:	-		<0.35	:	<0.34	:	<0.35	:
2-Methylphenol	mg/kg-dry	T	-		<0.36	:	-		<0.35	:	<0.34	:	<0.35	:
2-Nitroaniline	mg/kg-dry	T	-		<0.91	:	-		<0.87	:	<0.85	:	<0.87	:

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T = Total Fraction

Appendix A-7a
Soil - Biased 0-6 inches
Validated Analytical Results

Parameter	Units	Exposure Area Fraction	Site ID / Sample Date / Sample ID											
			MSS1-72 1/9/2003 MSS1-72-T01N-SOLDL SS1		MSS1-72 1/9/2003 MSS1-72-T01N-SOL SS1		MSS1-73 1/9/2003 MSS1-73-T01N-SOLDL SS1		MSS1-73 1/9/2003 MSS1-73-T01N-SOL SS1		MSS1-74 1/19/2003 MSS1-74-T01N-SOL SS1		MSS1-75 1/9/2003 MSS1-75-T01N-SOL SS1	
2-Nitrophenol	mg/kg-dry	T	-	:	<0.36	:	-	:	<0.35	:	<0.34	:	<0.35	:
3,3-Dichlorobenzidine	mg/kg-dry	T	-	:	<0.36	:	-	:	<0.35	:	<0.34	:	<0.35	:
3-Nitroaniline	mg/kg-dry	T	-	:	<0.91	:	-	:	<0.87	:	<0.85	J	<0.87	:
4,6-Dinitro-2-methylphenol	mg/kg-dry	T	-	:	<0.91	:	-	:	<0.87	:	<0.85	:	<0.87	:
4-Bromophenyl phenyl ether	mg/kg-dry	T	-	:	<0.36	:	-	:	<0.35	:	<0.34	:	<0.35	:
4-Chloro-3-methylphenol	mg/kg-dry	T	-	:	<0.36	:	-	:	<0.35	:	<0.34	:	<0.35	:
4-Chloroaniline	mg/kg-dry	T	-	:	<0.36	:	-	:	<0.35	:	<0.34	:	<0.35	:
4-Chlorophenyl phenyl ether	mg/kg-dry	T	-	:	<0.36	:	-	:	<0.35	:	<0.34	:	<0.35	:
4-Methylphenol	mg/kg-dry	T	-	:	<0.36	:	-	:	<0.35	:	<0.34	:	<0.35	:
4-Nitroaniline	mg/kg-dry	T	-	:	<0.91	:	-	:	<0.87	:	<0.85	:	<0.87	:
4-Nitrophenol	mg/kg-dry	T	-	:	<0.91	:	-	:	<0.87	:	<0.85	:	<0.87	:
Acenaphthene	mg/kg-dry	T	-	:	<0.36	:	-	:	<0.35	:	<0.34	:	<0.35	:
Acenaphthylene	mg/kg-dry	T	-	:	<0.36	:	-	:	<0.35	:	<0.34	:	<0.35	:
Anthracene	mg/kg-dry	T	-	:	<0.36	:	-	:	<0.35	:	<0.34	:	<0.35	:
Benzaldehyde	mg/kg-dry	T	-	:	<0.36	:	-	:	<0.35	:	<0.34	:	<0.35	:
Benzo(a)anthracene	mg/kg-dry	T	-	:	<0.36	:	-	:	<0.35	:	<0.34	:	<0.35	:
Benzo(a)pyrene	mg/kg-dry	T	-	:	<0.36	:	-	:	<0.35	:	<0.34	:	<0.35	:
Benzo(b)fluoranthene	mg/kg-dry	T	-	:	<0.36	:	-	:	<0.35	:	<0.34	:	<0.35	:
Benzo(g,h,i)perylene	mg/kg-dry	T	-	:	<0.36	:	-	:	<0.35	:	<0.34	:	<0.35	:
Benzo(k)fluoranthene	mg/kg-dry	T	-	:	<0.36	:	-	:	<0.35	:	<0.34	:	<0.35	:
Bis(2-chloroethoxy)methane	mg/kg-dry	T	-	:	<0.36	:	-	:	<0.35	:	<0.34	:	<0.35	:
Bis(2-chloroethyl)ether	mg/kg-dry	T	-	:	<0.36	:	-	:	<0.35	:	<0.34	:	<0.35	:
Bis(2-ethylhexyl)phthalate	mg/kg-dry	T	-	:	0.016	J	-	:	<0.35	:	0.026	J	0.11	J
Butyl benzyl phthalate	mg/kg-dry	T	-	:	<0.36	:	-	:	<0.35	:	<0.34	:	<0.35	:
Carbazole	mg/kg-dry	T	-	:	<0.36	:	-	:	<0.35	:	<0.34	:	<0.35	:
Chrysene	mg/kg-dry	T	-	:	<0.36	:	-	:	<0.35	:	<0.34	:	<0.35	:
Dibenz(a,h)anthracene	mg/kg-dry	T	-	:	<0.36	:	-	:	<0.35	:	<0.34	:	<0.35	:
Dibenzofuran	mg/kg-dry	T	-	:	<0.36	:	-	:	<0.35	:	<0.34	:	<0.35	:
Dichlorodiisopropyl ether	mg/kg-dry	T	-	:	<0.36	:	-	:	<0.35	:	<0.34	:	<0.35	:
Diethylphthalate	mg/kg-dry	T	-	:	<0.36	:	-	:	<0.35	:	<0.34	:	<0.35	:
Dimethylphthalate	mg/kg-dry	T	-	:	<0.36	:	-	:	<0.35	:	<0.34	:	<0.35	:
Di-n-Butyl phthalate	mg/kg-dry	T	-	:	<0.36	:	-	:	<0.35	:	<0.34	:	<0.35	:
Di-n-Octyl phthalate	mg/kg-dry	T	-	:	<0.36	:	-	:	<0.35	:	<0.34	:	0.024	J
Fluoranthene	mg/kg-dry	T	-	:	<0.36	:	-	:	<0.35	:	<0.34	:	0.031	J

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Appendix A-7a
Soil - Biased 0-6 inches
Validated Analytical Results

Parameter	Units	Exposure Area Fraction	Site ID / Sample Date / Sample ID / Exposure Area											
			MSS1-72 1/9/2003 MSS1-72-T01N-SOLDL SS1		MSS1-72 1/9/2003 MSS1-72-T01N-SOL SS1		MSS1-73 1/9/2003 MSS1-73-T01N-SOLDL SS1		MSS1-73 1/9/2003 MSS1-73-T01N-SOL SS1		MSS1-74 1/19/2003 MSS1-74-T01N-SOL SS1		MSS1-75 1/9/2003 MSS1-75-T01N-SOL SS1	
Fluorene	mg/kg-dry	T	-		<0.36	:	-		<0.35	:	<0.34	:	<0.35	:
Hexachlorobenzene	mg/kg-dry	T	-		<0.36	:	-		<0.35	:	<0.34	:	<0.35	:
Hexachlorobutadiene	mg/kg-dry	T	-		<0.36	:	-		<0.35	:	<0.34	:	<0.35	:
Hexachlorocyclopentadiene	mg/kg-dry	T	-		<0.36	:	-		<0.35	:	<0.34	:	<0.35	:
Hexachloroethane	mg/kg-dry	T	-		<0.36	:	-		<0.35	:	<0.34	:	<0.35	:
Indeno(1,2,3-cd)pyrene	mg/kg-dry	T	-		<0.36	:	-		<0.35	:	<0.34	:	<0.35	:
Isophorone	mg/kg-dry	T	-		<0.36	:	-		<0.35	:	<0.34	:	<0.35	:
Naphthalene	mg/kg-dry	T	-		<0.36	:	-		<0.35	:	<0.34	:	<0.35	:
Nitrobenzene	mg/kg-dry	T	-		<0.36	:	-		<0.35	:	<0.34	:	<0.35	:
N-Nitrosodi-n-propylamine	mg/kg-dry	T	-		<0.36	:	-		<0.35	:	<0.34	:	<0.35	:
N-Nitrosodiphenylamine	mg/kg-dry	T	-		<0.36	:	-		<0.35	:	<0.34	:	<0.35	:
Pentachlorophenol	mg/kg-dry	T	-		<0.91	:	-		<0.87	:	<0.85	:	<0.87	:
Phenanthrene	mg/kg-dry	T	-		<0.36	:	-		<0.35	:	<0.34	:	<0.35	:
Phenol	mg/kg-dry	T	-		<0.36	:	-		<0.35	:	<0.34	:	<0.35	:
Pyrene	mg/kg-dry	T	-		<0.36	:	-		<0.35	:	<0.34	:	0.024	J
Pesticides-PCBs														
Aroclor 1016	mg/kg-dry	T	-		<0.036	:	-		<0.035	:	<0.034	:	<0.035	:
Aroclor 1221	mg/kg-dry	T	-		<0.074	:	-		<0.071	:	<0.068	:	<0.071	:
Aroclor 1232	mg/kg-dry	T	-		<0.036	:	-		<0.035	:	<0.034	:	<0.035	:
Aroclor 1242	mg/kg-dry	T	-		<0.036	:	-		<0.035	:	<0.034	:	<0.035	:
Aroclor 1248	mg/kg-dry	T	0.53	J	-		-		<0.035	:	<0.034	:	<0.035	:
Aroclor 1254	mg/kg-dry	T	2.3	:	-		-		0.57	:	0.19	:	0.11	:
Aroclor 1260	mg/kg-dry	T	-		0.19	:	7.6	:	-		<0.034	:	<0.035	:

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Appendix A-7a
Soil - Biased 0-6 inches
Validated Analytical Results

Parameter	Units	Exposure Area Fraction	Site ID	MSS1-76		MSS1-77		MSS1-78		MSS1-79		MSS1-80		MSS1-81	
			Sample Date	1/9/2003		1/9/2003		1/9/2003		1/9/2003		1/7/2003		1/7/2003	
			Sample ID	MSS1-76-T01N-SOL		MSS1-77-T01N-SOL		MSS1-78-T01N-SOL		MSS1-79-T01N-SOL		MSS1-80-T01N-SOL		MSS1-81-T01N-SOL	
			Exposure Area	SS1		SS1		SS1		SS1		SS1		SS1	
General Chemistry															
Ammonia	mg/kg-dry	T		4.8	:	3.5	:	9.9	:	3.3	:	3.6	:	5.1	:
Chloride	mg/kg-dry	T		16.4	:	<2.2	:	8.5	:	9.4	:	64.5	:	106.	:
Fluoride	mg/kg-dry	T		-		<1.1	J	3.2	J	3.6	J	0.59	J	0.91	J
Nitrate	mg/kg-dry	T		5.6	J	<2.2	J	<2.8	J	<2.1	J	10.9	J	8.2	J
Phosphorus	mg/kg-dry	T		1130.	:	1000.	:	1140.	:	1060.	:	738.	:	1040.	:
Sulfate	mg/kg-dry	T		353.	:	142.	:	1610.	:	190.	J	56.8	:	369.	:
Total Kjeldahl Nitrogen	mg/kg-dry	T		75.2	:	71.4	:	<29.8	:	56.6	:	118.	:	164.	:
Total Organic Carbon	mg/kg-dry	T		4040.	J	11100.	J	<136.	J	159.	J	2050.	J	4780.	J
Laboratory Parameters															
pH	SU	T		6.7	:	7.1	:	10.5	:	7.4	:	7.7	:	7.5	:
Solids, Percent	%	T		97.1	:	95.	:	73.9	:	95.5	:	91.6	:	94.6	:
Solids, Percent - VOCs Only	%	T		-		-		87.6	:	96.3	:	-		-	
Specific Conductance	umhos/cm	T		1860.	:	521.	:	1130.	:	1660.	:	925.	:	1110.	:
Geotechnical															
Organic Soils	%	T		1.	:	1.6	:	0.7	:	1.2	:	1.3	:	1.6	:
Physical Properties															
Cation-Exchange Capacity	meq/100g	T		10.1	:	7.3	:	6.3	:	9.9	:	7.	:	10.	:
Sodium Absorption Ratio	ratio	T		0.44	:	0.03	:	0.22	:	0.19	:	2.45	:	2.71	:
Metals															
Aluminum	mg/kg-dry	T		9770.	:	10100.	:	10500.	:	11500.	:	7560.	:	10400.	:
Antimony	mg/kg-dry	T		<0.27	J	<0.27	J	<0.34	:	<0.3	J	<0.26	J	<0.24	J
Arsenic	mg/kg-dry	T		1.8	J	1.6	J	1.6	J	2.5	J	2.9	J	2.2	J
Barium	mg/kg-dry	T		82.	:	83.7	:	99.4	:	88.1	:	86.5	:	110.	:
Beryllium	mg/kg-dry	T		1.5	:	1.3	:	1.3	:	1.6	:	0.82	:	0.94	:
Boron	mg/kg-dry	T		4.7	:	<2.5	:	1.6	:	<2.5	:	<2.1	:	4.9	J
Cadmium	mg/kg-dry	T		1.1	:	0.61	:	0.67	:	1.1	J	0.72	:	0.15	J
Calcium	mg/kg-dry	T		14200.	:	12500.	:	23400.	:	14000.	:	8500.	:	12200.	:
Chromium	mg/kg-dry	T		39.2	J	37.1	J	47.5	J	38.7	J	20.3	J	37.9	J
Cobalt	mg/kg-dry	T		6.5	:	7.3	:	12.1	:	11.	:	5.2	:	10.8	:
Copper	mg/kg-dry	T		125.	J	157.	J	146.	:	186.	J	60.5	J	84.9	J
Iron	mg/kg-dry	T		15000.	:	15200.	:	21400.	:	20000.	:	13200.	:	20000.	:
Lead	mg/kg-dry	T		64.9	:	73.3	:	60.4	:	113.	:	128.	:	59.2	:
Magnesium	mg/kg-dry	T		6380.	:	6980.	:	8380.	:	6930.	:	4190.	:	7510.	:

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T = Total Fraction

Appendix A-7a
Soil - Biased 0-6 inches
Validated Analytical Results

Parameter	Units	Site ID / Sample Date / Sample ID / Exposure Area	Fraction	MSS1-76 1/9/2003 MSS1-76-T01N-SOL SS1		MSS1-77 1/9/2003 MSS1-77-T01N-SOL SS1		MSS1-78 1/9/2003 MSS1-78-T01N-SOL SS1		MSS1-79 1/9/2003 MSS1-79-T01N-SOL SS1		MSS1-80 1/7/2003 MSS1-80-T01N-SOL SS1		MSS1-81 1/7/2003 MSS1-81-T01N-SOL SS1	
Manganese	mg/kg-dry		T	582.	:	622.	:	566.	:	670.	:	587.	:	545.	:
Mercury	mg/kg-dry		T	<0.017	:	<0.018	:	<0.022	:	<0.015	:	0.018	:	0.054	:
Molybdenum	mg/kg-dry		T	1830.	:	1840.	:	1670.	:	1760.	:	920.	:	1620.	:
Nickel	mg/kg-dry		T	22.5	:	24.3	:	32.4	:	28.7	:	13.2	:	26.4	J
Potassium	mg/kg-dry		T	4240.	J	4830.	J	5600.	:	4840.	J	1950.	J	3270.	:
Selenium	mg/kg-dry		T	0.85	J	0.8	J	<0.91	J	0.91	J	0.71	J	0.65	J
Silver	mg/kg-dry		T	1.8	:	2.	:	0.89	:	1.4	:	0.35	:	0.51	:
Sodium	mg/kg-dry		T	<79.4	:	<29.7	:	64.5	:	<72.3	:	<271.	:	<270.	:
Thallium	mg/kg-dry		T	0.36	:	0.41	:	0.4	:	0.4	:	0.14	:	0.28	:
Vanadium	mg/kg-dry		T	46.3	:	50.1	:	51.9	:	48.7	:	26.5	:	51.3	:
Zinc	mg/kg-dry		T	191.	:	192.	:	143.	:	196.	:	173.	:	107.	:
Volatile Organics															
1,1,1-Trichloroethane	mg/kg-dry		T	<0.007	:	<0.007	:	<0.005	:	<0.005	:	<0.011	:	-	
1,1,2,2-Tetrachloroethane	mg/kg-dry		T	<0.007	:	<0.007	:	<0.005	:	<0.005	:	<0.011	:	-	
1,1,2-Trichloro-1,2,2-trifluoroethane	mg/kg-dry		T	<0.007	:	<0.007	:	<0.005	:	<0.005	:	<0.011	:	-	
1,1,2-Trichloroethane	mg/kg-dry		T	<0.007	:	<0.007	:	<0.005	:	<0.005	:	<0.011	:	-	
1,1-Dichloroethane	mg/kg-dry		T	<0.007	:	<0.007	:	<0.005	:	<0.005	:	<0.011	:	-	
1,1-Dichloroethene	mg/kg-dry		T	<0.007	:	<0.007	:	<0.005	:	<0.005	:	<0.011	:	-	
1,2,4-Trichlorobenzene	mg/kg-dry		T	<0.007	:	<0.007	:	<0.005	:	<0.005	:	<0.011	:	-	
1,2-Dibromo-3-chloropropane	mg/kg-dry		T	<0.007	:	<0.007	:	<0.005	:	<0.005	:	<0.011	:	-	
1,2-Dichlorobenzene	mg/kg-dry		T	<0.007	:	<0.007	:	<0.005	:	<0.005	:	<0.011	:	-	
1,2-Dichloroethane	mg/kg-dry		T	<0.007	:	<0.007	:	<0.005	:	<0.005	:	<0.011	:	-	
1,2-Dichloroethene (total)	mg/kg-dry		T	<0.007	:	<0.007	:	<0.005	:	<0.005	:	<0.011	:	-	
1,2-Dichloropropane	mg/kg-dry		T	<0.007	:	<0.007	:	<0.005	:	<0.005	:	<0.011	:	-	
1,3-Dichlorobenzene	mg/kg-dry		T	<0.007	:	<0.007	:	<0.005	:	<0.005	:	<0.011	:	-	
1,4-Dichlorobenzene	mg/kg-dry		T	<0.007	:	<0.007	:	<0.005	:	<0.005	:	<0.011	:	-	
2-Butanone	mg/kg-dry		T	<0.007	J	<0.007	J	0.003	J	<0.005	:	<0.011	:	-	
2-Hexanone	mg/kg-dry		T	<0.007	:	<0.007	:	<0.005	:	<0.005	:	<0.011	:	-	
4-Methyl-2-pentanone	mg/kg-dry		T	<0.007	:	<0.007	:	<0.005	:	0.004	J	<0.011	:	-	
Acetone	mg/kg-dry		T	<0.007	:	<0.007	:	<0.007	:	0.002	J	<0.011	:	-	
Benzene	mg/kg-dry		T	<0.007	:	<0.007	:	<0.005	:	<0.005	:	<0.011	:	-	
Bromodichloromethane	mg/kg-dry		T	<0.007	:	<0.007	:	<0.005	:	<0.005	:	<0.011	:	-	
Bromoform	mg/kg-dry		T	<0.007	:	<0.007	:	<0.005	:	<0.005	:	<0.011	:	-	
Bromomethane	mg/kg-dry		T	<0.007	:	<0.007	:	<0.005	:	<0.005	:	<0.011	J	-	

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T = Total Fraction

Appendix A-7a
Soil - Biased 0-6 inches
Validated Analytical Results

Parameter	Units	Exposure Area Fraction	Site ID / Sample Date / Sample ID		MSS1-76 1/9/2003 MSS1-76-T01N-SOL SS1		MSS1-77 1/9/2003 MSS1-77-T01N-SOL SS1		MSS1-78 1/9/2003 MSS1-78-T01N-SOL SS1		MSS1-79 1/9/2003 MSS1-79-T01N-SOL SS1		MSS1-80 1/7/2003 MSS1-80-T01N-SOL SS1		MSS1-81 1/7/2003 MSS1-81-T01N-SOL SS1	
Carbon disulfide	mg/kg-dry	T			<0.007	:	<0.007	:	<0.005	:	<0.005	:	<0.011	:	-	
Carbon tetrachloride	mg/kg-dry	T			<0.007	:	<0.007	:	<0.005	:	<0.005	:	<0.011	:	-	
Chlorobenzene	mg/kg-dry	T			<0.007	:	<0.007	:	<0.005	:	<0.005	:	<0.011	:	-	
Chloroethane	mg/kg-dry	T			<0.007	:	<0.007	:	<0.005	:	<0.005	:	<0.011	:	-	
Chloroform	mg/kg-dry	T			<0.007	:	<0.007	:	<0.005	:	<0.005	:	<0.011	:	-	
Chloromethane	mg/kg-dry	T			<0.007	:	<0.007	:	<0.005	:	<0.005	:	<0.011	:	-	
cis-1,2-Dichloroethene	mg/kg-dry	T			<0.007	:	<0.007	:	<0.005	:	<0.005	:	<0.011	:	-	
cis-1,3-Dichloropropene	mg/kg-dry	T			<0.007	:	<0.007	:	<0.005	:	<0.005	:	<0.011	:	-	
Dibromochloromethane	mg/kg-dry	T			<0.007	:	<0.007	:	<0.005	:	<0.005	:	<0.011	:	-	
Dichlorodifluoromethane	mg/kg-dry	T			<0.007	:	<0.007	:	<0.005	:	<0.005	:	<0.011	:	-	
Ethylbenzene	mg/kg-dry	T			0.001	J	<0.007	:	<0.005	:	0.0008	J	<0.011	:	-	
Methylene chloride	mg/kg-dry	T			<0.007	:	<0.007	:	<0.005	:	<0.005	:	<0.011	:	-	
Styrene	mg/kg-dry	T			<0.007	:	<0.007	:	<0.005	:	<0.005	:	<0.011	:	-	
Tetrachloroethene	mg/kg-dry	T			<0.007	:	<0.007	:	<0.005	:	<0.005	:	<0.011	:	-	
Toluene	mg/kg-dry	T			<0.007	:	<0.007	:	<0.005	:	<0.005	:	<0.011	:	-	
Total Xylene	mg/kg-dry	T			0.004	J	<0.007	:	0.0007	J	0.002	J	<0.011	:	-	
trans-1,2-Dichloroethene	mg/kg-dry	T			<0.007	:	<0.007	:	<0.005	:	<0.005	:	<0.011	:	-	
trans-1,3-Dichloropropene	mg/kg-dry	T			<0.007	:	<0.007	:	<0.005	:	<0.005	:	<0.011	:	-	
Trichloroethene	mg/kg-dry	T			<0.007	:	<0.007	:	<0.005	:	<0.005	:	<0.011	:	-	
Trichlorofluoromethane	mg/kg-dry	T			<0.007	:	<0.007	:	<0.005	:	<0.005	:	<0.011	:	-	
Vinyl chloride	mg/kg-dry	T			<0.007	:	<0.007	:	<0.005	:	<0.005	:	<0.011	:	-	
Semi-Volatile Organics																
1,1`-Biphenyl	mg/kg-dry	T			<0.34	:	<0.69	J	<0.44	:	<0.34	:	<0.36	:	<0.35	:
2,4,5-Trichlorophenol	mg/kg-dry	T			<0.85	:	<1.7	J	<1.1	:	<0.86	:	<0.9	:	<0.87	:
2,4,6-Trichlorophenol	mg/kg-dry	T			<0.34	:	<0.69	J	<0.44	:	<0.34	:	<0.36	:	<0.35	:
2,4-Dichlorophenol	mg/kg-dry	T			<0.34	:	<0.69	:	<0.44	:	<0.34	:	<0.36	:	<0.35	:
2,4-Dimethylphenol	mg/kg-dry	T			<0.34	:	<0.69	:	<0.44	:	<0.34	:	<0.36	:	<0.35	:
2,4-Dinitrophenol	mg/kg-dry	T			<0.85	:	<1.7	J	<1.1	:	<0.86	:	<0.9	:	<0.87	:
2,4-Dinitrotoluene	mg/kg-dry	T			<0.34	:	<0.69	J	<0.44	:	<0.34	:	<0.36	:	<0.35	:
2,6-Dinitrotoluene	mg/kg-dry	T			<0.34	:	<0.69	J	<0.44	:	<0.34	:	<0.36	:	<0.35	:
2-Chloronaphthalene	mg/kg-dry	T			<0.34	:	<0.69	J	<0.44	:	<0.34	:	<0.36	:	<0.35	:
2-Chlorophenol	mg/kg-dry	T			<0.34	:	<0.69	:	<0.44	:	<0.34	:	<0.36	:	<0.35	:
2-Methylnaphthalene	mg/kg-dry	T			<0.34	:	<0.69	:	<0.44	:	<0.34	:	<0.36	:	<0.35	:
2-Methylphenol	mg/kg-dry	T			<0.34	:	<0.69	:	<0.44	:	<0.34	:	<0.36	:	<0.35	:

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T = Total Fraction

Appendix A-7a
Soil - Biased 0-6 inches
Validated Analytical Results

Parameter	Units	Exposure Area Fraction	Site ID / Sample Date / Sample ID											
			MSS1-76 1/9/2003 MSS1-76-T01N-SOL		MSS1-77 1/9/2003 MSS1-77-T01N-SOL		MSS1-78 1/9/2003 MSS1-78-T01N-SOL		MSS1-79 1/9/2003 MSS1-79-T01N-SOL		MSS1-80 1/7/2003 MSS1-80-T01N-SOL		MSS1-81 1/7/2003 MSS1-81-T01N-SOL	
			SS1		SS1		SS1		SS1		SS1		SS1	
2-Nitroaniline	mg/kg-dry	T	<0.85	:	<1.7	J	<1.1	:	<0.86	:	<0.9	:	<0.87	:
2-Nitrophenol	mg/kg-dry	T	<0.34	:	<0.69	:	<0.44	:	<0.34	:	<0.36	:	<0.35	:
3,3-Dichlorobenzidine	mg/kg-dry	T	<0.34	:	<0.69	J	<0.44	:	<0.34	:	<0.36	:	<0.35	:
3-Nitroaniline	mg/kg-dry	T	<0.85	:	<1.7	J	<1.1	:	<0.86	:	<0.9	:	<0.87	:
4,6-Dinitro-2-methylphenol	mg/kg-dry	T	<0.85	:	<1.7	:	<1.1	:	<0.86	:	<0.9	:	<0.87	:
4-Bromophenyl phenyl ether	mg/kg-dry	T	<0.34	:	<0.69	:	<0.44	:	<0.34	:	<0.36	:	<0.35	:
4-Chloro-3-methylphenol	mg/kg-dry	T	<0.34	:	<0.69	:	<0.44	:	<0.34	:	<0.36	:	<0.35	:
4-Chloroaniline	mg/kg-dry	T	<0.34	:	<0.69	:	<0.44	:	<0.34	:	<0.36	:	<0.35	:
4-Chlorophenyl phenyl ether	mg/kg-dry	T	<0.34	:	<0.69	J	<0.44	:	<0.34	:	<0.36	:	<0.35	:
4-Methylphenol	mg/kg-dry	T	<0.34	:	<0.69	:	<0.44	:	<0.34	:	<0.36	:	<0.35	:
4-Nitroaniline	mg/kg-dry	T	<0.85	:	<1.7	J	<1.1	:	<0.86	:	<0.9	:	<0.87	:
4-Nitrophenol	mg/kg-dry	T	<0.85	:	<1.7	J	<1.1	:	<0.86	:	<0.9	:	<0.87	:
Acenaphthene	mg/kg-dry	T	<0.34	:	<0.69	J	<0.44	:	<0.34	:	<0.36	:	<0.35	:
Acenaphthylene	mg/kg-dry	T	<0.34	:	<0.69	J	<0.44	:	<0.34	:	<0.36	:	<0.35	:
Anthracene	mg/kg-dry	T	<0.34	:	<0.69	:	<0.44	:	<0.34	:	<0.36	:	<0.35	:
Benzaldehyde	mg/kg-dry	T	<0.34	:	<0.69	:	0.04	J	<0.34	:	<0.36	J	<0.35	J
Benzo(a)anthracene	mg/kg-dry	T	<0.34	:	<0.69	:	<0.44	:	<0.34	:	0.026	J	<0.35	:
Benzo(a)pyrene	mg/kg-dry	T	<0.34	:	<0.69	:	<0.44	:	<0.34	:	0.028	J	<0.35	:
Benzo(b)fluoranthene	mg/kg-dry	T	<0.34	:	<0.69	:	<0.44	:	<0.34	:	0.026	J	<0.35	:
Benzo(g,h,i)perylene	mg/kg-dry	T	<0.34	J	<0.69	J	<0.44	:	<0.34	:	<0.36	:	<0.35	:
Benzo(k)fluoranthene	mg/kg-dry	T	<0.34	:	<0.69	:	<0.44	:	<0.34	:	0.029	J	<0.35	:
Bis(2-chloroethoxy)methane	mg/kg-dry	T	<0.34	:	<0.69	:	<0.44	:	<0.34	:	<0.36	:	<0.35	:
Bis(2-chloroethyl)ether	mg/kg-dry	T	<0.34	:	<0.69	:	<0.44	:	<0.34	:	<0.36	:	<0.35	:
Bis(2-ethylhexyl)phthalate	mg/kg-dry	T	2.	:	<0.69	:	<0.44	:	<0.34	:	0.038	J	0.12	J
Butyl benzyl phthalate	mg/kg-dry	T	<0.34	:	<0.69	:	<0.44	:	<0.34	:	<0.36	:	0.037	J
Carbazole	mg/kg-dry	T	<0.34	:	<0.69	:	<0.44	:	<0.34	:	<0.36	:	<0.35	:
Chrysene	mg/kg-dry	T	<0.34	:	<0.69	:	<0.44	:	<0.34	:	0.041	J	0.017	J
Dibenz(a,h)anthracene	mg/kg-dry	T	<0.34	J	<0.69	J	<0.44	:	<0.34	:	<0.36	:	<0.35	:
Dibenzofuran	mg/kg-dry	T	<0.34	:	<0.69	J	<0.44	:	<0.34	:	<0.36	:	<0.35	:
Dichlorodiisopropyl ether	mg/kg-dry	T	<0.34	:	<0.69	:	<0.44	:	<0.34	:	<0.36	:	<0.35	:
Diethylphthalate	mg/kg-dry	T	<0.34	:	<0.69	J	<0.44	:	<0.34	:	<0.36	:	<0.35	:
Dimethylphthalate	mg/kg-dry	T	<0.34	:	<0.69	J	<0.44	:	<0.34	:	<0.36	:	<0.35	:
Di-n-Butyl phthalate	mg/kg-dry	T	<0.34	:	<0.69	:	<0.44	:	<0.34	:	<0.36	:	<0.35	:
Di-n-Octyl phthalate	mg/kg-dry	T	<0.34	:	<0.69	:	<0.44	:	<0.34	:	<0.36	:	<0.35	:

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T = Total Fraction

Appendix A-7a
Soil - Biased 0-6 inches
Validated Analytical Results

		Site ID	MSS1-76		MSS1-77		MSS1-78		MSS1-79		MSS1-80		MSS1-81	
		Sample Date	1/9/2003		1/9/2003		1/9/2003		1/9/2003		1/7/2003		1/7/2003	
		Sample ID	MSS1-76-T01N-SOL		MSS1-77-T01N-SOL		MSS1-78-T01N-SOL		MSS1-79-T01N-SOL		MSS1-80-T01N-SOL		MSS1-81-T01N-SOL	
		Exposure Area	SS1		SS1		SS1		SS1		SS1		SS1	
Parameter	**Units**	**Fraction**												
Fluoranthene	mg/kg-dry	T	<0.34	:	<0.69	:	<0.44	:	<0.34	:	0.039	J	<0.35	:
Fluorene	mg/kg-dry	T	<0.34	:	<0.69	J	<0.44	:	<0.34	:	<0.36	:	<0.35	:
Hexachlorobenzene	mg/kg-dry	T	<0.34	:	<0.69	:	<0.44	:	<0.34	:	<0.36	:	<0.35	:
Hexachlorobutadiene	mg/kg-dry	T	<0.34	:	<0.69	:	<0.44	:	<0.34	:	<0.36	:	<0.35	:
Hexachlorocyclopentadiene	mg/kg-dry	T	<0.34	:	<0.69	J	<0.44	:	<0.34	:	<0.36	:	<0.35	:
Hexachloroethane	mg/kg-dry	T	<0.34	:	<0.69	:	<0.44	:	<0.34	:	<0.36	:	<0.35	:
Indeno(1,2,3-cd)pyrene	mg/kg-dry	T	<0.34	J	<0.69	:	<0.44	:	<0.34	:	<0.36	:	<0.35	:
Isophorone	mg/kg-dry	T	<0.34	:	<0.69	:	<0.44	:	<0.34	:	<0.36	:	<0.35	:
Naphthalene	mg/kg-dry	T	<0.34	:	<0.69	:	<0.44	:	<0.34	:	<0.36	:	<0.35	:
Nitrobenzene	mg/kg-dry	T	<0.34	:	<0.69	:	<0.44	:	<0.34	:	<0.36	:	<0.35	:
N-Nitrosodi-n-propylamine	mg/kg-dry	T	<0.34	:	<0.69	:	<0.44	:	<0.34	:	<0.36	:	<0.35	:
N-Nitrosodiphenylamine	mg/kg-dry	T	<0.34	:	<0.69	:	<0.44	:	<0.34	:	<0.36	:	<0.35	:
Pentachlorophenol	mg/kg-dry	T	<0.85	:	<1.7	J	<1.1	:	<0.86	:	<0.9	:	<0.87	:
Phenanthrene	mg/kg-dry	T	<0.34	:	<0.69	:	<0.44	:	<0.34	:	<0.36	:	<0.35	:
Phenol	mg/kg-dry	T	<0.34	:	<0.69	:	<0.44	:	<0.34	:	<0.36	:	<0.35	:
Pyrene	mg/kg-dry	T	<0.34	:	<0.69	:	<0.44	:	<0.34	:	0.048	J	<0.35	:
Pesticides-PCBs														
Aroclor 1016	mg/kg-dry	T	<0.034	:	<0.035	:	<0.045	:	<0.034	:	<0.036	:	<0.035	:
Aroclor 1221	mg/kg-dry	T	<0.069	:	<0.07	:	<0.09	:	<0.07	:	<0.073	:	<0.071	:
Aroclor 1232	mg/kg-dry	T	<0.034	:	<0.035	:	<0.045	:	<0.034	:	<0.036	:	<0.035	:
Aroclor 1242	mg/kg-dry	T	<0.034	:	<0.035	:	<0.045	:	<0.034	:	<0.036	:	<0.035	:
Aroclor 1248	mg/kg-dry	T	<0.034	:	<0.035	:	<0.045	:	<0.034	:	<0.036	:	<0.035	:
Aroclor 1254	mg/kg-dry	T	0.04	:	<0.035	:	<0.045	:	0.063	J	0.035	J	0.11	:
Aroclor 1260	mg/kg-dry	T	<0.034	:	<0.035	:	<0.045	:	<0.034	:	<0.036	:	0.03	J

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Appendix A-7a
Soil - Biased 0-6 inches
Validated Analytical Results

Parameter	Units	Fraction	MSS1-81	MSS1-82	MSS1-82	MSS1-83	MSS1-84	MSS1-85
Sample Date			1/8/2003	1/7/2003	1/8/2003	1/9/2003	1/9/2003	1/9/2003
Sample ID			MSS1-81-T01N-SOL	MSS1-82-T01N-SOL	MSS1-82-T01N-SOL	MSS1-83-T01N-SOL	MSS1-84-T01N-SOL	MSS1-85-T01N-SOL
Exposure Area			SS1	SS1	SS1	SS1	SS1	SS1
General Chemistry								
Ammonia	mg/kg-dry	T	-	5. :	-	6.1 :	14.2 J	7.4 :
Chloride	mg/kg-dry	T	-	9.7 :	-	1140. :	7.3 :	2.7 :
Fluoride	mg/kg-dry	T	-	1.1 J	-	0.86 J	1.1 J	0.42 J
Nitrate	mg/kg-dry	T	-	2.8 J	-	26.6 J	<2.1 J	4. J
Phosphorus	mg/kg-dry	T	-	1050. :	-	1130. :	1230. :	1310. :
Sulfate	mg/kg-dry	T	-	34. :	-	643. :	60.6 :	14.7 :
Total Kjeldahl Nitrogen	mg/kg-dry	T	-	103. :	-	205. :	203. :	403. :
Total Organic Carbon	mg/kg-dry	T	-	982. J	-	4700. J	2140. J	2640. J
Laboratory Parameters								
pH	SU	T	-	7.8 :	-	7.8 :	7.4 :	8.5 :
Solids, Percent	%	T	96.6 :	92.4 :	95.6 :	95.1 :	95.7 :	92.9 :
Specific Conductance	umhos/cm	T	-	293. :	-	3310. :	280. :	243. :
Geotechnical								
Organic Soils	%	T	-	1.9 :	-	2.2 :	2. :	2.8 :
Physical Properties								
Cation-Exchange Capacity	meq/100g	T	-	9.7 :	-	12. :	13.1 :	15.6 :
Sodium Absorption Ratio	ratio	T	-	2.44 :	-	2.67 :	0.49 :	0.11 :
Metals								
Aluminum	mg/kg-dry	T	-	13100. :	-	13100. :	13200. :	15800. :
Antimony	mg/kg-dry	T	-	<0.25 J	-	<0.28 J	<0.3 J	<0.29 J
Arsenic	mg/kg-dry	T	-	2.8 J	-	3.1 J	4. J	3.4 J
Barium	mg/kg-dry	T	-	66.7 :	-	109. :	148. :	101. :
Beryllium	mg/kg-dry	T	-	0.82 :	-	1.1 :	0.89 :	1.5 :
Boron	mg/kg-dry	T	-	2.1 J	-	3.2 J	2.9 J	2.8 J
Cadmium	mg/kg-dry	T	-	<0.039 J	-	0.12 J	0.3 J	0.61 J
Calcium	mg/kg-dry	T	-	8360. :	-	10400. :	7360. :	18500. :
Chromium	mg/kg-dry	T	-	50.2 J	-	45. J	59.2 J	56.5 J
Cobalt	mg/kg-dry	T	-	12.8 :	-	12.7 :	12.5 J	17.5 :
Copper	mg/kg-dry	T	-	54.5 J	-	84.7 J	79.1 J	111. J
Iron	mg/kg-dry	T	-	25000. :	-	24100. :	27900. J	26800. :
Lead	mg/kg-dry	T	-	45.8 :	-	80.6 :	63.8 J	132. :
Magnesium	mg/kg-dry	T	-	11400. :	-	9430. :	10000. :	11900. :
Manganese	mg/kg-dry	T	-	647. :	-	773. :	668. J	1170. :

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Appendix A-7a
Soil - Biased 0-6 inches
Validated Analytical Results

Parameter	Units	Exposure Area Fraction	Site ID / Sample Date / Sample ID					
			MSS1-81 1/8/2003 MSS1-81-T01N-SOL SS1	MSS1-82 1/7/2003 MSS1-82-T01N-SOL SS1	MSS1-82 1/8/2003 MSS1-82-T01N-SOL SS1	MSS1-83 1/9/2003 MSS1-83-T01N-SOL SS1	MSS1-84 1/9/2003 MSS1-84-T01N-SOL SS1	MSS1-85 1/9/2003 MSS1-85-T01N-SOL SS1
Mercury	mg/kg-dry	T	-	<0.016 :	-	0.02 :	0.022 :	0.027 :
Molybdenum	mg/kg-dry	T	-	195. :	-	493. :	383. :	728. :
Nickel	mg/kg-dry	T	-	36.3 :	-	33. :	35.7 J	41.8 :
Potassium	mg/kg-dry	T	-	3160. J	-	2920. J	3260. J	2980. J
Selenium	mg/kg-dry	T	-	<0.67 J	-	1.2 J	1.5 J	1.6 J
Silver	mg/kg-dry	T	-	0.23 :	-	0.38 :	0.33 :	0.71 :
Sodium	mg/kg-dry	T	-	<126. :	-	409. :	<82.7 J	<28.7 J
Thallium	mg/kg-dry	T	-	0.25 :	-	0.26 :	0.3 :	0.28 :
Vanadium	mg/kg-dry	T	-	47.9 :	-	46.7 :	49.1 :	58.3 :
Zinc	mg/kg-dry	T	-	92.7 :	-	130. :	99.9 J	182. :
Volatile Organics								
1,1,1-Trichloroethane	mg/kg-dry	T	<0.005 :	-	<0.006 :	<0.011 :	<0.008 :	-
1,1,2,2-Tetrachloroethane	mg/kg-dry	T	<0.005 :	-	<0.006 :	<0.011 :	<0.008 :	-
1,1,2-Trichloro-1,2,2-trifluoroethane	mg/kg-dry	T	<0.005 :	-	<0.006 :	<0.011 :	<0.008 :	-
1,1,2-Trichloroethane	mg/kg-dry	T	<0.005 :	-	<0.006 :	<0.011 :	<0.008 :	-
1,1-Dichloroethane	mg/kg-dry	T	<0.005 :	-	<0.006 :	<0.011 :	<0.008 :	-
1,1-Dichloroethene	mg/kg-dry	T	<0.005 :	-	<0.006 :	<0.011 :	<0.008 :	-
1,2,4-Trichlorobenzene	mg/kg-dry	T	<0.005 :	-	<0.006 :	<0.011 :	<0.008 :	-
1,2-Dibromo-3-chloropropane	mg/kg-dry	T	<0.005 :	-	<0.006 :	<0.011 :	<0.008 :	-
1,2-Dichlorobenzene	mg/kg-dry	T	<0.005 :	-	<0.006 :	<0.011 :	<0.008 :	-
1,2-Dichloroethane	mg/kg-dry	T	<0.005 :	-	<0.006 :	<0.011 :	<0.008 :	-
1,2-Dichloroethene (total)	mg/kg-dry	T	<0.005 :	-	<0.006 :	<0.011 :	<0.008 :	-
1,2-Dichloropropane	mg/kg-dry	T	<0.005 :	-	<0.006 :	<0.011 :	<0.008 :	-
1,3-Dichlorobenzene	mg/kg-dry	T	<0.005 :	-	<0.006 :	<0.011 :	<0.008 :	-
1,4-Dichlorobenzene	mg/kg-dry	T	<0.005 :	-	<0.006 :	<0.011 :	<0.008 :	-
2-Butanone	mg/kg-dry	T	<0.005 :	-	<0.006 :	<0.011 J	<0.008 J	-
2-Hexanone	mg/kg-dry	T	<0.005 :	-	<0.006 :	<0.011 :	<0.008 :	-
4-Methyl-2-pentanone	mg/kg-dry	T	<0.005 :	-	<0.006 :	<0.011 :	<0.008 :	-
Acetone	mg/kg-dry	T	<0.005 :	-	<0.006 :	<0.011 J	<0.008 J	-
Benzene	mg/kg-dry	T	<0.005 :	-	<0.006 :	<0.011 :	<0.008 :	-
Bromodichloromethane	mg/kg-dry	T	<0.005 :	-	<0.006 :	<0.011 :	<0.008 :	-
Bromoform	mg/kg-dry	T	<0.005 :	-	<0.006 :	<0.011 :	<0.008 :	-
Bromomethane	mg/kg-dry	T	<0.005 J	-	<0.006 :	<0.011 :	<0.008 :	-
Carbon disulfide	mg/kg-dry	T	<0.005 :	-	<0.006 :	<0.011 :	0.001 J	-

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Appendix A-7a
Soil - Biased 0-6 inches
Validated Analytical Results

Parameter	Units	Exposure Area Fraction	Site ID / Sample Date / Sample ID					
			MSS1-81 1/8/2003 MSS1-81-T01N-SOL	MSS1-82 1/7/2003 MSS1-82-T01N-SOL	MSS1-82 1/8/2003 MSS1-82-T01N-SOL	MSS1-83 1/9/2003 MSS1-83-T01N-SOL	MSS1-84 1/9/2003 MSS1-84-T01N-SOL	MSS1-85 1/9/2003 MSS1-85-T01N-SOL
			SS1	SS1	SS1	SS1	SS1	SS1
Carbon tetrachloride	mg/kg-dry	T	<0.005 :	-	<0.006 :	<0.011 :	<0.008 :	-
Chlorobenzene	mg/kg-dry	T	<0.005 :	-	<0.006 :	<0.011 :	<0.008 :	-
Chloroethane	mg/kg-dry	T	<0.005 :	-	<0.006 :	<0.011 :	<0.008 :	-
Chloroform	mg/kg-dry	T	<0.005 :	-	<0.006 :	<0.011 :	<0.008 :	-
Chloromethane	mg/kg-dry	T	<0.005 :	-	<0.006 :	<0.011 :	<0.008 :	-
cis-1,2-Dichloroethene	mg/kg-dry	T	<0.005 :	-	<0.006 :	<0.011 :	<0.008 :	-
cis-1,3-Dichloropropene	mg/kg-dry	T	<0.005 :	-	<0.006 :	<0.011 :	<0.008 :	-
Dibromochloromethane	mg/kg-dry	T	<0.005 :	-	<0.006 :	<0.011 :	<0.008 :	-
Dichlorodifluoromethane	mg/kg-dry	T	<0.005 :	-	<0.006 :	<0.011 :	<0.008 :	-
Ethylbenzene	mg/kg-dry	T	0.003 J	-	0.0006 J	<0.011 :	<0.008 :	-
Methylene chloride	mg/kg-dry	T	<0.005 :	-	<0.006 :	<0.011 :	<0.008 :	-
Styrene	mg/kg-dry	T	<0.005 :	-	<0.006 :	<0.011 :	<0.008 :	-
Tetrachloroethene	mg/kg-dry	T	<0.005 :	-	<0.006 :	<0.011 :	<0.008 :	-
Toluene	mg/kg-dry	T	0.0008 J	-	0.0005 J	<0.011 :	0.0009 J	-
Total Xylene	mg/kg-dry	T	0.024 :	-	0.001 J	<0.011 :	0.004 J	-
trans-1,2-Dichloroethene	mg/kg-dry	T	<0.005 :	-	<0.006 :	<0.011 :	<0.008 :	-
trans-1,3-Dichloropropene	mg/kg-dry	T	<0.005 :	-	<0.006 :	<0.011 :	<0.008 :	-
Trichloroethene	mg/kg-dry	T	<0.005 :	-	<0.006 :	<0.011 :	<0.008 :	-
Trichlorofluoromethane	mg/kg-dry	T	<0.005 :	-	<0.006 :	<0.011 :	<0.008 :	-
Vinyl chloride	mg/kg-dry	T	<0.005 :	-	<0.006 :	<0.011 :	<0.008 :	-
Semi-Volatile Organics								
1,1`-Biphenyl	mg/kg-dry	T	-	<0.36 :	-	<0.35 :	<0.34 :	<0.35 :
2,4,5-Trichlorophenol	mg/kg-dry	T	-	<0.9 :	-	<0.87 :	<0.86 :	<0.89 :
2,4,6-Trichlorophenol	mg/kg-dry	T	-	<0.36 :	-	<0.35 :	<0.34 :	<0.35 :
2,4-Dichlorophenol	mg/kg-dry	T	-	<0.36 :	-	<0.35 :	<0.34 :	<0.35 :
2,4-Dimethylphenol	mg/kg-dry	T	-	<0.36 :	-	<0.35 :	<0.34 :	<0.35 :
2,4-Dinitrophenol	mg/kg-dry	T	-	<0.9 :	-	<0.87 J	<0.86 J	<0.89 J
2,4-Dinitrotoluene	mg/kg-dry	T	-	<0.36 :	-	<0.35 :	<0.34 J	<0.35 :
2,6-Dinitrotoluene	mg/kg-dry	T	-	<0.36 :	-	<0.35 :	<0.34 :	<0.35 :
2-Chloronaphthalene	mg/kg-dry	T	-	<0.36 :	-	<0.35 :	<0.34 :	<0.35 :
2-Chlorophenol	mg/kg-dry	T	-	<0.36 :	-	<0.35 :	<0.34 :	<0.35 :
2-Methylnaphthalene	mg/kg-dry	T	-	<0.36 :	-	<0.35 :	<0.34 :	<0.35 :
2-Methylphenol	mg/kg-dry	T	-	<0.36 :	-	<0.35 :	<0.34 :	<0.35 :
2-Nitroaniline	mg/kg-dry	T	-	<0.9 :	-	<0.87 :	<0.86 :	<0.89 :

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Appendix A-7a
Soil - Biased 0-6 inches
Validated Analytical Results

Parameter	Units	Exposure Area Fraction	Site ID / Sample Date / Sample ID / Exposure Area					
			MSS1-81 1/8/2003 MSS1-81-T01N-SOL SS1	MSS1-82 1/7/2003 MSS1-82-T01N-SOL SS1	MSS1-82 1/8/2003 MSS1-82-T01N-SOL SS1	MSS1-83 1/9/2003 MSS1-83-T01N-SOL SS1	MSS1-84 1/9/2003 MSS1-84-T01N-SOL SS1	MSS1-85 1/9/2003 MSS1-85-T01N-SOL SS1
2-Nitrophenol	mg/kg-dry	T	-	<0.36 :	-	<0.35 :	<0.34 :	<0.35 :
3,3-Dichlorobenzidine	mg/kg-dry	T	-	<0.36 :	-	<0.35 J	<0.34 :	<0.35 :
3-Nitroaniline	mg/kg-dry	T	-	<0.9 :	-	<0.87 :	<0.86 :	<0.89 :
4,6-Dinitro-2-methylphenol	mg/kg-dry	T	-	<0.9 :	-	<0.87 J	<0.86 J	<0.89 J
4-Bromophenyl phenyl ether	mg/kg-dry	T	-	<0.36 :	-	<0.35 :	<0.34 :	<0.35 :
4-Chloro-3-methylphenol	mg/kg-dry	T	-	<0.36 :	-	<0.35 :	<0.34 J	<0.35 :
4-Chloroaniline	mg/kg-dry	T	-	<0.36 :	-	<0.35 :	<0.34 :	<0.35 :
4-Chlorophenyl phenyl ether	mg/kg-dry	T	-	<0.36 :	-	<0.35 :	<0.34 :	<0.35 :
4-Methylphenol	mg/kg-dry	T	-	<0.36 :	-	<0.35 :	<0.34 :	<0.35 :
4-Nitroaniline	mg/kg-dry	T	-	<0.9 :	-	<0.87 :	<0.86 :	<0.89 :
4-Nitrophenol	mg/kg-dry	T	-	<0.9 :	-	<0.87 :	<0.86 J	<0.89 :
Acenaphthene	mg/kg-dry	T	-	<0.36 :	-	<0.35 :	<0.34 J	<0.35 :
Acenaphthylene	mg/kg-dry	T	-	<0.36 :	-	<0.35 :	<0.34 :	<0.35 :
Anthracene	mg/kg-dry	T	-	<0.36 :	-	<0.35 :	<0.34 :	<0.35 :
Benzaldehyde	mg/kg-dry	T	-	<0.36 J	-	<0.35 :	<0.34 :	<0.35 :
Benzo(a)anthracene	mg/kg-dry	T	-	<0.36 :	-	<0.35 J	<0.34 :	<0.35 :
Benzo(a)pyrene	mg/kg-dry	T	-	<0.36 :	-	<0.35 :	<0.34 :	<0.35 :
Benzo(b)fluoranthene	mg/kg-dry	T	-	<0.36 :	-	<0.35 :	<0.34 :	<0.35 :
Benzo(g,h,i)perylene	mg/kg-dry	T	-	<0.36 :	-	<0.35 :	<0.34 :	<0.35 :
Benzo(k)fluoranthene	mg/kg-dry	T	-	<0.36 :	-	<0.35 :	<0.34 :	<0.35 :
Bis(2-chloroethoxy)methane	mg/kg-dry	T	-	<0.36 :	-	<0.35 :	<0.34 :	<0.35 :
Bis(2-chloroethyl)ether	mg/kg-dry	T	-	<0.36 :	-	<0.35 :	<0.34 :	<0.35 :
Bis(2-ethylhexyl)phthalate	mg/kg-dry	T	-	<0.36 :	-	0.19 J	<0.34 :	0.092 J
Butyl benzyl phthalate	mg/kg-dry	T	-	<0.36 :	-	<0.35 J	<0.34 :	<0.35 :
Carbazole	mg/kg-dry	T	-	<0.36 :	-	<0.35 :	<0.34 :	<0.35 :
Chrysene	mg/kg-dry	T	-	<0.36 :	-	<0.35 J	<0.34 :	<0.35 :
Dibenz(a,h)anthracene	mg/kg-dry	T	-	<0.36 :	-	<0.35 :	<0.34 :	<0.35 :
Dibenzofuran	mg/kg-dry	T	-	<0.36 :	-	<0.35 :	<0.34 :	<0.35 :
Dichlorodiisopropyl ether	mg/kg-dry	T	-	<0.36 :	-	<0.35 :	<0.34 :	<0.35 :
Diethylphthalate	mg/kg-dry	T	-	<0.36 :	-	<0.35 :	<0.34 :	<0.35 :
Dimethylphthalate	mg/kg-dry	T	-	<0.36 :	-	<0.35 :	<0.34 :	<0.35 :
Di-n-Butyl phthalate	mg/kg-dry	T	-	<0.36 :	-	<0.35 :	<0.34 :	<0.35 :
Di-n-Octyl phthalate	mg/kg-dry	T	-	<0.36 :	-	0.2 J	<0.34 :	0.016 J
Fluoranthene	mg/kg-dry	T	-	<0.36 :	-	<0.35 :	<0.34 :	<0.35 :

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Appendix A-7a
Soil - Biased 0-6 inches
Validated Analytical Results

Parameter	Units	Exposure Area Fraction	Site ID		MSS1-81		MSS1-82		MSS1-82		MSS1-83		MSS1-84		MSS1-85	
			Sample Date		1/8/2003		1/7/2003		1/8/2003		1/9/2003		1/9/2003		1/9/2003	
			Sample ID		MSS1-81-T01N-SOL		MSS1-82-T01N-SOL		MSS1-82-T01N-SOL		MSS1-83-T01N-SOL		MSS1-84-T01N-SOL		MSS1-85-T01N-SOL	
			Exposure Area		SS1		SS1		SS1		SS1		SS1		SS1	
Fluorene	mg/kg-dry	T		-	<0.36	:	-	<0.35	:	<0.34	:	<0.35	:			
Hexachlorobenzene	mg/kg-dry	T		-	<0.36	:	-	<0.35	:	<0.34	:	<0.35	:			
Hexachlorobutadiene	mg/kg-dry	T		-	<0.36	:	-	<0.35	:	<0.34	:	<0.35	:			
Hexachlorocyclopentadiene	mg/kg-dry	T		-	<0.36	:	-	<0.35	:	<0.34	:	<0.35	:			
Hexachloroethane	mg/kg-dry	T		-	<0.36	:	-	<0.35	:	<0.34	:	<0.35	:			
Indeno(1,2,3-cd)pyrene	mg/kg-dry	T		-	<0.36	:	-	<0.35	:	<0.34	:	<0.35	:			
Isophorone	mg/kg-dry	T		-	<0.36	:	-	<0.35	:	<0.34	:	<0.35	:			
Naphthalene	mg/kg-dry	T		-	<0.36	:	-	<0.35	:	<0.34	:	<0.35	:			
Nitrobenzene	mg/kg-dry	T		-	<0.36	:	-	<0.35	:	<0.34	:	<0.35	:			
N-Nitrosodi-n-propylamine	mg/kg-dry	T		-	<0.36	:	-	<0.35	:	<0.34	:	<0.35	:			
N-Nitrosodiphenylamine	mg/kg-dry	T		-	<0.36	:	-	<0.35	:	<0.34	:	<0.35	:			
Pentachlorophenol	mg/kg-dry	T		-	<0.9	:	-	<0.87	J	<0.86	J	<0.89	J			
Phenanthrene	mg/kg-dry	T		-	<0.36	:	-	<0.35	:	<0.34	:	<0.35	:			
Phenol	mg/kg-dry	T		-	<0.36	:	-	<0.35	:	<0.34	:	<0.35	:			
Pyrene	mg/kg-dry	T		-	0.018	J	-	<0.35	J	<0.34	J	<0.35	:			
Pesticides-PCBs																
Aroclor 1016	mg/kg-dry	T		-	<0.036	:	-	<0.035	:	<0.034	:	<0.035	:			
Aroclor 1221	mg/kg-dry	T		-	<0.073	:	-	<0.071	:	<0.07	:	<0.072	:			
Aroclor 1232	mg/kg-dry	T		-	<0.036	:	-	<0.035	:	<0.034	:	<0.035	:			
Aroclor 1242	mg/kg-dry	T		-	<0.036	:	-	<0.035	:	<0.034	:	<0.035	:			
Aroclor 1248	mg/kg-dry	T		-	<0.036	:	-	<0.035	:	<0.034	:	<0.035	:			
Aroclor 1254	mg/kg-dry	T		-	0.052	:	-	0.086	:	0.1	:	0.12	J			
Aroclor 1260	mg/kg-dry	T		-	<0.036	:	-	<0.035	:	<0.034	:	0.033	J			

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Appendix A-7a
Soil - Biased 0-6 inches
Validated Analytical Results

Parameter	Units	Exposure Area Fraction	Site ID	Sample Date	Sample ID	Exposure Area
			MSS1-85	1/10/2003	MSS1-85-T01N-SOL	SS1
			MSS1-86	1/9/2003	MSS1-86-T01N-SOL	SS1
			MSS1-87	1/9/2003	MSS1-87-T01N-SOL DL	SS1
			MSS1-87	1/9/2003	MSS1-87-T01N-SOL	SS1
			MSS1-88	1/9/2003	MSS1-88-T01N-SOL	SS1
			MSS1-88	1/10/2003	MSS1-88-T01N-SOL	SS1
General Chemistry						
Ammonia	mg/kg-dry	T	-	45.6 :	-	7.2 :	-	5.5 :
Chloride	mg/kg-dry	T	-	3.6 :	-	6.4 :	-	5.2 :
Fluoride	mg/kg-dry	T	-	-	-	1.9 J	-	0.8 J
Nitrate	mg/kg-dry	T	-	<2.3 J	-	<2.3 J	-	<2.3 J
Phosphorus	mg/kg-dry	T	-	831. :	-	852. :	-	1150. :
Sulfate	mg/kg-dry	T	-	19.5 :	-	2350. :	-	19.5 :
Total Kjeldahl Nitrogen	mg/kg-dry	T	-	353. :	-	277. :	-	245. :
Total Organic Carbon	mg/kg-dry	T	-	10400. J	-	12400. J	-	3940. J
Laboratory Parameters						
pH	SU	T	-	8.5 :	-	6.6 :	-	7.4 :
Solids, Percent	%	T	91.7 :	89.1 :	-	92.1 :	91.5 :	90. :
Solids, Percent - VOCs Only	%	T	-	84.6 :	-	90.5 :	-	-
Specific Conductance	umhos/cm	T	-	142. :	-	1620. :	-	185. :
Geotechnical						
Organic Soils	%	T	-	2.4 :	-	2.4 :	-	2.2 :
Physical Properties						
Cation-Exchange Capacity	meq/100g	T	-	12.7 :	-	11.2 :	-	12.2 :
Sodium Absorption Ratio	ratio	T	-	0.24 :	-	0.12 :	-	0.21 :
Metals						
Aluminum	mg/kg-dry	T	-	10400. :	-	12400. :	-	16400. :
Antimony	mg/kg-dry	T	-	<0.61 J	-	<0.29 J	-	<0.29 J
Arsenic	mg/kg-dry	T	-	4.5 J	-	2.8 J	-	3.9 J
Barium	mg/kg-dry	T	-	188. :	-	70.2 :	-	79.9 :
Beryllium	mg/kg-dry	T	-	0.87 :	-	1. :	-	1.1 :
Boron	mg/kg-dry	T	-	2.9 J	-	<2.8 :	-	<2.6 :
Cadmium	mg/kg-dry	T	-	0.25 J	-	0.52 J	-	<0.039 :
Calcium	mg/kg-dry	T	-	4220. :	-	10300. :	-	9520. :
Chromium	mg/kg-dry	T	-	39.3 J	-	55.2 J	-	69.1 J
Cobalt	mg/kg-dry	T	-	7.2 :	-	11.2 :	-	15.7 :
Copper	mg/kg-dry	T	-	53.7 J	-	117. J	-	71.6 J
Iron	mg/kg-dry	T	-	22200. :	-	25200. :	-	30000. :
Lead	mg/kg-dry	T	-	70. :	-	150. :	-	64.3 :
Magnesium	mg/kg-dry	T	-	5040. :	-	8250. :	-	11300. :

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Appendix A-7a
Soil - Biased 0-6 inches
Validated Analytical Results

Parameter	Units	Exposure Area Fraction	Site ID / Sample Date / Sample ID											
			MSS1-85 1/10/2003 MSS1-85-T01N-SOL		MSS1-86 1/9/2003 MSS1-86-T01N-SOL		MSS1-87 1/9/2003 MSS1-87-T01N-SOL DL		MSS1-87 1/9/2003 MSS1-87-T01N-SOL		MSS1-88 1/9/2003 MSS1-88-T01N-SOL		MSS1-88 1/10/2003 MSS1-88-T01N-SOL	
			SS1		SS1		SS1		SS1		SS1		SS1	
Manganese	mg/kg-dry	T	-		564.	:	-		773.	:	-		793.	:
Mercury	mg/kg-dry	T	-		0.03	:	-		<0.018	:	-		<0.018	:
Molybdenum	mg/kg-dry	T	-		346.	:	-		2370.	:	-		466.	:
Nickel	mg/kg-dry	T	-		19.9	:	-		37.1	:	-		46.	:
Potassium	mg/kg-dry	T	-		2980.	J	-		3080.	J	-		3810.	J
Selenium	mg/kg-dry	T	-		<0.83	J	-		0.89	J	-		<0.79	J
Silver	mg/kg-dry	T	-		0.61	J	-		0.89	:	-		0.39	:
Sodium	mg/kg-dry	T	-		<94.8	:	-		<58.3	:	-		<31.9	:
Thallium	mg/kg-dry	T	-		0.23	:	-		0.26	:	-		0.28	:
Vanadium	mg/kg-dry	T	-		29.9	:	-		57.6	:	-		55.7	:
Zinc	mg/kg-dry	T	-		118.	:	-		170.	:	-		212.	:
Volatile Organics														
1,1,1-Trichloroethane	mg/kg-dry	T	<0.01	:	<0.01	:	-		<0.005	:	<0.005	:	-	
1,1,2,2-Tetrachloroethane	mg/kg-dry	T	<0.01	:	<0.01	:	-		<0.005	:	<0.005	:	-	
1,1,2-Trichloro-1,2,2-trifluoroethane	mg/kg-dry	T	<0.01	:	<0.01	:	-		<0.005	:	<0.005	:	-	
1,1,2-Trichloroethane	mg/kg-dry	T	<0.01	:	<0.01	:	-		<0.005	:	<0.005	:	-	
1,1-Dichloroethane	mg/kg-dry	T	<0.01	:	<0.01	:	-		<0.005	:	<0.005	:	-	
1,1-Dichloroethene	mg/kg-dry	T	<0.01	:	<0.01	:	-		<0.005	:	<0.005	:	-	
1,2,4-Trichlorobenzene	mg/kg-dry	T	<0.01	:	<0.01	:	-		<0.005	:	<0.005	:	-	
1,2-Dibromo-3-chloropropane	mg/kg-dry	T	<0.01	:	<0.01	:	-		<0.005	:	<0.005	:	-	
1,2-Dichlorobenzene	mg/kg-dry	T	<0.01	:	<0.01	:	-		<0.005	:	<0.005	:	-	
1,2-Dichloroethane	mg/kg-dry	T	<0.01	:	<0.01	:	-		<0.005	:	<0.005	:	-	
1,2-Dichloroethene (total)	mg/kg-dry	T	<0.01	:	<0.01	:	-		<0.005	:	<0.005	:	-	
1,2-Dichloropropane	mg/kg-dry	T	<0.01	:	<0.01	:	-		<0.005	:	<0.005	:	-	
1,3-Dichlorobenzene	mg/kg-dry	T	<0.01	:	<0.01	:	-		<0.005	:	<0.005	:	-	
1,4-Dichlorobenzene	mg/kg-dry	T	<0.01	:	<0.01	:	-		<0.005	:	<0.005	:	-	
2-Butanone	mg/kg-dry	T	<0.01	:	0.003	J	-		<0.005	J	<0.005	J	-	
2-Hexanone	mg/kg-dry	T	<0.01	:	<0.01	:	-		<0.005	:	<0.005	:	-	
4-Methyl-2-pentanone	mg/kg-dry	T	<0.01	:	<0.01	:	-		<0.005	:	<0.005	:	-	
Acetone	mg/kg-dry	T	0.003	J	0.007	J	-		<0.005	J	<0.005	J	-	
Benzene	mg/kg-dry	T	<0.01	:	<0.01	:	-		0.0005	J	<0.005	:	-	
Bromodichloromethane	mg/kg-dry	T	<0.01	:	<0.01	:	-		<0.005	:	<0.005	:	-	
Bromoform	mg/kg-dry	T	<0.01	:	<0.01	:	-		<0.005	:	<0.005	:	-	
Bromomethane	mg/kg-dry	T	<0.01	:	<0.01	:	-		<0.005	:	<0.005	:	-	

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Appendix A-7a
Soil - Biased 0-6 inches
Validated Analytical Results

Parameter	Units	Exposure Area Fraction	Site ID	Sample Date	Sample ID	Exposure Area
			MSS1-85	1/10/2003	MSS1-85-T01N-SOL	SS1
			MSS1-86	1/9/2003	MSS1-86-T01N-SOL	SS1
			MSS1-87	1/9/2003	MSS1-87-T01N-SOL DL	SS1
			MSS1-87	1/9/2003	MSS1-87-T01N-SOL	SS1
			MSS1-88	1/9/2003	MSS1-88-T01N-SOL	SS1
			MSS1-88	1/10/2003	MSS1-88-T01N-SOL	SS1
Carbon disulfide	mg/kg-dry	T	<0.01 :	0.003 J	-	<0.005 :	<0.005 :	-
Carbon tetrachloride	mg/kg-dry	T	<0.01 :	<0.01 :	-	<0.005 :	<0.005 :	-
Chlorobenzene	mg/kg-dry	T	<0.01 :	<0.01 :	-	<0.005 :	<0.005 :	-
Chloroethane	mg/kg-dry	T	<0.01 :	<0.01 :	-	<0.005 :	<0.005 :	-
Chloroform	mg/kg-dry	T	<0.01 :	<0.01 :	-	<0.005 :	<0.005 :	-
Chloromethane	mg/kg-dry	T	<0.01 :	<0.01 :	-	<0.005 :	<0.005 :	-
cis-1,2-Dichloroethene	mg/kg-dry	T	<0.01 :	<0.01 :	-	<0.005 :	<0.005 :	-
cis-1,3-Dichloropropene	mg/kg-dry	T	<0.01 :	<0.01 :	-	<0.005 :	<0.005 :	-
Dibromochloromethane	mg/kg-dry	T	<0.01 :	<0.01 :	-	<0.005 :	<0.005 :	-
Dichlorodifluoromethane	mg/kg-dry	T	<0.01 :	<0.01 :	-	<0.005 :	<0.005 :	-
Ethylbenzene	mg/kg-dry	T	<0.01 :	<0.01 :	-	<0.005 :	<0.005 :	-
Methylene chloride	mg/kg-dry	T	<0.01 :	<0.01 :	-	<0.005 :	<0.005 :	-
Styrene	mg/kg-dry	T	<0.01 :	<0.01 :	-	<0.005 :	<0.005 :	-
Tetrachloroethene	mg/kg-dry	T	<0.01 :	<0.01 :	-	0.0005 J	<0.005 :	-
Toluene	mg/kg-dry	T	<0.01 :	0.001 J	-	0.0005 J	0.0005 J	-
Total Xylene	mg/kg-dry	T	0.006 J	0.003 J	-	0.001 J	<0.005 :	-
trans-1,2-Dichloroethene	mg/kg-dry	T	<0.01 :	<0.01 :	-	<0.005 :	<0.005 :	-
trans-1,3-Dichloropropene	mg/kg-dry	T	<0.01 :	<0.01 :	-	<0.005 :	<0.005 :	-
Trichloroethene	mg/kg-dry	T	<0.01 :	<0.01 :	-	<0.005 :	<0.005 :	-
Trichlorofluoromethane	mg/kg-dry	T	<0.01 :	<0.01 :	-	<0.005 :	<0.005 :	-
Vinyl chloride	mg/kg-dry	T	<0.01 :	<0.01 :	-	<0.005 :	<0.005 :	-
Semi-Volatile Organics								
1,1`-Biphenyl	mg/kg-dry	T	-	<0.37 :	-	<0.37 :	-	<0.37 :
2,4,5-Trichlorophenol	mg/kg-dry	T	-	<0.93 :	-	<0.92 :	-	<0.92 :
2,4,6-Trichlorophenol	mg/kg-dry	T	-	<0.37 :	-	<0.37 :	-	<0.37 :
2,4-Dichlorophenol	mg/kg-dry	T	-	<0.37 :	-	<0.37 :	-	<0.37 :
2,4-Dimethylphenol	mg/kg-dry	T	-	<0.37 :	-	<0.37 :	-	<0.37 :
2,4-Dinitrophenol	mg/kg-dry	T	-	<0.93 :	-	<0.92 :	-	<0.92 :
2,4-Dinitrotoluene	mg/kg-dry	T	-	<0.37 :	-	<0.37 :	-	<0.37 :
2,6-Dinitrotoluene	mg/kg-dry	T	-	<0.37 :	-	<0.37 :	-	<0.37 :
2-Chloronaphthalene	mg/kg-dry	T	-	<0.37 :	-	<0.37 :	-	<0.37 :
2-Chlorophenol	mg/kg-dry	T	-	<0.37 :	-	<0.37 :	-	<0.37 :
2-Methylnaphthalene	mg/kg-dry	T	-	<0.37 :	-	<0.37 :	-	<0.37 :
2-Methylphenol	mg/kg-dry	T	-	<0.37 :	-	<0.37 :	-	<0.37 :

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T = Total Fraction

Appendix A-7a
Soil - Biased 0-6 inches
Validated Analytical Results

Site ID			MSS1-85	MSS1-86	MSS1-87	MSS1-87	MSS1-88	MSS1-88
Sample Date			1/10/2003	1/9/2003	1/9/2003	1/9/2003	1/9/2003	1/10/2003
Sample ID			MSS1-85-T01N-SOL	MSS1-86-T01N-SOL	MSS1-87-T01N-SOL DL	MSS1-87-T01N-SOL	MSS1-88-T01N-SOL	MSS1-88-T01N-SOL
Exposure Area			SS1	SS1	SS1	SS1	SS1	SS1
Parameter	**Units**	**Fraction**						
2-Nitroaniline	mg/kg-dry	T	-	<0.93 :	-	<0.92 :	-	<0.92 :
2-Nitrophenol	mg/kg-dry	T	-	<0.37 :	-	<0.37 :	-	<0.37 :
3,3-Dichlorobenzidine	mg/kg-dry	T	-	<0.37 :	-	<0.37 :	-	<0.37 :
3-Nitroaniline	mg/kg-dry	T	-	<0.93 :	-	<0.92 :	-	<0.92 :
4,6-Dinitro-2-methylphenol	mg/kg-dry	T	-	<0.93 :	-	<0.92 :	-	<0.92 :
4-Bromophenyl phenyl ether	mg/kg-dry	T	-	<0.37 :	-	<0.37 :	-	<0.37 :
4-Chloro-3-methylphenol	mg/kg-dry	T	-	<0.37 :	-	<0.37 :	-	<0.37 :
4-Chloroaniline	mg/kg-dry	T	-	<0.37 :	-	<0.37 :	-	<0.37 :
4-Chlorophenyl phenyl ether	mg/kg-dry	T	-	<0.37 :	-	<0.37 :	-	<0.37 :
4-Methylphenol	mg/kg-dry	T	-	<0.37 :	-	<0.37 :	-	<0.37 :
4-Nitroaniline	mg/kg-dry	T	-	<0.93 :	-	<0.92 :	-	<0.92 :
4-Nitrophenol	mg/kg-dry	T	-	<0.93 :	-	<0.92 :	-	<0.92 :
Acenaphthene	mg/kg-dry	T	-	<0.37 :	-	<0.37 :	-	<0.37 :
Acenaphthylene	mg/kg-dry	T	-	<0.37 :	-	<0.37 :	-	<0.37 :
Anthracene	mg/kg-dry	T	-	<0.37 :	-	<0.37 :	-	<0.37 :
Benzaldehyde	mg/kg-dry	T	-	0.086 J	-	<0.37 :	-	<0.37 :
Benzo(a)anthracene	mg/kg-dry	T	-	<0.37 :	-	<0.37 :	-	<0.37 :
Benzo(a)pyrene	mg/kg-dry	T	-	<0.37 :	-	<0.37 :	-	<0.37 :
Benzo(b)fluoranthene	mg/kg-dry	T	-	<0.37 :	-	<0.37 :	-	<0.37 :
Benzo(g,h,i)perylene	mg/kg-dry	T	-	<0.37 :	-	<0.37 J	-	<0.37 J
Benzo(k)fluoranthene	mg/kg-dry	T	-	<0.37 :	-	<0.37 :	-	<0.37 :
Bis(2-chloroethoxy)methane	mg/kg-dry	T	-	<0.37 :	-	<0.37 :	-	<0.37 :
Bis(2-chloroethyl)ether	mg/kg-dry	T	-	<0.37 :	-	<0.37 :	-	<0.37 :
Bis(2-ethylhexyl)phthalate	mg/kg-dry	T	-	0.078 J	-	0.26 J	-	0.019 J
Butyl benzyl phthalate	mg/kg-dry	T	-	<0.37 :	-	<0.37 :	-	<0.37 :
Carbazole	mg/kg-dry	T	-	<0.37 :	-	<0.37 :	-	<0.37 :
Chrysene	mg/kg-dry	T	-	<0.37 :	-	<0.37 :	-	<0.37 :
Dibenz(a,h)anthracene	mg/kg-dry	T	-	<0.37 :	-	<0.37 J	-	<0.37 J
Dibenzofuran	mg/kg-dry	T	-	<0.37 :	-	<0.37 :	-	<0.37 :
Dichlorodiisopropyl ether	mg/kg-dry	T	-	<0.37 :	-	<0.37 :	-	<0.37 :
Diethylphthalate	mg/kg-dry	T	-	<0.37 :	-	<0.37 :	-	<0.37 :
Dimethylphthalate	mg/kg-dry	T	-	<0.37 :	-	<0.37 :	-	<0.37 :
Di-n-Butyl phthalate	mg/kg-dry	T	-	<0.37 :	-	<0.37 :	-	<0.37 :
Di-n-Octyl phthalate	mg/kg-dry	T	-	0.031 J	-	<0.37 :	-	<0.37 :

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Appendix A-7a
Soil - Biased 0-6 inches
Validated Analytical Results

Parameter	Units	Exposure Area Fraction	Site ID	MSS1-85	MSS1-86	MSS1-87	MSS1-87	MSS1-88	MSS1-88
			Sample Date	1/10/2003	1/9/2003	1/9/2003	1/9/2003	1/9/2003	1/10/2003
			Sample ID	MSS1-85-T01N-SOL	MSS1-86-T01N-SOL	MSS1-87-T01N-SOL DL	MSS1-87-T01N-SOL	MSS1-88-T01N-SOL	MSS1-88-T01N-SOL
			Exposure Area	SS1	SS1	SS1	SS1	SS1	SS1
Fluoranthene	mg/kg-dry	T		-	<0.37 :	-	<0.37 :	-	<0.37 :
Fluorene	mg/kg-dry	T		-	<0.37 :	-	<0.37 :	-	<0.37 :
Hexachlorobenzene	mg/kg-dry	T		-	<0.37 :	-	<0.37 :	-	<0.37 :
Hexachlorobutadiene	mg/kg-dry	T		-	<0.37 :	-	<0.37 :	-	<0.37 :
Hexachlorocyclopentadiene	mg/kg-dry	T		-	<0.37 :	-	<0.37 J	-	<0.37 J
Hexachloroethane	mg/kg-dry	T		-	<0.37 :	-	<0.37 :	-	<0.37 :
Indeno(1,2,3-cd)pyrene	mg/kg-dry	T		-	<0.37 :	-	<0.37 J	-	<0.37 J
Isophorone	mg/kg-dry	T		-	<0.37 :	-	<0.37 :	-	<0.37 :
Naphthalene	mg/kg-dry	T		-	<0.37 :	-	<0.37 :	-	<0.37 :
Nitrobenzene	mg/kg-dry	T		-	<0.37 :	-	<0.37 :	-	<0.37 :
N-Nitrosodi-n-propylamine	mg/kg-dry	T		-	<0.37 :	-	<0.37 :	-	<0.37 :
N-Nitrosodiphenylamine	mg/kg-dry	T		-	<0.37 :	-	<0.37 :	-	<0.37 :
Pentachlorophenol	mg/kg-dry	T		-	<0.93 :	-	<0.92 J	-	<0.92 J
Phenanthrene	mg/kg-dry	T		-	<0.37 :	-	<0.37 :	-	<0.37 :
Phenol	mg/kg-dry	T		-	<0.37 :	-	<0.37 :	-	<0.37 :
Pyrene	mg/kg-dry	T		-	<0.37 :	-	<0.37 :	-	<0.37 :
Pesticides-PCBs									
Aroclor 1016	mg/kg-dry	T		-	<0.037 :	-	<0.073 :	-	<0.037 :
Aroclor 1221	mg/kg-dry	T		-	<0.075 :	-	<0.15 :	-	<0.074 :
Aroclor 1232	mg/kg-dry	T		-	<0.037 :	-	<0.073 :	-	<0.037 :
Aroclor 1242	mg/kg-dry	T		-	<0.037 :	-	<0.073 :	-	<0.037 :
Aroclor 1248	mg/kg-dry	T		-	<0.037 :	4.7 :	-	-	0.45 :
Aroclor 1254	mg/kg-dry	T		-	0.39 :	-	3.5 :	-	0.44 J
Aroclor 1260	mg/kg-dry	T		-	<0.037 :	-	<0.073 :	-	<0.037 :

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T = Total Fraction

Appendix A-7a
Soil - Biased 0-6 inches
Validated Analytical Results

Parameter	Units	Exposure Area Fraction	Site ID	MSS1-89	MSS1-90	MSS1-90	MSS1-91	MSS1-92	MSS1-93
			Sample Date	1/12/2003	1/12/2003	1/12/2003	1/12/2003	1/17/2003	1/17/2003
			Sample ID	MSS1-89-T01N-SOL	MSS1-90-T01N-SOL DL	MSS1-90-T01N-SOL	MSS1-91-T01N-SOL	MSS1-92-T01N-SOL	MSS1-93-T01N-SOL
			Exposure Area	SS1	SS1	SS1	SS1	SS1	SS1
General Chemistry									
Ammonia	mg/kg-dry	T		12.6 :	-	11.8 :	11.5 :	14.1 :	12.5 :
Chloride	mg/kg-dry	T		3.2 :	-	10.4 :	185. :	6.8 :	14.4 :
Fluoride	mg/kg-dry	T		3.2 J	-	51.3 J	2.5 J	0.85 J	1.2 J
Nitrate	mg/kg-dry	T		<2.3 J	-	2.3 J	2.6 J	5.1 J	9.6 J
Phosphorus	mg/kg-dry	T		1620. :	-	1480. :	846. :	1970. :	1650. :
Sulfate	mg/kg-dry	T		202. :	-	4620. :	64.9 :	1640. :	70.9 :
Total Kjeldahl Nitrogen	mg/kg-dry	T		138. :	-	89. :	105. :	119. :	71.1 :
Total Organic Carbon	mg/kg-dry	T		787. J	-	806. J	3130. J	949. J	939. J
Laboratory Parameters									
pH	SU	T		6.7 :	-	5.4 :	7.2 :	6.6 :	7.1 :
Solids, Percent	%	T		89.6 :	-	90.1 :	95. :	94.6 :	95.7 :
Specific Conductance	umhos/cm	T		532. :	-	1850. :	1100. :	1750. J	929. J
Geotechnical									
Organic Soils	%	T		1.5 :	-	1.2 :	1.5 :	2.2 :	1.6 :
Physical Properties									
Cation-Exchange Capacity	meq/100g	T		10.1 :	-	9.5 :	4.8 :	18.4 :	8.3 :
Sodium Absorption Ratio	ratio	T		0.41 :	-	0.14 :	3.87 :	0.16 :	0.36 :
Metals									
Aluminum	mg/kg-dry	T		13300. :	-	14600. :	8000. :	20300. :	11200. :
Antimony	mg/kg-dry	T		<0.32 J	-	<0.33 J	<0.32 :	<0.29 J	<0.3 J
Arsenic	mg/kg-dry	T		4.6 J	-	8. J	3.3 J	3.5 J	2.5 J
Barium	mg/kg-dry	T		98.3 :	-	109. :	39. :	99.5 :	64.8 :
Beryllium	mg/kg-dry	T		1.4 :	-	1.4 :	1.3 :	2.6 :	1.1 :
Boron	mg/kg-dry	T		<1.1 :	-	<0.23 :	2.9 J	<0.28 J	4.3 :
Cadmium	mg/kg-dry	T		1.9 :	-	3.8 :	1.4 J	1.5 :	0.36 :
Calcium	mg/kg-dry	T		6320. :	-	21300. :	9470. :	19500. :	7630. :
Chromium	mg/kg-dry	T		40.5 J	-	53.1 J	54.7 J	57.8 J	29.4 J
Cobalt	mg/kg-dry	T		7. :	-	<0.14 :	6.4 :	15.2 :	8.2 :
Copper	mg/kg-dry	T		706. J	-	1890. J	114. J	172. :	61.3 J
Iron	mg/kg-dry	T		27600. :	-	28600. :	22500. :	27000. :	15900. :
Lead	mg/kg-dry	T		1230. :	-	1060. :	239. :	169. :	49.1 :
Magnesium	mg/kg-dry	T		10600. :	-	12000. :	4500. :	13100. :	8840. :
Manganese	mg/kg-dry	T		866. :	-	771. :	2100. :	2230. :	674. :

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Appendix A-7a
Soil - Biased 0-6 inches
Validated Analytical Results

Parameter	Units	Exposure Area Fraction	Site ID / Sample Date / Sample ID / Exposure Area											
			MSS1-89 1/12/2003 MSS1-89-T01N-SOL SS1		MSS1-90 1/12/2003 MSS1-90-T01N-SOL DL SS1		MSS1-90 1/12/2003 MSS1-90-T01N-SOL SS1		MSS1-91 1/12/2003 MSS1-91-T01N-SOL SS1		MSS1-92 1/17/2003 MSS1-92-T01N-SOL SS1		MSS1-93 1/17/2003 MSS1-93-T01N-SOL SS1	
Mercury	mg/kg-dry	T	0.022	:	-		0.024	:	<0.015	:	<0.018	:	<0.017	:
Molybdenum	mg/kg-dry	T	15000.	:	-		31400.	:	572.	:	2450.	:	873.	:
Nickel	mg/kg-dry	T	31.3	:	-		42.4	:	20.1	:	39.5	:	22.4	:
Potassium	mg/kg-dry	T	2870.	J	-		3620.	J	2290.	J	5020.	J	3460.	J
Selenium	mg/kg-dry	T	2.7	J	-		4.4	J	1.3	J	1.1	J	<0.79	J
Silver	mg/kg-dry	T	7.7	:	-		12.	:	1.7	:	1.6	:	0.54	:
Sodium	mg/kg-dry	T	<51.2	J	-		<28.4	J	361.	:	<33.6	:	<38.9	:
Thallium	mg/kg-dry	T	0.79	:	-		0.96	:	0.19	:	0.55	:	0.37	:
Vanadium	mg/kg-dry	T	138.	:	-		175.	:	31.1	:	72.2	:	37.1	:
Zinc	mg/kg-dry	T	398.	:	-		632.	:	287.	:	255.	:	101.	:
Volatile Organics														
1,1,1-Trichloroethane	mg/kg-dry	T	<0.01	:	-		<0.009	:	<0.012	:	<0.005	:	<0.008	:
1,1,2,2-Tetrachloroethane	mg/kg-dry	T	<0.01	:	-		<0.009	:	<0.012	:	<0.005	:	<0.008	:
1,1,2-Trichloro-1,2,2-trifluoroethane	mg/kg-dry	T	<0.01	:	-		<0.009	:	<0.012	:	<0.005	:	<0.008	:
1,1,2-Trichloroethane	mg/kg-dry	T	<0.01	:	-		<0.009	:	<0.012	:	<0.005	:	<0.008	:
1,1-Dichloroethane	mg/kg-dry	T	<0.01	:	-		<0.009	:	<0.012	:	<0.005	:	<0.008	:
1,1-Dichloroethene	mg/kg-dry	T	<0.01	:	-		<0.009	:	<0.012	:	<0.005	:	<0.008	:
1,2,4-Trichlorobenzene	mg/kg-dry	T	<0.01	:	-		<0.009	:	<0.012	:	<0.005	:	<0.008	:
1,2-Dibromo-3-chloropropane	mg/kg-dry	T	<0.01	:	-		<0.009	:	<0.012	:	<0.005	:	<0.008	:
1,2-Dichlorobenzene	mg/kg-dry	T	<0.01	:	-		<0.009	:	<0.012	:	<0.005	:	<0.008	:
1,2-Dichloroethane	mg/kg-dry	T	<0.01	:	-		<0.009	:	<0.012	:	<0.005	:	<0.008	:
1,2-Dichloroethene (total)	mg/kg-dry	T	<0.01	:	-		<0.009	:	<0.012	:	<0.005	:	<0.008	:
1,2-Dichloropropane	mg/kg-dry	T	<0.01	:	-		<0.009	:	<0.012	:	<0.005	:	<0.008	:
1,3-Dichlorobenzene	mg/kg-dry	T	<0.01	:	-		<0.009	:	<0.012	:	<0.005	:	<0.008	:
1,4-Dichlorobenzene	mg/kg-dry	T	<0.01	:	-		<0.009	:	<0.012	:	<0.005	:	<0.008	:
2-Butanone	mg/kg-dry	T	<0.01	:	-		<0.009	:	0.004	J	0.001	J	<0.008	:
2-Hexanone	mg/kg-dry	T	<0.01	:	-		<0.009	:	<0.012	:	<0.005	:	<0.008	:
4-Methyl-2-pentanone	mg/kg-dry	T	<0.01	:	-		<0.009	:	<0.012	:	<0.005	:	<0.008	:
Acetone	mg/kg-dry	T	0.003	J	-		0.005	J	0.019	:	0.007	:	0.001	J
Benzene	mg/kg-dry	T	<0.01	:	-		<0.009	:	<0.012	:	<0.005	:	<0.008	:
Bromodichloromethane	mg/kg-dry	T	<0.01	:	-		<0.009	:	<0.012	:	<0.005	:	<0.008	:
Bromoform	mg/kg-dry	T	<0.01	:	-		<0.009	:	<0.012	:	<0.005	:	<0.008	:
Bromomethane	mg/kg-dry	T	<0.01	:	-		<0.009	:	<0.012	:	<0.005	:	<0.008	:
Carbon disulfide	mg/kg-dry	T	<0.01	:	-		<0.009	:	<0.012	:	<0.005	:	<0.008	:

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Appendix A-7a
Soil - Biased 0-6 inches
Validated Analytical Results

Parameter	Units	Exposure Area Fraction	Site ID / Sample Date / Sample ID / Exposure Area													
			MSS1-89 1/12/2003 MSS1-89-T01N-SOL SS1		MSS1-90 1/12/2003 MSS1-90-T01N-SOL DL SS1		MSS1-90 1/12/2003 MSS1-90-T01N-SOL SS1		MSS1-91 1/12/2003 MSS1-91-T01N-SOL SS1		MSS1-92 1/17/2003 MSS1-92-T01N-SOL SS1		MSS1-93 1/17/2003 MSS1-93-T01N-SOL SS1	
Carbon tetrachloride	mg/kg-dry	T	<0.01	:	-	:	<0.009	:	<0.012	:	<0.005	:	<0.008	:
Chlorobenzene	mg/kg-dry	T	<0.01	:	-	:	<0.009	:	<0.012	:	<0.005	:	<0.008	:
Chloroethane	mg/kg-dry	T	<0.01	:	-	:	<0.009	:	<0.012	:	<0.005	:	<0.008	:
Chloroform	mg/kg-dry	T	<0.01	:	-	:	<0.009	:	<0.012	:	<0.005	:	<0.008	:
Chloromethane	mg/kg-dry	T	<0.01	:	-	:	<0.009	:	<0.012	:	<0.005	:	<0.008	:
cis-1,2-Dichloroethene	mg/kg-dry	T	<0.01	:	-	:	<0.009	:	<0.012	:	<0.005	:	<0.008	:
cis-1,3-Dichloropropene	mg/kg-dry	T	<0.01	:	-	:	<0.009	:	<0.012	:	<0.005	:	<0.008	:
Dibromochloromethane	mg/kg-dry	T	<0.01	:	-	:	<0.009	:	<0.012	:	<0.005	:	<0.008	:
Dichlorodifluoromethane	mg/kg-dry	T	<0.01	:	-	:	<0.009	:	<0.012	:	<0.005	:	<0.008	:
Ethylbenzene	mg/kg-dry	T	<0.01	:	-	:	<0.009	:	<0.012	:	0.0006	J	<0.008	:
Methylene chloride	mg/kg-dry	T	<0.01	:	-	:	<0.009	:	<0.012	:	<0.005	:	<0.008	:
Styrene	mg/kg-dry	T	<0.01	:	-	:	<0.009	:	<0.012	:	<0.005	:	<0.008	:
Tetrachloroethene	mg/kg-dry	T	<0.01	:	-	:	<0.009	:	<0.012	:	<0.005	:	<0.008	:
Toluene	mg/kg-dry	T	<0.01	:	-	:	<0.009	:	0.001	J	<0.005	:	<0.008	:
Total Xylene	mg/kg-dry	T	<0.01	:	-	:	<0.009	:	<0.012	:	0.004	J	0.0009	J
trans-1,2-Dichloroethene	mg/kg-dry	T	<0.01	:	-	:	<0.009	:	<0.012	:	<0.005	:	<0.008	:
trans-1,3-Dichloropropene	mg/kg-dry	T	<0.01	:	-	:	<0.009	:	<0.012	:	<0.005	:	<0.008	:
Trichloroethene	mg/kg-dry	T	<0.01	:	-	:	<0.009	:	<0.012	:	<0.005	:	<0.008	:
Trichlorofluoromethane	mg/kg-dry	T	<0.01	:	-	:	<0.009	:	<0.012	:	<0.005	:	<0.008	:
Vinyl chloride	mg/kg-dry	T	<0.01	:	-	:	<0.009	:	<0.012	:	<0.005	:	<0.008	:
Semi-Volatile Organics														
1,1`-Biphenyl	mg/kg-dry	T	<0.37	:	-	:	<0.37	:	<0.35	:	<0.69	:	<0.34	:
2,4,5-Trichlorophenol	mg/kg-dry	T	<0.92	:	-	:	<0.92	:	<0.87	:	<1.7	:	<0.86	:
2,4,6-Trichlorophenol	mg/kg-dry	T	<0.37	:	-	:	<0.37	:	<0.35	:	<0.69	:	<0.34	:
2,4-Dichlorophenol	mg/kg-dry	T	<0.37	:	-	:	<0.37	:	<0.35	:	<0.69	:	<0.34	:
2,4-Dimethylphenol	mg/kg-dry	T	<0.37	:	-	:	<0.37	:	<0.35	:	<0.69	:	<0.34	:
2,4-Dinitrophenol	mg/kg-dry	T	<0.92	J	-	:	<0.92	J	<0.87	J	<1.7	:	<0.86	:
2,4-Dinitrotoluene	mg/kg-dry	T	<0.37	:	-	:	<0.37	:	<0.35	:	<0.69	:	<0.34	:
2,6-Dinitrotoluene	mg/kg-dry	T	<0.37	:	-	:	<0.37	:	<0.35	:	<0.69	:	<0.34	:
2-Chloronaphthalene	mg/kg-dry	T	<0.37	:	-	:	<0.37	:	<0.35	:	<0.69	:	<0.34	:
2-Chlorophenol	mg/kg-dry	T	<0.37	:	-	:	<0.37	:	<0.35	:	<0.69	:	<0.34	:
2-Methylnaphthalene	mg/kg-dry	T	<0.37	:	-	:	<0.37	:	<0.35	:	<0.69	:	<0.34	:
2-Methylphenol	mg/kg-dry	T	<0.37	:	-	:	<0.37	:	<0.35	:	<0.69	:	<0.34	:
2-Nitroaniline	mg/kg-dry	T	<0.92	:	-	:	<0.92	:	<0.87	:	<1.7	:	<0.86	:

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Appendix A-7a
Soil - Biased 0-6 inches
Validated Analytical Results

Parameter	Units	Site ID / Sample Date / Sample ID / Exposure Area / Fraction	MSS1-89 1/12/2003 MSS1-89-T01N-SOL SS1 T		MSS1-90 1/12/2003 MSS1-90-T01N-SOL DL SS1 T		MSS1-90 1/12/2003 MSS1-90-T01N-SOL SS1 T		MSS1-91 1/12/2003 MSS1-91-T01N-SOL SS1 T		MSS1-92 1/17/2003 MSS1-92-T01N-SOL SS1 T		MSS1-93 1/17/2003 MSS1-93-T01N-SOL SS1 T	
2-Nitrophenol	mg/kg-dry	T	<0.37	:	-		<0.37	:	<0.35	:	<0.69	:	<0.34	:
3,3-Dichlorobenzidine	mg/kg-dry	T	<0.37	:	-		<0.37	:	<0.35	:	<0.69	:	<0.34	J
3-Nitroaniline	mg/kg-dry	T	<0.92	:	-		<0.92	:	<0.87	:	<1.7	J	<0.86	J
4,6-Dinitro-2-methylphenol	mg/kg-dry	T	<0.92	:	-		<0.92	:	<0.87	:	<1.7	:	<0.86	:
4-Bromophenyl phenyl ether	mg/kg-dry	T	<0.37	:	-		<0.37	:	<0.35	:	<0.69	:	<0.34	:
4-Chloro-3-methylphenol	mg/kg-dry	T	<0.37	:	-		<0.37	:	<0.35	:	<0.69	:	<0.34	:
4-Chloroaniline	mg/kg-dry	T	<0.37	:	-		<0.37	:	<0.35	:	<0.69	:	<0.34	:
4-Chlorophenyl phenyl ether	mg/kg-dry	T	<0.37	:	-		<0.37	:	<0.35	:	<0.69	:	<0.34	:
4-Methylphenol	mg/kg-dry	T	<0.37	:	-		<0.37	:	<0.35	:	<0.69	:	<0.34	:
4-Nitroaniline	mg/kg-dry	T	<0.92	:	-		<0.92	:	<0.87	:	<1.7	:	<0.86	J
4-Nitrophenol	mg/kg-dry	T	<0.92	J	-		<0.92	J	<0.87	J	<1.7	:	<0.86	:
Acenaphthene	mg/kg-dry	T	<0.37	:	-		<0.37	:	<0.35	:	<0.69	:	<0.34	:
Acenaphthylene	mg/kg-dry	T	<0.37	:	-		<0.37	:	<0.35	:	<0.69	:	<0.34	:
Anthracene	mg/kg-dry	T	<0.37	:	-		<0.37	:	<0.35	:	<0.69	:	<0.34	:
Benzaldehyde	mg/kg-dry	T	<0.37	J	-		<0.37	J	<0.35	J	<0.69	:	<0.34	:
Benzo(a)anthracene	mg/kg-dry	T	<0.37	:	-		<0.37	:	<0.35	:	<0.69	:	0.031	J
Benzo(a)pyrene	mg/kg-dry	T	<0.37	:	-		<0.37	:	<0.35	:	<0.69	:	0.026	J
Benzo(b)fluoranthene	mg/kg-dry	T	<0.37	:	-		<0.37	:	<0.35	:	<0.69	:	0.021	J
Benzo(g,h,i)perylene	mg/kg-dry	T	<0.37	:	-		<0.37	:	<0.35	:	<0.69	:	0.022	J
Benzo(k)fluoranthene	mg/kg-dry	T	<0.37	:	-		<0.37	:	<0.35	:	<0.69	:	0.026	J
Bis(2-chloroethoxy)methane	mg/kg-dry	T	<0.37	:	-		<0.37	:	<0.35	:	<0.69	:	<0.34	:
Bis(2-chloroethyl)ether	mg/kg-dry	T	<0.37	:	-		<0.37	:	<0.35	:	<0.69	:	<0.34	:
Bis(2-ethylhexyl)phthalate	mg/kg-dry	T	<0.37	:	-		0.019	J	0.14	J	0.28	J	0.15	J
Butyl benzyl phthalate	mg/kg-dry	T	<0.37	:	-		<0.37	:	<0.35	:	<0.69	:	<0.34	:
Carbazole	mg/kg-dry	T	<0.37	:	-		<0.37	:	<0.35	:	<0.69	:	<0.34	:
Chrysene	mg/kg-dry	T	<0.37	:	-		<0.37	:	<0.35	:	<0.69	:	0.04	J
Dibenz(a,h)anthracene	mg/kg-dry	T	<0.37	J	-		<0.37	J	<0.35	J	<0.69	:	<0.34	J
Dibenzofuran	mg/kg-dry	T	<0.37	:	-		<0.37	:	<0.35	:	<0.69	:	<0.34	:
Dichlorodiisopropyl ether	mg/kg-dry	T	<0.37	:	-		<0.37	:	<0.35	:	<0.69	:	<0.34	:
Diethylphthalate	mg/kg-dry	T	<0.37	:	-		<0.37	:	<0.35	:	<0.69	:	<0.34	:
Dimethylphthalate	mg/kg-dry	T	<0.37	:	-		<0.37	:	<0.35	:	<0.69	:	<0.34	:
Di-n-Butyl phthalate	mg/kg-dry	T	<0.37	:	-		<0.37	:	0.03	J	<0.69	:	<0.34	:
Di-n-Octyl phthalate	mg/kg-dry	T	<0.37	:	-		<0.37	:	<0.35	:	<0.69	:	<0.34	:
Fluoranthene	mg/kg-dry	T	<0.37	:	-		<0.37	:	<0.35	:	<0.69	:	0.059	J

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T = Total Fraction

Appendix A-7a
Soil - Biased 0-6 inches
Validated Analytical Results

Parameter	Units	Exposure Area Fraction	Site ID / Sample Date / Sample ID					
			MSS1-89 1/12/2003 MSS1-89-T01N-SOL	MSS1-90 1/12/2003 MSS1-90-T01N-SOL DL	MSS1-90 1/12/2003 MSS1-90-T01N-SOL	MSS1-91 1/12/2003 MSS1-91-T01N-SOL	MSS1-92 1/17/2003 MSS1-92-T01N-SOL	MSS1-93 1/17/2003 MSS1-93-T01N-SOL
			SS1	SS1	SS1	SS1	SS1	SS1
Fluorene	mg/kg-dry	T	<0.37 :	-	<0.37 :	<0.35 :	<0.69 :	<0.34 :
Hexachlorobenzene	mg/kg-dry	T	<0.37 :	-	<0.37 :	<0.35 :	<0.69 :	<0.34 :
Hexachlorobutadiene	mg/kg-dry	T	<0.37 :	-	<0.37 :	<0.35 :	<0.69 :	<0.34 :
Hexachlorocyclopentadiene	mg/kg-dry	T	<0.37 :	-	<0.37 :	<0.35 :	<0.69 :	<0.34 :
Hexachloroethane	mg/kg-dry	T	<0.37 :	-	<0.37 :	<0.35 :	<0.69 :	<0.34 :
Indeno(1,2,3-cd)pyrene	mg/kg-dry	T	<0.37 :	-	<0.37 :	<0.35 :	<0.69 :	0.017 J
Isophorone	mg/kg-dry	T	<0.37 :	-	<0.37 :	<0.35 :	<0.69 :	<0.34 :
Naphthalene	mg/kg-dry	T	<0.37 :	-	<0.37 :	<0.35 :	<0.69 :	<0.34 :
Nitrobenzene	mg/kg-dry	T	<0.37 :	-	<0.37 :	<0.35 :	<0.69 :	<0.34 :
N-Nitrosodi-n-propylamine	mg/kg-dry	T	<0.37 :	-	<0.37 :	<0.35 :	<0.69 :	<0.34 :
N-Nitrosodiphenylamine	mg/kg-dry	T	<0.37 :	-	<0.37 :	<0.35 :	<0.69 :	<0.34 :
Pentachlorophenol	mg/kg-dry	T	<0.92 J	-	<0.92 J	<0.87 J	<1.7 :	<0.86 :
Phenanthrene	mg/kg-dry	T	<0.37 :	-	<0.37 :	<0.35 :	0.038 J	0.026 J
Phenol	mg/kg-dry	T	<0.37 :	-	<0.37 :	0.22 J	<0.69 :	<0.34 :
Pyrene	mg/kg-dry	T	<0.37 :	-	<0.37 :	<0.35 :	<0.69 :	0.077 J
Pesticides-PCBs								
Aroclor 1016	mg/kg-dry	T	<0.037 :	-	<0.037 :	<0.035 :	<0.035 :	<0.034 :
Aroclor 1221	mg/kg-dry	T	<0.074 :	-	<0.074 :	<0.07 :	<0.071 :	<0.07 :
Aroclor 1232	mg/kg-dry	T	<0.037 :	-	<0.037 :	<0.035 :	<0.035 :	<0.034 :
Aroclor 1242	mg/kg-dry	T	<0.037 :	-	<0.037 :	<0.035 :	<0.035 :	<0.034 :
Aroclor 1248	mg/kg-dry	T	<0.037 :	1.5 J	-	<0.035 :	<0.035 :	0.034 J
Aroclor 1254	mg/kg-dry	T	1.1 :	-	<0.037 :	0.14 :	0.027 J	0.053 :
Aroclor 1260	mg/kg-dry	T	<0.037 :	-	0.11 :	0.056 :	<0.035 :	<0.034 :

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T = Total Fraction

Appendix A-7a
Soil - Biased 0-6 inches
Validated Analytical Results

Parameter	Units	Exposure Area Fraction	Site ID	MSS1-94	MSS1-95	MSS1-96	MSS1-97	MSS1-98	MSS1-99
			Sample Date	1/16/2003	1/16/2003	1/17/2003	1/16/2003	1/16/2003	1/19/2003
			Sample ID	MSS1-94-T01N-SOL	MSS1-95-T01N-SOL	MSS1-96-T01N-SOL	MSS1-97-T01N-SOL	MSS1-98-T01N-SOL	MSS1-99-T01N-SOL
			Exposure Area	SS1	SS1	SS1	SS1	SS1	SS1
General Chemistry									
Ammonia	mg/kg-dry	T		12.2 :	8.7 :	10. J	10.3 :	10.6 :	7.8 :
Chloride	mg/kg-dry	T		36. :	26.9 :	16.4 :	3.5 :	6.5 :	16.1 :
Fluoride	mg/kg-dry	T		1.4 J	0.94 J	0.96 J	3.2 J	2.9 J	1.7 J
Nitrate	mg/kg-dry	T		<2.1 J	6.6 J	3.8 J	2.4 J	2.6 J	11.8 J
Phosphorus	mg/kg-dry	T		2390. :	1100. :	920. :	1460. :	1150. :	1470. :
Sulfate	mg/kg-dry	T		85.1 :	2640. :	363. :	1930. :	755. :	3570. J
Total Kjeldahl Nitrogen	mg/kg-dry	T		191. :	42.5 :	140. :	46.7 :	94.1 :	207. J
Total Organic Carbon	mg/kg-dry	T		54200. J	4440. J	1380. J	360. J	1780. J	218. J
Laboratory Parameters									
pH	SU	T		8.2 :	7.9 :	7.6 :	7.2 :	8.7 :	7.4 :
Solids, Percent	%	T		95.9 :	97.1 :	95.5 :	93.6 :	95.1 :	98.1 :
Solids, Percent - VOCs Only	%	T		-	-	96.2 :	-	-	-
Specific Conductance	umhos/cm	T		1490. J	2070. J	751. J	1870. J	1330. J	1940. J
Geotechnical									
Organic Soils	%	T		6.9 :	1.5 :	1.3 :	1.3 :	1.2 :	0.9 :
Physical Properties									
Cation-Exchange Capacity	meq/100g	T		12.4 :	5.6 :	20.7 :	9.9 :	8.9 :	6.9 :
Sodium Absorption Ratio	ratio	T		0.58 :	0.42 :	0.2 :	0.16 :	0.19 :	0.46 :
Metals									
Aluminum	mg/kg-dry	T		12100. :	10500. :	10000. J	10600. :	10200. :	12300. :
Antimony	mg/kg-dry	T		<0.3 J	<0.27 J	<0.29 J	<0.3 J	<0.29 J	<0.28 J
Arsenic	mg/kg-dry	T		1.9 J	<0.97 J	2. J	3. J	2. J	2.6 J
Barium	mg/kg-dry	T		90.5 :	77.1 :	41.3 J	72.5 :	53.7 :	90.3 :
Beryllium	mg/kg-dry	T		1.7 :	1.3 :	1.9 J	1.7 :	2.1 :	2. :
Boron	mg/kg-dry	T		<3.8 :	<2.9 :	<0.34 J	<3.1 :	4.4 :	<0.25 J
Cadmium	mg/kg-dry	T		1.6 :	0.25 :	1.2 :	0.69 :	0.9 :	0.73 :
Calcium	mg/kg-dry	T		20400. :	13600. :	8290. J	12400. :	10600. :	16100. :
Chromium	mg/kg-dry	T		46.3 J	41.6 J	23. J	35.4 J	31.7 J	61.1 J
Cobalt	mg/kg-dry	T		8.6 :	8.3 :	3.9 :	4.7 :	4. :	6.4 :
Copper	mg/kg-dry	T		197. J	128. J	117. J	128. J	90.4 J	136. :
Iron	mg/kg-dry	T		23800. :	15100. :	24200. J	16800. :	11500. :	19100. :
Lead	mg/kg-dry	T		110. :	34.5 :	127. J	70.7 :	67. :	68.8 :
Magnesium	mg/kg-dry	T		8240. :	9560. :	3710. J	5770. :	5810. :	8080. :

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T = Total Fraction

Appendix A-7a
Soil - Biased 0-6 inches
Validated Analytical Results

Parameter	Units	Fraction	MSS1-94		MSS1-95		MSS1-96		MSS1-97		MSS1-98		MSS1-99	
Site ID			MSS1-94		MSS1-95		MSS1-96		MSS1-97		MSS1-98		MSS1-99	
Sample Date			1/16/2003		1/16/2003		1/17/2003		1/16/2003		1/16/2003		1/19/2003	
Sample ID			MSS1-94-T01N-SOL		MSS1-95-T01N-SOL		MSS1-96-T01N-SOL		MSS1-97-T01N-SOL		MSS1-98-T01N-SOL		MSS1-99-T01N-SOL	
Exposure Area			SS1		SS1		SS1		SS1		SS1		SS1	
Manganese	mg/kg-dry	T	762.	:	481.	:	1920.	:	573.	:	2140.	:	760.	:
Mercury	mg/kg-dry	T	<0.017	:	<0.016	:	<0.017	:	<0.017	:	<0.016	:	<0.016	:
Molybdenum	mg/kg-dry	T	2680.	:	1240.	:	1150.	:	2310.	:	1530.	:	2540.	:
Nickel	mg/kg-dry	T	36.3	:	28.4	:	17.8	J	28.	:	17.8	:	36.9	:
Potassium	mg/kg-dry	T	4610.	J	5590.	J	3160.	J	4130.	J	3510.	J	4680.	J
Selenium	mg/kg-dry	T	1.2	J	1.	J	<0.78	J	<0.81	J	<0.78	J	<0.74	J
Silver	mg/kg-dry	T	1.9	:	0.46	:	1.5	:	2.4	:	0.8	:	0.91	:
Sodium	mg/kg-dry	T	<71.6	:	<31.5	:	<59.9	:	<80.7	:	<31.9	:	<68.7	:
Thallium	mg/kg-dry	T	0.52	:	0.52	:	0.32	:	0.53	:	0.36	:	0.54	:
Vanadium	mg/kg-dry	T	54.7	:	51.1	:	31.5	J	41.2	:	35.8	:	51.6	:
Zinc	mg/kg-dry	T	254.	:	94.	:	232.	J	124.	:	144.	:	170.	:
Volatile Organics														
1,1,1-Trichloroethane	mg/kg-dry	T	<0.011	:	<0.006	J	<0.006	:	<0.004	:	<0.007	:	<0.005	:
1,1,2,2-Tetrachloroethane	mg/kg-dry	T	<0.011	:	<0.006	J	<0.006	:	<0.004	:	<0.007	:	<0.005	:
1,1,2-Trichloro-1,2,2-trifluoroethane	mg/kg-dry	T	<0.011	:	<0.006	J	<0.006	:	<0.004	:	<0.007	:	<0.005	:
1,1,2-Trichloroethane	mg/kg-dry	T	<0.011	:	<0.006	J	<0.006	:	<0.004	:	<0.007	:	<0.005	:
1,1-Dichloroethane	mg/kg-dry	T	<0.011	:	<0.006	J	<0.006	:	<0.004	:	<0.007	:	<0.005	:
1,1-Dichloroethene	mg/kg-dry	T	<0.011	:	<0.006	J	<0.006	:	<0.004	:	<0.007	:	<0.005	:
1,2,4-Trichlorobenzene	mg/kg-dry	T	<0.011	:	<0.006	J	<0.006	:	<0.004	:	<0.007	:	<0.005	:
1,2-Dibromo-3-chloropropane	mg/kg-dry	T	<0.011	:	<0.006	J	<0.006	:	<0.004	:	<0.007	:	<0.005	:
1,2-Dichlorobenzene	mg/kg-dry	T	<0.011	:	<0.006	J	<0.006	:	<0.004	:	<0.007	:	<0.005	:
1,2-Dichloroethane	mg/kg-dry	T	<0.011	:	<0.006	J	<0.006	:	<0.004	:	<0.007	:	<0.005	:
1,2-Dichloroethene (total)	mg/kg-dry	T	<0.011	:	<0.006	J	<0.006	:	<0.004	:	<0.007	:	<0.005	:
1,2-Dichloropropane	mg/kg-dry	T	<0.011	:	<0.006	J	<0.006	:	<0.004	:	<0.007	:	<0.005	:
1,3-Dichlorobenzene	mg/kg-dry	T	<0.011	:	<0.006	J	<0.006	:	<0.004	:	<0.007	:	<0.005	:
1,4-Dichlorobenzene	mg/kg-dry	T	<0.011	:	<0.006	J	<0.006	:	<0.004	:	<0.007	:	<0.005	:
2-Butanone	mg/kg-dry	T	0.003	J	<0.006	J	<0.006	:	<0.004	:	<0.007	:	<0.005	:
2-Hexanone	mg/kg-dry	T	<0.011	:	<0.006	J	<0.006	:	<0.004	:	<0.007	:	<0.005	:
4-Methyl-2-pentanone	mg/kg-dry	T	<0.011	:	<0.006	J	<0.006	:	<0.004	:	<0.007	:	<0.005	:
Acetone	mg/kg-dry	T	0.006	J	0.002	J	0.002	J	0.0009	J	0.004	J	0.0009	J
Benzene	mg/kg-dry	T	<0.011	:	<0.006	J	<0.006	:	<0.004	:	<0.007	:	<0.005	:
Bromodichloromethane	mg/kg-dry	T	<0.011	:	<0.006	J	<0.006	:	<0.004	:	<0.007	:	<0.005	:
Bromoform	mg/kg-dry	T	<0.011	:	<0.006	J	<0.006	:	<0.004	:	<0.007	:	<0.005	:
Bromomethane	mg/kg-dry	T	<0.011	:	<0.006	J	<0.006	:	<0.004	:	<0.007	:	<0.005	:

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T = Total Fraction

Appendix A-7a
Soil - Biased 0-6 inches
Validated Analytical Results

Parameter	Units	Exposure Area Fraction	Site ID / Sample Date / Sample ID		MSS1-94 1/16/2003 MSS1-94-T01N-SOL SS1		MSS1-95 1/16/2003 MSS1-95-T01N-SOL SS1		MSS1-96 1/17/2003 MSS1-96-T01N-SOL SS1		MSS1-97 1/16/2003 MSS1-97-T01N-SOL SS1		MSS1-98 1/16/2003 MSS1-98-T01N-SOL SS1		MSS1-99 1/19/2003 MSS1-99-T01N-SOL SS1	
Carbon disulfide	mg/kg-dry	T		<0.011	:	<0.006	J	<0.006	:	<0.004	:	<0.007	:	<0.005	:
Carbon tetrachloride	mg/kg-dry	T		<0.011	:	<0.006	J	<0.006	:	<0.004	:	<0.007	:	<0.005	:
Chlorobenzene	mg/kg-dry	T		<0.011	:	<0.006	J	<0.006	:	<0.004	:	<0.007	:	<0.005	:
Chloroethane	mg/kg-dry	T		<0.011	:	<0.006	J	<0.006	:	<0.004	:	<0.007	:	<0.005	:
Chloroform	mg/kg-dry	T		<0.011	:	<0.006	J	<0.006	:	<0.004	:	<0.007	:	<0.005	:
Chloromethane	mg/kg-dry	T		<0.011	:	<0.006	J	<0.006	:	<0.004	:	<0.007	:	<0.005	:
cis-1,2-Dichloroethene	mg/kg-dry	T		<0.011	:	<0.006	J	<0.006	:	<0.004	:	<0.007	:	<0.005	:
cis-1,3-Dichloropropene	mg/kg-dry	T		<0.011	:	<0.006	J	<0.006	:	<0.004	:	<0.007	:	<0.005	:
Dibromochloromethane	mg/kg-dry	T		<0.011	:	<0.006	J	<0.006	:	<0.004	:	<0.007	:	<0.005	:
Dichlorodifluoromethane	mg/kg-dry	T		<0.011	:	<0.006	J	<0.006	:	<0.004	:	<0.007	:	<0.005	:
Ethylbenzene	mg/kg-dry	T		<0.011	:	<0.006	J	<0.006	:	<0.004	:	<0.007	:	0.002	J
Methylene chloride	mg/kg-dry	T		<0.011	:	<0.006	J	<0.006	:	<0.004	:	<0.007	:	<0.005	:
Styrene	mg/kg-dry	T		<0.011	:	<0.006	J	<0.006	:	<0.004	:	<0.007	:	<0.005	:
Tetrachloroethene	mg/kg-dry	T		<0.011	:	<0.006	J	<0.006	:	<0.004	:	<0.007	:	<0.005	:
Toluene	mg/kg-dry	T		<0.011	:	<0.006	J	<0.006	:	<0.004	:	<0.007	:	<0.005	:
Total Xylene	mg/kg-dry	T		0.002	J	<0.006	J	<0.006	:	0.001	J	0.002	J	0.012	:
trans-1,2-Dichloroethene	mg/kg-dry	T		<0.011	:	<0.006	J	<0.006	:	<0.004	:	<0.007	:	<0.005	:
trans-1,3-Dichloropropene	mg/kg-dry	T		<0.011	:	<0.006	J	<0.006	:	<0.004	:	<0.007	:	<0.005	:
Trichloroethene	mg/kg-dry	T		<0.011	:	<0.006	J	<0.006	:	<0.004	:	<0.007	:	<0.005	:
Trichlorofluoromethane	mg/kg-dry	T		<0.011	:	<0.006	J	<0.006	:	<0.004	:	<0.007	:	<0.005	:
Vinyl chloride	mg/kg-dry	T		<0.011	:	<0.006	J	<0.006	:	<0.004	:	<0.007	:	<0.005	:
Semi-Volatile Organics																
1,1`-Biphenyl	mg/kg-dry	T		<1.7	:	<0.34	:	<0.34	:	<0.35	:	<0.35	:	<0.34	:
2,4,5-Trichlorophenol	mg/kg-dry	T		<4.3	:	<0.86	:	<0.86	:	<0.88	:	<0.87	:	<0.85	:
2,4,6-Trichlorophenol	mg/kg-dry	T		<1.7	:	<0.34	:	<0.34	:	<0.35	:	<0.35	:	<0.34	:
2,4-Dichlorophenol	mg/kg-dry	T		<1.7	:	<0.34	:	<0.34	:	<0.35	:	<0.35	:	<0.34	:
2,4-Dimethylphenol	mg/kg-dry	T		<1.7	:	<0.34	:	<0.34	:	<0.35	:	<0.35	:	<0.34	:
2,4-Dinitrophenol	mg/kg-dry	T		<4.3	J	<0.86	:	<0.86	:	<0.88	:	<0.87	:	<0.85	:
2,4-Dinitrotoluene	mg/kg-dry	T		<1.7	:	<0.34	:	<0.34	:	<0.35	:	<0.35	:	<0.34	:
2,6-Dinitrotoluene	mg/kg-dry	T		<1.7	:	<0.34	:	<0.34	:	<0.35	:	<0.35	:	<0.34	:
2-Chloronaphthalene	mg/kg-dry	T		<1.7	:	<0.34	:	<0.34	:	<0.35	:	<0.35	:	<0.34	:
2-Chlorophenol	mg/kg-dry	T		<1.7	:	<0.34	:	<0.34	:	<0.35	:	<0.35	:	<0.34	:
2-Methylnaphthalene	mg/kg-dry	T		<1.7	:	<0.34	:	<0.34	:	<0.35	:	<0.35	:	<0.34	:
2-Methylphenol	mg/kg-dry	T		<1.7	:	<0.34	:	<0.34	:	<0.35	:	<0.35	:	<0.34	:

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R = Qualified as rejected value from data validation and results are considered unusable for any purpose
T = Total Fraction

Appendix A-7a
Soil - Biased 0-6 inches
Validated Analytical Results

Parameter	Units	Exposure Area Fraction	Site ID		Sample Date		Sample ID																	
			MSS1-94		MSS1-95		MSS1-96		MSS1-97		MSS1-98		MSS1-99											
			1/16/2003		1/16/2003		1/17/2003		1/16/2003		1/16/2003		1/19/2003											
			MSS1-94-T01N-SOL		MSS1-95-T01N-SOL		MSS1-96-T01N-SOL		MSS1-97-T01N-SOL		MSS1-98-T01N-SOL		MSS1-99-T01N-SOL											
			SS1		SS1		SS1		SS1		SS1		SS1											
2-Nitroaniline	mg/kg-dry	T	<4.3	:	<0.86	:	<0.86	:	<0.88	:	<0.87	:	<0.85	:										
2-Nitrophenol	mg/kg-dry	T	<1.7	:	<0.34	:	<0.34	:	<0.35	:	<0.35	:	<0.34	:										
3,3-Dichlorobenzidine	mg/kg-dry	T	<1.7	:	<0.34	:	<0.34	:	<0.35	:	<0.35	:	<0.34	:										
3-Nitroaniline	mg/kg-dry	T	<4.3	J	<0.86	:	<0.86	:	<0.88	:	<0.87	:	<0.85	J										
4,6-Dinitro-2-methylphenol	mg/kg-dry	T	<4.3	J	<0.86	:	<0.86	:	<0.88	:	<0.87	:	<0.85	:										
4-Bromophenyl phenyl ether	mg/kg-dry	T	<1.7	:	<0.34	:	<0.34	:	<0.35	:	<0.35	:	<0.34	:										
4-Chloro-3-methylphenol	mg/kg-dry	T	<1.7	:	<0.34	:	<0.34	:	<0.35	:	<0.35	:	<0.34	:										
4-Chloroaniline	mg/kg-dry	T	<1.7	J	<0.34	:	<0.34	:	<0.35	:	<0.35	:	<0.34	:										
4-Chlorophenyl phenyl ether	mg/kg-dry	T	<1.7	:	<0.34	:	<0.34	:	<0.35	:	<0.35	:	<0.34	:										
4-Methylphenol	mg/kg-dry	T	<1.7	:	<0.34	:	<0.34	:	<0.35	:	<0.35	:	<0.34	:										
4-Nitroaniline	mg/kg-dry	T	<4.3	J	<0.86	J	<0.86	:	<0.88	J	<0.87	J	<0.85	:										
4-Nitrophenol	mg/kg-dry	T	<4.3	:	<0.86	:	<0.86	:	<0.88	:	<0.87	:	<0.85	:										
Acenaphthene	mg/kg-dry	T	<1.7	:	<0.34	:	<0.34	:	<0.35	:	<0.35	:	<0.34	:										
Acenaphthylene	mg/kg-dry	T	<1.7	:	<0.34	:	<0.34	:	<0.35	:	<0.35	:	<0.34	:										
Anthracene	mg/kg-dry	T	<1.7	:	<0.34	:	<0.34	:	<0.35	:	<0.35	:	<0.34	:										
Benzaldehyde	mg/kg-dry	T	<1.7	:	<0.34	:	<0.34	J	<0.35	:	<0.35	:	<0.34	:										
Benzo(a)anthracene	mg/kg-dry	T	<1.7	:	<0.34	:	<0.34	:	<0.35	:	<0.35	:	<0.34	:										
Benzo(a)pyrene	mg/kg-dry	T	<1.7	:	<0.34	:	<0.34	:	<0.35	:	<0.35	:	<0.34	:										
Benzo(b)fluoranthene	mg/kg-dry	T	<1.7	:	<0.34	:	<0.34	:	<0.35	:	<0.35	:	<0.34	:										
Benzo(g,h,i)perylene	mg/kg-dry	T	<1.7	:	<0.34	:	<0.34	:	<0.35	:	<0.35	:	<0.34	:										
Benzo(k)fluoranthene	mg/kg-dry	T	<1.7	:	<0.34	:	<0.34	:	<0.35	:	<0.35	:	<0.34	:										
Bis(2-chloroethoxy)methane	mg/kg-dry	T	<1.7	:	<0.34	:	<0.34	:	<0.35	:	<0.35	:	<0.34	:										
Bis(2-chloroethyl)ether	mg/kg-dry	T	<1.7	:	<0.34	:	<0.34	:	<0.35	:	<0.35	:	<0.34	:										
Bis(2-ethylhexyl)phthalate	mg/kg-dry	T	<1.7	:	<0.34	:	0.086	J	0.042	J	0.065	J	0.033	J										
Butyl benzyl phthalate	mg/kg-dry	T	<1.7	:	<0.34	:	<0.34	:	<0.35	:	<0.35	:	<0.34	:										
Carbazole	mg/kg-dry	T	<1.7	:	<0.34	:	<0.34	:	<0.35	:	<0.35	:	<0.34	:										
Chrysene	mg/kg-dry	T	<1.7	:	<0.34	:	<0.34	:	<0.35	:	<0.35	:	<0.34	:										
Dibenz(a,h)anthracene	mg/kg-dry	T	<1.7	:	<0.34	:	<0.34	:	<0.35	:	<0.35	:	<0.34	:										
Dibenzofuran	mg/kg-dry	T	<1.7	:	<0.34	:	<0.34	:	<0.35	:	<0.35	:	<0.34	:										
Dichlorodiisopropyl ether	mg/kg-dry	T	<1.7	:	<0.34	:	<0.34	:	<0.35	:	<0.35	:	<0.34	:										
Diethylphthalate	mg/kg-dry	T	<1.7	:	<0.34	:	<0.34	:	<0.35	:	<0.35	:	<0.34	:										
Dimethylphthalate	mg/kg-dry	T	<1.7	:	<0.34	:	<0.34	:	<0.35	:	<0.35	:	<0.34	:										
Di-n-Butyl phthalate	mg/kg-dry	T	0.081	J	<0.34	:	0.021	J	0.026	J	0.022	J	<0.34	:										
Di-n-Octyl phthalate	mg/kg-dry	T	<1.7	J	<0.34	:	<0.34	:	<0.35	:	<0.35	:	<0.34	:										

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R = Qualified as rejected value from data validation and results are considered unusable for any purpose

T = Total Fraction

Appendix A-7a
Soil - Biased 0-6 inches
Validated Analytical Results

Parameter	Units	Exposure Area Fraction	Site ID / Sample Date / Sample ID / Exposure Area		MSS1-94 1/16/2003 MSS1-94-T01N-SOL SS1		MSS1-95 1/16/2003 MSS1-95-T01N-SOL SS1		MSS1-96 1/17/2003 MSS1-96-T01N-SOL SS1		MSS1-97 1/16/2003 MSS1-97-T01N-SOL SS1		MSS1-98 1/16/2003 MSS1-98-T01N-SOL SS1		MSS1-99 1/19/2003 MSS1-99-T01N-SOL SS1	
Fluoranthene	mg/kg-dry	T			<1.7	:	<0.34	:	<0.34	:	<0.35	:	<0.35	:	<0.34	:
Fluorene	mg/kg-dry	T			<1.7	:	<0.34	:	<0.34	:	<0.35	:	<0.35	:	<0.34	:
Hexachlorobenzene	mg/kg-dry	T			<1.7	:	<0.34	:	<0.34	:	<0.35	:	<0.35	:	<0.34	:
Hexachlorobutadiene	mg/kg-dry	T			<1.7	:	<0.34	:	<0.34	:	<0.35	:	<0.35	:	<0.34	:
Hexachlorocyclopentadiene	mg/kg-dry	T			<1.7	:	<0.34	:	<0.34	:	<0.35	:	<0.35	:	<0.34	:
Hexachloroethane	mg/kg-dry	T			<1.7	:	<0.34	:	<0.34	:	<0.35	:	<0.35	:	<0.34	:
Indeno(1,2,3-cd)pyrene	mg/kg-dry	T			<1.7	:	<0.34	:	<0.34	:	<0.35	:	<0.35	:	<0.34	:
Isophorone	mg/kg-dry	T			<1.7	:	<0.34	:	<0.34	:	<0.35	:	<0.35	:	<0.34	:
Naphthalene	mg/kg-dry	T			<1.7	:	<0.34	:	<0.34	:	<0.35	:	<0.35	:	<0.34	:
Nitrobenzene	mg/kg-dry	T			<1.7	:	<0.34	:	<0.34	:	<0.35	:	<0.35	:	<0.34	:
N-Nitrosodi-n-propylamine	mg/kg-dry	T			<1.7	:	<0.34	:	<0.34	:	<0.35	:	<0.35	:	<0.34	:
N-Nitrosodiphenylamine	mg/kg-dry	T			<1.7	:	<0.34	:	<0.34	:	<0.35	:	<0.35	:	<0.34	:
Pentachlorophenol	mg/kg-dry	T			<4.3	J	<0.86	:	<0.86	:	<0.88	:	<0.87	:	<0.85	:
Phenanthrene	mg/kg-dry	T			<1.7	:	<0.34	:	<0.34	:	<0.35	:	<0.35	:	<0.34	:
Phenol	mg/kg-dry	T			<1.7	:	<0.34	:	<0.34	:	<0.35	:	<0.35	:	<0.34	:
Pyrene	mg/kg-dry	T			<1.7	:	<0.34	:	<0.34	:	<0.35	:	<0.35	:	<0.34	:
Pesticides-PCBs																
Aroclor 1016	mg/kg-dry	T			<0.034	:	<0.034	:	<0.034	:	<0.035	:	<0.035	:	<0.034	:
Aroclor 1221	mg/kg-dry	T			<0.07	:	<0.069	:	<0.07	:	<0.071	:	<0.071	:	<0.068	:
Aroclor 1232	mg/kg-dry	T			<0.034	:	<0.034	:	<0.034	:	<0.035	:	<0.035	:	<0.034	:
Aroclor 1242	mg/kg-dry	T			<0.034	:	<0.034	:	<0.034	:	<0.035	:	<0.035	:	<0.034	:
Aroclor 1248	mg/kg-dry	T			<0.034	:	<0.034	:	<0.034	:	<0.035	:	<0.035	:	<0.034	:
Aroclor 1254	mg/kg-dry	T			<0.034	:	<0.034	:	<0.034	:	<0.035	:	<0.035	:	<0.034	:
Aroclor 1260	mg/kg-dry	T			<0.034	:	<0.034	:	<0.034	:	<0.035	:	<0.035	:	<0.034	:

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T = Total Fraction

Appendix A-7a
Soil - Biased 0-6 inches
Validated Analytical Results

Parameter	Units	Exposure Area Fraction	Site ID	MSS2-11	MSS2-12	MSS2-13	MSS2-14	MSS2-15	MSS2-16
			Sample Date	10/22/2002	10/22/2002	10/22/2002	10/22/2002	10/23/2002	10/23/2002
			Sample ID	MSS2-11-T01N-SOL	MSS2-12-T01N-SOL	MSS2-13-T01N-SOL	MSS2-14-T01N-SOL	MSS2-15-T01N-SOL	MSS2-16-T01N-SOL
			Exposure Area	SS2	SS2	SS2	SS2	SS2	SS2
General Chemistry									
Ammonia	mg/kg-dry	T		11.1 :	23.5 :	23.3 :	17. :	30. :	23.3 :
Chloride	mg/kg-dry	T		87.8 J	707. J	160. J	117. :	101. J	76.5 J
Fluoride	mg/kg-dry	T		1.9 J	2.2 J	2.3 J	1. J	2.3 J	0.94 J
Nitrate	mg/kg-dry	T		4.1 J	15.4 J	2.2 J	<2.1 J	<2.2 J	<2.2 J
Phosphorus	mg/kg-dry	T		732. J	766. J	89.9 J	963. J	317. J	1550. J
Sulfate	mg/kg-dry	T		4320. J	3840. J	1910. J	573. J	6900. J	16100. J
Total Kjeldahl Nitrogen	mg/kg-dry	T		328. :	98.8 :	98.7 :	71.5 J	78.1 :	95.8 :
Total Organic Carbon	mg/kg-dry	T		<105. J	424. J	3880. J	2220. J	1210. J	4640. J
Laboratory Parameters									
pH	SU	T		7.5 :	7.6 :	7.6 :	6.9 :	7.5 :	4.1 :
Solids, Percent	%	T		95.4 :	95.8 :	95.2 :	95.1 :	90.6 :	90.1 :
Specific Conductance	umhos/cm	T		897. :	1390. :	959. :	1090. J	1360. :	2090. :
Geotechnical									
Organic Soils	%	T		1.62 J	1.89 J	2.01 J	2.49 J	2.03 J	3.22 J
Physical Properties									
Cation-Exchange Capacity	meq/100g	T		35.7 :	43.5 :	42.8 :	2.5 :	12.8 :	15.3 :
Sodium Absorption Ratio	ratio	T		0.72 :	2.01 :	1.21 :	1.08 :	1.05 :	0.22 :
Metals									
Aluminum	mg/kg-dry	T		10700. :	11000. :	12200. :	11200. :	10600. :	15100. :
Antimony	mg/kg-dry	T		<0.24 J	<0.25 J	<0.23 J	<0.25 J	<0.27 J	<0.28 J
Arsenic	mg/kg-dry	T		2.2 :	3.1 :	2.7 :	2.5 :	3. :	3.4 :
Barium	mg/kg-dry	T		118. :	144. :	121. :	228. :	181. :	155. :
Beryllium	mg/kg-dry	T		0.8 :	0.79 :	0.83 :	0.81 :	0.78 :	0.74 :
Boron	mg/kg-dry	T		<0.2 J	<0.21 J	<0.47 J	<1.2 :	<0.22 J	<0.23 J
Cadmium	mg/kg-dry	T		0.52 :	0.42 :	0.57 :	0.54 :	1.4 :	0.39 :
Calcium	mg/kg-dry	T		8440. :	7900. :	9800. :	7510. :	9040. :	10300. :
Chromium	mg/kg-dry	T		22.6 :	30.2 :	32.5 :	32.7 :	26.6 :	50. :
Cobalt	mg/kg-dry	T		7.9 :	9. :	9.5 :	7.9 :	8.7 :	10.7 :
Copper	mg/kg-dry	T		45.5 :	64.1 :	65.1 :	109. :	95. :	77.5 :
Iron	mg/kg-dry	T		20800. :	23100. :	23800. :	38100. :	28900. :	33400. :
Lead	mg/kg-dry	T		57.6 :	44.3 :	45.9 :	77.2 :	80.2 :	50.5 :
Magnesium	mg/kg-dry	T		5850. :	6170. :	7080. :	5350. :	5800. :	7100. :
Manganese	mg/kg-dry	T		558. J	506. J	500. J	474. J	597. J	391. J

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T = Total Fraction

Appendix A-7a
Soil - Biased 0-6 inches
Validated Analytical Results

Parameter	Units	Exposure Area Fraction	Site ID	MSS2-11	MSS2-12	MSS2-13	MSS2-14	MSS2-15	MSS2-16
			Sample Date	10/22/2002	10/22/2002	10/22/2002	10/22/2002	10/23/2002	10/23/2002
			Sample ID	MSS2-11-T01N-SOL	MSS2-12-T01N-SOL	MSS2-13-T01N-SOL	MSS2-14-T01N-SOL	MSS2-15-T01N-SOL	MSS2-16-T01N-SOL
			Exposure Area	SS2	SS2	SS2	SS2	SS2	SS2
Mercury	mg/kg-dry	T		<0.017 :	<0.017 :	<0.017 :	<0.017 :	<0.017 :	<0.017 :
Molybdenum	mg/kg-dry	T		46.8 :	98.3 :	193. :	87.2 :	143. :	167. :
Nickel	mg/kg-dry	T		16.1 J	20.3 J	22.9 J	19.6 J	19.8 J	36.6 J
Potassium	mg/kg-dry	T		2230. J	2580. J	2840. J	3470. J	3170. J	4340. J
Selenium	mg/kg-dry	T		0.66 J	<0.66 J	0.7 J	0.79 J	0.73 J	1.1 J
Silver	mg/kg-dry	T		0.56 :	0.59 :	0.52 :	0.66 :	0.74 :	0.47 :
Sodium	mg/kg-dry	T		48.1 J	248. :	59.6 J	449. :	<240. :	<309. :
Thallium	mg/kg-dry	T		0.14 :	0.15 :	0.2 :	0.3 :	0.26 :	0.36 :
Vanadium	mg/kg-dry	T		27.9 :	31.5 :	37.8 :	35.7 :	33.9 :	41.8 :
Zinc	mg/kg-dry	T		104. J	93. J	98.5 J	102. J	178. J	85.6 J
Volatile Organics									
1,1,1-Trichloroethane	mg/kg-dry	T		<0.009 :	<0.009 :	<0.01 :	<0.006 :	<0.011 :	<0.009 :
1,1,2,2-Tetrachloroethane	mg/kg-dry	T		<0.009 :	<0.009 :	<0.01 :	<0.006 :	<0.011 :	<0.009 :
1,1,2-Trichloro-1,2,2-trifluoroethane	mg/kg-dry	T		<0.009 :	<0.009 :	<0.01 :	<0.006 :	<0.011 :	<0.009 :
1,1,2-Trichloroethane	mg/kg-dry	T		<0.009 :	<0.009 :	<0.01 :	<0.006 :	<0.011 :	<0.009 :
1,1-Dichloroethane	mg/kg-dry	T		<0.009 :	<0.009 :	<0.01 :	<0.006 :	<0.011 :	<0.009 :
1,1-Dichloroethene	mg/kg-dry	T		<0.009 :	<0.009 :	<0.01 :	<0.006 :	<0.011 :	<0.009 :
1,2,4-Trichlorobenzene	mg/kg-dry	T		<0.009 :	<0.009 :	<0.01 :	<0.006 :	<0.011 :	<0.009 :
1,2-Dibromo-3-chloropropane	mg/kg-dry	T		<0.009 :	<0.009 :	<0.01 :	<0.006 :	<0.011 :	<0.009 :
1,2-Dichlorobenzene	mg/kg-dry	T		<0.009 :	<0.009 :	<0.01 :	<0.006 :	<0.011 :	<0.009 :
1,2-Dichloroethane	mg/kg-dry	T		<0.009 :	<0.009 :	<0.01 :	<0.006 :	<0.011 :	<0.009 :
1,2-Dichloroethene (total)	mg/kg-dry	T		<0.009 :	<0.009 :	<0.01 :	<0.006 :	<0.011 :	<0.009 :
1,2-Dichloropropane	mg/kg-dry	T		<0.009 :	<0.009 :	<0.01 :	<0.006 :	<0.011 :	<0.009 :
1,3-Dichlorobenzene	mg/kg-dry	T		<0.009 :	<0.009 :	<0.01 :	<0.006 :	<0.011 :	<0.009 :
1,4-Dichlorobenzene	mg/kg-dry	T		<0.009 :	<0.009 :	<0.01 :	<0.006 :	<0.011 :	<0.009 :
2-Butanone	mg/kg-dry	T		<0.009 :	<0.009 :	<0.01 :	<0.006 J	<0.011 :	<0.009 :
2-Hexanone	mg/kg-dry	T		<0.009 :	<0.009 :	<0.01 :	<0.006 J	<0.011 :	<0.009 :
4-Methyl-2-pentanone	mg/kg-dry	T		<0.009 :	<0.009 :	<0.01 :	<0.006 :	<0.011 :	<0.009 :
Acetone	mg/kg-dry	T		0.002 J	0.053 :	0.002 J	0.001 J	<0.011 :	0.004 J
Benzene	mg/kg-dry	T		<0.009 :	<0.009 :	<0.01 :	<0.006 :	<0.011 :	<0.009 :
Bromodichloromethane	mg/kg-dry	T		<0.009 :	<0.009 :	<0.01 :	<0.006 :	<0.011 :	<0.009 :
Bromoform	mg/kg-dry	T		<0.009 :	<0.009 :	<0.01 :	<0.006 :	<0.011 :	<0.009 :
Bromomethane	mg/kg-dry	T		<0.009 :	<0.009 :	<0.01 :	<0.006 :	<0.011 :	<0.009 :
Carbon disulfide	mg/kg-dry	T		<0.009 :	<0.009 :	<0.01 :	<0.006 :	<0.011 :	<0.009 :

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T = Total Fraction

Appendix A-7a
Soil - Biased 0-6 inches
Validated Analytical Results

Site ID			MSS2-11	MSS2-12	MSS2-13	MSS2-14	MSS2-15	MSS2-16
Sample Date			10/22/2002	10/22/2002	10/22/2002	10/22/2002	10/23/2002	10/23/2002
Sample ID			MSS2-11-T01N-SOL	MSS2-12-T01N-SOL	MSS2-13-T01N-SOL	MSS2-14-T01N-SOL	MSS2-15-T01N-SOL	MSS2-16-T01N-SOL
Exposure Area			SS2	SS2	SS2	SS2	SS2	SS2
Parameter	**Units**	**Fraction**						
Carbon tetrachloride	mg/kg-dry	T	<0.009 :	<0.009 :	<0.01 :	<0.006 :	<0.011 :	<0.009 :
Chlorobenzene	mg/kg-dry	T	<0.009 :	<0.009 :	<0.01 :	<0.006 :	<0.011 :	<0.009 :
Chloroethane	mg/kg-dry	T	<0.009 :	<0.009 :	<0.01 :	<0.006 :	<0.011 :	<0.009 :
Chloroform	mg/kg-dry	T	<0.009 :	<0.009 :	<0.01 :	<0.006 :	<0.011 :	<0.009 :
Chloromethane	mg/kg-dry	T	<0.009 J	<0.009 J	<0.01 J	<0.006 J	<0.011 :	<0.009 :
cis-1,2-Dichloroethene	mg/kg-dry	T	<0.009 :	<0.009 :	<0.01 :	<0.006 :	<0.011 :	<0.009 :
cis-1,3-Dichloropropene	mg/kg-dry	T	<0.009 :	<0.009 :	<0.01 :	<0.006 :	<0.011 :	<0.009 :
Dibromochloromethane	mg/kg-dry	T	<0.009 :	<0.009 :	<0.01 :	<0.006 :	<0.011 :	<0.009 :
Dichlorodifluoromethane	mg/kg-dry	T	<0.009 J	<0.009 J	<0.01 J	<0.006 J	<0.011 :	<0.009 :
Ethylbenzene	mg/kg-dry	T	<0.009 :	<0.009 :	<0.01 :	<0.006 :	<0.011 :	<0.009 :
Methylene chloride	mg/kg-dry	T	<0.009 :	<0.009 :	<0.01 :	<0.006 :	<0.011 :	<0.009 :
Styrene	mg/kg-dry	T	<0.009 :	<0.009 :	<0.01 :	<0.006 :	<0.011 :	<0.009 :
Tetrachloroethene	mg/kg-dry	T	<0.009 :	<0.009 :	<0.01 :	<0.006 :	<0.011 :	<0.009 :
Toluene	mg/kg-dry	T	<0.009 :	<0.009 :	<0.01 :	<0.006 :	<0.011 :	0.002 J
Total Xylene	mg/kg-dry	T	<0.009 :	<0.009 :	<0.01 :	<0.006 :	<0.011 :	<0.009 :
trans-1,2-Dichloroethene	mg/kg-dry	T	<0.009 :	<0.009 :	<0.01 :	<0.006 :	<0.011 :	<0.009 :
trans-1,3-Dichloropropene	mg/kg-dry	T	<0.009 :	<0.009 :	<0.01 :	<0.006 :	<0.011 :	<0.009 :
Trichloroethene	mg/kg-dry	T	<0.009 :	<0.009 :	<0.01 :	<0.006 :	<0.011 :	<0.009 :
Trichlorofluoromethane	mg/kg-dry	T	<0.009 :	<0.009 :	<0.01 :	<0.006 :	<0.011 :	<0.009 :
Vinyl chloride	mg/kg-dry	T	<0.009 :	<0.009 :	<0.01 J	<0.006 :	<0.011 :	<0.009 :
Semi-Volatile Organics								
1,1`-Biphenyl	mg/kg-dry	T	<0.35 :	<0.34 :	<0.35 :	<0.35 :	<0.36 :	0.053 J
2,4,5-Trichlorophenol	mg/kg-dry	T	<0.87 :	<0.86 :	<0.87 :	<0.87 :	<0.91 :	<0.92 :
2,4,6-Trichlorophenol	mg/kg-dry	T	<0.35 :	<0.34 :	<0.35 :	<0.35 :	<0.36 :	<0.37 :
2,4-Dichlorophenol	mg/kg-dry	T	<0.35 :	<0.34 :	<0.35 :	<0.35 :	<0.36 :	<0.37 :
2,4-Dimethylphenol	mg/kg-dry	T	<0.35 :	<0.34 :	<0.35 :	<0.35 :	<0.36 :	<0.37 :
2,4-Dinitrophenol	mg/kg-dry	T	<0.87 J	<0.86 J	<0.87 J	<0.87 :	<0.91 :	<0.92 :
2,4-Dinitrotoluene	mg/kg-dry	T	<0.35 :	<0.34 :	<0.35 :	<0.35 :	<0.36 :	<0.37 :
2,6-Dinitrotoluene	mg/kg-dry	T	<0.35 :	<0.34 :	<0.35 :	<0.35 :	<0.36 :	<0.37 :
2-Chloronaphthalene	mg/kg-dry	T	<0.35 :	<0.34 :	<0.35 :	<0.35 :	<0.36 :	<0.37 :
2-Chlorophenol	mg/kg-dry	T	<0.35 :	<0.34 :	<0.35 :	<0.35 :	<0.36 :	<0.37 :
2-Methylnaphthalene	mg/kg-dry	T	<0.35 :	<0.34 :	<0.35 :	<0.35 :	<0.36 :	0.064 J
2-Methylphenol	mg/kg-dry	T	<0.35 :	<0.34 :	<0.35 :	<0.35 :	<0.36 :	<0.37 :
2-Nitroaniline	mg/kg-dry	T	<0.87 :	<0.86 :	<0.87 :	<0.87 :	<0.91 :	<0.92 :

J = Qualified as estimated during data validation
R = Qualified as rejected value from data validation and results are considered unusable for any purpose
T = Total Fraction

Appendix A-7a
Soil - Biased 0-6 inches
Validated Analytical Results

Parameter	Units	Exposure Area Fraction	Site ID / Sample Date / Sample ID		MSS2-11 10/22/2002 MSS2-11-T01N-SOL SS2		MSS2-12 10/22/2002 MSS2-12-T01N-SOL SS2		MSS2-13 10/22/2002 MSS2-13-T01N-SOL SS2		MSS2-14 10/22/2002 MSS2-14-T01N-SOL SS2		MSS2-15 10/23/2002 MSS2-15-T01N-SOL SS2		MSS2-16 10/23/2002 MSS2-16-T01N-SOL SS2	
2-Nitrophenol	mg/kg-dry	T		<0.35	:	<0.34	:	<0.35	:	<0.35	:	<0.36	:	<0.37	:
3,3-Dichlorobenzidine	mg/kg-dry	T		<0.35	:	<0.34	:	<0.35	:	<0.35	:	<0.36	:	<0.37	:
3-Nitroaniline	mg/kg-dry	T		<0.87	:	<0.86	:	<0.87	:	<0.87	:	<0.91	:	<0.92	:
4,6-Dinitro-2-methylphenol	mg/kg-dry	T		<0.87	J	<0.86	J	<0.87	J	<0.87	:	<0.91	:	<0.92	:
4-Bromophenyl phenyl ether	mg/kg-dry	T		<0.35	:	<0.34	:	<0.35	:	<0.35	:	<0.36	:	<0.37	:
4-Chloro-3-methylphenol	mg/kg-dry	T		<0.35	:	<0.34	:	<0.35	:	<0.35	:	<0.36	:	<0.37	:
4-Chloroaniline	mg/kg-dry	T		<0.35	:	<0.34	:	<0.35	:	<0.35	:	<0.36	:	<0.37	:
4-Chlorophenyl phenyl ether	mg/kg-dry	T		<0.35	:	<0.34	:	<0.35	:	<0.35	:	<0.36	:	<0.37	:
4-Methylphenol	mg/kg-dry	T		<0.35	:	<0.34	:	<0.35	:	<0.35	:	<0.36	:	<0.37	:
4-Nitroaniline	mg/kg-dry	T		<0.87	J	<0.86	J	<0.87	J	<0.87	:	<0.91	:	<0.92	:
4-Nitrophenol	mg/kg-dry	T		<0.87	J	<0.86	J	<0.87	J	<0.87	:	<0.91	:	<0.92	:
Acenaphthene	mg/kg-dry	T		<0.35	:	<0.34	:	<0.35	:	<0.35	:	<0.36	:	<0.37	:
Acenaphthylene	mg/kg-dry	T		<0.35	:	<0.34	:	<0.35	:	<0.35	:	<0.36	:	<0.37	:
Anthracene	mg/kg-dry	T		<0.35	:	<0.34	:	<0.35	:	<0.35	:	<0.36	:	<0.37	:
Benzaldehyde	mg/kg-dry	T		1.3	J	<0.34	J	<0.35	J	0.022	J	<0.36	:	<0.37	:
Benzo(a)anthracene	mg/kg-dry	T		<0.35	:	<0.34	:	<0.35	:	<0.35	:	<0.36	:	<0.37	:
Benzo(a)pyrene	mg/kg-dry	T		<0.35	:	<0.34	:	<0.35	:	<0.35	:	<0.36	:	<0.37	:
Benzo(b)fluoranthene	mg/kg-dry	T		<0.35	:	<0.34	:	<0.35	:	<0.35	:	<0.36	:	<0.37	:
Benzo(g,h,i)perylene	mg/kg-dry	T		<0.35	:	<0.34	:	<0.35	:	<0.35	:	<0.36	:	<0.37	:
Benzo(k)fluoranthene	mg/kg-dry	T		<0.35	:	<0.34	:	<0.35	:	<0.35	:	<0.36	:	<0.37	:
Bis(2-chloroethoxy)methane	mg/kg-dry	T		<0.35	:	<0.34	:	<0.35	:	<0.35	:	<0.36	:	<0.37	:
Bis(2-chloroethyl)ether	mg/kg-dry	T		<0.35	:	<0.34	:	<0.35	:	<0.35	:	<0.36	:	<0.37	:
Bis(2-ethylhexyl)phthalate	mg/kg-dry	T		0.041	J	0.088	J	0.037	J	0.045	J	0.023	J	0.22	J
Butyl benzyl phthalate	mg/kg-dry	T		<0.35	:	<0.34	:	<0.35	:	<0.35	:	<0.36	:	<0.37	:
Carbazole	mg/kg-dry	T		<0.35	:	<0.34	:	<0.35	:	<0.35	:	<0.36	:	<0.37	:
Chrysene	mg/kg-dry	T		<0.35	:	<0.34	:	<0.35	:	<0.35	:	<0.36	:	0.017	J
Dibenz(a,h)anthracene	mg/kg-dry	T		<0.35	:	<0.34	:	<0.35	:	<0.35	:	<0.36	:	<0.37	:
Dibenzofuran	mg/kg-dry	T		<0.35	:	<0.34	:	<0.35	:	<0.35	:	<0.36	:	<0.37	:
Dichlorodiisopropyl ether	mg/kg-dry	T		<0.35	:	<0.34	:	<0.35	:	<0.35	:	<0.36	:	<0.37	:
Diethylphthalate	mg/kg-dry	T		<0.35	:	<0.34	:	<0.35	:	<0.35	:	<0.36	:	<0.37	:
Dimethylphthalate	mg/kg-dry	T		<0.35	:	<0.34	:	<0.35	:	<0.35	:	<0.36	:	<0.37	:
Di-n-Butyl phthalate	mg/kg-dry	T		<0.35	:	<0.34	:	<0.35	:	<0.35	:	<0.36	:	<0.37	:
Di-n-Octyl phthalate	mg/kg-dry	T		<0.35	:	<0.34	:	<0.35	:	<0.35	:	<0.36	:	<0.37	:
Fluoranthene	mg/kg-dry	T		<0.35	:	<0.34	:	<0.35	:	<0.35	:	<0.36	:	0.028	J

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T = Total Fraction

Appendix A-7a
Soil - Biased 0-6 inches
Validated Analytical Results

Parameter	Units	Site ID / Sample Date / Sample ID / Exposure Area / Fraction	MSS2-11 10/22/2002 MSS2-11-T01N-SOL SS2	MSS2-12 10/22/2002 MSS2-12-T01N-SOL SS2	MSS2-13 10/22/2002 MSS2-13-T01N-SOL SS2	MSS2-14 10/22/2002 MSS2-14-T01N-SOL SS2	MSS2-15 10/23/2002 MSS2-15-T01N-SOL SS2	MSS2-16 10/23/2002 MSS2-16-T01N-SOL SS2
Fluorene	mg/kg-dry	T	<0.35 :	<0.34 :	<0.35 :	<0.35 :	<0.36 :	<0.37 :
Hexachlorobenzene	mg/kg-dry	T	<0.35 :	<0.34 :	<0.35 :	<0.35 :	<0.36 :	<0.37 :
Hexachlorobutadiene	mg/kg-dry	T	<0.35 :	<0.34 :	<0.35 :	<0.35 :	<0.36 :	<0.37 :
Hexachlorocyclopentadiene	mg/kg-dry	T	<0.35 :	<0.34 :	<0.35 :	<0.35 :	<0.36 :	<0.37 :
Hexachloroethane	mg/kg-dry	T	<0.35 :	<0.34 :	<0.35 :	<0.35 :	<0.36 :	<0.37 :
Indeno(1,2,3-cd)pyrene	mg/kg-dry	T	<0.35 :	<0.34 :	<0.35 :	<0.35 :	<0.36 :	<0.37 :
Isophorone	mg/kg-dry	T	<0.35 :	<0.34 :	<0.35 :	<0.35 :	<0.36 :	<0.37 :
Naphthalene	mg/kg-dry	T	<0.35 :	<0.34 :	<0.35 :	<0.35 :	<0.36 :	<0.37 :
Nitrobenzene	mg/kg-dry	T	<0.35 :	<0.34 :	<0.35 :	<0.35 :	<0.36 :	<0.37 :
N-Nitrosodi-n-propylamine	mg/kg-dry	T	<0.35 :	<0.34 :	<0.35 :	<0.35 :	<0.36 :	<0.37 :
N-Nitrosodiphenylamine	mg/kg-dry	T	<0.35 :	<0.34 :	<0.35 :	<0.35 :	<0.36 :	<0.37 :
Pentachlorophenol	mg/kg-dry	T	<0.87 J	<0.86 J	<0.87 J	<0.87 :	<0.91 :	<0.92 :
Phenanthrene	mg/kg-dry	T	<0.35 :	<0.34 :	<0.35 :	<0.35 :	<0.36 :	0.31 J
Phenol	mg/kg-dry	T	0.023 J	<0.34 :	<0.35 :	<0.35 :	<0.36 :	<0.37 :
Pyrene	mg/kg-dry	T	<0.35 :	<0.34 :	<0.35 :	<0.35 :	<0.36 :	0.045 J

J = Qualified as estimated during data validation
R = Qualified as rejected value from data validation and results are considered unusable for any purpose
T = Total Fraction

Appendix A-7a
Soil - Biased 0-6 inches
Validated Analytical Results

Parameter	Units	Exposure Area Fraction	Site ID	MSS2-17	MSS2-18	MSS2-19	MSS2-20	MSS2-21	MSS2-23
			Sample Date	10/23/2002	10/23/2002	10/23/2002	10/23/2002	10/23/2002	10/24/2002
			Sample ID	MSS2-17-T01N-SOL	MSS2-18-T01N-SOL	MSS2-19-T01N-SOL	MSS2-20-T01N-SOL	MSS2-21-T01N-SOL	MSS2-23-T01N-SOL
			Exposure Area	SS2	SS2	SS2	SS2	SS2	SS2
General Chemistry									
Ammonia	mg/kg-dry	T		16.6 :	15.9 :	14.8 :	23.9 :	21.1 :	19.1 J
Chloride	mg/kg-dry	T		124. :	110. :	639. J	41.3 J	69.2 J	85. J
Fluoride	mg/kg-dry	T		1.2 J	0.77 J	0.95 J	2.1 J	3.2 J	1.6 J
Nitrate	mg/kg-dry	T		10.8 :	5.7 :	10.1 J	4.4 J	4.6 J	7. J
Phosphorus	mg/kg-dry	T		1140. J	1040. J	770. J	937. J	883. J	996. J
Sulfate	mg/kg-dry	T		3420. :	1350. :	679. J	908. J	1250. J	451. J
Total Kjeldahl Nitrogen	mg/kg-dry	T		74.8 J	85.3 J	62.8 J	80.7 J	105. J	182. J
Total Organic Carbon	mg/kg-dry	T		<109. J	311. J	764. J	857. J	1630. J	2830. J
Laboratory Parameters									
pH	SU	T		5.9 :	6.7 :	7.6 :	7.8 :	7.7 :	7.4 :
Solids, Percent	%	T		92.4 :	93. :	92. :	90.5 :	92.5 :	92.1 :
Specific Conductance	umhos/cm	T		1060. :	856. :	2020. :	875. :	1090. :	612. :
Geotechnical									
Organic Soils	%	T		2.67 J	2.26 J	1.55 J	2.44 J	1.97 J	1.93 J
Physical Properties									
Cation-Exchange Capacity	meq/100g	T		16.9 :	14.7 :	10.4 :	16.2 :	11.7 :	10.1 :
Sodium Absorption Ratio	ratio	T		0.92 :	0.93 :	2.73 :	0.78 :	1.66 :	1.39 :
Metals									
Aluminum	mg/kg-dry	T		12800. :	11300. :	8040. J	9390. :	10100. :	13500. J
Antimony	mg/kg-dry	T		<0.25 J	<0.25 J	<0.25 J	<0.2 J	<0.23 J	0.31 J
Arsenic	mg/kg-dry	T		3.1 :	2.7 :	2.1 :	2.8 :	2.6 :	4.5 :
Barium	mg/kg-dry	T		271. :	264. :	132. J	226. :	164. :	128. J
Beryllium	mg/kg-dry	T		0.89 :	0.75 :	0.61 :	0.59 :	0.8 :	0.87 J
Boron	mg/kg-dry	T		5.1 :	4. J	4.1 :	3.3 :	3. :	<2. J
Cadmium	mg/kg-dry	T		0.35 J	0.25 J	0.21 J	0.37 :	0.39 :	2.1 J
Calcium	mg/kg-dry	T		6370. :	4740. :	4530. J	14800. :	7920. :	8610. J
Chromium	mg/kg-dry	T		33.1 :	31.2 :	20.9 J	23.3 :	28.7 :	44.9 J
Cobalt	mg/kg-dry	T		8. :	6.2 :	5.5 :	6.2 :	8.2 :	10.8 J
Copper	mg/kg-dry	T		91. :	82.3 :	49.5 J	54.7 :	76.2 :	109. J
Iron	mg/kg-dry	T		34200. :	32100. :	21000. J	24400. :	24100. :	27200. J
Lead	mg/kg-dry	T		71.9 :	67.9 :	40.1 J	62.8 :	48.4 :	91.8 J
Magnesium	mg/kg-dry	T		5540. :	5090. :	3960. J	4380. :	5570. :	7130. J
Manganese	mg/kg-dry	T		462. J	392. J	330. J	362. J	460. J	493. J

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T = Total Fraction

Appendix A-7a
Soil - Biased 0-6 inches
Validated Analytical Results

Parameter	Units	Exposure Area Fraction	Site ID / Sample Date / Sample ID		MSS2-17 10/23/2002 MSS2-17-T01N-SOL SS2		MSS2-18 10/23/2002 MSS2-18-T01N-SOL SS2		MSS2-19 10/23/2002 MSS2-19-T01N-SOL SS2		MSS2-20 10/23/2002 MSS2-20-T01N-SOL SS2		MSS2-21 10/23/2002 MSS2-21-T01N-SOL SS2		MSS2-23 10/24/2002 MSS2-23-T01N-SOL SS2	
Mercury	mg/kg-dry	T		<0.017	:	<0.017	:	<0.016	J	<0.017	J	<0.017	J	<0.018	:
Molybdenum	mg/kg-dry	T		94.8	:	95.7	:	54.1	J	38.1	:	119.	:	238.	J
Nickel	mg/kg-dry	T		19.8	J	17.2	J	15.	J	15.	J	21.4	J	26.	J
Potassium	mg/kg-dry	T		3710.	J	3380.	J	2530.	J	2920.	J	3020.	J	2860.	J
Selenium	mg/kg-dry	T		0.8	J	0.68	J	1.2	J	0.84	J	0.77	J	<0.8	J
Silver	mg/kg-dry	T		0.81	:	0.66	:	0.31	:	0.55	:	0.39	:	1.3	J
Sodium	mg/kg-dry	T		415.	:	451.	:	479.	:	323.	:	409.	:	<214.	:
Thallium	mg/kg-dry	T		0.29	:	0.3	:	0.21	:	0.26	:	0.26	:	0.18	J
Vanadium	mg/kg-dry	T		35.7	:	34.4	:	25.7	J	28.4	:	30.2	:	40.1	J
Zinc	mg/kg-dry	T		78.6	J	70.2	J	62.9	J	76.8	J	98.4	J	102.	J
Volatile Organics															
1,1,1-Trichloroethane	mg/kg-dry	T		<0.005	:	<0.007	:	<0.006	:	<0.011	:	<0.006	:	<0.008	:
1,1,2,2-Tetrachloroethane	mg/kg-dry	T		<0.005	:	<0.007	:	<0.006	:	<0.011	:	<0.006	:	<0.008	:
1,1,2-Trichloro-1,2,2-trifluoroethane	mg/kg-dry	T		<0.005	:	<0.007	:	<0.006	:	<0.011	:	<0.006	:	<0.008	:
1,1,2-Trichloroethane	mg/kg-dry	T		<0.005	:	<0.007	:	<0.006	:	<0.011	:	<0.006	:	<0.008	:
1,1-Dichloroethane	mg/kg-dry	T		<0.005	:	<0.007	:	<0.006	:	<0.011	:	<0.006	:	<0.008	:
1,1-Dichloroethene	mg/kg-dry	T		<0.005	:	<0.007	:	<0.006	:	<0.011	:	<0.006	:	<0.008	:
1,2,4-Trichlorobenzene	mg/kg-dry	T		<0.005	:	<0.007	:	<0.006	:	<0.011	:	<0.006	:	<0.008	:
1,2-Dibromo-3-chloropropane	mg/kg-dry	T		<0.005	:	<0.007	:	<0.006	:	<0.011	:	<0.006	:	<0.008	:
1,2-Dichlorobenzene	mg/kg-dry	T		<0.005	:	<0.007	:	<0.006	:	<0.011	:	<0.006	:	<0.008	:
1,2-Dichloroethane	mg/kg-dry	T		<0.005	:	<0.007	:	<0.006	:	<0.011	:	<0.006	:	<0.008	:
1,2-Dichloroethene (total)	mg/kg-dry	T		<0.005	:	<0.007	:	<0.006	:	<0.011	:	<0.006	:	<0.008	:
1,2-Dichloropropane	mg/kg-dry	T		<0.005	:	<0.007	:	<0.006	:	<0.011	:	<0.006	:	<0.008	:
1,3-Dichlorobenzene	mg/kg-dry	T		<0.005	:	<0.007	:	<0.006	:	<0.011	:	<0.006	:	<0.008	:
1,4-Dichlorobenzene	mg/kg-dry	T		<0.005	:	<0.007	:	<0.006	:	<0.011	:	<0.006	:	<0.008	:
2-Butanone	mg/kg-dry	T		<0.005	:	<0.007	:	<0.006	:	<0.011	:	<0.006	:	<0.008	:
2-Hexanone	mg/kg-dry	T		<0.005	:	<0.007	:	<0.006	:	<0.011	:	<0.006	:	<0.008	:
4-Methyl-2-pentanone	mg/kg-dry	T		<0.005	:	<0.007	:	<0.006	:	<0.011	:	<0.006	:	<0.008	:
Acetone	mg/kg-dry	T		<0.005	:	0.002	J	<0.006	:	<0.011	:	<0.006	:	<0.008	:
Benzene	mg/kg-dry	T		<0.005	:	<0.007	:	<0.006	:	<0.011	:	<0.006	:	<0.008	:
Bromodichloromethane	mg/kg-dry	T		<0.005	:	<0.007	:	<0.006	:	<0.011	:	<0.006	:	<0.008	:
Bromoform	mg/kg-dry	T		<0.005	:	<0.007	:	<0.006	:	<0.011	:	<0.006	:	<0.008	:
Bromomethane	mg/kg-dry	T		<0.005	:	<0.007	:	<0.006	:	<0.011	:	<0.006	:	<0.008	J
Carbon disulfide	mg/kg-dry	T		<0.005	:	<0.007	:	<0.006	:	<0.011	:	<0.006	:	<0.008	:

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T = Total Fraction

Appendix A-7a
Soil - Biased 0-6 inches
Validated Analytical Results

Parameter	Units	Exposure Area Fraction	Site ID	MSS2-17		MSS2-18		MSS2-19		MSS2-20		MSS2-21		MSS2-23	
			Sample Date	10/23/2002		10/23/2002		10/23/2002		10/23/2002		10/23/2002		10/24/2002	
			Sample ID	MSS2-17-T01N-SOL		MSS2-18-T01N-SOL		MSS2-19-T01N-SOL		MSS2-20-T01N-SOL		MSS2-21-T01N-SOL		MSS2-23-T01N-SOL	
			Exposure Area	SS2		SS2		SS2		SS2		SS2		SS2	
Carbon tetrachloride	mg/kg-dry	T		<0.005	:	<0.007	:	<0.006	:	<0.011	:	<0.006	:	<0.008	:
Chlorobenzene	mg/kg-dry	T		<0.005	:	<0.007	:	<0.006	:	<0.011	:	<0.006	:	<0.008	:
Chloroethane	mg/kg-dry	T		<0.005	:	<0.007	:	<0.006	:	<0.011	:	<0.006	:	<0.008	:
Chloroform	mg/kg-dry	T		<0.005	:	<0.007	:	<0.006	:	<0.011	:	<0.006	:	<0.008	:
Chloromethane	mg/kg-dry	T		<0.005	:	<0.007	:	<0.006	:	<0.011	:	<0.006	:	<0.008	J
cis-1,2-Dichloroethene	mg/kg-dry	T		<0.005	:	<0.007	:	<0.006	:	<0.011	:	<0.006	:	<0.008	:
cis-1,3-Dichloropropene	mg/kg-dry	T		<0.005	:	<0.007	:	<0.006	:	<0.011	:	<0.006	:	<0.008	:
Dibromochloromethane	mg/kg-dry	T		<0.005	:	<0.007	:	<0.006	:	<0.011	:	<0.006	:	<0.008	:
Dichlorodifluoromethane	mg/kg-dry	T		<0.005	:	<0.007	:	<0.006	:	<0.011	:	<0.006	:	<0.008	J
Ethylbenzene	mg/kg-dry	T		<0.005	:	<0.007	:	<0.006	:	<0.011	:	<0.006	:	<0.008	:
Methylene chloride	mg/kg-dry	T		<0.005	:	<0.007	:	<0.006	:	<0.011	:	<0.006	:	<0.008	:
Styrene	mg/kg-dry	T		<0.005	:	<0.007	:	<0.006	:	<0.011	:	<0.006	:	<0.008	:
Tetrachloroethene	mg/kg-dry	T		<0.005	:	<0.007	:	<0.006	:	<0.011	:	<0.006	:	<0.008	:
Toluene	mg/kg-dry	T		<0.005	:	<0.007	:	<0.006	:	<0.011	:	<0.006	:	<0.008	:
Total Xylene	mg/kg-dry	T		<0.005	:	<0.007	:	<0.006	:	<0.011	:	<0.006	:	0.006	J
trans-1,2-Dichloroethene	mg/kg-dry	T		<0.005	:	<0.007	:	<0.006	:	<0.011	:	<0.006	:	<0.008	:
trans-1,3-Dichloropropene	mg/kg-dry	T		<0.005	:	<0.007	:	<0.006	:	<0.011	:	<0.006	:	<0.008	:
Trichloroethene	mg/kg-dry	T		<0.005	:	<0.007	:	<0.006	:	<0.011	:	<0.006	:	<0.008	:
Trichlorofluoromethane	mg/kg-dry	T		<0.005	:	<0.007	:	<0.006	:	<0.011	:	<0.006	:	<0.008	:
Vinyl chloride	mg/kg-dry	T		<0.005	:	<0.007	:	<0.006	:	<0.011	:	<0.006	:	<0.008	:
Semi-Volatile Organics															
1,1`-Biphenyl	mg/kg-dry	T		<0.36	:	<0.35	:	<0.36	:	<0.37	:	<0.36	:	<0.36	:
2,4,5-Trichlorophenol	mg/kg-dry	T		<0.9	:	<0.89	:	<0.9	:	<0.92	:	<0.9	:	<0.9	:
2,4,6-Trichlorophenol	mg/kg-dry	T		<0.36	:	<0.35	:	<0.36	:	<0.37	:	<0.36	:	<0.36	:
2,4-Dichlorophenol	mg/kg-dry	T		<0.36	:	<0.35	:	<0.36	:	<0.37	:	<0.36	:	<0.36	:
2,4-Dimethylphenol	mg/kg-dry	T		<0.36	:	<0.35	:	<0.36	:	<0.37	:	<0.36	:	<0.36	:
2,4-Dinitrophenol	mg/kg-dry	T		<0.9	:	<0.89	:	<0.9	J	<0.92	J	<0.9	J	<0.9	J
2,4-Dinitrotoluene	mg/kg-dry	T		<0.36	:	<0.35	:	<0.36	:	<0.37	:	<0.36	:	<0.36	:
2,6-Dinitrotoluene	mg/kg-dry	T		<0.36	:	<0.35	:	<0.36	:	<0.37	:	<0.36	:	<0.36	:
2-Chloronaphthalene	mg/kg-dry	T		<0.36	:	<0.35	:	<0.36	:	<0.37	:	<0.36	:	<0.36	:
2-Chlorophenol	mg/kg-dry	T		<0.36	:	<0.35	:	<0.36	:	<0.37	:	<0.36	:	<0.36	:
2-Methylnaphthalene	mg/kg-dry	T		<0.36	:	<0.35	:	<0.36	:	<0.37	:	<0.36	:	<0.36	:
2-Methylphenol	mg/kg-dry	T		<0.36	:	<0.35	:	<0.36	:	<0.37	:	<0.36	:	<0.36	:
2-Nitroaniline	mg/kg-dry	T		<0.9	:	<0.89	:	<0.9	:	<0.92	:	<0.9	:	<0.9	:

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R = Qualified as rejected value from data validation and results are considered unusable for any purpose
T = Total Fraction

Appendix A-7a
Soil - Biased 0-6 inches
Validated Analytical Results

Parameter	Units	Exposure Area Fraction	Site ID	MSS2-17		MSS2-18		MSS2-19		MSS2-20		MSS2-21		MSS2-23	
			Sample Date	10/23/2002		10/23/2002		10/23/2002		10/23/2002		10/23/2002		10/24/2002	
			Sample ID	MSS2-17-T01N-SOL		MSS2-18-T01N-SOL		MSS2-19-T01N-SOL		MSS2-20-T01N-SOL		MSS2-21-T01N-SOL		MSS2-23-T01N-SOL	
			Exposure Area	SS2		SS2		SS2		SS2		SS2		SS2	
2-Nitrophenol	mg/kg-dry	T		<0.36	:	<0.35	:	<0.36	:	<0.37	:	<0.36	:	<0.36	:
3,3-Dichlorobenzidine	mg/kg-dry	T		<0.36	:	<0.35	:	<0.36	:	<0.37	:	<0.36	:	<0.36	:
3-Nitroaniline	mg/kg-dry	T		<0.9	:	<0.89	:	<0.9	:	<0.92	:	<0.9	:	<0.9	:
4,6-Dinitro-2-methylphenol	mg/kg-dry	T		<0.9	:	<0.89	:	<0.9	:	<0.92	:	<0.9	:	<0.9	J
4-Bromophenyl phenyl ether	mg/kg-dry	T		<0.36	:	<0.35	:	<0.36	:	<0.37	:	<0.36	:	<0.36	:
4-Chloro-3-methylphenol	mg/kg-dry	T		<0.36	:	<0.35	:	<0.36	:	<0.37	:	<0.36	:	<0.36	:
4-Chloroaniline	mg/kg-dry	T		<0.36	:	<0.35	:	<0.36	:	<0.37	:	<0.36	:	<0.36	:
4-Chlorophenyl phenyl ether	mg/kg-dry	T		<0.36	:	<0.35	:	<0.36	:	<0.37	:	<0.36	:	<0.36	:
4-Methylphenol	mg/kg-dry	T		<0.36	:	<0.35	:	<0.36	:	<0.37	:	<0.36	:	<0.36	:
4-Nitroaniline	mg/kg-dry	T		<0.9	:	<0.89	:	<0.9	J	<0.92	J	<0.9	J	<0.9	J
4-Nitrophenol	mg/kg-dry	T		<0.9	:	<0.89	:	<0.9	J	<0.92	J	<0.9	J	<0.9	J
Acenaphthene	mg/kg-dry	T		<0.36	:	<0.35	:	<0.36	:	<0.37	:	<0.36	:	<0.36	:
Acenaphthylene	mg/kg-dry	T		<0.36	:	<0.35	:	<0.36	:	<0.37	:	<0.36	:	<0.36	:
Anthracene	mg/kg-dry	T		<0.36	:	<0.35	:	<0.36	:	<0.37	:	<0.36	:	<0.36	:
Benzaldehyde	mg/kg-dry	T		0.11	J	0.098	J	0.71	:	<0.41	:	<0.36	:	0.062	J
Benzo(a)anthracene	mg/kg-dry	T		<0.36	:	<0.35	:	<0.36	:	<0.37	:	<0.36	:	0.12	J
Benzo(a)pyrene	mg/kg-dry	T		<0.36	:	<0.35	:	<0.36	:	<0.37	:	<0.36	:	0.12	J
Benzo(b)fluoranthene	mg/kg-dry	T		<0.36	:	<0.35	:	<0.36	:	<0.37	:	<0.36	:	0.21	J
Benzo(g,h,i)perylene	mg/kg-dry	T		<0.36	:	<0.35	:	<0.36	:	<0.37	:	<0.36	:	0.048	J
Benzo(k)fluoranthene	mg/kg-dry	T		<0.36	:	<0.35	:	<0.36	:	<0.37	:	<0.36	:	0.19	J
Bis(2-chloroethoxy)methane	mg/kg-dry	T		<0.36	:	<0.35	:	<0.36	:	<0.37	:	<0.36	:	<0.36	:
Bis(2-chloroethyl)ether	mg/kg-dry	T		<0.36	:	<0.35	:	<0.36	:	<0.37	:	<0.36	:	<0.36	:
Bis(2-ethylhexyl)phthalate	mg/kg-dry	T		0.02	J	0.036	J	<0.36	:	<0.37	:	<0.36	:	0.14	J
Butyl benzyl phthalate	mg/kg-dry	T		<0.36	:	<0.35	:	<0.36	:	0.04	J	0.22	J	<0.36	:
Carbazole	mg/kg-dry	T		<0.36	:	<0.35	:	<0.36	:	<0.37	:	<0.36	:	<0.36	:
Chrysene	mg/kg-dry	T		<0.36	:	<0.35	:	<0.36	:	<0.37	:	<0.36	:	0.18	J
Dibenz(a,h)anthracene	mg/kg-dry	T		<0.36	:	<0.35	:	<0.36	:	<0.37	:	<0.36	:	<0.36	:
Dibenzofuran	mg/kg-dry	T		<0.36	:	<0.35	:	<0.36	:	<0.37	:	<0.36	:	<0.36	:
Dichlorodiisopropyl ether	mg/kg-dry	T		<0.36	:	<0.35	:	<0.36	:	<0.37	:	<0.36	:	<0.36	J
Diethylphthalate	mg/kg-dry	T		<0.36	:	<0.35	:	<0.36	:	<0.37	:	<0.36	:	<0.36	:
Dimethylphthalate	mg/kg-dry	T		<0.36	:	<0.35	:	<0.36	:	<0.37	:	<0.36	:	<0.36	:
Di-n-Butyl phthalate	mg/kg-dry	T		<0.36	:	<0.35	:	<0.36	:	<0.37	:	<0.36	:	<0.36	:
Di-n-Octyl phthalate	mg/kg-dry	T		<0.36	:	<0.35	:	<0.36	:	<0.37	:	<0.36	:	<0.36	:
Fluoranthene	mg/kg-dry	T		<0.36	:	<0.35	:	<0.36	:	<0.37	:	<0.36	:	0.37	:

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T = Total Fraction

Appendix A-7a
Soil - Biased 0-6 inches
Validated Analytical Results

Parameter	Units	Site ID / Sample Date / Sample ID / Exposure Area / Fraction	MSS2-17 10/23/2002 MSS2-17-T01N-SOL SS2		MSS2-18 10/23/2002 MSS2-18-T01N-SOL SS2		MSS2-19 10/23/2002 MSS2-19-T01N-SOL SS2		MSS2-20 10/23/2002 MSS2-20-T01N-SOL SS2		MSS2-21 10/23/2002 MSS2-21-T01N-SOL SS2		MSS2-23 10/24/2002 MSS2-23-T01N-SOL SS2	
Fluorene	mg/kg-dry	T	<0.36	:	<0.35	:	<0.36	:	<0.37	:	<0.36	:	<0.36	:
Hexachlorobenzene	mg/kg-dry	T	<0.36	:	<0.35	:	<0.36	:	<0.37	:	<0.36	:	<0.36	:
Hexachlorobutadiene	mg/kg-dry	T	<0.36	:	<0.35	:	<0.36	:	<0.37	:	<0.36	:	<0.36	:
Hexachlorocyclopentadiene	mg/kg-dry	T	<0.36	:	<0.35	:	<0.36	:	<0.37	:	<0.36	:	<0.36	J
Hexachloroethane	mg/kg-dry	T	<0.36	:	<0.35	:	<0.36	:	<0.37	:	<0.36	:	<0.36	:
Indeno(1,2,3-cd)pyrene	mg/kg-dry	T	<0.36	:	<0.35	:	<0.36	:	<0.37	:	<0.36	:	0.05	J
Isophorone	mg/kg-dry	T	<0.36	:	<0.35	:	<0.36	:	<0.37	:	<0.36	:	<0.36	:
Naphthalene	mg/kg-dry	T	<0.36	:	<0.35	:	<0.36	:	<0.37	:	<0.36	:	<0.36	:
Nitrobenzene	mg/kg-dry	T	<0.36	:	<0.35	:	<0.36	:	<0.37	:	<0.36	:	<0.36	:
N-Nitrosodi-n-propylamine	mg/kg-dry	T	<0.36	:	<0.35	:	<0.36	:	<0.37	:	<0.36	:	<0.36	:
N-Nitrosodiphenylamine	mg/kg-dry	T	<0.36	:	<0.35	:	<0.36	:	<0.37	:	<0.36	:	<0.36	:
Pentachlorophenol	mg/kg-dry	T	<0.9	:	<0.89	:	<0.9	:	<0.92	:	<0.9	:	<0.9	:
Phenanthrene	mg/kg-dry	T	<0.36	:	<0.35	:	<0.36	:	<0.37	:	<0.36	:	0.033	J
Phenol	mg/kg-dry	T	<0.36	:	<0.35	:	<0.36	:	<0.37	:	<0.36	:	<0.36	J
Pyrene	mg/kg-dry	T	<0.36	:	<0.35	:	<0.36	:	<0.37	:	<0.36	:	0.27	J

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T = Total Fraction

Appendix A-7a
Soil - Biased 0-6 inches
Validated Analytical Results

Parameter	Units	Exposure Area Fraction	Site ID	MSS2-24		MSS2-26		MSS2-26		MSS2-27		MSS2-28		MSS2-29	
			Sample Date	10/24/2002		10/24/2002		10/24/2002		10/24/2002		10/24/2002		10/23/2002	
			Sample ID	MSS2-24-T01N-SOL		MSS2-26-T01N-SOL RE		MSS2-26-T01N-SOL		MSS2-27-T01N-SOL		MSS2-28-T01N-SOL		MSS2-29-T01N-SOL	
			Exposure Area	SS2		SS2		SS2		SS2		SS2		SS2	
General Chemistry															
Ammonia	mg/kg-dry	T		11.3	:	-		16.4	:	<8.5	:	22.2	:	16.7	:
Chloride	mg/kg-dry	T		343.	J	-		70.7	J	21.7	J	8.1	J	172.	J
Fluoride	mg/kg-dry	T		2.6	J	-		3.8	J	34.7	J	2.1	J	2.	J
Nitrate	mg/kg-dry	T		51.4	J	-		<2.3	J	<2.2	J	<2.4	J	5.4	J
Phosphorus	mg/kg-dry	T		824.	J	-		1020.	J	1180.	J	1280.	J	1000.	J
Sulfate	mg/kg-dry	T		2080.	J	-		2110.	J	2770.	J	2830.	J	1850.	J
Total Kjeldahl Nitrogen	mg/kg-dry	T		160.	:	-		161.	J	60.3	J	209.	J	91.9	J
Total Organic Carbon	mg/kg-dry	T		1640.	J	-		6480.	J	1190.	J	8340.	J	805.	J
Laboratory Parameters															
pH	SU	T		7.1	:	-		7.2	:	5.1	:	7.3	:	7.3	:
Solids, Percent	%	T		93.9	:	-		90.	:	91.1	:	86.8	:	91.5	:
Specific Conductance	umhos/cm	T		1630.	:	-		1480.	:	1280.	:	1180.	:	1320.	:
Geotechnical															
Organic Soils	%	T		1.7	J	-		3.05	J	2.16	J	3.33	J	2.56	J
Physical Properties															
Cation-Exchange Capacity	meq/100g	T		7.5	:	-		12.9	:	13.7	:	19.7	:	14.3	:
Sodium Absorption Ratio	ratio	T		1.81	:	-		1.63	:	0.36	:	0.3	:	1.06	:
Metals															
Aluminum	mg/kg-dry	T		12900.	:	-		12800.	:	20200.	:	15600.	:	11300.	:
Antimony	mg/kg-dry	T		<0.29	J	-		<0.28	J	<0.3	J	<0.32	J	<0.24	J
Arsenic	mg/kg-dry	T		2.8	:	-		3.5	:	2.4	:	2.7	:	2.3	:
Barium	mg/kg-dry	T		97.6	:	-		206.	:	194.	:	238.	:	190.	:
Beryllium	mg/kg-dry	T		0.82	:	-		1.	:	1.2	:	1.	:	0.81	:
Boron	mg/kg-dry	T		<2.	J	-		6.6	:	<2.8	:	3.	:	3.1	:
Cadmium	mg/kg-dry	T		1.7	:	-		1.8	:	0.61	:	1.1	:	0.28	J
Calcium	mg/kg-dry	T		9590.	:	-		14500.	:	10400.	:	20200.	:	8700.	:
Chromium	mg/kg-dry	T		40.5	:	-		39.2	:	36.6	:	47.7	:	30.8	:
Cobalt	mg/kg-dry	T		11.2	:	-		10.2	:	11.8	:	8.6	:	6.9	:
Copper	mg/kg-dry	T		148.	:	-		86.8	:	66.3	:	101.	:	108.	:
Iron	mg/kg-dry	T		25600.	:	-		27100.	:	29400.	:	34400.	:	32000.	:
Lead	mg/kg-dry	T		53.7	:	-		75.	:	54.	:	71.8	:	80.2	:
Magnesium	mg/kg-dry	T		7110.	:	-		7200.	:	9520.	:	7300.	:	5230.	:
Manganese	mg/kg-dry	T		547.	J	-		623.	J	823.	J	604.	J	494.	J

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R = Qualified as rejected value from data validation and results are considered unusable for any purpose

T = Total Fraction

Appendix A-7a
Soil - Biased 0-6 inches
Validated Analytical Results

Parameter	Units	Exposure Area Fraction	Site ID	MSS2-24		MSS2-26		MSS2-26		MSS2-27		MSS2-28		MSS2-29	
			Sample Date	10/24/2002		10/24/2002		10/24/2002		10/24/2002		10/24/2002		10/23/2002	
			Sample ID	MSS2-24-T01N-SOL		MSS2-26-T01N-SOL RE		MSS2-26-T01N-SOL		MSS2-27-T01N-SOL		MSS2-28-T01N-SOL		MSS2-29-T01N-SOL	
			Exposure Area	SS2		SS2		SS2		SS2		SS2		SS2	
Mercury	mg/kg-dry	T		<0.016	:	-		<0.016	J	0.017	J	<0.018	J	<0.017	J
Molybdenum	mg/kg-dry	T		211.	:	-		283.	:	59.1	:	169.	:	18.7	:
Nickel	mg/kg-dry	T		28.	J	-		25.3	J	31.8	J	26.5	J	17.8	J
Potassium	mg/kg-dry	T		2480.	J	-		3490.	J	5070.	J	4470.	J	3230.	J
Selenium	mg/kg-dry	T		<0.78	J	-		1.2	J	1.	J	1.2	J	0.89	J
Silver	mg/kg-dry	T		3.4	:	-		0.45	:	0.29	:	1.7	:	0.53	:
Sodium	mg/kg-dry	T		337.	:	-		409.	:	<224.	:	<303.	:	350.	:
Thallium	mg/kg-dry	T		0.14	:	-		0.26	:	0.35	:	0.34	:	0.29	:
Vanadium	mg/kg-dry	T		39.	:	-		39.2	:	43.8	:	48.3	:	31.1	:
Zinc	mg/kg-dry	T		178.	J	-		136.	J	125.	J	161.	J	97.1	J
Volatile Organics															
1,1,1-Trichloroethane	mg/kg-dry	T		<0.007	:	-		<0.013	:	<0.012	:	0.001	J	<0.006	:
1,1,2,2-Tetrachloroethane	mg/kg-dry	T		<0.007	:	-		<0.013	:	<0.012	:	<0.011	:	<0.006	:
1,1,2-Trichloro-1,2,2-trifluoroethane	mg/kg-dry	T		<0.007	:	-		<0.013	:	<0.012	:	<0.011	:	<0.006	:
1,1,2-Trichloroethane	mg/kg-dry	T		<0.007	:	-		<0.013	:	<0.012	:	<0.011	:	<0.006	:
1,1-Dichloroethane	mg/kg-dry	T		<0.007	:	-		<0.013	:	<0.012	:	<0.011	:	<0.006	:
1,1-Dichloroethene	mg/kg-dry	T		<0.007	:	-		<0.013	:	<0.012	:	<0.011	:	<0.006	:
1,2,4-Trichlorobenzene	mg/kg-dry	T		<0.007	:	-		<0.013	:	<0.012	:	<0.011	:	<0.006	:
1,2-Dibromo-3-chloropropane	mg/kg-dry	T		<0.007	:	-		<0.013	:	<0.012	:	<0.011	:	<0.006	:
1,2-Dichlorobenzene	mg/kg-dry	T		<0.007	:	-		<0.013	:	<0.012	:	<0.011	:	<0.006	:
1,2-Dichloroethane	mg/kg-dry	T		<0.007	:	-		<0.013	:	<0.012	:	<0.011	:	<0.006	:
1,2-Dichloroethene (total)	mg/kg-dry	T		<0.007	:	-		<0.013	:	<0.012	:	<0.011	:	<0.006	:
1,2-Dichloropropane	mg/kg-dry	T		<0.007	:	-		<0.013	:	<0.012	:	<0.011	:	<0.006	:
1,3-Dichlorobenzene	mg/kg-dry	T		<0.007	:	-		<0.013	:	<0.012	:	<0.011	:	<0.006	:
1,4-Dichlorobenzene	mg/kg-dry	T		<0.007	:	-		<0.013	:	<0.012	:	<0.011	:	<0.006	:
2-Butanone	mg/kg-dry	T		<0.007	:	-		<0.013	:	<0.012	J	<0.011	:	<0.006	:
2-Hexanone	mg/kg-dry	T		<0.007	:	-		<0.013	:	<0.012	J	<0.011	:	<0.006	:
4-Methyl-2-pentanone	mg/kg-dry	T		<0.007	:	-		<0.013	:	<0.012	J	<0.011	:	<0.006	:
Acetone	mg/kg-dry	T		<0.007	:	-		<0.013	:	0.001	J	<0.011	:	<0.006	:
Benzene	mg/kg-dry	T		<0.007	:	-		<0.013	:	<0.012	:	<0.011	:	<0.006	:
Bromodichloromethane	mg/kg-dry	T		<0.007	:	-		<0.013	:	<0.012	:	<0.011	:	<0.006	:
Bromoform	mg/kg-dry	T		<0.007	:	-		<0.013	:	<0.012	:	<0.011	:	<0.006	:
Bromomethane	mg/kg-dry	T		<0.007	J	-		<0.013	:	<0.012	:	<0.011	J	<0.006	:
Carbon disulfide	mg/kg-dry	T		<0.007	:	-		<0.013	:	<0.012	:	<0.011	:	<0.006	:

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Appendix A-7a
Soil - Biased 0-6 inches
Validated Analytical Results

Parameter	Units	Exposure Area Fraction	Site ID	MSS2-24	MSS2-26	MSS2-26	MSS2-27	MSS2-28	MSS2-29
			Sample Date	10/24/2002	10/24/2002	10/24/2002	10/24/2002	10/24/2002	10/23/2002
			Sample ID	MSS2-24-T01N-SOL	MSS2-26-T01N-SOL RE	MSS2-26-T01N-SOL	MSS2-27-T01N-SOL	MSS2-28-T01N-SOL	MSS2-29-T01N-SOL
			Exposure Area	SS2	SS2	SS2	SS2	SS2	SS2
Carbon tetrachloride	mg/kg-dry	T		<0.007 :	-	<0.013 :	<0.012 :	<0.011 :	<0.006 :
Chlorobenzene	mg/kg-dry	T		<0.007 :	-	<0.013 :	<0.012 :	<0.011 :	<0.006 :
Chloroethane	mg/kg-dry	T		<0.007 :	-	<0.013 :	<0.012 :	<0.011 :	<0.006 :
Chloroform	mg/kg-dry	T		<0.007 :	-	<0.013 :	<0.012 :	<0.011 :	<0.006 :
Chloromethane	mg/kg-dry	T		<0.007 J	-	<0.013 :	<0.012 :	<0.011 J	<0.006 :
cis-1,2-Dichloroethene	mg/kg-dry	T		<0.007 :	-	<0.013 :	<0.012 :	<0.011 :	<0.006 :
cis-1,3-Dichloropropene	mg/kg-dry	T		<0.007 :	-	<0.013 :	<0.012 :	<0.011 :	<0.006 :
Dibromochloromethane	mg/kg-dry	T		<0.007 :	-	<0.013 :	<0.012 :	<0.011 :	<0.006 :
Dichlorodifluoromethane	mg/kg-dry	T		<0.007 J	-	<0.013 :	<0.012 :	<0.011 J	<0.006 :
Ethylbenzene	mg/kg-dry	T		0.002 J	-	0.001 J	<0.012 :	<0.011 :	<0.006 :
Methylene chloride	mg/kg-dry	T		<0.007 :	-	<0.013 :	<0.012 :	<0.011 :	<0.006 :
Styrene	mg/kg-dry	T		<0.007 :	-	<0.013 :	<0.012 :	<0.011 :	<0.006 :
Tetrachloroethene	mg/kg-dry	T		<0.007 :	-	<0.013 :	<0.012 :	0.002 J	<0.006 :
Toluene	mg/kg-dry	T		<0.007 :	-	<0.013 :	<0.012 :	<0.011 :	<0.006 :
Total Xylene	mg/kg-dry	T		0.019 J	-	0.01 J	0.001 J	<0.011 :	0.002 J
trans-1,2-Dichloroethene	mg/kg-dry	T		<0.007 :	-	<0.013 :	<0.012 :	<0.011 :	<0.006 :
trans-1,3-Dichloropropene	mg/kg-dry	T		<0.007 :	-	<0.013 :	<0.012 :	<0.011 :	<0.006 :
Trichloroethene	mg/kg-dry	T		<0.007 :	-	<0.013 :	<0.012 :	<0.011 :	<0.006 :
Trichlorofluoromethane	mg/kg-dry	T		<0.007 :	-	<0.013 :	<0.012 :	<0.011 :	<0.006 :
Vinyl chloride	mg/kg-dry	T		<0.007 :	-	<0.013 :	<0.012 :	<0.011 :	<0.006 :
Semi-Volatile Organics									
1,1`-Biphenyl	mg/kg-dry	T		<0.35 :	<0.37 :	-	<0.36 :	<0.38 :	<0.36 :
2,4,5-Trichlorophenol	mg/kg-dry	T		<0.88 :	<0.92 :	-	<0.91 :	<0.95 :	<0.9 :
2,4,6-Trichlorophenol	mg/kg-dry	T		<0.35 :	<0.37 :	-	<0.36 :	<0.38 :	<0.36 :
2,4-Dichlorophenol	mg/kg-dry	T		<0.35 :	<0.37 :	-	<0.36 :	<0.38 :	<0.36 :
2,4-Dimethylphenol	mg/kg-dry	T		<0.35 :	<0.37 :	-	<0.36 :	<0.38 :	<0.36 :
2,4-Dinitrophenol	mg/kg-dry	T		<0.88 J	<0.92 J	-	<0.91 :	<0.95 :	<0.9 J
2,4-Dinitrotoluene	mg/kg-dry	T		<0.35 :	<0.37 :	-	<0.36 :	<0.38 :	<0.36 :
2,6-Dinitrotoluene	mg/kg-dry	T		<0.35 :	<0.37 :	-	<0.36 :	<0.38 :	<0.36 :
2-Chloronaphthalene	mg/kg-dry	T		<0.35 :	<0.37 :	-	<0.36 :	<0.38 :	<0.36 :
2-Chlorophenol	mg/kg-dry	T		<0.35 :	<0.37 :	-	<0.36 :	<0.38 :	<0.36 :
2-Methylnaphthalene	mg/kg-dry	T		<0.35 :	<0.37 :	-	<0.36 :	<0.38 :	<0.36 :
2-Methylphenol	mg/kg-dry	T		<0.35 :	<0.37 :	-	<0.36 :	<0.38 :	<0.36 :
2-Nitroaniline	mg/kg-dry	T		<0.88 :	<0.92 :	-	<0.91 :	<0.95 :	<0.9 J

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Appendix A-7a
Soil - Biased 0-6 inches
Validated Analytical Results

Parameter	Units	Exposure Area Fraction	Site ID	MSS2-24	MSS2-26	MSS2-26	MSS2-27	MSS2-28	MSS2-29
			Sample Date	10/24/2002	10/24/2002	10/24/2002	10/24/2002	10/24/2002	10/23/2002
			Sample ID	MSS2-24-T01N-SOL	MSS2-26-T01N-SOL RE	MSS2-26-T01N-SOL	MSS2-27-T01N-SOL	MSS2-28-T01N-SOL	MSS2-29-T01N-SOL
			Exposure Area	SS2	SS2	SS2	SS2	SS2	SS2
2-Nitrophenol	mg/kg-dry	T		<0.35 :	<0.37 :	-	<0.36 :	<0.38 J	<0.36 J
3,3-Dichlorobenzidine	mg/kg-dry	T		<0.35 :	<0.37 :	-	<0.36 :	<0.38 :	<0.36 :
3-Nitroaniline	mg/kg-dry	T		<0.88 :	<0.92 :	-	<0.91 :	<0.95 :	<0.9 :
4,6-Dinitro-2-methylphenol	mg/kg-dry	T		<0.88 J	<0.92 :	-	<0.91 :	<0.95 :	<0.9 :
4-Bromophenyl phenyl ether	mg/kg-dry	T		<0.35 :	<0.37 :	-	<0.36 :	<0.38 :	<0.36 :
4-Chloro-3-methylphenol	mg/kg-dry	T		<0.35 :	<0.37 :	-	<0.36 :	<0.38 :	<0.36 :
4-Chloroaniline	mg/kg-dry	T		<0.35 :	<0.37 J	-	<0.36 :	<0.38 :	<0.36 :
4-Chlorophenyl phenyl ether	mg/kg-dry	T		<0.35 :	<0.37 :	-	<0.36 :	<0.38 :	<0.36 :
4-Methylphenol	mg/kg-dry	T		<0.35 :	<0.37 :	-	<0.36 :	<0.38 :	<0.36 :
4-Nitroaniline	mg/kg-dry	T		<0.88 J	<0.92 :	-	<0.91 :	<0.95 :	<0.9 :
4-Nitrophenol	mg/kg-dry	T		<0.88 J	<0.92 :	-	<0.91 :	<0.95 :	<0.9 :
Acenaphthene	mg/kg-dry	T		<0.35 :	<0.37 :	-	<0.36 :	<0.38 :	<0.36 :
Acenaphthylene	mg/kg-dry	T		<0.35 :	<0.37 :	-	<0.36 :	<0.38 :	<0.36 :
Anthracene	mg/kg-dry	T		<0.35 :	<0.37 :	-	<0.36 :	<0.38 :	<0.36 :
Benzaldehyde	mg/kg-dry	T		0.068 J	<0.37 :	-	<0.36 :	<0.38 :	0.79 :
Benzo(a)anthracene	mg/kg-dry	T		<0.35 :	<0.37 :	-	<0.36 :	<0.38 :	<0.36 :
Benzo(a)pyrene	mg/kg-dry	T		<0.35 :	<0.37 :	-	<0.36 :	<0.38 :	<0.36 :
Benzo(b)fluoranthene	mg/kg-dry	T		<0.35 :	<0.37 :	-	<0.36 :	<0.38 :	<0.36 :
Benzo(g,h,i)perylene	mg/kg-dry	T		<0.35 :	<0.37 J	-	<0.36 :	<0.38 :	<0.36 :
Benzo(k)fluoranthene	mg/kg-dry	T		<0.35 :	<0.37 :	-	<0.36 :	<0.38 :	<0.36 :
Bis(2-chloroethoxy)methane	mg/kg-dry	T		<0.35 :	<0.37 :	-	<0.36 :	<0.38 :	<0.36 :
Bis(2-chloroethyl)ether	mg/kg-dry	T		<0.35 :	<0.37 :	-	<0.36 :	<0.38 :	<0.36 :
Bis(2-ethylhexyl)phthalate	mg/kg-dry	T		0.45 :	3.1 :	-	0.055 J	0.22 J	<0.36 :
Butyl benzyl phthalate	mg/kg-dry	T		<0.35 :	<0.37 :	-	<0.36 :	<0.38 :	<0.36 :
Carbazole	mg/kg-dry	T		<0.35 :	<0.37 :	-	<0.36 :	<0.38 :	<0.36 :
Chrysene	mg/kg-dry	T		<0.35 :	<0.37 :	-	<0.36 :	<0.38 :	<0.36 :
Dibenz(a,h)anthracene	mg/kg-dry	T		<0.35 :	<0.37 :	-	<0.36 :	<0.38 :	<0.36 :
Dibenzofuran	mg/kg-dry	T		<0.35 :	<0.37 :	-	<0.36 :	<0.38 :	<0.36 :
Dichlorodiisopropyl ether	mg/kg-dry	T		<0.35 J	<0.37 J	-	<0.36 :	<0.38 J	<0.36 :
Diethylphthalate	mg/kg-dry	T		<0.35 :	<0.37 :	-	<0.36 :	<0.38 :	<0.36 :
Dimethylphthalate	mg/kg-dry	T		<0.35 :	<0.37 :	-	<0.36 :	<0.38 :	<0.36 :
Di-n-Butyl phthalate	mg/kg-dry	T		<0.35 :	0.07 J	-	<0.36 :	0.022 J	<0.36 :
Di-n-Octyl phthalate	mg/kg-dry	T		<0.35 :	<0.37 :	-	<0.36 :	<0.38 :	<0.36 :
Fluoranthene	mg/kg-dry	T		<0.35 :	<0.37 :	-	<0.36 :	<0.38 :	<0.36 :

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Appendix A-7a
Soil - Biased 0-6 inches
Validated Analytical Results

Parameter	Units	Fraction	Site ID	Sample Date	Sample ID	Exposure Area											
			MSS2-24	10/24/2002	MSS2-24-T01N-SOL	SS2		MSS2-26	10/24/2002	MSS2-26-T01N-SOL RE	SS2	MSS2-26	10/24/2002	MSS2-26-T01N-SOL	SS2	MSS2-27	10/24/2002	MSS2-27-T01N-SOL	SS2	MSS2-28	10/24/2002	MSS2-28-T01N-SOL	SS2	MSS2-29	10/23/2002	MSS2-29-T01N-SOL	SS2
Fluorene	mg/kg-dry	T	<0.35	:				<0.37	:			-				<0.36	:			<0.38	:			<0.36	:		
Hexachlorobenzene	mg/kg-dry	T	<0.35	:				<0.37	:			-				<0.36	:			<0.38	:			<0.36	:		
Hexachlorobutadiene	mg/kg-dry	T	<0.35	:				<0.37	:			-				<0.36	:			<0.38	:			<0.36	:		
Hexachlorocyclopentadiene	mg/kg-dry	T	<0.35	J				<0.37	:			-				<0.36	:			<0.38	:			<0.36	:		
Hexachloroethane	mg/kg-dry	T	<0.35	:				<0.37	:			-				<0.36	:			<0.38	:			<0.36	:		
Indeno(1,2,3-cd)pyrene	mg/kg-dry	T	<0.35	:				<0.37	:			-				<0.36	:			<0.38	:			<0.36	:		
Isophorone	mg/kg-dry	T	<0.35	:				<0.37	:			-				<0.36	:			<0.38	:			<0.36	:		
Naphthalene	mg/kg-dry	T	<0.35	:				<0.37	:			-				<0.36	:			<0.38	:			<0.36	:		
Nitrobenzene	mg/kg-dry	T	<0.35	:				<0.37	:			-				<0.36	:			<0.38	:			<0.36	:		
N-Nitrosodi-n-propylamine	mg/kg-dry	T	<0.35	:				<0.37	J			-				<0.36	J			<0.38	:			<0.36	:		
N-Nitrosodiphenylamine	mg/kg-dry	T	<0.35	:				<0.37	:			-				<0.36	:			<0.38	:			<0.36	:		
Pentachlorophenol	mg/kg-dry	T	<0.88	:				<0.92	:			-				<0.91	:			<0.95	:			<0.9	:		
Phenanthrene	mg/kg-dry	T	<0.35	:				<0.37	:			-				<0.36	:			<0.38	:			<0.36	:		
Phenol	mg/kg-dry	T	<0.35	J				<0.37	:			-				<0.36	:			<0.38	J			<0.36	:		
Pyrene	mg/kg-dry	T	<0.35	J				0.14	J			-				<0.36	:			0.018	J			<0.36	:		

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Appendix A-7a
Soil - Biased 0-6 inches
Validated Analytical Results

Parameter	Units	Exposure Area Fraction	Site ID	MSS2-30	MSS2-32	MSS2-34	MSS2-35	MSS2-36	MSS2-37
			Sample Date	10/23/2002	10/23/2002	10/24/2002	10/23/2002	10/23/2002	10/23/2002
			Sample ID	MSS2-30-T01N-SOL	MSS2-32-T01N-SOL	MSS2-34-T01N-SOL	MSS2-35-T01N-SOL	MSS2-36-T01N-SOL	MSS2-37-T01N-SOL
			Exposure Area	SS2	SS2	SS2	SS2	SS2	SS2
General Chemistry									
Ammonia	mg/kg-dry	T		13.8 J	33.9 :	45. :	13.8 :	20.2 :	<9.6 J
Chloride	mg/kg-dry	T		552. J	562. J	59.9 J	304. J	51.4 :	1120. J
Fluoride	mg/kg-dry	T		3.3 J	1.3 J	1.4 J	4. J	4.8 J	1.6 J
Nitrate	mg/kg-dry	T		<2.2 J	12.4 J	6.4 J	13.5 J	9. J	14.6 J
Phosphorus	mg/kg-dry	T		710. J	1000. J	1230. J	1070. J	1060. J	1130. J
Sulfate	mg/kg-dry	T		<109. J	3120. J	1200. J	11200. J	10100. J	5470. J
Total Kjeldahl Nitrogen	mg/kg-dry	T		185. J	96.1 :	168. J	84.2 :	87.1 :	164. J
Total Organic Carbon	mg/kg-dry	T		9190. J	540. J	2980. J	2690. J	422. J	865. J
Laboratory Parameters									
pH	SU	T		6.9 :	6.5 :	6.4 :	7. :	7.2 :	7.1 :
Solids, Percent	%	T		91.4 :	90.2 :	91.1 :	86.9 :	90.7 :	90.4 :
Specific Conductance	umhos/cm	T		1590. :	1600. :	960. :	1880. :	1270. :	2480. :
Geotechnical									
Organic Soils	%	T		3.04 J	2.54 J	2.75 J	3.02 J	2.03 J	2.33 J
Physical Properties									
Cation-Exchange Capacity	meq/100g	T		21.1 :	23. :	16.2 :	17.8 :	18.5 :	12.2 :
Sodium Absorption Ratio	ratio	T		12.83 :	1.82 :	0.46 :	1.93 :	0.77 :	0.95 :
Metals									
Aluminum	mg/kg-dry	T		10700. :	11700. :	13100. :	14700. :	16100. :	14100. :
Antimony	mg/kg-dry	T		<0.26 J	<0.25 J	<0.32 J	<0.26 J	<0.26 J	<0.27 J
Arsenic	mg/kg-dry	T		2.8 :	3.8 :	3.1 :	3.5 :	3.4 :	3.3 :
Barium	mg/kg-dry	T		127. :	306. :	214. :	194. :	169. :	172. :
Beryllium	mg/kg-dry	T		0.81 :	0.94 :	0.95 :	1.1 :	1.2 :	1. :
Boron	mg/kg-dry	T		<0.63 J	<0.23 J	<2.6 :	<0.5 J	<0.24 J	<0.23 J
Cadmium	mg/kg-dry	T		0.67 :	0.26 J	0.39 :	0.51 :	0.61 :	0.48 :
Calcium	mg/kg-dry	T		17200. :	6360. :	6490. :	27300. :	15800. :	13300. :
Chromium	mg/kg-dry	T		36.3 :	25.4 :	36.3 :	36.5 :	39.8 :	35.7 :
Cobalt	mg/kg-dry	T		7.1 :	10.9 :	11.7 :	12. :	14.3 :	13.1 :
Copper	mg/kg-dry	T		47.1 :	70.7 :	93.8 :	74.7 :	81.1 :	82.2 :
Iron	mg/kg-dry	T		22600. :	30400. :	33600. :	27400. :	27500. :	27400. :
Lead	mg/kg-dry	T		190. :	53.3 :	73.3 :	60.2 :	68.8 :	65.5 :
Magnesium	mg/kg-dry	T		6730. :	5340. :	6340. :	7890. :	9450. :	8530. :
Manganese	mg/kg-dry	T		530. J	527. J	569. J	679. J	720. J	649. J

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Appendix A-7a
Soil - Biased 0-6 inches
Validated Analytical Results

Parameter	Units	Fraction	MSS2-30		MSS2-32		MSS2-34		MSS2-35		MSS2-36		MSS2-37	
Sample Date			10/23/2002		10/23/2002		10/24/2002		10/23/2002		10/23/2002		10/23/2002	
Sample ID			MSS2-30-T01N-SOL		MSS2-32-T01N-SOL		MSS2-34-T01N-SOL		MSS2-35-T01N-SOL		MSS2-36-T01N-SOL		MSS2-37-T01N-SOL	
Exposure Area			SS2		SS2		SS2		SS2		SS2		SS2	
Mercury	mg/kg-dry	T	0.016	:	<0.018	:	<0.018	J	<0.019	:	<0.017	:	<0.018	:
Molybdenum	mg/kg-dry	T	49.1	:	22.4	:	55.5	:	39.7	:	102.	:	77.1	:
Nickel	mg/kg-dry	T	21.5	J	21.4	J	27.9	J	30.2	J	34.5	J	29.7	J
Potassium	mg/kg-dry	T	2590.	J	3020.	J	3380.	J	3740.	J	4240.	J	3860.	J
Selenium	mg/kg-dry	T	0.78	J	0.89	J	1.6	J	0.76	J	1.1	J	<0.73	J
Silver	mg/kg-dry	T	0.54	:	0.72	:	0.44	:	0.58	:	0.56	:	0.62	:
Sodium	mg/kg-dry	T	<1220.	:	<416.	:	<311.	:	<430.	:	<227.	:	<268.	:
Thallium	mg/kg-dry	T	0.17	:	0.23	:	0.3	:	0.29	:	0.35	:	0.28	:
Vanadium	mg/kg-dry	T	33.	:	30.2	:	37.5	:	40.	:	44.4	:	40.8	:
Zinc	mg/kg-dry	T	119.	J	79.1	J	113.	J	102.	J	104.	J	98.7	J
Volatile Organics														
1,1,1-Trichloroethane	mg/kg-dry	T	<0.008	:	<0.003	:	<0.008	:	<0.004	:	<0.005	:	<0.01	:
1,1,2,2-Tetrachloroethane	mg/kg-dry	T	<0.008	:	<0.003	:	<0.008	:	<0.004	:	<0.005	:	<0.01	:
1,1,2-Trichloro-1,2,2-trifluoroethane	mg/kg-dry	T	<0.008	:	<0.003	:	<0.008	:	<0.004	:	<0.005	:	<0.01	:
1,1,2-Trichloroethane	mg/kg-dry	T	<0.008	:	<0.003	:	<0.008	:	<0.004	:	<0.005	:	<0.01	:
1,1-Dichloroethane	mg/kg-dry	T	<0.008	:	<0.003	:	<0.008	:	<0.004	:	<0.005	:	<0.01	:
1,1-Dichloroethene	mg/kg-dry	T	<0.008	:	<0.003	:	<0.008	:	<0.004	:	<0.005	:	<0.01	:
1,2,4-Trichlorobenzene	mg/kg-dry	T	<0.008	:	<0.003	:	<0.008	:	<0.004	:	<0.005	:	<0.01	:
1,2-Dibromo-3-chloropropane	mg/kg-dry	T	<0.008	:	<0.003	:	<0.008	:	<0.004	:	<0.005	:	<0.01	:
1,2-Dichlorobenzene	mg/kg-dry	T	<0.008	:	<0.003	:	<0.008	:	<0.004	:	<0.005	:	<0.01	:
1,2-Dichloroethane	mg/kg-dry	T	<0.008	:	<0.003	:	<0.008	:	<0.004	:	<0.005	:	<0.01	:
1,2-Dichloroethene (total)	mg/kg-dry	T	<0.008	:	<0.003	:	<0.008	:	<0.004	:	<0.005	:	<0.01	:
1,2-Dichloropropane	mg/kg-dry	T	<0.008	:	<0.003	:	<0.008	:	<0.004	:	<0.005	:	<0.01	:
1,3-Dichlorobenzene	mg/kg-dry	T	<0.008	:	<0.003	:	<0.008	:	<0.004	:	<0.005	:	<0.01	:
1,4-Dichlorobenzene	mg/kg-dry	T	<0.008	:	<0.003	:	<0.008	:	<0.004	:	<0.005	:	<0.01	:
2-Butanone	mg/kg-dry	T	<0.008	:	<0.003	:	<0.008	:	<0.004	:	<0.005	:	<0.01	:
2-Hexanone	mg/kg-dry	T	<0.008	:	<0.003	:	<0.008	:	<0.004	:	<0.005	:	<0.01	:
4-Methyl-2-pentanone	mg/kg-dry	T	<0.008	:	<0.003	:	<0.008	:	<0.004	:	<0.005	:	<0.01	:
Acetone	mg/kg-dry	T	0.002	J	0.001	J	<0.008	:	0.0007	J	0.001	J	<0.01	:
Benzene	mg/kg-dry	T	<0.008	:	<0.003	:	<0.008	:	<0.004	:	<0.005	:	<0.01	:
Bromodichloromethane	mg/kg-dry	T	<0.008	:	<0.003	:	<0.008	:	<0.004	:	<0.005	:	<0.01	:
Bromoform	mg/kg-dry	T	<0.008	:	<0.003	:	<0.008	:	<0.004	:	<0.005	:	<0.01	:
Bromomethane	mg/kg-dry	T	<0.008	:	<0.003	:	<0.008	J	<0.004	:	<0.005	:	<0.01	:
Carbon disulfide	mg/kg-dry	T	<0.008	:	<0.003	:	<0.008	:	<0.004	:	<0.005	:	<0.01	:

J = Qualified as estimated during data validation
R = Qualified as rejected value from data validation and results are considered unusable for any purpose
T = Total Fraction

Appendix A-7a
Soil - Biased 0-6 inches
Validated Analytical Results

Parameter	Units	Exposure Area Fraction	Site ID	Sample Date	Sample ID		MSS2-30		MSS2-32		MSS2-34		MSS2-35		MSS2-36		MSS2-37	
				10/23/2002	MSS2-30-T01N-SOL	SS2		10/23/2002	MSS2-32-T01N-SOL	SS2		10/24/2002	MSS2-34-T01N-SOL	SS2		10/23/2002	MSS2-35-T01N-SOL	SS2		10/23/2002	MSS2-36-T01N-SOL	SS2		10/23/2002	MSS2-37-T01N-SOL	SS2	
Carbon tetrachloride	mg/kg-dry	T				<0.008	:		<0.003	:		<0.008	:		<0.004	:		<0.005	:		<0.01	:
Chlorobenzene	mg/kg-dry	T				<0.008	:		<0.003	:		<0.008	:		<0.004	:		<0.005	:		<0.01	:
Chloroethane	mg/kg-dry	T				<0.008	:		<0.003	:		<0.008	:		<0.004	:		<0.005	:		<0.01	:
Chloroform	mg/kg-dry	T				<0.008	:		<0.003	:		<0.008	:		<0.004	:		<0.005	:		<0.01	:
Chloromethane	mg/kg-dry	T				<0.008	:		<0.003	:		<0.008	J		<0.004	:		<0.005	:		<0.01	:
cis-1,2-Dichloroethene	mg/kg-dry	T				<0.008	:		<0.003	:		<0.008	:		<0.004	:		<0.005	:		<0.01	:
cis-1,3-Dichloropropene	mg/kg-dry	T				<0.008	:		<0.003	:		<0.008	:		<0.004	:		<0.005	:		<0.01	:
Dibromochloromethane	mg/kg-dry	T				<0.008	:		<0.003	:		<0.008	:		<0.004	:		<0.005	:		<0.01	:
Dichlorodifluoromethane	mg/kg-dry	T				<0.008	:		<0.003	:		<0.008	J		<0.004	:		<0.005	:		<0.01	:
Ethylbenzene	mg/kg-dry	T				<0.008	:		<0.003	:		<0.008	:		<0.004	:		<0.005	:		<0.01	:
Methylene chloride	mg/kg-dry	T				<0.008	:		<0.003	:		<0.008	:		<0.004	:		<0.005	:		<0.01	:
Styrene	mg/kg-dry	T				<0.008	:		<0.003	:		<0.008	:		<0.004	:		<0.005	:		<0.01	:
Tetrachloroethene	mg/kg-dry	T				<0.008	:		<0.003	:		<0.008	:		<0.004	:		<0.005	:		<0.01	:
Toluene	mg/kg-dry	T				<0.008	:		<0.003	:		<0.008	:		<0.004	:		<0.005	:		<0.01	:
Total Xylene	mg/kg-dry	T				<0.008	:		<0.003	:		<0.008	:		<0.004	:		<0.005	:		<0.01	:
trans-1,2-Dichloroethene	mg/kg-dry	T				<0.008	:		<0.003	:		<0.008	:		<0.004	:		<0.005	:		<0.01	:
trans-1,3-Dichloropropene	mg/kg-dry	T				<0.008	:		<0.003	:		<0.008	:		<0.004	:		<0.005	:		<0.01	:
Trichloroethene	mg/kg-dry	T				<0.008	:		<0.003	:		<0.008	:		<0.004	:		<0.005	:		<0.01	:
Trichlorofluoromethane	mg/kg-dry	T				<0.008	:		<0.003	:		<0.008	:		<0.004	:		<0.005	:		<0.01	:
Vinyl chloride	mg/kg-dry	T				<0.008	:		<0.003	:		<0.008	:		<0.004	:		<0.005	:		<0.01	:
Semi-Volatile Organics																						
1,1`-Biphenyl	mg/kg-dry	T				<3.6	:		<0.37	:		<0.36	:		<0.38	:		<0.36	:		<0.37	:
2,4,5-Trichlorophenol	mg/kg-dry	T				<9.1	:		<0.92	:		<0.91	:		<0.95	:		<0.91	:		<0.92	:
2,4,6-Trichlorophenol	mg/kg-dry	T				<3.6	:		<0.37	:		<0.36	:		<0.38	:		<0.36	:		<0.37	:
2,4-Dichlorophenol	mg/kg-dry	T				<3.6	:		<0.37	:		<0.36	:		<0.38	:		<0.36	:		<0.37	:
2,4-Dimethylphenol	mg/kg-dry	T				<3.6	:		<0.37	:		<0.36	:		<0.38	:		<0.36	:		<0.37	:
2,4-Dinitrophenol	mg/kg-dry	T				<9.1	:		<0.92	:		<0.91	:		<0.95	:		<0.91	:		<0.92	:
2,4-Dinitrotoluene	mg/kg-dry	T				<3.6	:		<0.37	:		<0.36	:		<0.38	:		<0.36	:		<0.37	:
2,6-Dinitrotoluene	mg/kg-dry	T				<3.6	:		<0.37	:		<0.36	:		<0.38	:		<0.36	:		<0.37	:
2-Chloronaphthalene	mg/kg-dry	T				<3.6	:		<0.37	:		<0.36	:		<0.38	:		<0.36	:		<0.37	:
2-Chlorophenol	mg/kg-dry	T				<3.6	:		<0.37	:		<0.36	:		<0.38	:		<0.36	:		<0.37	:
2-Methylnaphthalene	mg/kg-dry	T				<3.6	:		<0.37	:		<0.36	:		<0.38	:		<0.36	:		<0.37	:
2-Methylphenol	mg/kg-dry	T				<3.6	:		<0.37	:		<0.36	:		<0.38	:		<0.36	:		<0.37	:
2-Nitroaniline	mg/kg-dry	T				<9.1	:		<0.92	:		<0.91	:		<0.95	:		<0.91	:		<0.92	:

J = Qualified as estimated during data validation
R = Qualified as rejected value from data validation and results are considered unusable for any purpose
T = Total Fraction

Appendix A-7a
Soil - Biased 0-6 inches
Validated Analytical Results

Parameter	Units	Exposure Area Fraction	Site ID	MSS2-30		MSS2-32		MSS2-34		MSS2-35		MSS2-36		MSS2-37	
			Sample Date	10/23/2002		10/23/2002		10/24/2002		10/23/2002		10/23/2002		10/23/2002	
			Sample ID	MSS2-30-T01N-SOL		MSS2-32-T01N-SOL		MSS2-34-T01N-SOL		MSS2-35-T01N-SOL		MSS2-36-T01N-SOL		MSS2-37-T01N-SOL	
			Exposure Area	SS2		SS2		SS2		SS2		SS2		SS2	
2-Nitrophenol	mg/kg-dry	T		<3.6	:	<0.37	:	<0.36	:	<0.38	:	<0.36	:	<0.37	:
3,3-Dichlorobenzidine	mg/kg-dry	T		<3.6	:	<0.37	:	<0.36	:	<0.38	:	<0.36	:	<0.37	:
3-Nitroaniline	mg/kg-dry	T		<9.1	:	<0.92	:	<0.91	:	<0.95	:	<0.91	:	<0.92	:
4,6-Dinitro-2-methylphenol	mg/kg-dry	T		<9.1	:	<0.92	:	<0.91	:	<0.95	:	<0.91	:	<0.92	:
4-Bromophenyl phenyl ether	mg/kg-dry	T		<3.6	:	<0.37	:	<0.36	:	<0.38	:	<0.36	:	<0.37	:
4-Chloro-3-methylphenol	mg/kg-dry	T		<3.6	:	<0.37	:	<0.36	:	<0.38	:	<0.36	:	<0.37	:
4-Chloroaniline	mg/kg-dry	T		<3.6	:	<0.37	:	<0.36	:	<0.38	:	<0.36	:	<0.37	:
4-Chlorophenyl phenyl ether	mg/kg-dry	T		<3.6	:	<0.37	:	<0.36	:	<0.38	:	<0.36	:	<0.37	:
4-Methylphenol	mg/kg-dry	T		<3.6	:	<0.37	:	<0.36	:	<0.38	:	<0.36	:	<0.37	:
4-Nitroaniline	mg/kg-dry	T		<9.1	:	<0.92	:	<0.91	:	<0.95	:	<0.91	:	<0.92	:
4-Nitrophenol	mg/kg-dry	T		<9.1	:	<0.92	:	<0.91	:	<0.95	:	<0.91	:	<0.92	:
Acenaphthene	mg/kg-dry	T		<3.6	:	<0.37	:	<0.36	:	<0.38	:	<0.36	:	<0.37	:
Acenaphthylene	mg/kg-dry	T		<3.6	:	<0.37	:	<0.36	:	<0.38	:	<0.36	:	<0.37	:
Anthracene	mg/kg-dry	T		<3.6	:	<0.37	:	<0.36	:	<0.38	:	<0.36	:	<0.37	:
Benzaldehyde	mg/kg-dry	T		<3.6	:	<0.37	:	<0.36	:	<0.38	:	<0.36	:	<0.37	:
Benzo(a)anthracene	mg/kg-dry	T		<3.6	:	<0.37	:	<0.36	:	<0.38	:	<0.36	:	<0.37	:
Benzo(a)pyrene	mg/kg-dry	T		<3.6	:	<0.37	:	<0.36	:	<0.38	:	<0.36	:	<0.37	:
Benzo(b)fluoranthene	mg/kg-dry	T		<3.6	:	<0.37	:	<0.36	:	<0.38	:	<0.36	:	<0.37	:
Benzo(g,h,i)perylene	mg/kg-dry	T		<3.6	:	<0.37	:	<0.36	:	<0.38	:	<0.36	:	<0.37	:
Benzo(k)fluoranthene	mg/kg-dry	T		<3.6	:	<0.37	:	<0.36	:	<0.38	:	<0.36	:	<0.37	:
Bis(2-chloroethoxy)methane	mg/kg-dry	T		<3.6	:	<0.37	:	<0.36	:	<0.38	:	<0.36	:	<0.37	:
Bis(2-chloroethyl)ether	mg/kg-dry	T		<3.6	:	<0.37	:	<0.36	:	<0.38	:	<0.36	:	<0.37	:
Bis(2-ethylhexyl)phthalate	mg/kg-dry	T		0.22	J	0.031	J	0.095	J	0.024	J	0.023	J	0.03	J
Butyl benzyl phthalate	mg/kg-dry	T		<3.6	:	<0.37	:	<0.36	:	<0.38	:	<0.36	:	<0.37	:
Carbazole	mg/kg-dry	T		<3.6	:	<0.37	:	<0.36	:	<0.38	:	<0.36	:	<0.37	:
Chrysene	mg/kg-dry	T		<3.6	:	<0.37	:	<0.36	:	<0.38	:	<0.36	:	<0.37	:
Dibenz(a,h)anthracene	mg/kg-dry	T		<3.6	:	<0.37	:	<0.36	:	<0.38	:	<0.36	:	<0.37	:
Dibenzofuran	mg/kg-dry	T		<3.6	:	<0.37	:	<0.36	:	<0.38	:	<0.36	:	<0.37	:
Dichlorodiisopropyl ether	mg/kg-dry	T		<3.6	:	<0.37	:	<0.36	:	<0.38	:	<0.36	:	<0.37	:
Diethylphthalate	mg/kg-dry	T		<3.6	:	<0.37	:	<0.36	:	<0.38	:	<0.36	:	<0.37	:
Dimethylphthalate	mg/kg-dry	T		<3.6	:	<0.37	:	<0.36	:	<0.38	:	<0.36	:	<0.37	:
Di-n-Butyl phthalate	mg/kg-dry	T		<3.6	:	<0.37	:	<0.36	:	<0.38	:	<0.36	:	<0.37	:
Di-n-Octyl phthalate	mg/kg-dry	T		<3.6	:	<0.37	:	<0.36	:	<0.38	:	<0.36	:	<0.37	:
Fluoranthene	mg/kg-dry	T		<3.6	:	<0.37	:	<0.36	:	<0.38	:	<0.36	:	<0.37	:

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Appendix A-7a
Soil - Biased 0-6 inches
Validated Analytical Results

Parameter	Units	Site ID / Sample Date / Sample ID / Exposure Area / Fraction	MSS2-30 10/23/2002 MSS2-30-T01N-SOL SS2		MSS2-32 10/23/2002 MSS2-32-T01N-SOL SS2		MSS2-34 10/24/2002 MSS2-34-T01N-SOL SS2		MSS2-35 10/23/2002 MSS2-35-T01N-SOL SS2		MSS2-36 10/23/2002 MSS2-36-T01N-SOL SS2		MSS2-37 10/23/2002 MSS2-37-T01N-SOL SS2	
Fluorene	mg/kg-dry	T	<3.6	:	<0.37	:	<0.36	:	<0.38	:	<0.36	:	<0.37	:
Hexachlorobenzene	mg/kg-dry	T	<3.6	:	<0.37	:	<0.36	:	<0.38	:	<0.36	:	<0.37	:
Hexachlorobutadiene	mg/kg-dry	T	<3.6	:	<0.37	:	<0.36	:	<0.38	:	<0.36	:	<0.37	:
Hexachlorocyclopentadiene	mg/kg-dry	T	<3.6	:	<0.37	:	<0.36	:	<0.38	:	<0.36	:	<0.37	:
Hexachloroethane	mg/kg-dry	T	<3.6	:	<0.37	:	<0.36	:	<0.38	:	<0.36	:	<0.37	:
Indeno(1,2,3-cd)pyrene	mg/kg-dry	T	<3.6	:	<0.37	:	<0.36	:	<0.38	:	<0.36	:	<0.37	:
Isophorone	mg/kg-dry	T	1.7	J	<0.37	:	<0.36	:	<0.38	:	<0.36	:	<0.37	:
Naphthalene	mg/kg-dry	T	<3.6	:	<0.37	:	<0.36	:	<0.38	:	<0.36	:	<0.37	:
Nitrobenzene	mg/kg-dry	T	<3.6	:	<0.37	:	<0.36	:	<0.38	:	<0.36	:	<0.37	:
N-Nitrosodi-n-propylamine	mg/kg-dry	T	<3.6	:	<0.37	:	<0.36	J	<0.38	:	<0.36	:	<0.37	:
N-Nitrosodiphenylamine	mg/kg-dry	T	<3.6	:	<0.37	:	<0.36	:	<0.38	:	<0.36	:	<0.37	:
Pentachlorophenol	mg/kg-dry	T	<9.1	:	<0.92	:	<0.91	:	<0.95	:	<0.91	:	<0.92	:
Phenanthrene	mg/kg-dry	T	<3.6	:	<0.37	:	<0.36	:	<0.38	:	<0.36	:	<0.37	:
Phenol	mg/kg-dry	T	<3.6	:	<0.37	:	<0.36	:	<0.38	:	<0.36	:	<0.37	:
Pyrene	mg/kg-dry	T	0.46	J	<0.37	:	<0.36	:	<0.38	:	<0.36	:	<0.37	:

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T = Total Fraction

Appendix A-7a
Soil - Biased 0-6 inches
Validated Analytical Results

Parameter	Units	Exposure Area Fraction	Site ID	MSS2-39		MSS2-40		MSS2-41		MSS2-43		MSS2-44		MSS2-45	
			Sample Date	10/24/2002		10/24/2002		10/24/2002		10/23/2002		10/23/2002		10/27/2002	
			Sample ID	MSS2-39-T01N-SOL		MSS2-40-T01N-SOL		MSS2-41-T01N-SOL		MSS2-43-T01N-SOL		MSS2-44-T01N-SOL		MSS2-45-T01N-SOL	
			Exposure Area	SS2		SS2		SS2		SS2		SS2		SS2	
General Chemistry															
Ammonia	mg/kg-dry	T		22.5	:	28.3	J	10.9	:	21.1	:	18.5	:	21.2	:
Chloride	mg/kg-dry	T		15.1	J	11.6	J	11.1	J	581.	:	955.	J	<37.	:
Fluoride	mg/kg-dry	T		1.	J	2.	J	1.8	J	4.3	J	2.7	J	4.4	J
Nitrate	mg/kg-dry	T		4.1	J	6.3	J	4.5	J	3.4	:	7.5	J	3.9	J
Phosphorus	mg/kg-dry	T		1360.	J	913.	J	1110.	J	815.	J	765.	J	467.	J
Sulfate	mg/kg-dry	T		382.	J	733.	J	328.	J	4910.	:	4480.	J	650.	:
Total Kjeldahl Nitrogen	mg/kg-dry	T		99.6	J	64.5	J	156.	J	44.2	J	76.3	:	74.8	:
Total Organic Carbon	mg/kg-dry	T		1370.	J	2080.	J	1920.	J	<109.	J	<110.	J	277.	J
Laboratory Parameters															
pH	SU	T		7.8	:	6.5	:	7.7	:	6.8	:	7.2	:	9.3	:
Solids, Percent	%	T		90.7	:	93.6	:	90.6	:	92.5	:	91.	:	82.1	:
Specific Conductance	umhos/cm	T		452.	:	437.	:	379.	:	2010.	:	1810.	:	645.	:
Geotechnical															
Organic Soils	%	T		2.68	J	1.88	J	2.46	J	1.89	J	2.27	J	2.34	J
Physical Properties															
Cation-Exchange Capacity	meq/100g	T		17.8	:	11.5	:	14.1	:	13.9	:	18.2	:	15.1	:
Sodium Absorption Ratio	ratio	T		0.26	:	0.3	:	0.36	:	4.59	:	2.06	:	0.16	:
Metals															
Aluminum	mg/kg-dry	T		21200.	:	13000.	:	14400.	:	9650.	:	9250.	:	11200.	:
Antimony	mg/kg-dry	T		<0.28	J	<0.27	J	<0.3	J	<0.25	J	<0.26	J	<0.3	J
Arsenic	mg/kg-dry	T		3.4	:	3.3	:	3.6	:	2.2	:	2.7	:	2.1	:
Barium	mg/kg-dry	T		208.	:	155.	:	152.	:	199.	:	132.	:	121.	:
Beryllium	mg/kg-dry	T		1.3	:	0.95	:	1.1	:	0.8	:	0.78	:	0.96	:
Boron	mg/kg-dry	T		<2.6	:	<2.6	:	<2.8	:	3.7	J	<0.51	J	<2.3	:
Cadmium	mg/kg-dry	T		0.42	:	0.62	:	0.42	:	0.4	J	0.57	:	0.66	:
Calcium	mg/kg-dry	T		20200.	:	12800.	:	10900.	:	8910.	:	12900.	:	28600.	:
Chromium	mg/kg-dry	T		58.1	:	39.7	:	42.4	:	27.1	:	20.3	:	35.8	:
Cobalt	mg/kg-dry	T		20.4	:	11.6	:	13.4	:	6.3	:	5.4	:	8.8	:
Copper	mg/kg-dry	T		94.6	:	84.8	:	85.9	:	54.3	:	43.4	:	43.4	:
Iron	mg/kg-dry	T		36200.	:	27000.	:	35600.	:	24600.	:	21100.	:	14900.	:
Lead	mg/kg-dry	T		56.5	:	37.5	:	45.7	:	61.7	:	52.8	:	20.	:
Magnesium	mg/kg-dry	T		13500.	:	8010.	:	8300.	:	4680.	:	4280.	:	8160.	:
Manganese	mg/kg-dry	T		844.	J	629.	J	620.	J	459.	J	435.	J	684.	J

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T = Total Fraction

Appendix A-7a
Soil - Biased 0-6 inches
Validated Analytical Results

Parameter	Units	Exposure Area Fraction	Site ID	MSS2-39		MSS2-40		MSS2-41		MSS2-43		MSS2-44		MSS2-45	
			Sample Date	10/24/2002		10/24/2002		10/24/2002		10/23/2002		10/23/2002		10/27/2002	
			Sample ID	MSS2-39-T01N-SOL		MSS2-40-T01N-SOL		MSS2-41-T01N-SOL		MSS2-43-T01N-SOL		MSS2-44-T01N-SOL		MSS2-45-T01N-SOL	
			Exposure Area	SS2		SS2		SS2		SS2		SS2		SS2	
Mercury	mg/kg-dry	T		<0.018	J	<0.017	J	<0.016	J	<0.016	:	<0.016	:	<0.018	:
Molybdenum	mg/kg-dry	T		47.	:	75.9	:	77.2	:	25.8	:	21.7	:	161.	:
Nickel	mg/kg-dry	T		47.1	J	28.9	J	32.	J	17.7	J	13.3	J	38.	J
Potassium	mg/kg-dry	T		5990.	J	3780.	J	3820.	J	2690.	J	2260.	J	2590.	J
Selenium	mg/kg-dry	T		0.94	J	0.79	J	0.89	J	0.92	J	<0.69	J	<0.79	J
Silver	mg/kg-dry	T		0.19	:	0.31	:	<0.16	:	0.36	:	0.42	:	<0.16	:
Sodium	mg/kg-dry	T		<54.2	:	<128.	:	<127.	:	807.	:	<496.	:	<148.	:
Thallium	mg/kg-dry	T		0.43	:	0.27	:	0.23	:	0.23	:	0.18	:	0.19	:
Vanadium	mg/kg-dry	T		63.2	:	41.4	:	46.5	:	25.8	:	23.3	:	31.4	:
Zinc	mg/kg-dry	T		117.	J	93.4	J	122.	J	86.7	J	97.9	J	141.	J
Volatile Organics															
1,1,1-Trichloroethane	mg/kg-dry	T		<0.007	:	<0.008	:	<0.01	:	<0.006	:	<0.004	:	<0.014	:
1,1,2,2-Tetrachloroethane	mg/kg-dry	T		<0.007	:	<0.008	:	<0.01	:	<0.006	:	<0.004	:	<0.014	:
1,1,2-Trichloro-1,2,2-trifluoroethane	mg/kg-dry	T		<0.007	:	<0.008	:	<0.01	:	<0.006	:	<0.004	:	<0.014	:
1,1,2-Trichloroethane	mg/kg-dry	T		<0.007	:	<0.008	:	<0.01	:	<0.006	:	<0.004	:	<0.014	:
1,1-Dichloroethane	mg/kg-dry	T		<0.007	:	<0.008	:	<0.01	:	<0.006	:	<0.004	:	<0.014	:
1,1-Dichloroethene	mg/kg-dry	T		<0.007	:	<0.008	:	<0.01	:	<0.006	:	<0.004	:	<0.014	:
1,2,4-Trichlorobenzene	mg/kg-dry	T		<0.007	:	<0.008	:	<0.01	:	<0.006	:	<0.004	:	<0.014	:
1,2-Dibromo-3-chloropropane	mg/kg-dry	T		<0.007	:	<0.008	:	<0.01	:	<0.006	:	<0.004	:	<0.014	:
1,2-Dichlorobenzene	mg/kg-dry	T		<0.007	:	<0.008	:	<0.01	:	<0.006	:	<0.004	:	<0.014	:
1,2-Dichloroethane	mg/kg-dry	T		<0.007	:	<0.008	:	<0.01	:	<0.006	:	<0.004	:	<0.014	:
1,2-Dichloroethene (total)	mg/kg-dry	T		<0.007	:	<0.008	:	<0.01	:	<0.006	:	<0.004	:	<0.014	:
1,2-Dichloropropane	mg/kg-dry	T		<0.007	:	<0.008	:	<0.01	:	<0.006	:	<0.004	:	<0.014	:
1,3-Dichlorobenzene	mg/kg-dry	T		<0.007	:	<0.008	:	<0.01	:	<0.006	:	<0.004	:	<0.014	:
1,4-Dichlorobenzene	mg/kg-dry	T		<0.007	:	<0.008	:	<0.01	:	<0.006	:	<0.004	:	<0.014	:
2-Butanone	mg/kg-dry	T		<0.007	:	<0.008	:	<0.01	:	<0.006	:	<0.004	:	<0.014	:
2-Hexanone	mg/kg-dry	T		<0.007	:	<0.008	:	<0.01	:	<0.006	:	<0.004	:	<0.014	:
4-Methyl-2-pentanone	mg/kg-dry	T		<0.007	:	<0.008	:	<0.01	:	<0.006	:	<0.004	:	<0.014	J
Acetone	mg/kg-dry	T		<0.007	:	<0.008	:	<0.01	:	0.002	J	0.001	J	0.037	:
Benzene	mg/kg-dry	T		<0.007	:	<0.008	:	<0.01	:	<0.006	:	<0.004	:	<0.014	:
Bromodichloromethane	mg/kg-dry	T		<0.007	:	<0.008	:	<0.01	:	<0.006	:	<0.004	:	<0.014	:
Bromoform	mg/kg-dry	T		<0.007	:	<0.008	:	<0.01	:	<0.006	:	<0.004	:	<0.014	:
Bromomethane	mg/kg-dry	T		<0.007	J	<0.008	J	<0.01	:	<0.006	:	<0.004	:	<0.014	:
Carbon disulfide	mg/kg-dry	T		<0.007	:	<0.008	:	<0.01	:	<0.006	:	<0.004	:	<0.014	:

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T = Total Fraction

Appendix A-7a
Soil - Biased 0-6 inches
Validated Analytical Results

Parameter	Units	Exposure Area Fraction	Site ID	MSS2-39	MSS2-40	MSS2-41	MSS2-43	MSS2-44	MSS2-45
			Sample Date	10/24/2002	10/24/2002	10/24/2002	10/23/2002	10/23/2002	10/27/2002
			Sample ID	MSS2-39-T01N-SOL	MSS2-40-T01N-SOL	MSS2-41-T01N-SOL	MSS2-43-T01N-SOL	MSS2-44-T01N-SOL	MSS2-45-T01N-SOL
			Exposure Area	SS2	SS2	SS2	SS2	SS2	SS2
Carbon tetrachloride	mg/kg-dry	T		<0.007 :	<0.008 :	<0.01 :	<0.006 :	<0.004 :	<0.014 :
Chlorobenzene	mg/kg-dry	T		<0.007 :	<0.008 :	<0.01 :	<0.006 :	<0.004 :	<0.014 :
Chloroethane	mg/kg-dry	T		<0.007 :	<0.008 :	<0.01 :	<0.006 :	<0.004 :	<0.014 J
Chloroform	mg/kg-dry	T		<0.007 :	<0.008 :	<0.01 :	<0.006 :	<0.004 :	<0.014 :
Chloromethane	mg/kg-dry	T		<0.007 J	<0.008 J	<0.01 :	<0.006 :	<0.004 :	<0.014 J
cis-1,2-Dichloroethene	mg/kg-dry	T		<0.007 :	<0.008 :	<0.01 :	<0.006 :	<0.004 :	<0.014 :
cis-1,3-Dichloropropene	mg/kg-dry	T		<0.007 :	<0.008 :	<0.01 :	<0.006 :	<0.004 :	<0.014 :
Dibromochloromethane	mg/kg-dry	T		<0.007 :	<0.008 :	<0.01 :	<0.006 :	<0.004 :	<0.014 :
Dichlorodifluoromethane	mg/kg-dry	T		<0.007 J	<0.008 J	<0.01 :	<0.006 :	<0.004 :	<0.014 :
Ethylbenzene	mg/kg-dry	T		<0.007 :	<0.008 :	<0.01 :	<0.006 :	<0.004 :	0.002 J
Methylene chloride	mg/kg-dry	T		<0.007 :	<0.008 :	<0.01 :	<0.006 :	<0.004 :	<0.014 :
Styrene	mg/kg-dry	T		<0.007 :	<0.008 :	<0.01 :	<0.006 :	<0.004 :	<0.014 :
Tetrachloroethene	mg/kg-dry	T		<0.007 :	<0.008 :	<0.01 :	<0.006 :	<0.004 :	<0.014 :
Toluene	mg/kg-dry	T		<0.007 :	<0.008 :	<0.01 :	<0.006 :	<0.004 :	<0.014 :
Total Xylene	mg/kg-dry	T		0.0009 J	<0.008 :	<0.01 :	<0.006 :	<0.004 :	0.008 J
trans-1,2-Dichloroethene	mg/kg-dry	T		<0.007 :	<0.008 :	<0.01 :	<0.006 :	<0.004 :	<0.014 :
trans-1,3-Dichloropropene	mg/kg-dry	T		<0.007 :	<0.008 :	<0.01 :	<0.006 :	<0.004 :	<0.014 :
Trichloroethene	mg/kg-dry	T		<0.007 :	<0.008 :	<0.01 :	<0.006 :	<0.004 :	<0.014 :
Trichlorofluoromethane	mg/kg-dry	T		<0.007 :	<0.008 :	<0.01 :	<0.006 :	<0.004 :	<0.014 :
Vinyl chloride	mg/kg-dry	T		<0.007 :	<0.008 :	<0.01 :	<0.006 :	<0.004 :	<0.014 J
Semi-Volatile Organics									
1,1`-Biphenyl	mg/kg-dry	T		<0.36 :	<0.35 :	<0.36 :	<0.36 :	<0.36 :	<0.4 :
2,4,5-Trichlorophenol	mg/kg-dry	T		<0.91 :	<0.88 :	<0.91 :	<0.9 :	<0.91 :	<1. :
2,4,6-Trichlorophenol	mg/kg-dry	T		<0.36 :	<0.35 :	<0.36 :	<0.36 :	<0.36 :	<0.4 :
2,4-Dichlorophenol	mg/kg-dry	T		<0.36 :	<0.35 :	<0.36 :	<0.36 :	<0.36 :	<0.4 :
2,4-Dimethylphenol	mg/kg-dry	T		<0.36 :	<0.35 :	<0.36 :	<0.36 :	<0.36 :	<0.4 :
2,4-Dinitrophenol	mg/kg-dry	T		<0.91 J	<0.88 :	<0.91 J	<0.9 :	<0.91 :	<1. :
2,4-Dinitrotoluene	mg/kg-dry	T		<0.36 :	<0.35 :	<0.36 :	<0.36 :	<0.36 :	<0.4 :
2,6-Dinitrotoluene	mg/kg-dry	T		<0.36 :	<0.35 :	<0.36 :	<0.36 :	<0.36 :	<0.4 :
2-Chloronaphthalene	mg/kg-dry	T		<0.36 :	<0.35 :	<0.36 :	<0.36 :	<0.36 :	<0.4 :
2-Chlorophenol	mg/kg-dry	T		<0.36 :	<0.35 :	<0.36 :	<0.36 :	<0.36 :	<0.4 :
2-Methylnaphthalene	mg/kg-dry	T		<0.36 :	<0.35 :	<0.36 :	<0.36 :	<0.36 :	<0.4 :
2-Methylphenol	mg/kg-dry	T		<0.36 :	<0.35 :	<0.36 :	<0.36 :	<0.36 :	<0.4 :
2-Nitroaniline	mg/kg-dry	T		<0.91 :	<0.88 :	<0.91 :	<0.9 :	<0.91 :	<1. :

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T = Total Fraction

Appendix A-7a
Soil - Biased 0-6 inches
Validated Analytical Results

Parameter	Units	Exposure Area Fraction	Site ID	MSS2-39	MSS2-40	MSS2-41	MSS2-43	MSS2-44	MSS2-45
			Sample Date	10/24/2002	10/24/2002	10/24/2002	10/23/2002	10/23/2002	10/27/2002
			Sample ID	MSS2-39-T01N-SOL	MSS2-40-T01N-SOL	MSS2-41-T01N-SOL	MSS2-43-T01N-SOL	MSS2-44-T01N-SOL	MSS2-45-T01N-SOL
			Exposure Area	SS2	SS2	SS2	SS2	SS2	SS2
2-Nitrophenol	mg/kg-dry	T		<0.36 :	<0.35 :	<0.36 :	<0.36 :	<0.36 :	<0.4 :
3,3-Dichlorobenzidine	mg/kg-dry	T		<0.36 :	<0.35 :	<0.36 :	<0.36 :	<0.36 :	<0.4 :
3-Nitroaniline	mg/kg-dry	T		<0.91 :	<0.88 :	<0.91 :	<0.9 :	<0.91 :	<1. :
4,6-Dinitro-2-methylphenol	mg/kg-dry	T		<0.91 :	<0.88 :	<0.91 :	<0.9 :	<0.91 :	<1. :
4-Bromophenyl phenyl ether	mg/kg-dry	T		<0.36 :	<0.35 :	<0.36 :	<0.36 :	<0.36 :	<0.4 :
4-Chloro-3-methylphenol	mg/kg-dry	T		<0.36 :	<0.35 :	<0.36 :	<0.36 :	<0.36 :	<0.4 :
4-Chloroaniline	mg/kg-dry	T		<0.36 :	<0.35 :	<0.36 :	<0.36 :	<0.36 :	<0.4 :
4-Chlorophenyl phenyl ether	mg/kg-dry	T		<0.36 :	<0.35 :	<0.36 :	<0.36 :	<0.36 :	<0.4 :
4-Methylphenol	mg/kg-dry	T		<0.36 :	<0.35 :	<0.36 :	<0.36 :	<0.36 :	<0.4 :
4-Nitroaniline	mg/kg-dry	T		<0.91 J	<0.88 :	<0.91 J	<0.9 :	<0.91 :	<1. :
4-Nitrophenol	mg/kg-dry	T		<0.91 J	<0.88 :	<0.91 J	<0.9 :	<0.91 :	<1. :
Acenaphthene	mg/kg-dry	T		<0.36 :	<0.35 :	<0.36 :	<0.36 :	<0.36 :	<0.4 :
Acenaphthylene	mg/kg-dry	T		<0.36 :	<0.35 :	<0.36 :	<0.36 :	<0.36 :	<0.4 :
Anthracene	mg/kg-dry	T		<0.36 :	<0.35 :	<0.36 :	<0.36 :	<0.36 :	<0.4 :
Benzaldehyde	mg/kg-dry	T		<0.36 :	<0.35 :	<0.36 :	0.14 J	<0.36 :	<0.4 :
Benzo(a)anthracene	mg/kg-dry	T		<0.36 :	0.054 J	<0.36 :	<0.36 :	<0.36 :	<0.4 :
Benzo(a)pyrene	mg/kg-dry	T		<0.36 :	0.035 J	<0.36 :	<0.36 :	<0.36 :	<0.4 :
Benzo(b)fluoranthene	mg/kg-dry	T		<0.36 :	0.041 J	<0.36 :	<0.36 :	<0.36 :	<0.4 :
Benzo(g,h,i)perylene	mg/kg-dry	T		<0.36 :	0.016 J	<0.36 :	<0.36 :	<0.36 :	<0.4 :
Benzo(k)fluoranthene	mg/kg-dry	T		<0.36 :	0.045 J	<0.36 :	<0.36 :	<0.36 :	<0.4 :
Bis(2-chloroethoxy)methane	mg/kg-dry	T		<0.36 :	<0.35 :	<0.36 :	<0.36 :	<0.36 :	<0.4 :
Bis(2-chloroethyl)ether	mg/kg-dry	T		<0.36 :	<0.35 :	<0.36 :	<0.36 :	<0.36 :	<0.4 :
Bis(2-ethylhexyl)phthalate	mg/kg-dry	T		0.022 J	0.026 J	0.032 J	<0.36 :	0.051 J	0.08 J
Butyl benzyl phthalate	mg/kg-dry	T		<0.36 J	<0.35 :	<0.36 J	<0.36 :	<0.36 :	<0.4 :
Carbazole	mg/kg-dry	T		<0.36 :	<0.35 :	<0.36 :	<0.36 :	<0.36 :	<0.4 :
Chrysene	mg/kg-dry	T		<0.36 :	0.065 J	<0.36 :	<0.36 :	<0.36 :	<0.4 :
Dibenz(a,h)anthracene	mg/kg-dry	T		<0.36 :	<0.35 :	<0.36 :	<0.36 :	<0.36 :	<0.4 :
Dibenzofuran	mg/kg-dry	T		<0.36 :	<0.35 :	<0.36 :	<0.36 :	<0.36 :	<0.4 :
Dichlorodiisopropyl ether	mg/kg-dry	T		<0.36 :	<0.35 :	<0.36 :	<0.36 :	<0.36 :	<0.4 :
Diethylphthalate	mg/kg-dry	T		<0.36 :	<0.35 :	<0.36 :	<0.36 :	<0.36 :	<0.4 :
Dimethylphthalate	mg/kg-dry	T		<0.36 :	<0.35 :	<0.36 :	<0.36 :	<0.36 :	<0.4 :
Di-n-Butyl phthalate	mg/kg-dry	T		<0.36 :	<0.35 :	<0.36 :	<0.36 :	<0.36 :	<0.4 :
Di-n-Octyl phthalate	mg/kg-dry	T		<0.36 :	<0.35 :	<0.36 :	<0.36 :	<0.36 :	<0.4 :
Fluoranthene	mg/kg-dry	T		<0.36 :	0.081 J	<0.36 :	<0.36 :	<0.36 :	<0.4 :

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Appendix A-7a
Soil - Biased 0-6 inches
Validated Analytical Results

Parameter	Units	Exposure Area Fraction	Site ID / Sample Date / Sample ID / Exposure Area											
			MSS2-39 10/24/2002 MSS2-39-T01N-SOL SS2		MSS2-40 10/24/2002 MSS2-40-T01N-SOL SS2		MSS2-41 10/24/2002 MSS2-41-T01N-SOL SS2		MSS2-43 10/23/2002 MSS2-43-T01N-SOL SS2		MSS2-44 10/23/2002 MSS2-44-T01N-SOL SS2		MSS2-45 10/27/2002 MSS2-45-T01N-SOL SS2	
Fluorene	mg/kg-dry	T	<0.36	:	<0.35	:	<0.36	:	<0.36	:	<0.36	:	<0.4	:
Hexachlorobenzene	mg/kg-dry	T	<0.36	:	<0.35	:	<0.36	:	<0.36	:	<0.36	:	<0.4	:
Hexachlorobutadiene	mg/kg-dry	T	<0.36	:	<0.35	:	<0.36	:	<0.36	:	<0.36	:	<0.4	:
Hexachlorocyclopentadiene	mg/kg-dry	T	<0.36	:	<0.35	:	<0.36	:	<0.36	:	<0.36	:	<0.4	:
Hexachloroethane	mg/kg-dry	T	<0.36	:	<0.35	:	<0.36	:	<0.36	:	<0.36	:	<0.4	:
Indeno(1,2,3-cd)pyrene	mg/kg-dry	T	<0.36	:	0.017	J	<0.36	:	<0.36	:	<0.36	:	<0.4	:
Isophorone	mg/kg-dry	T	<0.36	:	<0.35	:	<0.36	:	<0.36	:	<0.36	:	<0.4	:
Naphthalene	mg/kg-dry	T	<0.36	:	<0.35	:	<0.36	:	<0.36	:	<0.36	:	<0.4	:
Nitrobenzene	mg/kg-dry	T	<0.36	:	<0.35	:	<0.36	:	<0.36	:	<0.36	:	<0.4	:
N-Nitrosodi-n-propylamine	mg/kg-dry	T	<0.36	:	<0.35	J	<0.36	:	<0.36	:	<0.36	:	<0.4	:
N-Nitrosodiphenylamine	mg/kg-dry	T	<0.36	:	<0.35	:	<0.36	:	<0.36	:	<0.36	:	<0.4	:
Pentachlorophenol	mg/kg-dry	T	<0.91	:	<0.88	:	<0.91	:	<0.9	:	<0.91	:	<1.	:
Phenanthrene	mg/kg-dry	T	<0.36	:	<0.35	:	<0.36	:	<0.36	:	<0.36	:	<0.4	:
Phenol	mg/kg-dry	T	<0.36	:	<0.35	:	<0.36	:	<0.36	:	<0.36	:	<0.4	:
Pyrene	mg/kg-dry	T	<0.36	:	0.099	J	<0.36	:	<0.36	:	<0.36	:	<0.4	:

J = Qualified as estimated during data validation
R = Qualified as rejected value from data validation and results are considered unusable for any purpose
T = Total Fraction

Appendix A-7a
Soil - Biased 0-6 inches
Validated Analytical Results

Parameter	Units	Exposure Area Fraction	Site ID	MSS2-46	MSS2-47	MSS2-48	MSS2-49	MSS2-50	MSS2-51
			Sample Date	10/27/2002	10/27/2002	10/27/2002	10/27/2002	10/27/2002	10/27/2002
			Sample ID	MSS2-46-T01N-SOL	MSS2-47-T01N-SOL	MSS2-48-T01N-SOL	MSS2-49-T01N-SOL	MSS2-50-T01N-SOL	MSS2-51-T01N-SOL
			Exposure Area	SS2	SS2	SS2	SS2	SS2	SS2
General Chemistry									
Ammonia	mg/kg-dry	T		10.2 :	26.9 :	12.5 :	20.8 :	18.2 :	14.1 :
Chloride	mg/kg-dry	T		<31. :	<34. :	120. :	<33. J	160. :	160. :
Fluoride	mg/kg-dry	T		1.7 J	1. J	2. J	3.9 J	0.64 J	2.5 J
Nitrate	mg/kg-dry	T		5. J	1.9 J	<5.4 :	1.6 J	2.8 J	3.1 J
Phosphorus	mg/kg-dry	T		570. J	277. J	466. J	832. J	633. J	593. J
Sulfate	mg/kg-dry	T		1800. :	4900. :	100. :	60. J	170. :	82. :
Total Kjeldahl Nitrogen	mg/kg-dry	T		49.1 :	121. :	56.1 :	63.4 J	57.6 :	243. :
Total Organic Carbon	mg/kg-dry	T		<103. J	988. J	<108. J	567. J	<112. J	832. J
Laboratory Parameters									
pH	SU	T		7. :	4. :	4.9 :	6.3 :	8.5 :	7.1 :
Solids, Percent	%	T		97.1 :	87.2 :	92.6 :	89.8 :	89.6 :	87.6 :
Specific Conductance	umhos/cm	T		1350. :	1760. :	496. :	145. J	629. :	599. :
Geotechnical									
Organic Soils	%	T		2.13 J	3.53 J	2.87 J	2.85 J	3.34 J	3.72 J
Physical Properties									
Cation-Exchange Capacity	meq/100g	T		8.9 :	16.7 :	10.2 :	7.3 :	14.2 :	11.7 :
Sodium Absorption Ratio	ratio	T		0.71 :	0.07 :	1.81 :	0.11 :	1.62 :	0.53 :
Metals									
Aluminum	mg/kg-dry	T		8970. :	20700. :	4650. :	8710. :	5090. :	6890. :
Antimony	mg/kg-dry	T		<0.25 J	<0.28 J	<0.26 J	<0.23 J	<0.27 J	<0.28 J
Arsenic	mg/kg-dry	T		1.8 :	2.9 :	5.2 :	4.4 :	6.1 :	3.1 :
Barium	mg/kg-dry	T		95.1 :	230. :	321. :	250. J	369. :	154. :
Beryllium	mg/kg-dry	T		0.71 :	0.91 :	0.23 :	0.36 :	0.24 :	0.4 :
Boron	mg/kg-dry	T		<1.7 J	2.3 :	<0.25 J	1.9 J	<0.57 J	<2. :
Cadmium	mg/kg-dry	T		0.13 :	<0.037 J	<0.035 J	<0.033 :	<0.034 J	0.68 :
Calcium	mg/kg-dry	T		9640. :	11600. :	1530. :	5090. :	7690. :	29500. :
Chromium	mg/kg-dry	T		17.2 :	91. :	9.7 :	11.5 :	9.4 :	22.2 :
Cobalt	mg/kg-dry	T		5. :	14.1 :	1.4 :	0.94 :	1.4 :	4.7 :
Copper	mg/kg-dry	T		31.5 :	60.7 :	31.5 :	25.9 :	30.9 :	37.6 :
Iron	mg/kg-dry	T		14200. :	43700. :	22400. :	19800. :	27700. :	17000. :
Lead	mg/kg-dry	T		29.9 :	33.1 :	127. :	113. :	129. :	124. :
Magnesium	mg/kg-dry	T		3480. :	15900. :	1900. :	1440. :	1550. :	3290. :
Manganese	mg/kg-dry	T		649. J	655. J	93.7 J	82.5 J	120. J	252. J

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T = Total Fraction

Appendix A-7a
Soil - Biased 0-6 inches
Validated Analytical Results

Parameter	Units	Exposure Area Fraction	Site ID	MSS2-46		MSS2-47		MSS2-48		MSS2-49		MSS2-50		MSS2-51	
			Sample Date	10/27/2002		10/27/2002		10/27/2002		10/27/2002		10/27/2002		10/27/2002	
			Sample ID	MSS2-46-T01N-SOL		MSS2-47-T01N-SOL		MSS2-48-T01N-SOL		MSS2-49-T01N-SOL		MSS2-50-T01N-SOL		MSS2-51-T01N-SOL	
			Exposure Area	SS2		SS2		SS2		SS2		SS2		SS2	
Mercury	mg/kg-dry	T		<0.016	:	<0.017	:	<0.017	:	<0.018	:	<0.019	:	<0.019	:
Molybdenum	mg/kg-dry	T		51.3	:	32.	:	47.6	:	27.4	:	23.3	:	49.1	:
Nickel	mg/kg-dry	T		11.5	J	52.1	J	5.3	J	5.7	J	4.5	J	11.	J
Potassium	mg/kg-dry	T		2050.	J	6290.	J	3180.	J	4250.	J	5090.	J	2940.	J
Selenium	mg/kg-dry	T		<0.66	J	<0.76	J	1.1	J	1.2	J	1.	J	<0.75	J
Silver	mg/kg-dry	T		0.36	:	<0.15	:	0.94	:	0.68	:	1.	:	0.48	:
Sodium	mg/kg-dry	T		<245.	:	588.	:	354.	:	246.	:	389.	:	<209.	:
Thallium	mg/kg-dry	T		0.2	:	0.36	:	0.24	:	0.33	:	0.26	:	0.16	:
Vanadium	mg/kg-dry	T		20.7	:	76.7	:	11.6	:	13.3	:	13.3	:	17.8	:
Zinc	mg/kg-dry	T		67.	J	103.	J	24.	J	20.9	J	40.9	J	60.4	J
Volatile Organics															
1,1,1-Trichloroethane	mg/kg-dry	T		<0.009	:	<0.011	:	<0.007	:	<0.012	:	<0.01	:	-	
1,1,2,2-Tetrachloroethane	mg/kg-dry	T		<0.009	:	<0.011	:	<0.007	:	<0.012	:	<0.01	:	-	
1,1,2-Trichloro-1,2,2-trifluoroethane	mg/kg-dry	T		<0.009	:	<0.011	:	<0.007	:	<0.012	:	<0.01	:	-	
1,1,2-Trichloroethane	mg/kg-dry	T		<0.009	:	<0.011	:	<0.007	:	<0.012	:	<0.01	:	-	
1,1-Dichloroethane	mg/kg-dry	T		<0.009	:	<0.011	:	<0.007	:	<0.012	:	<0.01	:	-	
1,1-Dichloroethene	mg/kg-dry	T		<0.009	:	<0.011	:	<0.007	:	<0.012	:	<0.01	:	-	
1,2,4-Trichlorobenzene	mg/kg-dry	T		<0.009	:	<0.011	:	<0.007	:	<0.012	:	<0.01	:	-	
1,2-Dibromo-3-chloropropane	mg/kg-dry	T		<0.009	:	<0.011	:	<0.007	:	<0.012	:	<0.01	:	-	
1,2-Dichlorobenzene	mg/kg-dry	T		<0.009	:	<0.011	:	<0.007	:	<0.012	:	<0.01	:	-	
1,2-Dichloroethane	mg/kg-dry	T		<0.009	:	<0.011	:	<0.007	:	<0.012	:	<0.01	:	-	
1,2-Dichloroethene (total)	mg/kg-dry	T		<0.009	:	<0.011	:	<0.007	:	<0.012	:	<0.01	:	-	
1,2-Dichloropropane	mg/kg-dry	T		<0.009	:	<0.011	:	<0.007	:	<0.012	:	<0.01	:	-	
1,3-Dichlorobenzene	mg/kg-dry	T		<0.009	:	<0.011	:	<0.007	:	<0.012	:	<0.01	:	-	
1,4-Dichlorobenzene	mg/kg-dry	T		<0.009	:	<0.011	:	<0.007	:	<0.012	:	<0.01	:	-	
2-Butanone	mg/kg-dry	T		<0.009	:	<0.011	:	<0.007	:	<0.012	J	<0.01	:	-	
2-Hexanone	mg/kg-dry	T		<0.009	:	<0.011	:	<0.007	:	<0.012	J	<0.01	:	-	
4-Methyl-2-pentanone	mg/kg-dry	T		<0.009	J	<0.011	:	<0.007	J	<0.012	J	<0.01	:	-	
Acetone	mg/kg-dry	T		0.017	:	<0.011	:	0.007	:	0.004	J	<0.01	:	-	
Benzene	mg/kg-dry	T		<0.009	:	<0.011	:	<0.007	:	<0.012	:	<0.01	:	-	
Bromodichloromethane	mg/kg-dry	T		<0.009	:	<0.011	:	<0.007	:	<0.012	:	<0.01	:	-	
Bromoform	mg/kg-dry	T		<0.009	:	<0.011	:	<0.007	:	<0.012	:	<0.01	:	-	
Bromomethane	mg/kg-dry	T		<0.009	:	<0.011	:	<0.007	:	<0.012	:	<0.01	:	-	
Carbon disulfide	mg/kg-dry	T		<0.009	:	<0.011	:	<0.007	:	<0.012	:	<0.01	:	-	

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T = Total Fraction

Appendix A-7a
Soil - Biased 0-6 inches
Validated Analytical Results

Parameter	Units	Exposure Area Fraction	Site ID	MSS2-46	MSS2-47	MSS2-48	MSS2-49	MSS2-50	MSS2-51
			Sample Date	10/27/2002	10/27/2002	10/27/2002	10/27/2002	10/27/2002	10/27/2002
			Sample ID	MSS2-46-T01N-SOL	MSS2-47-T01N-SOL	MSS2-48-T01N-SOL	MSS2-49-T01N-SOL	MSS2-50-T01N-SOL	MSS2-51-T01N-SOL
			Exposure Area	SS2	SS2	SS2	SS2	SS2	SS2
Carbon tetrachloride	mg/kg-dry	T		<0.009 :	<0.011 :	<0.007 :	<0.012 :	<0.01 :	-
Chlorobenzene	mg/kg-dry	T		<0.009 :	<0.011 :	<0.007 :	<0.012 :	<0.01 :	-
Chloroethane	mg/kg-dry	T		<0.009 J	<0.011 :	<0.007 J	<0.012 :	<0.01 :	-
Chloroform	mg/kg-dry	T		<0.009 :	<0.011 :	<0.007 :	<0.012 :	<0.01 :	-
Chloromethane	mg/kg-dry	T		<0.009 J	<0.011 :	<0.007 J	<0.012 :	<0.01 :	-
cis-1,2-Dichloroethene	mg/kg-dry	T		<0.009 :	<0.011 :	<0.007 :	<0.012 :	<0.01 :	-
cis-1,3-Dichloropropene	mg/kg-dry	T		<0.009 :	<0.011 :	<0.007 :	<0.012 :	<0.01 :	-
Dibromochloromethane	mg/kg-dry	T		<0.009 :	<0.011 :	<0.007 :	<0.012 :	<0.01 :	-
Dichlorodifluoromethane	mg/kg-dry	T		<0.009 :	<0.011 :	<0.007 :	<0.012 :	<0.01 :	-
Ethylbenzene	mg/kg-dry	T		<0.009 :	<0.011 :	<0.007 :	<0.012 :	<0.01 :	-
Methylene chloride	mg/kg-dry	T		0.002 J	<0.011 :	0.001 J	<0.012 :	<0.01 :	-
Styrene	mg/kg-dry	T		<0.009 :	<0.011 :	<0.007 :	<0.012 :	<0.01 :	-
Tetrachloroethene	mg/kg-dry	T		<0.009 :	<0.011 :	<0.007 :	<0.012 :	<0.01 :	-
Toluene	mg/kg-dry	T		<0.009 :	<0.011 :	<0.007 :	<0.012 :	<0.01 :	-
Total Xylene	mg/kg-dry	T		<0.009 :	0.001 J	0.002 J	<0.012 :	0.002 J	-
trans-1,2-Dichloroethene	mg/kg-dry	T		<0.009 :	<0.011 :	<0.007 :	<0.012 :	<0.01 :	-
trans-1,3-Dichloropropene	mg/kg-dry	T		<0.009 :	<0.011 :	<0.007 :	<0.012 :	<0.01 :	-
Trichloroethene	mg/kg-dry	T		<0.009 :	<0.011 :	<0.007 :	<0.012 :	<0.01 :	-
Trichlorofluoromethane	mg/kg-dry	T		<0.009 :	<0.011 :	<0.007 :	<0.012 :	<0.01 :	-
Vinyl chloride	mg/kg-dry	T		<0.009 J	<0.011 :	<0.007 J	<0.012 :	<0.01 :	-
Semi-Volatile Organics									
1,1`-Biphenyl	mg/kg-dry	T		<0.34 :	<0.38 :	<0.47 :	<0.37 :	<0.37 :	<0.38 :
2,4,5-Trichlorophenol	mg/kg-dry	T		<0.86 :	<0.95 :	<1.2 :	<0.92 :	<0.92 :	<0.94 :
2,4,6-Trichlorophenol	mg/kg-dry	T		<0.34 :	<0.38 :	<0.47 :	<0.37 :	<0.37 :	<0.38 :
2,4-Dichlorophenol	mg/kg-dry	T		<0.34 :	<0.38 :	<0.47 :	<0.37 :	<0.37 :	<0.38 :
2,4-Dimethylphenol	mg/kg-dry	T		<0.34 :	<0.38 :	<0.47 :	<0.37 :	<0.37 :	<0.38 :
2,4-Dinitrophenol	mg/kg-dry	T		<0.86 J	<0.95 :	<1.2 :	<0.92 J	<0.92 :	<0.94 :
2,4-Dinitrotoluene	mg/kg-dry	T		<0.34 :	<0.38 :	<0.47 :	<0.37 :	<0.37 :	<0.38 :
2,6-Dinitrotoluene	mg/kg-dry	T		<0.34 :	<0.38 :	<0.47 :	<0.37 :	<0.37 :	<0.38 :
2-Chloronaphthalene	mg/kg-dry	T		<0.34 :	<0.38 :	<0.47 :	<0.37 :	<0.37 :	<0.38 :
2-Chlorophenol	mg/kg-dry	T		<0.34 :	<0.38 :	<0.47 :	<0.37 :	<0.37 :	<0.38 :
2-Methylnaphthalene	mg/kg-dry	T		<0.34 :	<0.38 :	<0.47 :	<0.37 :	<0.37 :	<0.38 :
2-Methylphenol	mg/kg-dry	T		<0.34 :	<0.38 :	<0.47 :	<0.37 :	<0.37 :	<0.38 :
2-Nitroaniline	mg/kg-dry	T		<0.86 :	<0.95 :	<1.2 :	<0.92 :	<0.92 :	<0.94 :

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T = Total Fraction

Appendix A-7a
Soil - Biased 0-6 inches
Validated Analytical Results

Parameter	Units	Exposure Area Fraction	Site ID / Sample Date / Sample ID	MSS2-46 10/27/2002 MSS2-46-T01N-SOL SS2	MSS2-47 10/27/2002 MSS2-47-T01N-SOL SS2	MSS2-48 10/27/2002 MSS2-48-T01N-SOL SS2	MSS2-49 10/27/2002 MSS2-49-T01N-SOL SS2	MSS2-50 10/27/2002 MSS2-50-T01N-SOL SS2	MSS2-51 10/27/2002 MSS2-51-T01N-SOL SS2
2-Nitrophenol	mg/kg-dry	T		<0.34 :	<0.38 :	<0.47 :	<0.37 :	<0.37 :	<0.38 :
3,3-Dichlorobenzidine	mg/kg-dry	T		<0.34 :	<0.38 :	<0.47 :	<0.37 :	<0.37 :	<0.38 :
3-Nitroaniline	mg/kg-dry	T		<0.86 :	<0.95 :	<1.2 :	<0.92 :	<0.92 :	<0.94 :
4,6-Dinitro-2-methylphenol	mg/kg-dry	T		<0.86 :	<0.95 :	<1.2 :	<0.92 :	<0.92 :	<0.94 :
4-Bromophenyl phenyl ether	mg/kg-dry	T		<0.34 :	<0.38 :	<0.47 :	<0.37 :	<0.37 :	<0.38 :
4-Chloro-3-methylphenol	mg/kg-dry	T		<0.34 :	<0.38 :	<0.47 :	<0.37 :	<0.37 :	<0.38 :
4-Chloroaniline	mg/kg-dry	T		<0.34 :	<0.38 :	<0.47 :	<0.37 :	<0.37 :	<0.38 :
4-Chlorophenyl phenyl ether	mg/kg-dry	T		<0.34 :	<0.38 :	<0.47 :	<0.37 :	<0.37 :	<0.38 :
4-Methylphenol	mg/kg-dry	T		<0.34 :	<0.38 :	<0.47 :	<0.37 :	<0.37 :	<0.38 :
4-Nitroaniline	mg/kg-dry	T		<0.86 :	<0.95 :	<1.2 :	<0.92 :	<0.92 :	<0.94 :
4-Nitrophenol	mg/kg-dry	T		<0.86 :	<0.95 :	<1.2 :	<0.92 J	<0.92 :	<0.94 :
Acenaphthene	mg/kg-dry	T		<0.34 :	<0.38 :	<0.47 :	<0.37 :	<0.37 :	<0.38 :
Acenaphthylene	mg/kg-dry	T		<0.34 :	<0.38 :	<0.47 :	<0.37 :	<0.37 :	<0.38 :
Anthracene	mg/kg-dry	T		<0.34 :	<0.38 :	<0.47 :	<0.37 :	<0.37 :	<0.38 :
Benzaldehyde	mg/kg-dry	T		<0.34 :	<0.38 :	3.4 J	<0.37 :	<0.37 :	<0.38 :
Benzo(a)anthracene	mg/kg-dry	T		<0.34 :	<0.38 :	<0.47 :	<0.37 :	<0.37 :	<0.38 :
Benzo(a)pyrene	mg/kg-dry	T		<0.34 :	<0.38 :	<0.47 :	<0.37 :	<0.37 :	<0.38 :
Benzo(b)fluoranthene	mg/kg-dry	T		<0.34 :	<0.38 :	<0.47 :	<0.37 :	<0.37 :	<0.38 :
Benzo(g,h,i)perylene	mg/kg-dry	T		<0.34 :	<0.38 :	<0.47 :	<0.37 :	<0.37 :	<0.38 :
Benzo(k)fluoranthene	mg/kg-dry	T		<0.34 :	<0.38 :	<0.47 :	<0.37 :	<0.37 :	<0.38 :
Bis(2-chloroethoxy)methane	mg/kg-dry	T		<0.34 :	<0.38 :	<0.47 :	<0.37 :	<0.37 :	<0.38 :
Bis(2-chloroethyl)ether	mg/kg-dry	T		<0.34 :	<0.38 :	<0.47 :	<0.37 :	<0.37 :	<0.38 :
Bis(2-ethylhexyl)phthalate	mg/kg-dry	T		<0.34 :	0.034 J	0.13 J	<0.37 :	0.018 J	0.053 J
Butyl benzyl phthalate	mg/kg-dry	T		<0.34 :	<0.38 :	<0.47 :	<0.37 :	<0.37 :	<0.38 :
Carbazole	mg/kg-dry	T		<0.34 :	<0.38 :	<0.47 :	<0.37 :	<0.37 :	<0.38 :
Chrysene	mg/kg-dry	T		<0.34 :	<0.38 :	<0.47 :	<0.37 :	<0.37 :	<0.38 :
Dibenz(a,h)anthracene	mg/kg-dry	T		<0.34 :	<0.38 :	<0.47 :	<0.37 :	<0.37 :	<0.38 :
Dibenzofuran	mg/kg-dry	T		<0.34 :	<0.38 :	<0.47 :	<0.37 :	<0.37 :	<0.38 :
Dichlorodiisopropyl ether	mg/kg-dry	T		<0.34 :	<0.38 :	<0.47 :	<0.37 :	<0.37 :	<0.38 :
Diethylphthalate	mg/kg-dry	T		<0.34 :	<0.38 :	<0.47 :	<0.37 :	<0.37 :	<0.38 :
Dimethylphthalate	mg/kg-dry	T		<0.34 :	<0.38 :	<0.47 :	<0.37 :	<0.37 :	<0.38 :
Di-n-Butyl phthalate	mg/kg-dry	T		<0.34 :	<0.38 :	<0.47 :	<0.37 :	<0.37 :	<0.38 :
Di-n-Octyl phthalate	mg/kg-dry	T		<0.34 :	<0.38 :	<0.47 :	<0.37 :	<0.37 :	<0.38 :
Fluoranthene	mg/kg-dry	T		<0.34 :	<0.38 :	<0.47 :	<0.37 :	<0.37 :	<0.38 :

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T = Total Fraction

Appendix A-7a
Soil - Biased 0-6 inches
Validated Analytical Results

Parameter	Units	Exposure Area Fraction	Site ID	MSS2-46	MSS2-47	MSS2-48	MSS2-49	MSS2-50	MSS2-51
			Sample Date	10/27/2002	10/27/2002	10/27/2002	10/27/2002	10/27/2002	10/27/2002
			Sample ID	MSS2-46-T01N-SOL	MSS2-47-T01N-SOL	MSS2-48-T01N-SOL	MSS2-49-T01N-SOL	MSS2-50-T01N-SOL	MSS2-51-T01N-SOL
			Exposure Area	SS2	SS2	SS2	SS2	SS2	SS2
Fluorene	mg/kg-dry	T		<0.34 :	<0.38 :	<0.47 :	<0.37 :	<0.37 :	<0.38 :
Hexachlorobenzene	mg/kg-dry	T		<0.34 :	<0.38 :	<0.47 :	<0.37 :	<0.37 :	<0.38 :
Hexachlorobutadiene	mg/kg-dry	T		<0.34 :	<0.38 :	<0.47 :	<0.37 :	<0.37 :	<0.38 :
Hexachlorocyclopentadiene	mg/kg-dry	T		<0.34 J	<0.38 :	<0.47 :	<0.37 J	<0.37 :	<0.38 :
Hexachloroethane	mg/kg-dry	T		<0.34 :	<0.38 :	<0.47 :	<0.37 :	<0.37 :	<0.38 :
Indeno(1,2,3-cd)pyrene	mg/kg-dry	T		<0.34 :	<0.38 :	<0.47 :	<0.37 :	<0.37 :	<0.38 :
Isophorone	mg/kg-dry	T		<0.34 :	<0.38 :	<0.47 :	<0.37 :	<0.37 :	<0.38 :
Naphthalene	mg/kg-dry	T		<0.34 :	<0.38 :	<0.47 :	<0.37 :	<0.37 :	<0.38 :
Nitrobenzene	mg/kg-dry	T		<0.34 :	<0.38 :	<0.47 :	<0.37 :	<0.37 :	<0.38 :
N-Nitrosodi-n-propylamine	mg/kg-dry	T		<0.34 :	<0.38 :	<0.47 :	<0.37 :	<0.37 :	<0.38 :
N-Nitrosodiphenylamine	mg/kg-dry	T		<0.34 :	<0.38 :	<0.47 :	<0.37 :	<0.37 :	<0.38 :
Pentachlorophenol	mg/kg-dry	T		<0.86 :	<0.95 :	<1.2 :	<0.92 :	<0.92 :	<0.94 :
Phenanthrene	mg/kg-dry	T		<0.34 :	<0.38 :	<0.47 :	<0.37 :	<0.37 :	<0.38 :
Phenol	mg/kg-dry	T		<0.34 :	<0.38 :	0.85 :	<0.37 :	<0.37 :	<0.38 :
Pyrene	mg/kg-dry	T		<0.34 :	<0.38 :	<0.47 :	<0.37 :	<0.37 :	<0.38 :

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T = Total Fraction

Appendix A-7a
Soil - Biased 0-6 inches
Validated Analytical Results

Parameter	Units	Exposure Area Fraction	Site ID / Sample Date / Sample ID		MSS2-51 4/8/2003 MSS2-51-T01N-SOL SS2		MSS2-52 10/27/2002 MSS2-52-T01N-SOL SS2		MSS2-53 10/27/2002 MSS2-53-T01N-SOL SS2		MSS2-54 10/27/2002 MSS2-54-T01N-SOL SS2		MSS2-56R 10/27/2002 MSS2-56-T01N-SOL SS2		MSS2-56R 1/12/2003 MSS2-56R-T01N-SOL SS2	
General Chemistry																
Ammonia	mg/kg-dry	T		-		36.3	:	23.3	:	26.3	:	-		34.2	:
Chloride	mg/kg-dry	T		-		<34.	:	38.	:	<33.	:	69.	:	201.	:
Fluoride	mg/kg-dry	T		-		0.34	J	1.2	J	0.28	J	-		3.2	J
Nitrate	mg/kg-dry	T		-		2.9	J	3.	J	1.9	J	7.4	:	32.3	J
Phosphorus	mg/kg-dry	T		-		719.	J	533.	J	371.	J	-		1190.	:
Sulfate	mg/kg-dry	T		-		<57.	:	77.	:	<55.	:	<57.	:	274.	J
Total Kjeldahl Nitrogen	mg/kg-dry	T		-		465.	:	81.3	:	211.	:	-		306.	:
Total Organic Carbon	mg/kg-dry	T		-		5820.	J	209.	J	2220.	J	-		4170.	J
Laboratory Parameters															
pH	SU	T		-		8.2	:	5.7	:	7.3	:	-		7.6	:
Solids, Percent	%	T		94.3	:	88.2	:	91.3	:	90.8	:	-		91.	:
Specific Conductance	umhos/cm	T		-		112.	:	248.	:	74.3	:	-		2010.	:
Geotechnical															
Organic Soils	%	T		-		2.47	J	3.08	J	1.4	J	-		3.94	:
Physical Properties															
Cation-Exchange Capacity	meq/100g	T		-		10.3	:	6.7	:	7.2	:	-		9.5	:
Sodium Absorption Ratio	ratio	T		-		0.12	:	2.25	:	0.1	:	-		0.66	:
Metals															
Aluminum	mg/kg-dry	T		-		8890.	:	4880.	:	5770.	:	-		10600.	:
Antimony	mg/kg-dry	T		-		<0.27	J	<0.27	J	<0.26	J	-		<0.31	J
Arsenic	mg/kg-dry	T		-		2.8	:	5.2	:	2.2	:	-		2.3	J
Barium	mg/kg-dry	T		-		91.2	:	305.	:	83.3	:	-		268.	:
Beryllium	mg/kg-dry	T		-		0.53	:	0.24	:	0.38	:	-		0.71	:
Boron	mg/kg-dry	T		-		<1.9	:	<0.35	J	<0.55	J	-		5.2	:
Cadmium	mg/kg-dry	T		-		0.54	:	<0.035	J	<0.035	J	-		0.11	J
Calcium	mg/kg-dry	T		-		4680.	:	1040.	:	2960.	:	-		24400.	:
Chromium	mg/kg-dry	T		-		24.3	:	10.1	:	20.2	:	-		21.	J
Cobalt	mg/kg-dry	T		-		6.1	:	1.5	:	5.8	:	-		7.9	:
Copper	mg/kg-dry	T		-		24.8	:	28.1	:	30.9	:	-		45.2	J
Iron	mg/kg-dry	T		-		15300.	:	22600.	:	36400.	:	-		28100.	:
Lead	mg/kg-dry	T		-		84.7	:	112.	:	19.6	:	-		49.4	:
Magnesium	mg/kg-dry	T		-		4360.	:	1670.	:	2320.	:	-		4450.	:
Manganese	mg/kg-dry	T		-		288.	J	118.	J	703.	J	-		453.	:

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Appendix A-7a
Soil - Biased 0-6 inches
Validated Analytical Results

Parameter	Units	Fraction	MSS2-51	MSS2-52	MSS2-53	MSS2-54	MSS2-56R	MSS2-56R
Sample Date			4/8/2003	10/27/2002	10/27/2002	10/27/2002	10/27/2002	1/12/2003
Sample ID			MSS2-51-T01N-SOL	MSS2-52-T01N-SOL	MSS2-53-T01N-SOL	MSS2-54-T01N-SOL	MSS2-56-T01N-SOL	MSS2-56R-T01N-SOL
Exposure Area			SS2	SS2	SS2	SS2	SS2	SS2
Mercury	mg/kg-dry	T	-	<0.018 :	<0.017 :	<0.018 :	-	<0.017 :
Molybdenum	mg/kg-dry	T	-	62.9 :	28.9 :	52.3 :	-	28.8 :
Nickel	mg/kg-dry	T	-	15.7 J	5.2 J	26.8 J	-	17.4 :
Potassium	mg/kg-dry	T	-	1830. J	3170. J	1370. J	-	3000. J
Selenium	mg/kg-dry	T	-	<0.71 J	0.86 J	<0.69 J	-	0.94 J
Silver	mg/kg-dry	T	-	0.34 :	0.85 :	<0.14 :	-	0.34 J
Sodium	mg/kg-dry	T	-	<69.6 :	318. :	<83.6 :	-	532. :
Thallium	mg/kg-dry	T	-	0.1 :	0.22 :	<0.086 :	-	0.2 :
Vanadium	mg/kg-dry	T	-	25.4 :	11.8 :	19.6 :	-	30.9 :
Zinc	mg/kg-dry	T	-	71.1 J	32.6 J	48.3 J	-	75.4 :
Volatile Organics								
1,1,1-Trichloroethane	mg/kg-dry	T	<0.008 :	<0.006 :	<0.011 :	<0.005 :	-	-
1,1,2,2-Tetrachloroethane	mg/kg-dry	T	<0.008 :	<0.006 :	<0.011 :	<0.005 :	-	-
1,1,2-Trichloro-1,2,2-trifluoroethane	mg/kg-dry	T	<0.008 :	<0.006 :	<0.011 :	<0.005 :	-	-
1,1,2-Trichloroethane	mg/kg-dry	T	<0.008 :	<0.006 :	<0.011 :	<0.005 :	-	-
1,1-Dichloroethane	mg/kg-dry	T	<0.008 :	<0.006 :	<0.011 :	<0.005 :	-	-
1,1-Dichloroethene	mg/kg-dry	T	<0.008 :	<0.006 :	<0.011 :	<0.005 :	-	-
1,2,4-Trichlorobenzene	mg/kg-dry	T	<0.008 :	<0.006 :	<0.011 :	<0.005 :	-	-
1,2-Dibromo-3-chloropropane	mg/kg-dry	T	<0.008 :	<0.006 :	<0.011 :	<0.005 :	-	-
1,2-Dichlorobenzene	mg/kg-dry	T	<0.008 :	<0.006 :	<0.011 :	<0.005 :	-	-
1,2-Dichloroethane	mg/kg-dry	T	<0.008 :	<0.006 :	<0.011 :	<0.005 :	-	-
1,2-Dichloroethene (total)	mg/kg-dry	T	<0.008 :	<0.006 :	<0.011 :	<0.005 :	-	-
1,2-Dichloropropane	mg/kg-dry	T	<0.008 :	<0.006 :	<0.011 :	<0.005 :	-	-
1,3-Dichlorobenzene	mg/kg-dry	T	<0.008 :	<0.006 :	<0.011 :	<0.005 :	-	-
1,4-Dichlorobenzene	mg/kg-dry	T	<0.008 :	<0.006 :	<0.011 :	<0.005 :	-	-
2-Butanone	mg/kg-dry	T	<0.008 :	<0.006 :	<0.011 :	<0.005 :	-	-
2-Hexanone	mg/kg-dry	T	<0.008 :	<0.006 :	<0.011 :	<0.005 :	-	-
4-Methyl-2-pentanone	mg/kg-dry	T	0.0008 J	<0.006 :	<0.011 :	<0.005 :	-	-
Acetone	mg/kg-dry	T	<0.008 :	<0.006 :	<0.011 :	<0.005 :	-	-
Benzene	mg/kg-dry	T	<0.008 :	<0.006 :	<0.011 :	<0.005 :	-	-
Bromodichloromethane	mg/kg-dry	T	<0.008 :	<0.006 :	<0.011 :	<0.005 :	-	-
Bromoform	mg/kg-dry	T	<0.008 :	<0.006 :	<0.011 :	<0.005 :	-	-
Bromomethane	mg/kg-dry	T	<0.008 :	<0.006 :	<0.011 :	<0.005 :	-	-
Carbon disulfide	mg/kg-dry	T	<0.008 :	<0.006 :	<0.011 :	<0.005 :	-	-

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T = Total Fraction

Appendix A-7a
Soil - Biased 0-6 inches
Validated Analytical Results

Parameter	Units	Exposure Area Fraction	Site ID / Sample Date / Sample ID		MSS2-51 4/8/2003 MSS2-51-T01N-SOL SS2		MSS2-52 10/27/2002 MSS2-52-T01N-SOL SS2		MSS2-53 10/27/2002 MSS2-53-T01N-SOL SS2		MSS2-54 10/27/2002 MSS2-54-T01N-SOL SS2		MSS2-56R 10/27/2002 MSS2-56-T01N-SOL SS2		MSS2-56R 1/12/2003 MSS2-56R-T01N-SOL SS2	
Carbon tetrachloride	mg/kg-dry	T		<0.008	:	<0.006	:	<0.011	:	<0.005	:	-		-	
Chlorobenzene	mg/kg-dry	T		<0.008	:	<0.006	:	<0.011	:	<0.005	:	-		-	
Chloroethane	mg/kg-dry	T		<0.008	:	<0.006	:	<0.011	:	<0.005	:	-		-	
Chloroform	mg/kg-dry	T		<0.008	:	<0.006	:	<0.011	:	<0.005	:	-		-	
Chloromethane	mg/kg-dry	T		<0.008	:	<0.006	:	<0.011	:	<0.005	:	-		-	
cis-1,2-Dichloroethene	mg/kg-dry	T		<0.008	:	<0.006	:	<0.011	:	<0.005	:	-		-	
cis-1,3-Dichloropropene	mg/kg-dry	T		<0.008	:	<0.006	:	<0.011	:	<0.005	:	-		-	
Dibromochloromethane	mg/kg-dry	T		<0.008	:	<0.006	:	<0.011	:	<0.005	:	-		-	
Dichlorodifluoromethane	mg/kg-dry	T		<0.008	:	<0.006	:	<0.011	:	<0.005	:	-		-	
Ethylbenzene	mg/kg-dry	T		<0.008	:	<0.006	:	<0.011	:	<0.005	:	-		-	
Methylene chloride	mg/kg-dry	T		<0.008	:	<0.006	:	<0.011	:	<0.005	:	-		-	
Styrene	mg/kg-dry	T		<0.008	:	<0.006	:	<0.011	:	<0.005	:	-		-	
Tetrachloroethene	mg/kg-dry	T		<0.008	:	<0.006	:	<0.011	:	<0.005	:	-		-	
Toluene	mg/kg-dry	T		<0.008	:	<0.006	:	<0.011	:	<0.005	:	-		-	
Total Xylene	mg/kg-dry	T		<0.008	:	<0.006	:	0.002	J	<0.005	:	-		-	
trans-1,2-Dichloroethene	mg/kg-dry	T		<0.008	:	<0.006	:	<0.011	:	<0.005	:	-		-	
trans-1,3-Dichloropropene	mg/kg-dry	T		<0.008	:	<0.006	:	<0.011	:	<0.005	:	-		-	
Trichloroethene	mg/kg-dry	T		<0.008	:	<0.006	:	<0.011	:	<0.005	:	-		-	
Trichlorofluoromethane	mg/kg-dry	T		<0.008	:	<0.006	:	<0.011	:	<0.005	:	-		-	
Vinyl chloride	mg/kg-dry	T		<0.008	:	<0.006	:	<0.011	:	<0.005	:	-		-	
Semi-Volatile Organics																
1,1`-Biphenyl	mg/kg-dry	T		-		<0.38	:	<0.36	:	<0.36	:	-		<0.36	:
2,4,5-Trichlorophenol	mg/kg-dry	T		-		<0.94	:	<0.91	:	<0.91	:	-		<0.91	:
2,4,6-Trichlorophenol	mg/kg-dry	T		-		<0.38	:	<0.36	:	<0.36	:	-		<0.36	:
2,4-Dichlorophenol	mg/kg-dry	T		-		<0.38	:	<0.36	:	<0.36	:	-		<0.36	J
2,4-Dimethylphenol	mg/kg-dry	T		-		<0.38	:	<0.36	:	<0.36	:	-		<0.36	:
2,4-Dinitrophenol	mg/kg-dry	T		-		<0.94	:	<0.91	:	<0.91	:	-		<0.91	:
2,4-Dinitrotoluene	mg/kg-dry	T		-		<0.38	:	<0.36	:	<0.36	:	-		<0.36	:
2,6-Dinitrotoluene	mg/kg-dry	T		-		<0.38	:	<0.36	:	<0.36	:	-		<0.36	:
2-Chloronaphthalene	mg/kg-dry	T		-		<0.38	:	<0.36	:	<0.36	:	-		<0.36	:
2-Chlorophenol	mg/kg-dry	T		-		<0.38	:	<0.36	:	<0.36	:	-		<0.36	:
2-Methylnaphthalene	mg/kg-dry	T		-		<0.38	:	<0.36	:	<0.36	:	-		<0.36	:
2-Methylphenol	mg/kg-dry	T		-		<0.38	:	<0.36	:	<0.36	:	-		<0.36	:
2-Nitroaniline	mg/kg-dry	T		-		<0.94	:	<0.91	:	<0.91	:	-		<0.91	:

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Appendix A-7a
Soil - Biased 0-6 inches
Validated Analytical Results

Parameter	Units	Exposure Area Fraction	Site ID	MSS2-51	MSS2-52	MSS2-53	MSS2-54	MSS2-56R	MSS2-56R
			Sample Date	4/8/2003	10/27/2002	10/27/2002	10/27/2002	10/27/2002	1/12/2003
			Sample ID	MSS2-51-T01N-SOL	MSS2-52-T01N-SOL	MSS2-53-T01N-SOL	MSS2-54-T01N-SOL	MSS2-56-T01N-SOL	MSS2-56R-T01N-SOL
			Exposure Area	SS2	SS2	SS2	SS2	SS2	SS2
2-Nitrophenol	mg/kg-dry	T		-	<0.38 :	<0.36 :	<0.36 :	-	<0.36 :
3,3-Dichlorobenzidine	mg/kg-dry	T		-	<0.38 :	<0.36 :	<0.36 :	-	<0.36 :
3-Nitroaniline	mg/kg-dry	T		-	<0.94 :	<0.91 :	<0.91 :	-	<0.91 :
4,6-Dinitro-2-methylphenol	mg/kg-dry	T		-	<0.94 :	<0.91 :	<0.91 :	-	<0.91 :
4-Bromophenyl phenyl ether	mg/kg-dry	T		-	<0.38 :	<0.36 :	<0.36 :	-	<0.36 :
4-Chloro-3-methylphenol	mg/kg-dry	T		-	<0.38 :	<0.36 :	<0.36 :	-	<0.36 :
4-Chloroaniline	mg/kg-dry	T		-	<0.38 :	<0.36 :	<0.36 :	-	<0.36 :
4-Chlorophenyl phenyl ether	mg/kg-dry	T		-	<0.38 :	<0.36 :	<0.36 :	-	<0.36 :
4-Methylphenol	mg/kg-dry	T		-	<0.38 :	<0.36 :	<0.36 :	-	<0.36 :
4-Nitroaniline	mg/kg-dry	T		-	<0.94 :	<0.91 :	<0.91 :	-	<0.91 :
4-Nitrophenol	mg/kg-dry	T		-	<0.94 :	<0.91 :	<0.91 :	-	<0.91 :
Acenaphthene	mg/kg-dry	T		-	<0.38 :	<0.36 :	<0.36 :	-	<0.36 :
Acenaphthylene	mg/kg-dry	T		-	<0.38 :	<0.36 :	<0.36 :	-	<0.36 :
Anthracene	mg/kg-dry	T		-	<0.38 :	<0.36 :	<0.36 :	-	<0.36 :
Benzaldehyde	mg/kg-dry	T		-	<0.38 :	<0.36 :	<0.36 :	-	<0.36 :
Benzo(a)anthracene	mg/kg-dry	T		-	<0.38 :	<0.36 :	<0.36 :	-	0.036 J
Benzo(a)pyrene	mg/kg-dry	T		-	<0.38 :	<0.36 :	<0.36 :	-	<0.36 :
Benzo(b)fluoranthene	mg/kg-dry	T		-	<0.38 :	<0.36 :	<0.36 :	-	<0.36 :
Benzo(g,h,i)perylene	mg/kg-dry	T		-	<0.38 :	<0.36 :	<0.36 :	-	<0.36 :
Benzo(k)fluoranthene	mg/kg-dry	T		-	<0.38 :	<0.36 :	<0.36 :	-	<0.36 :
Bis(2-chloroethoxy)methane	mg/kg-dry	T		-	<0.38 :	<0.36 :	<0.36 :	-	<0.36 :
Bis(2-chloroethyl)ether	mg/kg-dry	T		-	<0.38 :	<0.36 :	<0.36 :	-	<0.36 :
Bis(2-ethylhexyl)phthalate	mg/kg-dry	T		-	0.032 J	0.059 J	0.054 J	-	0.61 :
Butyl benzyl phthalate	mg/kg-dry	T		-	<0.38 :	<0.36 :	<0.36 :	-	0.034 J
Carbazole	mg/kg-dry	T		-	<0.38 :	<0.36 :	<0.36 :	-	<0.36 :
Chrysene	mg/kg-dry	T		-	<0.38 :	<0.36 :	<0.36 :	-	0.043 J
Dibenz(a,h)anthracene	mg/kg-dry	T		-	<0.38 :	<0.36 :	<0.36 :	-	<0.36 :
Dibenzofuran	mg/kg-dry	T		-	<0.38 :	<0.36 :	<0.36 :	-	<0.36 :
Dichlorodiisopropyl ether	mg/kg-dry	T		-	<0.38 :	<0.36 :	<0.36 :	-	<0.36 :
Diethylphthalate	mg/kg-dry	T		-	<0.38 :	<0.36 :	<0.36 :	-	<0.36 :
Dimethylphthalate	mg/kg-dry	T		-	<0.38 :	<0.36 :	<0.36 :	-	<0.36 :
Di-n-Butyl phthalate	mg/kg-dry	T		-	<0.38 :	<0.36 :	<0.36 :	-	0.041 J
Di-n-Octyl phthalate	mg/kg-dry	T		-	<0.38 :	<0.36 :	<0.36 :	-	0.041 J
Fluoranthene	mg/kg-dry	T		-	<0.38 :	<0.36 :	<0.36 :	-	0.061 J

J = Qualified as estimated during data validation
R = Qualified as rejected value from data validation and results are considered unusable for any purpose
T = Total Fraction

Appendix A-7a
Soil - Biased 0-6 inches
Validated Analytical Results

Parameter	Units	Exposure Area Fraction	Site ID / Sample Date / Sample ID / Exposure Area					
			MSS2-51 4/8/2003 MSS2-51-T01N-SOL SS2	MSS2-52 10/27/2002 MSS2-52-T01N-SOL SS2	MSS2-53 10/27/2002 MSS2-53-T01N-SOL SS2	MSS2-54 10/27/2002 MSS2-54-T01N-SOL SS2	MSS2-56R 10/27/2002 MSS2-56-T01N-SOL SS2	MSS2-56R 1/12/2003 MSS2-56R-T01N-SOL SS2
Fluorene	mg/kg-dry	T	-	<0.38 :	<0.36 :	<0.36 :	-	<0.36 :
Hexachlorobenzene	mg/kg-dry	T	-	<0.38 :	<0.36 :	<0.36 :	-	<0.36 :
Hexachlorobutadiene	mg/kg-dry	T	-	<0.38 :	<0.36 :	<0.36 :	-	<0.36 :
Hexachlorocyclopentadiene	mg/kg-dry	T	-	<0.38 :	<0.36 :	<0.36 :	-	<0.36 :
Hexachloroethane	mg/kg-dry	T	-	<0.38 :	<0.36 :	<0.36 :	-	<0.36 :
Indeno(1,2,3-cd)pyrene	mg/kg-dry	T	-	<0.38 :	<0.36 :	<0.36 :	-	<0.36 :
Isophorone	mg/kg-dry	T	-	<0.38 :	<0.36 :	<0.36 :	-	<0.36 :
Naphthalene	mg/kg-dry	T	-	<0.38 :	<0.36 :	<0.36 :	-	<0.36 :
Nitrobenzene	mg/kg-dry	T	-	<0.38 :	<0.36 :	<0.36 :	-	<0.36 :
N-Nitrosodi-n-propylamine	mg/kg-dry	T	-	<0.38 :	<0.36 :	<0.36 :	-	<0.36 :
N-Nitrosodiphenylamine	mg/kg-dry	T	-	<0.38 :	<0.36 :	<0.36 :	-	<0.36 :
Pentachlorophenol	mg/kg-dry	T	-	<0.94 :	<0.91 :	<0.91 :	-	<0.91 :
Phenanthrene	mg/kg-dry	T	-	<0.38 :	<0.36 :	<0.36 :	-	0.036 J
Phenol	mg/kg-dry	T	-	<0.38 :	<0.36 :	<0.36 :	-	<0.36 :
Pyrene	mg/kg-dry	T	-	<0.38 :	<0.36 :	<0.36 :	-	0.064 J
Pesticides-PCBs								
Aroclor 1016	mg/kg-dry	T	-	-	-	-	-	<0.036 :
Aroclor 1221	mg/kg-dry	T	-	-	-	-	-	<0.074 :
Aroclor 1232	mg/kg-dry	T	-	-	-	-	-	<0.036 :
Aroclor 1242	mg/kg-dry	T	-	-	-	-	-	<0.036 :
Aroclor 1248	mg/kg-dry	T	-	-	-	-	-	<0.036 :
Aroclor 1254	mg/kg-dry	T	-	-	-	-	-	<0.036 :
Aroclor 1260	mg/kg-dry	T	-	-	-	-	-	<0.036 :

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T = Total Fraction

Appendix A-7a
Soil - Biased 0-6 inches
Validated Analytical Results

Parameter	Units	Exposure Area Fraction	Site ID / Sample Date / Sample ID											
			MSS2-56R 1/15/2003 MSS2-56R-T01N-SOL SS2		MSS2-57R 10/27/2002 MSS2-57-T01N-SOL SS2		MSS2-57R 1/12/2003 MSS2-57R-T01N-SOL SS2		MSS2-57R 1/15/2003 MSS2-57R-T01N-SOL SS2		MSS2-58R2 1/15/2003 MSS2-58R2-T01N-SOL SS2		MSS2-59 10/27/2002 MSS2-59-T01N-SOL SS2	
General Chemistry														
Ammonia	mg/kg-dry	T	-		-		28.9	:	-		7.6	:	12.4	:
Chloride	mg/kg-dry	T	-		560.	:	1880.	:	-		160.	J	360.	:
Fluoride	mg/kg-dry	T	-		-		4.4	J	-		2.2	J	1.8	J
Nitrate	mg/kg-dry	T	-		3.3	J	6.1	J	-		24.4	J	5.2	J
Phosphorus	mg/kg-dry	T	-		-		682.	:	-		827.	:	1430.	J
Sulfate	mg/kg-dry	T	-		700.	:	1760.	:	-		607.	J	1800.	:
Total Kjeldahl Nitrogen	mg/kg-dry	T	-		-		141.	:	-		73.5	:	158.	J
Total Organic Carbon	mg/kg-dry	T	-		-		6010.	J	-		<106.	J	3080.	J
Laboratory Parameters														
pH	SU	T	-		-		7.5	:	-		6.5	:	6.9	:
Solids, Percent	%	T	94.7	:	-		93.	:	96.	:	94.6	:	88.7	:
Specific Conductance	umhos/cm	T	-		-		3740.	:	-		1410.	J	2070.	J
Geotechnical														
Organic Soils	%	T	-		-		5.38	:	-		1.1	:	3.87	J
Physical Properties														
Cation-Exchange Capacity	meq/100g	T	-		-		10.	:	-		9.2	:	18.6	J
Sodium Absorption Ratio	ratio	T	-		-		3.11	:	-		0.78	:	1.58	:
Metals														
Aluminum	mg/kg-dry	T	-		-		9740.	:	-		5060.	:	15900.	J
Antimony	mg/kg-dry	T	-		-		<0.44	:	-		<0.45	J	<0.24	J
Arsenic	mg/kg-dry	T	-		-		3.3	J	-		3.4	J	4.3	:
Barium	mg/kg-dry	T	-		-		158.	:	-		81.2	:	270.	J
Beryllium	mg/kg-dry	T	-		-		0.75	:	-		0.44	:	1.2	J
Boron	mg/kg-dry	T	-		-		6.8	:	-		<0.52	:	3.7	J
Cadmium	mg/kg-dry	T	-		-		0.5	:	-		0.13	:	0.59	:
Calcium	mg/kg-dry	T	-		-		43800.	:	-		7120.	:	19000.	J
Chromium	mg/kg-dry	T	-		-		17.8	J	-		9.2	J	25.3	J
Cobalt	mg/kg-dry	T	-		-		7.3	:	-		4.1	:	12.8	J
Copper	mg/kg-dry	T	-		-		43.8	J	-		17.	J	228.	J
Iron	mg/kg-dry	T	-		-		22100.	:	-		11500.	:	31100.	J
Lead	mg/kg-dry	T	-		-		31.9	:	-		11.1	:	95.8	J
Magnesium	mg/kg-dry	T	-		-		5090.	:	-		2300.	:	5800.	J
Manganese	mg/kg-dry	T	-		-		464.	:	-		255.	:	644.	J

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Appendix A-7a
Soil - Biased 0-6 inches
Validated Analytical Results

Parameter	Units	Exposure Area Fraction	Site ID / Sample Date / Sample ID					
			MSS2-56R 1/15/2003 MSS2-56R-T01N-SOL	MSS2-57R 10/27/2002 MSS2-57-T01N-SOL	MSS2-57R 1/12/2003 MSS2-57R-T01N-SOL	MSS2-57R 1/15/2003 MSS2-57R-T01N-SOL	MSS2-58R2 1/15/2003 MSS2-58R2-T01N-SOL	MSS2-59 10/27/2002 MSS2-59-T01N-SOL
			SS2	SS2	SS2	SS2	SS2	SS2
Mercury	mg/kg-dry	T	- :	- :	<0.018 :	- :	<0.016 :	0.021 :
Molybdenum	mg/kg-dry	T	- :	- :	56.2 :	- :	10.5 :	- :
Nickel	mg/kg-dry	T	- :	- :	17.3 :	- :	7.5 :	22.4 J
Potassium	mg/kg-dry	T	- :	- :	2430. J	- :	1010. J	3600. J
Selenium	mg/kg-dry	T	- :	- :	<0.78 J	- :	<0.81 J	1.2 J
Silver	mg/kg-dry	T	- :	- :	0.59 :	- :	<0.14 :	0.78 :
Sodium	mg/kg-dry	T	- :	- :	1140. :	- :	<159. :	513. :
Thallium	mg/kg-dry	T	- :	- :	0.14 :	- :	<0.1 :	0.34 :
Vanadium	mg/kg-dry	T	- :	- :	27. :	- :	16.6 :	33.6 J
Zinc	mg/kg-dry	T	- :	- :	96. :	- :	41. :	166. J
Volatile Organics								
1,1,1-Trichloroethane	mg/kg-dry	T	<0.005 :	- :	- :	<0.006 :	<0.004 :	<0.014 :
1,1,2,2-Tetrachloroethane	mg/kg-dry	T	<0.005 :	- :	- :	<0.006 :	<0.004 :	<0.014 :
1,1,2-Trichloro-1,2,2-trifluoroethane	mg/kg-dry	T	<0.005 :	- :	- :	<0.006 :	<0.004 :	<0.014 :
1,1,2-Trichloroethane	mg/kg-dry	T	<0.005 :	- :	- :	<0.006 :	<0.004 :	<0.014 :
1,1-Dichloroethane	mg/kg-dry	T	<0.005 :	- :	- :	<0.006 :	<0.004 :	<0.014 :
1,1-Dichloroethene	mg/kg-dry	T	<0.005 :	- :	- :	<0.006 :	<0.004 :	<0.014 :
1,2,4-Trichlorobenzene	mg/kg-dry	T	<0.005 :	- :	- :	<0.006 :	<0.004 :	<0.014 :
1,2-Dibromo-3-chloropropane	mg/kg-dry	T	<0.005 :	- :	- :	<0.006 :	<0.004 :	<0.014 :
1,2-Dichlorobenzene	mg/kg-dry	T	<0.005 :	- :	- :	<0.006 :	<0.004 :	<0.014 :
1,2-Dichloroethane	mg/kg-dry	T	<0.005 :	- :	- :	<0.006 :	<0.004 :	<0.014 :
1,2-Dichloroethene (total)	mg/kg-dry	T	<0.005 :	- :	- :	<0.006 :	<0.004 :	<0.014 :
1,2-Dichloropropane	mg/kg-dry	T	<0.005 :	- :	- :	<0.006 :	<0.004 :	<0.014 :
1,3-Dichlorobenzene	mg/kg-dry	T	<0.005 :	- :	- :	<0.006 :	<0.004 :	<0.014 :
1,4-Dichlorobenzene	mg/kg-dry	T	<0.005 :	- :	- :	<0.006 :	<0.004 :	<0.014 :
2-Butanone	mg/kg-dry	T	<0.005 :	- :	- :	<0.006 :	<0.004 :	<0.014 J
2-Hexanone	mg/kg-dry	T	<0.005 :	- :	- :	<0.006 :	<0.004 :	<0.014 J
4-Methyl-2-pentanone	mg/kg-dry	T	<0.005 :	- :	- :	<0.006 :	<0.004 :	<0.014 J
Acetone	mg/kg-dry	T	<0.005 :	- :	- :	<0.006 :	0.001 J	0.035 :
Benzene	mg/kg-dry	T	<0.005 :	- :	- :	<0.006 :	<0.004 :	<0.014 :
Bromodichloromethane	mg/kg-dry	T	<0.005 :	- :	- :	<0.006 :	<0.004 :	<0.014 :
Bromoform	mg/kg-dry	T	<0.005 :	- :	- :	<0.006 :	<0.004 :	<0.014 :
Bromomethane	mg/kg-dry	T	<0.005 :	- :	- :	<0.006 :	<0.004 :	<0.014 :
Carbon disulfide	mg/kg-dry	T	<0.005 :	- :	- :	<0.006 :	<0.004 :	<0.014 :

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Appendix A-7a
Soil - Biased 0-6 inches
Validated Analytical Results

Parameter	Units	Exposure Area Fraction	Site ID / Sample Date / Sample ID													
			MSS2-56R 1/15/2003 MSS2-56R-T01N-SOL SS2		MSS2-57R 10/27/2002 MSS2-57-T01N-SOL SS2		MSS2-57R 1/12/2003 MSS2-57R-T01N-SOL SS2		MSS2-57R 1/15/2003 MSS2-57R-T01N-SOL SS2		MSS2-58R2 1/15/2003 MSS2-58R2-T01N-SOL SS2		MSS2-59 10/27/2002 MSS2-59-T01N-SOL SS2	
Carbon tetrachloride	mg/kg-dry	T	<0.005	:	-		-		<0.006	:	<0.004	:	<0.014	:
Chlorobenzene	mg/kg-dry	T	<0.005	:	-		-		<0.006	:	<0.004	:	<0.014	:
Chloroethane	mg/kg-dry	T	<0.005	:	-		-		<0.006	:	<0.004	:	<0.014	:
Chloroform	mg/kg-dry	T	<0.005	:	-		-		<0.006	:	<0.004	:	<0.014	:
Chloromethane	mg/kg-dry	T	<0.005	:	-		-		<0.006	:	<0.004	:	<0.014	:
cis-1,2-Dichloroethene	mg/kg-dry	T	<0.005	:	-		-		<0.006	:	<0.004	:	<0.014	:
cis-1,3-Dichloropropene	mg/kg-dry	T	<0.005	:	-		-		<0.006	:	<0.004	:	<0.014	:
Dibromochloromethane	mg/kg-dry	T	<0.005	:	-		-		<0.006	:	<0.004	:	<0.014	:
Dichlorodifluoromethane	mg/kg-dry	T	<0.005	:	-		-		<0.006	:	<0.004	:	<0.014	:
Ethylbenzene	mg/kg-dry	T	<0.005	:	-		-		<0.006	:	<0.004	:	<0.014	:
Methylene chloride	mg/kg-dry	T	<0.005	:	-		-		<0.006	:	<0.004	:	<0.014	:
Styrene	mg/kg-dry	T	<0.005	:	-		-		<0.006	:	<0.004	:	<0.014	:
Tetrachloroethene	mg/kg-dry	T	<0.005	:	-		-		<0.006	:	<0.004	:	<0.014	:
Toluene	mg/kg-dry	T	<0.005	:	-		-		<0.006	:	<0.004	:	<0.014	:
Total Xylene	mg/kg-dry	T	0.002	J	-		-		0.0007	J	0.0009	J	<0.014	:
trans-1,2-Dichloroethene	mg/kg-dry	T	<0.005	:	-		-		<0.006	:	<0.004	:	<0.014	:
trans-1,3-Dichloropropene	mg/kg-dry	T	<0.005	:	-		-		<0.006	:	<0.004	:	<0.014	:
Trichloroethene	mg/kg-dry	T	<0.005	:	-		-		<0.006	:	<0.004	:	<0.014	:
Trichlorofluoromethane	mg/kg-dry	T	<0.005	:	-		-		<0.006	:	<0.004	:	<0.014	:
Vinyl chloride	mg/kg-dry	T	<0.005	:	-		-		<0.006	:	<0.004	:	<0.014	:
Semi-Volatile Organics														
1,1`-Biphenyl	mg/kg-dry	T	-		-		<0.35	:	-		<0.35	:	<0.37	:
2,4,5-Trichlorophenol	mg/kg-dry	T	-		-		<0.89	:	-		<0.87	:	<0.93	:
2,4,6-Trichlorophenol	mg/kg-dry	T	-		-		<0.35	:	-		<0.35	:	<0.37	:
2,4-Dichlorophenol	mg/kg-dry	T	-		-		<0.35	J	-		<0.35	:	<0.37	:
2,4-Dimethylphenol	mg/kg-dry	T	-		-		<0.35	:	-		<0.35	:	<0.37	:
2,4-Dinitrophenol	mg/kg-dry	T	-		-		<0.89	:	-		<0.87	:	<0.93	J
2,4-Dinitrotoluene	mg/kg-dry	T	-		-		<0.35	:	-		<0.35	:	<0.37	:
2,6-Dinitrotoluene	mg/kg-dry	T	-		-		<0.35	:	-		<0.35	:	<0.37	J
2-Chloronaphthalene	mg/kg-dry	T	-		-		<0.35	:	-		<0.35	:	<0.37	:
2-Chlorophenol	mg/kg-dry	T	-		-		<0.35	:	-		<0.35	:	<0.37	J
2-Methylnaphthalene	mg/kg-dry	T	-		-		<0.35	:	-		<0.35	:	<0.37	:
2-Methylphenol	mg/kg-dry	T	-		-		<0.35	:	-		<0.35	:	<0.37	:
2-Nitroaniline	mg/kg-dry	T	-		-		<0.89	:	-		<0.87	:	<0.93	:

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Appendix A-7a
Soil - Biased 0-6 inches
Validated Analytical Results

Parameter	Units	Exposure Area Fraction	Site ID / Sample Date / Sample ID					
			MSS2-56R 1/15/2003 MSS2-56R-T01N-SOL	MSS2-57R 10/27/2002 MSS2-57-T01N-SOL	MSS2-57R 1/12/2003 MSS2-57R-T01N-SOL	MSS2-57R 1/15/2003 MSS2-57R-T01N-SOL	MSS2-58R2 1/15/2003 MSS2-58R2-T01N-SOL	MSS2-59 10/27/2002 MSS2-59-T01N-SOL
			SS2	SS2	SS2	SS2	SS2	SS2
2-Nitrophenol	mg/kg-dry	T	-	-	<0.35 :	-	<0.35 :	<0.37 :
3,3-Dichlorobenzidine	mg/kg-dry	T	-	-	<0.35 :	-	<0.35 :	<0.37 :
3-Nitroaniline	mg/kg-dry	T	-	-	<0.89 :	-	<0.87 :	<0.93 :
4,6-Dinitro-2-methylphenol	mg/kg-dry	T	-	-	<0.89 :	-	<0.87 :	<0.93 :
4-Bromophenyl phenyl ether	mg/kg-dry	T	-	-	<0.35 :	-	<0.35 :	<0.37 :
4-Chloro-3-methylphenol	mg/kg-dry	T	-	-	<0.35 :	-	<0.35 :	<0.37 J
4-Chloroaniline	mg/kg-dry	T	-	-	<0.35 :	-	<0.35 :	<0.37 :
4-Chlorophenyl phenyl ether	mg/kg-dry	T	-	-	<0.35 :	-	<0.35 :	<0.37 :
4-Methylphenol	mg/kg-dry	T	-	-	<0.35 :	-	<0.35 :	<0.37 :
4-Nitroaniline	mg/kg-dry	T	-	-	<0.89 :	-	<0.87 :	<0.93 :
4-Nitrophenol	mg/kg-dry	T	-	-	<0.89 :	-	<0.87 :	<0.93 J
Acenaphthene	mg/kg-dry	T	-	-	<0.35 :	-	<0.35 :	<0.37 J
Acenaphthylene	mg/kg-dry	T	-	-	<0.35 :	-	<0.35 :	<0.37 :
Anthracene	mg/kg-dry	T	-	-	<0.35 :	-	<0.35 :	<0.37 :
Benzaldehyde	mg/kg-dry	T	-	-	0.14 J	-	<0.35 J	<0.37 :
Benzo(a)anthracene	mg/kg-dry	T	-	-	<0.35 :	-	<0.35 :	<0.37 :
Benzo(a)pyrene	mg/kg-dry	T	-	-	<0.35 :	-	<0.35 :	<0.37 :
Benzo(b)fluoranthene	mg/kg-dry	T	-	-	<0.35 :	-	<0.35 :	<0.37 :
Benzo(g,h,i)perylene	mg/kg-dry	T	-	-	<0.35 :	-	<0.35 :	<0.37 :
Benzo(k)fluoranthene	mg/kg-dry	T	-	-	<0.35 :	-	<0.35 :	<0.37 :
Bis(2-chloroethoxy)methane	mg/kg-dry	T	-	-	<0.35 :	-	<0.35 :	<0.37 :
Bis(2-chloroethyl)ether	mg/kg-dry	T	-	-	<0.35 :	-	<0.35 :	<0.37 :
Bis(2-ethylhexyl)phthalate	mg/kg-dry	T	-	-	0.28 J	-	<0.35 :	0.042 J
Butyl benzyl phthalate	mg/kg-dry	T	-	-	0.061 J	-	<0.35 :	<0.37 :
Carbazole	mg/kg-dry	T	-	-	<0.35 :	-	<0.35 :	<0.37 :
Chrysene	mg/kg-dry	T	-	-	<0.35 :	-	<0.35 :	<0.37 :
Dibenz(a,h)anthracene	mg/kg-dry	T	-	-	<0.35 :	-	<0.35 :	<0.37 :
Dibenzofuran	mg/kg-dry	T	-	-	<0.35 :	-	<0.35 :	<0.37 :
Dichlorodiisopropyl ether	mg/kg-dry	T	-	-	<0.35 :	-	<0.35 :	<0.37 :
Diethylphthalate	mg/kg-dry	T	-	-	<0.35 :	-	<0.35 :	<0.37 :
Dimethylphthalate	mg/kg-dry	T	-	-	<0.35 :	-	<0.35 :	<0.37 :
Di-n-Butyl phthalate	mg/kg-dry	T	-	-	<0.35 :	-	<0.35 :	<0.37 :
Di-n-Octyl phthalate	mg/kg-dry	T	-	-	<0.35 :	-	<0.35 :	<0.37 :
Fluoranthene	mg/kg-dry	T	-	-	<0.35 :	-	<0.35 :	<0.37 :

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Appendix A-7a
Soil - Biased 0-6 inches
Validated Analytical Results

Parameter	Units	Exposure Area Fraction	Site ID / Sample Date / Sample ID					
			MSS2-56R 1/15/2003 MSS2-56R-T01N-SOL	MSS2-57R 10/27/2002 MSS2-57-T01N-SOL	MSS2-57R 1/12/2003 MSS2-57R-T01N-SOL	MSS2-57R 1/15/2003 MSS2-57R-T01N-SOL	MSS2-58R2 1/15/2003 MSS2-58R2-T01N-SOL	MSS2-59 10/27/2002 MSS2-59-T01N-SOL
			SS2	SS2	SS2	SS2	SS2	SS2
Fluorene	mg/kg-dry	T	-	-	<0.35 :	-	<0.35 :	<0.37 :
Hexachlorobenzene	mg/kg-dry	T	-	-	<0.35 :	-	<0.35 :	<0.37 :
Hexachlorobutadiene	mg/kg-dry	T	-	-	<0.35 :	-	<0.35 :	<0.37 :
Hexachlorocyclopentadiene	mg/kg-dry	T	-	-	<0.35 :	-	<0.35 :	<0.37 J
Hexachloroethane	mg/kg-dry	T	-	-	<0.35 :	-	<0.35 :	<0.37 :
Indeno(1,2,3-cd)pyrene	mg/kg-dry	T	-	-	<0.35 :	-	<0.35 :	<0.37 :
Isophorone	mg/kg-dry	T	-	-	<0.35 :	-	<0.35 :	<0.37 :
Naphthalene	mg/kg-dry	T	-	-	<0.35 :	-	<0.35 :	<0.37 :
Nitrobenzene	mg/kg-dry	T	-	-	<0.35 :	-	<0.35 :	<0.37 :
N-Nitrosodi-n-propylamine	mg/kg-dry	T	-	-	<0.35 :	-	<0.35 :	<0.37 J
N-Nitrosodiphenylamine	mg/kg-dry	T	-	-	<0.35 :	-	<0.35 :	<0.37 :
Pentachlorophenol	mg/kg-dry	T	-	-	<0.89 :	-	<0.87 :	<0.93 J
Phenanthrene	mg/kg-dry	T	-	-	<0.35 :	-	<0.35 :	<0.37 :
Phenol	mg/kg-dry	T	-	-	<0.35 :	-	<0.35 :	<0.37 J
Pyrene	mg/kg-dry	T	-	-	<0.35 :	-	<0.35 :	<0.37 J
Pesticides-PCBs								
Aroclor 1016	mg/kg-dry	T	-	-	<0.035 :	-	-	-
Aroclor 1221	mg/kg-dry	T	-	-	<0.072 :	-	-	-
Aroclor 1232	mg/kg-dry	T	-	-	<0.035 :	-	-	-
Aroclor 1242	mg/kg-dry	T	-	-	<0.035 :	-	-	-
Aroclor 1248	mg/kg-dry	T	-	-	<0.035 :	-	-	-
Aroclor 1254	mg/kg-dry	T	-	-	<0.035 :	-	-	-
Aroclor 1260	mg/kg-dry	T	-	-	<0.035 :	-	-	-

J = Qualified as estimated during data validation
R = Qualified as rejected value from data validation and results are considered unusable for any purpose
T = Total Fraction

Appendix A-7a
Soil - Biased 0-6 inches
Validated Analytical Results

Parameter	Units	Fraction	MSS2-59	MSS2-60	MSS2-61	MSS2-61A	MSS2-62	MSS2-62
Sample Date			1/12/2003	1/12/2003	10/24/2002	1/12/2003	1/12/2003	1/15/2003
Sample ID			MSS2-59R-T01N-SOL	MSS2-60R-T01N-SOL	MSS2-61-T01N-SOL	MSS2-61A-T01N-SOL	MSS2-62-T01N-SOL	MSS2-62-T01N-SOL
Exposure Area			SS2	SS2	SS2	SS2	SS2	SS2
General Chemistry								
Ammonia	mg/kg-dry	T	-	15.1 :	11.5 :	12.3 :	9.9 :	-
Chloride	mg/kg-dry	T	-	56.1 :	461. J	114. :	175. :	-
Fluoride	mg/kg-dry	T	-	2.1 J	1.3 J	2.2 J	4.6 J	-
Nitrate	mg/kg-dry	T	-	5.3 J	8.4 J	51.4 J	3.5 J	-
Phosphorus	mg/kg-dry	T	-	1430. :	863. J	740. :	708. :	-
Sulfate	mg/kg-dry	T	-	1110. :	1510. J	4570. :	7560. :	-
Total Kjeldahl Nitrogen	mg/kg-dry	T	-	234. :	113. :	205. :	70.1 :	-
Total Organic Carbon	mg/kg-dry	T	-	3240. J	1160. J	7070. J	<103. J	-
Laboratory Parameters								
pH	SU	T	-	5.7 :	6.9 :	7.3 :	7.2 :	-
Solids, Percent	%	T	-	93. :	91.4 :	93.4 :	97.1 :	94.7 :
Specific Conductance	umhos/cm	T	-	1230. :	1350. :	2300. :	3890. :	-
Geotechnical								
Organic Soils	%	T	4.84 :	3.76 :	2.16 J	4.29 :	2.06 :	-
Physical Properties								
Cation-Exchange Capacity	meq/100g	T	-	16.1 :	11.6 :	11. :	7.5 :	-
Sodium Absorption Ratio	ratio	T	-	0.28 :	0.78 :	1.27 :	0.96 :	-
Metals								
Aluminum	mg/kg-dry	T	-	17900. :	16700. :	10600. J	10300. :	-
Antimony	mg/kg-dry	T	-	<0.3 J	<0.31 J	<0.31 J	<0.26 J	-
Arsenic	mg/kg-dry	T	-	2.5 J	3.3 :	2.6 J	1.8 J	-
Barium	mg/kg-dry	T	-	234. :	157. :	181. J	131. :	-
Beryllium	mg/kg-dry	T	-	1.8 :	1.1 :	0.86 :	1.9 :	-
Boron	mg/kg-dry	T	-	<2.7 :	<1.2 J	9.5 :	<2.6 :	-
Cadmium	mg/kg-dry	T	-	0.44 :	0.4 :	0.37 J	1.9 :	-
Calcium	mg/kg-dry	T	-	3990. :	16000. :	34500. J	7320. :	-
Chromium	mg/kg-dry	T	-	40.1 J	46.2 :	21.4 J	16.3 J	-
Cobalt	mg/kg-dry	T	-	39. :	14.3 :	8.4 :	41.7 :	-
Copper	mg/kg-dry	T	-	360. J	92.3 :	53.6 J	47.3 J	-
Iron	mg/kg-dry	T	-	35400. :	26600. :	21700. J	16600. :	-
Lead	mg/kg-dry	T	-	91.7 :	64.1 :	42.2 J	27. :	-
Magnesium	mg/kg-dry	T	-	4710. :	10400. :	4850. J	4670. :	-
Manganese	mg/kg-dry	T	-	914. :	740. J	548. J	1700. :	-

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Appendix A-7a
Soil - Biased 0-6 inches
Validated Analytical Results

Parameter	Units	Fraction	MSS2-59	MSS2-60	MSS2-61	MSS2-61A	MSS2-62	MSS2-62
Sample Date			1/12/2003	1/12/2003	10/24/2002	1/12/2003	1/12/2003	1/15/2003
Sample ID			MSS2-59R-T01N-SOL	MSS2-60R-T01N-SOL	MSS2-61-T01N-SOL	MSS2-61A-T01N-SOL	MSS2-62-T01N-SOL	MSS2-62-T01N-SOL
Exposure Area			SS2	SS2	SS2	SS2	SS2	SS2
Mercury	mg/kg-dry	T	-	0.018 :	<0.017 :	0.19 :	<0.017 :	-
Molybdenum	mg/kg-dry	T	-	24.5 :	119. :	63.5 J	97.8 :	-
Nickel	mg/kg-dry	T	-	46.3 :	33.9 J	15. J	74.7 :	-
Potassium	mg/kg-dry	T	-	2860. J	4190. J	2360. J	1840. J	-
Selenium	mg/kg-dry	T	-	<0.81 J	<0.83 J	<0.84 J	<0.69 J	-
Silver	mg/kg-dry	T	-	0.45 :	0.44 :	0.51 :	0.51 :	-
Sodium	mg/kg-dry	T	-	<183. :	<292. :	435. :	495. :	-
Thallium	mg/kg-dry	T	-	0.24 :	0.27 :	0.16 :	0.089 :	-
Vanadium	mg/kg-dry	T	-	31.5 :	46.9 :	28.3 J	22.4 :	-
Zinc	mg/kg-dry	T	-	264. :	124. J	125. J	125. :	-
Volatile Organics								
1,1,1-Trichloroethane	mg/kg-dry	T	-	<0.011 :	<0.007 :	<0.011 :	-	<0.006 :
1,1,2,2-Tetrachloroethane	mg/kg-dry	T	-	<0.011 :	<0.007 :	<0.011 :	-	<0.006 :
1,1,2-Trichloro-1,2,2-trifluoroethane	mg/kg-dry	T	-	<0.011 :	<0.007 :	<0.011 :	-	<0.006 :
1,1,2-Trichloroethane	mg/kg-dry	T	-	<0.011 :	<0.007 :	<0.011 :	-	<0.006 :
1,1-Dichloroethane	mg/kg-dry	T	-	<0.011 :	<0.007 :	<0.011 :	-	<0.006 :
1,1-Dichloroethene	mg/kg-dry	T	-	<0.011 :	<0.007 :	<0.011 :	-	<0.006 :
1,2,4-Trichlorobenzene	mg/kg-dry	T	-	<0.011 :	<0.007 :	<0.011 :	-	<0.006 :
1,2-Dibromo-3-chloropropane	mg/kg-dry	T	-	<0.011 :	<0.007 :	<0.011 :	-	<0.006 :
1,2-Dichlorobenzene	mg/kg-dry	T	-	<0.011 :	<0.007 :	<0.011 :	-	<0.006 :
1,2-Dichloroethane	mg/kg-dry	T	-	<0.011 :	<0.007 :	<0.011 :	-	<0.006 :
1,2-Dichloroethene (total)	mg/kg-dry	T	-	<0.011 :	<0.007 :	<0.011 :	-	<0.006 :
1,2-Dichloropropane	mg/kg-dry	T	-	<0.011 :	<0.007 :	<0.011 :	-	<0.006 :
1,3-Dichlorobenzene	mg/kg-dry	T	-	<0.011 :	<0.007 :	<0.011 :	-	<0.006 :
1,4-Dichlorobenzene	mg/kg-dry	T	-	<0.011 :	<0.007 :	<0.011 :	-	<0.006 :
2-Butanone	mg/kg-dry	T	-	<0.011 :	<0.007 :	<0.011 :	-	0.002 J
2-Hexanone	mg/kg-dry	T	-	<0.011 :	<0.007 :	<0.011 :	-	<0.006 :
4-Methyl-2-pentanone	mg/kg-dry	T	-	<0.011 :	<0.007 :	<0.011 :	-	<0.006 :
Acetone	mg/kg-dry	T	-	0.003 J	<0.007 :	0.006 J	-	0.005 J
Benzene	mg/kg-dry	T	-	<0.011 :	<0.007 :	<0.011 :	-	<0.006 :
Bromodichloromethane	mg/kg-dry	T	-	<0.011 :	<0.007 :	<0.011 :	-	<0.006 :
Bromoform	mg/kg-dry	T	-	<0.011 :	<0.007 :	<0.011 :	-	<0.006 :
Bromomethane	mg/kg-dry	T	-	<0.011 :	<0.007 J	<0.011 :	-	<0.006 :
Carbon disulfide	mg/kg-dry	T	-	<0.011 :	<0.007 :	<0.011 :	-	0.0008 J

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Appendix A-7a
Soil - Biased 0-6 inches
Validated Analytical Results

		Site ID	MSS2-59	MSS2-60	MSS2-61	MSS2-61A	MSS2-62	MSS2-62
		Sample Date	1/12/2003	1/12/2003	10/24/2002	1/12/2003	1/12/2003	1/15/2003
		Sample ID	MSS2-59R-T01N-SOL	MSS2-60R-T01N-SOL	MSS2-61-T01N-SOL	MSS2-61A-T01N-SOL	MSS2-62-T01N-SOL	MSS2-62-T01N-SOL
		Exposure Area	SS2	SS2	SS2	SS2	SS2	SS2
Parameter	**Units**	**Fraction**						
Carbon tetrachloride	mg/kg-dry	T	-	<0.011 :	<0.007 :	<0.011 :	-	<0.006 :
Chlorobenzene	mg/kg-dry	T	-	<0.011 :	<0.007 :	<0.011 :	-	<0.006 :
Chloroethane	mg/kg-dry	T	-	<0.011 :	<0.007 :	<0.011 :	-	<0.006 :
Chloroform	mg/kg-dry	T	-	<0.011 :	<0.007 :	<0.011 :	-	<0.006 :
Chloromethane	mg/kg-dry	T	-	<0.011 :	<0.007 J	<0.011 :	-	<0.006 :
cis-1,2-Dichloroethene	mg/kg-dry	T	-	<0.011 :	<0.007 :	<0.011 :	-	<0.006 :
cis-1,3-Dichloropropene	mg/kg-dry	T	-	<0.011 :	<0.007 :	<0.011 :	-	<0.006 :
Dibromochloromethane	mg/kg-dry	T	-	<0.011 :	<0.007 :	<0.011 :	-	<0.006 :
Dichlorodifluoromethane	mg/kg-dry	T	-	<0.011 :	<0.007 J	<0.011 :	-	<0.006 :
Ethylbenzene	mg/kg-dry	T	-	<0.011 :	<0.007 :	<0.011 :	-	0.0005 J
Methylene chloride	mg/kg-dry	T	-	<0.011 :	<0.007 :	<0.011 :	-	<0.006 :
Styrene	mg/kg-dry	T	-	<0.011 :	<0.007 :	<0.011 :	-	<0.006 :
Tetrachloroethene	mg/kg-dry	T	-	<0.011 :	<0.007 :	<0.011 :	-	<0.006 :
Toluene	mg/kg-dry	T	-	<0.011 :	<0.007 :	<0.011 :	-	<0.006 :
Total Xylene	mg/kg-dry	T	-	0.001 J	<0.007 :	0.001 J	-	0.002 J
trans-1,2-Dichloroethene	mg/kg-dry	T	-	<0.011 :	<0.007 :	<0.011 :	-	<0.006 :
trans-1,3-Dichloropropene	mg/kg-dry	T	-	<0.011 :	<0.007 :	<0.011 :	-	<0.006 :
Trichloroethene	mg/kg-dry	T	-	<0.011 :	<0.007 :	<0.011 :	-	<0.006 :
Trichlorofluoromethane	mg/kg-dry	T	-	<0.011 :	<0.007 :	<0.011 :	-	<0.006 :
Vinyl chloride	mg/kg-dry	T	-	<0.011 :	<0.007 :	<0.011 :	-	<0.006 :
Semi-Volatile Organics								
1,1`-Biphenyl	mg/kg-dry	T	-	<0.35 :	<0.36 :	<0.35 :	<0.34 :	-
2,4,5-Trichlorophenol	mg/kg-dry	T	-	<0.89 :	<0.91 :	<0.89 :	<0.85 :	-
2,4,6-Trichlorophenol	mg/kg-dry	T	-	<0.35 :	<0.36 :	<0.35 :	<0.34 :	-
2,4-Dichlorophenol	mg/kg-dry	T	-	<0.35 J	<0.36 :	<0.35 J	<0.34 J	-
2,4-Dimethylphenol	mg/kg-dry	T	-	<0.35 :	<0.36 :	<0.35 :	<0.34 :	-
2,4-Dinitrophenol	mg/kg-dry	T	-	<0.89 :	<0.91 :	<0.89 :	<0.85 :	-
2,4-Dinitrotoluene	mg/kg-dry	T	-	<0.35 :	<0.36 :	<0.35 :	<0.34 :	-
2,6-Dinitrotoluene	mg/kg-dry	T	-	<0.35 :	<0.36 :	<0.35 :	<0.34 :	-
2-Chloronaphthalene	mg/kg-dry	T	-	<0.35 :	<0.36 :	<0.35 :	<0.34 :	-
2-Chlorophenol	mg/kg-dry	T	-	<0.35 :	<0.36 :	<0.35 :	<0.34 :	-
2-Methylnaphthalene	mg/kg-dry	T	-	<0.35 :	<0.36 :	<0.35 :	<0.34 :	-
2-Methylphenol	mg/kg-dry	T	-	<0.35 :	<0.36 :	<0.35 :	<0.34 :	-
2-Nitroaniline	mg/kg-dry	T	-	<0.89 :	<0.91 :	<0.89 :	<0.85 :	-

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Appendix A-7a
Soil - Biased 0-6 inches
Validated Analytical Results

Parameter	Units	Fraction	MSS2-59	MSS2-60	MSS2-61	MSS2-61A	MSS2-62	MSS2-62
Sample Date			1/12/2003	1/12/2003	10/24/2002	1/12/2003	1/12/2003	1/15/2003
Sample ID			MSS2-59R-T01N-SOL	MSS2-60R-T01N-SOL	MSS2-61-T01N-SOL	MSS2-61A-T01N-SOL	MSS2-62-T01N-SOL	MSS2-62-T01N-SOL
Exposure Area			SS2	SS2	SS2	SS2	SS2	SS2
2-Nitrophenol	mg/kg-dry	T	-	<0.35 :	<0.36 :	<0.35 :	<0.34 :	-
3,3-Dichlorobenzidine	mg/kg-dry	T	-	<0.35 :	<0.36 :	<0.35 :	<0.34 :	-
3-Nitroaniline	mg/kg-dry	T	-	<0.89 :	<0.91 :	<0.89 :	<0.85 :	-
4,6-Dinitro-2-methylphenol	mg/kg-dry	T	-	<0.89 :	<0.91 :	<0.89 :	<0.85 :	-
4-Bromophenyl phenyl ether	mg/kg-dry	T	-	<0.35 :	<0.36 :	<0.35 :	<0.34 :	-
4-Chloro-3-methylphenol	mg/kg-dry	T	-	<0.35 :	<0.36 :	<0.35 :	<0.34 :	-
4-Chloroaniline	mg/kg-dry	T	-	<0.35 :	<0.36 :	<0.35 :	<0.34 :	-
4-Chlorophenyl phenyl ether	mg/kg-dry	T	-	<0.35 :	<0.36 :	<0.35 :	<0.34 :	-
4-Methylphenol	mg/kg-dry	T	-	<0.35 :	<0.36 :	<0.35 :	<0.34 :	-
4-Nitroaniline	mg/kg-dry	T	-	<0.89 :	<0.91 :	<0.89 :	<0.85 :	-
4-Nitrophenol	mg/kg-dry	T	-	<0.89 :	<0.91 :	<0.89 :	<0.85 :	-
Acenaphthene	mg/kg-dry	T	-	<0.35 :	<0.36 :	<0.35 :	<0.34 :	-
Acenaphthylene	mg/kg-dry	T	-	<0.35 :	<0.36 :	<0.35 :	<0.34 :	-
Anthracene	mg/kg-dry	T	-	<0.35 :	<0.36 :	<0.35 :	<0.34 :	-
Benzaldehyde	mg/kg-dry	T	-	0.071 J	0.048 J	<0.35 :	0.32 J	-
Benzo(a)anthracene	mg/kg-dry	T	-	<0.35 :	<0.36 :	<0.35 :	<0.34 :	-
Benzo(a)pyrene	mg/kg-dry	T	-	<0.35 :	<0.36 :	<0.35 :	<0.34 :	-
Benzo(b)fluoranthene	mg/kg-dry	T	-	<0.35 :	<0.36 :	<0.35 :	<0.34 :	-
Benzo(g,h,i)perylene	mg/kg-dry	T	-	<0.35 :	<0.36 :	<0.35 :	<0.34 :	-
Benzo(k)fluoranthene	mg/kg-dry	T	-	<0.35 :	<0.36 :	<0.35 :	<0.34 :	-
Bis(2-chloroethoxy)methane	mg/kg-dry	T	-	<0.35 :	<0.36 :	<0.35 :	<0.34 :	-
Bis(2-chloroethyl)ether	mg/kg-dry	T	-	<0.35 :	<0.36 :	<0.35 :	<0.34 :	-
Bis(2-ethylhexyl)phthalate	mg/kg-dry	T	-	0.073 J	0.022 J	0.16 J	<0.34 :	-
Butyl benzyl phthalate	mg/kg-dry	T	-	<0.35 :	<0.36 :	<0.35 :	<0.34 :	-
Carbazole	mg/kg-dry	T	-	<0.35 :	<0.36 :	<0.35 :	<0.34 :	-
Chrysene	mg/kg-dry	T	-	<0.35 :	<0.36 :	0.03 J	<0.34 :	-
Dibenz(a,h)anthracene	mg/kg-dry	T	-	<0.35 :	<0.36 :	<0.35 :	<0.34 :	-
Dibenzofuran	mg/kg-dry	T	-	<0.35 :	<0.36 :	<0.35 :	<0.34 :	-
Dichlorodiisopropyl ether	mg/kg-dry	T	-	<0.35 :	<0.36 :	<0.35 :	<0.34 :	-
Diethylphthalate	mg/kg-dry	T	-	<0.35 :	<0.36 :	<0.35 :	<0.34 :	-
Dimethylphthalate	mg/kg-dry	T	-	<0.35 :	<0.36 :	<0.35 :	<0.34 :	-
Di-n-Butyl phthalate	mg/kg-dry	T	-	0.083 J	<0.36 :	<0.35 :	<0.34 :	-
Di-n-Octyl phthalate	mg/kg-dry	T	-	<0.35 :	<0.36 :	<0.35 :	<0.34 :	-
Fluoranthene	mg/kg-dry	T	-	<0.35 :	<0.36 :	0.03 J	<0.34 :	-

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Appendix A-7a
Soil - Biased 0-6 inches
Validated Analytical Results

Parameter	Units	Exposure Area Fraction	Site ID / Sample Date / Sample ID / Exposure Area					
			MSS2-59 / 1/12/2003 / MSS2-59R-T01N-SOL / SS2	MSS2-60 / 1/12/2003 / MSS2-60R-T01N-SOL / SS2	MSS2-61 / 10/24/2002 / MSS2-61-T01N-SOL / SS2	MSS2-61A / 1/12/2003 / MSS2-61A-T01N-SOL / SS2	MSS2-62 / 1/12/2003 / MSS2-62-T01N-SOL / SS2	MSS2-62 / 1/15/2003 / MSS2-62-T01N-SOL / SS2
Fluorene	mg/kg-dry	T	-	<0.35 :	<0.36 :	<0.35 :	<0.34 :	-
Hexachlorobenzene	mg/kg-dry	T	-	<0.35 :	<0.36 :	<0.35 :	<0.34 :	-
Hexachlorobutadiene	mg/kg-dry	T	-	<0.35 :	<0.36 :	<0.35 :	<0.34 :	-
Hexachlorocyclopentadiene	mg/kg-dry	T	-	<0.35 :	<0.36 :	<0.35 :	<0.34 :	-
Hexachloroethane	mg/kg-dry	T	-	<0.35 :	<0.36 :	<0.35 :	<0.34 :	-
Indeno(1,2,3-cd)pyrene	mg/kg-dry	T	-	<0.35 :	<0.36 :	<0.35 :	<0.34 :	-
Isophorone	mg/kg-dry	T	-	<0.35 :	<0.36 :	<0.35 :	<0.34 :	-
Naphthalene	mg/kg-dry	T	-	<0.35 :	<0.36 :	<0.35 :	<0.34 :	-
Nitrobenzene	mg/kg-dry	T	-	<0.35 :	<0.36 :	<0.35 :	<0.34 :	-
N-Nitrosodi-n-propylamine	mg/kg-dry	T	-	<0.35 :	<0.36 :	<0.35 :	<0.34 :	-
N-Nitrosodiphenylamine	mg/kg-dry	T	-	<0.35 :	<0.36 :	<0.35 :	<0.34 :	-
Pentachlorophenol	mg/kg-dry	T	-	<0.89 :	<0.91 :	<0.89 :	<0.85 :	-
Phenanthrene	mg/kg-dry	T	-	<0.35 :	<0.36 :	0.034 J	<0.34 :	-
Phenol	mg/kg-dry	T	-	<0.35 :	<0.36 :	<0.35 :	0.55 :	-
Pyrene	mg/kg-dry	T	-	<0.35 :	<0.36 :	0.054 J	<0.34 :	-
Pesticides-PCBs								
Aroclor 1016	mg/kg-dry	T	-	<0.035 :	-	<0.035 :	<0.034 :	-
Aroclor 1221	mg/kg-dry	T	-	<0.072 :	-	<0.072 :	<0.069 :	-
Aroclor 1232	mg/kg-dry	T	-	<0.035 :	-	<0.035 :	<0.034 :	-
Aroclor 1242	mg/kg-dry	T	-	<0.035 :	-	<0.035 :	<0.034 :	-
Aroclor 1248	mg/kg-dry	T	-	<0.035 :	-	<0.035 :	<0.034 :	-
Aroclor 1254	mg/kg-dry	T	-	<0.035 :	-	<0.035 :	<0.034 :	-
Aroclor 1260	mg/kg-dry	T	-	<0.035 :	-	<0.035 :	<0.034 :	-

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T = Total Fraction

Appendix A-7a
Soil - Biased 0-6 inches
Validated Analytical Results

Parameter	Units	Exposure Area Fraction	Site ID	MSS2-63	MSS2-63	MSS2-64	MSS2-65	MSS2-66	MSS2-67
			Sample Date	1/12/2003	1/15/2003	1/12/2003	1/12/2003	1/16/2003	1/16/2003
			Sample ID	MSS2-63-T01N-SOL	MSS2-63-T01N-SOL	MSS2-64-T01N-SOL	MSS2-65-T01N-SOL	MSS2-66-T01N-SOL	MSS2-67-T01N-SOL
			Exposure Area	SS2	SS2	SS2	SS2	SS2	SS2
General Chemistry									
Ammonia	mg/kg-dry	T		27.9 :	-	14.2 :	12.7 :	14.3 :	15.5 :
Chloride	mg/kg-dry	T		7.6 :	-	102. :	2.6 :	23.6 :	21.2 :
Fluoride	mg/kg-dry	T		2.8 J	-	2. J	3.7 J	9.9 J	5.7 J
Nitrate	mg/kg-dry	T		2.9 J	-	<2.3 J	<2.3 J	3. J	<2.2 J
Phosphorus	mg/kg-dry	T		1130. :	-	1710. :	791. :	1560. :	1360. :
Sulfate	mg/kg-dry	T		676. :	-	6420. :	920. :	9100. :	6950. :
Total Kjeldahl Nitrogen	mg/kg-dry	T		181. :	-	149. :	87.3 :	89.9 :	105. :
Total Organic Carbon	mg/kg-dry	T		3090. J	-	1830. J	1510. J	1000. J	1070. :
Laboratory Parameters									
pH	SU	T		6.9 :	-	6.7 :	10.8 :	4.9 :	5. :
Solids, Percent	%	T		91.9 :	94.6 :	90. :	87.6 :	94.5 :	93.8 :
Specific Conductance	umhos/cm	T		902. :	-	1700. :	1200. :	2180. J	2440. J
Geotechnical									
Organic Soils	%	T		2.3 :	-	4. :	3.37 :	2.6 :	3.1 :
Physical Properties									
Cation-Exchange Capacity	meq/100g	T		19.7 :	-	19.1 :	9.8 :	14.3 :	16.7 :
Sodium Absorption Ratio	ratio	T		0.08 :	-	0.45 :	0.15 :	0.11 :	0.13 :
Metals									
Aluminum	mg/kg-dry	T		14200. :	-	18100. :	11600. :	10800. :	11200. :
Antimony	mg/kg-dry	T		<0.27 J	-	<0.31 J	<0.42 J	<0.29 J	<0.3 J
Arsenic	mg/kg-dry	T		5.2 J	-	4.3 J	3.8 J	2.7 J	2.5 J
Barium	mg/kg-dry	T		277. :	-	286. :	275. :	125. :	122. :
Beryllium	mg/kg-dry	T		1.2 :	-	1.4 :	0.98 :	1.1 :	1.2 :
Boron	mg/kg-dry	T		<0.26 J	-	<2.8 :	3.6 :	5. J	5. J
Cadmium	mg/kg-dry	T		0.11 J	-	0.17 J	0.55 :	0.71 :	0.41 :
Calcium	mg/kg-dry	T		8520. :	-	13400. :	27600. :	10300. :	7390. :
Chromium	mg/kg-dry	T		37.8 J	-	33.1 J	28.9 J	24.3 J	26.5 J
Cobalt	mg/kg-dry	T		15.4 :	-	13.1 :	10.6 :	11.3 :	14.4 :
Copper	mg/kg-dry	T		70.6 J	-	130. J	56.4 J	152. J	146. J
Iron	mg/kg-dry	T		31400. :	-	43400. :	29700. :	28900. :	25400. :
Lead	mg/kg-dry	T		68.7 :	-	95.6 :	76.2 :	92.2 :	63.1 :
Magnesium	mg/kg-dry	T		6920. :	-	7850. :	6380. :	6530. :	7010. :
Manganese	mg/kg-dry	T		636. :	-	884. :	677. :	634. :	736. :

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Appendix A-7a
Soil - Biased 0-6 inches
Validated Analytical Results

Parameter	Units	Exposure Area Fraction	Site ID	Sample Date	Sample ID	
			MSS2-63	1/12/2003	MSS2-63-T01N-SOL	SS2
			MSS2-63	1/15/2003	MSS2-63-T01N-SOL	SS2
			MSS2-64	1/12/2003	MSS2-64-T01N-SOL	SS2
			MSS2-65	1/12/2003	MSS2-65-T01N-SOL	SS2
			MSS2-66	1/16/2003	MSS2-66-T01N-SOL	SS2
			MSS2-67	1/16/2003	MSS2-67-T01N-SOL	SS2
Mercury	mg/kg-dry	T	<0.018 :	-	0.018 :	<0.017 :	<0.016 :	<0.018 :
Molybdenum	mg/kg-dry	T	25.7 :	-	29.3 :	45.2 :	29.9 :	47.4 :
Nickel	mg/kg-dry	T	29.1 :	-	21.3 :	21.9 :	21.8 :	27.8 :
Potassium	mg/kg-dry	T	3350. J	-	4570. J	3010. J	3110. J	2980. J
Selenium	mg/kg-dry	T	<0.72 J	-	<0.83 J	<0.87 J	<0.78 J	0.82 J
Silver	mg/kg-dry	T	0.33 :	-	0.98 :	0.86 :	0.66 :	0.46 :
Sodium	mg/kg-dry	T	266. :	-	307. :	<128. :	<97.4 :	<136. :
Thallium	mg/kg-dry	T	0.19 :	-	0.52 :	0.27 :	0.44 :	0.38 :
Vanadium	mg/kg-dry	T	36.9 :	-	41.4 :	35.3 :	29.3 :	29.3 :
Zinc	mg/kg-dry	T	86.2 :	-	147. :	149. :	275. :	162. :
Volatile Organics								
1,1,1-Trichloroethane	mg/kg-dry	T	-	<0.004 :	<0.012 :	<0.01 :	<0.01 :	<0.005 :
1,1,2,2-Tetrachloroethane	mg/kg-dry	T	-	<0.004 :	<0.012 :	<0.01 :	<0.01 :	<0.005 :
1,1,2-Trichloro-1,2,2-trifluoroethane	mg/kg-dry	T	-	<0.004 :	<0.012 :	<0.01 :	<0.01 :	<0.005 :
1,1,2-Trichloroethane	mg/kg-dry	T	-	<0.004 :	<0.012 :	<0.01 :	<0.01 :	<0.005 :
1,1-Dichloroethane	mg/kg-dry	T	-	<0.004 :	<0.012 :	<0.01 :	<0.01 :	<0.005 :
1,1-Dichloroethene	mg/kg-dry	T	-	<0.004 :	<0.012 :	<0.01 :	<0.01 :	<0.005 :
1,2,4-Trichlorobenzene	mg/kg-dry	T	-	<0.004 :	<0.012 :	<0.01 :	<0.01 :	<0.005 :
1,2-Dibromo-3-chloropropane	mg/kg-dry	T	-	<0.004 :	<0.012 :	<0.01 :	<0.01 :	<0.005 :
1,2-Dichlorobenzene	mg/kg-dry	T	-	<0.004 :	<0.012 :	<0.01 :	<0.01 :	<0.005 :
1,2-Dichloroethane	mg/kg-dry	T	-	<0.004 :	<0.012 :	<0.01 :	<0.01 :	<0.005 :
1,2-Dichloroethene (total)	mg/kg-dry	T	-	<0.004 :	<0.012 :	<0.01 :	<0.01 :	<0.005 :
1,2-Dichloropropane	mg/kg-dry	T	-	<0.004 :	<0.012 :	<0.01 :	<0.01 :	<0.005 :
1,3-Dichlorobenzene	mg/kg-dry	T	-	<0.004 :	<0.012 :	<0.01 :	<0.01 :	<0.005 :
1,4-Dichlorobenzene	mg/kg-dry	T	-	<0.004 :	<0.012 :	<0.01 :	<0.01 :	<0.005 :
2-Butanone	mg/kg-dry	T	-	<0.004 :	<0.012 :	0.004 J	<0.01 :	<0.005 :
2-Hexanone	mg/kg-dry	T	-	<0.004 :	<0.012 :	<0.01 :	<0.01 :	<0.005 :
4-Methyl-2-pentanone	mg/kg-dry	T	-	<0.004 :	<0.012 :	<0.01 :	<0.01 :	<0.005 :
Acetone	mg/kg-dry	T	-	<0.004 :	0.004 J	0.015 :	0.002 J	0.002 J
Benzene	mg/kg-dry	T	-	<0.004 :	<0.012 :	<0.01 :	<0.01 :	<0.005 :
Bromodichloromethane	mg/kg-dry	T	-	<0.004 :	<0.012 :	<0.01 :	<0.01 :	<0.005 :
Bromoform	mg/kg-dry	T	-	<0.004 :	<0.012 :	<0.01 :	<0.01 :	<0.005 :
Bromomethane	mg/kg-dry	T	-	<0.004 :	<0.012 :	<0.01 :	<0.01 :	<0.005 :
Carbon disulfide	mg/kg-dry	T	-	<0.004 :	<0.012 :	<0.01 :	<0.01 :	<0.005 :

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T = Total Fraction

Appendix A-7a
Soil - Biased 0-6 inches
Validated Analytical Results

Parameter	Units	Exposure Area Fraction	Site ID / Sample Date / Sample ID					
			MSS2-63 1/12/2003 MSS2-63-T01N-SOL	MSS2-63 1/15/2003 MSS2-63-T01N-SOL	MSS2-64 1/12/2003 MSS2-64-T01N-SOL	MSS2-65 1/12/2003 MSS2-65-T01N-SOL	MSS2-66 1/16/2003 MSS2-66-T01N-SOL	MSS2-67 1/16/2003 MSS2-67-T01N-SOL
			SS2	SS2	SS2	SS2	SS2	SS2
Carbon tetrachloride	mg/kg-dry	T	-	<0.004 :	<0.012 :	<0.01 :	<0.01 :	<0.005 :
Chlorobenzene	mg/kg-dry	T	-	<0.004 :	<0.012 :	<0.01 :	<0.01 :	<0.005 :
Chloroethane	mg/kg-dry	T	-	<0.004 :	<0.012 :	<0.01 :	<0.01 :	<0.005 :
Chloroform	mg/kg-dry	T	-	<0.004 :	<0.012 :	<0.01 :	<0.01 :	<0.005 :
Chloromethane	mg/kg-dry	T	-	<0.004 :	<0.012 :	<0.01 :	<0.01 :	<0.005 :
cis-1,2-Dichloroethene	mg/kg-dry	T	-	<0.004 :	<0.012 :	<0.01 :	<0.01 :	<0.005 :
cis-1,3-Dichloropropene	mg/kg-dry	T	-	<0.004 :	<0.012 :	<0.01 :	<0.01 :	<0.005 :
Dibromochloromethane	mg/kg-dry	T	-	<0.004 :	<0.012 :	<0.01 :	<0.01 :	<0.005 :
Dichlorodifluoromethane	mg/kg-dry	T	-	<0.004 :	<0.012 :	<0.01 :	<0.01 :	<0.005 :
Ethylbenzene	mg/kg-dry	T	-	<0.004 :	0.009 J	<0.01 :	<0.01 :	0.005 J
Methylene chloride	mg/kg-dry	T	-	<0.004 :	<0.012 :	<0.01 :	<0.01 :	<0.005 :
Styrene	mg/kg-dry	T	-	<0.004 :	<0.012 :	<0.01 :	0.001 J	<0.005 :
Tetrachloroethene	mg/kg-dry	T	-	<0.004 :	<0.012 :	<0.01 :	<0.01 :	<0.005 :
Toluene	mg/kg-dry	T	-	<0.004 :	<0.012 :	<0.01 :	<0.01 :	0.0005 J
Total Xylene	mg/kg-dry	T	-	<0.004 :	0.066 :	0.002 J	0.001 J	0.038 :
trans-1,2-Dichloroethene	mg/kg-dry	T	-	<0.004 :	<0.012 :	<0.01 :	<0.01 :	<0.005 :
trans-1,3-Dichloropropene	mg/kg-dry	T	-	<0.004 :	<0.012 :	<0.01 :	<0.01 :	<0.005 :
Trichloroethene	mg/kg-dry	T	-	<0.004 :	<0.012 :	<0.01 :	<0.01 :	<0.005 :
Trichlorofluoromethane	mg/kg-dry	T	-	<0.004 :	<0.012 :	<0.01 :	<0.01 :	<0.005 :
Vinyl chloride	mg/kg-dry	T	-	<0.004 :	<0.012 :	<0.01 :	<0.01 :	<0.005 :
Semi-Volatile Organics								
1,1`-Biphenyl	mg/kg-dry	T	<0.36 :	-	<0.37 :	<0.37 :	<0.35 :	<0.35 :
2,4,5-Trichlorophenol	mg/kg-dry	T	<0.9 :	-	<0.92 :	<0.94 :	<0.88 :	<0.88 :
2,4,6-Trichlorophenol	mg/kg-dry	T	<0.36 :	-	<0.37 :	<0.37 :	<0.35 :	<0.35 :
2,4-Dichlorophenol	mg/kg-dry	T	<0.36 :	-	<0.37 J	<0.37 J	<0.35 :	<0.35 :
2,4-Dimethylphenol	mg/kg-dry	T	<0.36 :	-	<0.37 :	<0.37 :	<0.35 :	<0.35 :
2,4-Dinitrophenol	mg/kg-dry	T	<0.9 :	-	<0.92 :	<0.94 :	<0.88 :	<0.88 :
2,4-Dinitrotoluene	mg/kg-dry	T	<0.36 :	-	<0.37 :	<0.37 :	<0.35 :	<0.35 :
2,6-Dinitrotoluene	mg/kg-dry	T	<0.36 :	-	<0.37 :	0.21 J	<0.35 :	<0.35 :
2-Chloronaphthalene	mg/kg-dry	T	<0.36 :	-	<0.37 :	<0.37 :	<0.35 J	<0.35 :
2-Chlorophenol	mg/kg-dry	T	<0.36 :	-	<0.37 :	<0.37 :	<0.35 :	<0.35 :
2-Methylnaphthalene	mg/kg-dry	T	<0.36 :	-	<0.37 :	<0.37 :	<0.35 :	<0.35 :
2-Methylphenol	mg/kg-dry	T	<0.36 :	-	<0.37 :	<0.37 :	<0.35 :	<0.35 :
2-Nitroaniline	mg/kg-dry	T	<0.9 :	-	<0.92 :	<0.94 :	<0.88 :	<0.88 :

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Appendix A-7a
Soil - Biased 0-6 inches
Validated Analytical Results

Parameter	Units	Fraction	Site ID		Sample Date		Sample ID		Exposure Area	
			MSS2-63		1/12/2003		MSS2-63-T01N-SOL		SS2	
2-Nitrophenol	mg/kg-dry	T	<0.36	:						
3,3-Dichlorobenzidine	mg/kg-dry	T	<0.36	J						
3-Nitroaniline	mg/kg-dry	T	<0.9	:						
4,6-Dinitro-2-methylphenol	mg/kg-dry	T	<0.9	:						
4-Bromophenyl phenyl ether	mg/kg-dry	T	<0.36	:						
4-Chloro-3-methylphenol	mg/kg-dry	T	<0.36	:						
4-Chloroaniline	mg/kg-dry	T	<0.36	:						
4-Chlorophenyl phenyl ether	mg/kg-dry	T	<0.36	:						
4-Methylphenol	mg/kg-dry	T	<0.36	:						
4-Nitroaniline	mg/kg-dry	T	<0.9	J						
4-Nitrophenol	mg/kg-dry	T	<0.9	:						
Acenaphthene	mg/kg-dry	T	<0.36	:						
Acenaphthylene	mg/kg-dry	T	<0.36	:						
Anthracene	mg/kg-dry	T	<0.36	:						
Benzaldehyde	mg/kg-dry	T	0.089	J						
Benzo(a)anthracene	mg/kg-dry	T	<0.36	J						
Benzo(a)pyrene	mg/kg-dry	T	<0.36	J						
Benzo(b)fluoranthene	mg/kg-dry	T	<0.36	J						
Benzo(g,h,i)perylene	mg/kg-dry	T	<0.36	J						
Benzo(k)fluoranthene	mg/kg-dry	T	<0.36	J						
Bis(2-chloroethoxy)methane	mg/kg-dry	T	<0.36	:						
Bis(2-chloroethyl)ether	mg/kg-dry	T	<0.36	:						
Bis(2-ethylhexyl)phthalate	mg/kg-dry	T	<0.36	J						
Butyl benzyl phthalate	mg/kg-dry	T	<0.36	J						
Carbazole	mg/kg-dry	T	<0.36	:						
Chrysene	mg/kg-dry	T	<0.36	J						
Dibenz(a,h)anthracene	mg/kg-dry	T	<0.36	J						
Dibenzofuran	mg/kg-dry	T	<0.36	:						
Dichlorodiisopropyl ether	mg/kg-dry	T	<0.36	:						
Diethylphthalate	mg/kg-dry	T	<0.36	:						
Dimethylphthalate	mg/kg-dry	T	<0.36	:						
Di-n-Butyl phthalate	mg/kg-dry	T	<0.36	:						
Di-n-Octyl phthalate	mg/kg-dry	T	<0.36	J						
Fluoranthene	mg/kg-dry	T	<0.36	:						

MSS2-63		MSS2-64		MSS2-65		MSS2-66		MSS2-67	
1/15/2003		1/12/2003		1/12/2003		1/16/2003		1/16/2003	
MSS2-63-T01N-SOL		MSS2-64-T01N-SOL		MSS2-65-T01N-SOL		MSS2-66-T01N-SOL		MSS2-67-T01N-SOL	
SS2		SS2		SS2		SS2		SS2	
-		<0.37	:	<0.37	:	<0.35	:	<0.35	:
-		<0.37	:	<0.37	:	<0.35	J	<0.35	:
-		<0.92	:	<0.94	:	<0.88	J	<0.88	:
-		<0.92	:	<0.94	:	<0.88	:	<0.88	:
-		<0.37	:	<0.37	:	<0.35	:	<0.35	:
-		<0.37	:	<0.37	:	<0.35	:	<0.35	:
-		<0.37	:	<0.37	:	<0.35	:	<0.35	:
-		<0.37	:	<0.37	:	<0.35	:	<0.35	:
-		<0.37	:	<0.37	:	<0.35	:	<0.35	:
-		<0.92	:	<0.94	:	<0.88	J	<0.88	J
-		<0.92	:	<0.94	:	<0.88	:	<0.88	:
-		<0.37	:	<0.37	:	<0.35	:	<0.35	:
-		<0.37	:	<0.37	:	<0.35	:	<0.35	:
-		<0.37	:	<0.37	:	<0.35	:	<0.35	:
-		<0.37	:	<0.37	:	<0.35	:	<0.35	:
-		<0.37	:	<0.37	:	<0.35	J	<0.35	:
-		<0.37	:	<0.37	:	<0.35	J	<0.35	:
-		<0.37	:	<0.37	:	<0.35	J	<0.35	:
-		<0.37	:	<0.37	:	<0.35	J	<0.35	:
-		<0.37	:	<0.37	:	<0.35	J	<0.35	:
-		<0.37	:	<0.37	:	<0.35	:	<0.35	:
-		<0.37	:	<0.37	:	<0.35	:	<0.35	:
-		<0.37	:	<0.37	:	<0.35	J	0.04	J
-		<0.37	:	<0.37	:	<0.35	J	<0.35	:
-		<0.37	:	<0.37	:	<0.35	:	<0.35	:
-		<0.37	:	<0.37	:	<0.35	J	<0.35	:
-		<0.37	:	<0.37	:	<0.35	J	<0.35	:
-		<0.37	:	<0.37	:	<0.35	:	<0.35	:
-		<0.37	:	<0.37	:	<0.35	J	<0.35	:
-		<0.37	:	<0.37	:	<0.35	:	<0.35	:
-		<0.37	:	<0.37	:	<0.35	:	<0.35	:
-		<0.37	:	<0.37	:	0.035	J	0.032	J
-		<0.37	:	<0.37	:	<0.35	J	<0.35	:
-		<0.37	:	<0.37	:	<0.35	:	<0.35	:

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Appendix A-7a
Soil - Biased 0-6 inches
Validated Analytical Results

Parameter	Units	Exposure Area Fraction	Site ID / Sample Date / Sample ID		MSS2-63 1/12/2003 MSS2-63-T01N-SOL SS2		MSS2-63 1/15/2003 MSS2-63-T01N-SOL SS2		MSS2-64 1/12/2003 MSS2-64-T01N-SOL SS2		MSS2-65 1/12/2003 MSS2-65-T01N-SOL SS2		MSS2-66 1/16/2003 MSS2-66-T01N-SOL SS2		MSS2-67 1/16/2003 MSS2-67-T01N-SOL SS2	
Fluorene	mg/kg-dry	T		<0.36	:	-		<0.37	:	<0.37	:	<0.35	:	<0.35	:
Hexachlorobenzene	mg/kg-dry	T		<0.36	:	-		<0.37	:	<0.37	:	<0.35	:	<0.35	:
Hexachlorobutadiene	mg/kg-dry	T		<0.36	:	-		<0.37	:	<0.37	:	<0.35	:	<0.35	:
Hexachlorocyclopentadiene	mg/kg-dry	T		<0.36	:	-		<0.37	:	<0.37	:	<0.35	:	<0.35	:
Hexachloroethane	mg/kg-dry	T		<0.36	:	-		<0.37	:	<0.37	:	<0.35	:	<0.35	:
Indeno(1,2,3-cd)pyrene	mg/kg-dry	T		<0.36	J	-		<0.37	:	<0.37	:	<0.35	J	<0.35	:
Isophorone	mg/kg-dry	T		<0.36	:	-		<0.37	:	<0.37	:	<0.35	:	<0.35	:
Naphthalene	mg/kg-dry	T		<0.36	:	-		<0.37	:	<0.37	:	<0.35	:	<0.35	:
Nitrobenzene	mg/kg-dry	T		<0.36	:	-		<0.37	:	<0.37	:	<0.35	:	<0.35	:
N-Nitrosodi-n-propylamine	mg/kg-dry	T		<0.36	:	-		<0.37	:	<0.37	:	<0.35	:	<0.35	:
N-Nitrosodiphenylamine	mg/kg-dry	T		<0.36	:	-		<0.37	:	<0.37	:	<0.35	:	<0.35	:
Pentachlorophenol	mg/kg-dry	T		<0.9	:	-		<0.92	:	<0.94	:	<0.88	:	<0.88	:
Phenanthrene	mg/kg-dry	T		<0.36	:	-		<0.37	:	<0.37	:	<0.35	:	<0.35	:
Phenol	mg/kg-dry	T		<0.36	:	-		<0.37	:	<0.37	:	<0.35	:	<0.35	:
Pyrene	mg/kg-dry	T		<0.36	J	-		<0.37	:	0.067	J	<0.35	J	<0.35	:
Pesticides-PCBs															
Aroclor 1016	mg/kg-dry	T		<0.036	:	-		<0.037	:	<0.037	:	-		-	
Aroclor 1221	mg/kg-dry	T		<0.073	:	-		<0.074	:	<0.076	:	-		-	
Aroclor 1232	mg/kg-dry	T		<0.036	:	-		<0.037	:	<0.037	:	-		-	
Aroclor 1242	mg/kg-dry	T		<0.036	:	-		<0.037	:	<0.037	:	-		-	
Aroclor 1248	mg/kg-dry	T		<0.036	:	-		<0.037	:	<0.037	:	-		-	
Aroclor 1254	mg/kg-dry	T		<0.036	:	-		<0.037	:	<0.037	:	-		-	
Aroclor 1260	mg/kg-dry	T		<0.036	:	-		<0.037	:	<0.037	:	-		-	

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T = Total Fraction

Appendix A-7a
Soil - Biased 0-6 inches
Validated Analytical Results

Parameter	Units	Exposure Area Fraction	Site ID / Sample Date / Sample ID		MSS2-68 1/16/2003 MSS2-68-T01N-SOL SS2		MSS2-69 1/16/2003 MSS2-69-T01N-SOL SS2		MSS2-70 1/17/2003 MSS2-70-T01N-SOL SS2		MSS2-71 1/15/2003 MSS2-71-T01N-SOL SS2		MSS2-72 1/16/2003 MSS2-72-T01N-SOL SS2		MSS2-73 1/16/2003 MSS2-73-T01N-SOL SS2	
General Chemistry																
Ammonia	mg/kg-dry	T			14.	:	22.5	:	57.9	:	44.6	:	28.	:	18.5	:
Chloride	mg/kg-dry	T			3.9	:	5.3	:	2.4	:	73.7	:	<2.1	:	5.5	:
Fluoride	mg/kg-dry	T			3.4	J	2.	J	0.58	J	2.	J	0.66	J	1.2	J
Nitrate	mg/kg-dry	T			3.2	J	<2.2	J	<2.2	J	2.7	J	<2.1	J	<2.2	J
Phosphorus	mg/kg-dry	T			1550.	:	1550.	:	1920.	:	1530.	:	1120.	:	1410.	:
Sulfate	mg/kg-dry	T			4720.	:	914.	:	29.5	:	1790.	:	62.8	:	66.6	:
Total Kjeldahl Nitrogen	mg/kg-dry	T			79.6	:	181.	:	573.	:	271.	:	229.	:	137.	:
Total Organic Carbon	mg/kg-dry	T			46900.	J	41600.	:	16600.	J	1600.	J	41600.	J	3920.	J
Laboratory Parameters																
pH	SU	T			7.7	:	7.8	:	7.5	:	6.8	:	8.	:	7.9	:
Solids, Percent	%	T			94.3	:	95.2	:	95.2	:	96.7	:	95.6	:	93.9	:
Solids, Percent - VOCs Only	%	T			-		-		-		-		95.3	:	94.6	:
Specific Conductance	umhos/cm	T			1940.	J	1630.	J	223.	J	1780.	J	353.	J	781.	J
Geotechnical																
Organic Soils	%	T			2.2	:	6.2	:	5.5	:	2.7	:	7.	:	2.8	:
Physical Properties																
Cation-Exchange Capacity	meq/100g	T			16.8	:	14.3	:	16.1	:	12.6	:	8.8	:	15.9	:
Sodium Absorption Ratio	ratio	T			0.06	:	0.13	:	0.06	:	0.4	:	0.07	:	0.43	:
Metals																
Aluminum	mg/kg-dry	T			12300.	:	14000.	:	12600.	:	9730.	:	8820.	:	12400.	:
Antimony	mg/kg-dry	T			<0.29	J	<0.27	J	<0.31	J	<0.27	J	<0.28	J	<0.29	J
Arsenic	mg/kg-dry	T			2.9	J	3.	J	3.9	J	2.8	J	6.5	J	2.4	J
Barium	mg/kg-dry	T			143.	:	200.	:	145.	:	121.	:	79.7	:	150.	:
Beryllium	mg/kg-dry	T			1.1	:	1.1	:	0.75	:	0.57	:	0.87	:	0.63	:
Boron	mg/kg-dry	T			<0.7	:	6.8	:	7.9	:	<0.21	J	<1.1	:	<2.	:
Cadmium	mg/kg-dry	T			<0.032	J	0.84	:	<0.036	J	0.17	:	0.39	:	0.34	:
Calcium	mg/kg-dry	T			10300.	:	9340.	:	6930.	:	7330.	:	8150.	:	7710.	:
Chromium	mg/kg-dry	T			33.3	J	39.1	J	32.4	J	25.6	J	32.8	J	34.9	J
Cobalt	mg/kg-dry	T			9.2	:	12.4	:	9.2	:	6.8	:	9.6	:	7.	:
Copper	mg/kg-dry	T			121.	J	97.1	J	42.	J	33.1	J	161.	J	55.3	J
Iron	mg/kg-dry	T			35200.	:	32900.	:	27100.	:	20600.	:	24500.	:	27600.	:
Lead	mg/kg-dry	T			55.5	:	65.3	:	29.4	:	21.6	:	34.	:	25.4	:
Magnesium	mg/kg-dry	T			6450.	:	8030.	:	6140.	:	5770.	:	5880.	:	6970.	:

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Appendix A-7a
Soil - Biased 0-6 inches
Validated Analytical Results

Site ID			MSS2-68		MSS2-69		MSS2-70		MSS2-71		MSS2-72		MSS2-73	
Sample Date			1/16/2003		1/16/2003		1/17/2003		1/15/2003		1/16/2003		1/16/2003	
Sample ID			MSS2-68-T01N-SOL		MSS2-69-T01N-SOL		MSS2-70-T01N-SOL		MSS2-71-T01N-SOL		MSS2-72-T01N-SOL		MSS2-73-T01N-SOL	
Exposure Area			SS2		SS2		SS2		SS2		SS2		SS2	
Parameter	**Units**	**Fraction**												
Manganese	mg/kg-dry	T	593.	:	634.	:	409.	:	363.	:	374.	:	385.	:
Mercury	mg/kg-dry	T	<0.016	:	<0.018	:	<0.016	:	<0.017	:	<0.017	:	<0.016	:
Molybdenum	mg/kg-dry	T	334.	:	142.	:	40.2	:	41.6	:	472.	:	59.7	:
Nickel	mg/kg-dry	T	23.8	:	29.3	:	24.3	:	19.	:	31.4	:	19.1	:
Potassium	mg/kg-dry	T	2950.	J	3950.	J	3060.	J	2610.	J	2700.	J	3240.	J
Selenium	mg/kg-dry	T	<0.79	J	1.	J	1.1	J	<0.72	J	<0.74	J	0.82	J
Silver	mg/kg-dry	T	0.47	J	0.44	:	<0.14	:	0.16	:	0.43	J	<0.13	J
Sodium	mg/kg-dry	T	<79.8	:	<190.	:	<132.	:	<138.	:	<64.4	:	152.	:
Thallium	mg/kg-dry	T	0.36	:	0.35	:	0.23	:	0.17	:	0.28	:	0.26	:
Vanadium	mg/kg-dry	T	41.4	:	39.1	:	37.9	:	30.6	:	32.4	:	39.2	:
Zinc	mg/kg-dry	T	103.	:	253.	:	86.2	:	74.	:	139.	:	93.4	:
Volatile Organics														
1,1,1-Trichloroethane	mg/kg-dry	T	<0.01	:	<0.008	:	<0.006	:	<0.005	:	<0.006	:	<0.005	:
1,1,2,2-Tetrachloroethane	mg/kg-dry	T	<0.01	:	<0.008	:	<0.006	:	<0.005	J	<0.006	:	<0.005	:
1,1,2-Trichloro-1,2,2-trifluoroethane	mg/kg-dry	T	<0.01	:	<0.008	:	<0.006	:	<0.005	:	<0.006	:	<0.005	:
1,1,2-Trichloroethane	mg/kg-dry	T	<0.01	:	<0.008	:	<0.006	:	<0.005	:	<0.006	:	<0.005	:
1,1-Dichloroethane	mg/kg-dry	T	<0.01	:	<0.008	:	<0.006	:	<0.005	:	<0.006	:	<0.005	:
1,1-Dichloroethene	mg/kg-dry	T	<0.01	:	<0.008	:	<0.006	:	<0.005	:	<0.006	:	<0.005	:
1,2,4-Trichlorobenzene	mg/kg-dry	T	<0.01	:	<0.008	:	<0.006	:	<0.005	J	<0.006	:	<0.005	:
1,2-Dibromo-3-chloropropane	mg/kg-dry	T	<0.01	:	<0.008	:	<0.006	:	<0.005	J	<0.006	:	<0.005	:
1,2-Dichlorobenzene	mg/kg-dry	T	<0.01	:	<0.008	:	<0.006	:	<0.005	J	<0.006	:	<0.005	:
1,2-Dichloroethane	mg/kg-dry	T	<0.01	:	<0.008	:	<0.006	:	<0.005	:	<0.006	:	<0.005	:
1,2-Dichloroethene (total)	mg/kg-dry	T	<0.01	:	<0.008	:	<0.006	:	<0.005	:	<0.006	:	<0.005	:
1,2-Dichloropropane	mg/kg-dry	T	<0.01	:	<0.008	:	<0.006	:	<0.005	:	<0.006	:	<0.005	:
1,3-Dichlorobenzene	mg/kg-dry	T	<0.01	:	<0.008	:	<0.006	:	<0.005	J	<0.006	:	<0.005	:
1,4-Dichlorobenzene	mg/kg-dry	T	<0.01	:	<0.008	:	<0.006	:	<0.005	J	<0.006	:	<0.005	:
2-Butanone	mg/kg-dry	T	<0.01	:	<0.008	:	0.002	J	0.003	J	0.003	J	0.003	J
2-Hexanone	mg/kg-dry	T	<0.01	:	<0.008	:	<0.006	:	<0.005	J	<0.006	:	<0.005	:
4-Methyl-2-pentanone	mg/kg-dry	T	<0.01	:	<0.008	:	<0.006	:	<0.005	J	<0.006	:	<0.005	:
Acetone	mg/kg-dry	T	0.003	J	0.016	:	0.008	:	0.025	J	<0.006	:	0.002	J
Benzene	mg/kg-dry	T	<0.01	:	<0.008	:	<0.006	:	<0.005	:	<0.006	:	<0.005	:
Bromodichloromethane	mg/kg-dry	T	<0.01	:	<0.008	:	<0.006	:	<0.005	:	<0.006	:	<0.005	:
Bromoform	mg/kg-dry	T	<0.01	:	<0.008	:	<0.006	:	<0.005	:	<0.006	:	<0.005	:
Bromomethane	mg/kg-dry	T	<0.01	:	<0.008	:	<0.006	:	<0.005	:	<0.006	:	<0.005	:

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T = Total Fraction

Appendix A-7a
Soil - Biased 0-6 inches
Validated Analytical Results

Parameter	Units	Exposure Area Fraction	Site ID / Sample Date / Sample ID		MSS2-68 1/16/2003 MSS2-68-T01N-SOL SS2		MSS2-69 1/16/2003 MSS2-69-T01N-SOL SS2		MSS2-70 1/17/2003 MSS2-70-T01N-SOL SS2		MSS2-71 1/15/2003 MSS2-71-T01N-SOL SS2		MSS2-72 1/16/2003 MSS2-72-T01N-SOL SS2		MSS2-73 1/16/2003 MSS2-73-T01N-SOL SS2	
Carbon disulfide	mg/kg-dry	T		<0.01	:	<0.008	:	<0.006	:	<0.005	:	<0.006	:	<0.005	:
Carbon tetrachloride	mg/kg-dry	T		<0.01	:	<0.008	:	<0.006	:	<0.005	:	<0.006	:	<0.005	:
Chlorobenzene	mg/kg-dry	T		<0.01	:	<0.008	:	<0.006	:	<0.005	J	<0.006	:	<0.005	:
Chloroethane	mg/kg-dry	T		<0.01	:	<0.008	:	<0.006	:	<0.005	:	<0.006	:	<0.005	:
Chloroform	mg/kg-dry	T		<0.01	:	<0.008	:	<0.006	:	<0.005	:	<0.006	:	<0.005	:
Chloromethane	mg/kg-dry	T		<0.01	:	<0.008	:	<0.006	:	<0.005	:	<0.006	:	<0.005	:
cis-1,2-Dichloroethene	mg/kg-dry	T		<0.01	:	<0.008	:	<0.006	:	<0.005	:	<0.006	:	<0.005	:
cis-1,3-Dichloropropene	mg/kg-dry	T		<0.01	:	<0.008	:	<0.006	:	<0.005	:	<0.006	:	<0.005	:
Dibromochloromethane	mg/kg-dry	T		<0.01	:	<0.008	:	<0.006	:	<0.005	:	<0.006	:	<0.005	:
Dichlorodifluoromethane	mg/kg-dry	T		<0.01	:	<0.008	:	<0.006	:	<0.005	:	<0.006	:	<0.005	:
Ethylbenzene	mg/kg-dry	T		<0.01	:	<0.008	:	<0.006	:	<0.005	J	<0.006	:	<0.005	:
Methylene chloride	mg/kg-dry	T		<0.01	:	<0.008	:	<0.006	:	<0.005	:	<0.006	:	<0.005	:
Styrene	mg/kg-dry	T		0.002	J	<0.008	:	<0.006	:	<0.005	J	<0.006	:	<0.005	:
Tetrachloroethene	mg/kg-dry	T		<0.01	:	<0.008	:	<0.006	:	<0.005	J	<0.006	:	<0.005	:
Toluene	mg/kg-dry	T		<0.01	:	<0.008	:	<0.006	:	<0.005	J	<0.006	:	<0.005	:
Total Xylene	mg/kg-dry	T		<0.01	:	0.004	J	<0.006	:	0.001	J	<0.006	:	0.0009	J
trans-1,2-Dichloroethene	mg/kg-dry	T		<0.01	:	<0.008	:	<0.006	:	<0.005	:	<0.006	:	<0.005	:
trans-1,3-Dichloropropene	mg/kg-dry	T		<0.01	:	<0.008	:	<0.006	:	<0.005	:	<0.006	:	<0.005	:
Trichloroethene	mg/kg-dry	T		<0.01	:	<0.008	:	<0.006	:	<0.005	:	<0.006	:	<0.005	:
Trichlorofluoromethane	mg/kg-dry	T		<0.01	:	<0.008	:	0.008	:	0.008	J	<0.006	:	0.002	J
Vinyl chloride	mg/kg-dry	T		<0.01	:	<0.008	:	<0.006	:	<0.005	:	<0.006	:	<0.005	:
Semi-Volatile Organics																
1,1`-Biphenyl	mg/kg-dry	T		<0.35	:	<3.5	:	<0.69	:	0.11	J	<1.7	:	<1.7	:
2,4,5-Trichlorophenol	mg/kg-dry	T		<0.88	:	<8.7	:	<1.7	:	<0.85	:	<4.4	:	<4.4	:
2,4,6-Trichlorophenol	mg/kg-dry	T		<0.35	:	<3.5	:	<0.69	:	<0.34	:	<1.7	:	<1.7	:
2,4-Dichlorophenol	mg/kg-dry	T		<0.35	:	<3.5	:	<0.69	:	<0.34	:	<1.7	:	<1.7	:
2,4-Dimethylphenol	mg/kg-dry	T		<0.35	:	<3.5	:	<0.69	:	<0.34	:	<1.7	:	<1.7	:
2,4-Dinitrophenol	mg/kg-dry	T		<0.88	:	<8.7	:	<1.7	:	<0.85	:	<4.4	J	<4.4	J
2,4-Dinitrotoluene	mg/kg-dry	T		<0.35	:	<3.5	:	<0.69	:	<0.34	:	<1.7	:	<1.7	:
2,6-Dinitrotoluene	mg/kg-dry	T		<0.35	:	<3.5	:	<0.69	:	<0.34	:	<1.7	:	<1.7	:
2-Chloronaphthalene	mg/kg-dry	T		<0.35	:	<3.5	:	<0.69	:	<0.34	:	<1.7	:	<1.7	:
2-Chlorophenol	mg/kg-dry	T		<0.35	:	<3.5	:	<0.69	:	<0.34	:	<1.7	:	<1.7	:
2-Methylnaphthalene	mg/kg-dry	T		<0.35	:	<3.5	:	<0.69	:	<0.34	:	<1.7	:	<1.7	:
2-Methylphenol	mg/kg-dry	T		<0.35	:	<3.5	:	<0.69	:	<0.34	:	<1.7	:	<1.7	:

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Appendix A-7a
Soil - Biased 0-6 inches
Validated Analytical Results

Parameter	Units	Exposure Area Fraction	Site ID / Sample Date / Sample ID		MSS2-68 1/16/2003 MSS2-68-T01N-SOL SS2		MSS2-69 1/16/2003 MSS2-69-T01N-SOL SS2		MSS2-70 1/17/2003 MSS2-70-T01N-SOL SS2		MSS2-71 1/15/2003 MSS2-71-T01N-SOL SS2		MSS2-72 1/16/2003 MSS2-72-T01N-SOL SS2		MSS2-73 1/16/2003 MSS2-73-T01N-SOL SS2	
2-Nitroaniline	mg/kg-dry	T		<0.88	:	<8.7	:	<1.7	:	<0.85	:	<4.4	:	<4.4	:
2-Nitrophenol	mg/kg-dry	T		<0.35	:	<3.5	:	<0.69	:	<0.34	:	<1.7	:	<1.7	:
3,3-Dichlorobenzidine	mg/kg-dry	T		<0.35	:	<3.5	J	<0.69	J	<0.34	J	<1.7	:	<1.7	:
3-Nitroaniline	mg/kg-dry	T		<0.88	:	<8.7	J	<1.7	J	<0.85	:	<4.4	:	<4.4	:
4,6-Dinitro-2-methylphenol	mg/kg-dry	T		<0.88	:	<8.7	:	<1.7	:	<0.85	:	<4.4	J	<4.4	J
4-Bromophenyl phenyl ether	mg/kg-dry	T		<0.35	:	<3.5	:	<0.69	:	<0.34	:	<1.7	:	<1.7	:
4-Chloro-3-methylphenol	mg/kg-dry	T		<0.35	:	<3.5	:	<0.69	:	<0.34	:	<1.7	:	<1.7	:
4-Chloroaniline	mg/kg-dry	T		<0.35	:	<3.5	:	<0.69	:	<0.34	:	<1.7	:	<1.7	:
4-Chlorophenyl phenyl ether	mg/kg-dry	T		<0.35	:	<3.5	:	<0.69	:	<0.34	:	<1.7	:	<1.7	:
4-Methylphenol	mg/kg-dry	T		<0.35	:	<3.5	:	<0.69	:	<0.34	:	<1.7	:	<1.7	:
4-Nitroaniline	mg/kg-dry	T		<0.88	:	<8.7	J	<1.7	J	<0.85	:	<4.4	:	<4.4	:
4-Nitrophenol	mg/kg-dry	T		<0.88	:	<8.7	:	<1.7	:	<0.85	:	<4.4	:	<4.4	:
Acenaphthene	mg/kg-dry	T		<0.35	:	<3.5	:	<0.69	:	<0.34	:	<1.7	:	<1.7	:
Acenaphthylene	mg/kg-dry	T		<0.35	:	<3.5	:	<0.69	:	<0.34	:	<1.7	:	<1.7	:
Anthracene	mg/kg-dry	T		<0.35	:	<3.5	:	<0.69	:	<0.34	:	<1.7	:	<1.7	:
Benzaldehyde	mg/kg-dry	T		0.027	J	<3.5	:	<0.69	:	<0.34	J	<1.7	:	<1.7	:
Benzo(a)anthracene	mg/kg-dry	T		<0.35	:	<3.5	:	<0.69	:	<0.34	J	0.087	J	<1.7	:
Benzo(a)pyrene	mg/kg-dry	T		<0.35	:	<3.5	:	<0.69	:	<0.34	:	<1.7	:	<1.7	:
Benzo(b)fluoranthene	mg/kg-dry	T		<0.35	:	<3.5	:	<0.69	:	<0.34	:	<1.7	:	<1.7	:
Benzo(g,h,i)perylene	mg/kg-dry	T		<0.35	:	<3.5	:	<0.69	:	<0.34	:	<1.7	:	<1.7	:
Benzo(k)fluoranthene	mg/kg-dry	T		<0.35	:	<3.5	:	<0.69	:	<0.34	:	<1.7	:	<1.7	:
Bis(2-chloroethoxy)methane	mg/kg-dry	T		<0.35	:	<3.5	:	<0.69	:	<0.34	:	<1.7	:	<1.7	:
Bis(2-chloroethyl)ether	mg/kg-dry	T		<0.35	:	<3.5	:	<0.69	:	<0.34	:	<1.7	:	<1.7	:
Bis(2-ethylhexyl)phthalate	mg/kg-dry	T		<0.35	:	1.8	J	0.9	:	0.6	:	4.6	:	0.27	J
Butyl benzyl phthalate	mg/kg-dry	T		<0.35	:	<3.5	:	<0.69	:	<0.34	J	<1.7	:	0.08	J
Carbazole	mg/kg-dry	T		<0.35	:	<3.5	:	<0.69	:	<0.34	:	<1.7	:	<1.7	:
Chrysene	mg/kg-dry	T		<0.35	:	<3.5	:	<0.69	:	0.017	J	0.085	J	<1.7	:
Dibenz(a,h)anthracene	mg/kg-dry	T		<0.35	:	<3.5	J	<0.69	J	<0.34	:	<1.7	:	<1.7	:
Dibenzofuran	mg/kg-dry	T		<0.35	:	<3.5	:	<0.69	:	0.054	J	<1.7	:	<1.7	:
Dichlorodiisopropyl ether	mg/kg-dry	T		<0.35	:	<3.5	:	<0.69	:	<0.34	:	<1.7	:	<1.7	:
Diethylphthalate	mg/kg-dry	T		<0.35	:	<3.5	:	<0.69	:	<0.34	:	<1.7	:	<1.7	:
Dimethylphthalate	mg/kg-dry	T		<0.35	:	<3.5	:	<0.69	:	<0.34	:	<1.7	:	<1.7	:
Di-n-Butyl phthalate	mg/kg-dry	T		<0.35	:	<3.5	:	<0.69	:	<0.34	:	<1.7	:	<1.7	:
Di-n-Octyl phthalate	mg/kg-dry	T		<0.35	:	<3.5	:	<0.69	:	<0.34	:	<1.7	:	<1.7	:

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T = Total Fraction

Appendix A-7a
Soil - Biased 0-6 inches
Validated Analytical Results

Parameter	Units	Site ID / Sample Date / Sample ID / Exposure Area / Fraction	MSS2-68 1/16/2003 MSS2-68-T01N-SOL SS2	MSS2-69 1/16/2003 MSS2-69-T01N-SOL SS2	MSS2-70 1/17/2003 MSS2-70-T01N-SOL SS2	MSS2-71 1/15/2003 MSS2-71-T01N-SOL SS2	MSS2-72 1/16/2003 MSS2-72-T01N-SOL SS2	MSS2-73 1/16/2003 MSS2-73-T01N-SOL SS2
Fluoranthene	mg/kg-dry	T	<0.35 :	<3.5 :	<0.69 :	<0.34 :	<1.7 :	<1.7 :
Fluorene	mg/kg-dry	T	<0.35 :	<3.5 :	<0.69 :	0.08 J	<1.7 :	<1.7 :
Hexachlorobenzene	mg/kg-dry	T	<0.35 :	<3.5 :	<0.69 :	<0.34 :	<1.7 :	<1.7 :
Hexachlorobutadiene	mg/kg-dry	T	<0.35 :	<3.5 :	<0.69 :	<0.34 :	<1.7 :	<1.7 :
Hexachlorocyclopentadiene	mg/kg-dry	T	<0.35 :	<3.5 :	<0.69 :	<0.34 :	<1.7 :	<1.7 :
Hexachloroethane	mg/kg-dry	T	<0.35 :	<3.5 :	<0.69 :	<0.34 :	<1.7 :	<1.7 :
Indeno(1,2,3-cd)pyrene	mg/kg-dry	T	<0.35 :	<3.5 :	<0.69 :	<0.34 :	<1.7 :	<1.7 :
Isophorone	mg/kg-dry	T	<0.35 :	<3.5 :	<0.69 :	<0.34 :	<1.7 :	<1.7 :
Naphthalene	mg/kg-dry	T	<0.35 :	<3.5 :	<0.69 :	<0.34 :	<1.7 :	<1.7 :
Nitrobenzene	mg/kg-dry	T	<0.35 :	<3.5 :	<0.69 :	<0.34 :	<1.7 :	<1.7 :
N-Nitrosodi-n-propylamine	mg/kg-dry	T	<0.35 :	<3.5 :	<0.69 :	<0.34 :	<1.7 :	<1.7 :
N-Nitrosodiphenylamine	mg/kg-dry	T	<0.35 :	<3.5 :	<0.69 :	<0.34 :	<1.7 :	<1.7 :
Pentachlorophenol	mg/kg-dry	T	<0.88 :	<8.7 :	<1.7 :	<0.85 :	<4.4 :	<4.4 :
Phenanthrene	mg/kg-dry	T	<0.35 :	<3.5 :	<0.69 :	0.19 J	<1.7 :	<1.7 :
Phenol	mg/kg-dry	T	<0.35 :	<3.5 :	<0.69 :	<0.34 :	<1.7 :	<1.7 :
Pyrene	mg/kg-dry	T	<0.35 :	<3.5 :	<0.69 :	0.069 J	0.29 J	<1.7 :

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Appendix A-7a
Soil - Biased 0-6 inches
Validated Analytical Results

Parameter	Units	Exposure Area Fraction	Site ID	MSS2-74	MSS2-75	MSS2-76	MSS2-77	MSS2-78	MSS2-78
			Sample Date	1/16/2003	1/17/2003	1/17/2003	1/15/2003	1/15/2003	1/15/2003
			Sample ID	MSS2-74-T01N-SOL	MSS2-75-T01N-SOL	MSS2-76-T01N-SOL	MSS2-77-T01N-SOL	MSS2-78-T01N-SOLRE	MSS2-78-T01N-SOL
			Exposure Area	SS2	SS2	SS2	SS2	SS2	SS2
General Chemistry									
Ammonia	mg/kg-dry	T		9.9 :	17.7 :	33. :	13.5 :	-	21.2 :
Chloride	mg/kg-dry	T		6.4 :	4.2 :	200. :	4.3 :	-	3.8 :
Fluoride	mg/kg-dry	T		0.84 J	1.8 J	0.93 J	1.3 J	-	0.65 J
Nitrate	mg/kg-dry	T		<2.2 J	<2.2 J	<2.1 J	5.8 J	-	2.5 J
Phosphorus	mg/kg-dry	T		943. :	1620. :	1520. :	1060. :	-	574. :
Sulfate	mg/kg-dry	T		875. :	51.3 :	200. :	1150. :	-	968. :
Total Kjeldahl Nitrogen	mg/kg-dry	T		137. :	241. :	246. :	127. :	-	271. :
Total Organic Carbon	mg/kg-dry	T		9980. J	36300. J	24300. J	632. J	-	787. J
Laboratory Parameters									
pH	SU	T		7.7 :	7.2 :	7. :	6.2 :	-	6.6 :
Solids, Percent	%	T		97. :	95.2 :	96.5 :	93.9 :	-	94.7 :
Solids, Percent - VOCs Only	%	T		95. :	-	-	-	-	-
Specific Conductance	umhos/cm	T		1570. J	380. J	606. J	1670. J	-	1290. J
Geotechnical									
Organic Soils	%	T		3.1 :	9. :	6.3 :	1.9 :	-	2.1 :
Physical Properties									
Cation-Exchange Capacity	meq/100g	T		11.4 :	15.7 :	12.8 :	14.3 :	-	11.7 :
Sodium Absorption Ratio	ratio	T		0.42 :	0.17 :	0.77 :	0.09 :	-	0.05 :
Metals									
Aluminum	mg/kg-dry	T		9370. :	14500. :	12700. :	12700. :	-	7340. :
Antimony	mg/kg-dry	T		<0.29 J	<0.26 J	<0.29 J	<0.31 J	-	<0.33 J
Arsenic	mg/kg-dry	T		1.5 J	3. J	2.9 J	3.3 J	-	5. J
Barium	mg/kg-dry	T		81.9 :	202. :	254. :	177. :	-	84.4 :
Beryllium	mg/kg-dry	T		0.54 :	0.68 :	0.7 :	1. :	-	0.73 :
Boron	mg/kg-dry	T		<1.9 :	10.1 :	<0.25 J	<0.22 J	-	<0.22 J
Cadmium	mg/kg-dry	T		0.059 J	0.083 J	0.27 J	0.31 :	-	1. :
Calcium	mg/kg-dry	T		6350. :	11400. :	6520. :	8210. :	-	9020. :
Chromium	mg/kg-dry	T		24.7 J	44.6 J	34.1 J	36.2 J	-	20.2 J
Cobalt	mg/kg-dry	T		7.7 :	6.7 :	7.9 :	9.9 :	-	5.2 :
Copper	mg/kg-dry	T		35.4 J	75.9 J	65.3 :	91. J	-	66. J
Iron	mg/kg-dry	T		17500. :	29500. :	29700. :	28200. :	-	20200. :
Lead	mg/kg-dry	T		19.7 :	46.7 :	54.6 :	60.4 :	-	85.7 :
Magnesium	mg/kg-dry	T		6040. :	7830. :	6530. :	7040. :	-	3180. :

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T = Total Fraction

Appendix A-7a
Soil - Biased 0-6 inches
Validated Analytical Results

Parameter	Units	Exposure Area Fraction	Site ID	MSS2-74		MSS2-75		MSS2-76		MSS2-77		MSS2-78		MSS2-78	
			Sample Date	1/16/2003		1/17/2003		1/17/2003		1/15/2003		1/15/2003		1/15/2003	
			Sample ID	MSS2-74-T01N-SOL		MSS2-75-T01N-SOL		MSS2-76-T01N-SOL		MSS2-77-T01N-SOL		MSS2-78-T01N-SOLRE		MSS2-78-T01N-SOL	
			Exposure Area	SS2		SS2		SS2		SS2		SS2		SS2	
Manganese	mg/kg-dry	T		371.	:	402.	:	418.	:	615.	:	-		543.	:
Mercury	mg/kg-dry	T		<0.017	:	<0.018	:	<0.016	:	<0.018	:	-		<0.017	:
Molybdenum	mg/kg-dry	T		120.	:	204.	:	63.7	:	174.	:	-		106.	:
Nickel	mg/kg-dry	T		18.2	:	23.9	:	21.7	:	26.2	:	-		12.9	:
Potassium	mg/kg-dry	T		1690.	J	4520.	J	3540.	J	2910.	J	-		1860.	J
Selenium	mg/kg-dry	T		<0.77	J	0.82	J	1.1	J	<0.83	J	-		<0.71	J
Silver	mg/kg-dry	T		<0.14	J	<0.16	:	0.25	:	0.55	:	-		0.92	:
Sodium	mg/kg-dry	T		<72.2	:	351.	:	<219.	:	<126.	:	-		<113.	:
Thallium	mg/kg-dry	T		0.15	:	0.34	:	0.3	:	0.24	:	-		0.16	:
Vanadium	mg/kg-dry	T		28.6	:	48.3	:	37.4	:	33.3	:	-		16.8	:
Zinc	mg/kg-dry	T		78.7	:	265.	:	125.	:	100.	:	-		169.	:
Volatile Organics															
1,1,1-Trichloroethane	mg/kg-dry	T		<0.005	:	<0.005	:	<0.007	:	<0.008	J	-		-	
1,1,2,2-Tetrachloroethane	mg/kg-dry	T		<0.005	:	<0.005	:	<0.007	:	<0.008	J	-		-	
1,1,2-Trichloro-1,2,2-trifluoroethane	mg/kg-dry	T		<0.005	:	<0.005	:	<0.007	:	<0.008	J	-		-	
1,1,2-Trichloroethane	mg/kg-dry	T		<0.005	:	<0.005	:	<0.007	:	<0.008	J	-		-	
1,1-Dichloroethane	mg/kg-dry	T		<0.005	:	<0.005	:	<0.007	:	<0.008	J	-		-	
1,1-Dichloroethene	mg/kg-dry	T		<0.005	:	<0.005	:	<0.007	:	<0.008	J	-		-	
1,2,4-Trichlorobenzene	mg/kg-dry	T		<0.005	:	<0.005	:	<0.007	:	<0.008	J	-		-	
1,2-Dibromo-3-chloropropane	mg/kg-dry	T		<0.005	:	<0.005	:	<0.007	:	<0.008	J	-		-	
1,2-Dichlorobenzene	mg/kg-dry	T		<0.005	:	<0.005	:	<0.007	:	<0.008	J	-		-	
1,2-Dichloroethane	mg/kg-dry	T		<0.005	:	<0.005	:	<0.007	:	<0.008	J	-		-	
1,2-Dichloroethene (total)	mg/kg-dry	T		<0.005	:	<0.005	:	<0.007	:	<0.008	J	-		-	
1,2-Dichloropropane	mg/kg-dry	T		<0.005	:	<0.005	:	<0.007	:	<0.008	J	-		-	
1,3-Dichlorobenzene	mg/kg-dry	T		<0.005	:	<0.005	:	<0.007	:	<0.008	J	-		-	
1,4-Dichlorobenzene	mg/kg-dry	T		<0.005	:	<0.005	:	<0.007	:	<0.008	J	-		-	
2-Butanone	mg/kg-dry	T		<0.005	:	<0.005	:	0.002	J	<0.008	J	-		-	
2-Hexanone	mg/kg-dry	T		<0.005	:	<0.005	:	<0.007	:	<0.008	J	-		-	
4-Methyl-2-pentanone	mg/kg-dry	T		<0.005	:	<0.005	:	<0.007	:	<0.008	J	-		-	
Acetone	mg/kg-dry	T		<0.005	:	0.013	:	0.006	J	<0.008	:	0.0008	J	-	
Benzene	mg/kg-dry	T		<0.005	:	<0.005	:	<0.007	:	<0.008	J	-		-	
Bromodichloromethane	mg/kg-dry	T		<0.005	:	<0.005	:	<0.007	:	<0.008	J	-		-	
Bromoform	mg/kg-dry	T		<0.005	:	<0.005	:	<0.007	:	<0.008	J	-		-	
Bromomethane	mg/kg-dry	T		<0.005	:	<0.005	:	<0.007	:	<0.008	J	-		-	

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Appendix A-7a
Soil - Biased 0-6 inches
Validated Analytical Results

Parameter	Units	Exposure Area Fraction	Site ID / Sample Date / Sample ID					
			MSS2-74 1/16/2003 MSS2-74-T01N-SOL	MSS2-75 1/17/2003 MSS2-75-T01N-SOL	MSS2-76 1/17/2003 MSS2-76-T01N-SOL	MSS2-77 1/15/2003 MSS2-77-T01N-SOL	MSS2-78 1/15/2003 MSS2-78-T01N-SOLRE	MSS2-78 1/15/2003 MSS2-78-T01N-SOL
			SS2	SS2	SS2	SS2	SS2	SS2
Carbon disulfide	mg/kg-dry	T	<0.005 :	<0.005 :	<0.007 :	<0.008 J	-	-
Carbon tetrachloride	mg/kg-dry	T	<0.005 :	<0.005 :	<0.007 :	<0.008 J	-	-
Chlorobenzene	mg/kg-dry	T	<0.005 :	<0.005 :	<0.007 :	<0.008 J	-	-
Chloroethane	mg/kg-dry	T	<0.005 :	<0.005 :	<0.007 :	<0.008 J	-	-
Chloroform	mg/kg-dry	T	<0.005 :	<0.005 :	<0.007 :	<0.008 J	-	-
Chloromethane	mg/kg-dry	T	<0.005 :	<0.005 :	<0.007 :	<0.008 J	-	-
cis-1,2-Dichloroethene	mg/kg-dry	T	<0.005 :	<0.005 :	<0.007 :	<0.008 J	-	-
cis-1,3-Dichloropropene	mg/kg-dry	T	<0.005 :	<0.005 :	<0.007 :	<0.008 J	-	-
Dibromochloromethane	mg/kg-dry	T	<0.005 :	<0.005 :	<0.007 :	<0.008 J	-	-
Dichlorodifluoromethane	mg/kg-dry	T	<0.005 :	<0.005 :	<0.007 :	<0.008 J	-	-
Ethylbenzene	mg/kg-dry	T	<0.005 :	<0.005 :	<0.007 :	<0.008 J	-	-
Methylene chloride	mg/kg-dry	T	<0.005 :	<0.005 :	<0.007 :	<0.008 J	-	-
Styrene	mg/kg-dry	T	<0.005 :	<0.005 :	<0.007 :	<0.008 J	-	-
Tetrachloroethene	mg/kg-dry	T	<0.005 :	<0.005 :	<0.007 :	<0.008 J	-	-
Toluene	mg/kg-dry	T	<0.005 :	<0.005 :	<0.007 :	<0.008 J	-	-
Total Xylene	mg/kg-dry	T	0.0006 J	0.0008 J	<0.007 :	0.002 J	0.0008 J	-
trans-1,2-Dichloroethene	mg/kg-dry	T	<0.005 :	<0.005 :	<0.007 :	<0.008 J	-	-
trans-1,3-Dichloropropene	mg/kg-dry	T	<0.005 :	<0.005 :	<0.007 :	<0.008 J	-	-
Trichloroethene	mg/kg-dry	T	<0.005 :	<0.005 :	<0.007 :	<0.008 J	-	-
Trichlorofluoromethane	mg/kg-dry	T	<0.005 :	<0.005 :	<0.007 :	<0.008 J	-	-
Vinyl chloride	mg/kg-dry	T	<0.005 :	<0.005 :	<0.007 :	<0.008 J	-	-
Semi-Volatile Organics								
1,1`-Biphenyl	mg/kg-dry	T	<1.7 :	<3.5 :	<3.4 :	<0.35 :	-	<0.35 :
2,4,5-Trichlorophenol	mg/kg-dry	T	<4.4 :	<8.7 :	<8.6 :	<0.88 :	-	<0.87 :
2,4,6-Trichlorophenol	mg/kg-dry	T	<1.7 :	<3.5 :	<3.4 :	<0.35 :	-	<0.35 :
2,4-Dichlorophenol	mg/kg-dry	T	<1.7 :	<3.5 :	<3.4 :	<0.35 :	-	<0.35 :
2,4-Dimethylphenol	mg/kg-dry	T	<1.7 :	<3.5 :	<3.4 :	<0.35 :	-	<0.35 :
2,4-Dinitrophenol	mg/kg-dry	T	<4.4 J	<8.7 :	<8.6 :	<0.88 J	-	<0.87 J
2,4-Dinitrotoluene	mg/kg-dry	T	<1.7 :	<3.5 :	<3.4 :	<0.35 :	-	<0.35 :
2,6-Dinitrotoluene	mg/kg-dry	T	<1.7 :	<3.5 :	<3.4 :	<0.35 :	-	<0.35 :
2-Chloronaphthalene	mg/kg-dry	T	<1.7 :	<3.5 :	<3.4 :	<0.35 :	-	<0.35 :
2-Chlorophenol	mg/kg-dry	T	<1.7 :	<3.5 :	<3.4 :	<0.35 :	-	<0.35 :
2-Methylnaphthalene	mg/kg-dry	T	<1.7 :	<3.5 :	<3.4 :	<0.35 :	-	<0.35 :
2-Methylphenol	mg/kg-dry	T	<1.7 :	<3.5 :	<3.4 :	<0.35 :	-	<0.35 :

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R = Qualified as rejected value from data validation and results are considered unusable for any purpose
T = Total Fraction

Appendix A-7a
Soil - Biased 0-6 inches
Validated Analytical Results

Parameter	Units	Exposure Area Fraction	Site ID / Sample Date / Sample ID					
			MSS2-74 1/16/2003 MSS2-74-T01N-SOL	MSS2-75 1/17/2003 MSS2-75-T01N-SOL	MSS2-76 1/17/2003 MSS2-76-T01N-SOL	MSS2-77 1/15/2003 MSS2-77-T01N-SOL	MSS2-78 1/15/2003 MSS2-78-T01N-SOLRE	MSS2-78 1/15/2003 MSS2-78-T01N-SOL
			SS2	SS2	SS2	SS2	SS2	SS2
2-Nitroaniline	mg/kg-dry	T	<4.4 :	<8.7 :	<8.6 :	<0.88 :	-	<0.87 :
2-Nitrophenol	mg/kg-dry	T	<1.7 :	<3.5 :	<3.4 :	<0.35 :	-	<0.35 :
3,3-Dichlorobenzidine	mg/kg-dry	T	<1.7 :	<3.5 J	<3.4 :	<0.35 J	-	<0.35 J
3-Nitroaniline	mg/kg-dry	T	<4.4 :	<8.7 J	<8.6 J	<0.88 :	-	<0.87 :
4,6-Dinitro-2-methylphenol	mg/kg-dry	T	<4.4 J	<8.7 :	<8.6 :	<0.88 J	-	<0.87 J
4-Bromophenyl phenyl ether	mg/kg-dry	T	<1.7 :	<3.5 :	<3.4 :	<0.35 :	-	<0.35 :
4-Chloro-3-methylphenol	mg/kg-dry	T	<1.7 :	<3.5 :	<3.4 :	<0.35 :	-	<0.35 :
4-Chloroaniline	mg/kg-dry	T	<1.7 :	<3.5 :	<3.4 :	<0.35 :	-	<0.35 :
4-Chlorophenyl phenyl ether	mg/kg-dry	T	<1.7 :	<3.5 :	<3.4 :	<0.35 :	-	<0.35 :
4-Methylphenol	mg/kg-dry	T	<1.7 :	<3.5 :	<3.4 :	<0.35 :	-	<0.35 :
4-Nitroaniline	mg/kg-dry	T	<4.4 :	<8.7 J	<8.6 :	<0.88 :	-	<0.87 :
4-Nitrophenol	mg/kg-dry	T	<4.4 :	<8.7 :	<8.6 :	<0.88 J	-	<0.87 J
Acenaphthene	mg/kg-dry	T	<1.7 :	<3.5 :	<3.4 :	<0.35 :	-	<0.35 :
Acenaphthylene	mg/kg-dry	T	<1.7 :	<3.5 :	<3.4 :	<0.35 :	-	<0.35 :
Anthracene	mg/kg-dry	T	<1.7 :	<3.5 :	<3.4 :	<0.35 :	-	<0.35 :
Benzaldehyde	mg/kg-dry	T	<1.7 :	<3.5 :	<3.4 :	<0.35 J	-	<0.35 J
Benzo(a)anthracene	mg/kg-dry	T	<1.7 :	<3.5 :	<3.4 :	<0.35 :	-	<0.35 J
Benzo(a)pyrene	mg/kg-dry	T	<1.7 :	<3.5 :	<3.4 :	<0.35 :	-	<0.35 :
Benzo(b)fluoranthene	mg/kg-dry	T	<1.7 :	<3.5 :	<3.4 J	<0.35 :	-	<0.35 :
Benzo(g,h,i)perylene	mg/kg-dry	T	<1.7 :	<3.5 :	<3.4 :	<0.35 :	-	<0.35 :
Benzo(k)fluoranthene	mg/kg-dry	T	<1.7 :	<3.5 :	<3.4 :	<0.35 :	-	<0.35 :
Bis(2-chloroethoxy)methane	mg/kg-dry	T	<1.7 :	<3.5 :	<3.4 :	<0.35 :	-	<0.35 :
Bis(2-chloroethyl)ether	mg/kg-dry	T	<1.7 :	<3.5 :	<3.4 :	<0.35 :	-	<0.35 :
Bis(2-ethylhexyl)phthalate	mg/kg-dry	T	0.48 J	0.49 J	<3.4 :	<0.35 :	-	<0.35 J
Butyl benzyl phthalate	mg/kg-dry	T	<1.7 :	<3.5 :	<3.4 :	<0.35 :	-	<0.35 :
Carbazole	mg/kg-dry	T	<1.7 :	<3.5 :	<3.4 :	<0.35 :	-	<0.35 :
Chrysene	mg/kg-dry	T	<1.7 :	<3.5 :	<3.4 :	<0.35 :	-	<0.35 J
Dibenz(a,h)anthracene	mg/kg-dry	T	<1.7 :	<3.5 J	<3.4 :	<0.35 :	-	<0.35 :
Dibenzofuran	mg/kg-dry	T	<1.7 :	<3.5 :	<3.4 :	<0.35 :	-	<0.35 :
Dichlorodiisopropyl ether	mg/kg-dry	T	<1.7 :	<3.5 :	<3.4 :	<0.35 :	-	<0.35 :
Diethylphthalate	mg/kg-dry	T	<1.7 :	<3.5 :	<3.4 :	<0.35 :	-	<0.35 :
Dimethylphthalate	mg/kg-dry	T	<1.7 :	<3.5 :	<3.4 :	<0.35 :	-	<0.35 :
Di-n-Butyl phthalate	mg/kg-dry	T	<1.7 :	<3.5 :	<3.4 :	<0.35 :	-	<0.35 :
Di-n-Octyl phthalate	mg/kg-dry	T	<1.7 :	<3.5 :	<3.4 J	<0.35 :	-	<0.35 :

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T = Total Fraction

Appendix A-7a
Soil - Biased 0-6 inches
Validated Analytical Results

Parameter	Units	Site ID / Sample Date / Sample ID / Exposure Area / Fraction	MSS2-74 1/16/2003 MSS2-74-T01N-SOL SS2		MSS2-75 1/17/2003 MSS2-75-T01N-SOL SS2		MSS2-76 1/17/2003 MSS2-76-T01N-SOL SS2		MSS2-77 1/15/2003 MSS2-77-T01N-SOL SS2		MSS2-78 1/15/2003 MSS2-78-T01N-SOLRE SS2		MSS2-78 1/15/2003 MSS2-78-T01N-SOL SS2	
Fluoranthene	mg/kg-dry	T	<1.7	:	<3.5	:	<3.4	:	<0.35	:	-		<0.35	:
Fluorene	mg/kg-dry	T	<1.7	:	<3.5	:	<3.4	:	<0.35	:	-		<0.35	:
Hexachlorobenzene	mg/kg-dry	T	<1.7	:	<3.5	:	<3.4	:	<0.35	:	-		<0.35	:
Hexachlorobutadiene	mg/kg-dry	T	<1.7	:	<3.5	:	<3.4	:	<0.35	:	-		<0.35	:
Hexachlorocyclopentadiene	mg/kg-dry	T	<1.7	:	<3.5	:	<3.4	:	<0.35	J	-		<0.35	J
Hexachloroethane	mg/kg-dry	T	<1.7	:	<3.5	:	<3.4	:	<0.35	:	-		<0.35	:
Indeno(1,2,3-cd)pyrene	mg/kg-dry	T	<1.7	:	<3.5	:	<3.4	:	<0.35	:	-		<0.35	:
Isophorone	mg/kg-dry	T	<1.7	:	<3.5	:	<3.4	:	<0.35	:	-		<0.35	:
Naphthalene	mg/kg-dry	T	<1.7	:	<3.5	:	<3.4	:	<0.35	:	-		<0.35	:
Nitrobenzene	mg/kg-dry	T	<1.7	:	<3.5	:	<3.4	:	<0.35	:	-		<0.35	:
N-Nitrosodi-n-propylamine	mg/kg-dry	T	<1.7	:	<3.5	:	<3.4	:	<0.35	:	-		<0.35	:
N-Nitrosodiphenylamine	mg/kg-dry	T	<1.7	:	<3.5	:	<3.4	:	<0.35	:	-		<0.35	:
Pentachlorophenol	mg/kg-dry	T	<4.4	:	<8.7	:	<8.6	:	<0.88	J	-		<0.87	J
Phenanthrene	mg/kg-dry	T	<1.7	:	<3.5	:	<3.4	:	<0.35	:	-		<0.35	:
Phenol	mg/kg-dry	T	<1.7	:	<3.5	:	<3.4	:	<0.35	:	-		<0.35	:
Pyrene	mg/kg-dry	T	<1.7	:	<3.5	:	<3.4	:	<0.35	:	-		<0.35	J

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Appendix A-7a
Soil - Biased 0-6 inches
Validated Analytical Results

Parameter	Units	Exposure Area Fraction	Site ID	MSS2-79		MSS2-80		MSS2-81		MSS3-11		MSS3-12		MSS4A1-11	
			Sample Date	1/16/2003		1/16/2003		1/15/2003		10/10/2002		10/10/2002		10/10/2002	
			Sample ID	MSS2-79-T01N-SOL		MSS2-80-T01N-SOL		MSS8-81-T01N-SOL		MSS3-11-T01N-SOL		MSS3-12-T01N-SOL		MSS4A1-11-T01N-SOL	
			Exposure Area	SS2		SS2		SS2		SS3		SS3		SS4A1	
General Chemistry															
Ammonia	mg/kg-dry	T		12.	:	14.5	:	15.4	:	76.7	:	85.7	:	84.7	:
Chloride	mg/kg-dry	T		<2.2	:	2.7	:	2060.	:	4.8	J	<2.2	J	<2.3	J
Fluoride	mg/kg-dry	T		0.81	J	7.4	J	4.4	J	0.6	J	0.42	J	0.23	J
Nitrate	mg/kg-dry	T		<2.2	J	4.2	J	7.6	J	3.2	J	<2.2	J	<2.3	J
Phosphorus	mg/kg-dry	T		825.	:	740.	:	806.	:	1540.	J	823.	J	884.	J
Sulfate	mg/kg-dry	T		4.4	:	1790.	J	3530.	:	157.	J	18.4	J	57.	J
Total Kjeldahl Nitrogen	mg/kg-dry	T		113.	:	88.9	:	113.	:	704.	:	138.	:	325.	:
Total Organic Carbon	mg/kg-dry	T		541.	J	479.	J	<104.	J	11600.	J	4000.	J	7240.	J
Laboratory Parameters															
pH	SU	T		8.2	:	5.7	:	5.6	:	4.2	:	4.5	:	5.9	:
Solids, Percent	%	T		93.9	:	96.4	:	96.6	:	97.	:	93.	:	90.3	:
Solids, Percent - VOCs Only	%	T		93.9	:	95.5	:	-		-		-		-	
Specific Conductance	umhos/cm	T		90.1	J	1770.	J	5990.	J	190.	:	41.9	:	79.1	:
Geotechnical															
Organic Soils	%	T		2.2	:	3.	:	2.	:	5.09	:	3.22	:	3.73	:
Physical Properties															
Cation-Exchange Capacity	meq/100g	T		14.9	:	11.	:	15.1	:	16.3	:	8.5	:	20.7	:
Sodium Absorption Ratio	ratio	T		0.06	:	0.07	:	3.63	:	0.29	:	0.22	:	0.08	:
Metals															
Aluminum	mg/kg-dry	T		11000.	:	5640.	:	13200.	:	7320.	:	3860.	:	12400.	:
Antimony	mg/kg-dry	T		<0.3	J	<0.29	J	<0.28	J	<0.17	J	<0.16	J	<0.18	J
Arsenic	mg/kg-dry	T		3.	J	6.7	J	3.6	J	10.7	:	6.2	:	5.7	:
Barium	mg/kg-dry	T		167.	:	452.	:	223.	:	104.	:	158.	:	149.	:
Beryllium	mg/kg-dry	T		0.89	:	0.38	:	0.99	:	0.7	:	0.23	:	1.3	:
Boron	mg/kg-dry	T		<2.	:	<1.	J	<0.23	J	<0.4	J	12.5	J	12.6	J
Cadmium	mg/kg-dry	T		0.14	J	<0.032	:	0.21	:	<0.025	J	<0.027	J	<0.026	J
Calcium	mg/kg-dry	T		4380.	:	2870.	:	7980.	:	579.	:	389.	:	3060.	:
Chromium	mg/kg-dry	T		25.9	J	14.5	J	30.1	J	18.1	:	9.	:	23.2	:
Cobalt	mg/kg-dry	T		13.7	:	11.2	:	12.	:	3.1	:	1.1	:	8.4	:
Copper	mg/kg-dry	T		144.	J	79.	J	75.3	J	63.4	:	38.	:	31.2	:
Iron	mg/kg-dry	T		22200.	:	30900.	:	28000.	:	37400.	:	25900.	:	24000.	:
Lead	mg/kg-dry	T		56.9	:	41.3	:	47.9	:	127.	:	118.	:	36.3	:
Magnesium	mg/kg-dry	T		5670.	:	2060.	:	6600.	:	3070.	:	1460.	:	5490.	:

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Appendix A-7a
Soil - Biased 0-6 inches
Validated Analytical Results

Parameter	Units	Exposure Area Fraction	Site ID	MSS2-79	MSS2-80	MSS2-81	MSS3-11	MSS3-12	MSS4A1-11
			Sample Date	1/16/2003	1/16/2003	1/15/2003	10/10/2002	10/10/2002	10/10/2002
			Sample ID	MSS2-79-T01N-SOL	MSS2-80-T01N-SOL	MSS8-81-T01N-SOL	MSS3-11-T01N-SOL	MSS3-12-T01N-SOL	MSS4A1-11-T01N-SOL
			Exposure Area	SS2	SS2	SS2	SS3	SS3	SS4A1
Manganese	mg/kg-dry	T		605. :	302. :	571. :	325. J	125. J	546. J
Mercury	mg/kg-dry	T		<0.017 :	<0.018 :	<0.016 :	<0.015 :	<0.017 :	<0.018 :
Molybdenum	mg/kg-dry	T		14.1 :	44.3 :	28.9 :	10. :	37.8 :	<3.7 :
Nickel	mg/kg-dry	T		27.3 :	9.4 :	26.1 :	10. J	4.5 J	20.5 J
Potassium	mg/kg-dry	T		1770. J	3010. J	3710. J	2990. J	2760. J	2190. J
Selenium	mg/kg-dry	T		<0.8 J	1.6 J	<0.76 J	1.2 J	1.3 J	0.72 J
Silver	mg/kg-dry	T		0.49 J	0.32 J	0.48 :	0.78 :	0.64 :	0.28 :
Sodium	mg/kg-dry	T		208. :	953. :	798. :	253. :	202. :	78.1 :
Thallium	mg/kg-dry	T		0.27 :	0.28 :	0.12 :	0.33 :	0.28 :	0.15 :
Vanadium	mg/kg-dry	T		23. :	17.1 :	33.5 :	19.3 :	11. :	24.2 :
Zinc	mg/kg-dry	T		311. :	182. :	81.7 :	82. J	30. J	76.1 J
Volatile Organics									
1,1,1-Trichloroethane	mg/kg-dry	T		<0.006 :	<0.005 :	<0.022 :	-	-	-
1,1,2,2-Tetrachloroethane	mg/kg-dry	T		<0.006 :	<0.005 :	<0.022 :	-	-	-
1,1,2-Trichloro-1,2,2-trifluoroethane	mg/kg-dry	T		<0.006 :	<0.005 :	<0.022 :	-	-	-
1,1,2-Trichloroethane	mg/kg-dry	T		<0.006 :	<0.005 :	<0.022 :	-	-	-
1,1-Dichloroethane	mg/kg-dry	T		<0.006 :	<0.005 :	<0.022 :	-	-	-
1,1-Dichloroethene	mg/kg-dry	T		<0.006 :	<0.005 :	<0.022 :	-	-	-
1,2,4-Trichlorobenzene	mg/kg-dry	T		<0.006 :	<0.005 :	<0.022 :	-	-	-
1,2-Dibromo-3-chloropropane	mg/kg-dry	T		<0.006 :	<0.005 :	<0.022 :	-	-	-
1,2-Dichlorobenzene	mg/kg-dry	T		<0.006 :	<0.005 :	<0.022 :	-	-	-
1,2-Dichloroethane	mg/kg-dry	T		<0.006 :	<0.005 :	<0.022 :	-	-	-
1,2-Dichloroethene (total)	mg/kg-dry	T		<0.006 :	<0.005 :	<0.022 :	-	-	-
1,2-Dichloropropane	mg/kg-dry	T		<0.006 :	<0.005 :	<0.022 :	-	-	-
1,3-Dichlorobenzene	mg/kg-dry	T		<0.006 :	<0.005 :	<0.022 :	-	-	-
1,4-Dichlorobenzene	mg/kg-dry	T		<0.006 :	<0.005 :	<0.022 :	-	-	-
2-Butanone	mg/kg-dry	T		<0.006 :	<0.005 :	<0.022 :	-	-	-
2-Hexanone	mg/kg-dry	T		<0.006 :	<0.005 :	<0.022 :	-	-	-
4-Methyl-2-pentanone	mg/kg-dry	T		<0.006 :	<0.005 :	<0.022 :	-	-	-
Acetone	mg/kg-dry	T		<0.006 :	<0.005 :	0.003 J	-	-	-
Benzene	mg/kg-dry	T		<0.006 :	<0.005 :	<0.022 :	-	-	-
Bromodichloromethane	mg/kg-dry	T		<0.006 :	<0.005 :	<0.022 :	-	-	-
Bromoform	mg/kg-dry	T		<0.006 :	<0.005 :	<0.022 :	-	-	-
Bromomethane	mg/kg-dry	T		<0.006 :	<0.005 :	<0.022 :	-	-	-

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Appendix A-7a
Soil - Biased 0-6 inches
Validated Analytical Results

Parameter	Units	Exposure Area Fraction	Site ID / Sample Date / Sample ID		MSS2-79 1/16/2003 MSS2-79-T01N-SOL SS2		MSS2-80 1/16/2003 MSS2-80-T01N-SOL SS2		MSS2-81 1/15/2003 MSS8-81-T01N-SOL SS2		MSS3-11 10/10/2002 MSS3-11-T01N-SOL SS3	MSS3-12 10/10/2002 MSS3-12-T01N-SOL SS3	MSS4A1-11 10/10/2002 MSS4A1-11-T01N-SOL SS4A1
Carbon disulfide	mg/kg-dry	T		<0.006	:	<0.005	:	<0.022	:	-	-	-
Carbon tetrachloride	mg/kg-dry	T		<0.006	:	<0.005	:	<0.022	:	-	-	-
Chlorobenzene	mg/kg-dry	T		<0.006	:	<0.005	:	<0.022	:	-	-	-
Chloroethane	mg/kg-dry	T		<0.006	:	<0.005	:	<0.022	:	-	-	-
Chloroform	mg/kg-dry	T		<0.006	:	<0.005	:	<0.022	:	-	-	-
Chloromethane	mg/kg-dry	T		<0.006	:	<0.005	:	<0.022	:	-	-	-
cis-1,2-Dichloroethene	mg/kg-dry	T		<0.006	:	<0.005	:	<0.022	:	-	-	-
cis-1,3-Dichloropropene	mg/kg-dry	T		<0.006	:	<0.005	:	<0.022	:	-	-	-
Dibromochloromethane	mg/kg-dry	T		<0.006	:	<0.005	:	<0.022	:	-	-	-
Dichlorodifluoromethane	mg/kg-dry	T		<0.006	:	<0.005	:	<0.022	:	-	-	-
Ethylbenzene	mg/kg-dry	T		<0.006	:	<0.005	:	<0.022	:	-	-	-
Methylene chloride	mg/kg-dry	T		<0.006	:	<0.005	:	<0.022	:	-	-	-
Styrene	mg/kg-dry	T		<0.006	:	<0.005	:	<0.022	:	-	-	-
Tetrachloroethene	mg/kg-dry	T		<0.006	:	<0.005	:	<0.022	:	-	-	-
Toluene	mg/kg-dry	T		<0.006	:	<0.005	:	<0.022	:	-	-	-
Total Xylene	mg/kg-dry	T		<0.006	:	0.0006	J	<0.022	:	-	-	-
trans-1,2-Dichloroethene	mg/kg-dry	T		<0.006	:	<0.005	:	<0.022	:	-	-	-
trans-1,3-Dichloropropene	mg/kg-dry	T		<0.006	:	<0.005	:	<0.022	:	-	-	-
Trichloroethene	mg/kg-dry	T		<0.006	:	<0.005	:	<0.022	:	-	-	-
Trichlorofluoromethane	mg/kg-dry	T		<0.006	:	<0.005	:	<0.022	:	-	-	-
Vinyl chloride	mg/kg-dry	T		<0.006	:	<0.005	:	<0.022	:	-	-	-
Semi-Volatile Organics												
1,1`-Biphenyl	mg/kg-dry	T		<0.35	:	<0.34	:	<0.34	:	-	-	-
2,4,5-Trichlorophenol	mg/kg-dry	T		<0.88	:	<0.86	:	<0.86	:	-	-	-
2,4,6-Trichlorophenol	mg/kg-dry	T		<0.35	:	<0.34	:	<0.34	:	-	-	-
2,4-Dichlorophenol	mg/kg-dry	T		<0.35	:	<0.34	:	<0.34	:	-	-	-
2,4-Dimethylphenol	mg/kg-dry	T		<0.35	:	<0.34	:	<0.34	:	-	-	-
2,4-Dinitrophenol	mg/kg-dry	T		<0.88	J	<0.86	:	<0.86	J	-	-	-
2,4-Dinitrotoluene	mg/kg-dry	T		<0.35	:	<0.34	:	<0.34	:	-	-	-
2,6-Dinitrotoluene	mg/kg-dry	T		<0.35	:	<0.34	:	<0.34	:	-	-	-
2-Chloronaphthalene	mg/kg-dry	T		<0.35	:	<0.34	:	<0.34	:	-	-	-
2-Chlorophenol	mg/kg-dry	T		<0.35	:	<0.34	:	<0.34	:	-	-	-
2-Methylnaphthalene	mg/kg-dry	T		<0.35	:	<0.34	:	<0.34	:	-	-	-
2-Methylphenol	mg/kg-dry	T		<0.35	:	<0.34	:	<0.34	:	-	-	-

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Appendix A-7a
Soil - Biased 0-6 inches
Validated Analytical Results

Parameter	Units	Exposure Area Fraction	Site ID / Sample Date / Sample ID		MSS2-79 1/16/2003 MSS2-79-T01N-SOL SS2		MSS2-80 1/16/2003 MSS2-80-T01N-SOL SS2		MSS2-81 1/15/2003 MSS8-81-T01N-SOL SS2		MSS3-11 10/10/2002 MSS3-11-T01N-SOL SS3	MSS3-12 10/10/2002 MSS3-12-T01N-SOL SS3	MSS4A1-11 10/10/2002 MSS4A1-11-T01N-SOL SS4A1
2-Nitroaniline	mg/kg-dry	T		<0.88	:	<0.86	:	<0.86	:	-	-	-
2-Nitrophenol	mg/kg-dry	T		<0.35	:	<0.34	:	<0.34	:	-	-	-
3,3-Dichlorobenzidine	mg/kg-dry	T		<0.35	:	<0.34	J	<0.34	J	-	-	-
3-Nitroaniline	mg/kg-dry	T		<0.88	:	<0.86	:	<0.86	:	-	-	-
4,6-Dinitro-2-methylphenol	mg/kg-dry	T		<0.88	J	<0.86	:	<0.86	J	-	-	-
4-Bromophenyl phenyl ether	mg/kg-dry	T		<0.35	:	<0.34	:	<0.34	:	-	-	-
4-Chloro-3-methylphenol	mg/kg-dry	T		<0.35	:	<0.34	:	<0.34	:	-	-	-
4-Chloroaniline	mg/kg-dry	T		<0.35	:	<0.34	:	<0.34	:	-	-	-
4-Chlorophenyl phenyl ether	mg/kg-dry	T		<0.35	:	<0.34	:	<0.34	:	-	-	-
4-Methylphenol	mg/kg-dry	T		<0.35	:	<0.34	:	<0.34	:	-	-	-
4-Nitroaniline	mg/kg-dry	T		<0.88	:	<0.86	:	<0.86	:	-	-	-
4-Nitrophenol	mg/kg-dry	T		<0.88	:	<0.86	:	<0.86	J	-	-	-
Acenaphthene	mg/kg-dry	T		<0.35	:	<0.34	:	<0.34	:	-	-	-
Acenaphthylene	mg/kg-dry	T		<0.35	:	<0.34	:	<0.34	:	-	-	-
Anthracene	mg/kg-dry	T		<0.35	:	<0.34	:	<0.34	:	-	-	-
Benzaldehyde	mg/kg-dry	T		<0.35	:	<0.34	J	0.065	J	-	-	-
Benzo(a)anthracene	mg/kg-dry	T		<0.35	:	<0.34	J	<0.34	:	-	-	-
Benzo(a)pyrene	mg/kg-dry	T		<0.35	:	<0.34	J	<0.34	:	-	-	-
Benzo(b)fluoranthene	mg/kg-dry	T		<0.35	:	<0.34	J	<0.34	:	-	-	-
Benzo(g,h,i)perylene	mg/kg-dry	T		<0.35	:	<0.34	:	<0.34	:	-	-	-
Benzo(k)fluoranthene	mg/kg-dry	T		<0.35	:	<0.34	J	<0.34	:	-	-	-
Bis(2-chloroethoxy)methane	mg/kg-dry	T		<0.35	:	<0.34	:	<0.34	:	-	-	-
Bis(2-chloroethyl)ether	mg/kg-dry	T		<0.35	:	<0.34	:	<0.34	:	-	-	-
Bis(2-ethylhexyl)phthalate	mg/kg-dry	T		0.087	J	0.24	J	0.57	:	-	-	-
Butyl benzyl phthalate	mg/kg-dry	T		<0.35	:	<0.34	J	0.31	J	-	-	-
Carbazole	mg/kg-dry	T		<0.35	:	<0.34	:	<0.34	:	-	-	-
Chrysene	mg/kg-dry	T		<0.35	:	<0.34	J	<0.34	:	-	-	-
Dibenz(a,h)anthracene	mg/kg-dry	T		<0.35	:	<0.34	J	<0.34	:	-	-	-
Dibenzofuran	mg/kg-dry	T		<0.35	:	<0.34	:	<0.34	:	-	-	-
Dichlorodiisopropyl ether	mg/kg-dry	T		<0.35	:	<0.34	:	<0.34	:	-	-	-
Diethylphthalate	mg/kg-dry	T		<0.35	:	<0.34	:	<0.34	:	-	-	-
Dimethylphthalate	mg/kg-dry	T		<0.35	:	<0.34	:	<0.34	:	-	-	-
Di-n-Butyl phthalate	mg/kg-dry	T		<0.35	:	<0.34	:	0.029	J	-	-	-
Di-n-Octyl phthalate	mg/kg-dry	T		<0.35	:	<0.34	J	<0.34	:	-	-	-

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T = Total Fraction

Appendix A-7a
Soil - Biased 0-6 inches
Validated Analytical Results

Parameter	Units	Site ID / Sample Date / Sample ID / Exposure Area	Fraction	MSS2-79 1/16/2003 MSS2-79-T01N-SOL SS2		MSS2-80 1/16/2003 MSS2-80-T01N-SOL SS2		MSS2-81 1/15/2003 MSS8-81-T01N-SOL SS2		MSS3-11 10/10/2002 MSS3-11-T01N-SOL SS3	MSS3-12 10/10/2002 MSS3-12-T01N-SOL SS3	MSS4A1-11 10/10/2002 MSS4A1-11-T01N-SOL SS4A1
Fluoranthene	mg/kg-dry		T	<0.35	:	<0.34	:	<0.34	:	-	-	-
Fluorene	mg/kg-dry		T	<0.35	:	<0.34	:	<0.34	:	-	-	-
Hexachlorobenzene	mg/kg-dry		T	<0.35	:	<0.34	:	<0.34	:	-	-	-
Hexachlorobutadiene	mg/kg-dry		T	<0.35	:	<0.34	:	<0.34	:	-	-	-
Hexachlorocyclopentadiene	mg/kg-dry		T	<0.35	:	<0.34	:	<0.34	J	-	-	-
Hexachloroethane	mg/kg-dry		T	<0.35	:	<0.34	:	<0.34	:	-	-	-
Indeno(1,2,3-cd)pyrene	mg/kg-dry		T	<0.35	:	<0.34	J	<0.34	:	-	-	-
Isophorone	mg/kg-dry		T	<0.35	:	<0.34	:	<0.34	:	-	-	-
Naphthalene	mg/kg-dry		T	<0.35	:	<0.34	:	<0.34	:	-	-	-
Nitrobenzene	mg/kg-dry		T	<0.35	:	<0.34	:	<0.34	:	-	-	-
N-Nitrosodi-n-propylamine	mg/kg-dry		T	<0.35	:	<0.34	:	<0.34	:	-	-	-
N-Nitrosodiphenylamine	mg/kg-dry		T	<0.35	:	<0.34	:	<0.34	:	-	-	-
Pentachlorophenol	mg/kg-dry		T	<0.88	:	<0.86	:	<0.86	J	-	-	-
Phenanthrene	mg/kg-dry		T	<0.35	:	<0.34	:	<0.34	:	-	-	-
Phenol	mg/kg-dry		T	<0.35	:	<0.34	:	<0.34	:	-	-	-
Pyrene	mg/kg-dry		T	<0.35	:	<0.34	J	<0.34	:	-	-	-

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T = Total Fraction

Appendix A-7a
Soil - Biased 0-6 inches
Validated Analytical Results

Parameter	Units	Exposure Area Fraction	Site ID / Sample Date / Sample ID / Exposure Area													
			MSS4A1-12		MSS4A1-13		MSS4A1-14		MSS4A1-15		MSS4A1-16		MSS4A1-17	
			10/10/2002		10/11/2002		10/23/2002		10/23/2002		10/23/2002		10/24/2002	
			MSS4A1-12-T01N-SOL		MSS4A1-13-T01N-SOL		MSS4A1-14-T01N-SOL		MSS4A1-15-T01N-SOL		MSS4A1-16-T01N-SOL		MSS4A1-17-T01N-SOL	
			SS4A1		SS4A1		SS4A1		SS4A1		SS4A1		SS4A1	
General Chemistry														
Ammonia	mg/kg-dry	T	123.	:	86.2	:	13.5	:	48.5	:	87.1	:	11.8	:
Chloride	mg/kg-dry	T	<2.2	J	4.3	J	<27.1	:	<27.1	:	<27.5	:	3.4	J
Fluoride	mg/kg-dry	T	0.94	J	1.5	J	1.2	J	0.37	J	0.15	J	1.3	J
Nitrate	mg/kg-dry	T	<2.2	J	<2.2	J	<2.2	:	<2.2	:	<2.2	:	2.5	J
Phosphorus	mg/kg-dry	T	1030.	J	710.	:	1180.	J	669.	J	458.	J	868.	J
Sulfate	mg/kg-dry	T	53.5	J	21.5	J	1580.	:	7410.	:	<110.	:	51.8	J
Total Kjeldahl Nitrogen	mg/kg-dry	T	271.	:	82.	J	64.	J	134.	J	642.	J	79.8	:
Total Organic Carbon	mg/kg-dry	T	5500.	J	<107.	J	<109.	J	542.	J	12200.	J	626.	J
Laboratory Parameters														
pH	SU	T	4.4	:	7.1	:	4.2	:	3.4	:	5.3	:	4.6	:
Solids, Percent	%	T	91.8	:	93.9	:	92.4	:	92.3	:	90.8	:	88.9	:
Specific Conductance	umhos/cm	T	271.	:	7.3	:	812.	:	2860.	:	241.	:	89.1	:
Geotechnical														
Organic Soils	%	T	3.45	:	3.05	J	2.68	J	4.47	J	3.87	J	2.53	J
Physical Properties														
Cation-Exchange Capacity	meq/100g	T	17.3	:	12.5	:	20.5	:	17.7	:	18.7	:	17.7	:
Sodium Absorption Ratio	ratio	T	0.05	:	<0.06	:	0.03	:	0.02	:	0.04	:	0.08	:
Metals														
Aluminum	mg/kg-dry	T	10200.	:	6410.	:	9980.	:	3110.	:	9800.	:	11700.	:
Antimony	mg/kg-dry	T	<0.16	J	<0.15	J	<0.27	J	<0.27	J	<0.27	J	<0.31	J
Arsenic	mg/kg-dry	T	5.6	:	6.	:	5.5	:	2.6	:	4.	:	5.6	:
Barium	mg/kg-dry	T	114.	:	275.	:	123.	:	350.	:	161.	:	75.7	:
Beryllium	mg/kg-dry	T	0.84	:	1.	:	0.99	:	0.31	:	0.62	:	1.	:
Boron	mg/kg-dry	T	13.2	J	3.5	J	5.1	:	4.6	J	5.2	J	<0.94	J
Cadmium	mg/kg-dry	T	<0.027	J	<0.026	:	0.47	J	0.15	J	0.14	J	0.28	J
Calcium	mg/kg-dry	T	1500.	:	1360.	:	1870.	:	1140.	:	2790.	:	1690.	:
Chromium	mg/kg-dry	T	23.4	:	9.3	:	17.7	:	4.1	:	16.3	:	21.	:
Cobalt	mg/kg-dry	T	6.	:	5.5	:	12.3	:	1.9	:	5.4	:	10.8	:
Copper	mg/kg-dry	T	34.2	:	35.1	:	51.3	:	13.1	:	18.4	:	58.9	:
Iron	mg/kg-dry	T	26200.	:	25100.	:	25700.	:	29200.	:	18400.	:	24500.	:
Lead	mg/kg-dry	T	101.	:	58.1	:	143.	:	27.2	:	50.5	:	201.	:
Magnesium	mg/kg-dry	T	4530.	:	2650.	:	3190.	:	1020.	:	3050.	:	3990.	:
Manganese	mg/kg-dry	T	516.	J	243.	J	1270.	J	246.	J	350.	J	1820.	J

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Appendix A-7a
Soil - Biased 0-6 inches
Validated Analytical Results

Parameter	Units	Exposure Area / Fraction	Site ID / Sample Date / Sample ID											
			MSS4A1-12 10/10/2002 MSS4A1-12-T01N-SOL SS4A1		MSS4A1-13 10/11/2002 MSS4A1-13-T01N-SOL SS4A1		MSS4A1-14 10/23/2002 MSS4A1-14-T01N-SOL SS4A1		MSS4A1-15 10/23/2002 MSS4A1-15-T01N-SOL SS4A1		MSS4A1-16 10/23/2002 MSS4A1-16-T01N-SOL SS4A1		MSS4A1-17 10/24/2002 MSS4A1-17-T01N-SOL SS4A1	
Mercury	mg/kg-dry	T	<0.018	:	<0.016	:	<0.016	:	<0.016	:	0.016	:	<0.018	:
Molybdenum	mg/kg-dry	T	8.6	:	4.4	:	4.3	:	3.4	:	3.8	:	5.8	:
Nickel	mg/kg-dry	T	17.2	J	6.6	J	16.1	J	4.1	J	11.4	J	16.8	J
Potassium	mg/kg-dry	T	2420.	J	2910.	J	2270.	J	2830.	J	2360.	J	1880.	J
Selenium	mg/kg-dry	T	1.	J	2.1	J	0.87	J	0.78	J	<0.72	J	0.84	J
Silver	mg/kg-dry	T	0.66	:	0.13	:	0.55	:	<0.13	:	0.33	:	0.61	:
Sodium	mg/kg-dry	T	111.	:	150.	:	<131.	:	454.	:	<88.1	:	<112.	:
Thallium	mg/kg-dry	T	0.21	:	0.11	:	0.19	:	0.11	:	0.16	:	0.18	:
Vanadium	mg/kg-dry	T	23.1	:	9.3	:	16.	:	10.8	:	23.9	:	20.7	:
Zinc	mg/kg-dry	T	83.1	J	65.3	J	202.	J	53.3	J	88.9	J	275.	J

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Appendix A-7a
Soil - Biased 0-6 inches
Validated Analytical Results

Parameter	Units	Fraction	Site ID	MSS4A1-18		MSS4A2-11		MSS4A2-11A		MSS4A2-12		MSS4A2-12A		MSS4A2-13	
			Sample Date	10/24/2002		10/11/2002		10/18/2002		10/11/2002		10/18/2002		10/18/2002	
			Sample ID	MSS4A1-18-T01N-SOL		MSS4A2-11-T01N-SOL		MSS4A2-11-T01N-SOL		MSS4A2-12-T01N-SOL		MSS4A2-12-T01N-SOL		MSS4A2-13-T01N-SOL	
			Exposure Area	SS4A1		SS4A2		SS4A2		SS4A2		SS4A2		SS4A2	
General Chemistry															
Ammonia	mg/kg-dry	T		15.5	:	27.4	:	19.	:	23.4	:	3.3	:	23.3	:
Chloride	mg/kg-dry	T		2.3	J	11.6	J	2.8	J	12.1	J	4.7	J	2.3	J
Fluoride	mg/kg-dry	T		0.43	J	0.41	J	0.89	J	0.44	J	0.56	J	1.1	J
Nitrate	mg/kg-dry	T		<2.3	J	<2.3	J	4.3	J	<2.3	J	<2.2	J	<2.2	J
Phosphorus	mg/kg-dry	T		1070.	J	978.	J	574.	J	1020.	J	636.	J	399.	J
Sulfate	mg/kg-dry	T		378.	J	8190.	J	1150.	J	8110.	J	3130.	J	1670.	J
Total Kjeldahl Nitrogen	mg/kg-dry	T		69.4	:	33.6	J	64.2	:	73.8	J	82.4	:	111.	:
Total Organic Carbon	mg/kg-dry	T		<112.	J	<111.	J	698.	J	339.	J	1380.	J	4860.	J
Laboratory Parameters															
pH	SU	T		3.9	:	4.	:	6.8	:	3.	:	6.9	:	7.5	:
Solids, Percent	%	T		89.4	:	90.2	:	95.4	:	88.3	:	93.5	:	91.3	:
Specific Conductance	umhos/cm	T		325.	:	1450.	J	838.	:	1710.	J	1110.	:	1130.	:
Geotechnical															
Organic Soils	%	T		2.97	J	3.48	J	1.23	J	3.39	J	1.29	J	2.11	J
Physical Properties															
Cation-Exchange Capacity	meq/100g	T		16.3	:	15.7	:	5.3	:	16.1	:	7.9	:	14.	:
Sodium Absorption Ratio	ratio	T		0.06	:	0.03	:	0.04	:	<0.02	:	0.06	:	0.09	:
Metals															
Aluminum	mg/kg-dry	T		13600.	:	11100.	:	11300.	:	8930.	:	8110.	J	8850.	:
Antimony	mg/kg-dry	T		<0.31	J	<0.18	J	<0.21	J	<0.18	J	<0.27	J	<0.27	J
Arsenic	mg/kg-dry	T		7.4	:	1.9	J	1.6	:	4.2	:	3.4	J	4.3	:
Barium	mg/kg-dry	T		110.	:	90.7	:	86.2	:	91.4	:	48.1	J	108.	:
Beryllium	mg/kg-dry	T		0.87	:	0.51	:	0.95	:	0.51	:	1.2	J	3.4	:
Boron	mg/kg-dry	T		<0.91	J	<0.44	J	<0.79	:	<0.43	J	<0.21	:	<1.8	:
Cadmium	mg/kg-dry	T		0.19	J	<0.028	J	0.45	J	<0.027	J	0.93	:	1.8	J
Calcium	mg/kg-dry	T		1650.	:	10400.	:	15400.	:	12200.	:	20900.	J	45000.	:
Chromium	mg/kg-dry	T		23.2	:	33.4	:	31.2	:	24.1	:	26.8	J	18.8	:
Cobalt	mg/kg-dry	T		13.8	:	4.8	:	6.5	:	5.6	:	6.	:	6.1	:
Copper	mg/kg-dry	T		63.3	:	135.	:	90.7	:	123.	:	114.	:	80.6	J
Iron	mg/kg-dry	T		30900.	:	36600.	:	14600.	:	37300.	:	15600.	:	17400.	:
Lead	mg/kg-dry	T		218.	:	103.	:	69.7	:	90.2	:	112.	J	120.	:
Magnesium	mg/kg-dry	T		5240.	:	8060.	:	6640.	:	5710.	:	6210.	J	5680.	:
Manganese	mg/kg-dry	T		2000.	J	357.	J	924.	J	381.	J	720.	J	1080.	J

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T = Total Fraction

Appendix A-7a
Soil - Biased 0-6 inches
Validated Analytical Results

Parameter	Units	Site ID / Sample Date / Sample ID / Exposure Area / Fraction	MSS4A1-18 10/24/2002 MSS4A1-18-T01N-SOL SS4A1		MSS4A2-11 10/11/2002 MSS4A2-11-T01N-SOL SS4A2		MSS4A2-11A 10/18/2002 MSS4A2-11-T01N-SOL SS4A2		MSS4A2-12 10/11/2002 MSS4A2-12-T01N-SOL SS4A2		MSS4A2-12A 10/18/2002 MSS4A2-12-T01N-SOL SS4A2		MSS4A2-13 10/18/2002 MSS4A2-13-T01N-SOL SS4A2	
Mercury	mg/kg-dry	T	<0.018	:	<0.018	:	<0.016	:	<0.017	:	<0.017	J	<0.017	J
Molybdenum	mg/kg-dry	T	7.1	:	12.2	:	400.	:	14.5	:	2460.	:	325.	:
Nickel	mg/kg-dry	T	19.5	J	19.9	J	16.	J	18.2	J	20.9	J	18.	J
Potassium	mg/kg-dry	T	2700.	J	5040.	J	3460.	J	3310.	J	2690.	J	1700.	J
Selenium	mg/kg-dry	T	<0.84	J	1.2	J	<0.57	J	<0.87	J	1.	J	<0.72	J
Silver	mg/kg-dry	T	1.1	:	0.82	:	0.49	:	1.	:	2.3	J	0.93	:
Sodium	mg/kg-dry	T	<108.	:	<112.	:	<296.	:	<91.4	:	<54.8	:	<94.9	:
Thallium	mg/kg-dry	T	0.24	:	0.7	:	0.23	:	0.42	:	0.3	:	0.15	:
Vanadium	mg/kg-dry	T	24.1	:	40.5	:	30.8	:	26.1	:	45.7	J	23.6	:
Zinc	mg/kg-dry	T	228.	J	64.7	J	108.	J	58.1	:	144.	J	351.	J

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R = Qualified as rejected value from data validation and results are considered unusable for any purpose
T = Total Fraction

Appendix A-7a
Soil - Biased 0-6 inches
Validated Analytical Results

Parameter	Units	Exposure Area Fraction	Site ID	Sample Date	Sample ID	Exposure Area
			MSS4A2-14	10/18/2002	MSS4A2-14-T01N-SOL	SS4A2
			MSS4A2-15	10/18/2002	MSS4A2-15-T01N-SOL	SS4A2
			MSS4A2-16	10/18/2002	MSS4A2-16-T01N-SOL	SS4A2
			MSS4A2-17	10/18/2002	MSS4A2-17-T01N-SOL	SS4A2
			MSS4A2-18	10/20/2002	MSS4A2-18-T01N-SOL	SS4A2
			MSS4A2-19	10/20/2002	MSS4A2-19-T01N-SOL	SS4A2
General Chemistry						
Ammonia	mg/kg-dry	T	19.8 :	41.1 :	14. :	31. :	20.7 :	20.9 :
Chloride	mg/kg-dry	T	<2.2 J	<2.2 J	2.2 J	<2.2 J	3.1 J	<2.2 J
Fluoride	mg/kg-dry	T	2.7 J	20.1 J	5.7 J	1.4 J	2.8 J	2.1 J
Nitrate	mg/kg-dry	T	2.2 J	<2.2 J	<2.2 J	<2.2 J	<2.2 J	<2.2 J
Phosphorus	mg/kg-dry	T	492. J	117. J	227. J	207. J	427. J	451. J
Sulfate	mg/kg-dry	T	1620. J	4130. J	2890. J	647. J	2710. J	2320. J
Total Kjeldahl Nitrogen	mg/kg-dry	T	31.1 :	42.9 :	36.1 :	43.4 J	27.8 :	39.4 :
Total Organic Carbon	mg/kg-dry	T	1340. J	274. J	387. J	3080. J	<109. J	<108. J
Laboratory Parameters						
pH	SU	T	7.3 :	5.1 :	7.3 :	6.3 :	7. :	7.1 :
Solids, Percent	%	T	92.8 :	92.9 :	92.7 :	93.2 :	92.1 :	92.8 :
Specific Conductance	umhos/cm	T	1160. :	1540. :	1370. :	921. :	1250. :	1180. :
Geotechnical						
Organic Soils	%	T	1.52 J	2.2 J	6.85 J	1.42 J	1.42 J	1.22 J
Physical Properties						
Cation-Exchange Capacity	meq/100g	T	6.5 :	11.1 :	10.6 :	8.7 :	7.1 :	6.1 :
Sodium Absorption Ratio	ratio	T	0.07 :	0.04 :	0.02 :	0.03 :	0.04 :	0.03 :
Metals						
Aluminum	mg/kg-dry	T	15100. :	14600. :	12200. :	12300. :	13400. :	11200. :
Antimony	mg/kg-dry	T	<0.26 J	<0.27 J	<0.26 J	<0.48 :	<0.23 J	<0.25 J
Arsenic	mg/kg-dry	T	3. :	1.9 :	1.9 :	2.5 :	2. :	2.3 :
Barium	mg/kg-dry	T	130. :	119. :	89.6 :	84.4 :	117. :	64.4 :
Beryllium	mg/kg-dry	T	1.4 :	1.2 :	1.2 :	1.3 :	1.1 :	1.1 :
Boron	mg/kg-dry	T	<0.22 J	<0.21 J	<0.21 J	<0.21 :	<0.21 :	<0.29 :
Cadmium	mg/kg-dry	T	0.35 J	0.17 J	<0.35 J	0.58 :	0.93 :	1.5 :
Calcium	mg/kg-dry	T	20300. :	16700. :	16900. :	15600. :	21500. :	19500. :
Chromium	mg/kg-dry	T	54.5 :	43.4 :	35. :	39.5 :	47.1 :	29.7 :
Cobalt	mg/kg-dry	T	15.6 :	19. :	15.5 :	12.5 :	9.9 :	7.8 :
Copper	mg/kg-dry	T	142. :	223. :	201. :	172. :	109. :	171. :
Iron	mg/kg-dry	T	22100. :	32500. :	25500. :	19900. :	20300. :	15900. :
Lead	mg/kg-dry	T	61.8 :	55.9 :	41. :	63.7 :	147. :	101. :
Magnesium	mg/kg-dry	T	14000. :	11300. :	9760. :	9980. :	10000. :	6090. :
Manganese	mg/kg-dry	T	815. J	615. J	627. J	786. J	1200. J	1120. J

J = Qualified as estimated during data validation

R = Qualified as rejected value from data validation and results are considered unusable for any purpose

T = Total Fraction

Appendix A-7a
Soil - Biased 0-6 inches
Validated Analytical Results

Parameter	Units	Site ID / Sample Date / Sample ID / Exposure Area / Fraction	MSS4A2-14 10/18/2002 MSS4A2-14-T01N-SOL SS4A2		MSS4A2-15 10/18/2002 MSS4A2-15-T01N-SOL SS4A2		MSS4A2-16 10/18/2002 MSS4A2-16-T01N-SOL SS4A2		MSS4A2-17 10/18/2002 MSS4A2-17-T01N-SOL SS4A2		MSS4A2-18 10/20/2002 MSS4A2-18-T01N-SOL SS4A2		MSS4A2-19 10/20/2002 MSS4A2-19-T01N-SOL SS4A2	
Mercury	mg/kg-dry	T	<0.016	J	<0.016	J	<0.017	J	<0.017	J	<0.017	:	<0.017	:
Molybdenum	mg/kg-dry	T	532.	:	306.	:	260.	:	565.	:	414.	:	306.	:
Nickel	mg/kg-dry	T	43.1	J	40.7	J	35.4	J	31.1	J	28.2	J	18.	J
Potassium	mg/kg-dry	T	5600.	J	5330.	J	4620.	J	4180.	J	4750.	J	3550.	J
Selenium	mg/kg-dry	T	1.1	J	1.4	J	0.97	J	<0.7	J	<0.62	J	<0.68	J
Silver	mg/kg-dry	T	0.67	:	0.84	:	0.72	:	0.85	:	0.79	:	1.1	:
Sodium	mg/kg-dry	T	<27.1	:	<46.1	:	<46.7	:	<25.1	:	<61.5	:	<102.	:
Thallium	mg/kg-dry	T	0.44	:	0.58	:	0.52	:	0.38	:	0.37	:	0.27	:
Vanadium	mg/kg-dry	T	57.9	:	47.6	:	42.3	:	44.1	:	47.	:	27.6	:
Zinc	mg/kg-dry	T	94.	J	97.4	J	99.5	J	118.	J	198.	J	246.	J

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T = Total Fraction

Appendix A-7a
Soil - Biased 0-6 inches
Validated Analytical Results

Parameter	Units	Exposure Area Fraction	Site ID		Sample Date		Sample ID		Exposure Area															
			MSS4A2-20		10/20/2002		MSS4A2-20-T01N-SOL		SS4A2		MSS4A2-21		10/21/2002		MSS4A2-21-T01N-SOL		SS4A2		MSS4A2-22		10/21/2002		MSS4A2-22-T01N-SOL		SS4A2
General Chemistry																								
Ammonia	mg/kg-dry	T	<8.3	:							20.7	:							17.8	:				
Chloride	mg/kg-dry	T	4.4	J							<28.2	:							<27.4	:				
Fluoride	mg/kg-dry	T	2.2	J							8.6	J							2.4	J				
Nitrate	mg/kg-dry	T	2.2	J							<2.3	:							<2.2	:				
Phosphorus	mg/kg-dry	T	1040.	J							792.	J							1630.	J				
Sulfate	mg/kg-dry	T	3380.	J							22900.	:							15300.	:				
Total Kjeldahl Nitrogen	mg/kg-dry	T	46.7	:							22.	:							38.2	:				
Total Organic Carbon	mg/kg-dry	T	<108.	J							<113.	J							<110.	J				
Laboratory Parameters																								
pH	SU	T	7.1	:							6.7	:							6.9	:				
Solids, Percent	%	T	93.	:							88.7	:							91.3	:				
Specific Conductance	umhos/cm	T	1020.	:							1760.	:							1350.	:				
Geotechnical																								
Organic Soils	%	T	1.35	J							1.64	J							1.86	J				
Physical Properties																								
Cation-Exchange Capacity	meq/100g	T	11.	:							10.	:							6.4	:				
Sodium Absorption Ratio	ratio	T	0.02	:							0.05	:							0.06	:				
Metals																								
Aluminum	mg/kg-dry	T	18500.	:							15700.	:							22800.	:				
Antimony	mg/kg-dry	T	<0.27	J							<0.46	J							<0.23	J				
Arsenic	mg/kg-dry	T	9.4	:							2.1	J							4.4	:				
Barium	mg/kg-dry	T	150.	:							125.	:							228.	:				
Beryllium	mg/kg-dry	T	3.1	:							1.6	:							1.5	:				
Boron	mg/kg-dry	T	<0.3	:							<2.2	:							<2.2	:				
Cadmium	mg/kg-dry	T	2.6	:							0.76	:							0.37	:				
Calcium	mg/kg-dry	T	24100.	:							26500.	:							26400.	:				
Chromium	mg/kg-dry	T	58.3	:							37.7	:							72.	:				
Cobalt	mg/kg-dry	T	14.5	:							11.6	:							18.4	:				
Copper	mg/kg-dry	T	168.	:							118.	:							198.	:				
Iron	mg/kg-dry	T	29000.	:							21300.	:							33500.	:				
Lead	mg/kg-dry	T	132.	:							124.	:							62.4	:				
Magnesium	mg/kg-dry	T	10700.	:							8750.	:							14500.	:				
Manganese	mg/kg-dry	T	1980.	J							870.	J							954.	J				

Parameter	Units	Exposure Area Fraction	Site ID		Sample Date		Sample ID		Exposure Area															
			MSS4A2-23		10/21/2002		MSS4A2-23-T01N-SOL		SS4A2		MSS4A2-24		10/22/2002		MSS4A2-24-T01N-SOL		SS4A2		MSS4A3-11		10/16/2002		MSS4A3-11-T01N-SOL		SS4A3
General Chemistry																								
Ammonia	mg/kg-dry	T	21.5	:							16.1	:							13.1	:				
Chloride	mg/kg-dry	T	<26.	:							<26.8	:							<2.2	J				
Fluoride	mg/kg-dry	T	1.	J							0.35	J							2.3	J				
Nitrate	mg/kg-dry	T	<2.1	:							<2.1	J							<2.2	J				
Phosphorus	mg/kg-dry	T	425.	J							1530.	J							21.3	J				
Sulfate	mg/kg-dry	T	1860.	:							16600.	J							209.	J				
Total Kjeldahl Nitrogen	mg/kg-dry	T	61.5	:							75.3	J							76.3	:				
Total Organic Carbon	mg/kg-dry	T	158.	J							166.	J							2340.	J				
Laboratory Parameters																								
pH	SU	T	7.1	:							3.5	:							7.5	:				
Solids, Percent	%	T	96.	:							93.3	:							93.9	:				
Specific Conductance	umhos/cm	T	855.	:							1270.	:							148.	:				
Geotechnical																								
Organic Soils	%	T	1.4	J							3.88	J							1.7	:				
Physical Properties																								
Cation-Exchange Capacity	meq/100g	T	12.5	:							2.8	:							13.7	J				
Sodium Absorption Ratio	ratio	T	0.03	:							0.03	:							0.12	:				
Metals																								
Aluminum	mg/kg-dry	T	12000.	:							11800.	:							19100.	J				
Antimony	mg/kg-dry	T	<0.25	J							<0.26	J							<0.23	J				
Arsenic	mg/kg-dry	T	2.1	J							2.8	:							3.6	:				
Barium	mg/kg-dry	T	71.7	:							206.	:							161.	:				
Beryllium	mg/kg-dry	T	0.95	:							0.65	:							1.9	:				
Boron	mg/kg-dry	T	<2.1	:							<1.1	:							<0.22	J				
Cadmium	mg/kg-dry	T	0.69	:							0.21	:							0.81	:				
Calcium	mg/kg-dry	T	15900.	:							10200.	:							15100.	:				
Chromium	mg/kg-dry	T	29.6	:							30.3	:							52.8	J				
Cobalt	mg/kg-dry	T	6.	:							6.4	:							14.3	J				
Copper	mg/kg-dry	T	89.8	:							129.	:							186.	:				
Iron	mg/kg-dry	T	15000.	:							39100.	:							26000.	J				
Lead	mg/kg-dry	T	84.	:							108.	:							73.6	J				
Magnesium	mg/kg-dry	T	6710.	:							7390.	:							9720.	:				
Manganese	mg/kg-dry	T	746.	J							352.	J							1090.	J				

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T = Total Fraction

Appendix A-7a
Soil - Biased 0-6 inches
Validated Analytical Results

Parameter	Units	Exposure Area Fraction	Site ID / Sample Date / Sample ID / Exposure Area											
			MSS4A2-20 10/20/2002 MSS4A2-20-T01N-SOL SS4A2		MSS4A2-21 10/21/2002 MSS4A2-21-T01N-SOL SS4A2		MSS4A2-22 10/21/2002 MSS4A2-22-T01N-SOL SS4A2		MSS4A2-23 10/21/2002 MSS4A2-23-T01N-SOL SS4A2		MSS4A2-24 10/22/2002 MSS4A2-24-T01N-SOL SS4A2		MSS4A3-11 10/16/2002 MSS4A3-11-T01N-SOL SS4A3	
Mercury	mg/kg-dry	T	<0.016	:	<0.017	J	<0.017	J	<0.015	J	<0.017	:	<0.016	:
Molybdenum	mg/kg-dry	T	783.	:	771.	:	798.	:	511.	:	10.7	:	503.	J
Nickel	mg/kg-dry	T	37.8	J	30.2	J	53.2	J	17.7	J	20.	J	35.5	J
Potassium	mg/kg-dry	T	5260.	J	4740.	J	6590.	J	3510.	J	4770.	J	5630.	J
Selenium	mg/kg-dry	T	0.96	J	1.5	J	1.4	J	0.92	J	1.1	J	1.2	J
Silver	mg/kg-dry	T	4.1	:	0.74	:	0.88	:	0.71	:	1.1	:	0.89	:
Sodium	mg/kg-dry	T	569.	:	35.6	J	72.2	J	<27.8	J	312.	:	1270.	:
Thallium	mg/kg-dry	T	0.42	:	0.5	:	0.56	:	0.28	:	0.63	:	0.49	:
Vanadium	mg/kg-dry	T	57.6	:	41.4	:	67.1	:	27.2	:	37.8	:	55.8	:
Zinc	mg/kg-dry	T	406.	J	129.	J	89.1	J	116.	J	70.3	J	155.	J

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T = Total Fraction

Appendix A-7a
Soil - Biased 0-6 inches
Validated Analytical Results

Parameter	Units	Fraction	Site ID	MSS4A3-13		MSS4A3-15		MSS5-11		MSS5-12		MSS5-13		MSS5-14	
			Sample Date	10/16/2002		10/16/2002		10/15/2002		10/15/2002		10/15/2002		10/15/2002	
			Sample ID	MSS4A3-13-T01N-SOL		MSS4A3-15-T01N-SOL		MSS5-11-T01N-SOL		MSS5-12-T01N-SOL		MSS5-13-T01N-SOL		MSS5-14-T01N-SOL	
			Exposure Area	SS4A3		SS4A3		SS5		SS5		SS5		SS5	
General Chemistry															
Ammonia	mg/kg-dry	T		<10.7	:	<8.1	:	11.2	:	21.5	:	<9.2	:	9.6	:
Chloride	mg/kg-dry	T		2.4	J	<2.1	J	3.4	J	3.	J	<2.2	J	<2.2	J
Fluoride	mg/kg-dry	T		0.51	J	0.68	J	2.5	J	0.73	J	2.2	J	0.85	J
Nitrate	mg/kg-dry	T		<2.2	J	<2.1	J	<2.2	J	<2.2	J	<2.2	J	<2.2	J
Phosphorus	mg/kg-dry	T		657.	J	140.	J	701.	J	259.	J	580.	:	1140.	J
Sulfate	mg/kg-dry	T		52.5	J	21.8	J	944.	J	105.	J	1030.	J	1420.	J
Total Kjeldahl Nitrogen	mg/kg-dry	T		73.9	:	39.7	:	25.1	:	<22.7	:	<25.4	:	29.	:
Total Organic Carbon	mg/kg-dry	T		<107.	J	<102.	J	<106.	J	<107.	J	<106.	:	262.	J
Laboratory Parameters															
pH	SU	T		8.	:	7.9	:	6.8	:	7.6	:	6.7	:	7.3	:
Solids, Percent	%	T		93.9	:	98.6	:	94.7	:	94.3	:	94.6	:	92.8	:
Specific Conductance	umhos/cm	T		36.	:	34.4	:	461.	:	85.7	:	694.	:	437.	:
Geotechnical															
Organic Soils	%	T		2.	J	1.19	J	1.1	J	1.05	J	1.36	J	1.54	J
Physical Properties															
Cation-Exchange Capacity	meq/100g	T		16.4	:	6.4	:	11.8	:	10.	:	8.9	:	9.8	:
Sodium Absorption Ratio	ratio	T		<0.03	:	<0.03	:	0.02	:	0.05	:	0.03	:	0.04	:
Metals															
Aluminum	mg/kg-dry	T		15700.	:	7550.	:	10000.	J	3250.	:	8940.	J	13400.	:
Antimony	mg/kg-dry	T		<0.21	J	<0.23	J	<0.25	J	<0.27	J	<0.16	:	<0.25	J
Arsenic	mg/kg-dry	T		3.9	:	2.2	:	3.3	:	2.6	:	3.	:	3.5	:
Barium	mg/kg-dry	T		99.3	:	14.3	:	54.1	:	9.2	:	49.	:	102.	:
Beryllium	mg/kg-dry	T		2.7	:	1.4	:	2.	J	2.4	:	3.	:	1.4	:
Boron	mg/kg-dry	T		<0.83	J	<0.44	:	2.1	:	0.74	:	<1.5	:	1.8	J
Cadmium	mg/kg-dry	T		1.7	:	0.5	:	0.77	:	2.7	:	2.1	:	0.47	:
Calcium	mg/kg-dry	T		11100.	:	13400.	:	11600.	J	10600.	:	16700.	J	17800.	:
Chromium	mg/kg-dry	T		37.4	:	4.4	:	25.7	:	1.5	:	17.4	:	52.5	:
Cobalt	mg/kg-dry	T		11.7	:	3.4	:	7.1	:	4.2	:	4.8	:	11.	:
Copper	mg/kg-dry	T		179.	:	98.	:	141.	:	175.	:	581.	:	158.	:
Iron	mg/kg-dry	T		17500.	:	8430.	:	15700.	J	7630.	:	9880.	J	20600.	:
Lead	mg/kg-dry	T		205.	:	52.1	:	173.	J	323.	:	135.	J	42.6	:
Magnesium	mg/kg-dry	T		7490.	:	1660.	:	5410.	J	1220.	:	3910.	J	11300.	:
Manganese	mg/kg-dry	T		1670.	J	1070.	J	2180.	J	1230.	J	1120.	J	880.	J

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T = Total Fraction

Appendix A-7a
Soil - Biased 0-6 inches
Validated Analytical Results

Site ID			MSS4A3-13		MSS4A3-15		MSS5-11		MSS5-12		MSS5-13		MSS5-14	
Sample Date			10/16/2002		10/16/2002		10/15/2002		10/15/2002		10/15/2002		10/15/2002	
Sample ID			MSS4A3-13-T01N-SOL		MSS4A3-15-T01N-SOL		MSS5-11-T01N-SOL		MSS5-12-T01N-SOL		MSS5-13-T01N-SOL		MSS5-14-T01N-SOL	
Exposure Area			SS4A3		SS4A3		SS5		SS5		SS5		SS5	
Parameter	**Units**	**Fraction**												
Mercury	mg/kg-dry	T	<0.018	:	<0.016	:	<0.017	:	<0.017	:	<0.017	J	<0.017	:
Molybdenum	mg/kg-dry	T	558.	:	280.	:	546.	:	417.	:	1550.	J	975.	:
Nickel	mg/kg-dry	T	27.8	J	4.6	J	18.4	J	5.8	J	15.6	:	36.1	J
Potassium	mg/kg-dry	T	4130.	J	1320.	J	3190.	J	967.	J	2110.	J	4650.	J
Selenium	mg/kg-dry	T	<0.55	J	<0.6	J	0.68	J	<0.71	J	1.2	:	1.	J
Silver	mg/kg-dry	T	1.5	:	0.52	:	1.3	:	2.5	:	0.88	:	0.68	:
Sodium	mg/kg-dry	T	<56.3	J	<64.6	:	<47.4	:	<59.8	:	39.6	:	<47.2	:
Thallium	mg/kg-dry	T	1.1	:	0.27	:	0.35	:	0.17	:	0.3	:	0.47	:
Vanadium	mg/kg-dry	T	42.8	:	9.8	:	30.3	J	7.6	:	27.4	J	59.3	:
Zinc	mg/kg-dry	T	384.	J	95.6	J	120.	J	435.	J	275.	J	101.	J

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R = Qualified as rejected value from data validation and results are considered unusable for any purpose
T = Total Fraction

Appendix A-7a
Soil - Biased 0-6 inches
Validated Analytical Results

Parameter	Units	Exposure Area Fraction	Site ID / Sample Date / Sample ID		MSS5-15 10/24/2002 MSS5-15-T01N-SOL SS5		MSS5-16 10/24/2002 MSS5-16-T01N-SOL SS5		MSS5-17 10/24/2002 MSS5-17-T01N-SOL SS5		MSS5-18 10/24/2002 MSS5-18-T01N-SOL SS5		MSS5-19 10/24/2002 MSS5-19-T01N-SOL SS5		MSS8-1 10/9/2002 MSS8-1-T01N-SOL SS8A	
General Chemistry																
Ammonia	mg/kg-dry	T			23.4	:	25.3	:	<7.8	:	36.8	:	33.4	:	25.2	:
Chloride	mg/kg-dry	T			6.4	J	<2.3	J	2.3	J	2.2	J	2.7	J	<2.2	J
Fluoride	mg/kg-dry	T			2.2	J	1.9	J	0.47	J	0.54	J	0.93	J	-	
Nitrate	mg/kg-dry	T			2.6	J	<2.3	J	<2.2	J	<2.2	J	2.3	J	<2.2	J
Phosphorus	mg/kg-dry	T			1460.	J	1280.	J	759.	J	1420.	J	1350.	J	1100.	J
Sulfate	mg/kg-dry	T			1020.	J	105.	J	9.5	J	352.	J	77.2	J	39.5	J
Total Kjeldahl Nitrogen	mg/kg-dry	T			70.2	J	136.	J	52.3	J	117.	J	76.2	:	465.	:
Total Organic Carbon	mg/kg-dry	T			<115.	J	1290.	J	146.	J	3160.	J	2150.	J	3650.	J
Laboratory Parameters																
pH	SU	T			3.4	:	4.4	:	5.3	:	4.	:	4.5	:	3.9	:
Solids, Percent	%	T			87.2	:	89.1	:	91.3	:	91.1	:	89.5	:	91.6	:
Specific Conductance	umhos/cm	T			1310.	:	140.	:	13.6	:	295.	:	100.	:	73.1	:
Geotechnical																
Organic Soils	%	T			4.48	J	2.64	J	2.79	J	3.6	J	3.15	J	-	
Physical Properties																
Cation-Exchange Capacity	meq/100g	T			19.1	:	11.3	:	5.9	:	20.3	:	20.4	:	14.4	:
Sodium Absorption Ratio	ratio	T			0.03	:	0.22	:	<0.15	:	0.18	:	0.07	:	0.21	:
Metals																
Aluminum	mg/kg-dry	T			14100.	:	9550.	:	2330.	:	22400.	:	24100.	:	-	
Antimony	mg/kg-dry	T			<0.33	J	<0.28	J	<0.31	J	<0.31	J	<0.3	J	-	
Arsenic	mg/kg-dry	T			2.9	:	2.8	:	5.4	:	1.3	:	1.8	:	-	
Barium	mg/kg-dry	T			169.	:	437.	:	455.	:	249.	:	236.	:	-	
Beryllium	mg/kg-dry	T			0.48	:	0.42	:	0.14	:	1.	:	1.	:	-	
Boron	mg/kg-dry	T			<1.1	J	<2.8	:	<0.93	J	<2.7	:	<0.79	J	-	
Cadmium	mg/kg-dry	T			<0.038	J	0.13	:	<0.035	:	0.17	:	<0.036	J	-	
Calcium	mg/kg-dry	T			2720.	:	1080.	:	430.	:	2310.	:	2180.	:	-	
Chromium	mg/kg-dry	T			41.2	:	26.5	:	2.5	:	76.7	:	69.9	:	-	
Cobalt	mg/kg-dry	T			2.7	:	3.3	:	0.44	:	13.	:	15.8	:	-	
Copper	mg/kg-dry	T			56.7	:	48.3	:	6.3	:	135.	:	125.	:	-	
Iron	mg/kg-dry	T			51200.	:	25300.	:	14100.	:	43400.	:	39800.	:	-	
Lead	mg/kg-dry	T			62.7	:	75.3	:	159.	:	42.9	:	19.7	:	-	
Magnesium	mg/kg-dry	T			9350.	:	4450.	:	354.	:	11800.	:	11000.	:	-	
Manganese	mg/kg-dry	T			234.	J	227.	J	45.	J	633.	J	684.	J	-	

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Appendix A-7a
Soil - Biased 0-6 inches
Validated Analytical Results

Parameter	Units	Exposure Area Fraction	Site ID / Sample Date / Sample ID					
			MSS5-15 10/24/2002 MSS5-15-T01N-SOL	MSS5-16 10/24/2002 MSS5-16-T01N-SOL	MSS5-17 10/24/2002 MSS5-17-T01N-SOL	MSS5-18 10/24/2002 MSS5-18-T01N-SOL	MSS5-19 10/24/2002 MSS5-19-T01N-SOL	MSS8-1 10/9/2002 MSS8-1-T01N-SOL
			SS5	SS5	SS5	SS5	SS5	SS8A
Mercury	mg/kg-dry	T	<0.019 :	<0.017 J	<0.018 :	<0.017 J	<0.017 :	-
Molybdenum	mg/kg-dry	T	54.4 :	89.9 :	87.4 :	43.3 :	40.3 :	-
Nickel	mg/kg-dry	T	15.7 J	12.5 J	0.9 J	41.4 J	40.7 J	-
Potassium	mg/kg-dry	T	7040. J	3940. J	1970. J	7610. J	7280. J	-
Selenium	mg/kg-dry	T	1.7 J	1.5 J	<0.82 J	1.3 J	<0.81 J	-
Silver	mg/kg-dry	T	0.47 :	0.49 :	0.69 :	0.74 :	0.62 :	-
Sodium	mg/kg-dry	T	429. :	378. :	361. :	<98.2 :	<42.8 :	-
Thallium	mg/kg-dry	T	0.89 :	0.4 :	0.2 :	1. :	0.92 :	-
Vanadium	mg/kg-dry	T	50.3 :	33.5 :	7.7 :	65.3 :	61.5 :	-
Zinc	mg/kg-dry	T	26.6 J	43.3 J	4.8 J	92.6 J	80.6 J	-
Semi-Volatile Organics								
1,1`-Biphenyl	mg/kg-dry	T	-	-	-	-	-	<0.36 :
2,4,5-Trichlorophenol	mg/kg-dry	T	-	-	-	-	-	<0.9 :
2,4,6-Trichlorophenol	mg/kg-dry	T	-	-	-	-	-	<0.36 :
2,4-Dichlorophenol	mg/kg-dry	T	-	-	-	-	-	<0.36 :
2,4-Dimethylphenol	mg/kg-dry	T	-	-	-	-	-	<0.36 :
2,4-Dinitrophenol	mg/kg-dry	T	-	-	-	-	-	<0.9 :
2,4-Dinitrotoluene	mg/kg-dry	T	-	-	-	-	-	<0.36 :
2,6-Dinitrotoluene	mg/kg-dry	T	-	-	-	-	-	<0.36 :
2-Chloronaphthalene	mg/kg-dry	T	-	-	-	-	-	<0.36 :
2-Chlorophenol	mg/kg-dry	T	-	-	-	-	-	<0.36 :
2-Methylnaphthalene	mg/kg-dry	T	-	-	-	-	-	<0.36 :
2-Methylphenol	mg/kg-dry	T	-	-	-	-	-	<0.36 :
2-Nitroaniline	mg/kg-dry	T	-	-	-	-	-	<0.9 :
2-Nitrophenol	mg/kg-dry	T	-	-	-	-	-	<0.36 :
3,3-Dichlorobenzidine	mg/kg-dry	T	-	-	-	-	-	<0.36 :
3-Nitroaniline	mg/kg-dry	T	-	-	-	-	-	<0.9 :
4,6-Dinitro-2-methylphenol	mg/kg-dry	T	-	-	-	-	-	<0.9 :
4-Bromophenyl phenyl ether	mg/kg-dry	T	-	-	-	-	-	<0.36 :
4-Chloro-3-methylphenol	mg/kg-dry	T	-	-	-	-	-	<0.36 :
4-Chloroaniline	mg/kg-dry	T	-	-	-	-	-	<0.36 :
4-Chlorophenyl phenyl ether	mg/kg-dry	T	-	-	-	-	-	<0.36 :
4-Methylphenol	mg/kg-dry	T	-	-	-	-	-	<0.36 :
4-Nitroaniline	mg/kg-dry	T	-	-	-	-	-	<0.9 :

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Appendix A-7a
Soil - Biased 0-6 inches
Validated Analytical Results

Parameter	Units	Exposure Area Fraction	Site ID / Sample Date / Sample ID						
			MSS5-15 10/24/2002 MSS5-15-T01N-SOL SS5	MSS5-16 10/24/2002 MSS5-16-T01N-SOL SS5	MSS5-17 10/24/2002 MSS5-17-T01N-SOL SS5	MSS5-18 10/24/2002 MSS5-18-T01N-SOL SS5	MSS5-19 10/24/2002 MSS5-19-T01N-SOL SS5	MSS8-1 10/9/2002 MSS8-1-T01N-SOL SS8A	
4-Nitrophenol	mg/kg-dry	T	-	-	-	-	-	<0.9	:
Acenaphthene	mg/kg-dry	T	-	-	-	-	-	<0.36	:
Acenaphthylene	mg/kg-dry	T	-	-	-	-	-	<0.36	:
Anthracene	mg/kg-dry	T	-	-	-	-	-	<0.36	J
Benzaldehyde	mg/kg-dry	T	-	-	-	-	-	<0.36	J
Benzo(a)anthracene	mg/kg-dry	T	-	-	-	-	-	<0.36	:
Benzo(a)pyrene	mg/kg-dry	T	-	-	-	-	-	<0.36	:
Benzo(b)fluoranthene	mg/kg-dry	T	-	-	-	-	-	<0.36	:
Benzo(g,h,i)perylene	mg/kg-dry	T	-	-	-	-	-	<0.36	:
Benzo(k)fluoranthene	mg/kg-dry	T	-	-	-	-	-	<0.36	J
Bis(2-chloroethoxy)methane	mg/kg-dry	T	-	-	-	-	-	<0.36	:
Bis(2-chloroethyl)ether	mg/kg-dry	T	-	-	-	-	-	<0.36	:
Bis(2-ethylhexyl)phthalate	mg/kg-dry	T	-	-	-	-	-	<0.36	:
Butyl benzyl phthalate	mg/kg-dry	T	-	-	-	-	-	<0.36	:
Carbazole	mg/kg-dry	T	-	-	-	-	-	<0.36	:
Chrysene	mg/kg-dry	T	-	-	-	-	-	<0.36	:
Dibenz(a,h)anthracene	mg/kg-dry	T	-	-	-	-	-	<0.36	:
Dibenzofuran	mg/kg-dry	T	-	-	-	-	-	<0.36	:
Dichlorodiisopropyl ether	mg/kg-dry	T	-	-	-	-	-	<0.36	:
Diethylphthalate	mg/kg-dry	T	-	-	-	-	-	<0.36	:
Dimethylphthalate	mg/kg-dry	T	-	-	-	-	-	<0.36	:
Di-n-Butyl phthalate	mg/kg-dry	T	-	-	-	-	-	<0.36	:
Di-n-Octyl phthalate	mg/kg-dry	T	-	-	-	-	-	<0.36	:
Fluoranthene	mg/kg-dry	T	-	-	-	-	-	<0.36	:
Fluorene	mg/kg-dry	T	-	-	-	-	-	<0.36	:
Hexachlorobenzene	mg/kg-dry	T	-	-	-	-	-	<0.36	:
Hexachlorobutadiene	mg/kg-dry	T	-	-	-	-	-	<0.36	:
Hexachlorocyclopentadiene	mg/kg-dry	T	-	-	-	-	-	<0.36	:
Hexachloroethane	mg/kg-dry	T	-	-	-	-	-	<0.36	:
Indeno(1,2,3-cd)pyrene	mg/kg-dry	T	-	-	-	-	-	<0.36	:
Isophorone	mg/kg-dry	T	-	-	-	-	-	<0.36	:
Naphthalene	mg/kg-dry	T	-	-	-	-	-	<0.36	:
Nitrobenzene	mg/kg-dry	T	-	-	-	-	-	<0.36	:
N-Nitrosodi-n-propylamine	mg/kg-dry	T	-	-	-	-	-	<0.36	:

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Appendix A-7a
Soil - Biased 0-6 inches
Validated Analytical Results

Parameter	Units	Exposure Area Fraction	Site ID / Sample Date / Sample ID						
			MSS5-15 10/24/2002 MSS5-15-T01N-SOL	MSS5-16 10/24/2002 MSS5-16-T01N-SOL	MSS5-17 10/24/2002 MSS5-17-T01N-SOL	MSS5-18 10/24/2002 MSS5-18-T01N-SOL	MSS5-19 10/24/2002 MSS5-19-T01N-SOL	MSS8-1 10/9/2002 MSS8-1-T01N-SOL	
			SS5	SS5	SS5	SS5	SS5	SS8A	
N-Nitrosodiphenylamine	mg/kg-dry	T	-	-	-	-	-	<0.36	:
Pentachlorophenol	mg/kg-dry	T	-	-	-	-	-	<0.9	J
Phenanthrene	mg/kg-dry	T	-	-	-	-	-	<0.36	:
Phenol	mg/kg-dry	T	-	-	-	-	-	<0.36	:
Pyrene	mg/kg-dry	T	-	-	-	-	-	<0.36	:
Explosives									
2,4,6-Trinitrotoluene	mg/kg-dry	T	-	-	-	-	-	<0.12	:
2,6-Pyridinediamine,	mg/kg-dry	T	-	-	-	-	-	<0.12	:
Cyclotetramethylenetetranitramine	mg/kg-dry	T	-	-	-	-	-	<0.12	:
Cyclotrimethylenetrinitramine	mg/kg-dry	T	-	-	-	-	-	<0.12	:
Pentaerythritol tetranitrate	mg/kg-dry	T	-	-	-	-	-	<5.	:

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Appendix A-7a
Soil - Biased 0-6 inches
Validated Analytical Results

Parameter	Units	Exposure Area Fraction	Site ID / Sample Date / Sample ID		MSS8-10 10/27/2002 MSS8-10-T01N-SOL SS8A		MSS8-11 10/27/2002 MSS8-11-T01N-SOL SS8A		MSS8-12 10/27/2002 MSS8-12-T01N-SOL SS8A		MSS8-13 10/16/2002 MSS8-13-T01N-SOL SS8B		MSS8-14 10/16/2002 MSS8-14-T01N-SOL SS8B		MSS8-15 10/16/2002 MSS8-15-T01N-SOL SS8B	
General Chemistry																
Ammonia	mg/kg-dry	T			23.2	:	12.6	:	12.3	:	-		-		-	
Chloride	mg/kg-dry	T			770.	J	<34.	:	<34.	J	-		-		-	
Fluoride	mg/kg-dry	T			2.	J	0.8	J	1.	J	-		-		-	
Nitrate	mg/kg-dry	T			56.	J	2.2	J	1.7	J	-		-		-	
Phosphorus	mg/kg-dry	T			1340.	J	1440.	J	707.	J	-		-		-	
Sulfate	mg/kg-dry	T			4700.	J	1400.	:	910.	J	-		-		-	
Total Kjeldahl Nitrogen	mg/kg-dry	T			82.6	J	57.3	J	90.5	J	-		-		-	
Total Organic Carbon	mg/kg-dry	T			1940.	J	637.	J	1410.	J	-		-		-	
Laboratory Parameters																
pH	SU	T			6.5	:	7.2	:	7.3	:	-		-		-	
Solids, Percent	%	T			89.5	:	87.9	:	89.2	:	92.5	:	95.1	:	90.2	:
Specific Conductance	umhos/cm	T			2420.	J	1230.	J	879.	J	-		-		-	
Geotechnical																
Organic Soils	%	T			1.89	J	1.8	J	1.48	J	-		-		-	
Physical Properties																
Cation-Exchange Capacity	meq/100g	T			11.6	:	9.7	:	17.2	:	-		-		-	
Sodium Absorption Ratio	ratio	T			2.75	:	0.06	:	0.05	:	-		-		-	
Semi-Volatile Organics																
1,1`-Biphenyl	mg/kg-dry	T			<0.37	:	<0.38	:	<0.37	:	<0.36	:	<1.7	:	<0.73	:
2,4,5-Trichlorophenol	mg/kg-dry	T			<0.92	:	<0.94	:	<0.93	:	<0.9	:	<4.4	:	<1.8	:
2,4,6-Trichlorophenol	mg/kg-dry	T			<0.37	:	<0.38	:	<0.37	:	<0.36	:	<1.7	:	<0.73	:
2,4-Dichlorophenol	mg/kg-dry	T			<0.37	:	<0.38	:	<0.37	:	<0.36	:	<1.7	:	<0.73	:
2,4-Dimethylphenol	mg/kg-dry	T			<0.37	:	<0.38	:	<0.37	:	<0.36	:	<1.7	:	<0.73	:
2,4-Dinitrophenol	mg/kg-dry	T			<0.92	J	<0.94	J	<0.93	J	<0.9	J	<4.4	:	<1.8	:
2,4-Dinitrotoluene	mg/kg-dry	T			<0.37	:	<0.38	:	<0.37	:	<0.36	:	<1.7	:	<0.73	:
2,6-Dinitrotoluene	mg/kg-dry	T			<0.37	:	<0.38	:	<0.37	:	<0.36	:	<1.7	:	<0.73	:
2-Chloronaphthalene	mg/kg-dry	T			<0.37	:	<0.38	:	<0.37	:	<0.36	:	<1.7	:	<0.73	:
2-Chlorophenol	mg/kg-dry	T			<0.37	:	<0.38	:	<0.37	:	<0.36	:	<1.7	:	<0.73	:
2-Methylnaphthalene	mg/kg-dry	T			<0.37	:	<0.38	:	<0.37	:	<0.36	:	10.	:	<0.73	:
2-Methylphenol	mg/kg-dry	T			<0.37	:	<0.38	:	<0.37	:	<0.36	:	<1.7	:	<0.73	:
2-Nitroaniline	mg/kg-dry	T			<0.92	:	<0.94	:	<0.93	:	<0.9	:	<4.4	:	<1.8	:
2-Nitrophenol	mg/kg-dry	T			<0.37	:	<0.38	:	<0.37	:	<0.36	:	<1.7	:	<0.73	:
3,3-Dichlorobenzidine	mg/kg-dry	T			<0.37	:	<0.38	:	<0.37	:	<0.36	:	<1.7	:	<0.73	:

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Appendix A-7a
Soil - Biased 0-6 inches
Validated Analytical Results

Parameter	Units	Exposure Area Fraction	Site ID / Sample Date / Sample ID		MSS8-10 10/27/2002 MSS8-10-T01N-SOL SS8A		MSS8-11 10/27/2002 MSS8-11-T01N-SOL SS8A		MSS8-12 10/27/2002 MSS8-12-T01N-SOL SS8A		MSS8-13 10/16/2002 MSS8-13-T01N-SOL SS8B		MSS8-14 10/16/2002 MSS8-14-T01N-SOL SS8B		MSS8-15 10/16/2002 MSS8-15-T01N-SOL SS8B	
3-Nitroaniline	mg/kg-dry	T			<0.92	:	<0.94	:	<0.93	:	<0.9	:	<4.4	:	<1.8	:
4,6-Dinitro-2-methylphenol	mg/kg-dry	T			<0.92	:	<0.94	:	<0.93	:	<0.9	:	<4.4	:	<1.8	:
4-Bromophenyl phenyl ether	mg/kg-dry	T			<0.37	:	<0.38	:	<0.37	:	<0.36	:	<1.7	:	<0.73	:
4-Chloro-3-methylphenol	mg/kg-dry	T			<0.37	:	<0.38	:	<0.37	:	<0.36	:	<1.7	:	<0.73	:
4-Chloroaniline	mg/kg-dry	T			<0.37	:	<0.38	:	<0.37	:	<0.36	:	<1.7	:	<0.73	:
4-Chlorophenyl phenyl ether	mg/kg-dry	T			<0.37	:	<0.38	:	<0.37	:	<0.36	:	<1.7	:	<0.73	:
4-Methylphenol	mg/kg-dry	T			<0.37	:	<0.38	:	<0.37	:	<0.36	:	<1.7	:	<0.73	:
4-Nitroaniline	mg/kg-dry	T			<0.92	:	<0.94	:	<0.93	:	<0.9	:	<4.4	:	<1.8	:
4-Nitrophenol	mg/kg-dry	T			<0.92	J	<0.94	J	<0.93	J	<0.9	:	<4.4	:	<1.8	:
Acenaphthene	mg/kg-dry	T			<0.37	:	<0.38	:	<0.37	:	<0.36	:	0.75	J	<0.73	:
Acenaphthylene	mg/kg-dry	T			<0.37	:	<0.38	:	<0.37	:	<0.36	:	<1.7	:	<0.73	:
Anthracene	mg/kg-dry	T			<0.37	:	<0.38	:	<0.37	:	<0.36	J	<1.7	J	<0.73	J
Benzaldehyde	mg/kg-dry	T			<0.37	:	<0.38	:	<0.37	:	<0.36	J	<1.7	J	<0.73	J
Benzo(a)anthracene	mg/kg-dry	T			<0.37	:	<0.38	:	<0.37	:	<0.36	:	<1.7	:	<0.73	:
Benzo(a)pyrene	mg/kg-dry	T			<0.37	:	<0.38	:	<0.37	:	<0.36	:	<1.7	:	<0.73	:
Benzo(b)fluoranthene	mg/kg-dry	T			<0.37	:	<0.38	:	<0.37	:	<0.36	:	<1.7	:	<0.73	:
Benzo(g,h,i)perylene	mg/kg-dry	T			<0.37	:	<0.38	:	<0.37	:	<0.36	:	<1.7	:	<0.73	:
Benzo(k)fluoranthene	mg/kg-dry	T			<0.37	:	<0.38	:	<0.37	:	<0.36	:	<1.7	J	<0.73	J
Bis(2-chloroethoxy)methane	mg/kg-dry	T			<0.37	:	<0.38	:	<0.37	:	<0.36	:	<1.7	:	<0.73	:
Bis(2-chloroethyl)ether	mg/kg-dry	T			<0.37	:	<0.38	:	<0.37	:	<0.36	:	<1.7	:	<0.73	:
Bis(2-ethylhexyl)phthalate	mg/kg-dry	T			<0.37	:	<0.38	:	<0.37	:	<0.36	:	0.24	J	0.096	J
Butyl benzyl phthalate	mg/kg-dry	T			<0.37	:	<0.38	:	<0.37	:	<0.36	:	<1.7	:	<0.73	:
Carbazole	mg/kg-dry	T			<0.37	:	<0.38	:	<0.37	:	<0.36	:	<1.7	:	<0.73	:
Chrysene	mg/kg-dry	T			<0.37	:	<0.38	:	<0.37	:	<0.36	:	0.3	J	<0.73	:
Dibenz(a,h)anthracene	mg/kg-dry	T			<0.37	:	<0.38	:	<0.37	:	<0.36	:	<1.7	:	<0.73	:
Dibenzofuran	mg/kg-dry	T			<0.37	:	<0.38	:	<0.37	:	<0.36	:	<1.7	:	<0.73	:
Dichlorodiisopropyl ether	mg/kg-dry	T			<0.37	:	<0.38	:	<0.37	:	<0.36	:	<1.7	:	<0.73	:
Diethylphthalate	mg/kg-dry	T			<0.37	:	<0.38	:	<0.37	:	<0.36	:	<1.7	:	<0.73	:
Dimethylphthalate	mg/kg-dry	T			<0.37	:	<0.38	:	<0.37	:	<0.36	:	<1.7	:	<0.73	:
Di-n-Butyl phthalate	mg/kg-dry	T			<0.37	:	<0.38	:	<0.37	:	<0.36	:	<1.7	:	<0.73	:
Di-n-Octyl phthalate	mg/kg-dry	T			<0.37	:	<0.38	:	<0.37	:	<0.36	:	<1.7	:	<0.73	:
Fluoranthene	mg/kg-dry	T			<0.37	:	<0.38	:	<0.37	:	<0.36	:	0.11	J	<0.73	:
Fluorene	mg/kg-dry	T			<0.37	:	<0.38	:	<0.37	:	<0.36	:	1.4	J	<0.73	:
Hexachlorobenzene	mg/kg-dry	T			<0.37	:	<0.38	:	<0.37	:	<0.36	:	<1.7	:	<0.73	:

J = Qualified as estimated during data validation
R = Qualified as rejected value from data validation and results are considered unusable for any purpose
T = Total Fraction

Appendix A-7a
Soil - Biased 0-6 inches
Validated Analytical Results

Parameter	Units	Site ID / Sample Date / Sample ID / Exposure Area	Fraction	MSS8-10 10/27/2002 MSS8-10-T01N-SOL SS8A		MSS8-11 10/27/2002 MSS8-11-T01N-SOL SS8A		MSS8-12 10/27/2002 MSS8-12-T01N-SOL SS8A		MSS8-13 10/16/2002 MSS8-13-T01N-SOL SS8B		MSS8-14 10/16/2002 MSS8-14-T01N-SOL SS8B		MSS8-15 10/16/2002 MSS8-15-T01N-SOL SS8B	
Hexachlorobutadiene	mg/kg-dry		T	<0.37	:	<0.38	:	<0.37	:	<0.36	:	<1.7	:	<0.73	:
Hexachlorocyclopentadiene	mg/kg-dry		T	<0.37	J	<0.38	J	<0.37	J	<0.36	:	<1.7	:	<0.73	:
Hexachloroethane	mg/kg-dry		T	<0.37	:	<0.38	:	<0.37	:	<0.36	:	<1.7	:	<0.73	:
Indeno(1,2,3-cd)pyrene	mg/kg-dry		T	<0.37	:	<0.38	:	<0.37	:	<0.36	:	<1.7	:	<0.73	:
Isophorone	mg/kg-dry		T	<0.37	:	<0.38	:	<0.37	:	<0.36	:	<1.7	:	<0.73	:
Naphthalene	mg/kg-dry		T	<0.37	:	<0.38	:	<0.37	:	<0.36	:	2.4	:	<0.73	:
Nitrobenzene	mg/kg-dry		T	<0.37	:	<0.38	:	<0.37	:	<0.36	:	<1.7	:	<0.73	:
N-Nitrosodi-n-propylamine	mg/kg-dry		T	<0.37	:	<0.38	:	<0.37	:	<0.36	:	<1.7	:	<0.73	:
N-Nitrosodiphenylamine	mg/kg-dry		T	<0.37	:	<0.38	:	<0.37	:	<0.36	:	<1.7	:	<0.73	:
Pentachlorophenol	mg/kg-dry		T	<0.92	:	<0.94	:	<0.93	:	<0.9	J	<4.4	J	<1.8	J
Phenanthrene	mg/kg-dry		T	<0.37	:	<0.38	:	<0.37	:	<0.36	:	3.8	:	<0.73	:
Phenol	mg/kg-dry		T	<0.37	:	<0.38	:	<0.37	:	<0.36	:	<1.7	:	<0.73	:
Pyrene	mg/kg-dry		T	<0.37	:	<0.38	:	<0.37	:	<0.36	:	0.81	J	<0.73	:
Explosives															
2,4,6-Trinitrotoluene	mg/kg-dry		T	<0.12	:	<0.12	:	<0.12	:	-		-		-	
2,6-Pyridinediamine,	mg/kg-dry		T	<0.12	:	<0.12	:	<0.12	:	-		-		-	
Cyclotetramethylenetetranitramine	mg/kg-dry		T	<0.12	:	<0.12	:	<0.12	:	-		-		-	
Cyclotrimethylenetrinitramine	mg/kg-dry		T	<0.12	:	<0.12	:	<0.12	:	-		-		-	
Pentaerythritol tetranitrate	mg/kg-dry		T	<5.	:	<5.	:	<5.	:	-		-		-	

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T = Total Fraction

Appendix A-7a
Soil - Biased 0-6 inches
Validated Analytical Results

Parameter	Units	Exposure Area Fraction	Site ID	MSS8-16	MSS8-17	MSS8-18	MSS8-19	MSS8-2	MSS8-20
			Sample Date	10/10/2002	10/10/2002	10/15/2002	10/15/2002	10/9/2002	10/15/2002
			Sample ID	MSS8-16-T01N-SOL	MSS8-17-T01N-SOL	MSS8-18-T01N-SOL	MSS8-19-T01N-SOL	MSS8-2-T01N-SOL	MSS8-20-T01N-SOL
			Exposure Area	SS8C	SS8C	SS8C	SS8C	SS8A	SS8C
General Chemistry									
Ammonia	mg/kg-dry	T		43.2 :	24.4 :	33.1 :	15.6 :	<16.6 :	8.2 :
Chloride	mg/kg-dry	T		<2.2 J	<2.2 J	11.2 J	12.3 J	<2.2 J	<2.2 J
Fluoride	mg/kg-dry	T		4.9 J	16. J	0.88 J	1.4 J	0.17 J	0.29 J
Nitrate	mg/kg-dry	T		<2.2 J	<2.2 J	2.2 J	13. J	<2.2 J	<2.2 J
Phosphorus	mg/kg-dry	T		613. J	1270. J	3090. :	1200. :	1230. J	1150. J
Sulfate	mg/kg-dry	T		1540. J	1940. J	2110. J	2410. J	5.3 J	10.2 J
Total Kjeldahl Nitrogen	mg/kg-dry	T		77.7 :	53.2 :	88.9 :	71.4 :	204. :	68.6 :
Total Organic Carbon	mg/kg-dry	T		36300. J	196. J	2850. :	777. :	3740. J	24600. J
Laboratory Parameters									
pH	SU	T		5.9 :	3.4 :	7. :	7.4 :	5.8 :	7.2 :
Solids, Percent	%	T		93.9 :	94.1 :	93.8 :	93.8 :	92.6 :	91.9 :
Specific Conductance	umhos/cm	T		156. :	819. :	880. :	706. :	17. :	41.3 :
Geotechnical									
Organic Soils	%	T		7.56 :	3.1 :	3.1 J	2.24 J	-	4.71 J
Physical Properties									
Cation-Exchange Capacity	meq/100g	T		4.1 :	11.4 :	18.4 :	16.2 :	14.1 :	13.6 :
Sodium Absorption Ratio	ratio	T		<0.02 :	0.02 :	0.14 :	0.45 :	<0.12 :	0.03 :
Metals									
Aluminum	mg/kg-dry	T		5940. :	7110. :	8490. :	8940. :	-	13400. :
Antimony	mg/kg-dry	T		2.3 J	<0.13 J	<0.17 :	<0.17 :	-	<0.25 J
Arsenic	mg/kg-dry	T		162. :	2.1 :	2.8 :	3.1 :	-	2. :
Barium	mg/kg-dry	T		32.4 :	64.2 :	104. :	73.8 :	-	121. :
Beryllium	mg/kg-dry	T		0.55 :	0.55 :	0.7 :	1.2 :	-	1. :
Boron	mg/kg-dry	T		<43.3 J	<0.4 J	6.1 J	4.1 J	-	2.1 J
Cadmium	mg/kg-dry	T		2.9 :	0.22 J	0.79 J	0.96 J	-	0.36 :
Calcium	mg/kg-dry	T		7180. :	4800. :	7130. :	11400. :	-	15600. :
Chromium	mg/kg-dry	T		29. :	14.4 :	22.5 :	29.3 :	-	47.1 :
Cobalt	mg/kg-dry	T		<19. :	4.9 :	3.3 :	3.2 :	-	19. :
Copper	mg/kg-dry	T		483. :	127. :	63.1 :	63.3 :	-	208. :
Iron	mg/kg-dry	T		15100. :	33300. :	36400. :	27700. :	-	26100. :
Lead	mg/kg-dry	T		1330. :	275. :	123. :	76.4 J	-	75.8 :
Magnesium	mg/kg-dry	T		3550. :	4350. :	4040. :	4280. :	-	11300. :
Manganese	mg/kg-dry	T		324. J	351. J	389. :	470. J	-	609. J

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T = Total Fraction

Appendix A-7a
Soil - Biased 0-6 inches
Validated Analytical Results

Parameter	Units	Exposure Area Fraction	Site ID	MSS8-16	MSS8-17	MSS8-18	MSS8-19	MSS8-2	MSS8-20
			Sample Date	10/10/2002	10/10/2002	10/15/2002	10/15/2002	10/9/2002	10/15/2002
			Sample ID	MSS8-16-T01N-SOL	MSS8-17-T01N-SOL	MSS8-18-T01N-SOL	MSS8-19-T01N-SOL	MSS8-2-T01N-SOL	MSS8-20-T01N-SOL
			Exposure Area	SS8C	SS8C	SS8C	SS8C	SS8A	SS8C
Mercury	mg/kg-dry	T		0.13 :	<0.017 :	<0.017 J	<0.017 J	-	<0.016 :
Molybdenum	mg/kg-dry	T		178000. :	1160. :	246. :	564. :	-	606. :
Nickel	mg/kg-dry	T		18.1 J	14.5 J	12.6 :	13.4 :	-	29.8 J
Potassium	mg/kg-dry	T		1670. J	3640. J	3010. :	3530. J	-	5700. J
Selenium	mg/kg-dry	T		19.8 J	1.9 J	1. J	1.1 :	-	1.4 J
Silver	mg/kg-dry	T		<16.5 :	1.1 :	1.3 :	1.2 :	-	0.9 :
Sodium	mg/kg-dry	T		<46.7 :	93.6 :	569. :	530. :	-	<48.5 :
Thallium	mg/kg-dry	T		4.2 :	0.41 :	0.34 :	0.37 :	-	0.78 :
Vanadium	mg/kg-dry	T		2330. :	37.8 :	28.5 :	27.9 :	-	46.5 :
Zinc	mg/kg-dry	T		355. J	122. J	65.6 :	110. J	-	103. J
Volatile Organics									
1,1,1-Trichloroethane	mg/kg-dry	T		<1.7 :	<0.007 :	<0.007 :	<0.01 :	-	<0.009 :
1,1,2,2-Tetrachloroethane	mg/kg-dry	T		<1.7 :	<0.007 :	<0.007 :	<0.01 :	-	<0.009 :
1,1,2-Trichloro-1,2,2-trifluoroethane	mg/kg-dry	T		<1.7 :	<0.007 :	<0.007 :	<0.01 :	-	<0.009 :
1,1,2-Trichloroethane	mg/kg-dry	T		<1.7 :	<0.007 :	<0.007 :	<0.01 :	-	<0.009 :
1,1-Dichloroethane	mg/kg-dry	T		<1.7 :	<0.007 :	<0.007 :	<0.01 :	-	<0.009 :
1,1-Dichloroethene	mg/kg-dry	T		<1.7 :	<0.007 :	<0.007 :	<0.01 :	-	<0.009 :
1,2,4-Trichlorobenzene	mg/kg-dry	T		<1.7 :	<0.007 :	<0.007 :	<0.01 :	-	<0.009 :
1,2-Dibromo-3-chloropropane	mg/kg-dry	T		<1.7 :	<0.007 :	<0.007 :	<0.01 :	-	<0.009 :
1,2-Dichlorobenzene	mg/kg-dry	T		<1.7 :	<0.007 :	<0.007 :	<0.01 :	-	<0.009 :
1,2-Dichloroethane	mg/kg-dry	T		<1.7 :	<0.007 :	<0.007 :	<0.01 :	-	<0.009 :
1,2-Dichloroethene (total)	mg/kg-dry	T		<1.7 :	<0.007 :	<0.007 :	<0.01 :	-	<0.009 :
1,2-Dichloropropane	mg/kg-dry	T		<1.7 :	<0.007 :	<0.007 :	<0.01 :	-	<0.009 :
1,3-Dichlorobenzene	mg/kg-dry	T		<1.7 :	<0.007 :	<0.007 :	<0.01 :	-	<0.009 :
1,4-Dichlorobenzene	mg/kg-dry	T		<1.7 :	<0.007 :	<0.007 :	<0.01 :	-	<0.009 :
2-Butanone	mg/kg-dry	T		<1.7 J	<0.007 :	<0.007 :	<0.01 :	-	<0.009 :
2-Hexanone	mg/kg-dry	T		<1.7 :	<0.007 :	<0.007 J	<0.01 J	-	<0.009 :
4-Methyl-2-pentanone	mg/kg-dry	T		<1.7 :	<0.007 :	<0.007 :	<0.01 :	-	<0.009 :
Acetone	mg/kg-dry	T		<1.7 J	<0.007 :	0.003 J	0.005 J	-	0.002 J
Benzene	mg/kg-dry	T		<1.7 :	<0.007 :	<0.007 :	<0.01 :	-	<0.009 :
Bromodichloromethane	mg/kg-dry	T		<1.7 :	<0.007 :	<0.007 :	<0.01 :	-	<0.009 :
Bromoform	mg/kg-dry	T		<1.7 :	<0.007 :	<0.007 :	<0.01 :	-	<0.009 :
Bromomethane	mg/kg-dry	T		<1.7 :	<0.007 :	<0.007 :	<0.01 :	-	<0.009 :
Carbon disulfide	mg/kg-dry	T		<1.7 :	<0.007 :	<0.007 :	<0.01 :	-	<0.009 :

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Appendix A-7a
Soil - Biased 0-6 inches
Validated Analytical Results

Parameter	Units	Exposure Area Fraction	Site ID / Sample Date / Sample ID		MSS8-16 10/10/2002 MSS8-16-T01N-SOL SS8C		MSS8-17 10/10/2002 MSS8-17-T01N-SOL SS8C		MSS8-18 10/15/2002 MSS8-18-T01N-SOL SS8C		MSS8-19 10/15/2002 MSS8-19-T01N-SOL SS8C		MSS8-2 10/9/2002 MSS8-2-T01N-SOL SS8A		MSS8-20 10/15/2002 MSS8-20-T01N-SOL SS8C	
Carbon tetrachloride	mg/kg-dry	T		<1.7	:	<0.007	:	0.001	J	0.001	J	-		<0.009	:
Chlorobenzene	mg/kg-dry	T		<1.7	:	<0.007	:	<0.007	:	<0.01	:	-		<0.009	:
Chloroethane	mg/kg-dry	T		<1.7	:	<0.007	:	<0.007	:	<0.01	:	-		<0.009	:
Chloroform	mg/kg-dry	T		<1.7	:	<0.007	:	<0.007	:	<0.01	:	-		<0.009	:
Chloromethane	mg/kg-dry	T		<1.7	:	<0.007	:	<0.007	:	<0.01	:	-		<0.009	:
cis-1,2-Dichloroethene	mg/kg-dry	T		<1.7	:	<0.007	:	<0.007	:	<0.01	:	-		<0.009	:
cis-1,3-Dichloropropene	mg/kg-dry	T		<1.7	:	<0.007	:	<0.007	:	<0.01	:	-		<0.009	:
Dibromochloromethane	mg/kg-dry	T		<1.7	:	<0.007	:	<0.007	:	<0.01	:	-		<0.009	:
Dichlorodifluoromethane	mg/kg-dry	T		<1.7	J	<0.007	:	<0.007	:	<0.01	:	-		<0.009	:
Ethylbenzene	mg/kg-dry	T		<1.7	:	<0.007	:	<0.007	:	<0.01	:	-		<0.009	:
Methylene chloride	mg/kg-dry	T		<1.7	:	<0.007	:	<0.007	:	<0.01	:	-		<0.009	:
Styrene	mg/kg-dry	T		<1.7	:	<0.007	:	<0.007	:	<0.01	:	-		<0.009	:
Tetrachloroethene	mg/kg-dry	T		<1.7	J	<0.007	:	<0.007	:	<0.01	:	-		<0.009	:
Toluene	mg/kg-dry	T		<1.7	:	<0.007	:	<0.007	:	<0.01	:	-		<0.009	:
Total Xylene	mg/kg-dry	T		<1.7	:	<0.007	:	<0.007	:	<0.01	:	-		<0.009	:
trans-1,2-Dichloroethene	mg/kg-dry	T		<1.7	:	<0.007	:	<0.007	:	<0.01	:	-		<0.009	:
trans-1,3-Dichloropropene	mg/kg-dry	T		<1.7	:	<0.007	:	<0.007	:	<0.01	:	-		<0.009	:
Trichloroethene	mg/kg-dry	T		<1.7	:	<0.007	:	<0.007	:	<0.01	:	-		<0.009	:
Trichlorofluoromethane	mg/kg-dry	T		<1.7	J	<0.007	:	0.004	J	0.003	J	-		<0.009	:
Vinyl chloride	mg/kg-dry	T		<1.7	J	<0.007	:	<0.007	:	<0.01	:	-		<0.009	:
Semi-Volatile Organics																
1,1`-Biphenyl	mg/kg-dry	T		<3.5	:	<0.35	:	<0.35	:	<0.35	:	<0.35	:	<1.8	:
2,4,5-Trichlorophenol	mg/kg-dry	T		<8.8	:	<0.88	:	<0.88	:	<0.88	:	<0.89	:	<4.5	:
2,4,6-Trichlorophenol	mg/kg-dry	T		<3.5	:	<0.35	:	<0.35	:	<0.35	:	<0.35	:	<1.8	:
2,4-Dichlorophenol	mg/kg-dry	T		<3.5	:	<0.35	:	<0.35	:	<0.35	:	<0.35	:	<1.8	:
2,4-Dimethylphenol	mg/kg-dry	T		<3.5	:	<0.35	:	<0.35	:	<0.35	:	<0.35	:	<1.8	:
2,4-Dinitrophenol	mg/kg-dry	T		<8.8	J	<0.88	J	<0.88	:	<0.88	:	<0.89	J	<4.5	:
2,4-Dinitrotoluene	mg/kg-dry	T		<3.5	:	<0.35	:	<0.35	:	<0.35	:	<0.35	:	<1.8	:
2,6-Dinitrotoluene	mg/kg-dry	T		<3.5	:	<0.35	:	<0.35	:	<0.35	:	<0.35	:	<1.8	:
2-Chloronaphthalene	mg/kg-dry	T		<3.5	:	<0.35	:	<0.35	:	<0.35	:	<0.35	:	<1.8	:
2-Chlorophenol	mg/kg-dry	T		<3.5	:	<0.35	:	<0.35	:	<0.35	:	<0.35	:	<1.8	:
2-Methylnaphthalene	mg/kg-dry	T		<3.5	:	<0.35	:	<0.35	:	<0.35	:	<0.35	:	<1.8	:
2-Methylphenol	mg/kg-dry	T		<3.5	:	<0.35	:	<0.35	:	<0.35	:	<0.35	:	<1.8	:
2-Nitroaniline	mg/kg-dry	T		<8.8	:	<0.88	:	<0.88	:	<0.88	:	<0.89	:	<4.5	:

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T = Total Fraction

Appendix A-7a
Soil - Biased 0-6 inches
Validated Analytical Results

Parameter	Units	Exposure Area Fraction	Site ID	MSS8-16		MSS8-17		MSS8-18		MSS8-19		MSS8-2		MSS8-20	
			Sample Date	10/10/2002		10/10/2002		10/15/2002		10/15/2002		10/9/2002		10/15/2002	
			Sample ID	MSS8-16-T01N-SOL		MSS8-17-T01N-SOL		MSS8-18-T01N-SOL		MSS8-19-T01N-SOL		MSS8-2-T01N-SOL		MSS8-20-T01N-SOL	
			Exposure Area	SS8C		SS8C		SS8C		SS8C		SS8A		SS8C	
2-Nitrophenol	mg/kg-dry	T		<3.5	:	<0.35	:	<0.35	:	<0.35	:	<0.35	:	<1.8	:
3,3-Dichlorobenzidine	mg/kg-dry	T		<3.5	:	<0.35	:	<0.35	:	<0.35	:	<0.35	:	<1.8	:
3-Nitroaniline	mg/kg-dry	T		<8.8	:	<0.88	:	<0.88	:	<0.88	:	<0.89	:	<4.5	:
4,6-Dinitro-2-methylphenol	mg/kg-dry	T		<8.8	J	<0.88	:	<0.88	:	<0.88	:	<0.89	:	<4.5	J
4-Bromophenyl phenyl ether	mg/kg-dry	T		<3.5	J	<0.35	:	<0.35	:	<0.35	:	<0.35	:	<1.8	:
4-Chloro-3-methylphenol	mg/kg-dry	T		<3.5	:	<0.35	:	<0.35	:	<0.35	:	<0.35	:	<1.8	:
4-Chloroaniline	mg/kg-dry	T		<3.5	:	<0.35	:	<0.35	:	<0.35	:	<0.35	:	<1.8	:
4-Chlorophenyl phenyl ether	mg/kg-dry	T		<3.5	:	<0.35	:	<0.35	:	<0.35	:	<0.35	:	<1.8	:
4-Methylphenol	mg/kg-dry	T		<3.5	:	<0.35	:	<0.35	:	<0.35	:	<0.35	:	<1.8	:
4-Nitroaniline	mg/kg-dry	T		<8.8	:	<0.88	:	<0.88	:	<0.88	:	<0.89	:	<4.5	:
4-Nitrophenol	mg/kg-dry	T		<8.8	J	<0.88	J	<0.88	:	<0.88	:	<0.89	:	<4.5	:
Acenaphthene	mg/kg-dry	T		<3.5	:	<0.35	:	<0.35	:	<0.35	:	<0.35	:	<1.8	:
Acenaphthylene	mg/kg-dry	T		<3.5	:	<0.35	:	<0.35	:	<0.35	:	<0.35	:	<1.8	:
Anthracene	mg/kg-dry	T		<3.5	J	<0.35	:	<0.35	J	<0.35	J	<0.35	J	<1.8	J
Benzaldehyde	mg/kg-dry	T		<3.5	:	<0.35	:	<0.35	J	<0.35	J	<0.35	J	<1.8	J
Benzo(a)anthracene	mg/kg-dry	T		<3.5	:	<0.35	:	<0.35	:	<0.35	:	<0.35	:	<1.8	:
Benzo(a)pyrene	mg/kg-dry	T		<3.5	:	<0.35	:	<0.35	:	<0.35	:	<0.35	:	<1.8	:
Benzo(b)fluoranthene	mg/kg-dry	T		<3.5	:	<0.35	:	<0.35	:	<0.35	:	<0.35	:	<1.8	:
Benzo(g,h,i)perylene	mg/kg-dry	T		<3.5	:	<0.35	:	<0.35	:	<0.35	:	<0.35	:	<1.8	:
Benzo(k)fluoranthene	mg/kg-dry	T		<3.5	J	<0.35	J	<0.35	:	<0.35	:	<0.35	:	<1.8	J
Bis(2-chloroethoxy)methane	mg/kg-dry	T		<3.5	:	<0.35	:	<0.35	:	<0.35	:	<0.35	:	<1.8	:
Bis(2-chloroethyl)ether	mg/kg-dry	T		<3.5	:	<0.35	:	<0.35	:	<0.35	:	<0.35	:	<1.8	:
Bis(2-ethylhexyl)phthalate	mg/kg-dry	T		1.8	J	<0.35	:	<0.35	:	<0.35	:	<0.35	:	<1.8	:
Butyl benzyl phthalate	mg/kg-dry	T		<3.5	:	<0.35	:	<0.35	:	<0.35	:	<0.35	:	<1.8	:
Carbazole	mg/kg-dry	T		<3.5	J	<0.35	:	<0.35	:	<0.35	:	<0.35	:	<1.8	:
Chrysene	mg/kg-dry	T		<3.5	:	<0.35	:	<0.35	:	<0.35	:	<0.35	:	<1.8	:
Dibenz(a,h)anthracene	mg/kg-dry	T		<3.5	:	<0.35	:	<0.35	:	<0.35	:	<0.35	:	<1.8	J
Dibenzofuran	mg/kg-dry	T		<3.5	:	<0.35	:	<0.35	:	<0.35	:	<0.35	:	<1.8	:
Dichlorodiisopropyl ether	mg/kg-dry	T		<3.5	:	<0.35	:	<0.35	:	<0.35	:	<0.35	:	<1.8	:
Diethylphthalate	mg/kg-dry	T		<3.5	:	<0.35	:	<0.35	:	<0.35	:	<0.35	:	<1.8	:
Dimethylphthalate	mg/kg-dry	T		<3.5	:	<0.35	:	<0.35	:	<0.35	:	<0.35	:	<1.8	:
Di-n-Butyl phthalate	mg/kg-dry	T		<3.5	J	<0.35	:	<0.35	:	<0.35	:	<0.35	:	<1.8	:
Di-n-Octyl phthalate	mg/kg-dry	T		0.69	J	<0.35	:	<0.35	:	<0.35	:	<0.35	:	<1.8	:
Fluoranthene	mg/kg-dry	T		<3.5	J	<0.35	:	<0.35	:	<0.35	:	<0.35	:	<1.8	:

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T = Total Fraction

Appendix A-7a
Soil - Biased 0-6 inches
Validated Analytical Results

Parameter	Units	Site ID / Sample Date / Sample ID / Exposure Area	Fraction	MSS8-16 10/10/2002 MSS8-16-T01N-SOL SS8C		MSS8-17 10/10/2002 MSS8-17-T01N-SOL SS8C		MSS8-18 10/15/2002 MSS8-18-T01N-SOL SS8C		MSS8-19 10/15/2002 MSS8-19-T01N-SOL SS8C		MSS8-2 10/9/2002 MSS8-2-T01N-SOL SS8A		MSS8-20 10/15/2002 MSS8-20-T01N-SOL SS8C	
Fluorene	mg/kg-dry		T	<3.5	:	<0.35	:	<0.35	:	<0.35	:	<0.35	:	<1.8	:
Hexachlorobenzene	mg/kg-dry		T	<3.5	J	<0.35	:	<0.35	:	<0.35	:	<0.35	:	<1.8	:
Hexachlorobutadiene	mg/kg-dry		T	<3.5	:	<0.35	:	<0.35	:	<0.35	:	<0.35	:	<1.8	:
Hexachlorocyclopentadiene	mg/kg-dry		T	<3.5	:	<0.35	:	<0.35	:	<0.35	:	<0.35	:	<1.8	:
Hexachloroethane	mg/kg-dry		T	<3.5	:	<0.35	:	<0.35	:	<0.35	:	<0.35	:	<1.8	:
Indeno(1,2,3-cd)pyrene	mg/kg-dry		T	<3.5	:	<0.35	:	<0.35	:	<0.35	:	<0.35	:	<1.8	:
Isophorone	mg/kg-dry		T	<3.5	:	<0.35	:	<0.35	:	<0.35	:	<0.35	:	<1.8	:
Naphthalene	mg/kg-dry		T	<3.5	:	<0.35	:	<0.35	:	<0.35	:	<0.35	:	<1.8	:
Nitrobenzene	mg/kg-dry		T	<3.5	:	<0.35	:	<0.35	:	<0.35	:	<0.35	:	<1.8	:
N-Nitrosodi-n-propylamine	mg/kg-dry		T	<3.5	:	<0.35	:	<0.35	:	<0.35	:	<0.35	:	<1.8	:
N-Nitrosodiphenylamine	mg/kg-dry		T	<3.5	J	<0.35	:	<0.35	:	<0.35	:	<0.35	:	<1.8	:
Pentachlorophenol	mg/kg-dry		T	<8.8	J	<0.88	J	<0.88	J	<0.88	J	<0.89	J	<4.5	J
Phenanthrene	mg/kg-dry		T	<3.5	J	<0.35	:	<0.35	:	<0.35	:	<0.35	:	<1.8	J
Phenol	mg/kg-dry		T	<3.5	:	<0.35	:	<0.35	:	<0.35	:	<0.35	:	<1.8	:
Pyrene	mg/kg-dry		T	0.82	J	<0.35	:	<0.35	:	<0.35	:	<0.35	:	<1.8	:
Explosives															
2,4,6-Trinitrotoluene	mg/kg-dry		T	-		-		-		-		<0.12	:	-	
2,6-Pyridinediamine,	mg/kg-dry		T	-		-		-		-		<0.12	:	-	
Cyclotetramethylenetetranitramine	mg/kg-dry		T	-		-		-		-		<0.12	:	-	
Cyclotrimethylenetrinitramine	mg/kg-dry		T	-		-		-		-		<0.12	:	-	
Pentaerythritol tetranitrate	mg/kg-dry		T	-		-		-		-		<5.	:	-	

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Appendix A-7a
Soil - Biased 0-6 inches
Validated Analytical Results

Parameter	Units	Exposure Area Fraction	Site ID	MSS8-21	MSS8-28	MSS8-28	MSS8-29	MSS8-29	MSS8-3
			Sample Date	10/15/2002	10/17/2002	10/23/2002	10/17/2002	10/23/2002	10/9/2002
			Sample ID	MSS8-21-T01N-SOL	MSS8-28-T01N-SOL	MSS8-28-T01N-SOL	MSS8-29-T01N-SOL	MSS8-29-T01N-SOL	MSS8-3-T01N-SOL
			Exposure Area	SS8C	SS8D	SS8D	SS8D	SS8D	SS8A
General Chemistry									
Ammonia	mg/kg-dry	T		34.9 :	20.6 :	-	<9. J	-	37.4 :
Chloride	mg/kg-dry	T		5.4 J	6.2 J	-	9.4 J	-	<2.2 J
Fluoride	mg/kg-dry	T		0.2 J	3. J	-	2.3 J	-	0.67 J
Nitrate	mg/kg-dry	T		2.7 J	2.5 J	-	<2.2 J	-	<2.2 J
Phosphorus	mg/kg-dry	T		854. J	1190. J	-	25.2 J	-	1090. J
Sulfate	mg/kg-dry	T		52.9 J	457. J	-	4420. J	-	402. J
Total Kjeldahl Nitrogen	mg/kg-dry	T		551. J	149. :	-	91.8 :	-	81.4 :
Total Organic Carbon	mg/kg-dry	T		15800. J	5660. J	-	3380. J	-	<108. J
Laboratory Parameters									
pH	SU	T		6.9 :	4.7 :	-	4.4 :	-	3.5 :
Solids, Percent	%	T		85.1 :	98.5 :	94.5 :	93.1 :	91.7 :	93.1 :
Specific Conductance	umhos/cm	T		35.4 :	141. :	-	1350. :	-	222. :
Geotechnical									
Organic Soils	%	T		3.16 J	3.67 J	-	3.23 J	-	-
Physical Properties									
Cation-Exchange Capacity	meq/100g	T		17.1 :	28.3 :	-	25.3 :	-	13.7 :
Sodium Absorption Ratio	ratio	T		0.06 :	0.11 :	-	0.01 :	-	0.32 :
Metals									
Aluminum	mg/kg-dry	T		18400. :	13800. :	-	14700. :	-	-
Antimony	mg/kg-dry	T		<0.28 J	<0.5 J	-	<0.24 J	-	-
Arsenic	mg/kg-dry	T		4.3 :	4.6 :	-	3.5 :	-	-
Barium	mg/kg-dry	T		112. :	250. :	-	171. :	-	-
Beryllium	mg/kg-dry	T		1.1 :	0.64 :	-	1.6 :	-	-
Boron	mg/kg-dry	T		5. J	<0.38 J	-	<0.4 J	-	-
Cadmium	mg/kg-dry	T		<0.028 :	<0.024 J	-	<0.025 J	-	-
Calcium	mg/kg-dry	T		3490. :	3390. :	-	12200. :	-	-
Chromium	mg/kg-dry	T		49.8 :	52.5 :	-	44.4 :	-	-
Cobalt	mg/kg-dry	T		14.7 :	10.6 :	-	24.6 :	-	-
Copper	mg/kg-dry	T		39.4 :	157. :	-	995. :	-	-
Iron	mg/kg-dry	T		25900. :	39100. :	-	46200. :	-	-
Lead	mg/kg-dry	T		56.6 :	4290. :	-	64.4 :	-	-
Magnesium	mg/kg-dry	T		7780. :	9270. :	-	10300. :	-	-
Manganese	mg/kg-dry	T		683. J	383. J	-	671. J	-	-

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Appendix A-7a
Soil - Biased 0-6 inches
Validated Analytical Results

Parameter	Units	Exposure Area Fraction	Site ID / Sample Date / Sample ID					
			MSS8-21 10/15/2002 MSS8-21-T01N-SOL	MSS8-28 10/17/2002 MSS8-28-T01N-SOL	MSS8-28 10/23/2002 MSS8-28-T01N-SOL	MSS8-29 10/17/2002 MSS8-29-T01N-SOL	MSS8-29 10/23/2002 MSS8-29-T01N-SOL	MSS8-3 10/9/2002 MSS8-3-T01N-SOL
			SS8C	SS8D	SS8D	SS8D	SS8D	SS8A
Mercury	mg/kg-dry	T	0.025 :	<0.017 :	-	<0.018 :	-	-
Molybdenum	mg/kg-dry	T	39. :	158. :	-	95.8 :	-	-
Nickel	mg/kg-dry	T	34.3 J	31. J	-	42. J	-	-
Potassium	mg/kg-dry	T	5140. J	5510. J	-	5310. J	-	-
Selenium	mg/kg-dry	T	<0.75 J	0.88 :	-	1.3 :	-	-
Silver	mg/kg-dry	T	<0.13 :	0.73 :	-	0.82 :	-	-
Sodium	mg/kg-dry	T	<50.7 :	185. :	-	90.7 :	-	-
Thallium	mg/kg-dry	T	0.27 :	0.72 :	-	0.7 :	-	-
Vanadium	mg/kg-dry	T	49.1 :	47.6 :	-	37. :	-	-
Zinc	mg/kg-dry	T	82.7 J	94.1 :	-	96.9 :	-	-
Volatile Organics								
1,1,1-Trichloroethane	mg/kg-dry	T	<0.009 :	-	<0.005 :	-	<0.008 :	-
1,1,2,2-Tetrachloroethane	mg/kg-dry	T	<0.009 :	-	<0.005 :	-	<0.008 :	-
1,1,2-Trichloro-1,2,2-trifluoroethane	mg/kg-dry	T	<0.009 :	-	<0.005 :	-	<0.008 :	-
1,1,2-Trichloroethane	mg/kg-dry	T	<0.009 :	-	<0.005 :	-	<0.008 :	-
1,1-Dichloroethane	mg/kg-dry	T	<0.009 :	-	<0.005 :	-	<0.008 :	-
1,1-Dichloroethene	mg/kg-dry	T	<0.009 :	-	<0.005 :	-	<0.008 :	-
1,2,4-Trichlorobenzene	mg/kg-dry	T	<0.009 :	-	<0.005 :	-	<0.008 :	-
1,2-Dibromo-3-chloropropane	mg/kg-dry	T	<0.009 :	-	<0.005 :	-	<0.008 :	-
1,2-Dichlorobenzene	mg/kg-dry	T	<0.009 :	-	<0.005 :	-	<0.008 :	-
1,2-Dichloroethane	mg/kg-dry	T	<0.009 :	-	<0.005 :	-	<0.008 :	-
1,2-Dichloroethene (total)	mg/kg-dry	T	<0.009 :	-	<0.005 :	-	<0.008 :	-
1,2-Dichloropropane	mg/kg-dry	T	<0.009 :	-	<0.005 :	-	<0.008 :	-
1,3-Dichlorobenzene	mg/kg-dry	T	<0.009 :	-	<0.005 :	-	<0.008 :	-
1,4-Dichlorobenzene	mg/kg-dry	T	<0.009 :	-	<0.005 :	-	<0.008 :	-
2-Butanone	mg/kg-dry	T	<0.009 :	-	<0.005 :	-	<0.008 :	-
2-Hexanone	mg/kg-dry	T	<0.009 J	-	<0.005 :	-	<0.008 :	-
4-Methyl-2-pentanone	mg/kg-dry	T	<0.009 :	-	<0.005 :	-	<0.008 :	-
Acetone	mg/kg-dry	T	<0.009 :	-	<0.005 :	-	<0.008 :	-
Benzene	mg/kg-dry	T	<0.009 :	-	<0.005 :	-	<0.008 :	-
Bromodichloromethane	mg/kg-dry	T	<0.009 :	-	<0.005 :	-	<0.008 :	-
Bromoform	mg/kg-dry	T	<0.009 :	-	<0.005 :	-	<0.008 :	-
Bromomethane	mg/kg-dry	T	<0.009 :	-	<0.005 :	-	<0.008 :	-
Carbon disulfide	mg/kg-dry	T	<0.009 :	-	<0.005 :	-	0.001 J	-

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Appendix A-7a
Soil - Biased 0-6 inches
Validated Analytical Results

Parameter	Units	Site ID / Sample Date / Sample ID / Exposure Area / Fraction	MSS8-21 10/15/2002 MSS8-21-T01N-SOL SS8C	MSS8-28 10/17/2002 MSS8-28-T01N-SOL SS8D	MSS8-28 10/23/2002 MSS8-28-T01N-SOL SS8D	MSS8-29 10/17/2002 MSS8-29-T01N-SOL SS8D	MSS8-29 10/23/2002 MSS8-29-T01N-SOL SS8D	MSS8-3 10/9/2002 MSS8-3-T01N-SOL SS8A
Carbon tetrachloride	mg/kg-dry	T	<0.009 :	-	<0.005 :	-	<0.008 :	-
Chlorobenzene	mg/kg-dry	T	<0.009 :	-	<0.005 :	-	<0.008 :	-
Chloroethane	mg/kg-dry	T	<0.009 :	-	<0.005 :	-	<0.008 :	-
Chloroform	mg/kg-dry	T	<0.009 :	-	<0.005 :	-	<0.008 :	-
Chloromethane	mg/kg-dry	T	<0.009 :	-	<0.005 :	-	<0.008 :	-
cis-1,2-Dichloroethene	mg/kg-dry	T	<0.009 :	-	<0.005 :	-	<0.008 :	-
cis-1,3-Dichloropropene	mg/kg-dry	T	<0.009 :	-	<0.005 :	-	<0.008 :	-
Dibromochloromethane	mg/kg-dry	T	<0.009 :	-	<0.005 :	-	<0.008 :	-
Dichlorodifluoromethane	mg/kg-dry	T	<0.009 :	-	<0.005 :	-	<0.008 :	-
Ethylbenzene	mg/kg-dry	T	<0.009 :	-	<0.005 :	-	<0.008 :	-
Methylene chloride	mg/kg-dry	T	<0.009 :	-	<0.005 :	-	<0.008 :	-
Styrene	mg/kg-dry	T	<0.009 :	-	<0.005 :	-	<0.008 :	-
Tetrachloroethene	mg/kg-dry	T	<0.009 :	-	<0.005 :	-	<0.008 :	-
Toluene	mg/kg-dry	T	<0.009 :	-	<0.005 :	-	<0.008 :	-
Total Xylene	mg/kg-dry	T	<0.009 :	-	<0.005 :	-	<0.008 :	-
trans-1,2-Dichloroethene	mg/kg-dry	T	<0.009 :	-	<0.005 :	-	<0.008 :	-
trans-1,3-Dichloropropene	mg/kg-dry	T	<0.009 :	-	<0.005 :	-	<0.008 :	-
Trichloroethene	mg/kg-dry	T	<0.009 :	-	<0.005 :	-	<0.008 :	-
Trichlorofluoromethane	mg/kg-dry	T	<0.009 :	-	<0.005 :	-	<0.008 :	-
Vinyl chloride	mg/kg-dry	T	<0.009 :	-	<0.005 :	-	<0.008 :	-
Semi-Volatile Organics								
1,1`-Biphenyl	mg/kg-dry	T	<0.39 :	<0.34 :	-	<0.35 :	-	<0.35 :
2,4,5-Trichlorophenol	mg/kg-dry	T	<0.98 :	<0.85 :	-	<0.89 :	-	<0.89 :
2,4,6-Trichlorophenol	mg/kg-dry	T	<0.39 :	<0.34 :	-	<0.35 :	-	<0.35 :
2,4-Dichlorophenol	mg/kg-dry	T	<0.39 :	<0.34 :	-	<0.35 :	-	<0.35 :
2,4-Dimethylphenol	mg/kg-dry	T	<0.39 :	<0.34 :	-	<0.35 :	-	<0.35 :
2,4-Dinitrophenol	mg/kg-dry	T	<0.98 :	<0.85 :	-	<0.89 :	-	<0.89 J
2,4-Dinitrotoluene	mg/kg-dry	T	<0.39 :	<0.34 :	-	<0.35 :	-	<0.35 :
2,6-Dinitrotoluene	mg/kg-dry	T	<0.39 :	<0.34 :	-	<0.35 :	-	<0.35 :
2-Chloronaphthalene	mg/kg-dry	T	<0.39 :	<0.34 :	-	<0.35 :	-	<0.35 :
2-Chlorophenol	mg/kg-dry	T	<0.39 :	<0.34 J	-	<0.35 :	-	<0.35 :
2-Methylnaphthalene	mg/kg-dry	T	<0.39 :	<0.34 :	-	<0.35 :	-	<0.35 :
2-Methylphenol	mg/kg-dry	T	<0.39 :	<0.34 J	-	<0.35 :	-	<0.35 :
2-Nitroaniline	mg/kg-dry	T	<0.98 :	<0.85 :	-	<0.89 :	-	<0.89 :

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T = Total Fraction

Appendix A-7a
Soil - Biased 0-6 inches
Validated Analytical Results

Parameter	Units	Site ID / Sample Date / Sample ID / Exposure Area / Fraction	MSS8-21 10/15/2002 MSS8-21-T01N-SOL SS8C		MSS8-28 10/17/2002 MSS8-28-T01N-SOL SS8D		MSS8-28 10/23/2002 MSS8-28-T01N-SOL SS8D		MSS8-29 10/17/2002 MSS8-29-T01N-SOL SS8D		MSS8-29 10/23/2002 MSS8-29-T01N-SOL SS8D		MSS8-3 10/9/2002 MSS8-3-T01N-SOL SS8A	
2-Nitrophenol	mg/kg-dry	T	<0.39	:	<0.34	:	-		<0.35	:	-		<0.35	:
3,3-Dichlorobenzidine	mg/kg-dry	T	<0.39	:	<0.34	:	-		<0.35	:	-		<0.35	:
3-Nitroaniline	mg/kg-dry	T	<0.98	:	<0.85	:	-		<0.89	:	-		<0.89	:
4,6-Dinitro-2-methylphenol	mg/kg-dry	T	<0.98	:	<0.85	:	-		<0.89	:	-		<0.89	:
4-Bromophenyl phenyl ether	mg/kg-dry	T	<0.39	:	<0.34	:	-		<0.35	:	-		<0.35	:
4-Chloro-3-methylphenol	mg/kg-dry	T	<0.39	:	<0.34	:	-		<0.35	:	-		<0.35	:
4-Chloroaniline	mg/kg-dry	T	<0.39	:	<0.34	:	-		<0.35	:	-		<0.35	:
4-Chlorophenyl phenyl ether	mg/kg-dry	T	<0.39	:	<0.34	:	-		<0.35	:	-		<0.35	:
4-Methylphenol	mg/kg-dry	T	<0.39	:	<0.34	J	-		<0.35	:	-		<0.35	:
4-Nitroaniline	mg/kg-dry	T	<0.98	:	<0.85	:	-		<0.89	:	-		<0.89	:
4-Nitrophenol	mg/kg-dry	T	<0.98	J	<0.85	:	-		<0.89	:	-		<0.89	J
Acenaphthene	mg/kg-dry	T	<0.39	:	<0.34	:	-		<0.35	:	-		<0.35	:
Acenaphthylene	mg/kg-dry	T	<0.39	:	<0.34	:	-		<0.35	:	-		<0.35	:
Anthracene	mg/kg-dry	T	<0.39	J	<0.34	:	-		<0.35	:	-		<0.35	:
Benzaldehyde	mg/kg-dry	T	<0.39	J	<0.34	:	-		<0.35	:	-		<0.35	J
Benzo(a)anthracene	mg/kg-dry	T	<0.39	:	<0.34	:	-		<0.35	:	-		<0.35	:
Benzo(a)pyrene	mg/kg-dry	T	<0.39	:	<0.34	:	-		<0.35	:	-		<0.35	:
Benzo(b)fluoranthene	mg/kg-dry	T	<0.39	:	<0.34	:	-		<0.35	:	-		<0.35	:
Benzo(g,h,i)perylene	mg/kg-dry	T	<0.39	:	<0.34	:	-		<0.35	:	-		<0.35	:
Benzo(k)fluoranthene	mg/kg-dry	T	<0.39	:	<0.34	:	-		<0.35	:	-		<0.35	J
Bis(2-chloroethoxy)methane	mg/kg-dry	T	<0.39	:	<0.34	:	-		<0.35	:	-		<0.35	:
Bis(2-chloroethyl)ether	mg/kg-dry	T	<0.39	:	<0.34	J	-		<0.35	:	-		<0.35	:
Bis(2-ethylhexyl)phthalate	mg/kg-dry	T	<0.39	:	0.12	J	-		0.15	J	-		<0.35	:
Butyl benzyl phthalate	mg/kg-dry	T	<0.39	:	<0.34	:	-		<0.35	:	-		<0.35	:
Carbazole	mg/kg-dry	T	<0.39	:	<0.34	:	-		<0.35	:	-		<0.35	:
Chrysene	mg/kg-dry	T	<0.39	:	0.046	J	-		<0.35	:	-		<0.35	:
Dibenz(a,h)anthracene	mg/kg-dry	T	<0.39	:	<0.34	:	-		<0.35	:	-		<0.35	:
Dibenzofuran	mg/kg-dry	T	<0.39	:	<0.34	:	-		<0.35	:	-		<0.35	:
Dichlorodiisopropyl ether	mg/kg-dry	T	<0.39	:	<0.34	J	-		<0.35	:	-		<0.35	:
Diethylphthalate	mg/kg-dry	T	<0.39	:	<0.34	:	-		<0.35	:	-		<0.35	:
Dimethylphthalate	mg/kg-dry	T	<0.39	:	<0.34	:	-		<0.35	:	-		<0.35	:
Di-n-Butyl phthalate	mg/kg-dry	T	<0.39	:	<0.34	:	-		0.03	J	-		<0.35	:
Di-n-Octyl phthalate	mg/kg-dry	T	<0.39	:	<0.34	:	-		<0.35	:	-		<0.35	:
Fluoranthene	mg/kg-dry	T	<0.39	:	0.035	J	-		<0.35	:	-		<0.35	:

J = Qualified as estimated during data validation
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T = Total Fraction

Appendix A-7a
Soil - Biased 0-6 inches
Validated Analytical Results

Parameter	Units	Exposure Area Fraction	Site ID / Sample Date / Sample ID					
			MSS8-21 10/15/2002 MSS8-21-T01N-SOL	MSS8-28 10/17/2002 MSS8-28-T01N-SOL	MSS8-28 10/23/2002 MSS8-28-T01N-SOL	MSS8-29 10/17/2002 MSS8-29-T01N-SOL	MSS8-29 10/23/2002 MSS8-29-T01N-SOL	MSS8-3 10/9/2002 MSS8-3-T01N-SOL
			SS8C	SS8D	SS8D	SS8D	SS8D	SS8A
Fluorene	mg/kg-dry	T	<0.39 :	<0.34 :	-	<0.35 :	-	<0.35 :
Hexachlorobenzene	mg/kg-dry	T	<0.39 :	<0.34 :	-	<0.35 :	-	<0.35 :
Hexachlorobutadiene	mg/kg-dry	T	<0.39 :	<0.34 :	-	<0.35 :	-	<0.35 :
Hexachlorocyclopentadiene	mg/kg-dry	T	<0.39 :	<0.34 :	-	<0.35 :	-	<0.35 :
Hexachloroethane	mg/kg-dry	T	<0.39 :	<0.34 J	-	<0.35 :	-	<0.35 :
Indeno(1,2,3-cd)pyrene	mg/kg-dry	T	<0.39 :	<0.34 :	-	<0.35 :	-	<0.35 :
Isophorone	mg/kg-dry	T	<0.39 :	<0.34 :	-	<0.35 :	-	<0.35 :
Naphthalene	mg/kg-dry	T	<0.39 :	<0.34 :	-	<0.35 :	-	<0.35 :
Nitrobenzene	mg/kg-dry	T	<0.39 :	<0.34 :	-	<0.35 :	-	<0.35 :
N-Nitrosodi-n-propylamine	mg/kg-dry	T	<0.39 :	<0.34 J	-	<0.35 :	-	<0.35 :
N-Nitrosodiphenylamine	mg/kg-dry	T	<0.39 :	<0.34 :	-	<0.35 :	-	<0.35 :
Pentachlorophenol	mg/kg-dry	T	<0.98 :	<0.85 :	-	<0.89 :	-	<0.89 J
Phenanthrene	mg/kg-dry	T	<0.39 :	0.025 J	-	<0.35 :	-	<0.35 :
Phenol	mg/kg-dry	T	<0.39 :	<0.34 J	-	<0.35 :	-	<0.35 :
Pyrene	mg/kg-dry	T	<0.39 :	<0.34 :	-	<0.35 :	-	<0.35 :
Explosives								
2,4,6-Trinitrotoluene	mg/kg-dry	T	-	-	-	-	-	<0.12 :
2,6-Pyridinediamine,	mg/kg-dry	T	-	-	-	-	-	<0.12 :
Cyclotetramethylenetetranitramine	mg/kg-dry	T	-	-	-	-	-	<0.12 :
Cyclotrimethylenetrinitramine	mg/kg-dry	T	-	-	-	-	-	<0.12 :
Pentaerythritol tetranitrate	mg/kg-dry	T	-	-	-	-	-	<5. :

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T = Total Fraction

Appendix A-7a
Soil - Biased 0-6 inches
Validated Analytical Results

Parameter	Units	Exposure Area Fraction	Site ID	MSS8-30	MSS8-31	MSS8-31	MSS8-32	MSS8-33	MSS8-34
			Sample Date	10/23/2002	10/23/2002	10/23/2002	10/23/2002	1/13/2003	1/13/2003
			Sample ID	MSS8-30-T01N-SOL	MSS8-31-T01N-SOL RE	MSS8-31-T01N-SOL	MSS8-32-T01N-SOL	MSS8-33-T01N-SOL	MSS8-34-T01N-SOL
			Exposure Area	SS8D	SS8D	SS8D	SS8D	SS8D	SS8D
General Chemistry									
Ammonia	mg/kg-dry	T		33.2 J	-	18.5 :	17.7 :	28.7 :	26.2 :
Chloride	mg/kg-dry	T		<28.4 :	-	<27.5 :	<26.3 :	12.1 :	<2.4 :
Fluoride	mg/kg-dry	T		0.52 J	-	0.46 J	4.1 J	0.26 J	1.7 J
Nitrate	mg/kg-dry	T		<2.3 :	-	<2.2 :	<2.1 :	<2.3 J	<2.4 J
Phosphorus	mg/kg-dry	T		1960. J	-	984. J	1330. J	956. :	651. :
Sulfate	mg/kg-dry	T		<114. :	-	2910. :	562. :	3520. :	64. :
Total Kjeldahl Nitrogen	mg/kg-dry	T		93.1 J	-	133. J	57.6 J	231. :	355. :
Total Organic Carbon	mg/kg-dry	T		5300. J	-	4560. J	854. J	3150. J	11400. J
Laboratory Parameters									
pH	SU	T		6.4 :	-	3. :	5. :	3.8 :	6.6 :
Solids, Percent	%	T		88.1 :	-	90.8 :	94.9 :	87.2 :	86.1 :
Specific Conductance	umhos/cm	T		92.4 :	-	1670. :	428. :	2210. :	168. :
Geotechnical									
Organic Soils	%	T		3.55 J	-	7.63 J	2.4 J	3. :	2.2 :
Physical Properties									
Cation-Exchange Capacity	meq/100g	T		17.3 :	-	16.6 :	18.9 :	18. :	23.8 :
Sodium Absorption Ratio	ratio	T		0.08 :	-	<0.02 :	0.12 :	0.08 :	1.46 :
Metals									
Aluminum	mg/kg-dry	T		25400. :	-	7440. :	13100. :	18500. :	11800. :
Antimony	mg/kg-dry	T		<0.26 J	-	<0.26 J	<0.25 J	<0.27 J	<0.26 J
Arsenic	mg/kg-dry	T		14.1 :	-	4.2 :	1.9 :	3.7 J	2.4 J
Barium	mg/kg-dry	T		237. :	-	195. :	89.6 :	483. :	182. :
Beryllium	mg/kg-dry	T		0.96 :	-	0.3 :	1.1 :	0.98 :	0.68 :
Boron	mg/kg-dry	T		9.1 :	-	10.4 :	3.6 J	1.3 J	2.9 :
Cadmium	mg/kg-dry	T		1. :	-	<0.063 :	0.35 J	<0.043 J	7.3 :
Calcium	mg/kg-dry	T		4120. :	-	947. :	5080. :	1400. :	1980. :
Chromium	mg/kg-dry	T		77.7 :	-	29.4 :	26.2 :	32.4 J	19.6 J
Cobalt	mg/kg-dry	T		8.8 :	-	2.2 :	12.7 :	11.2 :	7. :
Copper	mg/kg-dry	T		225. :	-	81.7 :	95.8 :	139. J	36.8 J
Iron	mg/kg-dry	T		52900. :	-	73200. :	25200. :	34100. :	18700. :
Lead	mg/kg-dry	T		33.8 :	-	66.6 :	46.8 :	38.4 :	29.5 :
Magnesium	mg/kg-dry	T		12500. :	-	2660. :	6140. :	6350. :	3830. :
Manganese	mg/kg-dry	T		487. J	-	97.3 :	928. J	345. :	255. :

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T = Total Fraction

Appendix A-7a
Soil - Biased 0-6 inches
Validated Analytical Results

Parameter	Units	Exposure Area Fraction	Site ID	MSS8-30	MSS8-31	MSS8-31	MSS8-32	MSS8-33	MSS8-34
			Sample Date	10/23/2002	10/23/2002	10/23/2002	10/23/2002	1/13/2003	1/13/2003
			Sample ID	MSS8-30-T01N-SOL	MSS8-31-T01N-SOL RE	MSS8-31-T01N-SOL	MSS8-32-T01N-SOL	MSS8-33-T01N-SOL	MSS8-34-T01N-SOL
			Exposure Area	SS8D	SS8D	SS8D	SS8D	SS8D	SS8D
Mercury	mg/kg-dry	T		<0.017 :	-	<0.016 :	<0.017 :	0.019 :	<0.018 :
Molybdenum	mg/kg-dry	T		63.4 J	-	112. :	103. :	34. :	24.8 :
Nickel	mg/kg-dry	T		36.5 J	-	8.7 J	32.6 J	20.8 :	14.4 :
Potassium	mg/kg-dry	T		11000. J	-	6540. J	2500. J	4040. J	2420. J
Selenium	mg/kg-dry	T		0.8 J	-	2.7 J	0.75 J	1.7 J	<0.7 J
Silver	mg/kg-dry	T		0.34 :	-	0.58 :	0.36 :	<0.17 :	<0.18 :
Sodium	mg/kg-dry	T		<197. :	-	1080. :	<118. :	<249. :	147. :
Thallium	mg/kg-dry	T		1.6 :	-	0.85 :	0.4 :	0.45 :	0.21 :
Vanadium	mg/kg-dry	T		73.6 :	-	39.3 :	26.4 :	43.5 :	28.6 :
Zinc	mg/kg-dry	T		166. J	-	22.6 J	93.5 J	87.7 :	72.5 :
Volatile Organics									
1,1,1-Trichloroethane	mg/kg-dry	T		<0.005 :	-	<0.008 :	<0.009 :	<0.008 :	-
1,1,2,2-Tetrachloroethane	mg/kg-dry	T		<0.005 :	-	<0.008 :	<0.009 :	<0.008 :	-
1,1,2-Trichloro-1,2,2-trifluoroethane	mg/kg-dry	T		<0.005 :	-	<0.008 :	<0.009 :	<0.008 :	-
1,1,2-Trichloroethane	mg/kg-dry	T		<0.005 :	-	<0.008 :	<0.009 :	<0.008 :	-
1,1-Dichloroethane	mg/kg-dry	T		<0.005 :	-	<0.008 :	<0.009 :	<0.008 :	-
1,1-Dichloroethene	mg/kg-dry	T		<0.005 :	-	<0.008 :	<0.009 :	<0.008 :	-
1,2,4-Trichlorobenzene	mg/kg-dry	T		<0.005 :	-	<0.008 :	<0.009 :	<0.008 :	-
1,2-Dibromo-3-chloropropane	mg/kg-dry	T		<0.005 :	-	<0.008 :	<0.009 :	<0.008 :	-
1,2-Dichlorobenzene	mg/kg-dry	T		<0.005 :	-	<0.008 :	<0.009 :	<0.008 :	-
1,2-Dichloroethane	mg/kg-dry	T		<0.005 :	-	<0.008 :	<0.009 :	<0.008 :	-
1,2-Dichloroethene (total)	mg/kg-dry	T		<0.005 :	-	<0.008 :	<0.009 :	<0.008 :	-
1,2-Dichloropropane	mg/kg-dry	T		<0.005 :	-	<0.008 :	<0.009 :	<0.008 :	-
1,3-Dichlorobenzene	mg/kg-dry	T		<0.005 :	-	<0.008 :	<0.009 :	<0.008 :	-
1,4-Dichlorobenzene	mg/kg-dry	T		<0.005 :	-	<0.008 :	<0.009 :	<0.008 :	-
2-Butanone	mg/kg-dry	T		<0.005 :	-	<0.008 :	<0.009 :	<0.008 :	-
2-Hexanone	mg/kg-dry	T		<0.005 :	-	<0.008 :	<0.009 :	<0.008 :	-
4-Methyl-2-pentanone	mg/kg-dry	T		<0.005 :	-	<0.008 :	<0.009 :	<0.008 :	-
Acetone	mg/kg-dry	T		0.002 J	-	0.006 J	0.003 J	<0.008 :	-
Benzene	mg/kg-dry	T		<0.005 :	-	<0.008 :	<0.009 :	<0.008 :	-
Bromodichloromethane	mg/kg-dry	T		<0.005 :	-	<0.008 :	<0.009 :	<0.008 :	-
Bromoform	mg/kg-dry	T		<0.005 :	-	<0.008 :	<0.009 :	<0.008 :	-
Bromomethane	mg/kg-dry	T		<0.005 :	-	<0.008 :	<0.009 :	<0.008 :	-
Carbon disulfide	mg/kg-dry	T		<0.005 :	-	<0.008 :	<0.009 :	<0.008 :	-

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T = Total Fraction

Appendix A-7a
Soil - Biased 0-6 inches
Validated Analytical Results

Parameter	Units	Exposure Area Fraction	Site ID	MSS8-30	MSS8-31	MSS8-31	MSS8-32	MSS8-33	MSS8-34
			Sample Date	10/23/2002	10/23/2002	10/23/2002	10/23/2002	1/13/2003	1/13/2003
			Sample ID	MSS8-30-T01N-SOL	MSS8-31-T01N-SOL RE	MSS8-31-T01N-SOL	MSS8-32-T01N-SOL	MSS8-33-T01N-SOL	MSS8-34-T01N-SOL
			Exposure Area	SS8D	SS8D	SS8D	SS8D	SS8D	SS8D
Carbon tetrachloride	mg/kg-dry	T		<0.005 :	-	<0.008 :	<0.009 :	<0.008 :	-
Chlorobenzene	mg/kg-dry	T		<0.005 :	-	<0.008 :	<0.009 :	<0.008 :	-
Chloroethane	mg/kg-dry	T		<0.005 :	-	<0.008 :	<0.009 :	<0.008 :	-
Chloroform	mg/kg-dry	T		<0.005 :	-	<0.008 :	<0.009 :	<0.008 :	-
Chloromethane	mg/kg-dry	T		<0.005 :	-	<0.008 :	<0.009 :	<0.008 :	-
cis-1,2-Dichloroethene	mg/kg-dry	T		<0.005 :	-	<0.008 :	<0.009 :	<0.008 :	-
cis-1,3-Dichloropropene	mg/kg-dry	T		<0.005 :	-	<0.008 :	<0.009 :	<0.008 :	-
Dibromochloromethane	mg/kg-dry	T		<0.005 :	-	<0.008 :	<0.009 :	<0.008 :	-
Dichlorodifluoromethane	mg/kg-dry	T		<0.005 :	-	<0.008 :	<0.009 :	<0.008 :	-
Ethylbenzene	mg/kg-dry	T		<0.005 :	-	<0.008 :	<0.009 :	<0.008 :	-
Methylene chloride	mg/kg-dry	T		<0.005 :	-	<0.008 :	<0.009 :	<0.008 :	-
Styrene	mg/kg-dry	T		<0.005 :	-	<0.008 :	<0.009 :	<0.008 :	-
Tetrachloroethene	mg/kg-dry	T		<0.005 :	-	<0.008 :	<0.009 :	<0.008 :	-
Toluene	mg/kg-dry	T		<0.005 :	-	<0.008 :	<0.009 :	<0.008 :	-
Total Xylene	mg/kg-dry	T		<0.005 :	-	<0.008 :	<0.009 :	0.002 J	-
trans-1,2-Dichloroethene	mg/kg-dry	T		<0.005 :	-	<0.008 :	<0.009 :	<0.008 :	-
trans-1,3-Dichloropropene	mg/kg-dry	T		<0.005 :	-	<0.008 :	<0.009 :	<0.008 :	-
Trichloroethene	mg/kg-dry	T		<0.005 :	-	<0.008 :	<0.009 :	<0.008 :	-
Trichlorofluoromethane	mg/kg-dry	T		<0.005 :	-	<0.008 :	<0.009 :	<0.008 :	-
Vinyl chloride	mg/kg-dry	T		<0.005 :	-	<0.008 :	<0.009 :	<0.008 :	-
Semi-Volatile Organics									
1,1`-Biphenyl	mg/kg-dry	T		<0.37 :	<0.36 :	-	<0.35 :	<0.38 :	<3.8 :
2,4,5-Trichlorophenol	mg/kg-dry	T		<0.94 :	<0.91 :	-	<0.87 :	<0.95 :	<9.6 :
2,4,6-Trichlorophenol	mg/kg-dry	T		<0.37 :	<0.36 :	-	<0.35 :	<0.38 :	<3.8 :
2,4-Dichlorophenol	mg/kg-dry	T		<0.37 :	<0.36 :	-	<0.35 :	<0.38 :	<3.8 :
2,4-Dimethylphenol	mg/kg-dry	T		<0.37 :	<0.36 :	-	<0.35 :	<0.38 :	<3.8 :
2,4-Dinitrophenol	mg/kg-dry	T		<0.94 :	<0.91 :	-	<0.87 :	<0.95 J	<9.6 J
2,4-Dinitrotoluene	mg/kg-dry	T		<0.37 :	<0.36 :	-	<0.35 :	<0.38 :	<3.8 :
2,6-Dinitrotoluene	mg/kg-dry	T		<0.37 :	<0.36 :	-	<0.35 :	<0.38 :	<3.8 :
2-Chloronaphthalene	mg/kg-dry	T		<0.37 :	<0.36 :	-	<0.35 :	<0.38 :	<3.8 :
2-Chlorophenol	mg/kg-dry	T		<0.37 :	<0.36 :	-	<0.35 :	<0.38 :	<3.8 :
2-Methylnaphthalene	mg/kg-dry	T		<0.37 :	<0.36 :	-	<0.35 :	<0.38 :	<3.8 :
2-Methylphenol	mg/kg-dry	T		<0.37 :	<0.36 :	-	<0.35 :	<0.38 :	<3.8 :
2-Nitroaniline	mg/kg-dry	T		<0.94 :	<0.91 :	-	<0.87 :	<0.95 :	<9.6 :

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T = Total Fraction

Appendix A-7a
Soil - Biased 0-6 inches
Validated Analytical Results

Parameter	Units	Exposure Area Fraction	Site ID	MSS8-30	MSS8-31	MSS8-31	MSS8-32	MSS8-33	MSS8-34
			Sample Date	10/23/2002	10/23/2002	10/23/2002	10/23/2002	1/13/2003	1/13/2003
			Sample ID	MSS8-30-T01N-SOL	MSS8-31-T01N-SOL RE	MSS8-31-T01N-SOL	MSS8-32-T01N-SOL	MSS8-33-T01N-SOL	MSS8-34-T01N-SOL
			Exposure Area	SS8D	SS8D	SS8D	SS8D	SS8D	SS8D
2-Nitrophenol	mg/kg-dry	T		<0.37 :	<0.36 :	-	<0.35 :	<0.38 :	<3.8 :
3,3-Dichlorobenzidine	mg/kg-dry	T		<0.37 :	<0.36 :	-	<0.35 :	<0.38 :	<3.8 :
3-Nitroaniline	mg/kg-dry	T		<0.94 :	<0.91 :	-	<0.87 :	<0.95 J	<9.6 :
4,6-Dinitro-2-methylphenol	mg/kg-dry	T		<0.94 :	<0.91 :	-	<0.87 :	<0.95 :	<9.6 J
4-Bromophenyl phenyl ether	mg/kg-dry	T		<0.37 :	<0.36 :	-	<0.35 :	<0.38 :	<3.8 :
4-Chloro-3-methylphenol	mg/kg-dry	T		<0.37 :	<0.36 :	-	<0.35 :	<0.38 :	<3.8 :
4-Chloroaniline	mg/kg-dry	T		<0.37 :	<0.36 :	-	<0.35 :	<0.38 :	<3.8 :
4-Chlorophenyl phenyl ether	mg/kg-dry	T		<0.37 :	<0.36 :	-	<0.35 :	<0.38 :	<3.8 :
4-Methylphenol	mg/kg-dry	T		<0.37 :	<0.36 :	-	<0.35 :	<0.38 :	<3.8 :
4-Nitroaniline	mg/kg-dry	T		<0.94 :	<0.91 :	-	<0.87 :	<0.95 :	<9.6 :
4-Nitrophenol	mg/kg-dry	T		<0.94 :	<0.91 :	-	<0.87 :	<0.95 J	<9.6 :
Acenaphthene	mg/kg-dry	T		<0.37 :	<0.36 :	-	<0.35 :	<0.38 :	<3.8 :
Acenaphthylene	mg/kg-dry	T		<0.37 :	<0.36 :	-	<0.35 :	<0.38 :	<3.8 :
Anthracene	mg/kg-dry	T		<0.37 :	<0.36 :	-	<0.35 :	<0.38 :	<3.8 :
Benzaldehyde	mg/kg-dry	T		0.088 J	0.25 J	-	0.24 J	<0.38 :	<3.8 :
Benzo(a)anthracene	mg/kg-dry	T		<0.37 :	<0.36 :	-	<0.35 :	<0.38 :	<3.8 :
Benzo(a)pyrene	mg/kg-dry	T		<0.37 :	<0.36 J	-	<0.35 :	<0.38 :	<3.8 :
Benzo(b)fluoranthene	mg/kg-dry	T		<0.37 :	<0.36 J	-	<0.35 :	<0.38 :	<3.8 :
Benzo(g,h,i)perylene	mg/kg-dry	T		<0.37 :	<0.36 J	-	<0.35 :	<0.38 :	<3.8 :
Benzo(k)fluoranthene	mg/kg-dry	T		<0.37 :	<0.36 J	-	<0.35 :	<0.38 :	<3.8 :
Bis(2-chloroethoxy)methane	mg/kg-dry	T		<0.37 :	<0.36 :	-	<0.35 :	<0.38 :	<3.8 :
Bis(2-chloroethyl)ether	mg/kg-dry	T		<0.37 :	<0.36 :	-	<0.35 :	<0.38 :	<3.8 :
Bis(2-ethylhexyl)phthalate	mg/kg-dry	T		<0.37 :	0.16 J	-	<0.35 :	0.022 J	0.64 J
Butyl benzyl phthalate	mg/kg-dry	T		<0.37 :	<0.36 :	-	<0.35 :	<0.38 :	<3.8 :
Carbazole	mg/kg-dry	T		<0.37 :	<0.36 :	-	<0.35 :	<0.38 :	<3.8 :
Chrysene	mg/kg-dry	T		<0.37 :	0.038 J	-	<0.35 :	<0.38 :	0.44 J
Dibenz(a,h)anthracene	mg/kg-dry	T		<0.37 :	<0.36 J	-	<0.35 :	<0.38 J	<3.8 :
Dibenzofuran	mg/kg-dry	T		<0.37 :	<0.36 :	-	<0.35 :	<0.38 :	<3.8 :
Dichlorodiisopropyl ether	mg/kg-dry	T		<0.37 :	<0.36 :	-	<0.35 :	<0.38 :	<3.8 :
Diethylphthalate	mg/kg-dry	T		<0.37 :	<0.36 :	-	<0.35 :	<0.38 :	<3.8 :
Dimethylphthalate	mg/kg-dry	T		<0.37 :	<0.36 :	-	<0.35 :	<0.38 :	<3.8 :
Di-n-Butyl phthalate	mg/kg-dry	T		<0.37 :	<0.36 :	-	<0.35 :	<0.38 :	<3.8 :
Di-n-Octyl phthalate	mg/kg-dry	T		<0.37 :	<0.36 J	-	<0.35 :	<0.38 :	<3.8 :
Fluoranthene	mg/kg-dry	T		<0.37 :	0.038 J	-	<0.35 :	<0.38 J	<3.8 :

J = Qualified as estimated during data validation
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T = Total Fraction

Appendix A-7a
Soil - Biased 0-6 inches
Validated Analytical Results

Parameter	Units	Exposure Area Fraction	Site ID	MSS8-30	MSS8-31	MSS8-31	MSS8-32	MSS8-33	MSS8-34
			Sample Date	10/23/2002	10/23/2002	10/23/2002	10/23/2002	1/13/2003	1/13/2003
			Sample ID	MSS8-30-T01N-SOL	MSS8-31-T01N-SOL RE	MSS8-31-T01N-SOL	MSS8-32-T01N-SOL	MSS8-33-T01N-SOL	MSS8-34-T01N-SOL
			Exposure Area	SS8D	SS8D	SS8D	SS8D	SS8D	SS8D
Fluorene	mg/kg-dry	T		<0.37 :	<0.36 :	-	<0.35 :	<0.38 :	<3.8 :
Hexachlorobenzene	mg/kg-dry	T		<0.37 :	<0.36 :	-	<0.35 :	<0.38 :	<3.8 :
Hexachlorobutadiene	mg/kg-dry	T		<0.37 :	<0.36 :	-	<0.35 :	<0.38 :	<3.8 :
Hexachlorocyclopentadiene	mg/kg-dry	T		<0.37 :	<0.36 :	-	<0.35 :	<0.38 :	<3.8 :
Hexachloroethane	mg/kg-dry	T		<0.37 :	<0.36 :	-	<0.35 :	<0.38 :	<3.8 :
Indeno(1,2,3-cd)pyrene	mg/kg-dry	T		<0.37 :	<0.36 J	-	<0.35 :	<0.38 :	<3.8 :
Isophorone	mg/kg-dry	T		<0.37 :	<0.36 :	-	<0.35 :	<0.38 :	<3.8 :
Naphthalene	mg/kg-dry	T		<0.37 :	<0.36 :	-	<0.35 :	<0.38 :	<3.8 :
Nitrobenzene	mg/kg-dry	T		<0.37 :	<0.36 :	-	<0.35 :	<0.38 :	<3.8 :
N-Nitrosodi-n-propylamine	mg/kg-dry	T		<0.37 :	<0.36 :	-	<0.35 :	<0.38 :	<3.8 :
N-Nitrosodiphenylamine	mg/kg-dry	T		<0.37 :	<0.36 :	-	<0.35 :	<0.38 :	<3.8 :
Pentachlorophenol	mg/kg-dry	T		<0.94 :	<0.91 :	-	<0.87 :	<0.95 :	<9.6 :
Phenanthrene	mg/kg-dry	T		<0.37 :	0.048 J	-	<0.35 :	<0.38 :	0.19 J
Phenol	mg/kg-dry	T		<0.37 :	<0.36 :	-	<0.35 :	<0.38 :	<3.8 :
Pyrene	mg/kg-dry	T		<0.37 :	0.026 J	-	<0.35 :	<0.38 :	0.59 J
Pesticides-PCBs									
Aroclor 1016	mg/kg-dry	T		<0.037 J	-	<0.036 J	<0.035 J	<0.038 :	<0.038 :
Aroclor 1221	mg/kg-dry	T		<0.076 J	-	<0.074 J	<0.07 J	<0.077 :	<0.078 :
Aroclor 1232	mg/kg-dry	T		<0.037 J	-	<0.036 J	<0.035 J	<0.038 :	<0.038 :
Aroclor 1242	mg/kg-dry	T		<0.037 J	-	<0.036 J	<0.035 J	<0.038 :	<0.038 :
Aroclor 1248	mg/kg-dry	T		<0.037 J	-	0.067 J	<0.035 J	<0.038 :	<0.038 :
Aroclor 1254	mg/kg-dry	T		<0.037 J	-	<0.036 J	<0.035 J	<0.038 :	<0.038 :
Aroclor 1260	mg/kg-dry	T		0.047 J	-	<0.036 J	<0.035 J	<0.038 :	<0.038 :

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T = Total Fraction

Appendix A-7a
Soil - Biased 0-6 inches
Validated Analytical Results

Parameter	Units	Exposure Area Fraction	Site ID / Sample Date / Sample ID / Exposure Area											
			MSS8-34 1/14/2003 MSS8-34-T01N-SOL SS8D		MSS8-35 1/13/2003 MSS8-35-T01N-SOL SS8D		MSS8-35 1/15/2003 MSS8-35-T01N-SOL SS8D		MSS8-36 1/13/2003 MSS8-36-T01N-SOL SS8D		MSS8-36 1/15/2003 MSS8-36-T01N-SOL SS8D		MSS8-37 1/13/2003 MSS8-37-T01N-SOL SS8D	
General Chemistry														
Ammonia	mg/kg-dry	T	-		15.4	:	-		9.9	:	-		10.	:
Chloride	mg/kg-dry	T	-		5.5	:	-		22.2	J	-		<2.3	:
Fluoride	mg/kg-dry	T	-		0.43	J	-		0.3	J	-		1.5	J
Nitrate	mg/kg-dry	T	-		<2.4	J	-		<2.1	J	-		<2.3	J
Phosphorus	mg/kg-dry	T	-		1200.	:	-		1580.	:	-		854.	:
Sulfate	mg/kg-dry	T	-		854.	:	-		3960.	:	-		68.4	:
Total Kjeldahl Nitrogen	mg/kg-dry	T	-		374.	:	-		211.	:	-		148.	:
Total Organic Carbon	mg/kg-dry	T	-		25600.	J	-		12700.	J	-		5610.	J
Laboratory Parameters														
pH	SU	T	-		3.4	:	-		3.7	:	-		6.5	:
Solids, Percent	%	T	92.1	:	84.1	:	91.9	:	95.4	:	97.9	:	89.6	:
Specific Conductance	umhos/cm	T	-		882.	:	-		2210.	:	-		167.	:
Geotechnical														
Organic Soils	%	T	-		5.6	:	-		4.2	:	-		1.6	:
Physical Properties														
Cation-Exchange Capacity	meq/100g	T	-		17.	:	-		18.7	:	-		14.8	:
Sodium Absorption Ratio	ratio	T	-		0.55	:	-		0.02	:	-		<0.06	:
Metals														
Aluminum	mg/kg-dry	T	-		16600.	:	-		14700.	:	-		9780.	:
Antimony	mg/kg-dry	T	-		<0.3	J	-		<0.25	J	-		<0.25	J
Arsenic	mg/kg-dry	T	-		2.5	J	-		4.3	J	-		3.1	J
Barium	mg/kg-dry	T	-		262.	:	-		361.	:	-		302.	:
Beryllium	mg/kg-dry	T	-		0.49	:	-		0.76	:	-		0.63	:
Boron	mg/kg-dry	T	-		<0.3	J	-		<0.26	J	-		<0.28	J
Cadmium	mg/kg-dry	T	-		<0.045	J	-		<0.039	J	-		0.25	:
Calcium	mg/kg-dry	T	-		2330.	:	-		3250.	:	-		2430.	:
Chromium	mg/kg-dry	T	-		58.1	J	-		52.5	J	-		28.2	J
Cobalt	mg/kg-dry	T	-		7.1	:	-		9.5	:	-		7.1	J
Copper	mg/kg-dry	T	-		87.5	J	-		125.	J	-		76.3	J
Iron	mg/kg-dry	T	-		38400.	:	-		40200.	:	-		21700.	:
Lead	mg/kg-dry	T	-		101.	:	-		114.	:	-		60.3	:
Magnesium	mg/kg-dry	T	-		10700.	:	-		8580.	:	-		4890.	:
Manganese	mg/kg-dry	T	-		368.	:	-		341.	:	-		314.	:

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T = Total Fraction

Appendix A-7a
Soil - Biased 0-6 inches
Validated Analytical Results

Parameter	Units	Exposure Area Fraction	Site ID / Sample Date / Sample ID											
			MSS8-34	1/14/2003	MSS8-34-T01N-SOL	MSS8-35	1/13/2003	MSS8-35-T01N-SOL	MSS8-35	1/15/2003	MSS8-35-T01N-SOL	MSS8-36	1/13/2003	MSS8-36-T01N-SOL
			SS8D			SS8D			SS8D			SS8D		
Mercury	mg/kg-dry	T	-			<0.018	:		-			0.016	:	
Molybdenum	mg/kg-dry	T	-			71.7	:		-			213.	:	
Nickel	mg/kg-dry	T	-			29.1	:		-			27.5	:	
Potassium	mg/kg-dry	T	-			5850.	J		-			5170.	J	
Selenium	mg/kg-dry	T	-			2.5	J		-			2.6	J	
Silver	mg/kg-dry	T	-			0.47	:		-			0.63	:	
Sodium	mg/kg-dry	T	-			<313.	:		-			<269.	:	
Thallium	mg/kg-dry	T	-			0.77	:		-			0.64	:	
Vanadium	mg/kg-dry	T	-			57.3	:		-			46.2	:	
Zinc	mg/kg-dry	T	-			55.7	:		-			83.5	:	
Volatile Organics														
1,1,1-Trichloroethane	mg/kg-dry	T	<0.005	:		-			<0.01	J		-		
1,1,2,2-Tetrachloroethane	mg/kg-dry	T	<0.005	:		-			<0.01	J		-		
1,1,2-Trichloro-1,2,2-trifluoroethane	mg/kg-dry	T	<0.005	:		-			<0.01	J		-		
1,1,2-Trichloroethane	mg/kg-dry	T	<0.005	:		-			<0.01	J		-		
1,1-Dichloroethane	mg/kg-dry	T	<0.005	:		-			<0.01	J		-		
1,1-Dichloroethene	mg/kg-dry	T	<0.005	:		-			<0.01	J		-		
1,2,4-Trichlorobenzene	mg/kg-dry	T	<0.005	:		-			<0.01	J		-		
1,2-Dibromo-3-chloropropane	mg/kg-dry	T	<0.005	:		-			<0.01	J		-		
1,2-Dichlorobenzene	mg/kg-dry	T	<0.005	:		-			<0.01	J		-		
1,2-Dichloroethane	mg/kg-dry	T	<0.005	:		-			<0.01	J		-		
1,2-Dichloroethene (total)	mg/kg-dry	T	<0.005	:		-			<0.01	J		-		
1,2-Dichloropropane	mg/kg-dry	T	<0.005	:		-			<0.01	J		-		
1,3-Dichlorobenzene	mg/kg-dry	T	<0.005	:		-			<0.01	J		-		
1,4-Dichlorobenzene	mg/kg-dry	T	<0.005	:		-			<0.01	J		-		
2-Butanone	mg/kg-dry	T	0.001	J		-			0.011	J		-		
2-Hexanone	mg/kg-dry	T	<0.005	:		-			<0.01	J		-		
4-Methyl-2-pentanone	mg/kg-dry	T	<0.005	:		-			<0.01	J		-		
Acetone	mg/kg-dry	T	<0.01	:		-			0.03	J		-		
Benzene	mg/kg-dry	T	<0.005	:		-			<0.01	J		-		
Bromodichloromethane	mg/kg-dry	T	<0.005	:		-			<0.01	J		-		
Bromoform	mg/kg-dry	T	<0.005	:		-			<0.01	J		-		
Bromomethane	mg/kg-dry	T	<0.005	:		-			<0.01	J		-		
Carbon disulfide	mg/kg-dry	T	<0.005	:		-			<0.01	J		-		

Parameter	Units	Exposure Area Fraction	Site ID / Sample Date / Sample ID											
			MSS8-36	1/15/2003	MSS8-36-T01N-SOL	MSS8-37	1/13/2003	MSS8-37-T01N-SOL						
			SS8D			SS8D								
Mercury	mg/kg-dry	T	-			<0.018	:							
Molybdenum	mg/kg-dry	T	-			104.	:							
Nickel	mg/kg-dry	T	-			17.5	:							
Potassium	mg/kg-dry	T	-			2820.	J							
Selenium	mg/kg-dry	T	-			<0.68	J							
Silver	mg/kg-dry	T	-			0.19	:							
Sodium	mg/kg-dry	T	-			92.6	:							
Thallium	mg/kg-dry	T	-			0.18	:							
Vanadium	mg/kg-dry	T	-			29.3	:							
Zinc	mg/kg-dry	T	-			126.	:							
Volatile Organics														
1,1,1-Trichloroethane	mg/kg-dry	T	<0.006	:		-								
1,1,2,2-Tetrachloroethane	mg/kg-dry	T	<0.006	:		-								
1,1,2-Trichloro-1,2,2-trifluoroethane	mg/kg-dry	T	<0.006	:		-								
1,1,2-Trichloroethane	mg/kg-dry	T	<0.006	:		-								
1,1-Dichloroethane	mg/kg-dry	T	<0.006	:		-								
1,1-Dichloroethene	mg/kg-dry	T	<0.006	:		-								
1,2,4-Trichlorobenzene	mg/kg-dry	T	<0.006	:		-								
1,2-Dibromo-3-chloropropane	mg/kg-dry	T	<0.006	:		-								
1,2-Dichlorobenzene	mg/kg-dry	T	<0.006	:		-								
1,2-Dichloroethane	mg/kg-dry	T	<0.006	:		-								
1,2-Dichloroethene (total)	mg/kg-dry	T	<0.006	:		-								
1,2-Dichloropropane	mg/kg-dry	T	<0.006	:		-								
1,3-Dichlorobenzene	mg/kg-dry	T	<0.006	:		-								
1,4-Dichlorobenzene	mg/kg-dry	T	<0.006	:		-								
2-Butanone	mg/kg-dry	T	<0.006	:		-								
2-Hexanone	mg/kg-dry	T	<0.006	:		-								
4-Methyl-2-pentanone	mg/kg-dry	T	<0.006	:		-								
Acetone	mg/kg-dry	T	0.006	:		-								
Benzene	mg/kg-dry	T	<0.006	:		-								
Bromodichloromethane	mg/kg-dry	T	<0.006	:		-								
Bromoform	mg/kg-dry	T	<0.006	:		-								
Bromomethane	mg/kg-dry	T	<0.006	:		-								
Carbon disulfide	mg/kg-dry	T	0.001	J		-								

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R = Qualified as rejected value from data validation and results are considered unusable for any purpose
T = Total Fraction

Appendix A-7a
Soil - Biased 0-6 inches
Validated Analytical Results

Parameter	Units	Exposure Area Fraction	Site ID / Sample Date / Sample ID					
			MSS8-34 1/14/2003 MSS8-34-T01N-SOL	MSS8-35 1/13/2003 MSS8-35-T01N-SOL	MSS8-35 1/15/2003 MSS8-35-T01N-SOL	MSS8-36 1/13/2003 MSS8-36-T01N-SOL	MSS8-36 1/15/2003 MSS8-36-T01N-SOL	MSS8-37 1/13/2003 MSS8-37-T01N-SOL
			SS8D	SS8D	SS8D	SS8D	SS8D	SS8D
Carbon tetrachloride	mg/kg-dry	T	<0.005 :	-	<0.01 J	-	<0.006 :	-
Chlorobenzene	mg/kg-dry	T	<0.005 :	-	<0.01 J	-	<0.006 :	-
Chloroethane	mg/kg-dry	T	<0.005 :	-	<0.01 J	-	<0.006 :	-
Chloroform	mg/kg-dry	T	<0.005 :	-	<0.01 J	-	<0.006 :	-
Chloromethane	mg/kg-dry	T	<0.005 :	-	<0.01 J	-	<0.006 :	-
cis-1,2-Dichloroethene	mg/kg-dry	T	<0.005 :	-	<0.01 J	-	<0.006 :	-
cis-1,3-Dichloropropene	mg/kg-dry	T	<0.005 :	-	<0.01 J	-	<0.006 :	-
Dibromochloromethane	mg/kg-dry	T	<0.005 :	-	<0.01 J	-	<0.006 :	-
Dichlorodifluoromethane	mg/kg-dry	T	<0.005 :	-	<0.01 J	-	<0.006 :	-
Ethylbenzene	mg/kg-dry	T	0.0006 J	-	0.002 J	-	<0.006 :	-
Methylene chloride	mg/kg-dry	T	0.0006 J	-	<0.01 J	-	<0.006 :	-
Styrene	mg/kg-dry	T	<0.005 :	-	<0.01 J	-	<0.006 :	-
Tetrachloroethene	mg/kg-dry	T	<0.005 :	-	<0.01 J	-	<0.006 :	-
Toluene	mg/kg-dry	T	<0.005 :	-	0.001 J	-	<0.006 :	-
Total Xylene	mg/kg-dry	T	0.003 J	-	0.015 J	-	0.001 J	-
trans-1,2-Dichloroethene	mg/kg-dry	T	<0.005 :	-	<0.01 J	-	<0.006 :	-
trans-1,3-Dichloropropene	mg/kg-dry	T	<0.005 :	-	<0.01 J	-	<0.006 :	-
Trichloroethene	mg/kg-dry	T	<0.005 :	-	<0.01 J	-	<0.006 :	-
Trichlorofluoromethane	mg/kg-dry	T	<0.005 :	-	<0.01 J	-	<0.006 :	-
Vinyl chloride	mg/kg-dry	T	<0.005 :	-	<0.01 J	-	<0.006 :	-
Semi-Volatile Organics								
1,1`-Biphenyl	mg/kg-dry	T	-	<0.78 :	-	<0.35 :	-	<0.37 :
2,4,5-Trichlorophenol	mg/kg-dry	T	-	<2. :	-	<0.87 :	-	<0.92 :
2,4,6-Trichlorophenol	mg/kg-dry	T	-	<0.78 :	-	<0.35 :	-	<0.37 :
2,4-Dichlorophenol	mg/kg-dry	T	-	<0.78 :	-	<0.35 :	-	<0.37 :
2,4-Dimethylphenol	mg/kg-dry	T	-	<0.78 :	-	<0.35 :	-	<0.37 :
2,4-Dinitrophenol	mg/kg-dry	T	-	<2. J	-	<0.87 J	-	<0.92 :
2,4-Dinitrotoluene	mg/kg-dry	T	-	<0.78 :	-	<0.35 :	-	<0.37 :
2,6-Dinitrotoluene	mg/kg-dry	T	-	<0.78 :	-	<0.35 :	-	<0.37 :
2-Chloronaphthalene	mg/kg-dry	T	-	<0.78 :	-	<0.35 :	-	<0.37 :
2-Chlorophenol	mg/kg-dry	T	-	<0.78 :	-	<0.35 :	-	<0.37 :
2-Methylnaphthalene	mg/kg-dry	T	-	<0.78 :	-	<0.35 :	-	<0.37 :
2-Methylphenol	mg/kg-dry	T	-	<0.78 :	-	<0.35 :	-	<0.37 :
2-Nitroaniline	mg/kg-dry	T	-	<2. :	-	<0.87 :	-	<0.92 :

J = Qualified as estimated during data validation
R = Qualified as rejected value from data validation and results are considered unusable for any purpose
T = Total Fraction

Appendix A-7a
Soil - Biased 0-6 inches
Validated Analytical Results

Parameter	Units	Exposure Area Fraction	Site ID / Sample Date / Sample ID		Site ID / Sample Date / Sample ID		Site ID / Sample Date / Sample ID		Site ID / Sample Date / Sample ID		Site ID / Sample Date / Sample ID	
			MSS8-34 1/14/2003 MSS8-34-T01N-SOL		MSS8-35 1/13/2003 MSS8-35-T01N-SOL		MSS8-35 1/15/2003 MSS8-35-T01N-SOL		MSS8-36 1/13/2003 MSS8-36-T01N-SOL		MSS8-36 1/15/2003 MSS8-36-T01N-SOL		MSS8-37 1/13/2003 MSS8-37-T01N-SOL	
			SS8D		SS8D		SS8D		SS8D		SS8D		SS8D	
2-Nitrophenol	mg/kg-dry	T	-		<0.78	:	-		<0.35	:	-		<0.37	:
3,3-Dichlorobenzidine	mg/kg-dry	T	-		<0.78	:	-		<0.35	:	-		<0.37	:
3-Nitroaniline	mg/kg-dry	T	-		<2.	J	-		<0.87	J	-		<0.92	:
4,6-Dinitro-2-methylphenol	mg/kg-dry	T	-		<2.	:	-		<0.87	:	-		<0.92	:
4-Bromophenyl phenyl ether	mg/kg-dry	T	-		<0.78	:	-		<0.35	:	-		<0.37	:
4-Chloro-3-methylphenol	mg/kg-dry	T	-		<0.78	:	-		<0.35	:	-		<0.37	:
4-Chloroaniline	mg/kg-dry	T	-		<0.78	:	-		<0.35	:	-		<0.37	:
4-Chlorophenyl phenyl ether	mg/kg-dry	T	-		<0.78	:	-		<0.35	:	-		<0.37	:
4-Methylphenol	mg/kg-dry	T	-		<0.78	:	-		<0.35	:	-		<0.37	:
4-Nitroaniline	mg/kg-dry	T	-		<2.	:	-		<0.87	:	-		<0.92	:
4-Nitrophenol	mg/kg-dry	T	-		<2.	J	-		<0.87	J	-		<0.92	:
Acenaphthene	mg/kg-dry	T	-		<0.78	:	-		<0.35	:	-		<0.37	:
Acenaphthylene	mg/kg-dry	T	-		<0.78	:	-		<0.35	:	-		<0.37	:
Anthracene	mg/kg-dry	T	-		0.069	J	-		<0.35	:	-		<0.37	:
Benzaldehyde	mg/kg-dry	T	-		<0.78	:	-		<0.35	:	-		<0.37	:
Benzo(a)anthracene	mg/kg-dry	T	-		<0.78	:	-		<0.35	:	-		<0.37	:
Benzo(a)pyrene	mg/kg-dry	T	-		<0.78	:	-		<0.35	:	-		<0.37	:
Benzo(b)fluoranthene	mg/kg-dry	T	-		<0.78	:	-		<0.35	:	-		<0.37	:
Benzo(g,h,i)perylene	mg/kg-dry	T	-		<0.78	:	-		<0.35	:	-		<0.37	:
Benzo(k)fluoranthene	mg/kg-dry	T	-		<0.78	:	-		<0.35	:	-		<0.37	:
Bis(2-chloroethoxy)methane	mg/kg-dry	T	-		<0.78	:	-		<0.35	:	-		<0.37	:
Bis(2-chloroethyl)ether	mg/kg-dry	T	-		<0.78	:	-		<0.35	:	-		<0.37	:
Bis(2-ethylhexyl)phthalate	mg/kg-dry	T	-		0.71	J	-		0.054	J	-		0.026	J
Butyl benzyl phthalate	mg/kg-dry	T	-		<0.78	:	-		<0.35	:	-		<0.37	:
Carbazole	mg/kg-dry	T	-		<0.78	:	-		<0.35	:	-		<0.37	:
Chrysene	mg/kg-dry	T	-		0.56	J	-		<0.35	:	-		<0.37	:
Dibenz(a,h)anthracene	mg/kg-dry	T	-		<0.78	J	-		<0.35	J	-		<0.37	:
Dibenzofuran	mg/kg-dry	T	-		<0.78	:	-		<0.35	:	-		<0.37	:
Dichlorodiisopropyl ether	mg/kg-dry	T	-		<0.78	:	-		<0.35	:	-		<0.37	:
Diethylphthalate	mg/kg-dry	T	-		<0.78	:	-		<0.35	:	-		<0.37	:
Dimethylphthalate	mg/kg-dry	T	-		<0.78	:	-		<0.35	:	-		<0.37	:
Di-n-Butyl phthalate	mg/kg-dry	T	-		<0.78	:	-		<0.35	:	-		<0.37	:
Di-n-Octyl phthalate	mg/kg-dry	T	-		<0.78	:	-		<0.35	:	-		<0.37	:
Fluoranthene	mg/kg-dry	T	-		0.07	J	-		<0.35	J	-		<0.37	:

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T = Total Fraction

Appendix A-7a
Soil - Biased 0-6 inches
Validated Analytical Results

Parameter	Units	Exposure Area Fraction	Site ID / Sample Date / Sample ID											
			MSS8-34 1/14/2003 MSS8-34-T01N-SOL		MSS8-35 1/13/2003 MSS8-35-T01N-SOL		MSS8-35 1/15/2003 MSS8-35-T01N-SOL		MSS8-36 1/13/2003 MSS8-36-T01N-SOL		MSS8-36 1/15/2003 MSS8-36-T01N-SOL		MSS8-37 1/13/2003 MSS8-37-T01N-SOL	
			SS8D		SS8D		SS8D		SS8D		SS8D		SS8D	
Fluorene	mg/kg-dry	T	-		<0.78	:	-		<0.35	:	-		<0.37	:
Hexachlorobenzene	mg/kg-dry	T	-		<0.78	:	-		<0.35	:	-		<0.37	:
Hexachlorobutadiene	mg/kg-dry	T	-		<0.78	:	-		<0.35	:	-		<0.37	:
Hexachlorocyclopentadiene	mg/kg-dry	T	-		<0.78	:	-		<0.35	:	-		<0.37	:
Hexachloroethane	mg/kg-dry	T	-		<0.78	:	-		<0.35	:	-		<0.37	:
Indeno(1,2,3-cd)pyrene	mg/kg-dry	T	-		<0.78	:	-		<0.35	:	-		<0.37	:
Isophorone	mg/kg-dry	T	-		<0.78	:	-		<0.35	:	-		<0.37	:
Naphthalene	mg/kg-dry	T	-		<0.78	:	-		<0.35	:	-		<0.37	:
Nitrobenzene	mg/kg-dry	T	-		<0.78	:	-		<0.35	:	-		<0.37	:
N-Nitrosodi-n-propylamine	mg/kg-dry	T	-		<0.78	:	-		<0.35	:	-		<0.37	:
N-Nitrosodiphenylamine	mg/kg-dry	T	-		<0.78	:	-		<0.35	:	-		<0.37	:
Pentachlorophenol	mg/kg-dry	T	-		<2.	:	-		<0.87	:	-		<0.92	:
Phenanthrene	mg/kg-dry	T	-		0.14	J	-		<0.35	:	-		<0.37	:
Phenol	mg/kg-dry	T	-		<0.78	:	-		<0.35	:	-		<0.37	:
Pyrene	mg/kg-dry	T	-		0.36	J	-		<0.35	:	-		<0.37	:

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T = Total Fraction

Appendix A-7a
Soil - Biased 0-6 inches
Validated Analytical Results

Parameter	Units	Exposure Area Fraction	Site ID / Sample Date / Sample ID											
			MSS8-37		MSS8-38		MSS8-38		MSS8-39		MSS8-39		MSS8-4	
			1/15/2003		1/13/2003		1/15/2003		1/13/2003		1/15/2003		10/10/2002	
			MSS8-37-T01N-SOL		MSS8-38-T01N-SOL		MSS8-38-T01N-SOL		MSS8-39-T01N-SOL		MSS8-39-T01N-SOL		MSS8-4-T01N-SOL	
			SS8D		SS8D		SS8D		SS8D		SS8D		SS8A	
General Chemistry														
Ammonia	mg/kg-dry	T	-		9.5	:	-		14.7	:	-		86.4	:
Chloride	mg/kg-dry	T	-		<2.3	:	-		<2.3	:	-		<2.1	J
Fluoride	mg/kg-dry	T	-		0.74	J	-		4.	J	-		0.7	J
Nitrate	mg/kg-dry	T	-		<2.3	J	-		<2.3	J	-		<2.1	J
Phosphorus	mg/kg-dry	T	-		989.	:	-		1220.	:	-		422.	J
Sulfate	mg/kg-dry	T	-		121.	:	-		1020.	:	-		409.	J
Total Kjeldahl Nitrogen	mg/kg-dry	T	-		99.8	:	-		93.	:	-		80.5	J
Total Organic Carbon	mg/kg-dry	T	-		1380.	J	-		4710.	J	-		69000.	J
Laboratory Parameters														
pH	SU	T	-		6.5	:	-		6.5	:	-		7.1	:
Solids, Percent	%	T	93.1	:	90.5	:	91.7	:	89.8	:	96.4	:	97.5	:
Specific Conductance	umhos/cm	T	-		254.	:	-		1620.	:	-		781.	:
Geotechnical														
Organic Soils	%	T	-		1.9	:	-		1.8	:	-		7.32	J
Physical Properties														
Cation-Exchange Capacity	meq/100g	T	-		16.2	:	-		16.4	:	-		7.9	:
Sodium Absorption Ratio	ratio	T	-		0.28	:	-		0.1	:	-		0.38	:
Metals														
Aluminum	mg/kg-dry	T	-		10200.	:	-		13300.	:	-		-	
Antimony	mg/kg-dry	T	-		<0.25	J	-		<0.26	J	-		-	
Arsenic	mg/kg-dry	T	-		4.	J	-		5.7	J	-		-	
Barium	mg/kg-dry	T	-		374.	:	-		246.	:	-		-	
Beryllium	mg/kg-dry	T	-		0.53	:	-		0.7	:	-		-	
Boron	mg/kg-dry	T	-		<0.26	J	-		1.6	J	-		-	
Cadmium	mg/kg-dry	T	-		<0.039	J	-		0.93	:	-		-	
Calcium	mg/kg-dry	T	-		1580.	:	-		8680.	:	-		-	
Chromium	mg/kg-dry	T	-		23.6	J	-		42.2	J	-		-	
Cobalt	mg/kg-dry	T	-		6.6	:	-		10.5	:	-		-	
Copper	mg/kg-dry	T	-		37.8	J	-		86.9	J	-		-	
Iron	mg/kg-dry	T	-		21100.	:	-		28400.	:	-		-	
Lead	mg/kg-dry	T	-		37.3	:	-		74.4	:	-		-	
Magnesium	mg/kg-dry	T	-		4140.	:	-		8440.	:	-		-	
Manganese	mg/kg-dry	T	-		265.	:	-		583.	:	-		-	

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Appendix A-7a
Soil - Biased 0-6 inches
Validated Analytical Results

Parameter	Units	Exposure Area Fraction	Site ID / Sample Date / Sample ID					
			MSS8-37 1/15/2003 MSS8-37-T01N-SOL	MSS8-38 1/13/2003 MSS8-38-T01N-SOL	MSS8-38 1/15/2003 MSS8-38-T01N-SOL	MSS8-39 1/13/2003 MSS8-39-T01N-SOL	MSS8-39 1/15/2003 MSS8-39-T01N-SOL	MSS8-4 10/10/2002 MSS8-4-T01N-SOL
			SS8D	SS8D	SS8D	SS8D	SS8D	SS8A
Mercury	mg/kg-dry	T	-	<0.018 :	-	<0.017 :	-	-
Molybdenum	mg/kg-dry	T	-	45.3 :	-	111. :	-	-
Nickel	mg/kg-dry	T	-	11.3 :	-	30.2 :	-	-
Potassium	mg/kg-dry	T	-	2560. J	-	5510. J	-	-
Selenium	mg/kg-dry	T	-	<0.67 J	-	<0.69 J	-	-
Silver	mg/kg-dry	T	-	0.31 :	-	0.48 :	-	-
Sodium	mg/kg-dry	T	-	176. :	-	136. :	-	-
Thallium	mg/kg-dry	T	-	0.51 :	-	0.41 :	-	-
Vanadium	mg/kg-dry	T	-	24.1 :	-	46.6 :	-	-
Zinc	mg/kg-dry	T	-	36.5 :	-	233. :	-	-
Volatile Organics								
1,1,1-Trichloroethane	mg/kg-dry	T	<0.008 :	-	<0.006 :	-	<0.006 :	-
1,1,2,2-Tetrachloroethane	mg/kg-dry	T	<0.008 :	-	<0.006 :	-	<0.006 :	-
1,1,2-Trichloro-1,2,2-trifluoroethane	mg/kg-dry	T	<0.008 :	-	<0.006 :	-	<0.006 :	-
1,1,2-Trichloroethane	mg/kg-dry	T	<0.008 :	-	<0.006 :	-	<0.006 :	-
1,1-Dichloroethane	mg/kg-dry	T	<0.008 :	-	<0.006 :	-	<0.006 :	-
1,1-Dichloroethene	mg/kg-dry	T	<0.008 :	-	<0.006 :	-	<0.006 :	-
1,2,4-Trichlorobenzene	mg/kg-dry	T	<0.008 :	-	<0.006 :	-	<0.006 :	-
1,2-Dibromo-3-chloropropane	mg/kg-dry	T	<0.008 :	-	<0.006 :	-	<0.006 :	-
1,2-Dichlorobenzene	mg/kg-dry	T	<0.008 :	-	<0.006 :	-	<0.006 :	-
1,2-Dichloroethane	mg/kg-dry	T	<0.008 :	-	<0.006 :	-	<0.006 :	-
1,2-Dichloroethene (total)	mg/kg-dry	T	<0.008 :	-	<0.006 :	-	<0.006 :	-
1,2-Dichloropropane	mg/kg-dry	T	<0.008 :	-	<0.006 :	-	<0.006 :	-
1,3-Dichlorobenzene	mg/kg-dry	T	<0.008 :	-	<0.006 :	-	<0.006 :	-
1,4-Dichlorobenzene	mg/kg-dry	T	<0.008 :	-	<0.006 :	-	<0.006 :	-
2-Butanone	mg/kg-dry	T	<0.008 :	-	<0.006 :	-	<0.006 :	-
2-Hexanone	mg/kg-dry	T	<0.008 :	-	<0.006 :	-	<0.006 :	-
4-Methyl-2-pentanone	mg/kg-dry	T	<0.008 :	-	<0.006 :	-	<0.006 :	-
Acetone	mg/kg-dry	T	<0.008 :	-	0.001 J	-	<0.006 :	-
Benzene	mg/kg-dry	T	<0.008 :	-	<0.006 :	-	<0.006 :	-
Bromodichloromethane	mg/kg-dry	T	<0.008 :	-	<0.006 :	-	<0.006 :	-
Bromoform	mg/kg-dry	T	<0.008 :	-	<0.006 :	-	<0.006 :	-
Bromomethane	mg/kg-dry	T	<0.008 :	-	<0.006 :	-	<0.006 :	-
Carbon disulfide	mg/kg-dry	T	<0.008 :	-	<0.006 :	-	<0.006 :	-

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Appendix A-7a
Soil - Biased 0-6 inches
Validated Analytical Results

Parameter	Units	Exposure Area Fraction	Site ID / Sample Date / Sample ID					
			MSS8-37 1/15/2003 MSS8-37-T01N-SOL	MSS8-38 1/13/2003 MSS8-38-T01N-SOL	MSS8-38 1/15/2003 MSS8-38-T01N-SOL	MSS8-39 1/13/2003 MSS8-39-T01N-SOL	MSS8-39 1/15/2003 MSS8-39-T01N-SOL	MSS8-4 10/10/2002 MSS8-4-T01N-SOL
			SS8D	SS8D	SS8D	SS8D	SS8D	SS8A
Carbon tetrachloride	mg/kg-dry	T	<0.008 :	-	<0.006 :	-	<0.006 :	-
Chlorobenzene	mg/kg-dry	T	<0.008 :	-	<0.006 :	-	<0.006 :	-
Chloroethane	mg/kg-dry	T	<0.008 :	-	<0.006 :	-	<0.006 :	-
Chloroform	mg/kg-dry	T	<0.008 :	-	<0.006 :	-	<0.006 :	-
Chloromethane	mg/kg-dry	T	<0.008 :	-	<0.006 :	-	<0.006 :	-
cis-1,2-Dichloroethene	mg/kg-dry	T	<0.008 :	-	<0.006 :	-	<0.006 :	-
cis-1,3-Dichloropropene	mg/kg-dry	T	<0.008 :	-	<0.006 :	-	<0.006 :	-
Dibromochloromethane	mg/kg-dry	T	<0.008 :	-	<0.006 :	-	<0.006 :	-
Dichlorodifluoromethane	mg/kg-dry	T	<0.008 :	-	<0.006 :	-	<0.006 :	-
Ethylbenzene	mg/kg-dry	T	<0.008 :	-	<0.006 :	-	<0.006 :	-
Methylene chloride	mg/kg-dry	T	<0.008 :	-	<0.006 :	-	<0.006 :	-
Styrene	mg/kg-dry	T	<0.008 :	-	<0.006 :	-	<0.006 :	-
Tetrachloroethene	mg/kg-dry	T	<0.008 :	-	<0.006 :	-	<0.006 :	-
Toluene	mg/kg-dry	T	<0.008 :	-	<0.006 :	-	<0.006 :	-
Total Xylene	mg/kg-dry	T	0.002 J	-	0.0007 J	-	<0.006 :	-
trans-1,2-Dichloroethene	mg/kg-dry	T	<0.008 :	-	<0.006 :	-	<0.006 :	-
trans-1,3-Dichloropropene	mg/kg-dry	T	<0.008 :	-	<0.006 :	-	<0.006 :	-
Trichloroethene	mg/kg-dry	T	<0.008 :	-	<0.006 :	-	<0.006 :	-
Trichlorofluoromethane	mg/kg-dry	T	<0.008 :	-	<0.006 :	-	<0.006 :	-
Vinyl chloride	mg/kg-dry	T	<0.008 :	-	<0.006 :	-	<0.006 :	-
Semi-Volatile Organics								
1,1`-Biphenyl	mg/kg-dry	T	-	<0.37 :	-	<0.37 :	-	<3.4 :
2,4,5-Trichlorophenol	mg/kg-dry	T	-	<0.92 :	-	<0.92 :	-	<8.4 :
2,4,6-Trichlorophenol	mg/kg-dry	T	-	<0.37 :	-	<0.37 :	-	<3.4 :
2,4-Dichlorophenol	mg/kg-dry	T	-	<0.37 :	-	<0.37 :	-	<3.4 :
2,4-Dimethylphenol	mg/kg-dry	T	-	<0.37 :	-	<0.37 :	-	<3.4 :
2,4-Dinitrophenol	mg/kg-dry	T	-	<0.92 :	-	<0.92 :	-	<8.4 J
2,4-Dinitrotoluene	mg/kg-dry	T	-	<0.37 :	-	<0.37 :	-	<3.4 :
2,6-Dinitrotoluene	mg/kg-dry	T	-	<0.37 :	-	<0.37 :	-	<3.4 :
2-Chloronaphthalene	mg/kg-dry	T	-	<0.37 :	-	<0.37 :	-	<3.4 :
2-Chlorophenol	mg/kg-dry	T	-	<0.37 :	-	<0.37 :	-	<3.4 :
2-Methylnaphthalene	mg/kg-dry	T	-	<0.37 :	-	<0.37 :	-	<3.4 :
2-Methylphenol	mg/kg-dry	T	-	<0.37 :	-	<0.37 :	-	<3.4 :
2-Nitroaniline	mg/kg-dry	T	-	<0.92 :	-	<0.92 :	-	<8.4 :

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Appendix A-7a
Soil - Biased 0-6 inches
Validated Analytical Results

Parameter	Units	Exposure Area Fraction	Site ID / Sample Date / Sample ID											
			MSS8-37	1/15/2003	MSS8-37-T01N-SOL	MSS8-38	1/13/2003	MSS8-38-T01N-SOL	MSS8-38	1/15/2003	MSS8-38-T01N-SOL	MSS8-39	1/13/2003	MSS8-39-T01N-SOL
			SS8D			SS8D			SS8D			SS8D		
2-Nitrophenol	mg/kg-dry	T	-			<0.37	:		-			<0.37	:	
3,3-Dichlorobenzidine	mg/kg-dry	T	-			<0.37	:		-			<0.37	:	
3-Nitroaniline	mg/kg-dry	T	-			<0.92	:		-			<0.92	:	
4,6-Dinitro-2-methylphenol	mg/kg-dry	T	-			<0.92	:		-			<0.92	:	
4-Bromophenyl phenyl ether	mg/kg-dry	T	-			<0.37	:		-			<0.37	:	
4-Chloro-3-methylphenol	mg/kg-dry	T	-			<0.37	:		-			<0.37	:	
4-Chloroaniline	mg/kg-dry	T	-			<0.37	:		-			<0.37	:	
4-Chlorophenyl phenyl ether	mg/kg-dry	T	-			<0.37	:		-			<0.37	:	
4-Methylphenol	mg/kg-dry	T	-			<0.37	:		-			<0.37	:	
4-Nitroaniline	mg/kg-dry	T	-			<0.92	:		-			<0.92	:	
4-Nitrophenol	mg/kg-dry	T	-			<0.92	:		-			<0.92	:	
Acenaphthene	mg/kg-dry	T	-			<0.37	:		-			<0.37	:	
Acenaphthylene	mg/kg-dry	T	-			<0.37	:		-			<0.37	:	
Anthracene	mg/kg-dry	T	-			<0.37	:		-			<0.37	:	
Benzaldehyde	mg/kg-dry	T	-			<0.37	J		-			<0.37	J	
Benzo(a)anthracene	mg/kg-dry	T	-			<0.37	:		-			<0.37	:	
Benzo(a)pyrene	mg/kg-dry	T	-			<0.37	:		-			<0.37	:	
Benzo(b)fluoranthene	mg/kg-dry	T	-			<0.37	:		-			<0.37	:	
Benzo(g,h,i)perylene	mg/kg-dry	T	-			<0.37	:		-			<0.37	:	
Benzo(k)fluoranthene	mg/kg-dry	T	-			<0.37	:		-			<0.37	:	
Bis(2-chloroethoxy)methane	mg/kg-dry	T	-			<0.37	:		-			<0.37	:	
Bis(2-chloroethyl)ether	mg/kg-dry	T	-			<0.37	:		-			<0.37	:	
Bis(2-ethylhexyl)phthalate	mg/kg-dry	T	-			0.036	J		-			0.028	J	
Butyl benzyl phthalate	mg/kg-dry	T	-			<0.37	:		-			<0.37	:	
Carbazole	mg/kg-dry	T	-			<0.37	:		-			<0.37	:	
Chrysene	mg/kg-dry	T	-			<0.37	:		-			<0.37	:	
Dibenz(a,h)anthracene	mg/kg-dry	T	-			<0.37	:		-			<0.37	:	
Dibenzofuran	mg/kg-dry	T	-			<0.37	:		-			<0.37	:	
Dichlorodiisopropyl ether	mg/kg-dry	T	-			<0.37	:		-			<0.37	:	
Diethylphthalate	mg/kg-dry	T	-			<0.37	:		-			<0.37	:	
Dimethylphthalate	mg/kg-dry	T	-			<0.37	:		-			<0.37	:	
Di-n-Butyl phthalate	mg/kg-dry	T	-			<0.37	:		-			<0.37	:	
Di-n-Octyl phthalate	mg/kg-dry	T	-			<0.37	:		-			<0.37	:	
Fluoranthene	mg/kg-dry	T	-			<0.37	:		-			<0.37	:	

Parameter	Units	Exposure Area Fraction	Site ID / Sample Date / Sample ID											
			MSS8-39	1/15/2003	MSS8-39-T01N-SOL	MSS8-4	10/10/2002	MSS8-4-T01N-SOL						
			SS8D			SS8A								
2-Nitrophenol	mg/kg-dry	T	-			<3.4	:							
3,3-Dichlorobenzidine	mg/kg-dry	T	-			<3.4	:							
3-Nitroaniline	mg/kg-dry	T	-			<8.4	:							
4,6-Dinitro-2-methylphenol	mg/kg-dry	T	-			<8.4	:							
4-Bromophenyl phenyl ether	mg/kg-dry	T	-			<3.4	:							
4-Chloro-3-methylphenol	mg/kg-dry	T	-			<3.4	:							
4-Chloroaniline	mg/kg-dry	T	-			<3.4	:							
4-Chlorophenyl phenyl ether	mg/kg-dry	T	-			<3.4	:							
4-Methylphenol	mg/kg-dry	T	-			<3.4	:							
4-Nitroaniline	mg/kg-dry	T	-			<8.4	:							
4-Nitrophenol	mg/kg-dry	T	-			<8.4	J							
Acenaphthene	mg/kg-dry	T	-			<3.4	:							
Acenaphthylene	mg/kg-dry	T	-			<3.4	:							
Anthracene	mg/kg-dry	T	-			<3.4	:							
Benzaldehyde	mg/kg-dry	T	-			<3.4	J							
Benzo(a)anthracene	mg/kg-dry	T	-			<3.4	:							
Benzo(a)pyrene	mg/kg-dry	T	-			<3.4	:							
Benzo(b)fluoranthene	mg/kg-dry	T	-			<3.4	:							
Benzo(g,h,i)perylene	mg/kg-dry	T	-			<3.4	:							
Benzo(k)fluoranthene	mg/kg-dry	T	-			<3.4	J							
Bis(2-chloroethoxy)methane	mg/kg-dry	T	-			<3.4	:							
Bis(2-chloroethyl)ether	mg/kg-dry	T	-			<3.4	:							
Bis(2-ethylhexyl)phthalate	mg/kg-dry	T	-			<3.4	:							
Butyl benzyl phthalate	mg/kg-dry	T	-			<3.4	:							
Carbazole	mg/kg-dry	T	-			<3.4	:							
Chrysene	mg/kg-dry	T	-			<3.4	:							
Dibenz(a,h)anthracene	mg/kg-dry	T	-			<3.4	:							
Dibenzofuran	mg/kg-dry	T	-			<3.4	:							
Dichlorodiisopropyl ether	mg/kg-dry	T	-			<3.4	:							
Diethylphthalate	mg/kg-dry	T	-			<3.4	:							
Dimethylphthalate	mg/kg-dry	T	-			<3.4	:							
Di-n-Butyl phthalate	mg/kg-dry	T	-			<3.4	:							
Di-n-Octyl phthalate	mg/kg-dry	T	-			<3.4	:							
Fluoranthene	mg/kg-dry	T	-			<3.4	:							

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Appendix A-7a
Soil - Biased 0-6 inches
Validated Analytical Results

Parameter	Units	Exposure Area Fraction	Site ID / Sample Date / Sample ID					
			MSS8-37 1/15/2003 MSS8-37-T01N-SOL	MSS8-38 1/13/2003 MSS8-38-T01N-SOL	MSS8-38 1/15/2003 MSS8-38-T01N-SOL	MSS8-39 1/13/2003 MSS8-39-T01N-SOL	MSS8-39 1/15/2003 MSS8-39-T01N-SOL	MSS8-4 10/10/2002 MSS8-4-T01N-SOL
			SS8D	SS8D	SS8D	SS8D	SS8D	SS8A
Fluorene	mg/kg-dry	T	-	<0.37 :	-	<0.37 :	-	<3.4 :
Hexachlorobenzene	mg/kg-dry	T	-	<0.37 :	-	<0.37 :	-	<3.4 :
Hexachlorobutadiene	mg/kg-dry	T	-	<0.37 :	-	<0.37 :	-	<3.4 :
Hexachlorocyclopentadiene	mg/kg-dry	T	-	<0.37 :	-	<0.37 :	-	<3.4 :
Hexachloroethane	mg/kg-dry	T	-	<0.37 :	-	<0.37 :	-	<3.4 :
Indeno(1,2,3-cd)pyrene	mg/kg-dry	T	-	<0.37 :	-	<0.37 :	-	<3.4 :
Isophorone	mg/kg-dry	T	-	<0.37 :	-	<0.37 :	-	<3.4 :
Naphthalene	mg/kg-dry	T	-	<0.37 :	-	<0.37 :	-	<3.4 :
Nitrobenzene	mg/kg-dry	T	-	<0.37 :	-	<0.37 :	-	<3.4 :
N-Nitrosodi-n-propylamine	mg/kg-dry	T	-	<0.37 :	-	<0.37 :	-	<3.4 :
N-Nitrosodiphenylamine	mg/kg-dry	T	-	<0.37 :	-	<0.37 :	-	<3.4 :
Pentachlorophenol	mg/kg-dry	T	-	<0.92 :	-	<0.92 :	-	<8.4 J
Phenanthrene	mg/kg-dry	T	-	<0.37 :	-	<0.37 :	-	<3.4 :
Phenol	mg/kg-dry	T	-	<0.37 :	-	<0.37 :	-	<3.4 :
Pyrene	mg/kg-dry	T	-	<0.37 :	-	<0.37 :	-	<3.4 :
Explosives								
2,4,6-Trinitrotoluene	mg/kg-dry	T	-	-	-	-	-	<0.12 :
2,6-Pyridinediamine,	mg/kg-dry	T	-	-	-	-	-	<0.12 :
Cyclotetramethylenetetranitramine	mg/kg-dry	T	-	-	-	-	-	<0.12 :
Cyclotrimethylenetrinitramine	mg/kg-dry	T	-	-	-	-	-	<0.12 :
Pentaerythritol tetranitrate	mg/kg-dry	T	-	-	-	-	-	<5. :

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Appendix A-7a
Soil - Biased 0-6 inches
Validated Analytical Results

Parameter	Units	Fraction	MSS8-40		MSS8-41		MSS8-42		MSS8-43		MSS8-44		MSS8-45	
Sample Date			1/13/2003		1/13/2003		1/13/2003		1/15/2003		1/13/2003		1/13/2003	
Sample ID			MSS8-40-T01N-SOL		MSS8-41-T01N-SOL		MSS8-42-T01N-SOL		MSS8-43-T01N-SOL		MSS8-44-T01N-SOL		MSS8-45-T01N-SOL	
Exposure Area			SS8D		SS8D		SS8D		SS8D		SS8D		SS8D	
General Chemistry														
Ammonia	mg/kg-dry	T	13.9	:	11.4	:	12.3	:	43.1	:	9.7	:	13.5	:
Chloride	mg/kg-dry	T	22.2	:	84.9	:	3.5	:	3.8	:	41.9	J	5.2	:
Fluoride	mg/kg-dry	T	98.5	J	1.2	J	5.9	J	4.4	J	1.5	J	0.97	J
Nitrate	mg/kg-dry	T	<2.2	J	<2.2	J	<2.2	J	<2.2	J	<2.3	J	<2.4	J
Phosphorus	mg/kg-dry	T	1440.	:	1390.	:	13.2	:	2540.	:	1520.	:	1770.	:
Sulfate	mg/kg-dry	T	3980.	:	634.	:	1900.	:	500.	J	7510.	:	8570.	:
Total Kjeldahl Nitrogen	mg/kg-dry	T	142.	:	109.	:	99.	:	428.	:	73.1	:	78.	:
Total Organic Carbon	mg/kg-dry	T	4050.	J	10100.	J	3210.	J	1670.	J	5290.	J	590.	J
Laboratory Parameters														
pH	SU	T	4.5	:	6.6	:	6.3	:	6.2	:	4.2	:	3.9	:
Solids, Percent	%	T	93.9	:	92.1	:	92.	:	93.9	:	88.7	:	86.	:
Specific Conductance	umhos/cm	T	2770.	:	1660.	:	1680.	:	1280.	J	2260.	:	1670.	:
Geotechnical														
Organic Soils	%	T	2.6	:	2.7	:	2.8	:	3.5	:	3.9	:	3.2	:
Physical Properties														
Cation-Exchange Capacity	meq/100g	T	18.8	:	14.	:	17.	:	14.7	:	17.4	:	17.9	:
Sodium Absorption Ratio	ratio	T	0.09	:	0.59	:	0.1	:	0.03	:	0.06	:	0.07	:
Metals														
Aluminum	mg/kg-dry	T	15000.	:	15400.	:	15500.	:	16700.	:	18800.	:	19900.	:
Antimony	mg/kg-dry	T	<0.26	J	<0.27	J	<0.24	J	<0.3	J	<0.28	J	<0.26	J
Arsenic	mg/kg-dry	T	2.2	J	6.1	J	3.4	J	5.5	J	2.4	J	1.3	J
Barium	mg/kg-dry	T	280.	:	337.	:	160.	:	236.	:	167.	:	181.	:
Beryllium	mg/kg-dry	T	0.77	:	0.93	:	1.	:	1.4	:	1.3	:	0.76	:
Boron	mg/kg-dry	T	<0.26	J	1.6	J	<0.27	J	3.8	:	<0.27	J	<0.27	J
Cadmium	mg/kg-dry	T	<0.038	J	<0.041	J	0.5	J	0.74	:	<0.04	J	<0.04	J
Calcium	mg/kg-dry	T	3660.	:	10200.	:	7700.	:	10600.	:	16500.	:	20500.	:
Chromium	mg/kg-dry	T	33.9	J	37.9	J	45.2	J	48.5	J	69.8	J	88.7	J
Cobalt	mg/kg-dry	T	14.6	:	15.4	:	15.2	:	23.1	:	22.	:	7.4	:
Copper	mg/kg-dry	T	101.	J	132.	J	262.	J	243.	J	174.	J	114.	J
Iron	mg/kg-dry	T	28800.	:	35900.	:	35300.	:	37400.	:	43600.	:	49000.	:
Lead	mg/kg-dry	T	63.3	:	77.6	:	133.	:	179.	:	138.	:	159.	:
Magnesium	mg/kg-dry	T	7620.	:	8050.	:	7450.	:	11400.	:	12500.	:	15200.	:
Manganese	mg/kg-dry	T	360.	:	511.	:	406.	:	1080.	:	667.	:	783.	:

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Appendix A-7a
Soil - Biased 0-6 inches
Validated Analytical Results

Parameter	Units	Exposure Area Fraction	Site ID / Sample Date / Sample ID		MSS8-40 1/13/2003 MSS8-40-T01N-SOL SS8D		MSS8-41 1/13/2003 MSS8-41-T01N-SOL SS8D		MSS8-42 1/13/2003 MSS8-42-T01N-SOL SS8D		MSS8-43 1/15/2003 MSS8-43-T01N-SOL SS8D		MSS8-44 1/13/2003 MSS8-44-T01N-SOL SS8D		MSS8-45 1/13/2003 MSS8-45-T01N-SOL SS8D	
Mercury	mg/kg-dry	T		<0.016	:	<0.017	:	<0.018	:	<0.017	:	<0.018	:	<0.019	:
Molybdenum	mg/kg-dry	T		105.	:	78.9	:	107.	:	70.2	:	94.7	:	31.5	:
Nickel	mg/kg-dry	T		32.2	:	28.1	:	24.6	:	39.3	:	45.	:	37.	:
Potassium	mg/kg-dry	T		4920.	J	4780.	J	4750.	J	4410.	J	6490.	J	8170.	J
Selenium	mg/kg-dry	T		0.76	J	2.	J	1.7	J	1.	J	2.6	J	2.9	J
Silver	mg/kg-dry	T		<0.15	:	0.73	:	0.76	:	0.63	J	1.	:	1.3	:
Sodium	mg/kg-dry	T		142.	:	<338.	:	<103.	:	<83.9	:	<112.	:	<183.	:
Thallium	mg/kg-dry	T		0.43	:	0.46	:	0.61	:	0.74	:	0.86	:	1.1	:
Vanadium	mg/kg-dry	T		40.7	:	40.3	:	36.8	:	44.6	:	52.4	:	67.4	:
Zinc	mg/kg-dry	T		89.4	:	98.	:	199.	:	137.	:	176.	:	96.9	:
Volatile Organics															
1,1,1-Trichloroethane	mg/kg-dry	T		-		<0.83	:	<0.01	:	-		<0.01	:	<0.012	:
1,1,2,2-Tetrachloroethane	mg/kg-dry	T		-		<0.83	:	<0.01	:	-		<0.01	:	<0.012	:
1,1,2-Trichloro-1,2,2-trifluoroethane	mg/kg-dry	T		-		<0.83	:	<0.01	:	-		<0.01	:	<0.012	:
1,1,2-Trichloroethane	mg/kg-dry	T		-		<0.83	:	<0.01	:	-		<0.01	:	<0.012	:
1,1-Dichloroethane	mg/kg-dry	T		-		<0.83	:	<0.01	:	-		<0.01	:	<0.012	:
1,1-Dichloroethene	mg/kg-dry	T		-		<0.83	:	<0.01	:	-		<0.01	:	<0.012	:
1,2,4-Trichlorobenzene	mg/kg-dry	T		-		<0.83	:	<0.01	:	-		<0.01	:	<0.012	:
1,2-Dibromo-3-chloropropane	mg/kg-dry	T		-		<0.83	:	<0.01	:	-		<0.01	:	<0.012	:
1,2-Dichlorobenzene	mg/kg-dry	T		-		<0.83	:	<0.01	:	-		<0.01	:	<0.012	:
1,2-Dichloroethane	mg/kg-dry	T		-		<0.83	:	<0.01	:	-		<0.01	:	<0.012	:
1,2-Dichloroethene (total)	mg/kg-dry	T		-		<0.83	:	<0.01	:	-		<0.01	:	<0.012	:
1,2-Dichloropropane	mg/kg-dry	T		-		<0.83	:	<0.01	:	-		<0.01	:	<0.012	:
1,3-Dichlorobenzene	mg/kg-dry	T		-		<0.83	:	<0.01	:	-		<0.01	:	<0.012	:
1,4-Dichlorobenzene	mg/kg-dry	T		-		<0.83	:	<0.01	:	-		<0.01	:	<0.012	:
2-Butanone	mg/kg-dry	T		-		<0.83	:	0.001	J	-		<0.01	:	<0.012	:
2-Hexanone	mg/kg-dry	T		-		<0.83	:	<0.01	:	-		<0.01	:	<0.012	:
4-Methyl-2-pentanone	mg/kg-dry	T		-		<0.83	:	<0.01	:	-		<0.01	:	<0.012	:
Acetone	mg/kg-dry	T		-		<0.83	:	<0.027	:	<0.01	J	<0.018	:	<0.012	:
Benzene	mg/kg-dry	T		-		<0.83	:	<0.01	:	-		<0.01	:	<0.012	:
Bromodichloromethane	mg/kg-dry	T		-		<0.83	:	<0.01	:	-		<0.01	:	<0.012	:
Bromoform	mg/kg-dry	T		-		<0.83	:	<0.01	:	-		<0.01	:	<0.012	:
Bromomethane	mg/kg-dry	T		-		<0.83	:	<0.01	:	-		<0.01	:	<0.012	:
Carbon disulfide	mg/kg-dry	T		-		<0.83	:	0.002	J	<0.01	J	0.002	J	<0.012	:

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Appendix A-7a
Soil - Biased 0-6 inches
Validated Analytical Results

Parameter	Units	Exposure Area Fraction	Site ID		Sample Date		Sample ID		Exposure Area	
			MSS8-40		1/13/2003		MSS8-40-T01N-SOL		SS8D	
Carbon tetrachloride	mg/kg-dry	T	-		<0.83	:	<0.01	:	-	
Chlorobenzene	mg/kg-dry	T	-		<0.83	:	<0.01	:	-	
Chloroethane	mg/kg-dry	T	-		<0.83	:	<0.01	:	-	
Chloroform	mg/kg-dry	T	-		<0.83	:	<0.01	:	-	
Chloromethane	mg/kg-dry	T	-		<0.83	:	<0.01	:	-	
cis-1,2-Dichloroethene	mg/kg-dry	T	-		<0.83	:	<0.01	:	-	
cis-1,3-Dichloropropene	mg/kg-dry	T	-		<0.83	:	<0.01	:	-	
Dibromochloromethane	mg/kg-dry	T	-		<0.83	:	<0.01	:	-	
Dichlorodifluoromethane	mg/kg-dry	T	-		<0.83	:	<0.01	:	-	
Ethylbenzene	mg/kg-dry	T	-		0.76	J	0.002	J	-	
Methylene chloride	mg/kg-dry	T	-		<0.83	:	<0.01	:	-	
Styrene	mg/kg-dry	T	-		<0.83	:	<0.01	:	-	
Tetrachloroethene	mg/kg-dry	T	-		<0.83	:	<0.01	:	-	
Toluene	mg/kg-dry	T	-		<0.83	:	<0.01	:	-	
Total Xylene	mg/kg-dry	T	-		0.6	J	0.022	:	0.002	J
trans-1,2-Dichloroethene	mg/kg-dry	T	-		<0.83	:	<0.01	:	-	
trans-1,3-Dichloropropene	mg/kg-dry	T	-		<0.83	:	<0.01	:	-	
Trichloroethene	mg/kg-dry	T	-		<0.83	:	<0.01	:	-	
Trichlorofluoromethane	mg/kg-dry	T	-		<0.83	:	<0.01	:	-	
Vinyl chloride	mg/kg-dry	T	-		<0.83	:	<0.01	:	-	
Semi-Volatile Organics										
1,1`-Biphenyl	mg/kg-dry	T	<0.35	:	1.3	J	<0.72	:	<0.35	:
2,4,5-Trichlorophenol	mg/kg-dry	T	<0.88	:	<9.	:	<1.8	:	<0.88	:
2,4,6-Trichlorophenol	mg/kg-dry	T	<0.35	:	<3.6	:	<0.72	:	<0.35	:
2,4-Dichlorophenol	mg/kg-dry	T	<0.35	:	<3.6	:	<0.72	:	<0.35	:
2,4-Dimethylphenol	mg/kg-dry	T	<0.35	:	<3.6	:	<0.72	:	<0.35	:
2,4-Dinitrophenol	mg/kg-dry	T	<0.88	:	<9.	J	<1.8	:	<0.88	:
2,4-Dinitrotoluene	mg/kg-dry	T	<0.35	:	<3.6	:	<0.72	:	<0.35	:
2,6-Dinitrotoluene	mg/kg-dry	T	<0.35	:	<3.6	:	<0.72	:	<0.35	:
2-Chloronaphthalene	mg/kg-dry	T	<0.35	:	<3.6	:	<0.72	:	<0.35	:
2-Chlorophenol	mg/kg-dry	T	<0.35	:	<3.6	:	<0.72	:	<0.35	:
2-Methylnaphthalene	mg/kg-dry	T	<0.35	:	15.	:	<0.72	:	<0.35	:
2-Methylphenol	mg/kg-dry	T	<0.35	:	<3.6	:	<0.72	:	<0.35	:
2-Nitroaniline	mg/kg-dry	T	<0.88	:	<9.	:	<1.8	:	<0.88	:

Parameter	Units	Exposure Area Fraction	Site ID		Sample Date		Sample ID		Exposure Area	
			MSS8-41		1/13/2003		MSS8-41-T01N-SOL		SS8D	
Carbon tetrachloride	mg/kg-dry	T	<0.83	:						
Chlorobenzene	mg/kg-dry	T	<0.83	:						
Chloroethane	mg/kg-dry	T	<0.83	:						
Chloroform	mg/kg-dry	T	<0.83	:						
Chloromethane	mg/kg-dry	T	<0.83	:						
cis-1,2-Dichloroethene	mg/kg-dry	T	<0.83	:						
cis-1,3-Dichloropropene	mg/kg-dry	T	<0.83	:						
Dibromochloromethane	mg/kg-dry	T	<0.83	:						
Dichlorodifluoromethane	mg/kg-dry	T	<0.83	:						
Ethylbenzene	mg/kg-dry	T	0.76	J						
Methylene chloride	mg/kg-dry	T	<0.83	:						
Styrene	mg/kg-dry	T	<0.83	:						
Tetrachloroethene	mg/kg-dry	T	<0.83	:						
Toluene	mg/kg-dry	T	<0.83	:						
Total Xylene	mg/kg-dry	T	0.6	J						
trans-1,2-Dichloroethene	mg/kg-dry	T	<0.83	:						
trans-1,3-Dichloropropene	mg/kg-dry	T	<0.83	:						
Trichloroethene	mg/kg-dry	T	<0.83	:						
Trichlorofluoromethane	mg/kg-dry	T	<0.83	:						
Vinyl chloride	mg/kg-dry	T	<0.83	:						
Semi-Volatile Organics										
1,1`-Biphenyl	mg/kg-dry	T	1.3	J						
2,4,5-Trichlorophenol	mg/kg-dry	T	<9.	:						
2,4,6-Trichlorophenol	mg/kg-dry	T	<3.6	:						
2,4-Dichlorophenol	mg/kg-dry	T	<3.6	:						
2,4-Dimethylphenol	mg/kg-dry	T	<3.6	:						
2,4-Dinitrophenol	mg/kg-dry	T	<9.	J						
2,4-Dinitrotoluene	mg/kg-dry	T	<3.6	:						
2,6-Dinitrotoluene	mg/kg-dry	T	<3.6	:						
2-Chloronaphthalene	mg/kg-dry	T	<3.6	:						
2-Chlorophenol	mg/kg-dry	T	<3.6	:						
2-Methylnaphthalene	mg/kg-dry	T	15.	:						
2-Methylphenol	mg/kg-dry	T	<3.6	:						
2-Nitroaniline	mg/kg-dry	T	<9.	:						

Parameter	Units	Exposure Area Fraction	Site ID		Sample Date		Sample ID		Exposure Area	
			MSS8-42		1/13/2003		MSS8-42-T01N-SOL		SS8D	
Carbon tetrachloride	mg/kg-dry	T	<0.01	:						
Chlorobenzene	mg/kg-dry	T	<0.01	:						
Chloroethane	mg/kg-dry	T	<0.01	:						
Chloroform	mg/kg-dry	T	<0.01	:						
Chloromethane	mg/kg-dry	T	<0.01	:						
cis-1,2-Dichloroethene	mg/kg-dry	T	<0.01	:						
cis-1,3-Dichloropropene	mg/kg-dry	T	<0.01	:						
Dibromochloromethane	mg/kg-dry	T	<0.01	:						
Dichlorodifluoromethane	mg/kg-dry	T	<0.01	:						
Ethylbenzene	mg/kg-dry	T	0.002	J						
Methylene chloride	mg/kg-dry	T	<0.01	:						
Styrene	mg/kg-dry	T	<0.01	:						
Tetrachloroethene	mg/kg-dry	T	<0.01	:						
Toluene	mg/kg-dry	T	<0.01	:						
Total Xylene	mg/kg-dry	T	0.022	:						
trans-1,2-Dichloroethene	mg/kg-dry	T	<0.01	:						
trans-1,3-Dichloropropene	mg/kg-dry	T	<0.01	:						
Trichloroethene	mg/kg-dry	T	<0.01	:						
Trichlorofluoromethane	mg/kg-dry	T	<0.01	:						
Vinyl chloride	mg/kg-dry	T	<0.01	:						
Semi-Volatile Organics										
1,1`-Biphenyl	mg/kg-dry	T	<0.72	:						
2,4,5-Trichlorophenol	mg/kg-dry	T	<1.8	:						
2,4,6-Trichlorophenol	mg/kg-dry	T	<0.72	:						
2,4-Dichlorophenol	mg/kg-dry	T	<0.72	:						
2,4-Dimethylphenol	mg/kg-dry	T	<0.72	:						
2,4-Dinitrophenol	mg/kg-dry	T	<1.8	:						
2,4-Dinitrotoluene	mg/kg-dry	T	<0.72	:						
2,6-Dinitrotoluene	mg/kg-dry	T	<0.72	:						
2-Chloronaphthalene	mg/kg-dry	T	<0.72	:						
2-Chlorophenol	mg/kg-dry	T	<0.72	:						
2-Methylnaphthalene	mg/kg-dry	T	<0.72	:						
2-Methylphenol	mg/kg-dry	T	<0.72	:						
2-Nitroaniline	mg/kg-dry	T	<1.8	:						

Parameter	Units	Exposure Area Fraction	Site ID		Sample Date		Sample ID		Exposure Area	
			MSS8-43		1/15/2003		MSS8-43-T01N-SOL		SS8D	
Carbon tetrachloride	mg/kg-dry	T	-							
Chlorobenzene	mg/kg-dry	T	-							
Chloroethane	mg/kg-dry	T	-							
Chloroform	mg/kg-dry	T	-							
Chloromethane	mg/kg-dry	T	-							
cis-1,2-Dichloroethene	mg/kg-dry	T	-							
cis-1,3-Dichloropropene	mg/kg-dry	T	-							
Dibromochloromethane	mg/kg-dry	T	-							
Dichlorodifluoromethane	mg/kg-dry	T	-							
Ethylbenzene	mg/kg-dry	T	-							
Methylene chloride	mg/kg-dry	T	-							
Styrene	mg/kg-dry	T	-							
Tetrachloroethene	mg/kg-dry	T	-							
Toluene	mg/kg-dry	T	-							
Total Xylene	mg/kg-dry	T	0.002	J						
trans-1,2-Dichloroethene	mg/kg-dry	T	-							
trans-1,3-Dichloropropene	mg/kg-dry	T	-							
Trichloroethene	mg/kg-dry	T	-							
Trichlorofluoromethane	mg/kg-dry	T	-							
Vinyl chloride	mg/kg-dry	T	-							
Semi-Volatile Organics										
1,1`-Biphenyl	mg/kg-dry	T	<0.35	:						
2,4,5-Trichlorophenol	mg/kg-dry	T	<0.88	:						
2,4,6-Trichlorophenol	mg/kg-dry	T	<0.35	:						
2,4-Dichlorophenol	mg/kg-dry	T	<0.35	:						
2,4-Dimethylphenol	mg/kg-dry	T	<0.35	:						
2,4-Dinitrophenol	mg/kg-dry	T	<0.88	:						
2,4-Dinitrotoluene	mg/kg-dry	T	<0.35	:						
2,6-Dinitrotoluene	mg/kg-dry	T	<0.35	:						
2-Chloronaphthalene	mg/kg-dry	T	<0.35	:						
2-Chlorophenol	mg/kg-dry	T	<0.35	:						
2-Methylnaphthalene	mg/kg-dry	T	<0.35	:						
2-Methylphenol	mg/kg-dry	T	<0.35	:						
2-Nitroaniline	mg/kg-dry	T	<0.88	:						

Parameter	Units	Exposure Area Fraction	Site ID		Sample Date		Sample ID		Exposure Area	
			MSS8-44		1/13/2003		MSS8-44-T01N-SOL		SS8D	
Carbon tetrachloride	mg/kg-dry	T	<0.01	:						
Chlorobenzene	mg/kg-dry	T	<0.01	:						
Chloroethane	mg/kg-dry	T	<0.01	:						
Chloroform	mg/kg-dry	T	<0.01	:						
Chloromethane	mg/kg-dry	T	<0.01	:						
cis-1,2-Dichloroethene	mg/kg-dry	T	<0.01	:						
cis-1,3-Dichloropropene	mg/kg-dry	T	<0.01	:						
Dibromochloromethane	mg/kg-dry	T	<0.01	:						
Dichlorodifluoromethane	mg/kg-dry	T	<0.01	:						
Ethylbenzene	mg/kg-dry	T	0.002	J						
Methylene chloride	mg/kg-dry	T	<0.01	:						
Styrene	mg/kg-dry	T	<0.01	:						
Tetrachloroethene	mg/kg-dry	T	<0.01	:						
Toluene	mg/kg-dry	T	<0.01	:						
Total Xylene	mg/kg-dry	T	0.012	:						
trans-1,2-Dichloroethene	mg/kg-dry	T	<0.01	:						
trans-1,3-Dichloropropene	mg/kg-dry	T	<0.01	:						
Trichloroethene	mg/kg-dry	T	<0.01	:						
Trichlorofluoromethane	mg/kg-dry	T	<0.01	:						
Vinyl chloride	mg/kg-dry	T	<0.01	:						
Semi-Volatile Organics										
1,1`-Biphenyl	mg/kg-dry	T	<0.37	:						
2,4,5-Trichlorophenol	mg/kg-dry	T	<0.93	:						
2,4,6-Trichlorophenol	mg/kg-dry	T	<0.37	:						
2,4-Dichlorophenol	mg/kg-dry	T	<0.37	:						
2,4-Dimethylphenol	mg/kg-dry	T	<0.37	:						
2,4-Dinitrophenol	mg/kg-dry	T	<0.93	J						
2,4-Dinitrotoluene	mg/kg-dry	T	<0.37	:						
2,6-Dinitrotoluene	mg/kg-dry	T	<0.37	:						
2-Chloronaphthalene	mg/kg-dry	T	<0.37	:						
2-Chlorophenol	mg/kg-dry	T	<0.37	:						
2-Methylnaphthalene	mg/kg-dry	T	<0.37	:						
2-Methylphenol	mg/kg-dry	T	<0.37	:						
2-Nitroaniline	mg/kg-dry	T	<0.93	:						

Parameter	Units	Exposure Area Fraction	Site ID		Sample Date		Sample ID		Exposure Area	
			MSS8-45		1/13/2003		MSS8-45-T01N-SOL		SS8D	
Carbon tetrachloride	mg/kg-dry	T	<0.012	:						
Chlorobenzene	mg/kg-dry	T	<0.012	:						
Chloroethane	mg/kg-dry	T	<0.012	:						
Chloroform	mg/kg-dry	T	<0.012	:						
Chloromethane	mg/kg-dry	T	<0.012	:						
cis-1,2-Dichloroethene	mg/kg-dry	T	<0.012	:						
cis-1,3-Dichloropropene	mg/kg-dry	T	<0.012	:						
Dibromochloromethane	mg/kg-dry	T	<0.012	:						
Dichlorodifluoromethane	mg/kg-dry	T	<0.012	:						
Ethylbenzene	mg/kg-dry	T	0.003	J						
Methylene chloride	mg/kg-dry	T	<0.012	:						
Styrene	mg/kg-dry	T	<0.012	:						
Tetrachloroethene	mg/kg-dry	T	<0.012	:						
Toluene	mg/kg-dry	T	<0.012	:						
Total Xylene	mg/kg-dry	T	0.013	:						
trans-1,2-Dichloroethene	mg/kg-dry	T	<0.012	:						
trans-1,3-Dichloropropene	mg/kg-dry	T	<0.012	:						
Trichloroethene	mg/kg-dry	T	<0.012	:						
Trichlorofluoromethane	mg/kg-dry	T	<0.012	:						
Vinyl chloride	mg/kg-dry	T	<0.012	:						
Semi-Volatile Organics										
1,1`-Biphenyl	mg/kg-dry	T	<0.38	:						
2,4,5-Trichlorophenol	mg/kg-dry	T	<0.96	:						
2,4,6-Trichlorophenol	mg/kg-dry	T	<0.38	:						
2,4-Dichlorophenol	mg/kg-dry	T	<0.38	:						
2,4-Dimethylphenol	mg/kg-dry	T	<0.38	:						
2,4-Dinitrophenol	mg/kg-dry	T	<0.96	J						
2,4-Dinitrotoluene	mg/kg-dry	T	<0.38	:						
2,6-Dinitrotoluene	mg/kg-dry	T	<0.38	:						
2-Chloronaphthalene	mg/kg-dry	T	<0.38	:						
2-Chlorophenol	mg/kg-dry	T	<0.38	:						
2-Methylnaphthalene	mg/kg-dry	T	<0.38	:						
2-Methylphenol	mg/kg-dry	T	<0.38	:						
2-Nitroaniline	mg/kg-dry	T	<0.96	:						

J = Qualified as estimated during data validation
R = Qualified as rejected value from data validation and results are considered unusable for any purpose
T = Total Fraction

Appendix A-7a
Soil - Biased 0-6 inches
Validated Analytical Results

Parameter	Units	Exposure Area Fraction	Site ID / Sample Date / Sample ID		MSS8-40 1/13/2003 MSS8-40-T01N-SOL SS8D		MSS8-41 1/13/2003 MSS8-41-T01N-SOL SS8D		MSS8-42 1/13/2003 MSS8-42-T01N-SOL SS8D		MSS8-43 1/15/2003 MSS8-43-T01N-SOL SS8D		MSS8-44 1/13/2003 MSS8-44-T01N-SOL SS8D		MSS8-45 1/13/2003 MSS8-45-T01N-SOL SS8D	
2-Nitrophenol	mg/kg-dry	T			<0.35	:	<3.6	:	<0.72	:	<0.35	:	<0.37	:	<0.38	:
3,3-Dichlorobenzidine	mg/kg-dry	T			<0.35	:	<3.6	:	<0.72	:	<0.35	J	<0.37	:	<0.38	:
3-Nitroaniline	mg/kg-dry	T			<0.88	:	<9.	J	<1.8	:	<0.88	J	<0.93	:	<0.96	J
4,6-Dinitro-2-methylphenol	mg/kg-dry	T			<0.88	:	<9.	:	<1.8	:	<0.88	:	<0.93	J	<0.96	:
4-Bromophenyl phenyl ether	mg/kg-dry	T			<0.35	:	<3.6	:	<0.72	:	<0.35	:	<0.37	:	<0.38	:
4-Chloro-3-methylphenol	mg/kg-dry	T			<0.35	:	<3.6	:	<0.72	:	<0.35	:	<0.37	:	<0.38	:
4-Chloroaniline	mg/kg-dry	T			<0.35	:	<3.6	:	<0.72	:	<0.35	J	<0.37	J	<0.38	:
4-Chlorophenyl phenyl ether	mg/kg-dry	T			<0.35	:	<3.6	:	<0.72	:	<0.35	:	<0.37	:	<0.38	:
4-Methylphenol	mg/kg-dry	T			<0.35	:	<3.6	:	<0.72	:	<0.35	:	<0.37	:	<0.38	:
4-Nitroaniline	mg/kg-dry	T			<0.88	:	<9.	:	<1.8	:	<0.88	J	<0.93	:	<0.96	:
4-Nitrophenol	mg/kg-dry	T			<0.88	:	<9.	J	<1.8	:	<0.88	:	<0.93	:	<0.96	J
Acenaphthene	mg/kg-dry	T			<0.35	:	0.68	J	<0.72	:	<0.35	:	<0.37	:	<0.38	:
Acenaphthylene	mg/kg-dry	T			<0.35	:	<3.6	:	<0.72	:	<0.35	:	<0.37	:	<0.38	:
Anthracene	mg/kg-dry	T			<0.35	:	<3.6	:	<0.72	:	<0.35	:	<0.37	:	<0.38	:
Benzaldehyde	mg/kg-dry	T			<0.35	J	<3.6	:	<0.72	:	<0.35	:	<0.37	:	<0.38	:
Benzo(a)anthracene	mg/kg-dry	T			<0.35	:	<3.6	:	<0.72	:	<0.35	J	<0.37	:	<0.38	:
Benzo(a)pyrene	mg/kg-dry	T			<0.35	:	<3.6	:	<0.72	:	<0.35	:	<0.37	:	<0.38	:
Benzo(b)fluoranthene	mg/kg-dry	T			<0.35	:	<3.6	:	<0.72	:	<0.35	:	<0.37	:	<0.38	:
Benzo(g,h,i)perylene	mg/kg-dry	T			<0.35	:	<3.6	:	<0.72	J	<0.35	:	<0.37	:	<0.38	:
Benzo(k)fluoranthene	mg/kg-dry	T			<0.35	:	<3.6	:	<0.72	:	<0.35	:	<0.37	:	<0.38	:
Bis(2-chloroethoxy)methane	mg/kg-dry	T			<0.35	:	<3.6	:	<0.72	:	<0.35	:	<0.37	:	<0.38	:
Bis(2-chloroethyl)ether	mg/kg-dry	T			<0.35	:	<3.6	:	<0.72	:	<0.35	:	<0.37	:	<0.38	:
Bis(2-ethylhexyl)phthalate	mg/kg-dry	T			0.12	J	0.17	J	0.086	J	0.7	J	0.096	J	0.032	J
Butyl benzyl phthalate	mg/kg-dry	T			<0.35	:	<3.6	:	<0.72	:	<0.35	J	<0.37	:	<0.38	:
Carbazole	mg/kg-dry	T			<0.35	:	<3.6	:	<0.72	:	<0.35	:	<0.37	:	<0.38	:
Chrysene	mg/kg-dry	T			<0.35	:	<3.6	:	0.042	J	<0.35	J	0.019	J	<0.38	:
Dibenz(a,h)anthracene	mg/kg-dry	T			<0.35	:	<3.6	J	<0.72	J	<0.35	:	<0.37	J	<0.38	J
Dibenzofuran	mg/kg-dry	T			<0.35	:	1.2	J	<0.72	:	<0.35	:	<0.37	:	<0.38	:
Dichlorodiisopropyl ether	mg/kg-dry	T			<0.35	:	<3.6	:	<0.72	:	<0.35	:	<0.37	:	<0.38	:
Diethylphthalate	mg/kg-dry	T			<0.35	:	<3.6	:	<0.72	:	<0.35	:	<0.37	:	<0.38	:
Dimethylphthalate	mg/kg-dry	T			<0.35	:	<3.6	:	<0.72	:	<0.35	:	<0.37	:	<0.38	:
Di-n-Butyl phthalate	mg/kg-dry	T			<0.35	:	<3.6	:	<0.72	:	<0.35	:	0.027	J	<0.38	:
Di-n-Octyl phthalate	mg/kg-dry	T			<0.35	:	<3.6	:	<0.72	:	<0.35	:	<0.37	:	<0.38	:
Fluoranthene	mg/kg-dry	T			<0.35	:	<3.6	J	<0.72	:	0.045	J	<0.37	:	<0.38	J

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Appendix A-7a
Soil - Biased 0-6 inches
Validated Analytical Results

Parameter	Units	Exposure Area Fraction	Site ID / Sample Date / Sample ID		MSS8-40 1/13/2003 MSS8-40-T01N-SOL SS8D		MSS8-41 1/13/2003 MSS8-41-T01N-SOL SS8D		MSS8-42 1/13/2003 MSS8-42-T01N-SOL SS8D		MSS8-43 1/15/2003 MSS8-43-T01N-SOL SS8D		MSS8-44 1/13/2003 MSS8-44-T01N-SOL SS8D		MSS8-45 1/13/2003 MSS8-45-T01N-SOL SS8D	
Fluorene	mg/kg-dry	T			<0.35	:	1.8	J	<0.72	:	<0.35	:	<0.37	:	<0.38	:
Hexachlorobenzene	mg/kg-dry	T			<0.35	:	<3.6	:	<0.72	:	<0.35	:	<0.37	:	<0.38	:
Hexachlorobutadiene	mg/kg-dry	T			<0.35	:	<3.6	:	<0.72	:	<0.35	:	<0.37	:	<0.38	:
Hexachlorocyclopentadiene	mg/kg-dry	T			<0.35	:	<3.6	:	<0.72	:	<0.35	:	<0.37	:	<0.38	:
Hexachloroethane	mg/kg-dry	T			<0.35	:	<3.6	:	<0.72	:	<0.35	:	<0.37	:	<0.38	:
Indeno(1,2,3-cd)pyrene	mg/kg-dry	T			<0.35	:	<3.6	:	<0.72	J	<0.35	:	<0.37	J	<0.38	:
Isophorone	mg/kg-dry	T			<0.35	:	<3.6	:	<0.72	:	<0.35	:	<0.37	:	<0.38	:
Naphthalene	mg/kg-dry	T			<0.35	:	3.6	:	<0.72	:	<0.35	:	<0.37	:	<0.38	:
Nitrobenzene	mg/kg-dry	T			<0.35	:	<3.6	:	<0.72	:	<0.35	:	<0.37	:	<0.38	:
N-Nitrosodi-n-propylamine	mg/kg-dry	T			<0.35	:	<3.6	:	<0.72	:	<0.35	:	<0.37	:	<0.38	:
N-Nitrosodiphenylamine	mg/kg-dry	T			<0.35	:	<3.6	:	<0.72	:	<0.35	:	<0.37	:	<0.38	:
Pentachlorophenol	mg/kg-dry	T			<0.88	:	<9.	:	<1.8	:	<0.88	:	<0.93	J	<0.96	:
Phenanthrene	mg/kg-dry	T			<0.35	:	3.2	J	<0.72	:	<0.35	:	<0.37	:	<0.38	:
Phenol	mg/kg-dry	T			<0.35	:	<3.6	:	<0.72	:	<0.35	:	<0.37	:	<0.38	:
Pyrene	mg/kg-dry	T			<0.35	:	<3.6	:	<0.72	:	<0.35	J	<0.37	:	<0.38	:
Pesticides-PCBs																
Aroclor 1016	mg/kg-dry	T			-		<0.036	:	<0.036	:	-		-		-	
Aroclor 1221	mg/kg-dry	T			-		<0.073	:	<0.073	:	-		-		-	
Aroclor 1232	mg/kg-dry	T			-		<0.036	:	<0.036	:	-		-		-	
Aroclor 1242	mg/kg-dry	T			-		<0.036	:	<0.036	:	-		-		-	
Aroclor 1248	mg/kg-dry	T			-		<0.036	:	<0.036	:	-		-		-	
Aroclor 1254	mg/kg-dry	T			-		<0.036	:	<0.036	:	-		-		-	
Aroclor 1260	mg/kg-dry	T			-		0.23	:	<0.036	:	-		-		-	

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Appendix A-7a
Soil - Biased 0-6 inches
Validated Analytical Results

Parameter	Units	Fraction	MSS8-46		MSS8-47		MSS8-48		MSS8-49		MSS8-49		MSS8-5	
Sample Date			1/13/2003		1/15/2003		1/15/2003		1/13/2003		7/20/2003		10/10/2002	
Sample ID			MSS8-46-T01N-SOL		MSS8-47-T01N-SOL		MSS8-48-T01N-SOL		MSS8-49-T01N-SOL		MSS8-49R2-T01N-SOL		MSS8-5-T01N-SOL	
Exposure Area			SS8D		SS8D		SS8D		SS8D		SS8D		SS8A	
General Chemistry														
Ammonia	mg/kg-dry	T	14.8	:	256.	:	22.3	:	12.5	:	-		16.9	:
Chloride	mg/kg-dry	T	8.5	:	5.5	:	3.5	:	<2.3	:	-		<2.1	J
Fluoride	mg/kg-dry	T	9.4	J	0.4	J	3.3	J	1.1	J	-		0.72	J
Nitrate	mg/kg-dry	T	<2.1	J	3.	J	<2.2	J	<2.3	J	-		<2.1	J
Phosphorus	mg/kg-dry	T	1590.	:	2320.	:	1580.	:	2390.	:	-		423.	J
Sulfate	mg/kg-dry	T	1370.	:	128.	:	315.	:	485.	:	-		250.	J
Total Kjeldahl Nitrogen	mg/kg-dry	T	186.	:	702.	:	171.	:	61.5	:	-		157.	J
Total Organic Carbon	mg/kg-dry	T	8180.	J	8830.	J	2400.	J	3360.	J	-		63500.	J
Laboratory Parameters														
pH	SU	T	4.8	:	4.6	:	5.	:	6.1	:	-		7.4	:
Solids, Percent	%	T	95.5	:	87.6	:	91.3	:	87.1	:	94.6	:	96.8	:
Specific Conductance	umhos/cm	T	1150.	:	205.	J	523.	J	785.	:	-		131.	J
Geotechnical														
Organic Soils	%	T	3.5	:	4.5	:	2.5	:	2.5	:	-		7.3	J
Physical Properties														
Cation-Exchange Capacity	meq/100g	T	19.	:	17.2	:	14.6	:	18.2	:	-		6.9	:
Sodium Absorption Ratio	ratio	T	0.07	:	0.4	:	0.17	:	0.26	:	-		0.11	:
Metals														
Aluminum	mg/kg-dry	T	18500.	:	16900.	:	14400.	:	21000.	:	-		-	
Antimony	mg/kg-dry	T	<0.24	J	<0.3	J	<0.31	J	<0.28	J	-		-	
Arsenic	mg/kg-dry	T	5.8	J	3.7	J	3.3	J	0.98	J	-		-	
Barium	mg/kg-dry	T	679.	:	234.	:	228.	:	258.	:	-		-	
Beryllium	mg/kg-dry	T	1.5	:	0.6	:	0.92	:	2.1	:	-		-	
Boron	mg/kg-dry	T	0.92	J	3.1	J	<0.23	J	<0.26	J	-		-	
Cadmium	mg/kg-dry	T	0.47	J	<0.036	:	0.39	:	<0.038	J	-		-	
Calcium	mg/kg-dry	T	8920.	:	1610.	:	3260.	:	2940.	:	-		-	
Chromium	mg/kg-dry	T	82.2	J	51.3	J	57.3	J	72.1	J	-		-	
Cobalt	mg/kg-dry	T	29.9	:	4.9	:	8.9	:	6.9	:	-		-	
Copper	mg/kg-dry	T	5870.	J	173.	J	167.	J	527.	J	-		-	
Iron	mg/kg-dry	T	73500.	:	43400.	:	33800.	:	58400.	:	-		-	
Lead	mg/kg-dry	T	516.	:	132.	:	86.5	:	27.4	:	-		-	
Magnesium	mg/kg-dry	T	10800.	:	8760.	:	7250.	:	10900.	:	-		-	
Manganese	mg/kg-dry	T	1340.	:	336.	:	584.	:	458.	:	-		-	

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T = Total Fraction

Appendix A-7a
Soil - Biased 0-6 inches
Validated Analytical Results

Parameter	Units	Exposure Area Fraction	Site ID		Sample Date		Sample ID		Exposure Area		Site ID		Sample Date		Sample ID		Exposure Area		Site ID		Sample Date		Sample ID		Exposure Area		Site ID		Sample Date		Sample ID		Exposure Area	
			MSS8-46		1/13/2003		MSS8-46-T01N-SOL		SS8D		MSS8-47		1/15/2003		MSS8-47-T01N-SOL		SS8D		MSS8-48		1/15/2003		MSS8-48-T01N-SOL		SS8D		MSS8-49		1/13/2003		MSS8-49-T01N-SOL		SS8D	
Mercury	mg/kg-dry	T	0.035	:							0.058	:							<0.018	:							<0.019	:				
Molybdenum	mg/kg-dry	T	408.	:							133.	:							604.	:							72.5	:				
Nickel	mg/kg-dry	T	46.9	:							25.4	:							45.9	:							37.8	:				
Potassium	mg/kg-dry	T	5860.	J							5850.	J							3810.	J							6530.	J				
Selenium	mg/kg-dry	T	3.7	J							<0.8	J							<0.83	J							2.9	J				
Silver	mg/kg-dry	T	9.6	:							1.3	:							0.61	:							0.61	:				
Sodium	mg/kg-dry	T	<58.4	:							<205.	:							<85.5	:							<31.3	:				
Thallium	mg/kg-dry	T	0.78	:							0.81	:							0.57	:							0.97	:				
Vanadium	mg/kg-dry	T	62.7	:							45.6	:							36.2	:							51.2	:				
Zinc	mg/kg-dry	T	247.	:							117.	:							237.	:							89.1	:				
Volatile Organics																																
1,1,1-Trichloroethane	mg/kg-dry	T	<0.006	:							<0.007	:							<0.009	:							-					
1,1,2,2-Tetrachloroethane	mg/kg-dry	T	<0.006	:							<0.007	:							<0.009	:							-					
1,1,2-Trichloro-1,2,2-trifluoroethane	mg/kg-dry	T	<0.006	:							<0.007	:							<0.009	:							-					
1,1,2-Trichloroethane	mg/kg-dry	T	<0.006	:							<0.007	:							<0.009	:							-					
1,1-Dichloroethane	mg/kg-dry	T	<0.006	:							<0.007	:							<0.009	:							-					
1,1-Dichloroethene	mg/kg-dry	T	<0.006	:							<0.007	:							<0.009	:							-					
1,2,4-Trichlorobenzene	mg/kg-dry	T	<0.006	:							<0.007	:							<0.009	:							-					
1,2-Dibromo-3-chloropropane	mg/kg-dry	T	<0.006	:							<0.007	:							<0.009	:							-					
1,2-Dichlorobenzene	mg/kg-dry	T	<0.006	:							<0.007	:							<0.009	:							-					
1,2-Dichloroethane	mg/kg-dry	T	<0.006	:							<0.007	:							<0.009	:							-					
1,2-Dichloroethene (total)	mg/kg-dry	T	<0.006	:							<0.007	:							<0.009	:							-					
1,2-Dichloropropane	mg/kg-dry	T	<0.006	:							<0.007	:							<0.009	:							-					
1,3-Dichlorobenzene	mg/kg-dry	T	<0.006	:							<0.007	:							<0.009	:							-					
1,4-Dichlorobenzene	mg/kg-dry	T	<0.006	:							<0.007	:							<0.009	:							-					
2-Butanone	mg/kg-dry	T	<0.006	:							0.003	J							<0.009	:							-					
2-Hexanone	mg/kg-dry	T	<0.006	:							<0.007	:							<0.009	:							-					
4-Methyl-2-pentanone	mg/kg-dry	T	<0.006	:							<0.007	:							<0.009	:							-					
Acetone	mg/kg-dry	T	<0.006	:							<0.007	:							0.015	:							-					
Benzene	mg/kg-dry	T	<0.006	:							<0.007	:							<0.009	:							-					
Bromodichloromethane	mg/kg-dry	T	<0.006	:							<0.007	:							<0.009	:							-					
Bromoform	mg/kg-dry	T	<0.006	:							<0.007	:							<0.009	:							-					
Bromomethane	mg/kg-dry	T	<0.006	:							<0.007	:							<0.009	:							-					
Carbon disulfide	mg/kg-dry	T	<0.006	:							<0.007	:							<0.009	:							-					

Parameter	Units	Exposure Area Fraction	Site ID		Sample Date		Sample ID		Exposure Area		Site ID		Sample Date		Sample ID		Exposure Area	
			MSS8-49		7/20/2003		MSS8-49R2-T01N-SOL		SS8D		MSS8-5		10/10/2002		MSS8-5-T01N-SOL		SS8A	
Mercury	mg/kg-dry	T	-								-							
Molybdenum	mg/kg-dry	T	-								-							
Nickel	mg/kg-dry	T	-								-							
Potassium	mg/kg-dry	T	-								-							
Selenium	mg/kg-dry	T	-								-							
Silver	mg/kg-dry	T	-								-							
Sodium	mg/kg-dry	T	-								-							
Thallium	mg/kg-dry	T	-								-							
Vanadium	mg/kg-dry	T	-								-							
Zinc	mg/kg-dry	T	-								-							
Volatile Organics																		
1,1,1-Trichloroethane	mg/kg-dry	T	0.004	J							-							
1,1,2,2-Tetrachloroethane	mg/kg-dry	T	<0.008	:							-							
1,1,2-Trichloro-1,2,2-trifluoroethane	mg/kg-dry	T	<0.008	:							-							
1,1,2-Trichloroethane	mg/kg-dry	T	<0.008	:							-							
1,1-Dichloroethane	mg/kg-dry	T	<0.008	:							-							
1,1-Dichloroethene	mg/kg-dry	T	<0.008	:							-							
1,2,4-Trichlorobenzene	mg/kg-dry	T	<0.008	:							-							
1,2-Dibromo-3-chloropropane	mg/kg-dry	T	<0.008	:							-							
1,2-Dichlorobenzene	mg/kg-dry	T	<0.008	:							-							
1,2-Dichloroethane	mg/kg-dry	T	<0.008	:							-							
1,2-Dichloroethene (total)	mg/kg-dry	T	<0.008	:							-							
1,2-Dichloropropane	mg/kg-dry	T	<0.008	:							-							
1,3-Dichlorobenzene	mg/kg-dry	T	<0.008	:							-							
1,4-Dichlorobenzene	mg/kg-dry	T	<0.008	:							-							
2-Butanone	mg/kg-dry	T	<0.008	:							-							
2-Hexanone	mg/kg-dry	T	<0.008	:							-							
4-Methyl-2-pentanone	mg/kg-dry	T	<0.008	:							-							
Acetone	mg/kg-dry	T	<0.008	:							-							
Benzene	mg/kg-dry	T	<0.008	:							-							
Bromodichloromethane	mg/kg-dry	T	<0.008	:							-							
Bromoform	mg/kg-dry	T	<0.008	:							-							
Bromomethane	mg/kg-dry	T	<0.008	:							-							
Carbon disulfide	mg/kg-dry	T	0.003	J							-							

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Appendix A-7a
Soil - Biased 0-6 inches
Validated Analytical Results

Parameter	Units	Exposure Area Fraction	Site ID / Sample Date / Sample ID					
			MSS8-46 1/13/2003 MSS8-46-T01N-SOL	MSS8-47 1/15/2003 MSS8-47-T01N-SOL	MSS8-48 1/15/2003 MSS8-48-T01N-SOL	MSS8-49 1/13/2003 MSS8-49-T01N-SOL	MSS8-49 7/20/2003 MSS8-49R2-T01N-SOL	MSS8-5 10/10/2002 MSS8-5-T01N-SOL
			SS8D	SS8D	SS8D	SS8D	SS8D	SS8A
Carbon tetrachloride	mg/kg-dry	T	<0.006 :	<0.007 :	<0.009 :	-	<0.008 :	-
Chlorobenzene	mg/kg-dry	T	<0.006 :	<0.007 :	<0.009 :	-	<0.008 :	-
Chloroethane	mg/kg-dry	T	<0.006 :	<0.007 :	<0.009 :	-	<0.008 :	-
Chloroform	mg/kg-dry	T	<0.006 :	<0.007 :	<0.009 :	-	<0.008 :	-
Chloromethane	mg/kg-dry	T	<0.006 :	<0.007 :	<0.009 :	-	<0.008 :	-
cis-1,2-Dichloroethene	mg/kg-dry	T	<0.006 :	<0.007 :	<0.009 :	-	<0.008 :	-
cis-1,3-Dichloropropene	mg/kg-dry	T	<0.006 :	<0.007 :	<0.009 :	-	<0.008 :	-
Dibromochloromethane	mg/kg-dry	T	<0.006 :	<0.007 :	<0.009 :	-	<0.008 :	-
Dichlorodifluoromethane	mg/kg-dry	T	<0.006 :	<0.007 :	<0.009 :	-	<0.008 :	-
Ethylbenzene	mg/kg-dry	T	0.001 J	<0.007 :	0.002 J	-	<0.008 :	-
Methylene chloride	mg/kg-dry	T	<0.006 :	0.0009 J	<0.009 :	-	<0.008 :	-
Styrene	mg/kg-dry	T	<0.006 :	<0.007 :	<0.009 :	-	<0.008 :	-
Tetrachloroethene	mg/kg-dry	T	<0.006 :	<0.007 :	<0.009 :	-	<0.008 :	-
Toluene	mg/kg-dry	T	<0.006 :	0.0006 J	<0.009 :	-	<0.008 :	-
Total Xylene	mg/kg-dry	T	0.008 :	0.001 J	0.01 :	-	<0.008 :	-
trans-1,2-Dichloroethene	mg/kg-dry	T	<0.006 :	<0.007 :	<0.009 :	-	<0.008 :	-
trans-1,3-Dichloropropene	mg/kg-dry	T	<0.006 :	<0.007 :	<0.009 :	-	<0.008 :	-
Trichloroethene	mg/kg-dry	T	<0.006 :	<0.007 :	<0.009 :	-	<0.008 :	-
Trichlorofluoromethane	mg/kg-dry	T	<0.006 :	<0.007 :	<0.009 :	-	<0.008 :	-
Vinyl chloride	mg/kg-dry	T	<0.006 :	<0.007 :	<0.009 :	-	<0.008 :	-
Semi-Volatile Organics								
1,1`-Biphenyl	mg/kg-dry	T	<0.34 :	<0.37 :	<0.72 :	<0.38 :	-	<3.4 :
2,4,5-Trichlorophenol	mg/kg-dry	T	<0.86 :	<0.94 :	<1.8 :	<0.95 :	-	<8.6 :
2,4,6-Trichlorophenol	mg/kg-dry	T	<0.34 :	<0.37 :	<0.72 :	<0.38 :	-	<3.4 :
2,4-Dichlorophenol	mg/kg-dry	T	<0.34 :	<0.37 :	<0.72 :	<0.38 :	-	<3.4 :
2,4-Dimethylphenol	mg/kg-dry	T	<0.34 :	<0.37 :	<0.72 :	<0.38 :	-	<3.4 :
2,4-Dinitrophenol	mg/kg-dry	T	<0.86 J	<0.94 J	<1.8 :	<0.95 J	-	<8.6 :
2,4-Dinitrotoluene	mg/kg-dry	T	<0.34 :	<0.37 :	<0.72 :	<0.38 :	-	<3.4 :
2,6-Dinitrotoluene	mg/kg-dry	T	<0.34 :	<0.37 :	<0.72 :	<0.38 :	-	<3.4 :
2-Chloronaphthalene	mg/kg-dry	T	<0.34 :	<0.37 :	<0.72 :	<0.38 :	-	<3.4 J
2-Chlorophenol	mg/kg-dry	T	<0.34 :	<0.37 :	<0.72 :	<0.38 :	-	<3.4 :
2-Methylnaphthalene	mg/kg-dry	T	<0.34 :	<0.37 :	<0.72 :	0.029 J	-	<3.4 :
2-Methylphenol	mg/kg-dry	T	<0.34 :	<0.37 :	<0.72 :	<0.38 :	-	<3.4 :
2-Nitroaniline	mg/kg-dry	T	<0.86 :	<0.94 :	<1.8 :	<0.95 :	-	<8.6 :

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Appendix A-7a
Soil - Biased 0-6 inches
Validated Analytical Results

Parameter	Units	Exposure Area Fraction	Site ID	MSS8-46	MSS8-47	MSS8-48	MSS8-49	MSS8-49	MSS8-5
			Sample Date	1/13/2003	1/15/2003	1/15/2003	1/13/2003	7/20/2003	10/10/2002
			Sample ID	MSS8-46-T01N-SOL	MSS8-47-T01N-SOL	MSS8-48-T01N-SOL	MSS8-49-T01N-SOL	MSS8-49R2-T01N-SOL	MSS8-5-T01N-SOL
			Exposure Area	SS8D	SS8D	SS8D	SS8D	SS8D	SS8A
2-Nitrophenol	mg/kg-dry	T		<0.34 :	<0.37 :	<0.72 :	<0.38 :	-	<3.4 :
3,3-Dichlorobenzidine	mg/kg-dry	T		<0.34 :	<0.37 J	<0.72 :	<0.38 :	-	<3.4 :
3-Nitroaniline	mg/kg-dry	T		<0.86 :	<0.94 :	<1.8 :	<0.95 :	-	<8.6 :
4,6-Dinitro-2-methylphenol	mg/kg-dry	T		<0.86 J	<0.94 J	<1.8 :	<0.95 J	-	<8.6 :
4-Bromophenyl phenyl ether	mg/kg-dry	T		<0.34 :	<0.37 :	<0.72 :	<0.38 :	-	<3.4 :
4-Chloro-3-methylphenol	mg/kg-dry	T		<0.34 :	<0.37 :	<0.72 :	<0.38 :	-	<3.4 :
4-Chloroaniline	mg/kg-dry	T		<0.34 J	<0.37 :	<0.72 :	<0.38 J	-	<3.4 :
4-Chlorophenyl phenyl ether	mg/kg-dry	T		<0.34 :	<0.37 :	<0.72 :	<0.38 :	-	<3.4 :
4-Methylphenol	mg/kg-dry	T		<0.34 :	<0.37 :	<0.72 :	<0.38 :	-	<3.4 :
4-Nitroaniline	mg/kg-dry	T		<0.86 :	<0.94 :	<1.8 :	<0.95 :	-	<8.6 :
4-Nitrophenol	mg/kg-dry	T		<0.86 :	<0.94 J	<1.8 :	<0.95 :	-	<8.6 :
Acenaphthene	mg/kg-dry	T		<0.34 :	<0.37 :	<0.72 :	<0.38 :	-	<3.4 :
Acenaphthylene	mg/kg-dry	T		<0.34 :	<0.37 :	<0.72 :	<0.38 :	-	<3.4 :
Anthracene	mg/kg-dry	T		<0.34 :	<0.37 :	<0.72 :	<0.38 :	-	<3.4 :
Benzaldehyde	mg/kg-dry	T		<0.34 :	<0.37 J	<0.72 J	<0.38 :	-	<3.4 J
Benzo(a)anthracene	mg/kg-dry	T		<0.34 :	<0.37 :	<0.72 :	<0.38 :	-	<3.4 :
Benzo(a)pyrene	mg/kg-dry	T		<0.34 :	<0.37 :	<0.72 :	<0.38 :	-	<3.4 :
Benzo(b)fluoranthene	mg/kg-dry	T		<0.34 :	<0.37 :	<0.72 :	<0.38 :	-	<3.4 :
Benzo(g,h,i)perylene	mg/kg-dry	T		<0.34 :	<0.37 :	<0.72 :	<0.38 :	-	<3.4 :
Benzo(k)fluoranthene	mg/kg-dry	T		<0.34 :	<0.37 :	<0.72 :	<0.38 :	-	<3.4 J
Bis(2-chloroethoxy)methane	mg/kg-dry	T		<0.34 :	<0.37 :	<0.72 :	<0.38 :	-	<3.4 :
Bis(2-chloroethyl)ether	mg/kg-dry	T		<0.34 :	<0.37 :	<0.72 :	<0.38 :	-	<3.4 :
Bis(2-ethylhexyl)phthalate	mg/kg-dry	T		0.038 J	0.79 :	<0.72 :	0.033 J	-	<3.4 :
Butyl benzyl phthalate	mg/kg-dry	T		<0.34 :	<0.37 :	<0.72 :	<0.38 :	-	<3.4 :
Carbazole	mg/kg-dry	T		<0.34 :	<0.37 :	<0.72 :	<0.38 :	-	<3.4 :
Chrysene	mg/kg-dry	T		<0.34 :	0.025 J	<0.72 :	<0.38 :	-	<3.4 :
Dibenz(a,h)anthracene	mg/kg-dry	T		<0.34 J	<0.37 :	<0.72 :	<0.38 J	-	<3.4 J
Dibenzofuran	mg/kg-dry	T		<0.34 :	<0.37 :	<0.72 :	<0.38 :	-	<3.4 :
Dichlorodiisopropyl ether	mg/kg-dry	T		<0.34 :	<0.37 :	<0.72 :	<0.38 :	-	<3.4 :
Diethylphthalate	mg/kg-dry	T		<0.34 :	<0.37 :	<0.72 :	<0.38 :	-	<3.4 :
Dimethylphthalate	mg/kg-dry	T		<0.34 :	<0.37 :	<0.72 :	<0.38 :	-	<3.4 :
Di-n-Butyl phthalate	mg/kg-dry	T		0.018 J	<0.37 :	<0.72 :	<0.38 :	-	<3.4 :
Di-n-Octyl phthalate	mg/kg-dry	T		<0.34 :	0.18 J	<0.72 :	<0.38 :	-	<3.4 :
Fluoranthene	mg/kg-dry	T		<0.34 :	0.038 J	<0.72 :	<0.38 :	-	<3.4 :

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Appendix A-7a
Soil - Biased 0-6 inches
Validated Analytical Results

Parameter	Units	Fraction	MSS8-46		MSS8-47		MSS8-48		MSS8-49		MSS8-49		MSS8-5	
Sample Date			1/13/2003		1/15/2003		1/15/2003		1/13/2003		7/20/2003		10/10/2002	
Sample ID			MSS8-46-T01N-SOL		MSS8-47-T01N-SOL		MSS8-48-T01N-SOL		MSS8-49-T01N-SOL		MSS8-49R2-T01N-SOL		MSS8-5-T01N-SOL	
Exposure Area			SS8D		SS8D		SS8D		SS8D		SS8D		SS8A	
Fluorene	mg/kg-dry	T	<0.34	:	<0.37	:	<0.72	:	<0.38	:	-		<3.4	:
Hexachlorobenzene	mg/kg-dry	T	<0.34	:	<0.37	:	<0.72	:	<0.38	:	-		<3.4	:
Hexachlorobutadiene	mg/kg-dry	T	<0.34	:	<0.37	:	<0.72	:	<0.38	:	-		<3.4	:
Hexachlorocyclopentadiene	mg/kg-dry	T	<0.34	:	<0.37	J	<0.72	:	<0.38	:	-		<3.4	:
Hexachloroethane	mg/kg-dry	T	<0.34	:	<0.37	:	<0.72	:	<0.38	:	-		<3.4	:
Indeno(1,2,3-cd)pyrene	mg/kg-dry	T	<0.34	J	<0.37	:	<0.72	:	<0.38	J	-		<3.4	J
Isophorone	mg/kg-dry	T	<0.34	:	<0.37	:	<0.72	:	<0.38	:	-		<3.4	:
Naphthalene	mg/kg-dry	T	<0.34	:	<0.37	:	<0.72	:	<0.38	:	-		<3.4	:
Nitrobenzene	mg/kg-dry	T	<0.34	:	<0.37	:	<0.72	:	<0.38	:	-		<3.4	:
N-Nitrosodi-n-propylamine	mg/kg-dry	T	<0.34	:	<0.37	:	<0.72	:	<0.38	:	-		<3.4	:
N-Nitrosodiphenylamine	mg/kg-dry	T	<0.34	:	<0.37	:	<0.72	:	<0.38	:	-		<3.4	:
Pentachlorophenol	mg/kg-dry	T	<0.86	J	<0.94	J	<1.8	:	<0.95	J	-		<8.6	:
Phenanthrene	mg/kg-dry	T	<0.34	:	0.032	J	<0.72	:	0.047	J	-		<3.4	:
Phenol	mg/kg-dry	T	<0.34	:	<0.37	:	<0.72	:	<0.38	:	-		<3.4	:
Pyrene	mg/kg-dry	T	<0.34	:	0.026	J	<0.72	:	<0.38	:	-		<3.4	:
Explosives														
2,4,6-Trinitrotoluene	mg/kg-dry	T	-		-		-		-		-		<0.12	J
2,6-Pyridinediamine,	mg/kg-dry	T	-		-		-		-		-		<0.12	J
Cyclotetramethylenetetranitramine	mg/kg-dry	T	-		-		-		-		-		<0.12	J
Cyclotrimethylenetrinitramine	mg/kg-dry	T	-		-		-		-		-		<0.12	J
Pentaerythritol tetranitrate	mg/kg-dry	T	-		-		-		-		-		<5.	J

J = Qualified as estimated during data validation
R = Qualified as rejected value from data validation and results are considered unusable for any purpose
T = Total Fraction

Appendix A-7a
Soil - Biased 0-6 inches
Validated Analytical Results

Parameter	Units	Exposure Area Fraction	Site ID	MSS8-50	MSS8-51	MSS8-52	MSS8-53	MSS8-53	MSS8-54
			Sample Date	1/15/2003	1/15/2003	1/15/2003	1/13/2003	1/15/2003	1/15/2003
			Sample ID	MSS8-50-T01N-SOL	MSS8-51-T01N-SOL	MSS8-52-T01N-SOL	MSS8-53-T01N-SOL	MSS8-53-T01N-SOL	MSS8-54-T01N-SOL
			Exposure Area	SS8D	SS8D	SS8D	SS8D	SS8D	SS8D
General Chemistry									
Ammonia	mg/kg-dry	T		23.6 :	15.1 :	9.6 :	36.2 :	-	122. :
Chloride	mg/kg-dry	T		3.5 :	3. :	3.2 :	3.4 :	-	31.7 :
Fluoride	mg/kg-dry	T		0.28 J	1.8 J	0.95 J	0.91 J	-	0.89 J
Nitrate	mg/kg-dry	T		<2.2 J	2.3 J	<2.1 J	<2.3 J	-	<2.2 J
Phosphorus	mg/kg-dry	T		2210. :	3190. :	1830. :	985. :	-	2700. :
Sulfate	mg/kg-dry	T		25.9 :	69.4 :	1620. :	1680. :	-	12900. :
Total Kjeldahl Nitrogen	mg/kg-dry	T		194. :	266. :	127. :	97.6 :	-	379. :
Total Organic Carbon	mg/kg-dry	T		3140. J	3010. J	1470. J	3040. J	-	11800. J
Laboratory Parameters									
pH	SU	T		6.8 :	5.8 :	4.3 :	3.7 :	-	3.4 :
Solids, Percent	%	T		91.4 :	91. :	95.7 :	90.8 :	91.6 :	94.1 :
Specific Conductance	umhos/cm	T		150. J	279. J	1500. J	1710. :	-	4720. J
Geotechnical									
Organic Soils	%	T		2.9 :	3.5 :	3.4 :	4.2 :	-	5.2 :
Physical Properties									
Cation-Exchange Capacity	meq/100g	T		19.6 :	20.4 :	19.8 :	12. :	-	16.6 :
Sodium Absorption Ratio	ratio	T		0.09 :	0.19 :	0.1 :	0.05 :	-	0.03 :
Metals									
Aluminum	mg/kg-dry	T		23200. :	29300. :	12900. :	6050. :	-	12700. :
Antimony	mg/kg-dry	T		<0.32 J	<0.29 J	<0.29 J	<0.28 J	-	<0.29 J
Arsenic	mg/kg-dry	T		9.7 J	15.4 J	4.1 J	6.8 J	-	5.2 J
Barium	mg/kg-dry	T		217. :	399. :	130. :	85.3 :	-	249. :
Beryllium	mg/kg-dry	T		0.79 :	1.1 :	0.6 :	0.38 :	-	0.73 :
Boron	mg/kg-dry	T		<2.3 :	<2.3 :	<2.3 :	0.56 J	-	<2.4 :
Cadmium	mg/kg-dry	T		0.23 :	0.49 :	<0.034 :	<0.038 J	-	1.1 :
Calcium	mg/kg-dry	T		3680. :	3360. :	4200. :	2150. :	-	12500. :
Chromium	mg/kg-dry	T		85. J	96.7 J	59.2 J	26.2 J	-	44.6 J
Cobalt	mg/kg-dry	T		8.6 :	12.2 :	9.8 :	1.9 :	-	14.1 :
Copper	mg/kg-dry	T		191. J	691. J	133. J	89.4 J	-	150. J
Iron	mg/kg-dry	T		48400. :	49300. :	37400. :	35900. :	-	39300. :
Lead	mg/kg-dry	T		51.7 :	99.6 :	61.8 :	128. :	-	108. :
Magnesium	mg/kg-dry	T		13100. :	16100. :	8490. :	2640. :	-	7200. :
Manganese	mg/kg-dry	T		526. :	620. :	335. :	246. :	-	488. :

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Appendix A-7a
Soil - Biased 0-6 inches
Validated Analytical Results

Parameter	Units	Exposure Area Fraction	Site ID	MSS8-50	MSS8-51	MSS8-52	MSS8-53	MSS8-53	MSS8-54
			Sample Date	1/15/2003	1/15/2003	1/15/2003	1/13/2003	1/15/2003	1/15/2003
			Sample ID	MSS8-50-T01N-SOL	MSS8-51-T01N-SOL	MSS8-52-T01N-SOL	MSS8-53-T01N-SOL	MSS8-53-T01N-SOL	MSS8-54-T01N-SOL
			Exposure Area	SS8D	SS8D	SS8D	SS8D	SS8D	SS8D
Mercury	mg/kg-dry	T		<0.017 :	<0.016 :	<0.017 :	<0.018 :	-	<0.017 :
Molybdenum	mg/kg-dry	T		53.5 :	84.3 :	51. :	155. :	-	465. :
Nickel	mg/kg-dry	T		37.3 :	50.2 :	30.7 :	10.8 :	-	31.8 :
Potassium	mg/kg-dry	T		8260. J	18800. J	4910. J	3590. J	-	4260. J
Selenium	mg/kg-dry	T		0.92 J	<0.77 J	1. J	2.1 J	-	1.1 J
Silver	mg/kg-dry	T		0.55 J	0.56 J	0.35 J	1. :	-	0.92 :
Sodium	mg/kg-dry	T		<28. :	<50.3 :	<134. :	<293. :	-	284. :
Thallium	mg/kg-dry	T		1.4 :	1.6 :	0.84 :	0.3 :	-	0.56 :
Vanadium	mg/kg-dry	T		73.9 :	78.8 :	43.4 :	19.1 :	-	40.5 :
Zinc	mg/kg-dry	T		102. :	192. :	56.1 :	49. :	-	216. :
Volatile Organics									
1,1,1-Trichloroethane	mg/kg-dry	T		<0.012 :	<0.006 :	<0.008 :	-	<0.006 :	<0.009 :
1,1,2,2-Tetrachloroethane	mg/kg-dry	T		<0.012 :	<0.006 :	<0.008 J	-	<0.006 :	<0.009 J
1,1,2-Trichloro-1,2,2-trifluoroethane	mg/kg-dry	T		<0.012 :	<0.006 :	<0.008 :	-	<0.006 :	<0.009 :
1,1,2-Trichloroethane	mg/kg-dry	T		<0.012 :	<0.006 :	<0.008 :	-	<0.006 :	<0.009 :
1,1-Dichloroethane	mg/kg-dry	T		<0.012 :	<0.006 :	<0.008 :	-	<0.006 :	<0.009 :
1,1-Dichloroethene	mg/kg-dry	T		<0.012 :	<0.006 :	<0.008 :	-	<0.006 :	<0.009 :
1,2,4-Trichlorobenzene	mg/kg-dry	T		<0.012 :	<0.006 :	<0.008 :	-	<0.006 :	<0.009 :
1,2-Dibromo-3-chloropropane	mg/kg-dry	T		<0.012 :	<0.006 :	<0.008 J	-	<0.006 :	<0.009 J
1,2-Dichlorobenzene	mg/kg-dry	T		<0.012 :	<0.006 :	<0.008 :	-	<0.006 :	<0.009 :
1,2-Dichloroethane	mg/kg-dry	T		<0.012 :	<0.006 :	<0.008 :	-	<0.006 :	<0.009 :
1,2-Dichloroethene (total)	mg/kg-dry	T		<0.012 :	<0.006 :	<0.008 :	-	<0.006 :	<0.009 :
1,2-Dichloropropane	mg/kg-dry	T		<0.012 :	<0.006 :	<0.008 :	-	<0.006 :	<0.009 :
1,3-Dichlorobenzene	mg/kg-dry	T		<0.012 :	<0.006 :	<0.008 :	-	<0.006 :	<0.009 :
1,4-Dichlorobenzene	mg/kg-dry	T		<0.012 :	<0.006 :	<0.008 :	-	<0.006 :	<0.009 :
2-Butanone	mg/kg-dry	T		<0.012 :	<0.006 :	<0.008 J	-	<0.006 :	<0.009 J
2-Hexanone	mg/kg-dry	T		<0.012 :	<0.006 :	<0.008 J	-	<0.006 :	0.001 J
4-Methyl-2-pentanone	mg/kg-dry	T		<0.012 :	<0.006 :	<0.008 J	-	<0.006 :	<0.009 J
Acetone	mg/kg-dry	T		0.002 J	0.001 J	0.023 J	-	0.001 J	0.025 J
Benzene	mg/kg-dry	T		<0.012 :	<0.006 :	<0.008 :	-	<0.006 :	<0.009 :
Bromodichloromethane	mg/kg-dry	T		<0.012 :	<0.006 :	<0.008 :	-	<0.006 :	<0.009 :
Bromoform	mg/kg-dry	T		<0.012 :	<0.006 :	<0.008 :	-	<0.006 :	<0.009 :
Bromomethane	mg/kg-dry	T		<0.012 :	<0.006 :	<0.008 :	-	<0.006 :	<0.009 :
Carbon disulfide	mg/kg-dry	T		<0.012 :	<0.006 :	<0.008 :	-	<0.006 :	<0.009 :

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T = Total Fraction

Appendix A-7a
Soil - Biased 0-6 inches
Validated Analytical Results

Parameter	Units	Exposure Area Fraction	Site ID	MSS8-50	MSS8-51	MSS8-52	MSS8-53	MSS8-53	MSS8-54
			Sample Date	1/15/2003	1/15/2003	1/15/2003	1/13/2003	1/15/2003	1/15/2003
			Sample ID	MSS8-50-T01N-SOL	MSS8-51-T01N-SOL	MSS8-52-T01N-SOL	MSS8-53-T01N-SOL	MSS8-53-T01N-SOL	MSS8-54-T01N-SOL
			Exposure Area	SS8D	SS8D	SS8D	SS8D	SS8D	SS8D
Carbon tetrachloride	mg/kg-dry	T		<0.012 :	<0.006 :	<0.008 :	-	<0.006 :	<0.009 :
Chlorobenzene	mg/kg-dry	T		<0.012 :	<0.006 :	<0.008 :	-	<0.006 :	<0.009 :
Chloroethane	mg/kg-dry	T		<0.012 :	<0.006 :	<0.008 :	-	<0.006 :	<0.009 :
Chloroform	mg/kg-dry	T		<0.012 :	<0.006 :	<0.008 :	-	<0.006 :	<0.009 :
Chloromethane	mg/kg-dry	T		<0.012 :	<0.006 :	<0.008 :	-	<0.006 :	<0.009 :
cis-1,2-Dichloroethene	mg/kg-dry	T		<0.012 :	<0.006 :	<0.008 :	-	<0.006 :	<0.009 :
cis-1,3-Dichloropropene	mg/kg-dry	T		<0.012 :	<0.006 :	<0.008 :	-	<0.006 :	<0.009 :
Dibromochloromethane	mg/kg-dry	T		<0.012 :	<0.006 :	<0.008 :	-	<0.006 :	<0.009 :
Dichlorodifluoromethane	mg/kg-dry	T		<0.012 :	<0.006 :	<0.008 :	-	<0.006 :	<0.009 :
Ethylbenzene	mg/kg-dry	T		<0.012 :	0.001 J	<0.008 :	-	<0.006 :	0.003 J
Methylene chloride	mg/kg-dry	T		0.001 J	<0.006 :	0.001 J	-	<0.006 :	0.001 J
Styrene	mg/kg-dry	T		<0.012 :	<0.006 :	<0.008 :	-	<0.006 :	<0.009 :
Tetrachloroethene	mg/kg-dry	T		<0.012 :	<0.006 :	<0.008 :	-	<0.006 :	<0.009 :
Toluene	mg/kg-dry	T		<0.012 :	<0.006 :	<0.008 :	-	<0.006 :	<0.009 :
Total Xylene	mg/kg-dry	T		0.004 J	0.009 :	0.001 J	-	<0.006 :	0.024 :
trans-1,2-Dichloroethene	mg/kg-dry	T		<0.012 :	<0.006 :	<0.008 :	-	<0.006 :	<0.009 :
trans-1,3-Dichloropropene	mg/kg-dry	T		<0.012 :	<0.006 :	<0.008 :	-	<0.006 :	<0.009 :
Trichloroethene	mg/kg-dry	T		<0.012 :	<0.006 :	<0.008 :	-	<0.006 :	<0.009 :
Trichlorofluoromethane	mg/kg-dry	T		<0.012 :	<0.006 :	<0.008 :	-	<0.006 :	<0.009 :
Vinyl chloride	mg/kg-dry	T		<0.012 :	<0.006 :	<0.008 :	-	<0.006 :	<0.009 :
Semi-Volatile Organics									
1,1`-Biphenyl	mg/kg-dry	T		<0.36 :	<0.36 :	<0.34 :	<0.36 :	-	<1.8 :
2,4,5-Trichlorophenol	mg/kg-dry	T		<0.91 :	<0.91 :	<0.86 :	<0.91 :	-	<4.4 :
2,4,6-Trichlorophenol	mg/kg-dry	T		<0.36 :	<0.36 :	<0.34 :	<0.36 :	-	<1.8 :
2,4-Dichlorophenol	mg/kg-dry	T		<0.36 :	<0.36 :	<0.34 :	<0.36 :	-	<1.8 :
2,4-Dimethylphenol	mg/kg-dry	T		<0.36 :	<0.36 :	<0.34 :	<0.36 :	-	<1.8 :
2,4-Dinitrophenol	mg/kg-dry	T		<0.91 :	<0.91 :	<0.86 :	<0.91 J	-	<4.4 :
2,4-Dinitrotoluene	mg/kg-dry	T		<0.36 :	<0.36 :	<0.34 :	<0.36 :	-	<1.8 :
2,6-Dinitrotoluene	mg/kg-dry	T		<0.36 :	<0.36 :	<0.34 :	<0.36 :	-	<1.8 :
2-Chloronaphthalene	mg/kg-dry	T		<0.36 :	<0.36 :	<0.34 :	<0.36 :	-	<1.8 :
2-Chlorophenol	mg/kg-dry	T		<0.36 :	<0.36 :	<0.34 :	<0.36 :	-	<1.8 :
2-Methylnaphthalene	mg/kg-dry	T		<0.36 :	<0.36 :	<0.34 :	<0.36 :	-	<1.8 :
2-Methylphenol	mg/kg-dry	T		<0.36 :	<0.36 :	<0.34 :	<0.36 :	-	<1.8 :
2-Nitroaniline	mg/kg-dry	T		<0.91 :	<0.91 :	<0.86 :	<0.91 :	-	<4.4 :

J = Qualified as estimated during data validation
R = Qualified as rejected value from data validation and results are considered unusable for any purpose
T = Total Fraction

Appendix A-7a
Soil - Biased 0-6 inches
Validated Analytical Results

Parameter	Units	Exposure Area Fraction	Site ID / Sample Date / Sample ID					
			MSS8-50 1/15/2003 MSS8-50-T01N-SOL	MSS8-51 1/15/2003 MSS8-51-T01N-SOL	MSS8-52 1/15/2003 MSS8-52-T01N-SOL	MSS8-53 1/13/2003 MSS8-53-T01N-SOL	MSS8-53 1/15/2003 MSS8-53-T01N-SOL	MSS8-54 1/15/2003 MSS8-54-T01N-SOL
			SS8D	SS8D	SS8D	SS8D	SS8D	SS8D
2-Nitrophenol	mg/kg-dry	T	<0.36 :	<0.36 :	<0.34 :	<0.36 :	-	<1.8 :
3,3-Dichlorobenzidine	mg/kg-dry	T	<0.36 :	<0.36 :	<0.34 :	<0.36 :	-	<1.8 :
3-Nitroaniline	mg/kg-dry	T	<0.91 :	<0.91 :	<0.86 J	<0.91 J	-	<4.4 :
4,6-Dinitro-2-methylphenol	mg/kg-dry	T	<0.91 :	<0.91 :	<0.86 :	<0.91 :	-	<4.4 :
4-Bromophenyl phenyl ether	mg/kg-dry	T	<0.36 :	<0.36 :	<0.34 :	<0.36 :	-	<1.8 :
4-Chloro-3-methylphenol	mg/kg-dry	T	<0.36 :	<0.36 :	<0.34 :	<0.36 :	-	<1.8 :
4-Chloroaniline	mg/kg-dry	T	<0.36 :	<0.36 :	<0.34 J	<0.36 :	-	<1.8 :
4-Chlorophenyl phenyl ether	mg/kg-dry	T	<0.36 :	<0.36 :	<0.34 :	<0.36 :	-	<1.8 :
4-Methylphenol	mg/kg-dry	T	<0.36 :	<0.36 :	<0.34 :	<0.36 :	-	<1.8 :
4-Nitroaniline	mg/kg-dry	T	<0.91 :	<0.91 :	<0.86 J	<0.91 :	-	<4.4 :
4-Nitrophenol	mg/kg-dry	T	<0.91 :	<0.91 :	<0.86 :	<0.91 J	-	<4.4 :
Acenaphthene	mg/kg-dry	T	<0.36 :	<0.36 :	<0.34 :	<0.36 :	-	<1.8 :
Acenaphthylene	mg/kg-dry	T	<0.36 :	<0.36 :	<0.34 :	<0.36 :	-	<1.8 :
Anthracene	mg/kg-dry	T	<0.36 :	<0.36 :	<0.34 :	<0.36 :	-	<1.8 :
Benzaldehyde	mg/kg-dry	T	<0.36 :	<0.36 :	<0.34 :	<0.36 :	-	<1.8 :
Benzo(a)anthracene	mg/kg-dry	T	<0.36 :	<0.36 :	<0.34 :	<0.36 :	-	<1.8 :
Benzo(a)pyrene	mg/kg-dry	T	<0.36 :	<0.36 :	<0.34 :	<0.36 :	-	<1.8 :
Benzo(b)fluoranthene	mg/kg-dry	T	<0.36 :	<0.36 :	<0.34 :	<0.36 :	-	<1.8 J
Benzo(g,h,i)perylene	mg/kg-dry	T	<0.36 :	<0.36 :	<0.34 :	<0.36 :	-	<1.8 :
Benzo(k)fluoranthene	mg/kg-dry	T	<0.36 J	<0.36 J	<0.34 :	<0.36 :	-	<1.8 :
Bis(2-chloroethoxy)methane	mg/kg-dry	T	<0.36 :	<0.36 :	<0.34 :	<0.36 :	-	<1.8 :
Bis(2-chloroethyl)ether	mg/kg-dry	T	<0.36 :	<0.36 :	<0.34 :	<0.36 :	-	<1.8 :
Bis(2-ethylhexyl)phthalate	mg/kg-dry	T	0.029 J	0.044 J	0.074 J	0.03 J	-	0.17 J
Butyl benzyl phthalate	mg/kg-dry	T	<0.36 :	<0.36 :	<0.34 :	<0.36 :	-	<1.8 :
Carbazole	mg/kg-dry	T	<0.36 :	<0.36 :	<0.34 :	<0.36 :	-	<1.8 :
Chrysene	mg/kg-dry	T	<0.36 :	<0.36 :	0.028 J	<0.36 :	-	<1.8 :
Dibenz(a,h)anthracene	mg/kg-dry	T	<0.36 :	<0.36 :	<0.34 :	<0.36 J	-	<1.8 :
Dibenzofuran	mg/kg-dry	T	<0.36 :	<0.36 :	<0.34 :	<0.36 :	-	<1.8 :
Dichlorodiisopropyl ether	mg/kg-dry	T	<0.36 :	<0.36 :	<0.34 :	<0.36 :	-	<1.8 :
Diethylphthalate	mg/kg-dry	T	<0.36 :	<0.36 :	<0.34 :	<0.36 :	-	<1.8 :
Dimethylphthalate	mg/kg-dry	T	<0.36 :	<0.36 :	<0.34 :	<0.36 :	-	<1.8 :
Di-n-Butyl phthalate	mg/kg-dry	T	<0.36 :	<0.36 :	<0.34 :	<0.36 :	-	<1.8 :
Di-n-Octyl phthalate	mg/kg-dry	T	<0.36 J	<0.36 J	<0.34 :	<0.36 :	-	<1.8 J
Fluoranthene	mg/kg-dry	T	<0.36 :	0.041 J	<0.34 :	<0.36 J	-	<1.8 :

J = Qualified as estimated during data validation
R = Qualified as rejected value from data validation and results are considered unusable for any purpose
T = Total Fraction

Appendix A-7a
Soil - Biased 0-6 inches
Validated Analytical Results

Parameter	Units	Exposure Area Fraction	Site ID / Sample Date / Sample ID													
			MSS8-50 1/15/2003 MSS8-50-T01N-SOL		MSS8-51 1/15/2003 MSS8-51-T01N-SOL		MSS8-52 1/15/2003 MSS8-52-T01N-SOL		MSS8-53 1/13/2003 MSS8-53-T01N-SOL		MSS8-53 1/15/2003 MSS8-53-T01N-SOL		MSS8-54 1/15/2003 MSS8-54-T01N-SOL	
			SS8D		SS8D		SS8D		SS8D		SS8D		SS8D	
Fluorene	mg/kg-dry	T	<0.36	:	<0.36	:	<0.34	:	<0.36	:	-		<1.8	:
Hexachlorobenzene	mg/kg-dry	T	<0.36	:	<0.36	:	<0.34	:	<0.36	:	-		<1.8	:
Hexachlorobutadiene	mg/kg-dry	T	<0.36	:	<0.36	:	<0.34	:	<0.36	:	-		<1.8	:
Hexachlorocyclopentadiene	mg/kg-dry	T	<0.36	:	<0.36	:	<0.34	:	<0.36	:	-		<1.8	:
Hexachloroethane	mg/kg-dry	T	<0.36	:	<0.36	:	<0.34	:	<0.36	:	-		<1.8	:
Indeno(1,2,3-cd)pyrene	mg/kg-dry	T	<0.36	:	<0.36	:	<0.34	:	<0.36	:	-		<1.8	:
Isophorone	mg/kg-dry	T	<0.36	:	<0.36	:	<0.34	:	<0.36	:	-		<1.8	:
Naphthalene	mg/kg-dry	T	<0.36	:	<0.36	:	<0.34	:	<0.36	:	-		<1.8	:
Nitrobenzene	mg/kg-dry	T	<0.36	:	<0.36	:	<0.34	:	<0.36	:	-		<1.8	:
N-Nitrosodi-n-propylamine	mg/kg-dry	T	<0.36	:	<0.36	:	<0.34	:	<0.36	:	-		<1.8	:
N-Nitrosodiphenylamine	mg/kg-dry	T	<0.36	:	<0.36	:	<0.34	:	<0.36	:	-		<1.8	:
Pentachlorophenol	mg/kg-dry	T	<0.91	:	<0.91	:	<0.86	:	<0.91	:	-		<4.4	:
Phenanthrene	mg/kg-dry	T	<0.36	:	<0.36	:	0.028	J	<0.36	:	-		<1.8	:
Phenol	mg/kg-dry	T	<0.36	:	<0.36	:	<0.34	:	<0.36	:	-		<1.8	:
Pyrene	mg/kg-dry	T	<0.36	:	0.03	J	<0.34	:	<0.36	:	-		<1.8	:

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Appendix A-7a
Soil - Biased 0-6 inches
Validated Analytical Results

Parameter	Units	Fraction	MSS8-55		MSS8-56		MSS8-57		MSS8-58		MSS8-59		MSS8-6	
Sample Date			1/15/2003		7/20/2003		1/15/2003		1/15/2003		1/14/2003		10/10/2002	
Sample ID			MSS8-55-T01N-SOL		MSS8-56R2-T01N-SOL		MSS8-57-T01N-SOL		MSS8-58-T01N-SOL		MSS8-59-T01N-SOL		MSS8-6-T01N-SOL	
Exposure Area			SS8D		SS8F		SS8D		SS8D		SS8F		SS8A	
General Chemistry														
Ammonia	mg/kg-dry	T	115.	:	41.1	:	235.	:	37.9	:	36.9	:	51.8	:
Chloride	mg/kg-dry	T	11.3	:	200.	:	12.5	:	22.3	:	2.6	:	<2.2	J
Fluoride	mg/kg-dry	T	0.45	J	3.	:	0.4	J	0.55	J	0.17	J	0.58	J
Nitrate	mg/kg-dry	T	<2.2	J	9.9	J	<2.2	J	2.4	J	<2.3	J	<2.2	J
Phosphorus	mg/kg-dry	T	3110.	:	1930.	:	2790.	:	2050.	:	743.	:	820.	J
Sulfate	mg/kg-dry	T	6030.	:	1650.	:	7600.	:	5520.	:	5.	:	131.	J
Total Kjeldahl Nitrogen	mg/kg-dry	T	367.	:	452.	:	498.	:	216.	:	407.	:	95.2	J
Total Organic Carbon	mg/kg-dry	T	3030.	J	2680.	:	<108.	J	4040.	J	6300.	J	29400.	J
Laboratory Parameters														
pH	SU	T	3.4	:	6.6	J	3.	:	3.3	:	7.9	:	6.9	:
Solids, Percent	%	T	93.3	:	93.8	:	93.3	:	93.5	:	88.	:	93.	:
Specific Conductance	umhos/cm	T	2710.	J	3710.	J	2970.	J	1820.	J	207.	J	254.	:
Geotechnical														
Organic Soils	%	T	5.4	:	3.3	J	4.7	:	4.6	:	3.1	:	5.29	J
Physical Properties														
Cation-Exchange Capacity	meq/100g	T	16.	:	16.7	:	13.7	:	16.	:	15.2	:	8.2	:
Sodium Absorption Ratio	ratio	T	<0.02	:	5.03	:	<0.02	:	0.02	:	0.19	:	0.04	:
Metals														
Aluminum	mg/kg-dry	T	10900.	:	16800.	:	7970.	:	8910.	:	11100.	:	-	
Antimony	mg/kg-dry	T	<0.29	J	<0.51	J	<0.27	J	<0.69	J	<0.33	J	-	
Arsenic	mg/kg-dry	T	6.7	J	3.4	J	5.4	J	5.	J	2.8	J	-	
Barium	mg/kg-dry	T	263.	:	261.	:	403.	:	349.	:	160.	:	-	
Beryllium	mg/kg-dry	T	0.72	:	1.3	:	0.36	:	0.43	:	0.83	:	-	
Boron	mg/kg-dry	T	<2.3	:	3.9	J	<0.23	J	<0.46	J	<2.2	:	-	
Cadmium	mg/kg-dry	T	<0.034	:	0.58	J	<0.034	:	0.43	:	0.16	:	-	
Calcium	mg/kg-dry	T	13900.	:	8770.	:	18600.	:	5420.	:	4110.	:	-	
Chromium	mg/kg-dry	T	47.	J	52.2	:	23.5	J	33.2	J	32.1	J	-	
Cobalt	mg/kg-dry	T	7.9	:	16.7	:	2.2	:	4.5	:	11.	:	-	
Copper	mg/kg-dry	T	112.	J	67.	:	55.6	J	98.6	J	37.5	J	-	
Iron	mg/kg-dry	T	51200.	:	37500.	:	49600.	:	44100.	:	25300.	:	-	
Lead	mg/kg-dry	T	117.	:	65.6	:	114.	:	970.	:	45.8	:	-	
Magnesium	mg/kg-dry	T	5760.	:	9520.	:	3520.	:	3980.	:	6770.	:	-	
Manganese	mg/kg-dry	T	308.	:	704.	:	186.	:	239.	:	670.	:	-	

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Appendix A-7a
Soil - Biased 0-6 inches
Validated Analytical Results

		Site ID	MSS8-55	MSS8-56	MSS8-57	MSS8-58	MSS8-59	MSS8-6
		Sample Date	1/15/2003	7/20/2003	1/15/2003	1/15/2003	1/14/2003	10/10/2002
		Sample ID	MSS8-55-T01N-SOL	MSS8-56R2-T01N-SOL	MSS8-57-T01N-SOL	MSS8-58-T01N-SOL	MSS8-59-T01N-SOL	MSS8-6-T01N-SOL
		Exposure Area	SS8D	SS8F	SS8D	SS8D	SS8F	SS8A
Parameter	**Units**	**Fraction**						
Mercury	mg/kg-dry	T	<0.018 :	0.093 :	<0.018 :	<0.017 :	0.022 :	-
Molybdenum	mg/kg-dry	T	533. :	90.8 :	267. :	370. :	28.1 :	-
Nickel	mg/kg-dry	T	23.2 :	40.8 :	10.3 :	14.5 :	26.1 :	-
Potassium	mg/kg-dry	T	4560. J	3620. :	5020. J	4620. J	2250. J	-
Selenium	mg/kg-dry	T	1.4 J	0.58 :	1. J	1.3 J	<0.89 J	-
Silver	mg/kg-dry	T	0.96 :	0.69 :	1.5 :	1.1 :	0.29 :	-
Sodium	mg/kg-dry	T	<734. :	1150. J	1060. :	621. :	<112. :	-
Thallium	mg/kg-dry	T	0.62 :	0.21 :	0.52 :	0.49 :	0.26 :	-
Vanadium	mg/kg-dry	T	41.7 :	42.6 :	37.1 :	34.8 :	31.2 :	-
Zinc	mg/kg-dry	T	76.3 :	104. :	30.2 :	58.1 :	115. :	-
Volatile Organics								
1,1,1-Trichloroethane	mg/kg-dry	T	<0.004 :	<0.008 :	<0.006 :	<0.008 :	-	-
1,1,2,2-Tetrachloroethane	mg/kg-dry	T	<0.004 J	<0.008 :	<0.006 :	<0.008 :	-	-
1,1,2-Trichloro-1,2,2-trifluoroethane	mg/kg-dry	T	<0.004 :	<0.008 :	<0.006 :	<0.008 :	-	-
1,1,2-Trichloroethane	mg/kg-dry	T	<0.004 :	<0.008 :	<0.006 :	<0.008 :	-	-
1,1-Dichloroethane	mg/kg-dry	T	<0.004 :	<0.008 :	<0.006 :	<0.008 :	-	-
1,1-Dichloroethene	mg/kg-dry	T	<0.004 :	<0.008 :	<0.006 :	<0.008 :	-	-
1,2,4-Trichlorobenzene	mg/kg-dry	T	<0.004 :	<0.008 :	<0.006 :	<0.008 :	-	-
1,2-Dibromo-3-chloropropane	mg/kg-dry	T	<0.004 J	<0.008 :	<0.006 :	<0.008 :	-	-
1,2-Dichlorobenzene	mg/kg-dry	T	<0.004 :	<0.008 :	<0.006 :	<0.008 :	-	-
1,2-Dichloroethane	mg/kg-dry	T	<0.004 :	<0.008 :	<0.006 :	<0.008 :	-	-
1,2-Dichloroethene (total)	mg/kg-dry	T	<0.004 :	<0.008 :	<0.006 :	<0.008 :	-	-
1,2-Dichloropropane	mg/kg-dry	T	<0.004 :	<0.008 :	<0.006 :	<0.008 :	-	-
1,3-Dichlorobenzene	mg/kg-dry	T	<0.004 :	<0.008 :	<0.006 :	<0.008 :	-	-
1,4-Dichlorobenzene	mg/kg-dry	T	<0.004 :	<0.008 :	<0.006 :	<0.008 :	-	-
2-Butanone	mg/kg-dry	T	<0.004 J	<0.008 :	0.001 J	0.003 J	-	-
2-Hexanone	mg/kg-dry	T	<0.004 J	<0.008 :	<0.006 :	0.0008 J	-	-
4-Methyl-2-pentanone	mg/kg-dry	T	<0.004 J	<0.008 :	<0.006 :	<0.008 :	-	-
Acetone	mg/kg-dry	T	<0.008 J	<0.008 :	<0.006 :	<0.009 :	-	-
Benzene	mg/kg-dry	T	<0.004 :	<0.008 :	<0.006 :	<0.008 :	-	-
Bromodichloromethane	mg/kg-dry	T	<0.004 :	<0.008 :	<0.006 :	<0.008 :	-	-
Bromoform	mg/kg-dry	T	<0.004 :	<0.008 :	<0.006 :	<0.008 :	-	-
Bromomethane	mg/kg-dry	T	<0.004 :	<0.008 :	<0.006 :	<0.008 :	-	-
Carbon disulfide	mg/kg-dry	T	<0.004 :	<0.008 :	0.001 J	<0.008 :	-	-

J = Qualified as estimated during data validation
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Appendix A-7a
Soil - Biased 0-6 inches
Validated Analytical Results

Parameter	Units	Exposure Area Fraction	Site ID / Sample Date / Sample ID					
			MSS8-55 1/15/2003 MSS8-55-T01N-SOL SS8D	MSS8-56 7/20/2003 MSS8-56R2-T01N-SOL SS8F	MSS8-57 1/15/2003 MSS8-57-T01N-SOL SS8D	MSS8-58 1/15/2003 MSS8-58-T01N-SOL SS8D	MSS8-59 1/14/2003 MSS8-59-T01N-SOL SS8F	MSS8-6 10/10/2002 MSS8-6-T01N-SOL SS8A
Carbon tetrachloride	mg/kg-dry	T	<0.004 :	<0.008 :	<0.006 :	<0.008 :	-	-
Chlorobenzene	mg/kg-dry	T	<0.004 :	<0.008 :	<0.006 :	<0.008 :	-	-
Chloroethane	mg/kg-dry	T	<0.004 :	<0.008 :	<0.006 :	<0.008 :	-	-
Chloroform	mg/kg-dry	T	<0.004 :	<0.008 :	<0.006 :	<0.008 :	-	-
Chloromethane	mg/kg-dry	T	<0.004 :	<0.008 :	<0.006 :	<0.008 :	-	-
cis-1,2-Dichloroethene	mg/kg-dry	T	<0.004 :	<0.008 :	<0.006 :	<0.008 :	-	-
cis-1,3-Dichloropropene	mg/kg-dry	T	<0.004 :	<0.008 :	<0.006 :	<0.008 :	-	-
Dibromochloromethane	mg/kg-dry	T	<0.004 :	<0.008 :	<0.006 :	<0.008 :	-	-
Dichlorodifluoromethane	mg/kg-dry	T	<0.004 :	<0.008 :	<0.006 :	<0.008 :	-	-
Ethylbenzene	mg/kg-dry	T	<0.004 :	<0.008 :	<0.006 :	<0.008 :	-	-
Methylene chloride	mg/kg-dry	T	0.0004 J	<0.008 :	<0.006 :	<0.008 :	-	-
Styrene	mg/kg-dry	T	<0.004 :	<0.008 :	<0.006 :	<0.008 :	-	-
Tetrachloroethene	mg/kg-dry	T	<0.004 :	<0.008 :	<0.006 :	<0.008 :	-	-
Toluene	mg/kg-dry	T	<0.004 :	<0.008 :	<0.006 :	<0.008 :	-	-
Total Xylene	mg/kg-dry	T	<0.004 :	<0.008 :	0.003 J	0.001 J	-	-
trans-1,2-Dichloroethene	mg/kg-dry	T	<0.004 :	<0.008 :	<0.006 :	<0.008 :	-	-
trans-1,3-Dichloropropene	mg/kg-dry	T	<0.004 :	<0.008 :	<0.006 :	<0.008 :	-	-
Trichloroethene	mg/kg-dry	T	<0.004 :	<0.008 :	<0.006 :	<0.008 :	-	-
Trichlorofluoromethane	mg/kg-dry	T	<0.004 :	<0.008 :	<0.006 :	<0.008 :	-	-
Vinyl chloride	mg/kg-dry	T	<0.004 :	<0.008 :	<0.006 :	<0.008 :	-	-
Semi-Volatile Organics								
1,1`-Biphenyl	mg/kg-dry	T	<1.8 :	-	<0.35 :	<0.7 :	-	<1.8 :
2,4,5-Trichlorophenol	mg/kg-dry	T	<4.4 :	-	<0.89 :	<1.8 :	-	<4.5 :
2,4,6-Trichlorophenol	mg/kg-dry	T	<1.8 :	-	<0.35 :	<0.7 :	-	<1.8 :
2,4-Dichlorophenol	mg/kg-dry	T	<1.8 :	-	<0.35 :	<0.7 :	-	<1.8 :
2,4-Dimethylphenol	mg/kg-dry	T	<1.8 :	-	<0.35 :	<0.7 :	-	<1.8 :
2,4-Dinitrophenol	mg/kg-dry	T	<4.4 :	-	<0.89 :	<1.8 :	-	<4.5 J
2,4-Dinitrotoluene	mg/kg-dry	T	<1.8 :	-	<0.35 :	<0.7 :	-	<1.8 :
2,6-Dinitrotoluene	mg/kg-dry	T	<1.8 :	-	<0.35 :	<0.7 :	-	<1.8 :
2-Chloronaphthalene	mg/kg-dry	T	<1.8 :	-	<0.35 :	<0.7 :	-	<1.8 :
2-Chlorophenol	mg/kg-dry	T	<1.8 :	-	<0.35 :	<0.7 :	-	<1.8 :
2-Methylnaphthalene	mg/kg-dry	T	<1.8 :	-	<0.35 :	<0.7 :	-	<1.8 :
2-Methylphenol	mg/kg-dry	T	<1.8 :	-	<0.35 :	<0.7 :	-	<1.8 :
2-Nitroaniline	mg/kg-dry	T	<4.4 :	-	<0.89 :	<1.8 :	-	<4.5 :

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T = Total Fraction

Appendix A-7a
Soil - Biased 0-6 inches
Validated Analytical Results

Parameter	Units	Exposure Area Fraction	Site ID / Sample Date / Sample ID					
			MSS8-55 1/15/2003 MSS8-55-T01N-SOL	MSS8-56 7/20/2003 MSS8-56R2-T01N-SOL	MSS8-57 1/15/2003 MSS8-57-T01N-SOL	MSS8-58 1/15/2003 MSS8-58-T01N-SOL	MSS8-59 1/14/2003 MSS8-59-T01N-SOL	MSS8-6 10/10/2002 MSS8-6-T01N-SOL
			SS8D	SS8F	SS8D	SS8D	SS8F	SS8A
2-Nitrophenol	mg/kg-dry	T	<1.8 :	-	<0.35 :	<0.7 :	-	<1.8 :
3,3-Dichlorobenzidine	mg/kg-dry	T	<1.8 :	-	<0.35 :	<0.7 :	-	<1.8 :
3-Nitroaniline	mg/kg-dry	T	<4.4 :	-	<0.89 :	<1.8 :	-	<4.5 :
4,6-Dinitro-2-methylphenol	mg/kg-dry	T	<4.4 :	-	<0.89 :	<1.8 :	-	<4.5 :
4-Bromophenyl phenyl ether	mg/kg-dry	T	<1.8 :	-	<0.35 :	<0.7 :	-	<1.8 :
4-Chloro-3-methylphenol	mg/kg-dry	T	<1.8 :	-	<0.35 :	<0.7 :	-	<1.8 :
4-Chloroaniline	mg/kg-dry	T	<1.8 :	-	<0.35 :	<0.7 :	-	<1.8 :
4-Chlorophenyl phenyl ether	mg/kg-dry	T	<1.8 :	-	<0.35 :	<0.7 :	-	<1.8 :
4-Methylphenol	mg/kg-dry	T	<1.8 :	-	<0.35 :	<0.7 :	-	<1.8 :
4-Nitroaniline	mg/kg-dry	T	<4.4 :	-	<0.89 :	<1.8 :	-	<4.5 :
4-Nitrophenol	mg/kg-dry	T	<4.4 :	-	<0.89 :	<1.8 :	-	<4.5 J
Acenaphthene	mg/kg-dry	T	<1.8 :	-	<0.35 :	<0.7 :	-	<1.8 :
Acenaphthylene	mg/kg-dry	T	<1.8 :	-	<0.35 :	<0.7 :	-	<1.8 :
Anthracene	mg/kg-dry	T	<1.8 :	-	<0.35 :	<0.7 :	-	<1.8 :
Benzaldehyde	mg/kg-dry	T	<1.8 :	-	<0.35 J	<0.7 J	-	<1.8 J
Benzo(a)anthracene	mg/kg-dry	T	<1.8 :	-	<0.35 :	<0.7 :	-	<1.8 :
Benzo(a)pyrene	mg/kg-dry	T	<1.8 :	-	<0.35 :	<0.7 :	-	<1.8 :
Benzo(b)fluoranthene	mg/kg-dry	T	<1.8 J	-	<0.35 :	<0.7 :	-	<1.8 :
Benzo(g,h,i)perylene	mg/kg-dry	T	<1.8 :	-	<0.35 :	<0.7 :	-	<1.8 :
Benzo(k)fluoranthene	mg/kg-dry	T	<1.8 :	-	<0.35 :	<0.7 :	-	<1.8 J
Bis(2-chloroethoxy)methane	mg/kg-dry	T	<1.8 :	-	<0.35 :	<0.7 :	-	<1.8 :
Bis(2-chloroethyl)ether	mg/kg-dry	T	<1.8 :	-	<0.35 :	<0.7 :	-	<1.8 :
Bis(2-ethylhexyl)phthalate	mg/kg-dry	T	0.86 J	-	0.088 J	1.2 :	-	<1.8 :
Butyl benzyl phthalate	mg/kg-dry	T	<1.8 :	-	<0.35 :	<0.7 :	-	<1.8 :
Carbazole	mg/kg-dry	T	<1.8 :	-	<0.35 :	<0.7 :	-	<1.8 :
Chrysene	mg/kg-dry	T	<1.8 :	-	<0.35 :	<0.7 :	-	<1.8 :
Dibenz(a,h)anthracene	mg/kg-dry	T	<1.8 :	-	<0.35 :	<0.7 :	-	<1.8 :
Dibenzofuran	mg/kg-dry	T	<1.8 :	-	<0.35 :	<0.7 :	-	<1.8 :
Dichlorodiisopropyl ether	mg/kg-dry	T	<1.8 :	-	<0.35 :	<0.7 :	-	<1.8 :
Diethylphthalate	mg/kg-dry	T	<1.8 :	-	<0.35 :	<0.7 :	-	<1.8 :
Dimethylphthalate	mg/kg-dry	T	<1.8 :	-	<0.35 :	<0.7 :	-	<1.8 :
Di-n-Butyl phthalate	mg/kg-dry	T	<1.8 :	-	<0.35 :	<0.7 :	-	0.13 J
Di-n-Octyl phthalate	mg/kg-dry	T	<1.8 J	-	<0.35 :	<0.7 :	-	<1.8 :
Fluoranthene	mg/kg-dry	T	<1.8 :	-	<0.35 :	<0.7 :	-	<1.8 :

J = Qualified as estimated during data validation
R = Qualified as rejected value from data validation and results are considered unusable for any purpose
T = Total Fraction

Appendix A-7a
Soil - Biased 0-6 inches
Validated Analytical Results

Parameter	Units	Site ID / Sample Date / Sample ID / Exposure Area / Fraction											
		Site ID	MSS8-55		MSS8-56		MSS8-57		MSS8-58		MSS8-59		MSS8-6	
		Sample Date	1/15/2003		7/20/2003		1/15/2003		1/15/2003		1/14/2003		10/10/2002	
		Sample ID	MSS8-55-T01N-SOL		MSS8-56R2-T01N-SOL		MSS8-57-T01N-SOL		MSS8-58-T01N-SOL		MSS8-59-T01N-SOL		MSS8-6-T01N-SOL	
		Exposure Area	SS8D		SS8F		SS8D		SS8D		SS8F		SS8A	
Fluorene	mg/kg-dry	T	<1.8	:	-		<0.35	:	<0.7	:	-		<1.8	:
Hexachlorobenzene	mg/kg-dry	T	<1.8	:	-		<0.35	:	<0.7	:	-		<1.8	:
Hexachlorobutadiene	mg/kg-dry	T	<1.8	:	-		<0.35	:	<0.7	:	-		<1.8	:
Hexachlorocyclopentadiene	mg/kg-dry	T	<1.8	:	-		<0.35	:	<0.7	:	-		<1.8	:
Hexachloroethane	mg/kg-dry	T	<1.8	:	-		<0.35	:	<0.7	:	-		<1.8	:
Indeno(1,2,3-cd)pyrene	mg/kg-dry	T	<1.8	:	-		<0.35	:	<0.7	:	-		<1.8	:
Isophorone	mg/kg-dry	T	<1.8	:	-		<0.35	:	<0.7	:	-		<1.8	:
Naphthalene	mg/kg-dry	T	<1.8	:	-		<0.35	:	<0.7	:	-		<1.8	:
Nitrobenzene	mg/kg-dry	T	<1.8	:	-		<0.35	:	<0.7	:	-		<1.8	:
N-Nitrosodi-n-propylamine	mg/kg-dry	T	<1.8	:	-		<0.35	:	<0.7	:	-		<1.8	:
N-Nitrosodiphenylamine	mg/kg-dry	T	<1.8	:	-		<0.35	:	<0.7	:	-		<1.8	:
Pentachlorophenol	mg/kg-dry	T	<4.4	:	-		<0.89	:	<1.8	:	-		<4.5	J
Phenanthrene	mg/kg-dry	T	<1.8	:	-		<0.35	:	<0.7	:	-		<1.8	:
Phenol	mg/kg-dry	T	<1.8	:	-		<0.35	:	<0.7	:	-		<1.8	:
Pyrene	mg/kg-dry	T	<1.8	:	-		<0.35	:	<0.7	:	-		<1.8	:
Explosives														
2,4,6-Trinitrotoluene	mg/kg-dry	T	-		-		-		-		-		<0.12	:
2,6-Pyridinediamine,	mg/kg-dry	T	-		-		-		-		-		<0.12	:
Cyclotetramethylenetetranitramine	mg/kg-dry	T	-		-		-		-		-		<0.12	:
Cyclotrimethylenetrinitramine	mg/kg-dry	T	-		-		-		-		-		<0.12	:
Pentaerythritol tetranitrate	mg/kg-dry	T	-		-		-		-		-		<5.	:

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Appendix A-7a
Soil - Biased 0-6 inches
Validated Analytical Results

Parameter	Units	Exposure Area Fraction	Site ID	MSS8-60	MSS8-61	MSS8-62	MSS8-63	MSS8-64	MSS8-65
			Sample Date	1/14/2003	1/14/2003	1/14/2003	1/14/2003	1/14/2003	1/14/2003
			Sample ID	MSS8-60-T01N-SOL	MSS8-61-T01N-SOL	MSS8-62-T01N-SOL	MSS8-63-T01N-SOL	MSS8-64-T01N-SOL	MSS8-65-T01N-SOL
			Exposure Area	SS8F	SS8F	SS8F	SS8F	SS8F	SS8F
General Chemistry									
Ammonia	mg/kg-dry	T		77.4 :	71. :	46.4 :	11.5 :	18.2 :	11.8 J
Chloride	mg/kg-dry	T		30.3 :	17.9 :	5.6 :	3.1 :	4.3 :	6.5 :
Fluoride	mg/kg-dry	T		76.9 J	0.48 J	1.3 J	3.4 J	1.5 J	0.3 J
Nitrate	mg/kg-dry	T		5.1 J	<2.4 J	2.4 J	<2.2 J	<2.2 J	<2.6 J
Phosphorus	mg/kg-dry	T		763. :	1510. :	1630. :	1020. :	1040. :	1250. :
Sulfate	mg/kg-dry	T		1890. :	1810. :	72.5 :	29.9 J	4650. J	47.9 :
Total Kjeldahl Nitrogen	mg/kg-dry	T		397. :	773. :	548. :	162. :	106. :	1270. :
Total Organic Carbon	mg/kg-dry	T		939. J	9360. J	1590. J	687. J	733. J	21300. J
Laboratory Parameters									
pH	SU	T		4.6 :	7.2 :	6.9 :	7.1 :	7. :	7.2 :
Solids, Percent	%	T		96.4 :	86.7 :	92.3 :	93.9 :	93.1 :	78.8 :
Specific Conductance	umhos/cm	T		1850. J	1680. J	284. :	705. :	1490. :	193. :
Geotechnical									
Organic Soils	%	T		3.7 :	4.7 :	3.4 :	1.4 :	1.2 :	6.2 :
Physical Properties									
Cation-Exchange Capacity	meq/100g	T		13.1 :	18.2 :	15.7 :	13.3 :	8.8 :	18.4 :
Sodium Absorption Ratio	ratio	T		0.07 :	0.17 :	0.1 :	0.13 :	0.04 :	0.08 :
Metals									
Aluminum	mg/kg-dry	T		7730. :	12600. :	13300. :	11800. :	10300. :	12400. :
Antimony	mg/kg-dry	T		<0.29 J	<0.3 J	<0.31 J	<0.29 J	<0.28 J	<0.33 J
Arsenic	mg/kg-dry	T		9.3 J	3. J	2.9 J	3.1 J	9.1 J	3.3 J
Barium	mg/kg-dry	T		651. :	198. :	251. :	82.4 :	96.2 :	190. :
Beryllium	mg/kg-dry	T		0.79 :	0.91 :	0.88 :	1.1 :	1. :	0.83 :
Boron	mg/kg-dry	T		4. :	3.3 :	2.2 J	<0.33 J	<0.24 J	2.1 J
Cadmium	mg/kg-dry	T		1.2 :	0.2 :	0.33 :	1.2 :	0.97 :	0.12 :
Calcium	mg/kg-dry	T		4450. :	8160. :	6390. :	9000. :	15300. :	4670. :
Chromium	mg/kg-dry	T		29.7 J	57.4 J	45.9 J	49.2 J	41.3 J	42.2 J
Cobalt	mg/kg-dry	T		9.3 :	14.1 :	12.5 :	9.8 :	9.3 :	13.2 :
Copper	mg/kg-dry	T		127. J	56.7 J	53.9 J	135. J	160. J	50.1 J
Iron	mg/kg-dry	T		30300. :	33300. :	30300. :	21600. :	20600. :	35300. :
Lead	mg/kg-dry	T		253. :	58.9 :	82.7 :	129. :	94.4 :	66.2 :
Magnesium	mg/kg-dry	T		3920. :	8270. :	7150. :	7270. :	7120. :	6640. :
Manganese	mg/kg-dry	T		1440. :	780. :	613. :	740. :	674. :	678. :

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Appendix A-7a
Soil - Biased 0-6 inches
Validated Analytical Results

Parameter	Units	Exposure Area Fraction	Site ID / Sample Date / Sample ID		MSS8-60 1/14/2003 MSS8-60-T01N-SOL SS8F		MSS8-61 1/14/2003 MSS8-61-T01N-SOL SS8F		MSS8-62 1/14/2003 MSS8-62-T01N-SOL SS8F		MSS8-63 1/14/2003 MSS8-63-T01N-SOL SS8F		MSS8-64 1/14/2003 MSS8-64-T01N-SOL SS8F		MSS8-65 1/14/2003 MSS8-65-T01N-SOL SS8F	
Mercury	mg/kg-dry	T			0.02	:	<0.018	:	0.12	:	0.14	:	0.036	:	<0.021	:
Molybdenum	mg/kg-dry	T			453.	:	99.4	:	177.	:	1630.	:	1960.	:	98.7	:
Nickel	mg/kg-dry	T			19.3	:	45.8	:	34.4	:	31.2	:	27.2	:	29.7	:
Potassium	mg/kg-dry	T			2920.	J	3080.	J	3170.	J	3750.	J	3770.	J	3440.	J
Selenium	mg/kg-dry	T			1.3	J	<0.8	J	<0.83	J	<0.78	J	0.77	J	<0.88	J
Silver	mg/kg-dry	T			1.8	:	0.48	:	0.47	:	1.4	:	0.98	:	0.45	:
Sodium	mg/kg-dry	T			<137.	:	<123.	:	<114.	:	<30.1	:	<29.6	:	<96.1	:
Thallium	mg/kg-dry	T			0.3	:	0.22	:	0.2	:	0.38	:	0.36	:	0.17	:
Vanadium	mg/kg-dry	T			25.9	:	33.7	:	37.6	:	41.9	:	44.3	:	34.2	:
Zinc	mg/kg-dry	T			374.	:	120.	:	144.	:	246.	:	172.	:	105.	:
Volatile Organics																
1,1,1-Trichloroethane	mg/kg-dry	T			-		-		<0.009	:	<0.011	:	<0.009	:	-	
1,1,2,2-Tetrachloroethane	mg/kg-dry	T			-		-		<0.009	:	<0.011	:	<0.009	:	-	
1,1,2-Trichloro-1,2,2-trifluoroethane	mg/kg-dry	T			-		-		<0.009	:	<0.011	:	<0.009	:	-	
1,1,2-Trichloroethane	mg/kg-dry	T			-		-		<0.009	:	<0.011	:	<0.009	:	-	
1,1-Dichloroethane	mg/kg-dry	T			-		-		<0.009	:	<0.011	:	<0.009	:	-	
1,1-Dichloroethene	mg/kg-dry	T			-		-		<0.009	:	<0.011	:	<0.009	:	-	
1,2,4-Trichlorobenzene	mg/kg-dry	T			-		-		<0.009	:	<0.011	:	<0.009	:	-	
1,2-Dibromo-3-chloropropane	mg/kg-dry	T			-		-		<0.009	:	<0.011	:	<0.009	:	-	
1,2-Dichlorobenzene	mg/kg-dry	T			-		-		<0.009	:	<0.011	:	<0.009	:	-	
1,2-Dichloroethane	mg/kg-dry	T			-		-		<0.009	:	<0.011	:	<0.009	:	-	
1,2-Dichloroethene (total)	mg/kg-dry	T			-		-		<0.009	:	<0.011	:	<0.009	:	-	
1,2-Dichloropropane	mg/kg-dry	T			-		-		<0.009	:	<0.011	:	<0.009	:	-	
1,3-Dichlorobenzene	mg/kg-dry	T			-		-		<0.009	:	<0.011	:	<0.009	:	-	
1,4-Dichlorobenzene	mg/kg-dry	T			-		-		<0.009	:	<0.011	:	<0.009	:	-	
2-Butanone	mg/kg-dry	T			-		-		<0.009	:	<0.011	:	0.003	J	-	
2-Hexanone	mg/kg-dry	T			-		-		<0.009	:	<0.011	:	<0.009	:	-	
4-Methyl-2-pentanone	mg/kg-dry	T			-		-		<0.009	:	<0.011	:	<0.009	:	-	
Acetone	mg/kg-dry	T			-		-		<0.009	:	<0.011	:	<0.009	:	-	
Benzene	mg/kg-dry	T			-		-		<0.009	:	<0.011	:	<0.009	:	-	
Bromodichloromethane	mg/kg-dry	T			-		-		<0.009	:	<0.011	:	<0.009	:	-	
Bromoform	mg/kg-dry	T			-		-		<0.009	:	<0.011	:	<0.009	:	-	
Bromomethane	mg/kg-dry	T			-		-		<0.009	:	<0.011	:	<0.009	:	-	
Carbon disulfide	mg/kg-dry	T			-		-		<0.009	:	<0.011	:	<0.009	:	-	

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Appendix A-7a
Soil - Biased 0-6 inches
Validated Analytical Results

Parameter	Units	Exposure Area Fraction	Site ID / Sample Date / Sample ID					
			MSS8-60 1/14/2003 MSS8-60-T01N-SOL	MSS8-61 1/14/2003 MSS8-61-T01N-SOL	MSS8-62 1/14/2003 MSS8-62-T01N-SOL	MSS8-63 1/14/2003 MSS8-63-T01N-SOL	MSS8-64 1/14/2003 MSS8-64-T01N-SOL	MSS8-65 1/14/2003 MSS8-65-T01N-SOL
			SS8F	SS8F	SS8F	SS8F	SS8F	SS8F
Carbon tetrachloride	mg/kg-dry	T	-	-	<0.009 :	<0.011 :	<0.009 :	-
Chlorobenzene	mg/kg-dry	T	-	-	<0.009 :	<0.011 :	<0.009 :	-
Chloroethane	mg/kg-dry	T	-	-	<0.009 :	<0.011 :	<0.009 :	-
Chloroform	mg/kg-dry	T	-	-	<0.009 :	<0.011 :	<0.009 :	-
Chloromethane	mg/kg-dry	T	-	-	<0.009 :	<0.011 :	<0.009 :	-
cis-1,2-Dichloroethene	mg/kg-dry	T	-	-	<0.009 :	<0.011 :	<0.009 :	-
cis-1,3-Dichloropropene	mg/kg-dry	T	-	-	<0.009 :	<0.011 :	<0.009 :	-
Dibromochloromethane	mg/kg-dry	T	-	-	<0.009 :	<0.011 :	<0.009 :	-
Dichlorodifluoromethane	mg/kg-dry	T	-	-	<0.009 :	<0.011 :	<0.009 :	-
Ethylbenzene	mg/kg-dry	T	-	-	<0.009 :	<0.011 :	<0.009 :	-
Methylene chloride	mg/kg-dry	T	-	-	<0.009 :	<0.011 :	<0.009 :	-
Styrene	mg/kg-dry	T	-	-	<0.009 :	<0.011 :	<0.009 :	-
Tetrachloroethene	mg/kg-dry	T	-	-	<0.009 :	<0.011 :	<0.009 :	-
Toluene	mg/kg-dry	T	-	-	<0.009 :	<0.011 :	<0.009 :	-
Total Xylene	mg/kg-dry	T	-	-	0.0009 J	0.002 J	0.002 J	-
trans-1,2-Dichloroethene	mg/kg-dry	T	-	-	<0.009 :	<0.011 :	<0.009 :	-
trans-1,3-Dichloropropene	mg/kg-dry	T	-	-	<0.009 :	<0.011 :	<0.009 :	-
Trichloroethene	mg/kg-dry	T	-	-	<0.009 :	<0.011 :	<0.009 :	-
Trichlorofluoromethane	mg/kg-dry	T	-	-	<0.009 :	<0.011 :	<0.009 :	-
Vinyl chloride	mg/kg-dry	T	-	-	<0.009 :	<0.011 :	<0.009 :	-
Semi-Volatile Organics								
1,1`-Biphenyl	mg/kg-dry	T	-	-	<0.36 :	<0.35 :	<0.36 :	-
2,4,5-Trichlorophenol	mg/kg-dry	T	-	-	<0.9 :	<0.88 :	<0.89 :	-
2,4,6-Trichlorophenol	mg/kg-dry	T	-	-	<0.36 :	<0.35 :	<0.36 :	-
2,4-Dichlorophenol	mg/kg-dry	T	-	-	<0.36 :	<0.35 :	<0.36 :	-
2,4-Dimethylphenol	mg/kg-dry	T	-	-	<0.36 :	<0.35 :	<0.36 :	-
2,4-Dinitrophenol	mg/kg-dry	T	-	-	<0.9 :	<0.88 :	<0.89 :	-
2,4-Dinitrotoluene	mg/kg-dry	T	-	-	<0.36 :	<0.35 :	<0.36 :	-
2,6-Dinitrotoluene	mg/kg-dry	T	-	-	<0.36 :	<0.35 :	<0.36 :	-
2-Chloronaphthalene	mg/kg-dry	T	-	-	<0.36 :	<0.35 :	<0.36 :	-
2-Chlorophenol	mg/kg-dry	T	-	-	<0.36 :	<0.35 :	<0.36 :	-
2-Methylnaphthalene	mg/kg-dry	T	-	-	<0.36 :	<0.35 :	<0.36 :	-
2-Methylphenol	mg/kg-dry	T	-	-	<0.36 :	<0.35 :	<0.36 :	-
2-Nitroaniline	mg/kg-dry	T	-	-	<0.9 :	<0.88 :	<0.89 :	-

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Appendix A-7a
Soil - Biased 0-6 inches
Validated Analytical Results

Parameter	Units	Exposure Area Fraction	Site ID / Sample Date / Sample ID	MSS8-60 1/14/2003 MSS8-60-T01N-SOL SS8F	MSS8-61 1/14/2003 MSS8-61-T01N-SOL SS8F	MSS8-62 1/14/2003 MSS8-62-T01N-SOL SS8F	MSS8-63 1/14/2003 MSS8-63-T01N-SOL SS8F	MSS8-64 1/14/2003 MSS8-64-T01N-SOL SS8F	MSS8-65 1/14/2003 MSS8-65-T01N-SOL SS8F
2-Nitrophenol	mg/kg-dry	T		-	-	<0.36 :	<0.35 :	<0.36 :	-
3,3-Dichlorobenzidine	mg/kg-dry	T		-	-	<0.36 :	<0.35 :	<0.36 :	-
3-Nitroaniline	mg/kg-dry	T		-	-	<0.9 :	<0.88 :	<0.89 :	-
4,6-Dinitro-2-methylphenol	mg/kg-dry	T		-	-	<0.9 :	<0.88 :	<0.89 :	-
4-Bromophenyl phenyl ether	mg/kg-dry	T		-	-	<0.36 :	<0.35 :	<0.36 :	-
4-Chloro-3-methylphenol	mg/kg-dry	T		-	-	<0.36 :	<0.35 :	<0.36 :	-
4-Chloroaniline	mg/kg-dry	T		-	-	<0.36 :	<0.35 :	<0.36 :	-
4-Chlorophenyl phenyl ether	mg/kg-dry	T		-	-	<0.36 :	<0.35 :	<0.36 :	-
4-Methylphenol	mg/kg-dry	T		-	-	<0.36 :	<0.35 :	<0.36 :	-
4-Nitroaniline	mg/kg-dry	T		-	-	<0.9 :	<0.88 :	<0.89 :	-
4-Nitrophenol	mg/kg-dry	T		-	-	<0.9 :	<0.88 :	<0.89 :	-
Acenaphthene	mg/kg-dry	T		-	-	<0.36 :	<0.35 :	<0.36 :	-
Acenaphthylene	mg/kg-dry	T		-	-	<0.36 :	<0.35 :	<0.36 :	-
Anthracene	mg/kg-dry	T		-	-	<0.36 :	<0.35 :	<0.36 :	-
Benzaldehyde	mg/kg-dry	T		-	-	<0.36 J	<0.35 J	<0.36 J	-
Benzo(a)anthracene	mg/kg-dry	T		-	-	<0.36 :	<0.35 :	<0.36 :	-
Benzo(a)pyrene	mg/kg-dry	T		-	-	<0.36 :	<0.35 :	<0.36 :	-
Benzo(b)fluoranthene	mg/kg-dry	T		-	-	<0.36 :	<0.35 :	<0.36 :	-
Benzo(g,h,i)perylene	mg/kg-dry	T		-	-	<0.36 :	<0.35 :	<0.36 :	-
Benzo(k)fluoranthene	mg/kg-dry	T		-	-	<0.36 :	<0.35 :	<0.36 :	-
Bis(2-chloroethoxy)methane	mg/kg-dry	T		-	-	<0.36 :	<0.35 :	<0.36 :	-
Bis(2-chloroethyl)ether	mg/kg-dry	T		-	-	<0.36 :	<0.35 :	<0.36 :	-
Bis(2-ethylhexyl)phthalate	mg/kg-dry	T		-	-	0.077 J	0.43 :	<0.36 :	-
Butyl benzyl phthalate	mg/kg-dry	T		-	-	<0.36 :	0.042 J	<0.36 :	-
Carbazole	mg/kg-dry	T		-	-	<0.36 :	<0.35 :	<0.36 :	-
Chrysene	mg/kg-dry	T		-	-	<0.36 :	<0.35 :	<0.36 :	-
Dibenz(a,h)anthracene	mg/kg-dry	T		-	-	<0.36 :	<0.35 :	<0.36 :	-
Dibenzofuran	mg/kg-dry	T		-	-	<0.36 :	<0.35 :	<0.36 :	-
Dichlorodiisopropyl ether	mg/kg-dry	T		-	-	<0.36 :	<0.35 :	<0.36 :	-
Diethylphthalate	mg/kg-dry	T		-	-	<0.36 :	<0.35 :	<0.36 :	-
Dimethylphthalate	mg/kg-dry	T		-	-	<0.36 :	<0.35 :	<0.36 :	-
Di-n-Butyl phthalate	mg/kg-dry	T		-	-	<0.36 :	<0.35 :	<0.36 :	-
Di-n-Octyl phthalate	mg/kg-dry	T		-	-	<0.36 :	<0.35 :	<0.36 :	-
Fluoranthene	mg/kg-dry	T		-	-	<0.36 :	<0.35 :	<0.36 :	-

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Appendix A-7a
Soil - Biased 0-6 inches
Validated Analytical Results

Parameter	Units	Exposure Area Fraction	Site ID / Sample Date / Sample ID					
			MSS8-60 1/14/2003 MSS8-60-T01N-SOL	MSS8-61 1/14/2003 MSS8-61-T01N-SOL	MSS8-62 1/14/2003 MSS8-62-T01N-SOL	MSS8-63 1/14/2003 MSS8-63-T01N-SOL	MSS8-64 1/14/2003 MSS8-64-T01N-SOL	MSS8-65 1/14/2003 MSS8-65-T01N-SOL
			SS8F	SS8F	SS8F	SS8F	SS8F	SS8F
Fluorene	mg/kg-dry	T	-	-	<0.36 :	<0.35 :	<0.36 :	-
Hexachlorobenzene	mg/kg-dry	T	-	-	<0.36 :	<0.35 :	<0.36 :	-
Hexachlorobutadiene	mg/kg-dry	T	-	-	<0.36 :	<0.35 :	<0.36 :	-
Hexachlorocyclopentadiene	mg/kg-dry	T	-	-	<0.36 :	<0.35 :	<0.36 :	-
Hexachloroethane	mg/kg-dry	T	-	-	<0.36 :	<0.35 :	<0.36 :	-
Indeno(1,2,3-cd)pyrene	mg/kg-dry	T	-	-	<0.36 :	<0.35 :	<0.36 :	-
Isophorone	mg/kg-dry	T	-	-	<0.36 :	<0.35 :	<0.36 :	-
Naphthalene	mg/kg-dry	T	-	-	<0.36 :	<0.35 :	<0.36 :	-
Nitrobenzene	mg/kg-dry	T	-	-	<0.36 :	<0.35 :	<0.36 :	-
N-Nitrosodi-n-propylamine	mg/kg-dry	T	-	-	<0.36 :	<0.35 :	<0.36 :	-
N-Nitrosodiphenylamine	mg/kg-dry	T	-	-	<0.36 :	<0.35 :	<0.36 :	-
Pentachlorophenol	mg/kg-dry	T	-	-	<0.9 :	<0.88 :	<0.89 :	-
Phenanthrene	mg/kg-dry	T	-	-	<0.36 :	<0.35 :	<0.36 :	-
Phenol	mg/kg-dry	T	-	-	<0.36 :	<0.35 :	<0.36 :	-
Pyrene	mg/kg-dry	T	-	-	<0.36 :	<0.35 :	<0.36 :	-

J = Qualified as estimated during data validation
R = Qualified as rejected value from data validation and results are considered unusable for any purpose
T = Total Fraction

Appendix A-7a
Soil - Biased 0-6 inches
Validated Analytical Results

Parameter	Units	Exposure Area Fraction	Site ID	MSS8-66	MSS8-67	MSS8-68	MSS8-69	MSS8-7	MSS8-70
			Sample Date	1/14/2003	1/14/2003	1/14/2003	1/14/2003	10/23/2002	1/14/2003
			Sample ID	MSS8-66-T01N-SOL	MSS8-67-T01N-SOL	MSS8-68-T01N-SOL	MSS8-69-T01N-SOL	MSS8-7-T01N-SOL	MSS8-70-T01N-SOL
			Exposure Area	SS8F	SS8F	SS8F	SS8F	SS8A	SS8F
General Chemistry									
Ammonia	mg/kg-dry	T		30.8 :	59.5 :	28.8 :	72.6 :	16. :	149. :
Chloride	mg/kg-dry	T		5.3 :	22. :	2.4 :	4.4 :	8.5 J	4.7 :
Fluoride	mg/kg-dry	T		0.93 J	0.52 J	2.1 J	1.4 J	0.49 J	0.27 J
Nitrate	mg/kg-dry	T		2.4 J	<2.5 J	<2.3 J	<2.3 J	<2.2 J	<2.5 J
Phosphorus	mg/kg-dry	T		906. :	731. :	892. :	1450. :	591. J	1200. :
Sulfate	mg/kg-dry	T		163. :	48.9 :	1260. :	19.3 :	49.6 J	24.2 :
Total Kjeldahl Nitrogen	mg/kg-dry	T		248. :	971. :	322. :	645. :	74.2 J	1370. :
Total Organic Carbon	mg/kg-dry	T		9130. J	12500. J	5560. J	23100. J	2330. J	23500. J
Laboratory Parameters									
pH	SU	T		7.4 :	7.8 :	6.2 :	7.2 :	5.4 :	7. :
Solids, Percent	%	T		87.2 :	82.4 :	89.8 :	89.4 :	93.6 :	80.9 :
Specific Conductance	umhos/cm	T		1100. J	394. J	1650. J	127. :	116. :	129. :
Geotechnical									
Organic Soils	%	T		2.5 :	5.1 :	3. :	4.2 :	2.75 J	7.2 :
Physical Properties									
Cation-Exchange Capacity	meq/100g	T		11.2 :	14.8 :	19.2 :	19.6 :	11.1 :	20. :
Sodium Absorption Ratio	ratio	T		0.11 :	0.15 :	0.02 :	0.1 :	0.49 :	0.06 :
Metals									
Aluminum	mg/kg-dry	T		9510. :	7580. :	14300. :	16600. :	-	12100. :
Antimony	mg/kg-dry	T		<0.33 J	<0.36 J	<0.32 J	<0.33 J	-	<0.35 J
Arsenic	mg/kg-dry	T		2.8 J	3.6 J	4.3 J	7.2 J	-	3.9 J
Barium	mg/kg-dry	T		106. :	121. :	167. :	226. :	-	197. :
Beryllium	mg/kg-dry	T		0.6 :	0.52 :	1.4 :	0.98 :	-	0.8 :
Boron	mg/kg-dry	T		<2.4 :	5.2 :	<2.2 :	<0.81 J	-	3.1 J
Cadmium	mg/kg-dry	T		0.32 :	0.91 :	1.5 :	15.5 :	-	0.42 :
Calcium	mg/kg-dry	T		6070. :	10500. :	10900. :	4960. :	-	5120. :
Chromium	mg/kg-dry	T		31.1 J	45. J	32.4 J	59.9 J	-	36.9 J
Cobalt	mg/kg-dry	T		8.3 :	7.3 :	11.5 :	16. :	-	11.9 :
Copper	mg/kg-dry	T		52.7 J	63.3 J	103. J	69.3 J	-	41.4 J
Iron	mg/kg-dry	T		19100. :	21600. :	29300. :	39300. :	-	27800. :
Lead	mg/kg-dry	T		35.8 :	89.8 :	100. :	62.8 :	-	59.3 :
Magnesium	mg/kg-dry	T		6730. :	4400. :	7370. :	10100. :	-	6830. :
Manganese	mg/kg-dry	T		534. :	511. :	1300. :	691. :	-	633. :

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Appendix A-7a
Soil - Biased 0-6 inches
Validated Analytical Results

Parameter	Units	Exposure Area Fraction	Site ID / Sample Date / Sample ID		MSS8-66 1/14/2003 MSS8-66-T01N-SOL SS8F		MSS8-67 1/14/2003 MSS8-67-T01N-SOL SS8F		MSS8-68 1/14/2003 MSS8-68-T01N-SOL SS8F		MSS8-69 1/14/2003 MSS8-69-T01N-SOL SS8F		MSS8-7 10/23/2002 MSS8-7-T01N-SOL SS8A		MSS8-70 1/14/2003 MSS8-70-T01N-SOL SS8F	
Mercury	mg/kg-dry	T			0.031	:	0.046	:	0.11	:	<0.018	:	-		0.028	:
Molybdenum	mg/kg-dry	T			173.	:	297.	:	1070.	:	574.	:	-		124.	:
Nickel	mg/kg-dry	T			24.6	:	20.7	:	26.	:	39.4	:	-		27.1	:
Potassium	mg/kg-dry	T			2130.	J	1970.	J	2890.	J	3630.	J	-		3330.	J
Selenium	mg/kg-dry	T			<0.88	J	<0.96	J	0.98	J	<0.87	J	-		<0.94	J
Silver	mg/kg-dry	T			0.35	:	0.52	:	1.3	:	0.56	:	-		0.3	:
Sodium	mg/kg-dry	T			<59.4	:	190.	:	<89.6	:	<121.	:	-		<124.	:
Thallium	mg/kg-dry	T			0.17	:	0.13	:	0.29	:	0.23	:	-		0.19	:
Vanadium	mg/kg-dry	T			28.8	:	25.7	:	37.7	:	50.	:	-		33.8	:
Zinc	mg/kg-dry	T			99.5	:	742.	:	247.	:	124.	:	-		131.	:
Semi-Volatile Organics																
1,1`-Biphenyl	mg/kg-dry	T			-		-		-		-		<0.35	:	-	
2,4,5-Trichlorophenol	mg/kg-dry	T			-		-		-		-		<0.88	:	-	
2,4,6-Trichlorophenol	mg/kg-dry	T			-		-		-		-		<0.35	:	-	
2,4-Dichlorophenol	mg/kg-dry	T			-		-		-		-		<0.35	:	-	
2,4-Dimethylphenol	mg/kg-dry	T			-		-		-		-		<0.35	:	-	
2,4-Dinitrophenol	mg/kg-dry	T			-		-		-		-		<0.88	J	-	
2,4-Dinitrotoluene	mg/kg-dry	T			-		-		-		-		<0.35	:	-	
2,6-Dinitrotoluene	mg/kg-dry	T			-		-		-		-		<0.35	:	-	
2-Chloronaphthalene	mg/kg-dry	T			-		-		-		-		<0.35	:	-	
2-Chlorophenol	mg/kg-dry	T			-		-		-		-		<0.35	:	-	
2-Methylnaphthalene	mg/kg-dry	T			-		-		-		-		<0.35	:	-	
2-Methylphenol	mg/kg-dry	T			-		-		-		-		<0.35	:	-	
2-Nitroaniline	mg/kg-dry	T			-		-		-		-		<0.88	:	-	
2-Nitrophenol	mg/kg-dry	T			-		-		-		-		<0.35	:	-	
3,3-Dichlorobenzidine	mg/kg-dry	T			-		-		-		-		<0.35	:	-	
3-Nitroaniline	mg/kg-dry	T			-		-		-		-		<0.88	:	-	
4,6-Dinitro-2-methylphenol	mg/kg-dry	T			-		-		-		-		<0.88	:	-	
4-Bromophenyl phenyl ether	mg/kg-dry	T			-		-		-		-		<0.35	:	-	
4-Chloro-3-methylphenol	mg/kg-dry	T			-		-		-		-		<0.35	:	-	
4-Chloroaniline	mg/kg-dry	T			-		-		-		-		<0.35	:	-	
4-Chlorophenyl phenyl ether	mg/kg-dry	T			-		-		-		-		<0.35	:	-	
4-Methylphenol	mg/kg-dry	T			-		-		-		-		<0.35	:	-	
4-Nitroaniline	mg/kg-dry	T			-		-		-		-		<0.88	J	-	

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Appendix A-7a
Soil - Biased 0-6 inches
Validated Analytical Results

Parameter	Units	Exposure Area Fraction	Site ID / Sample Date / Sample ID					
			MSS8-66 1/14/2003 MSS8-66-T01N-SOL	MSS8-67 1/14/2003 MSS8-67-T01N-SOL	MSS8-68 1/14/2003 MSS8-68-T01N-SOL	MSS8-69 1/14/2003 MSS8-69-T01N-SOL	MSS8-7 10/23/2002 MSS8-7-T01N-SOL	MSS8-70 1/14/2003 MSS8-70-T01N-SOL
			SS8F	SS8F	SS8F	SS8F	SS8A	SS8F
4-Nitrophenol	mg/kg-dry	T	-	-	-	-	<0.88 J	-
Acenaphthene	mg/kg-dry	T	-	-	-	-	<0.35 :	-
Acenaphthylene	mg/kg-dry	T	-	-	-	-	<0.35 :	-
Anthracene	mg/kg-dry	T	-	-	-	-	<0.35 :	-
Benzaldehyde	mg/kg-dry	T	-	-	-	-	<0.55 :	-
Benzo(a)anthracene	mg/kg-dry	T	-	-	-	-	<0.35 :	-
Benzo(a)pyrene	mg/kg-dry	T	-	-	-	-	<0.35 :	-
Benzo(b)fluoranthene	mg/kg-dry	T	-	-	-	-	<0.35 :	-
Benzo(g,h,i)perylene	mg/kg-dry	T	-	-	-	-	<0.35 :	-
Benzo(k)fluoranthene	mg/kg-dry	T	-	-	-	-	<0.35 :	-
Bis(2-chloroethoxy)methane	mg/kg-dry	T	-	-	-	-	<0.35 :	-
Bis(2-chloroethyl)ether	mg/kg-dry	T	-	-	-	-	<0.35 :	-
Bis(2-ethylhexyl)phthalate	mg/kg-dry	T	-	-	-	-	0.22 J	-
Butyl benzyl phthalate	mg/kg-dry	T	-	-	-	-	0.037 J	-
Carbazole	mg/kg-dry	T	-	-	-	-	<0.35 :	-
Chrysene	mg/kg-dry	T	-	-	-	-	<0.35 :	-
Dibenz(a,h)anthracene	mg/kg-dry	T	-	-	-	-	<0.35 :	-
Dibenzofuran	mg/kg-dry	T	-	-	-	-	<0.35 :	-
Dichlorodiisopropyl ether	mg/kg-dry	T	-	-	-	-	<0.35 :	-
Diethylphthalate	mg/kg-dry	T	-	-	-	-	<0.35 :	-
Dimethylphthalate	mg/kg-dry	T	-	-	-	-	<0.35 :	-
Di-n-Butyl phthalate	mg/kg-dry	T	-	-	-	-	<0.35 :	-
Di-n-Octyl phthalate	mg/kg-dry	T	-	-	-	-	<0.35 :	-
Fluoranthene	mg/kg-dry	T	-	-	-	-	0.043 J	-
Fluorene	mg/kg-dry	T	-	-	-	-	0.17 J	-
Hexachlorobenzene	mg/kg-dry	T	-	-	-	-	<0.35 :	-
Hexachlorobutadiene	mg/kg-dry	T	-	-	-	-	<0.35 :	-
Hexachlorocyclopentadiene	mg/kg-dry	T	-	-	-	-	<0.35 :	-
Hexachloroethane	mg/kg-dry	T	-	-	-	-	<0.35 :	-
Indeno(1,2,3-cd)pyrene	mg/kg-dry	T	-	-	-	-	<0.35 :	-
Isophorone	mg/kg-dry	T	-	-	-	-	<0.35 :	-
Naphthalene	mg/kg-dry	T	-	-	-	-	<0.35 :	-
Nitrobenzene	mg/kg-dry	T	-	-	-	-	<0.35 :	-
N-Nitrosodi-n-propylamine	mg/kg-dry	T	-	-	-	-	<0.35 :	-

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Appendix A-7a
Soil - Biased 0-6 inches
Validated Analytical Results

Parameter	Units	Exposure Area Fraction	Site ID / Sample Date / Sample ID					
			MSS8-66 1/14/2003 MSS8-66-T01N-SOL	MSS8-67 1/14/2003 MSS8-67-T01N-SOL	MSS8-68 1/14/2003 MSS8-68-T01N-SOL	MSS8-69 1/14/2003 MSS8-69-T01N-SOL	MSS8-7 10/23/2002 MSS8-7-T01N-SOL	MSS8-70 1/14/2003 MSS8-70-T01N-SOL
			SS8F	SS8F	SS8F	SS8F	SS8A	SS8F
N-Nitrosodiphenylamine	mg/kg-dry	T	-	-	-	-	<0.35 :	-
Pentachlorophenol	mg/kg-dry	T	-	-	-	-	<0.88 :	-
Phenanthrene	mg/kg-dry	T	-	-	-	-	0.5 :	-
Phenol	mg/kg-dry	T	-	-	-	-	<0.35 :	-
Pyrene	mg/kg-dry	T	-	-	-	-	0.16 J	-
Explosives								
2,4,6-Trinitrotoluene	mg/kg-dry	T	-	-	-	-	<0.12 :	-
2,6-Pyridinediamine,	mg/kg-dry	T	-	-	-	-	<0.12 :	-
Cyclotetramethylenetetranitramine	mg/kg-dry	T	-	-	-	-	<0.12 :	-
Cyclotrimethylenetrinitramine	mg/kg-dry	T	-	-	-	-	<0.12 :	-
Pentaerythritol tetranitrate	mg/kg-dry	T	-	-	-	-	13. J	-

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Appendix A-7a
Soil - Biased 0-6 inches
Validated Analytical Results

Parameter	Units	Exposure Area Fraction	Site ID / Sample Date / Sample ID		MSS8-71 1/14/2003 MSS8-71-T01N-SOL		MSS8-72 1/14/2003 MSS8-72-T01N-SOL		MSS8-73 1/14/2003 MSS8-73-T01N-SOL		MSS8-74 1/14/2003 MSS8-74-T01N-SOL		MSS8-75 1/17/2003 MSS8-75-T01N-SOL		MSS8-76 1/17/2003 MSS8-76-T01N-SOL	
			Exposure Area		SS8F		SS8F		SS8F		SS8F		SS8A		SS8A	
General Chemistry																
Ammonia	mg/kg-dry	T			<9.4	:	17.5	:	31.4	J	35.6	:	10.1	:	17.5	:
Chloride	mg/kg-dry	T			4.2	:	4.	:	2.7	:	3.1	:	2.5	:	<2.1	:
Fluoride	mg/kg-dry	T			2.5	J	2.6	J	4.7	J	1.4	J	1.5	J	1.4	J
Nitrate	mg/kg-dry	T			<2.2	J	<2.2	J	<2.2	J	<2.2	J	<2.2	J	<2.1	J
Phosphorus	mg/kg-dry	T			514.	:	564.	:	876.	:	1330.	:	633.	:	389.	:
Sulfate	mg/kg-dry	T			739.	:	19.5	:	71.9	:	267.	:	359.	:	185.	:
Total Kjeldahl Nitrogen	mg/kg-dry	T			102.	:	55.8	:	306.	:	265.	:	96.5	:	139.	:
Total Organic Carbon	mg/kg-dry	T			1850.	J	2690.	J	4370.	J	4640.	J	1590.	J	894.	J
Laboratory Parameters																
pH	SU	T			7.3	:	7.1	:	7.3	:	6.9	:	7.4	:	7.6	:
Solids, Percent	%	T			93.1	:	91.5	:	92.1	:	92.3	:	94.3	:	95.5	:
Specific Conductance	umhos/cm	T			1230.	:	187.	J	289.	:	1420.	:	871.	J	1800.	J
Geotechnical																
Organic Soils	%	T			1.5	:	1.1	:	2.	:	2.9	:	0.9	:	1.	:
Physical Properties																
Cation-Exchange Capacity	meq/100g	T			8.7	:	10.1	:	13.6	:	13.4	:	15.5	:	14.3	:
Sodium Absorption Ratio	ratio	T			0.1	:	0.2	:	0.13	:	0.11	:	0.04	:	0.11	:
Metals																
Aluminum	mg/kg-dry	T			9290.	:	8470.	:	12600.	J	15400.	:	-		-	
Antimony	mg/kg-dry	T			<0.31	J	<0.31	J	<0.32	J	<0.3	J	-		-	
Arsenic	mg/kg-dry	T			3.5	J	2.9	J	4.2	J	4.9	J	-		-	
Barium	mg/kg-dry	T			24.6	:	27.1	:	75.6	J	252.	:	-		-	
Beryllium	mg/kg-dry	T			1.6	:	1.2	:	1.7	J	0.82	:	-		-	
Boron	mg/kg-dry	T			<0.28	:	<1.	:	<0.26	J	<0.66	J	-		-	
Cadmium	mg/kg-dry	T			4.7	:	3.3	:	2.4	J	<0.039	:	-		-	
Calcium	mg/kg-dry	T			10700.	:	8890.	:	8080.	J	6700.	:	-		-	
Chromium	mg/kg-dry	T			22.5	J	19.4	J	21.3	J	56.4	J	-		-	
Cobalt	mg/kg-dry	T			18.	:	2.1	:	5.9	:	13.7	:	-		-	
Copper	mg/kg-dry	T			129.	J	115.	J	195.	J	38.3	J	-		-	
Iron	mg/kg-dry	T			18600.	:	19300.	:	22600.	J	32500.	:	-		-	
Lead	mg/kg-dry	T			129.	:	138.	:	97.8	J	29.4	:	-		-	
Magnesium	mg/kg-dry	T			3800.	:	3520.	:	5830.	J	9560.	:	-		-	
Manganese	mg/kg-dry	T			891.	:	765.	:	1470.	:	668.	:	-		-	

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Appendix A-7a
Soil - Biased 0-6 inches
Validated Analytical Results

Parameter	Units	Exposure Area Fraction	Site ID / Sample Date / Sample ID		MSS8-71 1/14/2003 MSS8-71-T01N-SOL SS8F		MSS8-72 1/14/2003 MSS8-72-T01N-SOL SS8F		MSS8-73 1/14/2003 MSS8-73-T01N-SOL SS8F		MSS8-74 1/14/2003 MSS8-74-T01N-SOL SS8F		MSS8-75 1/17/2003 MSS8-75-T01N-SOL SS8A		MSS8-76 1/17/2003 MSS8-76-T01N-SOL SS8A	
Mercury	mg/kg-dry	T		0.08	:	0.028	:	0.31	J	<0.018	:	-		-	
Molybdenum	mg/kg-dry	T		1260.	:	1910.	:	1430.	:	21.8	:	-		-	
Nickel	mg/kg-dry	T		9.9	:	10.1	:	14.5	J	38.5	:	-		-	
Potassium	mg/kg-dry	T		2110.	J	1980.	J	2860.	J	3190.	J	-		-	
Selenium	mg/kg-dry	T		<0.82	J	0.82	J	<0.85	J	<0.8	J	-		-	
Silver	mg/kg-dry	T		2.	:	2.3	:	1.7	:	0.28	:	-		-	
Sodium	mg/kg-dry	T		<141.	:	<71.	:	<51.6	:	<133.	:	-		-	
Thallium	mg/kg-dry	T		0.25	:	0.31	:	0.3	:	0.16	:	-		-	
Vanadium	mg/kg-dry	T		23.1	:	24.7	:	32.1	J	40.5	:	-		-	
Zinc	mg/kg-dry	T		666.	:	397.	:	344.	J	83.8	:	-		-	
Semi-Volatile Organics															
1,1`-Biphenyl	mg/kg-dry	T		-		-		-		-		<0.35	:	<0.34	:
2,4,5-Trichlorophenol	mg/kg-dry	T		-		-		-		-		<0.88	:	<0.86	:
2,4,6-Trichlorophenol	mg/kg-dry	T		-		-		-		-		<0.35	:	<0.34	:
2,4-Dichlorophenol	mg/kg-dry	T		-		-		-		-		<0.35	:	<0.34	:
2,4-Dimethylphenol	mg/kg-dry	T		-		-		-		-		<0.35	:	<0.34	:
2,4-Dinitrophenol	mg/kg-dry	T		-		-		-		-		<0.88	:	<0.86	:
2,4-Dinitrotoluene	mg/kg-dry	T		-		-		-		-		<0.35	:	<0.34	:
2,6-Dinitrotoluene	mg/kg-dry	T		-		-		-		-		<0.35	:	<0.34	:
2-Chloronaphthalene	mg/kg-dry	T		-		-		-		-		<0.35	:	<0.34	:
2-Chlorophenol	mg/kg-dry	T		-		-		-		-		<0.35	:	<0.34	:
2-Methylnaphthalene	mg/kg-dry	T		-		-		-		-		<0.35	:	<0.34	:
2-Methylphenol	mg/kg-dry	T		-		-		-		-		<0.35	:	<0.34	:
2-Nitroaniline	mg/kg-dry	T		-		-		-		-		<0.88	:	<0.86	:
2-Nitrophenol	mg/kg-dry	T		-		-		-		-		<0.35	:	<0.34	:
3,3-Dichlorobenzidine	mg/kg-dry	T		-		-		-		-		<0.35	:	<0.34	:
3-Nitroaniline	mg/kg-dry	T		-		-		-		-		<0.88	:	<0.86	:
4,6-Dinitro-2-methylphenol	mg/kg-dry	T		-		-		-		-		<0.88	:	<0.86	:
4-Bromophenyl phenyl ether	mg/kg-dry	T		-		-		-		-		<0.35	:	<0.34	:
4-Chloro-3-methylphenol	mg/kg-dry	T		-		-		-		-		<0.35	:	<0.34	:
4-Chloroaniline	mg/kg-dry	T		-		-		-		-		<0.35	:	<0.34	:
4-Chlorophenyl phenyl ether	mg/kg-dry	T		-		-		-		-		<0.35	:	<0.34	:
4-Methylphenol	mg/kg-dry	T		-		-		-		-		<0.35	:	<0.34	:
4-Nitroaniline	mg/kg-dry	T		-		-		-		-		<0.88	:	<0.86	:

J = Qualified as estimated during data validation
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T = Total Fraction

Appendix A-7a
Soil - Biased 0-6 inches
Validated Analytical Results

Parameter	Units	Exposure Area Fraction	Site ID	Sample Date	Sample ID					
			MSS8-71	MSS8-72	MSS8-73	MSS8-74	MSS8-75	MSS8-76
			1/14/2003	1/14/2003	1/14/2003	1/14/2003	1/17/2003	1/17/2003
			MSS8-71-T01N-SOL	MSS8-72-T01N-SOL	MSS8-73-T01N-SOL	MSS8-74-T01N-SOL	MSS8-75-T01N-SOL	MSS8-76-T01N-SOL
			SS8F	SS8F	SS8F	SS8F	SS8A	SS8A
4-Nitrophenol	mg/kg-dry	T	-	-	-	-	<0.88 :	<0.86 :
Acenaphthene	mg/kg-dry	T	-	-	-	-	<0.35 :	<0.34 :
Acenaphthylene	mg/kg-dry	T	-	-	-	-	<0.35 :	<0.34 :
Anthracene	mg/kg-dry	T	-	-	-	-	<0.35 :	<0.34 :
Benzaldehyde	mg/kg-dry	T	-	-	-	-	<0.35 J	<0.34 J
Benzo(a)anthracene	mg/kg-dry	T	-	-	-	-	<0.35 :	<0.34 :
Benzo(a)pyrene	mg/kg-dry	T	-	-	-	-	<0.35 :	<0.34 :
Benzo(b)fluoranthene	mg/kg-dry	T	-	-	-	-	<0.35 :	<0.34 :
Benzo(g,h,i)perylene	mg/kg-dry	T	-	-	-	-	<0.35 :	<0.34 :
Benzo(k)fluoranthene	mg/kg-dry	T	-	-	-	-	<0.35 :	<0.34 :
Bis(2-chloroethoxy)methane	mg/kg-dry	T	-	-	-	-	<0.35 :	<0.34 :
Bis(2-chloroethyl)ether	mg/kg-dry	T	-	-	-	-	<0.35 :	<0.34 :
Bis(2-ethylhexyl)phthalate	mg/kg-dry	T	-	-	-	-	<0.35 :	<0.34 :
Butyl benzyl phthalate	mg/kg-dry	T	-	-	-	-	<0.35 :	<0.34 :
Carbazole	mg/kg-dry	T	-	-	-	-	<0.35 :	<0.34 :
Chrysene	mg/kg-dry	T	-	-	-	-	<0.35 :	<0.34 :
Dibenz(a,h)anthracene	mg/kg-dry	T	-	-	-	-	<0.35 :	<0.34 :
Dibenzofuran	mg/kg-dry	T	-	-	-	-	<0.35 :	<0.34 :
Dichlorodiisopropyl ether	mg/kg-dry	T	-	-	-	-	<0.35 :	<0.34 :
Diethylphthalate	mg/kg-dry	T	-	-	-	-	<0.35 :	<0.34 :
Dimethylphthalate	mg/kg-dry	T	-	-	-	-	<0.35 :	<0.34 :
Di-n-Butyl phthalate	mg/kg-dry	T	-	-	-	-	<0.35 :	<0.34 :
Di-n-Octyl phthalate	mg/kg-dry	T	-	-	-	-	<0.35 :	<0.34 :
Fluoranthene	mg/kg-dry	T	-	-	-	-	<0.35 :	<0.34 :
Fluorene	mg/kg-dry	T	-	-	-	-	<0.35 :	<0.34 :
Hexachlorobenzene	mg/kg-dry	T	-	-	-	-	<0.35 :	<0.34 :
Hexachlorobutadiene	mg/kg-dry	T	-	-	-	-	<0.35 :	<0.34 :
Hexachlorocyclopentadiene	mg/kg-dry	T	-	-	-	-	<0.35 :	<0.34 :
Hexachloroethane	mg/kg-dry	T	-	-	-	-	<0.35 :	<0.34 :
Indeno(1,2,3-cd)pyrene	mg/kg-dry	T	-	-	-	-	<0.35 :	<0.34 :
Isophorone	mg/kg-dry	T	-	-	-	-	<0.35 :	<0.34 :
Naphthalene	mg/kg-dry	T	-	-	-	-	<0.35 :	<0.34 :
Nitrobenzene	mg/kg-dry	T	-	-	-	-	<0.35 :	<0.34 :
N-Nitrosodi-n-propylamine	mg/kg-dry	T	-	-	-	-	<0.35 :	<0.34 :

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Appendix A-7a
Soil - Biased 0-6 inches
Validated Analytical Results

Parameter	Units	Exposure Area Fraction	Site ID / Sample Date / Sample ID					
			MSS8-71 1/14/2003 MSS8-71-T01N-SOL	MSS8-72 1/14/2003 MSS8-72-T01N-SOL	MSS8-73 1/14/2003 MSS8-73-T01N-SOL	MSS8-74 1/14/2003 MSS8-74-T01N-SOL	MSS8-75 1/17/2003 MSS8-75-T01N-SOL	MSS8-76 1/17/2003 MSS8-76-T01N-SOL
			SS8F	SS8F	SS8F	SS8F	SS8A	SS8A
N-Nitrosodiphenylamine	mg/kg-dry	T	-	-	-	-	<0.35 :	<0.34 :
Pentachlorophenol	mg/kg-dry	T	-	-	-	-	<0.88 :	<0.86 :
Phenanthrene	mg/kg-dry	T	-	-	-	-	<0.35 :	<0.34 :
Phenol	mg/kg-dry	T	-	-	-	-	<0.35 :	<0.34 :
Pyrene	mg/kg-dry	T	-	-	-	-	<0.35 :	<0.34 :
Pesticides-PCBs								
Aroclor 1016	mg/kg-dry	T	-	-	-	-	<0.035 :	<0.034 :
Aroclor 1221	mg/kg-dry	T	-	-	-	-	<0.071 :	<0.07 :
Aroclor 1232	mg/kg-dry	T	-	-	-	-	<0.035 :	<0.034 :
Aroclor 1242	mg/kg-dry	T	-	-	-	-	<0.035 :	<0.034 :
Aroclor 1248	mg/kg-dry	T	-	-	-	-	<0.035 :	<0.034 :
Aroclor 1254	mg/kg-dry	T	-	-	-	-	<0.035 :	<0.034 :
Aroclor 1260	mg/kg-dry	T	-	-	-	-	<0.035 :	<0.034 :

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Appendix A-7a
Soil - Biased 0-6 inches
Validated Analytical Results

Parameter	Units	Fraction	MSS8-8		MSS8-9		MSS8-TF1		MSS8-TF2		MSS8-TF20		MSS8-TF3	
Sample Date			10/23/2002		10/23/2002		10/16/2002		10/16/2002		1/19/2003		10/17/2002	
Sample ID			MSS8-8-T01N-SOL		MSS8-9-T01N-SOL		MSS8-TF1-T01N-SOL		MSS8-TF2-T01N-SOL		MSS8-TF20-T01N-SOL		MSS8-TF3-T01N-SOL	
Exposure Area			SS8A		SS8A		SS8E		SS8E		SS8E		SS8E	
General Chemistry														
Ammonia	mg/kg-dry	T	27.5	:	23.7	:	-		-		-		-	
Chloride	mg/kg-dry	T	4.6	J	4.4	J	-		-		-		-	
Fluoride	mg/kg-dry	T	2.2	J	3.6	J	-		-		-		-	
Nitrate	mg/kg-dry	T	3.5	J	3.	J	-		-		-		-	
Phosphorus	mg/kg-dry	T	900.	J	1020.	J	-		-		-		-	
Sulfate	mg/kg-dry	T	1090.	J	1350.	J	-		-		-		-	
Total Kjeldahl Nitrogen	mg/kg-dry	T	104.	J	86.3	J	-		-		-		-	
Total Organic Carbon	mg/kg-dry	T	1300.	J	994.	J	-		-		-		-	
Laboratory Parameters														
pH	SU	T	4.	:	4.2	:	-		-		-		-	
Solids, Percent	%	T	89.7	:	92.3	:	96.	:	94.1	:	91.6	:	89.	:
Specific Conductance	umhos/cm	T	978.	:	699.	:	-		-		-		-	
Geotechnical														
Organic Soils	%	T	3.1	J	2.93	J	-		-		-		-	
Physical Properties														
Cation-Exchange Capacity	meq/100g	T	18.6	:	14.4	:	-		-		-		-	
Sodium Absorption Ratio	ratio	T	0.05	:	0.1	:	-		-		-		-	
Semi-Volatile Organics														
1,1`-Biphenyl	mg/kg-dry	T	<0.37	:	<0.36	:	-		-		-		-	
2,4,5-Trichlorophenol	mg/kg-dry	T	<0.92	:	<0.9	:	-		-		-		-	
2,4,6-Trichlorophenol	mg/kg-dry	T	<0.37	:	<0.36	:	-		-		-		-	
2,4-Dichlorophenol	mg/kg-dry	T	<0.37	:	<0.36	:	-		-		-		-	
2,4-Dimethylphenol	mg/kg-dry	T	<0.37	:	<0.36	:	-		-		-		-	
2,4-Dinitrophenol	mg/kg-dry	T	<0.92	:	<0.9	:	-		-		-		-	
2,4-Dinitrotoluene	mg/kg-dry	T	<0.37	:	<0.36	:	-		-		-		-	
2,6-Dinitrotoluene	mg/kg-dry	T	<0.37	:	<0.36	:	-		-		-		-	
2-Chloronaphthalene	mg/kg-dry	T	<0.37	:	<0.36	:	-		-		-		-	
2-Chlorophenol	mg/kg-dry	T	<0.37	:	<0.36	:	-		-		-		-	
2-Methylnaphthalene	mg/kg-dry	T	<0.37	:	<0.36	:	-		-		-		-	
2-Methylphenol	mg/kg-dry	T	<0.37	:	<0.36	:	-		-		-		-	
2-Nitroaniline	mg/kg-dry	T	<0.92	:	<0.9	:	-		-		-		-	
2-Nitrophenol	mg/kg-dry	T	<0.37	:	<0.36	:	-		-		-		-	
3,3-Dichlorobenzidine	mg/kg-dry	T	<0.37	:	<0.36	:	-		-		-		-	

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Appendix A-7a
Soil - Biased 0-6 inches
Validated Analytical Results

Parameter	Units	Fraction	Site ID	MSS8-8		MSS8-9		MSS8-TF1	MSS8-TF2	MSS8-TF20	MSS8-TF3
			Sample Date	10/23/2002		10/23/2002		10/16/2002	10/16/2002	1/19/2003	10/17/2002
			Sample ID	MSS8-8-T01N-SOL		MSS8-9-T01N-SOL		MSS8-TF1-T01N-SOL	MSS8-TF2-T01N-SOL	MSS8-TF20-T01N-SOL	MSS8-TF3-T01N-SOL
			Exposure Area	SS8A		SS8A		SS8E	SS8E	SS8E	SS8E
3-Nitroaniline	mg/kg-dry	T		<0.92	:	<0.9	:	-	-	-	-
4,6-Dinitro-2-methylphenol	mg/kg-dry	T		<0.92	:	<0.9	:	-	-	-	-
4-Bromophenyl phenyl ether	mg/kg-dry	T		<0.37	:	<0.36	:	-	-	-	-
4-Chloro-3-methylphenol	mg/kg-dry	T		<0.37	:	<0.36	:	-	-	-	-
4-Chloroaniline	mg/kg-dry	T		<0.37	:	<0.36	:	-	-	-	-
4-Chlorophenyl phenyl ether	mg/kg-dry	T		<0.37	:	<0.36	:	-	-	-	-
4-Methylphenol	mg/kg-dry	T		<0.37	:	<0.36	:	-	-	-	-
4-Nitroaniline	mg/kg-dry	T		<0.92	:	<0.9	:	-	-	-	-
4-Nitrophenol	mg/kg-dry	T		<0.92	:	<0.9	:	-	-	-	-
Acenaphthene	mg/kg-dry	T		<0.37	:	<0.36	:	-	-	-	-
Acenaphthylene	mg/kg-dry	T		<0.37	:	<0.36	:	-	-	-	-
Anthracene	mg/kg-dry	T		<0.37	:	<0.36	:	-	-	-	-
Benzaldehyde	mg/kg-dry	T		<0.52	:	<0.36	:	-	-	-	-
Benzo(a)anthracene	mg/kg-dry	T		<0.37	:	<0.36	:	-	-	-	-
Benzo(a)pyrene	mg/kg-dry	T		<0.37	:	<0.36	:	-	-	-	-
Benzo(b)fluoranthene	mg/kg-dry	T		<0.37	:	<0.36	:	-	-	-	-
Benzo(g,h,i)perylene	mg/kg-dry	T		<0.37	:	<0.36	:	-	-	-	-
Benzo(k)fluoranthene	mg/kg-dry	T		<0.37	:	<0.36	:	-	-	-	-
Bis(2-chloroethoxy)methane	mg/kg-dry	T		<0.37	:	<0.36	:	-	-	-	-
Bis(2-chloroethyl)ether	mg/kg-dry	T		<0.37	:	<0.36	:	-	-	-	-
Bis(2-ethylhexyl)phthalate	mg/kg-dry	T		0.32	J	<0.36	:	-	-	-	-
Butyl benzyl phthalate	mg/kg-dry	T		<0.37	:	<0.36	:	-	-	-	-
Carbazole	mg/kg-dry	T		<0.37	:	<0.36	:	-	-	-	-
Chrysene	mg/kg-dry	T		<0.37	:	<0.36	:	-	-	-	-
Dibenz(a,h)anthracene	mg/kg-dry	T		<0.37	:	<0.36	:	-	-	-	-
Dibenzofuran	mg/kg-dry	T		<0.37	:	<0.36	:	-	-	-	-
Dichlorodiisopropyl ether	mg/kg-dry	T		<0.37	:	<0.36	:	-	-	-	-
Diethylphthalate	mg/kg-dry	T		<0.37	:	<0.36	:	-	-	-	-
Dimethylphthalate	mg/kg-dry	T		0.038	J	<0.36	:	-	-	-	-
Di-n-Butyl phthalate	mg/kg-dry	T		<0.37	:	<0.36	:	-	-	-	-
Di-n-Octyl phthalate	mg/kg-dry	T		<0.37	:	<0.36	:	-	-	-	-
Fluoranthene	mg/kg-dry	T		<0.37	:	<0.36	:	-	-	-	-
Fluorene	mg/kg-dry	T		<0.37	:	<0.36	:	-	-	-	-
Hexachlorobenzene	mg/kg-dry	T		<0.37	:	<0.36	:	-	-	-	-

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Appendix A-7a
Soil - Biased 0-6 inches
Validated Analytical Results

Parameter	Units	Fraction	MSS8-8	MSS8-9	MSS8-TF1	MSS8-TF2	MSS8-TF20	MSS8-TF3
		Sample Date	10/23/2002	10/23/2002	10/16/2002	10/16/2002	1/19/2003	10/17/2002
		Sample ID	MSS8-8-T01N-SOL	MSS8-9-T01N-SOL	MSS8-TF1-T01N-SO L	MSS8-TF2-T01N-SOL	MSS8-TF20-T01N-SO L	MSS8-TF3-T01N-SOL
		Exposure Area	SS8A	SS8A	SS8E	SS8E	SS8E	SS8E
Hexachlorobutadiene	mg/kg-dry	T	<0.37 :	<0.36 :	-	-	-	-
Hexachlorocyclopentadiene	mg/kg-dry	T	<0.37 :	<0.36 :	-	-	-	-
Hexachloroethane	mg/kg-dry	T	<0.37 :	<0.36 :	-	-	-	-
Indeno(1,2,3-cd)pyrene	mg/kg-dry	T	<0.37 :	<0.36 :	-	-	-	-
Isophorone	mg/kg-dry	T	<0.37 :	<0.36 :	-	-	-	-
Naphthalene	mg/kg-dry	T	<0.37 :	<0.36 :	-	-	-	-
Nitrobenzene	mg/kg-dry	T	<0.37 :	<0.36 :	-	-	-	-
N-Nitrosodi-n-propylamine	mg/kg-dry	T	<0.37 :	<0.36 :	-	-	-	-
N-Nitrosodiphenylamine	mg/kg-dry	T	<0.37 :	<0.36 :	-	-	-	-
Pentachlorophenol	mg/kg-dry	T	<0.92 :	<0.9 :	-	-	-	-
Phenanthrene	mg/kg-dry	T	<0.37 :	<0.36 :	-	-	-	-
Phenol	mg/kg-dry	T	<0.37 :	<0.36 :	-	-	-	-
Pyrene	mg/kg-dry	T	<0.37 :	<0.36 :	-	-	-	-
Explosives								
2,4,6-Trinitrotoluene	mg/kg-dry	T	<0.12 :	<0.12 :	-	-	-	-
2,6-Pyridinediamine,	mg/kg-dry	T	<0.12 :	<0.12 :	-	-	-	-
Cyclotetramethylenetetranitramine	mg/kg-dry	T	<0.12 :	<0.12 :	-	-	-	-
Cyclotrimethylenetrinitramine	mg/kg-dry	T	<0.12 :	<0.12 :	-	-	-	-
Pentaerythritol tetranitrate	mg/kg-dry	T	<5. :	<5. :	-	-	-	-
Pesticides-PCBs								
Aroclor 1016	mg/kg-dry	T	-	-	<0.034 :	<0.035 :	<0.036 :	<0.037 :
Aroclor 1221	mg/kg-dry	T	-	-	<0.07 :	<0.071 :	<0.073 :	<0.075 :
Aroclor 1232	mg/kg-dry	T	-	-	<0.034 :	<0.035 :	<0.036 :	<0.037 :
Aroclor 1242	mg/kg-dry	T	-	-	<0.034 :	<0.035 :	<0.036 :	<0.037 :
Aroclor 1248	mg/kg-dry	T	-	-	<0.034 :	<0.035 :	<0.036 :	<0.037 :
Aroclor 1254	mg/kg-dry	T	-	-	<0.034 :	<0.035 :	<0.036 :	<0.037 :
Aroclor 1260	mg/kg-dry	T	-	-	<0.034 :	<0.035 :	<0.036 :	<0.037 :

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Appendix A-7a
Soil - Biased 0-6 inches
Validated Analytical Results

Parameter	Units	Fraction	MSS8-TF4		MSS8-TF5		RS-13A		TSS11-1		TSS11-2		TSS11-3	
Sample Date			10/17/2002		10/17/2002		9/9/2003		10/28/2002		10/28/2002		10/28/2002	
Sample ID			MSS8-TF4-T01N-SOL		MSS8-TF5-T01N-SOL		RS-13A-T01N-SOL		TSS11-1-T01N-SOL		TSS11-2-T01N-SOL		TSS11-3-T01N-SOL	
Exposure Area			SS8E		SS8E		SS16		SS11		SS11		SS11	
General Chemistry														
Ammonia	mg/kg-dry	T	-		-		66.8	:	30.4	:	19.1	:	60.4	:
Chloride	mg/kg-dry	T	-		-		9.8	:	<37.	:	<36.	:	<37.	:
Fluoride	mg/kg-dry	T	-		-		1.6	:	2.3	J	6.1	J	3.4	J
Nitrate	mg/kg-dry	T	-		-		14.6	J	4.7	J	3.5	J	7.8	:
Phosphorus	mg/kg-dry	T	-		-		970.	:	764.	J	888.	J	818.	J
Sulfate	mg/kg-dry	T	-		-		294.	J	<62.	:	<60.	:	<61.	:
Total Kjeldahl Nitrogen	mg/kg-dry	T	-		-		625.	:	488.	:	211.	:	588.	:
Total Organic Carbon	mg/kg-dry	T	-		-		10400.	:	20900.	J	1850.	J	18900.	J
Laboratory Parameters														
pH	SU	T	-		-		5.4	J	8.1	:	8.4	:	8.3	:
Solids, Percent	%	T	98.	:	93.8	:	90.5	:	81.2	:	88.1	:	81.4	:
Specific Conductance	umhos/cm	T	-		-		527.	J	221.	:	115.	:	263.	:
Geotechnical														
Organic Soils	%	T	-		-		3.	:	6.26	J	3.79	J	8.29	J
Physical Properties														
Cation-Exchange Capacity	meq/100g	T	-		-		20.9	:	26.3	:	15.4	:	26.	:
Sodium Absorption Ratio	ratio	T	-		-		0.23	:	1.16	:	0.05	:	0.31	:
Metals														
Aluminum	mg/kg-dry	T	-		-		7320.	:	18800.	:	12300.	:	17200.	:
Antimony	mg/kg-dry	T	-		-		<0.53	J	<0.24	J	<0.26	J	<0.23	J
Arsenic	mg/kg-dry	T	-		-		3.3	:	4.5	:	6.	:	5.6	:
Barium	mg/kg-dry	T	-		-		280.	:	267.	:	102.	:	259.	:
Beryllium	mg/kg-dry	T	-		-		0.62	:	0.9	:	0.74	:	0.77	:
Boron	mg/kg-dry	T	-		-		5.3	:	11.8	:	7.3	:	10.3	:
Cadmium	mg/kg-dry	T	-		-		0.1	:	0.25	J	0.22	J	0.28	J
Calcium	mg/kg-dry	T	-		-		1960.	:	45200.	:	19300.	:	65000.	:
Chromium	mg/kg-dry	T	-		-		17.2	:	20.4	:	24.8	:	18.8	:
Cobalt	mg/kg-dry	T	-		-		6.8	:	9.3	:	9.2	:	8.2	:
Copper	mg/kg-dry	T	-		-		44.2	:	25.	:	31.3	:	21.5	:
Iron	mg/kg-dry	T	-		-		18500.	:	19600.	:	19500.	:	17800.	:
Lead	mg/kg-dry	T	-		-		42.2	:	19.8	:	29.6	:	17.3	:
Magnesium	mg/kg-dry	T	-		-		3680.	:	5820.	:	7110.	:	7160.	:
Manganese	mg/kg-dry	T	-		-		315.	:	453.	J	369.	J	370.	J

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Appendix A-7a
Soil - Biased 0-6 inches
Validated Analytical Results

Parameter	Units	Exposure Area Fraction	Site ID	MSS8-TF4	MSS8-TF5	RS-13A	TSS11-1	TSS11-2	TSS11-3
			Sample Date	10/17/2002	10/17/2002	9/9/2003	10/28/2002	10/28/2002	10/28/2002
			Sample ID	MSS8-TF4-T01N-SOL	MSS8-TF5-T01N-SOL	RS-13A-T01N-SOL	TSS11-1-T01N-SOL	TSS11-2-T01N-SOL	TSS11-3-T01N-SOL
			Exposure Area	SS8E	SS8E	SS16	SS11	SS11	SS11
Mercury	mg/kg-dry	T		-	-	<0.017 J	<0.019 :	<0.017 :	<0.02 :
Molybdenum	mg/kg-dry	T		-	-	31.7 :	13.6 :	4.1 :	14.1 :
Nickel	mg/kg-dry	T		-	-	13. :	15.7 J	19.4 J	15.3 J
Potassium	mg/kg-dry	T		-	-	1890. J	2770. J	1920. J	2760. J
Selenium	mg/kg-dry	T		-	-	0.72 :	0.99 J	0.85 J	1. J
Silver	mg/kg-dry	T		-	-	<0.18 :	<0.14 :	<0.15 :	<0.15 :
Sodium	mg/kg-dry	T		-	-	<81.9 :	<174. :	<52.5 :	<129. :
Thallium	mg/kg-dry	T		-	-	0.11 :	0.24 :	0.15 :	0.23 :
Vanadium	mg/kg-dry	T		-	-	21.2 :	40. :	49.9 :	43.8 :
Zinc	mg/kg-dry	T		-	-	81.6 :	70.2 J	66.7 J	58.9 J
Volatile Organics									
1,1,1-Trichloroethane	mg/kg-dry	T		-	-	-	<0.006 :	<0.004 :	<0.009 :
1,1,2,2-Tetrachloroethane	mg/kg-dry	T		-	-	-	<0.006 :	<0.004 :	<0.009 :
1,1,2-Trichloro-1,2,2-trifluoroethane	mg/kg-dry	T		-	-	-	<0.006 :	<0.004 :	<0.009 :
1,1,2-Trichloroethane	mg/kg-dry	T		-	-	-	<0.006 :	<0.004 :	<0.009 :
1,1-Dichloroethane	mg/kg-dry	T		-	-	-	<0.006 :	<0.004 :	<0.009 :
1,1-Dichloroethene	mg/kg-dry	T		-	-	-	<0.006 :	<0.004 :	<0.009 :
1,2,4-Trichlorobenzene	mg/kg-dry	T		-	-	-	<0.006 :	<0.004 :	<0.009 :
1,2-Dibromo-3-chloropropane	mg/kg-dry	T		-	-	-	<0.006 :	<0.004 :	<0.009 :
1,2-Dichlorobenzene	mg/kg-dry	T		-	-	-	<0.006 :	<0.004 :	<0.009 :
1,2-Dichloroethane	mg/kg-dry	T		-	-	-	<0.006 :	<0.004 :	<0.009 :
1,2-Dichloroethene (total)	mg/kg-dry	T		-	-	-	<0.006 :	<0.004 :	<0.009 :
1,2-Dichloropropane	mg/kg-dry	T		-	-	-	<0.006 :	<0.004 :	<0.009 :
1,3-Dichlorobenzene	mg/kg-dry	T		-	-	-	<0.006 :	<0.004 :	<0.009 :
1,4-Dichlorobenzene	mg/kg-dry	T		-	-	-	<0.006 :	<0.004 :	<0.009 :
2-Butanone	mg/kg-dry	T		-	-	-	<0.006 :	<0.004 :	<0.009 :
2-Hexanone	mg/kg-dry	T		-	-	-	<0.006 :	<0.004 :	<0.009 :
4-Methyl-2-pentanone	mg/kg-dry	T		-	-	-	<0.006 :	<0.004 :	<0.009 :
Acetone	mg/kg-dry	T		-	-	-	0.001 J	0.003 J	0.004 J
Benzene	mg/kg-dry	T		-	-	-	<0.006 :	<0.004 :	<0.009 :
Bromodichloromethane	mg/kg-dry	T		-	-	-	<0.006 :	<0.004 :	<0.009 :
Bromoform	mg/kg-dry	T		-	-	-	<0.006 :	<0.004 :	<0.009 :
Bromomethane	mg/kg-dry	T		-	-	-	<0.006 :	<0.004 :	<0.009 :
Carbon disulfide	mg/kg-dry	T		-	-	-	<0.006 :	<0.004 :	<0.009 :

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Appendix A-7a
Soil - Biased 0-6 inches
Validated Analytical Results

Parameter	Units	Exposure Area Fraction	Site ID / Sample Date / Sample ID					
			MSS8-TF4 10/17/2002 MSS8-TF4-T01N-SOL SS8E	MSS8-TF5 10/17/2002 MSS8-TF5-T01N-SOL SS8E	RS-13A 9/9/2003 RS-13A-T01N-SOL SS16	TSS11-1 10/28/2002 TSS11-1-T01N-SOL SS11	TSS11-2 10/28/2002 TSS11-2-T01N-SOL SS11	TSS11-3 10/28/2002 TSS11-3-T01N-SOL SS11
Carbon tetrachloride	mg/kg-dry	T	-	-	-	<0.006 :	<0.004 :	<0.009 :
Chlorobenzene	mg/kg-dry	T	-	-	-	<0.006 :	<0.004 :	<0.009 :
Chloroethane	mg/kg-dry	T	-	-	-	<0.006 :	<0.004 :	<0.009 :
Chloroform	mg/kg-dry	T	-	-	-	<0.006 :	<0.004 :	<0.009 :
Chloromethane	mg/kg-dry	T	-	-	-	<0.006 :	<0.004 :	<0.009 :
cis-1,2-Dichloroethene	mg/kg-dry	T	-	-	-	<0.006 :	<0.004 :	<0.009 :
cis-1,3-Dichloropropene	mg/kg-dry	T	-	-	-	<0.006 :	<0.004 :	<0.009 :
Dibromochloromethane	mg/kg-dry	T	-	-	-	<0.006 :	<0.004 :	<0.009 :
Dichlorodifluoromethane	mg/kg-dry	T	-	-	-	<0.006 :	<0.004 :	<0.009 :
Ethylbenzene	mg/kg-dry	T	-	-	-	<0.006 :	<0.004 :	<0.009 :
Methylene chloride	mg/kg-dry	T	-	-	-	<0.006 :	<0.004 :	<0.009 :
Styrene	mg/kg-dry	T	-	-	-	<0.006 :	<0.004 :	<0.009 :
Tetrachloroethene	mg/kg-dry	T	-	-	-	<0.006 :	<0.004 :	<0.009 :
Toluene	mg/kg-dry	T	-	-	-	<0.006 :	<0.004 :	<0.009 :
Total Xylene	mg/kg-dry	T	-	-	-	<0.006 :	<0.004 :	<0.009 :
trans-1,2-Dichloroethene	mg/kg-dry	T	-	-	-	<0.006 :	<0.004 :	<0.009 :
trans-1,3-Dichloropropene	mg/kg-dry	T	-	-	-	<0.006 :	<0.004 :	<0.009 :
Trichloroethene	mg/kg-dry	T	-	-	-	<0.006 :	<0.004 :	<0.009 :
Trichlorofluoromethane	mg/kg-dry	T	-	-	-	<0.006 :	<0.004 :	<0.009 :
Vinyl chloride	mg/kg-dry	T	-	-	-	<0.006 :	<0.004 :	<0.009 :
Semi-Volatile Organics								
1,1`-Biphenyl	mg/kg-dry	T	-	-	-	<0.41 :	<0.38 :	<0.41 :
2,4,5-Trichlorophenol	mg/kg-dry	T	-	-	-	<1. :	<0.94 :	<1. :
2,4,6-Trichlorophenol	mg/kg-dry	T	-	-	-	<0.41 :	<0.38 :	<0.41 :
2,4-Dichlorophenol	mg/kg-dry	T	-	-	-	<0.41 :	<0.38 :	<0.41 :
2,4-Dimethylphenol	mg/kg-dry	T	-	-	-	<0.41 :	<0.38 :	<0.41 :
2,4-Dinitrophenol	mg/kg-dry	T	-	-	-	<1. J	<0.94 J	<1. J
2,4-Dinitrotoluene	mg/kg-dry	T	-	-	-	<0.41 :	<0.38 :	<0.41 :
2,6-Dinitrotoluene	mg/kg-dry	T	-	-	-	<0.41 :	<0.38 :	<0.41 :
2-Chloronaphthalene	mg/kg-dry	T	-	-	-	<0.41 :	<0.38 :	<0.41 :
2-Chlorophenol	mg/kg-dry	T	-	-	-	<0.41 :	<0.38 :	<0.41 :
2-Methylnaphthalene	mg/kg-dry	T	-	-	-	<0.41 :	<0.38 :	<0.41 :
2-Methylphenol	mg/kg-dry	T	-	-	-	<0.41 :	<0.38 :	<0.41 :
2-Nitroaniline	mg/kg-dry	T	-	-	-	<1. :	<0.94 :	<1. :

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Appendix A-7a
Soil - Biased 0-6 inches
Validated Analytical Results

Parameter	Units	Exposure Area Fraction	Site ID / Sample Date / Sample ID					
			MSS8-TF4 10/17/2002 MSS8-TF4-T01N-SOL SS8E	MSS8-TF5 10/17/2002 MSS8-TF5-T01N-SOL SS8E	RS-13A 9/9/2003 RS-13A-T01N-SOL SS16	TSS11-1 10/28/2002 TSS11-1-T01N-SOL SS11	TSS11-2 10/28/2002 TSS11-2-T01N-SOL SS11	TSS11-3 10/28/2002 TSS11-3-T01N-SOL SS11
2-Nitrophenol	mg/kg-dry	T	-	-	-	<0.41 :	<0.38 :	<0.41 :
3,3-Dichlorobenzidine	mg/kg-dry	T	-	-	-	<0.41 :	<0.38 :	<0.41 :
3-Nitroaniline	mg/kg-dry	T	-	-	-	<1. :	<0.94 :	<1. :
4,6-Dinitro-2-methylphenol	mg/kg-dry	T	-	-	-	<1. :	<0.94 :	<1. :
4-Bromophenyl phenyl ether	mg/kg-dry	T	-	-	-	<0.41 :	<0.38 :	<0.41 :
4-Chloro-3-methylphenol	mg/kg-dry	T	-	-	-	<0.41 :	<0.38 :	<0.41 :
4-Chloroaniline	mg/kg-dry	T	-	-	-	<0.41 J	<0.38 J	<0.41 J
4-Chlorophenyl phenyl ether	mg/kg-dry	T	-	-	-	<0.41 :	<0.38 :	<0.41 :
4-Methylphenol	mg/kg-dry	T	-	-	-	<0.41 :	<0.38 :	<0.41 :
4-Nitroaniline	mg/kg-dry	T	-	-	-	<1. :	<0.94 :	<1. :
4-Nitrophenol	mg/kg-dry	T	-	-	-	<1. :	<0.94 :	<1. :
Acenaphthene	mg/kg-dry	T	-	-	-	<0.41 :	<0.38 :	<0.41 :
Acenaphthylene	mg/kg-dry	T	-	-	-	<0.41 :	<0.38 :	<0.41 :
Anthracene	mg/kg-dry	T	-	-	-	<0.41 :	<0.38 :	<0.41 :
Benzaldehyde	mg/kg-dry	T	-	-	-	<0.41 :	<0.38 :	<0.41 :
Benzo(a)anthracene	mg/kg-dry	T	-	-	-	<0.41 :	<0.38 :	<0.41 :
Benzo(a)pyrene	mg/kg-dry	T	-	-	-	<0.41 :	<0.38 :	<0.41 :
Benzo(b)fluoranthene	mg/kg-dry	T	-	-	-	<0.41 :	<0.38 :	<0.41 :
Benzo(g,h,i)perylene	mg/kg-dry	T	-	-	-	<0.41 J	<0.38 J	<0.41 J
Benzo(k)fluoranthene	mg/kg-dry	T	-	-	-	<0.41 :	<0.38 :	<0.41 :
Bis(2-chloroethoxy)methane	mg/kg-dry	T	-	-	-	<0.41 :	<0.38 :	<0.41 :
Bis(2-chloroethyl)ether	mg/kg-dry	T	-	-	-	<0.41 :	<0.38 :	<0.41 :
Bis(2-ethylhexyl)phthalate	mg/kg-dry	T	-	-	-	<0.41 :	<0.38 :	<0.41 :
Butyl benzyl phthalate	mg/kg-dry	T	-	-	-	<0.41 :	<0.38 :	<0.41 :
Carbazole	mg/kg-dry	T	-	-	-	<0.41 :	<0.38 :	<0.41 :
Chrysene	mg/kg-dry	T	-	-	-	<0.41 :	<0.38 :	<0.41 :
Dibenz(a,h)anthracene	mg/kg-dry	T	-	-	-	<0.41 :	<0.38 :	<0.41 :
Dibenzofuran	mg/kg-dry	T	-	-	-	<0.41 :	<0.38 :	<0.41 :
Dichlorodiisopropyl ether	mg/kg-dry	T	-	-	-	<0.41 J	<0.38 J	<0.41 J
Diethylphthalate	mg/kg-dry	T	-	-	-	<0.41 :	<0.38 :	<0.41 :
Dimethylphthalate	mg/kg-dry	T	-	-	-	<0.41 :	<0.38 :	<0.41 :
Di-n-Butyl phthalate	mg/kg-dry	T	-	-	-	<0.41 :	<0.38 :	<0.41 :
Di-n-Octyl phthalate	mg/kg-dry	T	-	-	-	<0.41 :	<0.38 :	<0.41 :
Fluoranthene	mg/kg-dry	T	-	-	-	<0.41 :	<0.38 :	<0.41 :

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Appendix A-7a
Soil - Biased 0-6 inches
Validated Analytical Results

Parameter	Units	Site ID / Sample Date / Sample ID / Exposure Area / Fraction	MSS8-TF4 10/17/2002 MSS8-TF4-T01N-SOL SS8E		MSS8-TF5 10/17/2002 MSS8-TF5-T01N-SOL SS8E		RS-13A 9/9/2003 RS-13A-T01N-SOL SS16		TSS11-1 10/28/2002 TSS11-1-T01N-SOL SS11		TSS11-2 10/28/2002 TSS11-2-T01N-SOL SS11		TSS11-3 10/28/2002 TSS11-3-T01N-SOL SS11	
Fluorene	mg/kg-dry	T	-		-		-		<0.41	:	<0.38	:	<0.41	:
Hexachlorobenzene	mg/kg-dry	T	-		-		-		<0.41	:	<0.38	:	<0.41	:
Hexachlorobutadiene	mg/kg-dry	T	-		-		-		<0.41	:	<0.38	:	<0.41	:
Hexachlorocyclopentadiene	mg/kg-dry	T	-		-		-		<0.41	:	<0.38	:	<0.41	:
Hexachloroethane	mg/kg-dry	T	-		-		-		<0.41	:	<0.38	:	<0.41	:
Indeno(1,2,3-cd)pyrene	mg/kg-dry	T	-		-		-		<0.41	:	<0.38	:	<0.41	:
Isophorone	mg/kg-dry	T	-		-		-		<0.41	:	<0.38	:	<0.41	:
Naphthalene	mg/kg-dry	T	-		-		-		<0.41	:	<0.38	:	<0.41	:
Nitrobenzene	mg/kg-dry	T	-		-		-		<0.41	:	<0.38	:	<0.41	:
N-Nitrosodi-n-propylamine	mg/kg-dry	T	-		-		-		<0.41	J	<0.38	J	<0.41	J
N-Nitrosodiphenylamine	mg/kg-dry	T	-		-		-		<0.41	:	<0.38	:	<0.41	:
Pentachlorophenol	mg/kg-dry	T	-		-		-		<1.	:	<0.94	:	<1.	:
Phenanthrene	mg/kg-dry	T	-		-		-		<0.41	:	<0.38	:	<0.41	:
Phenol	mg/kg-dry	T	-		-		-		<0.41	:	<0.38	:	<0.41	:
Pyrene	mg/kg-dry	T	-		-		-		<0.41	:	<0.38	:	<0.41	:
Pesticides-PCBs														
Aroclor 1016	mg/kg-dry	T	<0.034	:	<0.035	:	-		-		-		-	
Aroclor 1221	mg/kg-dry	T	<0.068	:	<0.071	:	-		-		-		-	
Aroclor 1232	mg/kg-dry	T	<0.034	:	<0.035	:	-		-		-		-	
Aroclor 1242	mg/kg-dry	T	<0.034	:	<0.035	:	-		-		-		-	
Aroclor 1248	mg/kg-dry	T	0.14	:	<0.035	:	-		-		-		-	
Aroclor 1254	mg/kg-dry	T	0.092	:	<0.035	:	-		-		-		-	
Aroclor 1260	mg/kg-dry	T	<0.034	:	<0.035	:	-		-		-		-	

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Appendix A-7a
Soil - Biased 0-6 inches
Validated Analytical Results

Parameter	Units	Exposure Area Fraction	Site ID / Sample Date / Sample ID	TSS11-4 10/28/2002 TSS11-4-T01N-SOL	TSS11-5 10/28/2002 TSS11-5-T01N-SOL	TSS12-1 10/10/2002 TSS12-1-T01N-SOL	TSS12-2 10/11/2002 TSS12-2-T01N-SOL	TSS12-3 10/11/2002 TSS12-3-T01N-SOL	TSS12-4 10/11/2002 TSS12-4-T01N-SOL
			Exposure Area	SS11	SS11	SS12	SS12	SS12	SS12
General Chemistry									
Ammonia	mg/kg-dry	T		32.5 :	63. :	33.4 :	39.2 :	39.8 :	116. :
Chloride	mg/kg-dry	T		110. :	<36. :	<2.3 J	3.9 J	8.5 J	13.3 J
Fluoride	mg/kg-dry	T		2.6 J	0.17 J	2. J	0.85 J	1.2 J	0.71 J
Nitrate	mg/kg-dry	T		6.9 :	3.1 J	7.4 J	9.7 J	4.3 J	23.9 J
Phosphorus	mg/kg-dry	T		806. J	844. J	719. J	504. J	337. J	714. J
Sulfate	mg/kg-dry	T		610. :	<61. :	6.1 J	15.2 J	9.3 J	2020. J
Total Kjeldahl Nitrogen	mg/kg-dry	T		275. :	775. :	488. :	892. J	181. J	1720. J
Total Organic Carbon	mg/kg-dry	T		5360. J	15800. J	6000. J	17600. J	4900. J	30000. J
Laboratory Parameters									
pH	SU	T		8.1 :	8.4 :	7.4 :	8.6 :	8.9 :	7.9 :
Solids, Percent	%	T		90.1 :	82.5 :	87.3 :	91. :	93.3 :	84.8 :
Specific Conductance	umhos/cm	T		975. :	151. :	106. :	111. J	83.6 J	771. J
Geotechnical									
Organic Soils	%	T		3.2 J	4.47 J	4.02 :	6.01 J	2.86 J	9.73 J
Physical Properties									
Cation-Exchange Capacity	meq/100g	T		13.6 :	25.6 :	20.1 :	19.7 :	15.9 :	30.4 :
Sodium Absorption Ratio	ratio	T		3.28 :	4.37 :	0.37 :	2.25 :	2.11 :	1.03 :
Metals									
Aluminum	mg/kg-dry	T		10800. :	17900. :	13700. :	15500. :	10800. :	14900. :
Antimony	mg/kg-dry	T		<0.21 J	<0.21 J	<0.17 J	<0.17 J	<0.16 J	<0.19 J
Arsenic	mg/kg-dry	T		8.9 :	4.1 :	3.9 :	4.3 :	3.3 :	3.7 :
Barium	mg/kg-dry	T		76.7 :	170. :	142. :	373. :	92.4 :	162. :
Beryllium	mg/kg-dry	T		0.67 :	0.83 :	0.8 :	0.77 :	0.67 :	0.81 :
Boron	mg/kg-dry	T		11.2 :	10.3 :	12.2 :	6.7 :	<3.2 :	5. :
Cadmium	mg/kg-dry	T		1.4 :	0.28 J	0.084 :	0.28 :	0.16 :	0.61 :
Calcium	mg/kg-dry	T		11600. :	4590. :	20100. :	29700. :	11800. :	17000. :
Chromium	mg/kg-dry	T		46.8 :	21.6 :	21.7 :	21.5 :	15.8 :	34.4 :
Cobalt	mg/kg-dry	T		9. :	10.1 :	8.2 :	8.2 :	5.9 :	10.9 :
Copper	mg/kg-dry	T		58.6 :	21.3 :	24.9 :	33.7 :	18.1 :	58.2 :
Iron	mg/kg-dry	T		38400. :	19600. :	18100. :	18400. :	14900. :	22100. :
Lead	mg/kg-dry	T		56.6 :	35.8 :	29.3 :	25.8 :	16.2 :	54.9 :
Magnesium	mg/kg-dry	T		5450. :	4850. :	6000. :	6460. :	4000. :	6130. :
Manganese	mg/kg-dry	T		620. J	493. J	531. J	420. J	307. J	850. J

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T = Total Fraction

Appendix A-7a
Soil - Biased 0-6 inches
Validated Analytical Results

Parameter	Units	Exposure Area Fraction	Site ID / Sample Date / Sample ID		TSS11-4 10/28/2002 TSS11-4-T01N-SOL SS11		TSS11-5 10/28/2002 TSS11-5-T01N-SOL SS11		TSS12-1 10/10/2002 TSS12-1-T01N-SOL SS12		TSS12-2 10/11/2002 TSS12-2-T01N-SOL SS12		TSS12-3 10/11/2002 TSS12-3-T01N-SOL SS12		TSS12-4 10/11/2002 TSS12-4-T01N-SOL SS12	
Mercury	mg/kg-dry	T		<0.016	:	<0.02	:	<0.018	:	<0.017	:	0.019	:	0.18	:
Molybdenum	mg/kg-dry	T		324.	:	12.4	:	<4.	:	53.4	:	6.	:	8.8	:
Nickel	mg/kg-dry	T		28.9	J	14.	J	16.9	J	16.5	J	13.2	J	21.	J
Potassium	mg/kg-dry	T		2590.	J	2720.	J	1850.	J	2950.	J	1500.	J	2140.	J
Selenium	mg/kg-dry	T		0.84	J	0.93	J	0.46	J	0.84	J	0.4	J	1.3	J
Silver	mg/kg-dry	T		0.14	:	<0.14	:	<0.13	:	<0.12	:	<0.11	:	0.32	:
Sodium	mg/kg-dry	T		346.	:	<57.7	:	56.9	:	180.	:	132.	:	190.	:
Thallium	mg/kg-dry	T		0.16	:	0.24	:	0.19	:	0.15	:	0.11	:	0.19	:
Vanadium	mg/kg-dry	T		34.3	:	36.5	:	32.6	:	34.4	:	25.2	:	39.4	:
Zinc	mg/kg-dry	T		158.	J	173.	J	69.2	J	71.6	J	65.2	J	134.	J
Volatile Organics															
1,1,1-Trichloroethane	mg/kg-dry	T		<0.005	:	<0.008	:	-		-		-		-	
1,1,2,2-Tetrachloroethane	mg/kg-dry	T		<0.005	:	<0.008	:	-		-		-		-	
1,1,2-Trichloro-1,2,2-trifluoroethane	mg/kg-dry	T		<0.005	:	<0.008	:	-		-		-		-	
1,1,2-Trichloroethane	mg/kg-dry	T		<0.005	:	<0.008	:	-		-		-		-	
1,1-Dichloroethane	mg/kg-dry	T		<0.005	:	<0.008	:	-		-		-		-	
1,1-Dichloroethene	mg/kg-dry	T		<0.005	:	<0.008	:	-		-		-		-	
1,2,4-Trichlorobenzene	mg/kg-dry	T		<0.005	:	<0.008	:	-		-		-		-	
1,2-Dibromo-3-chloropropane	mg/kg-dry	T		<0.005	:	<0.008	:	-		-		-		-	
1,2-Dichlorobenzene	mg/kg-dry	T		<0.005	:	<0.008	:	-		-		-		-	
1,2-Dichloroethane	mg/kg-dry	T		<0.005	:	<0.008	:	-		-		-		-	
1,2-Dichloroethene (total)	mg/kg-dry	T		<0.005	:	<0.008	:	-		-		-		-	
1,2-Dichloropropane	mg/kg-dry	T		<0.005	:	<0.008	:	-		-		-		-	
1,3-Dichlorobenzene	mg/kg-dry	T		<0.005	:	<0.008	:	-		-		-		-	
1,4-Dichlorobenzene	mg/kg-dry	T		<0.005	:	<0.008	:	-		-		-		-	
2-Butanone	mg/kg-dry	T		<0.005	:	<0.008	:	-		-		-		-	
2-Hexanone	mg/kg-dry	T		<0.005	:	<0.008	:	-		-		-		-	
4-Methyl-2-pentanone	mg/kg-dry	T		<0.005	:	<0.008	:	-		-		-		-	
Acetone	mg/kg-dry	T		0.15	:	0.017	:	-		-		-		-	
Benzene	mg/kg-dry	T		<0.005	:	<0.008	:	-		-		-		-	
Bromodichloromethane	mg/kg-dry	T		<0.005	:	<0.008	:	-		-		-		-	
Bromoform	mg/kg-dry	T		<0.005	:	<0.008	:	-		-		-		-	
Bromomethane	mg/kg-dry	T		<0.005	:	<0.008	:	-		-		-		-	
Carbon disulfide	mg/kg-dry	T		<0.005	:	<0.008	:	-		-		-		-	

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T = Total Fraction

Appendix A-7a
Soil - Biased 0-6 inches
Validated Analytical Results

Parameter	Units	Exposure Area Fraction	Site ID / Sample Date / Sample ID	TSS11-4 10/28/2002 TSS11-4-T01N-SOL SS11	TSS11-5 10/28/2002 TSS11-5-T01N-SOL SS11	TSS12-1 10/10/2002 TSS12-1-T01N-SOL SS12	TSS12-2 10/11/2002 TSS12-2-T01N-SOL SS12	TSS12-3 10/11/2002 TSS12-3-T01N-SOL SS12	TSS12-4 10/11/2002 TSS12-4-T01N-SOL SS12
Carbon tetrachloride	mg/kg-dry	T		<0.005 :	<0.008 :	-	-	-	-
Chlorobenzene	mg/kg-dry	T		<0.005 :	<0.008 :	-	-	-	-
Chloroethane	mg/kg-dry	T		<0.005 :	<0.008 :	-	-	-	-
Chloroform	mg/kg-dry	T		<0.005 :	<0.008 :	-	-	-	-
Chloromethane	mg/kg-dry	T		<0.005 :	<0.008 :	-	-	-	-
cis-1,2-Dichloroethene	mg/kg-dry	T		<0.005 :	<0.008 :	-	-	-	-
cis-1,3-Dichloropropene	mg/kg-dry	T		<0.005 :	<0.008 :	-	-	-	-
Dibromochloromethane	mg/kg-dry	T		<0.005 :	<0.008 :	-	-	-	-
Dichlorodifluoromethane	mg/kg-dry	T		<0.005 :	<0.008 :	-	-	-	-
Ethylbenzene	mg/kg-dry	T		<0.005 :	<0.008 :	-	-	-	-
Methylene chloride	mg/kg-dry	T		<0.005 :	<0.008 :	-	-	-	-
Styrene	mg/kg-dry	T		<0.005 :	<0.008 :	-	-	-	-
Tetrachloroethene	mg/kg-dry	T		<0.005 :	<0.008 :	-	-	-	-
Toluene	mg/kg-dry	T		<0.005 :	<0.008 :	-	-	-	-
Total Xylene	mg/kg-dry	T		<0.005 :	<0.008 :	-	-	-	-
trans-1,2-Dichloroethene	mg/kg-dry	T		<0.005 :	<0.008 :	-	-	-	-
trans-1,3-Dichloropropene	mg/kg-dry	T		<0.005 :	<0.008 :	-	-	-	-
Trichloroethene	mg/kg-dry	T		<0.005 :	<0.008 :	-	-	-	-
Trichlorofluoromethane	mg/kg-dry	T		<0.005 :	<0.008 :	-	-	-	-
Vinyl chloride	mg/kg-dry	T		<0.005 :	<0.008 :	-	-	-	-
Semi-Volatile Organics									
1,1`-Biphenyl	mg/kg-dry	T		<0.37 :	<0.4 :	-	-	-	-
2,4,5-Trichlorophenol	mg/kg-dry	T		<0.92 :	<1. :	-	-	-	-
2,4,6-Trichlorophenol	mg/kg-dry	T		<0.37 :	<0.4 :	-	-	-	-
2,4-Dichlorophenol	mg/kg-dry	T		<0.37 :	<0.4 :	-	-	-	-
2,4-Dimethylphenol	mg/kg-dry	T		<0.37 :	<0.4 :	-	-	-	-
2,4-Dinitrophenol	mg/kg-dry	T		<0.92 :	<1. :	-	-	-	-
2,4-Dinitrotoluene	mg/kg-dry	T		<0.37 :	<0.4 :	-	-	-	-
2,6-Dinitrotoluene	mg/kg-dry	T		<0.37 :	<0.4 :	-	-	-	-
2-Chloronaphthalene	mg/kg-dry	T		<0.37 :	<0.4 :	-	-	-	-
2-Chlorophenol	mg/kg-dry	T		<0.37 :	<0.4 :	-	-	-	-
2-Methylnaphthalene	mg/kg-dry	T		<0.37 :	<0.4 :	-	-	-	-
2-Methylphenol	mg/kg-dry	T		<0.37 :	<0.4 :	-	-	-	-
2-Nitroaniline	mg/kg-dry	T		<0.92 :	<1. :	-	-	-	-

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Appendix A-7a
Soil - Biased 0-6 inches
Validated Analytical Results

Parameter	Units	Fraction	Site ID	TSS11-4		TSS11-5		TSS12-1	TSS12-2	TSS12-3	TSS12-4
			Sample Date	10/28/2002		10/28/2002		10/10/2002	10/11/2002	10/11/2002	10/11/2002
			Sample ID	TSS11-4-T01N-SOL		TSS11-5-T01N-SOL		TSS12-1-T01N-SOL	TSS12-2-T01N-SOL	TSS12-3-T01N-SOL	TSS12-4-T01N-SOL
			Exposure Area	SS11		SS11		SS12	SS12	SS12	SS12
2-Nitrophenol	mg/kg-dry	T		<0.37	:	<0.4	:	-	-	-	-
3,3-Dichlorobenzidine	mg/kg-dry	T		<0.37	:	<0.4	:	-	-	-	-
3-Nitroaniline	mg/kg-dry	T		<0.92	:	<1.	:	-	-	-	-
4,6-Dinitro-2-methylphenol	mg/kg-dry	T		<0.92	:	<1.	:	-	-	-	-
4-Bromophenyl phenyl ether	mg/kg-dry	T		<0.37	:	<0.4	:	-	-	-	-
4-Chloro-3-methylphenol	mg/kg-dry	T		<0.37	:	<0.4	:	-	-	-	-
4-Chloroaniline	mg/kg-dry	T		<0.37	:	<0.4	:	-	-	-	-
4-Chlorophenyl phenyl ether	mg/kg-dry	T		<0.37	:	<0.4	:	-	-	-	-
4-Methylphenol	mg/kg-dry	T		<0.37	:	<0.4	:	-	-	-	-
4-Nitroaniline	mg/kg-dry	T		<0.92	:	<1.	:	-	-	-	-
4-Nitrophenol	mg/kg-dry	T		<0.92	J	<1.	J	-	-	-	-
Acenaphthene	mg/kg-dry	T		0.064	J	<0.4	:	-	-	-	-
Acenaphthylene	mg/kg-dry	T		<0.37	:	<0.4	:	-	-	-	-
Anthracene	mg/kg-dry	T		0.1	J	<0.4	:	-	-	-	-
Benzaldehyde	mg/kg-dry	T		<0.37	J	<0.4	J	-	-	-	-
Benzo(a)anthracene	mg/kg-dry	T		0.36	J	<0.4	:	-	-	-	-
Benzo(a)pyrene	mg/kg-dry	T		0.26	J	<0.4	:	-	-	-	-
Benzo(b)fluoranthene	mg/kg-dry	T		0.41	:	<0.4	:	-	-	-	-
Benzo(g,h,i)perylene	mg/kg-dry	T		0.14	J	<0.4	:	-	-	-	-
Benzo(k)fluoranthene	mg/kg-dry	T		0.37	:	<0.4	:	-	-	-	-
Bis(2-chloroethoxy)methane	mg/kg-dry	T		<0.37	:	<0.4	:	-	-	-	-
Bis(2-chloroethyl)ether	mg/kg-dry	T		<0.37	:	<0.4	:	-	-	-	-
Bis(2-ethylhexyl)phthalate	mg/kg-dry	T		0.18	J	<0.4	:	-	-	-	-
Butyl benzyl phthalate	mg/kg-dry	T		<0.37	:	<0.4	:	-	-	-	-
Carbazole	mg/kg-dry	T		0.096	J	<0.4	:	-	-	-	-
Chrysene	mg/kg-dry	T		0.41	:	<0.4	:	-	-	-	-
Dibenz(a,h)anthracene	mg/kg-dry	T		0.057	J	<0.4	:	-	-	-	-
Dibenzofuran	mg/kg-dry	T		0.024	J	<0.4	:	-	-	-	-
Dichlorodiisopropyl ether	mg/kg-dry	T		<0.37	J	<0.4	J	-	-	-	-
Diethylphthalate	mg/kg-dry	T		<0.37	:	<0.4	:	-	-	-	-
Dimethylphthalate	mg/kg-dry	T		<0.37	:	<0.4	:	-	-	-	-
Di-n-Butyl phthalate	mg/kg-dry	T		<0.37	:	<0.4	:	-	-	-	-
Di-n-Octyl phthalate	mg/kg-dry	T		<0.37	:	<0.4	:	-	-	-	-
Fluoranthene	mg/kg-dry	T		0.74	:	<0.4	:	-	-	-	-

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Appendix A-7a
Soil - Biased 0-6 inches
Validated Analytical Results

Parameter	Units	Exposure Area Fraction	Site ID											
			Sample Date	10/28/2002		10/28/2002		10/10/2002	10/11/2002	10/11/2002	10/11/2002			
			Sample ID	TSS11-4-T01N-SOL		TSS11-5-T01N-SOL		TSS12-1-T01N-SOL	TSS12-2-T01N-SOL	TSS12-3-T01N-SOL	TSS12-4-T01N-SOL			
			Exposure Area	SS11		SS11		SS12	SS12	SS12	SS12			
Fluorene	mg/kg-dry	T		0.052	J	<0.4	:	-	-	-	-			
Hexachlorobenzene	mg/kg-dry	T		<0.37	:	<0.4	:	-	-	-	-			
Hexachlorobutadiene	mg/kg-dry	T		<0.37	:	<0.4	:	-	-	-	-			
Hexachlorocyclopentadiene	mg/kg-dry	T		<0.37	:	<0.4	:	-	-	-	-			
Hexachloroethane	mg/kg-dry	T		<0.37	:	<0.4	:	-	-	-	-			
Indeno(1,2,3-cd)pyrene	mg/kg-dry	T		0.16	J	<0.4	:	-	-	-	-			
Isophorone	mg/kg-dry	T		<0.37	:	<0.4	:	-	-	-	-			
Naphthalene	mg/kg-dry	T		<0.37	:	<0.4	:	-	-	-	-			
Nitrobenzene	mg/kg-dry	T		<0.37	:	<0.4	:	-	-	-	-			
N-Nitrosodi-n-propylamine	mg/kg-dry	T		<0.37	:	<0.4	:	-	-	-	-			
N-Nitrosodiphenylamine	mg/kg-dry	T		<0.37	:	<0.4	:	-	-	-	-			
Pentachlorophenol	mg/kg-dry	T		<0.92	:	<1.	:	-	-	-	-			
Phenanthrene	mg/kg-dry	T		0.55	:	<0.4	:	-	-	-	-			
Phenol	mg/kg-dry	T		<0.37	J	<0.4	J	-	-	-	-			
Pyrene	mg/kg-dry	T		0.63	:	<0.4	:	-	-	-	-			

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Appendix A-7a
Soil - Biased 0-6 inches
Validated Analytical Results

Parameter	Units	Exposure Area Fraction	Site ID / Sample Date / Sample ID		TSS13-1 10/11/2002 TSS13-1-T01N-SOL SS13		TSS17-1 11/3/2003 TSS17-1-T01N-SOL SS17		TSS17-10 11/5/2003 TSS17-10-T01N-SOL SS17		TSS17-11 11/5/2003 TSS17-11-T01N-SOL SS17		TSS17-12 11/5/2003 TSS17-12-T01N-SOL SS17		TSS17-13 11/5/2003 TSS17-13-T01N-SOL SS17	
General Chemistry																
Ammonia	mg/kg-dry	T			27.6	:	11.	:	27.	:	231.	:	127.	:	25.	:
Chloride	mg/kg-dry	T			2.8	J	5.8	:	3.2	:	65.3	:	15.4	:	4.6	:
Fluoride	mg/kg-dry	T			1.1	J	0.77	:	0.79	J	1.1	:	0.93	:	0.38	J
Nitrate	mg/kg-dry	T			7.	J	32.4	J	<2.8	J	20.3	J	<2.9	J	3.5	J
Phosphorus	mg/kg-dry	T			575.	J	131.	J	102.	J	1070.	J	171.	J	270.	J
Sulfate	mg/kg-dry	T			53.9	J	14.8	:	38.4	:	156.	:	114.	:	149.	:
Total Kjeldahl Nitrogen	mg/kg-dry	T			726.	J	484.	J	130.	J	2430.	J	1940.	J	196.	J
Total Organic Carbon	mg/kg-dry	T			8980.	J	6270.	:	768.	:	25300.	:	32100.	:	25100.	:
Laboratory Parameters																
pH	SU	T			4.3	:	7.6	J	8.3	J	6.8	J	7.2	J	8.4	J
Solids, Percent	%	T			84.2	:	93.2	:	73.5	:	69.9	:	69.7	:	82.6	:
Specific Conductance	umhos/cm	T			254.	J	315.	J	131.	J	428.	J	384.	J	244.	J
Geotechnical																
Organic Soils	%	T			5.03	J	3.7	J	1.2	J	7.	J	10.6	J	1.5	J
Physical Properties																
Cation-Exchange Capacity	meq/100g	T			35.6	:	32.5	:	8.1	:	33.1	:	41.2	:	16.3	:
Sodium Absorption Ratio	ratio	T			0.21	:	0.5	:	0.28	:	0.27	:	0.25	:	0.23	:
Metals																
Aluminum	mg/kg-dry	T			27300.	:	18500.	:	7070.	:	14700.	:	14000.	:	7040.	:
Antimony	mg/kg-dry	T			<0.19	J	<0.46	J	<0.58	J	<0.69	J	<0.7	J	<0.5	J
Arsenic	mg/kg-dry	T			2.6	:	3.1	J	1.7	J	3.6	J	4.1	J	2.2	J
Barium	mg/kg-dry	T			295.	:	153.	:	45.8	:	158.	:	176.	:	49.5	:
Beryllium	mg/kg-dry	T			1.2	:	1.2	:	0.55	:	1.2	:	1.4	:	0.55	:
Boron	mg/kg-dry	T			7.9	:	<7.	:	<3.5	:	7.6	:	3.	:	<3.5	:
Cadmium	mg/kg-dry	T			<0.027	:	0.57	:	0.48	:	1.1	:	1.3	:	0.54	:
Calcium	mg/kg-dry	T			11000.	:	7570.	:	3070.	:	5640.	:	5110.	:	2560.	:
Chromium	mg/kg-dry	T			23.2	:	20.	:	15.4	:	21.	:	19.	:	16.7	:
Cobalt	mg/kg-dry	T			11.	:	9.5	:	11.4	:	13.1	:	12.6	:	12.7	:
Copper	mg/kg-dry	T			67.5	:	19.4	:	20.5	:	42.4	:	49.8	:	20.3	:
Iron	mg/kg-dry	T			23600.	:	17800.	:	14900.	:	21100.	:	23700.	:	14400.	:
Lead	mg/kg-dry	T			16.3	:	16.5	:	12.3	:	33.5	:	51.3	:	13.3	:
Magnesium	mg/kg-dry	T			7490.	:	5280.	:	3270.	:	4800.	:	4610.	:	3310.	:
Manganese	mg/kg-dry	T			235.	J	538.	:	553.	:	814.	:	939.	:	563.	:

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Appendix A-7a
Soil - Biased 0-6 inches
Validated Analytical Results

Parameter	Units	Fraction	Site ID	Sample Date	Sample ID	Exposure Area
			TSS13-1	10/11/2002	TSS13-1-T01N-SOL	SS13
			TSS17-1	11/3/2003	TSS17-1-T01N-SOL	SS17
			TSS17-10	11/5/2003	TSS17-10-T01N-SOL	SS17
			TSS17-11	11/5/2003	TSS17-11-T01N-SOL	SS17
			TSS17-12	11/5/2003	TSS17-12-T01N-SOL	SS17
			TSS17-13	11/5/2003	TSS17-13-T01N-SOL	SS17
Mercury	mg/kg-dry	T	0.029 :		<0.015 :		<0.023 :		<0.022 :		<0.019 :		<0.017 :	
Molybdenum	mg/kg-dry	T	14. :		<0.75 :		0.84 :		7.5 :		9.2 :		4.2 :	
Nickel	mg/kg-dry	T	35.5	J	18.7 :		25.2 :		27.9 :		40.7 :		29.8 :	
Potassium	mg/kg-dry	T	4430.	J	2860.	J	1160.	J	2040.	J	2270.	J	1070.	J
Selenium	mg/kg-dry	T	0.87	J	0.69	J	<0.35	J	0.85	J	1.4	J	0.55	J
Silver	mg/kg-dry	T	<0.13 :		<0.16 :		<0.18 :		<0.22 :		0.51 :		<0.15 :	
Sodium	mg/kg-dry	T	<49.2 :		<46.4 :		<50.6 :		147. :		437. :		<41.9 :	
Thallium	mg/kg-dry	T	0.34 :		0.2 :		<0.12 :		0.18 :		0.15 :		0.1 :	
Vanadium	mg/kg-dry	T	38.2 :		25.5 :		22. :		32. :		29.2 :		19.3 :	
Zinc	mg/kg-dry	T	75.6	J	61.4	J	146.	J	236.	J	262.	J	163.	J

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R = Qualified as rejected value from data validation and results are considered unusable for any purpose
T = Total Fraction

Appendix A-7a
Soil - Biased 0-6 inches
Validated Analytical Results

Parameter	Units	Exposure Area Fraction	Site ID	TSS17-14		TSS17-15		TSS17-16		TSS17-17		TSS17-18		TSS17-19	
			Sample Date	11/5/2003		11/5/2003		11/3/2003		11/3/2003		11/4/2003		11/4/2003	
			Sample ID	TSS17-14-T01N-SOL		TSS17-15-T01N-SOL		TSS17-16-T01N-SOL		TSS17-17-T01N-SOL		TSS17-18-T01N-SOL		TSS17-19-T01N-SOL	
			Exposure Area	SS17		SS17		SS17		SS17		SS17		SS17	
General Chemistry															
Ammonia	mg/kg-dry	T		108.	:	89.6	:	147.	:	37.1	:	97.1	:	1610.	:
Chloride	mg/kg-dry	T		12.4	:	8.1	:	21.7	:	5.7	:	5.	:	43.5	:
Fluoride	mg/kg-dry	T		0.65	J	228.	:	0.34	:	0.98	:	0.78	:	6.3	:
Nitrate	mg/kg-dry	T		5.8	J	7.9	J	<2.2	J	<2.1	J	9.9	J	<9.9	J
Phosphorus	mg/kg-dry	T		153.	J	103.	J	128.	J	208.	J	220.	J	303.	J
Sulfate	mg/kg-dry	T		487.	:	114.	:	590.	:	241.	:	25.5	:	8270.	:
Total Kjeldahl Nitrogen	mg/kg-dry	T		1820.	J	1220.	J	1730.	J	432.	J	1100.	J	34300.	J
Total Organic Carbon	mg/kg-dry	T		22800.	:	16900.	:	26100.	J	4130.	:	16200.	:	291900.	:
Laboratory Parameters															
pH	SU	T		7.1	J	7.8	J	6.7	J	7.2	J	7.6	J	7.2	J
Solids, Percent	%	T		76.4	:	81.1	:	92.8	:	96.1	:	90.2	:	20.4	:
Specific Conductance	umhos/cm	T		752.	J	1340.	J	1030.	J	509.	J	120.	J	1100.	J
Geotechnical															
Organic Soils	%	T		6.	J	3.7	J	8.7	J	3.2	J	4.5	J	27.3	J
Physical Properties															
Cation-Exchange Capacity	meq/100g	T		43.9	:	33.4	:	27.1	:	25.1	:	30.	:	60.3	:
Sodium Absorption Ratio	ratio	T		0.26	:	0.14	:	0.41	:	0.93	:	0.16	:	0.33	:
Metals															
Aluminum	mg/kg-dry	T		14300.	:	13800.	:	11800.	:	14200.	:	11700.	:	23700.	:
Antimony	mg/kg-dry	T		<0.52	J	<0.6	J	<0.54	J	<0.44	J	<0.51	J	<2.1	J
Arsenic	mg/kg-dry	T		0.98	J	3.4	J	2.7	J	3.1	J	3.5	J	2.3	J
Barium	mg/kg-dry	T		154.	:	132.	:	130.	:	117.	:	93.6	:	170.	:
Beryllium	mg/kg-dry	T		0.88	:	0.71	:	0.65	:	0.82	:	0.92	:	1.2	:
Boron	mg/kg-dry	T		7.7	J	<6.7	:	<6.9	:	<4.6	:	2.4	:	17.2	:
Cadmium	mg/kg-dry	T		0.5	J	0.21	:	0.56	:	0.53	:	0.62	:	<0.86	:
Calcium	mg/kg-dry	T		5040.	:	4340.	:	6410.	:	4380.	:	4270.	:	17400.	:
Chromium	mg/kg-dry	T		21.3	:	20.1	:	20.7	:	24.4	:	19.	:	27.3	:
Cobalt	mg/kg-dry	T		9.7	:	8.1	:	7.8	:	9.2	:	8.5	:	11.9	:
Copper	mg/kg-dry	T		32.	:	20.9	:	25.6	:	26.7	:	27.2	:	35.7	:
Iron	mg/kg-dry	T		20400.	:	18400.	:	17000.	:	19100.	:	18100.	:	22400.	:
Lead	mg/kg-dry	T		32.8	:	18.6	:	16.	:	15.4	:	22.3	:	27.7	:
Magnesium	mg/kg-dry	T		4740.	:	4360.	:	4390.	:	4810.	:	4260.	:	8530.	:
Manganese	mg/kg-dry	T		518.	:	374.	:	429.	:	468.	:	619.	:	214.	:

J = Qualified as estimated during data validation
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Appendix A-7a
Soil - Biased 0-6 inches
Validated Analytical Results

Parameter	Units	Exposure Area Fraction	Site ID / Sample Date / Sample ID											
			TSS17-14 11/5/2003 TSS17-14-T01N-SOL		TSS17-15 11/5/2003 TSS17-15-T01N-SOL		TSS17-16 11/3/2003 TSS17-16-T01N-SOL		TSS17-17 11/3/2003 TSS17-17-T01N-SOL		TSS17-18 11/4/2003 TSS17-18-T01N-SOL		TSS17-19 11/4/2003 TSS17-19-T01N-SOL	
			SS17		SS17		SS17		SS17		SS17		SS17	
Mercury	mg/kg-dry	T	<0.022	:	<0.017	:	0.053	:	<0.017	:	<0.015	:	0.095	:
Molybdenum	mg/kg-dry	T	11.	:	3.6	:	4.5	:	5.6	:	<3.3	J	596.	:
Nickel	mg/kg-dry	T	21.2	:	15.7	:	16.5	:	20.9	:	40.3	:	14.5	:
Potassium	mg/kg-dry	T	2680.	J	2640.	J	2390.	J	1850.	J	1850.	J	2920.	J
Selenium	mg/kg-dry	T	<0.31	J	0.85	J	0.4	J	0.51	J	0.95	J	3.	J
Silver	mg/kg-dry	T	<0.16	:	<0.2	:	<0.16	:	<0.16	:	0.28	:	<0.62	:
Sodium	mg/kg-dry	T	48.4	J	<55.4	:	<52.3	:	<90.4	:	<383.	:	1070.	:
Thallium	mg/kg-dry	T	<0.1	:	0.17	:	0.12	:	0.12	:	0.16	:	<0.43	:
Vanadium	mg/kg-dry	T	29.4	:	30.6	:	29.2	:	30.5	:	25.5	:	32.2	:
Zinc	mg/kg-dry	T	116.	J	58.4	J	61.4	J	64.1	J	127.	J	132.	J

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Appendix A-7a
Soil - Biased 0-6 inches
Validated Analytical Results

Parameter	Units	Exposure Area Fraction	Site ID / Sample Date / Sample ID		TSS17-2 11/3/2003 TSS17-2-T01N-SOL SS17		TSS17-20 11/4/2003 TSS17-20-T01N-SOL SS17		TSS17-21 11/4/2003 TSS17-21-T01N-SOL SS17		TSS17-22 11/4/2003 TSS17-22-T01N-SOL SS17		TSS17-23 11/5/2003 TSS17-23-T01N-SOL SS17		TSS17-24 11/5/2003 TSS17-24-T01N-SOL SS17	
General Chemistry																
Ammonia	mg/kg-dry	T			40.5	:	571.	:	297.	:	80.1	:	32.7	:	23.7	:
Chloride	mg/kg-dry	T			<2.2	:	78.1	:	175.	:	10.7	:	<2.1	:	3.3	:
Fluoride	mg/kg-dry	T			0.72	:	6.1	:	2.4	:	1.1	:	0.15	J	<0.11	:
Nitrate	mg/kg-dry	T			2.3	J	<4.7	J	94.4	J	2.8	J	<2.1	J	<2.1	J
Phosphorus	mg/kg-dry	T			144.	J	248.	J	193.	J	101.	J	1070.	J	89.1	J
Sulfate	mg/kg-dry	T			2.7	:	1380.	:	9810.	:	10.5	:	<2.1	:	3.3	:
Total Kjeldahl Nitrogen	mg/kg-dry	T			1060.	J	4620.	J	2930.	J	1120.	J	486.	J	268.	J
Total Organic Carbon	mg/kg-dry	T			10500.	:	156300.	:	31900.	:	15500.	:	6240.	:	3890.	:
Laboratory Parameters																
pH	SU	T			7.7	J	7.5	J	7.5	J	8.1	J	8.7	J	8.2	J
Solids, Percent	%	T			93.	:	43.3	:	34.4	:	86.8	:	97.4	:	97.8	:
Specific Conductance	umhos/cm	T			117.	J	1590.	J	849.	J	182.	J	179.	J	59.4	J
Geotechnical																
Organic Soils	%	T			4.6	J	21.6	J	4.5	J	7.2	J	2.9	J	2.1	J
Physical Properties																
Cation-Exchange Capacity	meq/100g	T			31.8	:	47.8	:	30.9	:	46.2	:	28.7	:	21.4	:
Sodium Absorption Ratio	ratio	T			<0.06	:	0.47	:	1.	:	0.42	:	0.04	:	<0.05	:
Metals																
Aluminum	mg/kg-dry	T			17000.	:	23600.	:	28400.	:	27300.	:	13200.	:	11200.	:
Antimony	mg/kg-dry	T			<0.49	J	<1.1	J	<1.2	J	<0.46	J	<0.46	J	<0.44	J
Arsenic	mg/kg-dry	T			3.9	J	4.2	J	5.8	J	4.4	J	2.9	J	2.	J
Barium	mg/kg-dry	T			149.	:	380.	:	284.	:	204.	:	137.	:	95.5	:
Beryllium	mg/kg-dry	T			1.1	:	1.3	:	1.5	:	1.8	:	0.63	:	0.61	:
Boron	mg/kg-dry	T			<6.7	:	9.8	:	22.4	:	4.8	:	<6.2	:	1.3	:
Cadmium	mg/kg-dry	T			0.64	:	<0.45	:	<0.47	:	<0.18	:	0.19	J	<0.18	:
Calcium	mg/kg-dry	T			6260.	:	12600.	:	47000.	:	12400.	:	6800.	:	3870.	:
Chromium	mg/kg-dry	T			20.2	:	19.2	:	24.5	:	20.6	:	20.9	:	22.4	:
Cobalt	mg/kg-dry	T			8.7	:	14.4	:	10.6	:	8.1	:	8.4	:	7.	:
Copper	mg/kg-dry	T			22.4	:	21.7	:	38.6	:	26.2	:	24.	:	23.1	:
Iron	mg/kg-dry	T			18300.	:	63100.	:	25800.	:	23300.	:	18300.	:	17700.	:
Lead	mg/kg-dry	T			19.6	:	19.5	:	28.8	:	20.5	:	15.1	:	21.7	:
Magnesium	mg/kg-dry	T			4780.	:	5960.	:	8840.	:	5810.	:	5180.	:	4470.	:
Manganese	mg/kg-dry	T			523.	:	569.	:	1060.	:	488.	:	393.	:	425.	:

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Appendix A-7a
Soil - Biased 0-6 inches
Validated Analytical Results

Parameter	Units	Exposure Area Fraction	Site ID / Sample Date / Sample ID											
			TSS17-2 11/3/2003 TSS17-2-T01N-SOL		TSS17-20 11/4/2003 TSS17-20-T01N-SOL		TSS17-21 11/4/2003 TSS17-21-T01N-SOL		TSS17-22 11/4/2003 TSS17-22-T01N-SOL		TSS17-23 11/5/2003 TSS17-23-T01N-SOL		TSS17-24 11/5/2003 TSS17-24-T01N-SOL	
			SS17		SS17		SS17		SS17		SS17		SS17	
Mercury	mg/kg-dry	T	<0.014	:	0.047	:	<0.047	:	0.033	:	<0.016	:	<0.017	:
Molybdenum	mg/kg-dry	T	1.6	:	130.	:	15.9	:	<1.4	J	2.4	:	<1.6	J
Nickel	mg/kg-dry	T	18.8	:	26.7	:	31.6	:	30.	:	16.3	:	24.1	:
Potassium	mg/kg-dry	T	2580.	J	3090.	J	4950.	J	3330.	J	1980.	J	1860.	J
Selenium	mg/kg-dry	T	0.72	J	1.7	J	1.6	J	1.	J	<0.28	J	0.37	J
Silver	mg/kg-dry	T	<0.17	:	0.47	:	0.46	:	0.39	:	<0.13	:	0.22	:
Sodium	mg/kg-dry	T	<48.8	:	973.	:	2320.	:	453.	:	41.9	J	397.	:
Thallium	mg/kg-dry	T	0.17	:	<0.22	:	0.28	:	0.28	:	0.15	:	0.12	:
Vanadium	mg/kg-dry	T	27.8	:	37.5	:	40.9	:	31.2	:	32.	:	28.2	:
Zinc	mg/kg-dry	T	64.3	J	65.7	J	112.	J	81.3	J	55.	J	56.7	J

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Appendix A-7a
Soil - Biased 0-6 inches
Validated Analytical Results

Parameter	Units	Exposure Area Fraction	Site ID	TSS17-25		TSS17-26		TSS17-27		TSS17-28		TSS17-29		TSS17-3	
			Sample Date	11/5/2003		11/5/2003		11/4/2003		11/4/2003		11/4/2003		11/3/2003	
			Sample ID	TSS17-25-T01N-SOL		TSS17-26-T01N-SOL		TSS17-27-T01N-SOL		TSS17-28-T01N-SOL		TSS17-29-T01N-SOL		TSS17-3-T01N-SOL	
			Exposure Area	SS17		SS17		SS17		SS17		SS17		SS17	
General Chemistry															
Ammonia	mg/kg-dry	T		15.1	:	35.7	J	73.1	:	24.6	:	329.	:	17.7	:
Chloride	mg/kg-dry	T		3.2	:	2.5	:	3.2	:	2.1	:	11.6	:	2.3	:
Fluoride	mg/kg-dry	T		<0.11	:	0.13	J	0.16	:	0.72	:	<0.11	:	1.4	:
Nitrate	mg/kg-dry	T		<2.1	J	<2.1	J	2.3	J	<2.1	J	136.	J	3.	J
Phosphorus	mg/kg-dry	T		642.	J	1000.	J	125.	J	134.	J	417.	J	96.9	J
Sulfate	mg/kg-dry	T		5.8	:	2.5	:	5.4	:	4.	:	67.3	:	8.3	:
Total Kjeldahl Nitrogen	mg/kg-dry	T		278.	J	704.	J	1020.	J	275.	J	8380.	J	527.	J
Total Organic Carbon	mg/kg-dry	T		825.	:	4450.	J	10800.	:	2740.	:	50600.	:	5930.	:
Laboratory Parameters															
pH	SU	T		7.8	J	7.7	J	8.	J	8.5	J	7.2	J	8.3	J
Solids, Percent	%	T		99.1	:	98.1	:	98.	:	97.9	:	94.	:	95.4	:
Specific Conductance	umhos/cm	T		41.6	J	163.	J	106.	J	99.	J	1080.	J	163.	J
Geotechnical															
Organic Soils	%	T		1.8	J	2.9	J	3.7	J	2.4	J	9.7	J	4.	J
Physical Properties															
Cation-Exchange Capacity	meq/100g	T		-		22.7	:	25.3	:	18.7	:	23.	:	27.4	:
Sodium Absorption Ratio	ratio	T		-		0.03	:	0.89	:	<0.03	:	0.06	:	<0.05	:
Metals															
Aluminum	mg/kg-dry	T		6910.	:	11400.	J	12400.	:	8390.	:	14500.	:	17100.	:
Antimony	mg/kg-dry	T		<0.37	J	<0.46	J	<0.49	J	<0.47	J	<0.47	J	<0.5	J
Arsenic	mg/kg-dry	T		2.	J	2.1	J	2.4	J	2.7	J	2.8	J	3.6	J
Barium	mg/kg-dry	T		93.7	:	105.	J	118.	:	86.2	:	164.	:	151.	:
Beryllium	mg/kg-dry	T		0.47	:	0.52	:	0.62	:	0.52	:	0.87	:	1.3	:
Boron	mg/kg-dry	T		0.72	:	<5.3	:	2.6	:	1.4	:	10.9	:	<6.5	:
Cadmium	mg/kg-dry	T		0.19	:	0.17	J	<0.19	:	<0.19	:	0.4	:	0.57	:
Calcium	mg/kg-dry	T		2980.	:	6520.	J	4160.	:	7550.	:	8090.	:	12800.	:
Chromium	mg/kg-dry	T		15.9	:	24.6	J	21.9	:	16.5	:	19.6	:	18.9	:
Cobalt	mg/kg-dry	T		6.8	:	9.	:	7.4	:	5.9	:	7.1	:	8.4	:
Copper	mg/kg-dry	T		23.4	:	26.	J	30.4	:	21.7	:	27.4	:	18.8	:
Iron	mg/kg-dry	T		12900.	:	19000.	J	18200.	:	14300.	:	17500.	:	16600.	:
Lead	mg/kg-dry	T		13.	:	14.5	J	20.9	:	11.	:	19.8	:	20.9	:
Magnesium	mg/kg-dry	T		4020.	:	5600.	J	4630.	:	4420.	:	4850.	:	4930.	:
Manganese	mg/kg-dry	T		387.	:	355.	:	469.	:	281.	:	543.	:	510.	:

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T = Total Fraction

Appendix A-7a
Soil - Biased 0-6 inches
Validated Analytical Results

Parameter	Units	Exposure Area Fraction	Site ID / Sample Date / Sample ID											
			TSS17-25 11/5/2003 TSS17-25-T01N-SOL		TSS17-26 11/5/2003 TSS17-26-T01N-SOL		TSS17-27 11/4/2003 TSS17-27-T01N-SOL		TSS17-28 11/4/2003 TSS17-28-T01N-SOL		TSS17-29 11/4/2003 TSS17-29-T01N-SOL		TSS17-3 11/3/2003 TSS17-3-T01N-SOL	
			SS17		SS17		SS17		SS17		SS17		SS17	
Mercury	mg/kg-dry	T	<0.015	:	<0.015	:	<0.017	:	<0.015	:	0.037	:	<0.017	:
Molybdenum	mg/kg-dry	T	1.7	:	1.9	:	<3.4	J	<3.1	J	<2.9	J	0.91	:
Nickel	mg/kg-dry	T	14.3	:	17.8	J	22.	:	16.2	:	20.4	:	18.1	:
Potassium	mg/kg-dry	T	1130.	J	1690.	J	2320.	J	1130.	J	4580.	J	2360.	J
Selenium	mg/kg-dry	T	0.24	J	0.3	J	0.36	J	0.43	J	0.69	J	0.75	J
Silver	mg/kg-dry	T	<0.14	:	<0.13	:	0.31	:	0.22	:	0.25	:	<0.16	:
Sodium	mg/kg-dry	T	<38.5	:	<37.6	:	468.	:	<358.	:	<351.	:	<44.	:
Thallium	mg/kg-dry	T	<0.075	:	0.097	:	0.11	:	<0.094	:	0.15	:	0.19	:
Vanadium	mg/kg-dry	T	19.1	:	32.8	J	30.2	:	25.9	:	27.2	:	24.3	:
Zinc	mg/kg-dry	T	46.7	J	55.8	J	60.3	J	46.7	J	103.	J	67.2	J

J = Qualified as estimated during data validation
R = Qualified as rejected value from data validation and results are considered unusable for any purpose
T = Total Fraction

Appendix A-7a
Soil - Biased 0-6 inches
Validated Analytical Results

Parameter	Units	Exposure Area Fraction	Site ID	TSS17-30	TSS17-31	TSS17-32	TSS17-33	TSS17-34	TSS17-35
			Sample Date	11/5/2003	12/10/2003	5/4/2004	5/4/2004	5/4/2004	5/4/2004
			Sample ID	TSS17-30-T01N-SOL	TSS17-31-T01N-SOL	TSS17-32-T01N-SOL	TSS17-33-T01N-SOL	TSS17-34-T01N-SOL	TSS17-35-T01N-SOL
			Exposure Area	SS17	SS17	SS17	SS17	SS17	SS17
General Chemistry									
Ammonia	mg/kg-dry	T		392. :	28.4 :	69.7 :	146. :	140. :	69.9 :
Chloride	mg/kg-dry	T		234. :	6.6 :	15.8 :	15.6 :	28. :	10.8 :
Fluoride	mg/kg-dry	T		0.15 J	<0.12 :	0.99 :	<0.12 :	2.5 :	1.1 :
Nitrate	mg/kg-dry	T		445. J	<2.3 J	2.5 J	71.6 J	13.2 J	4. J
Phosphorus	mg/kg-dry	T		296. J	676. J	1110. :	1960. :	1460. :	1060. :
Sulfate	mg/kg-dry	T		292. :	192. :	287. :	78.5 :	6260. :	52.9 :
Total Kjeldahl Nitrogen	mg/kg-dry	T		6280. J	325. J	1120. :	2990. :	2660. :	1180. :
Total Organic Carbon	mg/kg-dry	T		109600. :	8250. :	27500. :	58300. J	26200. :	15200. :
Laboratory Parameters									
pH	SU	T		7.8 J	8. J	7.7 J	7.4 J	8.1 J	8.3 J
Solids, Percent	%	T		84.8 :	88.1 :	89.8 :	85.8 :	92.6 :	92.4 :
Specific Conductance	umhos/cm	T		4430. J	71.1 J	703. J	682. J	5220. J	402. J
Geotechnical									
Organic Soils	%	T		24.7 J	2.2 :	5.2 :	8.5 :	9.3 :	5. :
Physical Properties									
Cation-Exchange Capacity	meq/100g	T		49.5 :	17.2 :	22.2 :	29.8 :	36.1 :	25. :
Sodium Absorption Ratio	ratio	T		0.62 :	<0.07 :	0.86 :	0.08 :	0.63 :	0.59 :
Metals									
Aluminum	mg/kg-dry	T		10200. :	10900. J	8190. :	10200. :	12900. :	8650. :
Antimony	mg/kg-dry	T		<0.51 J	<1.1 J	<1.9 J	<2. J	<1.8 J	<1.9 J
Arsenic	mg/kg-dry	T		1.7 J	3.7 J	4.3 J	2.7 J	3.2 J	3.5 J
Barium	mg/kg-dry	T		150. :	108. :	263. J	131. J	184. J	206. J
Beryllium	mg/kg-dry	T		0.49 :	0.56 :	0.84 J	0.71 J	0.92 J	0.73 J
Boron	mg/kg-dry	T		28. :	<0.55 :	<0.19 J	6. J	7.5 J	<0.19 J
Cadmium	mg/kg-dry	T		0.35 :	0.2 :	0.61 J	0.43 J	0.41 J	0.44 J
Calcium	mg/kg-dry	T		21600. :	3760. J	4340. :	6590. :	25300. :	5350. :
Chromium	mg/kg-dry	T		17.1 :	22.4 J	18.1 J	17.2 J	14.7 J	16.3 J
Cobalt	mg/kg-dry	T		6.5 :	7.6 :	10.1 J	7.2 J	7.6 J	8. J
Copper	mg/kg-dry	T		26.1 :	25.7 :	59.2 J	21.4 J	28.9 J	41.8 J
Iron	mg/kg-dry	T		13800. :	15400. J	22300. :	14100. :	15400. :	19100. :
Lead	mg/kg-dry	T		15.3 :	15.3 J	51. :	19. :	23.1 :	41.4 :
Magnesium	mg/kg-dry	T		5630. :	4580. J	4330. :	3880. :	5390. :	4580. :
Manganese	mg/kg-dry	T		455. :	425. J	407. :	448. :	458. :	558. :

J = Qualified as estimated during data validation
R = Qualified as rejected value from data validation and results are considered unusable for any purpose
T = Total Fraction

Appendix A-7a
Soil - Biased 0-6 inches
Validated Analytical Results

Parameter	Units	Exposure Area Fraction	Site ID / Sample Date / Sample ID													
			TSS17-30 11/5/2003 TSS17-30-T01N-SOL		TSS17-31 12/10/2003 TSS17-31-T01N-SOL		TSS17-32 5/4/2004 TSS17-32-T01N-SOL		TSS17-33 5/4/2004 TSS17-33-T01N-SOL		TSS17-34 5/4/2004 TSS17-34-T01N-SOL		TSS17-35 5/4/2004 TSS17-35-T01N-SOL	
			SS17		SS17		SS17		SS17		SS17		SS17	
Mercury	mg/kg-dry	T	<0.02	:	<0.016	:	<0.017	:	0.04	:	0.026	:	<0.015	:
Molybdenum	mg/kg-dry	T	3.7	:	1.8	:	44.2	J	4.6	J	7.9	J	22.4	J
Nickel	mg/kg-dry	T	13.5	:	17.4	J	19.8	J	16.3	J	15.1	J	16.6	J
Potassium	mg/kg-dry	T	6520.	J	1640.	J	1720.	J	3860.	J	3780.	J	2020.	J
Selenium	mg/kg-dry	T	0.32	J	<0.28	J	1.1	:	<0.81	:	<0.74	:	<0.75	:
Silver	mg/kg-dry	T	<0.18	:	<0.14	:	<0.34	J	<0.11	J	<0.11	J	<0.25	J
Sodium	mg/kg-dry	T	202.	:	<39.3	:	57.3	J	<19.5	J	90.	J	<18.7	J
Thallium	mg/kg-dry	T	<0.1	:	0.13	:	0.15	:	0.15	:	0.15	:	0.16	:
Vanadium	mg/kg-dry	T	22.6	:	25.3	:	21.1	J	21.3	J	22.1	J	19.5	J
Zinc	mg/kg-dry	T	89.8	J	53.1	J	117.	J	147.	J	73.6	J	85.7	J

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T = Total Fraction

Appendix A-7a
Soil - Biased 0-6 inches
Validated Analytical Results

Parameter	Units	Exposure Area Fraction	Site ID / Sample Date / Sample ID / Exposure Area		TSS17-36 5/4/2004 TSS17-36-T01N-SOL SS17		TSS17-37 5/4/2004 TSS17-37-T01N-SOL SS17		TSS17-38 5/4/2004 TSS17-38-T01N-SOL SS17		TSS17-39 5/4/2004 TSS17-39-T01N-SOL SS17		TSS17-4 11/3/2003 TSS17-4-T01N-SOL SS17		TSS17-40 5/4/2004 TSS17-40-T01N-SOL SS17	
General Chemistry																
Ammonia	mg/kg-dry	T			70.6	:	531.	:	358.	:	38.4	:	53.1	:	74.3	:
Chloride	mg/kg-dry	T			14.	:	43.2	:	23.6	:	13.6	:	6.2	:	9.3	:
Fluoride	mg/kg-dry	T			1.3	:	7.1	:	11.8	:	0.72	:	0.65	:	1.4	:
Nitrate	mg/kg-dry	T			3.	J	2.6	J	2.2	J	2.6	J	2.6	J	5.2	J
Phosphorus	mg/kg-dry	T			863.	:	582.	:	1240.	:	846.	:	115.	J	1300.	:
Sulfate	mg/kg-dry	T			3790.	:	3580.	:	132.	:	58.5	:	4.	:	44.8	:
Total Kjeldahl Nitrogen	mg/kg-dry	T			1120.	:	7030.	:	4420.	:	1050.	:	1320.	J	940.	:
Total Organic Carbon	mg/kg-dry	T			9830.	:	155300.	:	95200.	:	14100.	:	16900.	:	14800.	:
Laboratory Parameters																
pH	SU	T			7.6	J	7.6	J	8.3	J	7.3	J	8.1	J	8.1	J
Solids, Percent	%	T			95.9	:	89.6	:	94.2	:	96.2	:	91.	:	95.2	:
Specific Conductance	umhos/cm	T			2060.	J	7370.	J	1420.	J	148.	J	244.	J	194.	J
Geotechnical																
Organic Soils	%	T			4.2	:	30.4	:	14.3	:	4.4	:	6.7	J	4.2	:
Physical Properties																
Cation-Exchange Capacity	meq/100g	T			23.3	:	73.8	:	48.8	:	24.7	:	44.2	:	20.9	:
Sodium Absorption Ratio	ratio	T			0.52	:	1.03	:	3.17	:	0.17	:	0.44	:	0.14	:
Metals																
Aluminum	mg/kg-dry	T			7370.	:	10600.	:	9490.	:	10200.	:	26200.	:	11200.	:
Antimony	mg/kg-dry	T			<1.8	J	<2.	J	<1.8	J	<1.8	J	<0.47	J	<1.7	J
Arsenic	mg/kg-dry	T			2.9	J	5.1	J	3.8	J	3.2	J	4.8	J	3.1	J
Barium	mg/kg-dry	T			89.8	J	186.	J	204.	J	122.	J	187.	:	140.	J
Beryllium	mg/kg-dry	T			0.6	J	0.71	J	0.79	J	0.77	J	1.8	:	0.79	J
Boron	mg/kg-dry	T			<0.19	J	3.8	J	3.1	J	<0.17	J	8.4	:	1.2	J
Cadmium	mg/kg-dry	T			0.35	J	0.49	J	0.53	J	0.36	J	0.72	J	0.38	J
Calcium	mg/kg-dry	T			4920.	:	51100.	:	21600.	:	4110.	:	8840.	:	4940.	:
Chromium	mg/kg-dry	T			30.4	J	12.2	J	17.2	J	18.	J	21.8	:	20.3	J
Cobalt	mg/kg-dry	T			7.2	J	5.9	J	7.8	J	8.1	J	9.	:	8.3	J
Copper	mg/kg-dry	T			25.6	J	19.5	J	47.5	J	22.3	J	26.5	:	24.5	J
Iron	mg/kg-dry	T			16300.	:	27400.	:	17100.	:	15700.	:	22600.	:	16600.	:
Lead	mg/kg-dry	T			18.2	:	15.	:	40.2	:	18.6	:	22.1	:	20.3	:
Magnesium	mg/kg-dry	T			3640.	:	3870.	:	5230.	:	4270.	:	5760.	:	4580.	:
Manganese	mg/kg-dry	T			226.	:	1650.	:	808.	:	483.	:	494.	:	455.	:

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R = Qualified as rejected value from data validation and results are considered unusable for any purpose
T = Total Fraction

Appendix A-7a
Soil - Biased 0-6 inches
Validated Analytical Results

Parameter	Units	Exposure Area Fraction	Site ID / Sample Date / Sample ID / Exposure Area											
			TSS17-36 5/4/2004 TSS17-36-T01N-SOL SS17		TSS17-37 5/4/2004 TSS17-37-T01N-SOL SS17		TSS17-38 5/4/2004 TSS17-38-T01N-SOL SS17		TSS17-39 5/4/2004 TSS17-39-T01N-SOL SS17		TSS17-4 11/3/2003 TSS17-4-T01N-SOL SS17		TSS17-40 5/4/2004 TSS17-40-T01N-SOL SS17	
Mercury	mg/kg-dry	T	0.044	:	0.031	:	0.022	:	<0.017	:	0.019	:	0.019	:
Molybdenum	mg/kg-dry	T	39.9	J	360.	J	60.5	J	5.4	J	1.8	:	13.4	J
Nickel	mg/kg-dry	T	15.6	J	11.2	J	16.9	J	16.8	J	20.8	:	17.7	J
Potassium	mg/kg-dry	T	1080.	J	1070.	J	1320.	J	1980.	J	3650.	J	2340.	J
Selenium	mg/kg-dry	T	<0.73	:	<0.78	:	1.	:	<0.71	:	0.81	J	<0.69	:
Silver	mg/kg-dry	T	<0.1	J	<0.11	J	<0.23	J	<0.095	J	<0.17	:	<0.15	J
Sodium	mg/kg-dry	T	37.	J	300.	J	389.	J	<16.3	J	<73.9	:	<18.	J
Thallium	mg/kg-dry	T	0.12	:	0.15	:	0.14	:	0.14	:	0.28	:	0.14	:
Vanadium	mg/kg-dry	T	18.9	J	24.	J	21.4	J	24.3	J	30.2	:	25.2	J
Zinc	mg/kg-dry	T	72.	J	54.5	J	91.2	J	62.8	J	85.	J	65.7	J

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R = Qualified as rejected value from data validation and results are considered unusable for any purpose
T = Total Fraction

Appendix A-7a
Soil - Biased 0-6 inches
Validated Analytical Results

Parameter	Units	Exposure Area Fraction	Site ID	TSS17-41		TSS17-42		TSS17-5		TSS17-6		TSS17-7		TSS17-8	
			Sample Date	5/4/2004		5/4/2004		11/3/2003		11/3/2003		11/3/2003		11/3/2003	
			Sample ID	TSS17-41-T01N-SOL		TSS17-31-T01N-SOL		TSS17-5-T01N-SOL		TSS17-6-T01N-SOL		TSS17-7-T01N-SOL		TSS17-8-T01N-SOL	
			Exposure Area	SS17		SS17		SS17		SS17		SS17		SS17	
General Chemistry															
Ammonia	mg/kg-dry	T		62.5	:	224.	:	64.1	:	75.7	:	45.4	:	65.1	:
Chloride	mg/kg-dry	T		11.3	:	99.9	:	2.8	:	4.7	:	9.3	:	<2.2	:
Fluoride	mg/kg-dry	T		1.8	:	<0.14	:	0.33	:	0.62	:	16.2	:	1.6	:
Nitrate	mg/kg-dry	T		<2.2	J	144.	J	7.6	J	4.2	J	<2.2	J	2.5	J
Phosphorus	mg/kg-dry	T		750.	:	3220.	:	88.8	J	60.3	J	141.	J	93.9	J
Sulfate	mg/kg-dry	T		162.	:	2230.	:	7.9	:	5.3	:	139.	:	8.1	:
Total Kjeldahl Nitrogen	mg/kg-dry	T		1220.	:	5330.	:	1490.	J	1580.	J	424.	J	594.	J
Total Organic Carbon	mg/kg-dry	T		17400.	:	48400.	:	14300.	:	18900.	:	5050.	:	6660.	:
Laboratory Parameters															
pH	SU	T		7.4	J	8.3	J	8.1	J	8.1	J	7.6	J	7.7	J
Solids, Percent	%	T		91.	:	71.8	:	93.5	:	88.4	:	92.7	:	95.	:
Specific Conductance	umhos/cm	T		310.	J	3680.	J	233.	J	270.	J	408.	J	205.	J
Geotechnical															
Organic Soils	%	T		4.4	:	14.6	:	6.4	J	7.	J	3.8	J	4.2	J
Physical Properties															
Cation-Exchange Capacity	meq/100g	T		17.2	:	44.7	:	32.7	:	44.6	:	30.7	:	26.7	:
Sodium Absorption Ratio	ratio	T		0.55	:	1.79	:	0.08	:	0.38	:	<0.05	:	0.12	:
Metals															
Aluminum	mg/kg-dry	T		6880.	:	10700.	:	17900.	:	25400.	:	15900.	J	14500.	:
Antimony	mg/kg-dry	T		<1.9	J	<2.4	J	<0.45	J	<0.45	J	<0.49	J	<0.44	J
Arsenic	mg/kg-dry	T		2.3	J	3.1	J	3.6	J	4.6	J	3.8	J	3.7	J
Barium	mg/kg-dry	T		95.1	J	197.	J	149.	:	184.	:	127.	J	139.	:
Beryllium	mg/kg-dry	T		0.55	J	0.66	J	1.2	:	1.7	:	1.	:	1.1	:
Boron	mg/kg-dry	T		<0.19	J	20.7	J	8.7	:	8.6	:	<5.8	:	<4.8	:
Cadmium	mg/kg-dry	T		0.33	J	0.41	J	0.62	:	0.69	J	0.67	:	0.81	:
Calcium	mg/kg-dry	T		3090.	:	19700.	:	7200.	:	8760.	:	5670.	J	11700.	:
Chromium	mg/kg-dry	T		13.1	J	11.3	J	22.	:	21.6	:	21.5	J	21.3	:
Cobalt	mg/kg-dry	T		5.4	J	9.4	J	8.2	:	8.6	:	9.5	:	7.8	:
Copper	mg/kg-dry	T		26.	J	28.2	J	23.1	:	25.5	:	25.8	:	44.1	:
Iron	mg/kg-dry	T		13100.	:	15500.	:	17900.	:	21800.	:	18500.	J	16000.	:
Lead	mg/kg-dry	T		24.8	:	18.2	:	18.5	:	21.2	:	22.7	J	55.5	:
Magnesium	mg/kg-dry	T		3270.	:	6180.	:	4910.	:	5620.	:	4710.	J	4720.	:
Manganese	mg/kg-dry	T		201.	:	648.	:	536.	:	480.	:	567.	J	2180.	:

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T = Total Fraction

Appendix A-7a
Soil - Biased 0-6 inches
Validated Analytical Results

Parameter	Units	Exposure Area Fraction	Site ID	TSS17-41		TSS17-42		TSS17-5		TSS17-6		TSS17-7		TSS17-8	
			Sample Date	5/4/2004		5/4/2004		11/3/2003		11/3/2003		11/3/2003		11/3/2003	
			Sample ID	TSS17-41-T01N-SOL		TSS17-31-T01N-SOL		TSS17-5-T01N-SOL		TSS17-6-T01N-SOL		TSS17-7-T01N-SOL		TSS17-8-T01N-SOL	
			Exposure Area	SS17		SS17		SS17		SS17		SS17		SS17	
Mercury	mg/kg-dry	T		<0.018	:	0.031	:	<0.018	:	0.02	:	<0.018	:	<0.017	:
Molybdenum	mg/kg-dry	T		22.5	J	12.3	J	1.9	:	2.1	:	5.3	J	155.	:
Nickel	mg/kg-dry	T		12.	J	17.	J	19.4	:	20.1	:	21.2	J	19.5	:
Potassium	mg/kg-dry	T		1060.	J	6160.	J	3450.	J	3500.	J	2120.	J	2100.	J
Selenium	mg/kg-dry	T		<0.76	:	<0.96	:	0.56	J	1.	J	0.81	J	0.59	J
Silver	mg/kg-dry	T		<0.11	J	<0.13	J	<0.17	:	<0.15	:	<0.15	:	0.22	:
Sodium	mg/kg-dry	T		<18.6	J	346.	J	<47.1	:	<55.5	:	<42.2	:	<41.4	:
Thallium	mg/kg-dry	T		<0.11	:	0.15	:	0.15	:	0.25	:	0.15	:	0.14	:
Vanadium	mg/kg-dry	T		17.2	J	25.4	J	27.2	:	29.6	:	27.2	J	27.4	:
Zinc	mg/kg-dry	T		63.	J	80.	J	71.9	J	82.1	J	83.	J	101.	J

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T = Total Fraction

Appendix A-7a
Soil - Biased 0-6 inches
Validated Analytical Results

Parameter	Units	Exposure Area Fraction	Site ID / Sample Date / Sample ID / Exposure Area					
			TSS17-9 / 11/3/2003 / TSS17-9-T01N-SOL / SS17	----	----	----	----	----
General Chemistry								
Ammonia	mg/kg-dry	T	72.4 :	-	-	-	-	-
Chloride	mg/kg-dry	T	7.1 :	-	-	-	-	-
Fluoride	mg/kg-dry	T	0.42 :	-	-	-	-	-
Nitrate	mg/kg-dry	T	39. J	-	-	-	-	-
Phosphorus	mg/kg-dry	T	113. J	-	-	-	-	-
Sulfate	mg/kg-dry	T	101. :	-	-	-	-	-
Total Kjeldahl Nitrogen	mg/kg-dry	T	748. J	-	-	-	-	-
Total Organic Carbon	mg/kg-dry	T	7780. J	-	-	-	-	-
Laboratory Parameters								
pH	SU	T	7.3 J	-	-	-	-	-
Solids, Percent	%	T	93. :	-	-	-	-	-
Specific Conductance	umhos/cm	T	509. J	-	-	-	-	-
Geotechnical								
Organic Soils	%	T	4.9 J	-	-	-	-	-
Physical Properties								
Cation-Exchange Capacity	meq/100g	T	31.7 :	-	-	-	-	-
Sodium Absorption Ratio	ratio	T	0.09 :	-	-	-	-	-
Metals								
Aluminum	mg/kg-dry	T	17400. :	-	-	-	-	-
Antimony	mg/kg-dry	T	<0.49 J	-	-	-	-	-
Arsenic	mg/kg-dry	T	3.5 J	-	-	-	-	-
Barium	mg/kg-dry	T	145. :	-	-	-	-	-
Beryllium	mg/kg-dry	T	1.1 :	-	-	-	-	-
Boron	mg/kg-dry	T	<5.8 :	-	-	-	-	-
Cadmium	mg/kg-dry	T	0.71 :	-	-	-	-	-
Calcium	mg/kg-dry	T	9160. :	-	-	-	-	-
Chromium	mg/kg-dry	T	22.7 :	-	-	-	-	-
Cobalt	mg/kg-dry	T	8.9 :	-	-	-	-	-
Copper	mg/kg-dry	T	33.3 :	-	-	-	-	-
Iron	mg/kg-dry	T	17900. :	-	-	-	-	-
Lead	mg/kg-dry	T	34.8 :	-	-	-	-	-
Magnesium	mg/kg-dry	T	5000. :	-	-	-	-	-
Manganese	mg/kg-dry	T	1170. :	-	-	-	-	-

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Appendix A-7a
Soil - Biased 0-6 inches
Validated Analytical Results

Parameter	Units	Fraction	Site ID / Sample Date / Sample ID / Exposure Area					
			TSS17-9 11/3/2003 TSS17-9-T01N-SOL SS17	----	----	----	----	----
Mercury	mg/kg-dry	T	0.014 :	-	-	-	-	-
Molybdenum	mg/kg-dry	T	64.3 :	-	-	-	-	-
Nickel	mg/kg-dry	T	20.9 :	-	-	-	-	-
Potassium	mg/kg-dry	T	2390. J	-	-	-	-	-
Selenium	mg/kg-dry	T	0.8 J	-	-	-	-	-
Silver	mg/kg-dry	T	0.16 :	-	-	-	-	-
Sodium	mg/kg-dry	T	<42.1 :	-	-	-	-	-
Thallium	mg/kg-dry	T	0.18 :	-	-	-	-	-
Vanadium	mg/kg-dry	T	28.2 :	-	-	-	-	-
Zinc	mg/kg-dry	T	93.2 J	-	-	-	-	-

J = Qualified as estimated during data validation
R = Qualified as rejected value from data validation and results are considered unusable for any purpose
T = Total Fraction

Appendix A-7b
Soil - Non-Random 0-6 inches
Validated Analytical Results

Parameter	Units	Exposure Area Fraction	Site ID / Sample Date / Sample ID		CGBUG1 10/19/2002 CGBUG1-T01N-SOL CAMP-Junebug		CGBUG2 10/19/2002 CGBUG2-T01N-SOL CAMP-Junebug		CGBUG3 10/19/2002 CGBUG3-T01N-SOL CAMP-Junebug		CGBUG4 10/19/2002 CGBUG4-T01N-SOL CAMP-Junebug		CGBUG5 10/19/2002 CGBUG5-T01N-SOL CAMP-Junebug		CGGTH1 10/19/2002 CGGTH1-T01N-SOL CAMP-GTH	
General Chemistry																
Ammonia	mg/kg-dry	T			51.4	:	48.2	:	24.1	:	19.1	:	97.8	J	28.9	:
Chloride	mg/kg-dry	T			4.	J	3.3	J	4.3	J	<2.2	J	6.6	J	3.7	J
Fluoride	mg/kg-dry	T			0.31	J	0.39	J	0.22	J	0.2	J	0.13	J	0.42	J
Nitrate	mg/kg-dry	T			<2.3	J	2.9	J	<2.2	J	<2.2	J	<2.5	J	<2.1	J
Phosphorus	mg/kg-dry	T			757.	J	554.	J	753.	J	105.	J	2260.	J	559.	J
Sulfate	mg/kg-dry	T			22.9	J	5.1	J	7.6	J	4.8	J	61.9	J	34.4	J
Total Kjeldahl Nitrogen	mg/kg-dry	T			883.	:	700.	:	696.	:	290.	:	831.	:	372.	:
Total Organic Carbon	mg/kg-dry	T			18300.	J	15400.	J	13700.	J	11300.	J	22400.	J	11800.	J
Laboratory Parameters																
pH	SU	T			7.3	:	7.4	:	7.2	:	6.	:	5.	:	5.6	:
Solids, Percent	%	T			90.4	:	91.	:	94.7	:	95.	:	80.3	:	96.1	:
Specific Conductance	umhos/cm	T			98.6	:	48.1	:	77.4	:	34.4	:	109.	:	161.	:
Geotechnical																
Organic Soils	%	T			4.43	J	3.27	J	3.68	J	2.27	J	8.69	J	2.9	J
Physical Properties																
Cation-Exchange Capacity	meq/100g	T			15.4	:	11.9	:	12.7	:	8.2	:	21.2	:	8.8	:
Sodium Absorption Ratio	ratio	T			0.12	:	0.08	:	0.59	:	0.11	:	0.29	:	0.21	:
Metals																
Aluminum	mg/kg-dry	T			10800.	:	10600.	:	8970.	:	8260.	:	13900.	:	7280.	:
Antimony	mg/kg-dry	T			<0.25	J	<0.25	J	<0.22	J	<0.26	J	<0.3	J	<0.26	J
Arsenic	mg/kg-dry	T			4.1	:	3.1	:	3.2	:	3.1	:	10.4	:	3.9	:
Barium	mg/kg-dry	T			205.	:	141.	:	153.	:	175.	:	492.	:	183.	:
Beryllium	mg/kg-dry	T			0.75	:	0.56	:	0.59	:	0.49	:	0.42	:	0.49	:
Boron	mg/kg-dry	T			<1.6	:	<1.8	:	<1.6	:	<0.94	:	2.	:	<1.6	:
Cadmium	mg/kg-dry	T			<0.04	J	<0.035	J	0.087	J	<0.033	J	<0.042	J	<0.034	J
Calcium	mg/kg-dry	T			3480.	:	3500.	:	3430.	:	2470.	:	1540.	:	2150.	:
Chromium	mg/kg-dry	T			26.3	:	24.4	:	21.4	J	22.	:	42.1	:	18.8	:
Cobalt	mg/kg-dry	T			10.1	:	9.9	:	9.4	J	7.6	:	1.8	:	6.	:
Copper	mg/kg-dry	T			118.	:	74.7	:	77.4	:	83.9	:	52.3	:	44.3	:
Iron	mg/kg-dry	T			27700.	:	25500.	:	21600.	:	24000.	:	52500.	:	22700.	:
Lead	mg/kg-dry	T			49.7	:	51.3	:	41.1	J	48.5	:	274.	:	51.3	:
Magnesium	mg/kg-dry	T			4910.	:	5300.	:	4520.	:	4240.	:	9210.	:	3860.	:
Manganese	mg/kg-dry	T			519.	J	520.	J	594.	J	392.	J	408.	J	321.	J

J = Qualified as estimated during data validation

R = Qualified as rejected value from data validation and results are considered unusable for any purpose

T = Total Fraction

Appendix A-7b
Soil - Non-Random 0-6 inches
Validated Analytical Results

Parameter	Units	Exposure Area Fraction	Site ID	CGBUG1		CGBUG2		CGBUG3		CGBUG4		CGBUG5		CGGTH1	
			Sample Date	10/19/2002		10/19/2002		10/19/2002		10/19/2002		10/19/2002		10/19/2002	
			Sample ID	CGBUG1-T01N-SOL		CGBUG2-T01N-SOL		CGBUG3-T01N-SOL		CGBUG4-T01N-SOL		CGBUG5-T01N-SOL		CGGTH1-T01N-SOL	
			Exposure Area	CAMP-Junebug		CAMP-Junebug		CAMP-Junebug		CAMP-Junebug		CAMP-Junebug		CAMP-GTH	
Mercury	mg/kg-dry	T		<0.016	:	<0.017	:	<0.016	:	<0.016	:	<0.02	J	<0.016	J
Molybdenum	mg/kg-dry	T		17.6	:	31.7	:	19.	:	11.8	:	16.5	:	34.9	:
Nickel	mg/kg-dry	T		21.3	J	14.3	J	18.1	J	13.3	J	9.4	J	12.6	J
Potassium	mg/kg-dry	T		2400.	J	2110.	J	2070.	J	1810.	J	4520.	J	2110.	J
Selenium	mg/kg-dry	T		1.3	J	<0.66	J	0.85	J	1.	J	3.2	J	<0.68	J
Silver	mg/kg-dry	T		0.53	:	0.34	:	0.23	:	0.27	:	1.8	:	0.22	:
Sodium	mg/kg-dry	T		<120.	:	<101.	:	<163.	:	<97.2	:	568.	:	<135.	:
Thallium	mg/kg-dry	T		0.19	:	0.14	:	0.15	:	0.17	:	0.29	:	0.12	:
Vanadium	mg/kg-dry	T		37.7	:	34.8	:	30.8	:	34.7	:	33.1	:	24.7	:
Zinc	mg/kg-dry	T		143.	J	114.	J	121.	J	86.6	J	66.	J	76.8	J

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R = Qualified as rejected value from data validation and results are considered unusable for any purpose
T = Total Fraction

Appendix A-7b
Soil - Non-Random 0-6 inches
Validated Analytical Results

Parameter	Units	Exposure Area Fraction	Site ID	CGGTH2	CGGTH3	CGGTH4	CGGTH5	CGUFL1	CGUFL2
			Sample Date	10/19/2002	10/19/2002	10/19/2002	10/19/2002	10/20/2002	10/20/2002
			Sample ID	CGGTH2-T01N-SOL	CGGTH3-T01N-SOL	CGGTH4-T01N-SOL	CGGTH5-T01N-SOL	CGUFL1-T01N-SOL	CGUFL2-T01N-SOL
			Exposure Area	CAMP-GTH	CAMP-GTH	CAMP-GTH	CAMP-GTH	CAMP-UFL	CAMP-UFL
General Chemistry									
Ammonia	mg/kg-dry	T		17.2 :	110. :	11.9 :	67.8 J	19. :	23.8 J
Chloride	mg/kg-dry	T		6.8 J	11.9 J	2.7 J	4.3 J	9.3 J	4.5 J
Fluoride	mg/kg-dry	T		0.68 J	0.87 J	0.24 J	0.28 J	0.23 J	0.18 J
Nitrate	mg/kg-dry	T		<2.2 J	<2.2 J	<2.2 J	<2.3 J	<2.2 J	2.7 J
Phosphorus	mg/kg-dry	T		677. J	307. J	136. J	304. J	653. J	621. J
Sulfate	mg/kg-dry	T		40.6 J	30.6 J	9.2 J	9. J	29.4 J	49.4 J
Total Kjeldahl Nitrogen	mg/kg-dry	T		340. :	629. :	91. :	628. :	1030. :	647. J
Total Organic Carbon	mg/kg-dry	T		15300. J	30100. J	1680. J	18900. J	18600. J	16900. J
Laboratory Parameters									
pH	SU	T		6.3 :	6.5 :	7.4 :	6.6 :	6. :	6. :
Solids, Percent	%	T		95.1 :	91.6 :	94.5 :	90.2 :	93.1 :	91.9 :
Specific Conductance	umhos/cm	T		142. :	180. :	28.4 :	72.4 :	157. :	151. :
Geotechnical									
Organic Soils	%	T		2.74 J	4.54 J	1.43 J	4.85 J	7.48 J	5.24 J
Physical Properties									
Cation-Exchange Capacity	meq/100g	T		8.3 :	12.5 :	5.7 :	11. :	17.5 :	15.8 :
Sodium Absorption Ratio	ratio	T		0.16 :	0.34 :	1.87 :	0.22 :	0.16 :	0.13 :
Metals									
Aluminum	mg/kg-dry	T		7200. :	7500. :	5290. :	9150. :	6770. :	9210. J
Antimony	mg/kg-dry	T		<0.26 J	<0.26 J	<0.25 J	<0.27 J	<0.37 :	<0.25 J
Arsenic	mg/kg-dry	T		3.7 :	4.7 :	2.5 :	4.7 :	6.7 :	7.6 :
Barium	mg/kg-dry	T		144. :	230. :	100. :	178. :	302. :	245. J
Beryllium	mg/kg-dry	T		0.57 :	0.53 :	0.31 :	0.58 :	0.56 :	0.69 :
Boron	mg/kg-dry	T		1.9 :	2.1 :	<0.84 :	1.9 :	<1.8 :	<1.3 :
Cadmium	mg/kg-dry	T		<0.034 J	<0.033 J	<0.031 :	<0.036 J	<0.035 J	<0.034 J
Calcium	mg/kg-dry	T		2720. :	3170. :	2060. :	3330. :	2890. :	2640. J
Chromium	mg/kg-dry	T		19.2 :	17.2 :	13.6 :	21. :	9.1 :	24.5 :
Cobalt	mg/kg-dry	T		6. :	6. :	3.4 :	6.3 :	5.7 :	9.2 J
Copper	mg/kg-dry	T		45. :	55.3 :	23.8 :	44.3 :	18.1 :	33.2 :
Iron	mg/kg-dry	T		19400. :	22700. :	14200. :	24800. :	20800. :	31100. :
Lead	mg/kg-dry	T		46.6 :	88.7 :	43. :	75.2 :	48.2 :	47.9 J
Magnesium	mg/kg-dry	T		4110. :	3540. :	2780. :	4250. :	2510. :	4960. J
Manganese	mg/kg-dry	T		337. J	438. J	210. J	425. J	566. J	506. J

J = Qualified as estimated during data validation

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T = Total Fraction

Appendix A-7b
Soil - Non-Random 0-6 inches
Validated Analytical Results

Parameter	Units	Exposure Area Fraction	Site ID / Sample Date / Sample ID		CGGTH2 10/19/2002 CGGTH2-T01N-SOL CAMP-GTH		CGGTH3 10/19/2002 CGGTH3-T01N-SOL CAMP-GTH		CGGTH4 10/19/2002 CGGTH4-T01N-SOL CAMP-GTH		CGGTH5 10/19/2002 CGGTH5-T01N-SOL CAMP-GTH		CGUFL1 10/20/2002 CGUFL1-T01N-SOL CAMP-UFL		CGUFL2 10/20/2002 CGUFL2-T01N-SOL CAMP-UFL	
Mercury	mg/kg-dry	T		<0.018	J	<0.018	J	<0.016	J	<0.017	J	0.03	J	<0.017	J
Molybdenum	mg/kg-dry	T		194.	:	56.5	:	19.	:	49.1	:	13.7	:	18.4	:
Nickel	mg/kg-dry	T		13.9	J	12.3	J	8.6	J	13.4	J	13.3	J	19.5	J
Potassium	mg/kg-dry	T		2250.	J	2690.	J	1860.	J	3150.	J	3000.	J	2490.	J
Selenium	mg/kg-dry	T		0.78	J	<0.69	J	<0.66	J	0.79	J	0.8	J	0.94	J
Silver	mg/kg-dry	T		0.31	:	0.45	:	0.19	:	0.44	:	<0.14	:	0.21	:
Sodium	mg/kg-dry	T		<129.	:	<142.	:	<192.	:	<168.	:	<140.	:	<212.	:
Thallium	mg/kg-dry	T		0.14	:	0.19	:	0.12	:	0.21	:	0.14	:	0.1	:
Vanadium	mg/kg-dry	T		23.7	:	22.4	:	17.9	:	26.3	:	13.3	:	27.2	J
Zinc	mg/kg-dry	T		74.	J	95.1	J	37.5	J	68.9	J	60.1	J	58.2	J

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R = Qualified as rejected value from data validation and results are considered unusable for any purpose
T = Total Fraction

Appendix A-7b
Soil - Non-Random 0-6 inches
Validated Analytical Results

Parameter	Units	Exposure Area Fraction	Site ID: CGUFL3 Sample Date: 10/20/2002 Sample ID: CGUFL3-T01N-SOL CAMP-UFL		Site ID: CGUFL4 Sample Date: 10/20/2002 Sample ID: CGUFL4-T01N-SOL CAMP-UFL		Site ID: CGUFL5 Sample Date: 10/20/2002 Sample ID: CGUFL5-T01N-SOL CAMP-UFL		Site ID: ERL-1 Sample Date: 10/20/2002 Sample ID: ERL1-T01N-SOL CAMP-ERL		Site ID: ERL-2 Sample Date: 10/20/2002 Sample ID: ERL2-T01N-SOL CAMP-ERL		Site ID: ERL-3 Sample Date: 10/20/2002 Sample ID: ERL3-T01N-SOL CAMP-ERL	
General Chemistry														
Ammonia	mg/kg-dry	T	25.	:	37.3	:	39.3	:	32.2	:	154.	:	70.6	:
Chloride	mg/kg-dry	T	8.1	J	5.7	J	7.7	J	3.2	J	36.	J	2.9	J
Fluoride	mg/kg-dry	T	0.27	J	0.21	J	0.38	J	0.43	J	0.39	J	0.39	J
Nitrate	mg/kg-dry	T	2.3	J	<2.4	J	<2.3	J	8.7	J	57.6	J	3.4	J
Phosphorus	mg/kg-dry	T	688.	J	599.	J	697.	J	643.	J	783.	J	776.	J
Sulfate	mg/kg-dry	T	14.8	J	65.9	J	98.6	J	26.2	J	93.3	J	33.	J
Total Kjeldahl Nitrogen	mg/kg-dry	T	599.	:	1200.	:	1430.	:	492.	:	2990.	:	895.	:
Total Organic Carbon	mg/kg-dry	T	32200.	J	79700.	:	34200.	J	13600.	J	85500.	J	16200.	J
Laboratory Parameters														
pH	SU	T	6.6	:	5.5	:	5.2	:	7.1	:	6.8	:	6.9	:
Solids, Percent	%	T	94.	:	86.1	:	89.8	:	94.	:	93.	:	94.8	:
Specific Conductance	umhos/cm	T	122.	:	206.	:	140.	:	69.9	:	602.	:	62.9	:
Geotechnical														
Organic Soils	%	T	6.06	J	11.63	J	10.29	J	2.89	J	12.86	J	4.25	J
Physical Properties														
Cation-Exchange Capacity	meq/100g	T	14.1	:	17.4	:	16.7	:	9.8	:	34.4	:	15.6	:
Sodium Absorption Ratio	ratio	T	0.14	:	0.19	:	0.14	:	0.15	:	0.26	:	0.05	:
Metals														
Aluminum	mg/kg-dry	T	9340.	:	6710.	:	8820.	:	9580.	:	7110.	:	8370.	:
Antimony	mg/kg-dry	T	<0.25	J	<0.29	J	<0.53	:	<0.25	J	<0.27	J	<0.26	J
Arsenic	mg/kg-dry	T	5.2	:	7.6	:	7.5	:	2.7	:	3.6	:	4.	:
Barium	mg/kg-dry	T	147.	:	335.	:	336.	:	109.	:	150.	:	262.	:
Beryllium	mg/kg-dry	T	0.65	:	0.55	:	0.87	:	1.2	:	0.57	:	0.7	:
Boron	mg/kg-dry	T	<1.2	:	<1.8	:	<0.71	:	<0.23	:	7.1	:	<0.21	:
Cadmium	mg/kg-dry	T	<0.035	J	<0.037	J	<0.036	J	1.6	:	0.64	:	0.38	J
Calcium	mg/kg-dry	T	3960.	:	3920.	:	2720.	:	2570.	:	6920.	:	2520.	:
Chromium	mg/kg-dry	T	15.8	:	8.1	:	10.3	:	16.2	:	16.5	:	19.6	:
Cobalt	mg/kg-dry	T	7.2	:	3.6	:	8.3	:	22.1	:	6.9	:	8.4	:
Copper	mg/kg-dry	T	26.9	:	24.3	:	29.3	:	60.3	:	49.6	:	53.8	:
Iron	mg/kg-dry	T	18200.	:	20600.	:	25400.	:	15000.	:	18200.	:	19800.	:
Lead	mg/kg-dry	T	42.5	:	43.	:	53.5	:	31.1	:	55.9	:	50.1	:
Magnesium	mg/kg-dry	T	3730.	:	2150.	:	2880.	:	3730.	:	4190.	:	4140.	:
Manganese	mg/kg-dry	T	340.	J	362.	J	334.	J	1720.	J	464.	J	469.	J

J = Qualified as estimated during data validation

R = Qualified as rejected value from data validation and results are considered unusable for any purpose

T = Total Fraction

Appendix A-7b
Soil - Non-Random 0-6 inches
Validated Analytical Results

Parameter	Units	Exposure Area Fraction	Site ID / Sample Date / Sample ID / Exposure Area											
			CGUFL3 10/20/2002 CGUFL3-T01N-SOL CAMP-UFL		CGUFL4 10/20/2002 CGUFL4-T01N-SOL CAMP-UFL		CGUFL5 10/20/2002 CGUFL5-T01N-SOL CAMP-UFL		ERL-1 10/20/2002 ERL1-T01N-SOL CAMP-ERL		ERL-2 10/20/2002 ERL2-T01N-SOL CAMP-ERL		ERL-3 10/20/2002 ERL3-T01N-SOL CAMP-ERL	
Mercury	mg/kg-dry	T	<0.015	J	0.044	J	0.034	J	<0.017	J	0.039	:	<0.017	J
Molybdenum	mg/kg-dry	T	28.3	:	31.1	:	42.9	:	11.9	:	33.1	:	31.	:
Nickel	mg/kg-dry	T	16.3	J	10.9	J	16.7	J	46.1	J	15.8	J	19.8	J
Potassium	mg/kg-dry	T	2160.	J	3300.	J	3380.	J	1560.	J	2400.	J	2440.	J
Selenium	mg/kg-dry	T	<0.68	J	0.8	:	1.2	J	<0.66	J	<0.72	J	<0.7	J
Silver	mg/kg-dry	T	<0.13	:	<0.15	:	<0.14	:	0.27	:	0.33	:	0.59	:
Sodium	mg/kg-dry	T	<95.	:	<141.	:	<151.	:	<30.9	:	37.6	J	<28.1	J
Thallium	mg/kg-dry	T	0.11	:	0.14	:	0.15	:	0.12	:	0.12	:	0.17	:
Vanadium	mg/kg-dry	T	34.1	:	12.7	:	14.8	:	21.4	:	22.5	:	22.9	:
Zinc	mg/kg-dry	T	50.4	J	58.4	J	61.1	J	304.	J	142.	J	106.	J

J = Qualified as estimated during data validation
R = Qualified as rejected value from data validation and results are considered unusable for any purpose
T = Total Fraction

Appendix A-7b
Soil - Non-Random 0-6 inches
Validated Analytical Results

Parameter	Units	Exposure Area Fraction	Site ID / Sample Date / Sample ID / Exposure Area		ERL-4 10/20/2002 ERL4-T01N-SOL CAMP-ERL		ERL-5 10/20/2002 ERL5-T01N-SOL CAMP-ERL		PR3-1 5/10/2004 PR3-1-T01N-SOL Tailings Spill		PR3-2 5/10/2004 PR3-2-T01N-SOL Tailings Spill		PR4-1 5/10/2004 PR4-1-T01N-SOL Tailings Spill		PR4-2 5/10/2004 PR4-2-T01N-SOL Tailings Spill	
General Chemistry																
Ammonia	mg/kg-dry	T			25.5	:	26.3	:	360.	:	265.	:	74.7	:	52.6	:
Chloride	mg/kg-dry	T			5.6	J	15.9	J	14.2	:	24.1	:	3.4	:	9.1	:
Fluoride	mg/kg-dry	T			0.41	J	0.23	J	1.1	:	1.6	:	0.39	:	0.68	:
Nitrate	mg/kg-dry	T			2.4	J	8.4	J	19.4	J	11.5	J	2.5	J	3.3	J
Phosphorus	mg/kg-dry	T			1120.	J	633.	J	271.	J	215.	J	409.	J	362.	J
Sulfate	mg/kg-dry	T			14.1	J	52.	J	171.	J	232.	J	4.4	J	2.1	J
Total Kjeldahl Nitrogen	mg/kg-dry	T			360.	:	1400.	:	3150.	:	3150.	:	807.	J	308.	:
Total Organic Carbon	mg/kg-dry	T			11700.	J	20900.	J	41700.	:	46700.	:	15200.	:	4060.	:
Laboratory Parameters																
pH	SU	T			7.1	:	6.5	:	7.3	J	7.9	J	8.	J	9.	J
Solids, Percent	%	T			88.4	:	94.5	:	70.	:	90.6	:	92.2	:	96.4	:
Specific Conductance	umhos/cm	T			17.	:	144.	:	324.	J	704.	J	66.2	J	146.	J
Geotechnical																
Organic Soils	%	T			3.72	J	4.81	J	13.2	:	11.	:	3.	:	1.7	:
Physical Properties																
Cation-Exchange Capacity	meq/100g	T			14.3	:	14.	:	33.5	:	34.	:	14.9	:	10.1	:
Sodium Absorption Ratio	ratio	T			0.08	:	0.13	:	0.12	:	0.24	:	<0.05	:	0.84	:
Metals																
Aluminum	mg/kg-dry	T			11800.	:	7960.	:	14700.	:	10200.	:	5280.	:	4370.	:
Antimony	mg/kg-dry	T			<0.27	J	<0.26	J	1.	J	0.81	J	0.79	J	0.74	J
Arsenic	mg/kg-dry	T			5.7	:	3.3	:	9.8	:	5.7	:	2.5	:	2.4	:
Barium	mg/kg-dry	T			341.	:	112.	:	330.	:	218.	:	68.8	:	64.5	:
Beryllium	mg/kg-dry	T			1.4	:	0.63	:	1.9	J	1.2	J	0.58	J	0.47	J
Boron	mg/kg-dry	T			<0.24	J	<0.63	:	<0.25	J	4.4	J	<0.54	:	<0.49	:
Cadmium	mg/kg-dry	T			0.23	J	0.4	:	1.3	:	1.1	:	0.28	:	0.23	:
Calcium	mg/kg-dry	T			2330.	:	2730.	:	6630.	:	8200.	:	2200.	:	2240.	:
Chromium	mg/kg-dry	T			21.3	:	15.3	:	30.1	:	20.4	:	9.3	:	8.3	:
Cobalt	mg/kg-dry	T			8.5	:	5.5	:	14.5	:	11.	:	5.3	:	3.7	:
Copper	mg/kg-dry	T			105.	:	28.4	:	115.	:	65.2	:	13.8	:	12.8	:
Iron	mg/kg-dry	T			25900.	:	15000.	:	38500.	:	25800.	:	11300.	:	10100.	:
Lead	mg/kg-dry	T			84.	:	47.2	:	126.	:	70.9	:	28.	:	42.1	:
Magnesium	mg/kg-dry	T			3920.	:	3150.	:	6660.	:	5080.	:	1800.	:	1630.	:
Manganese	mg/kg-dry	T			427.	J	429.	J	989.	:	736.	:	422.	:	314.	:

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T = Total Fraction

Appendix A-7b
Soil - Non-Random 0-6 inches
Validated Analytical Results

Parameter	Units	Exposure Area Fraction	Site ID / Sample Date / Sample ID											
			ERL-4 10/20/2002 ERL4-T01N-SOL		ERL-5 10/20/2002 ERL5-T01N-SOL		PR3-1 5/10/2004 PR3-1-T01N-SOL		PR3-2 5/10/2004 PR3-2-T01N-SOL		PR4-1 5/10/2004 PR4-1-T01N-SOL		PR4-2 5/10/2004 PR4-2-T01N-SOL	
			CAMP-ERL		CAMP-ERL		Tailings Spill		Tailings Spill		Tailings Spill		Tailings Spill	
Mercury	mg/kg-dry	T	<0.017	J	<0.017	J	0.028	:	<0.018	:	<0.018	:	<0.017	:
Molybdenum	mg/kg-dry	T	28.1	:	27.1	:	114.	:	47.8	:	6.7	J	4.9	:
Nickel	mg/kg-dry	T	29.3	J	15.1	J	39.2	J	27.9	J	8.3	J	6.3	J
Potassium	mg/kg-dry	T	2400.	J	2100.	J	4230.	J	3980.	J	1810.	J	1490.	J
Selenium	mg/kg-dry	T	0.99	J	<0.69	J	1.7	J	1.2	J	<0.74	:	<0.7	:
Silver	mg/kg-dry	T	0.53	:	0.2	:	0.78	:	<0.4	:	<0.74	:	<0.1	:
Sodium	mg/kg-dry	T	<33.1	J	<31.2	:	<222.	J	<186.	J	<71.2	:	<136.	:
Thallium	mg/kg-dry	T	0.23	:	0.14	:	0.45	:	0.3	:	0.16	:	0.15	:
Vanadium	mg/kg-dry	T	25.5	:	19.9	:	31.9	:	23.3	:	15.2	:	13.4	:
Zinc	mg/kg-dry	T	152.	J	109.	J	267.	J	203.	J	71.6	J	58.8	J

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T = Total Fraction

Appendix A-7b
Soil - Non-Random 0-6 inches
Validated Analytical Results

Parameter	Units	Exposure Area Fraction	Site ID / Sample Date / Sample ID / Exposure Area		PR5-1 5/10/2004 PR5-1-T01N-SOL Tailings Spill		PR5-2 5/10/2004 PR5-2-T01N-SOL Tailings Spill		PR5-3 5/10/2004 PR5-3-T01N-SOL Tailings Spill		PR5-4 5/10/2004 PR5-4-T01N-SOL Tailings Spill		PR5-5 5/10/2004 PR5-5-T01N-SOL Tailings Spill		PR5-6 5/10/2004 PR5-6-T01N-SOL Tailings Spill	
General Chemistry																
Ammonia	mg/kg-dry	T			110.	:	132.	:	109.	:	127.	:	123.	:	103.	:
Chloride	mg/kg-dry	T			6.	:	3.8	:	8.	:	5.6	:	3.4	:	4.6	:
Fluoride	mg/kg-dry	T			1.2	:	0.98	:	0.97	:	0.98	:	1.1	:	1.6	:
Nitrate	mg/kg-dry	T			4.2	J	3.4	J	2.9	J	5.2	J	3.8	J	5.7	J
Phosphorus	mg/kg-dry	T			373.	J	584.	J	593.	J	427.	J	301.	J	185.	J
Sulfate	mg/kg-dry	T			51.7	J	2.4	J	15.6	J	18.7	J	22.4	J	14.4	J
Total Kjeldahl Nitrogen	mg/kg-dry	T			1070.	:	1620.	:	1070.	:	1070.	:	877.	:	965.	:
Total Organic Carbon	mg/kg-dry	T			17600.	:	26500.	:	12600.	:	11200.	:	10800.	:	15200.	:
Laboratory Parameters																
pH	SU	T			7.6	J	8.	J	7.7	J	7.6	J	7.3	J	8.1	J
Solids, Percent	%	T			93.1	:	95.9	:	96.3	:	94.1	:	94.5	:	90.3	:
Specific Conductance	umhos/cm	T			167.	J	92.	J	109.	J	147.	J	94.1	J	137.	J
Geotechnical																
Organic Soils	%	T			4.7	:	6.	:	4.6	:	4.3	:	4.	:	4.6	:
Physical Properties																
Cation-Exchange Capacity	meq/100g	T			23.5	:	28.9	:	20.2	:	20.3	:	21.9	:	21.1	:
Sodium Absorption Ratio	ratio	T			0.13	:	0.06	:	0.06	:	0.08	:	0.1	:	0.05	:
Metals																
Aluminum	mg/kg-dry	T			9030.	:	12600.	:	7910.	:	7660.	:	8620.	:	8120.	:
Antimony	mg/kg-dry	T			0.76	J	0.77	J	0.78	J	0.76	J	0.78	J	0.78	J
Arsenic	mg/kg-dry	T			3.5	:	5.1	:	4.7	:	3.6	:	3.5	:	4.9	:
Barium	mg/kg-dry	T			110.	:	212.	:	172.	:	123.	:	122.	:	172.	:
Beryllium	mg/kg-dry	T			1.2	J	1.1	J	0.79	J	0.77	J	0.88	J	0.88	J
Boron	mg/kg-dry	T			<0.19	:	<0.19	J	<0.18	:	<0.42	:	<0.19	:	<0.2	:
Cadmium	mg/kg-dry	T			0.96	:	0.58	:	0.58	:	0.39	:	0.36	:	0.57	:
Calcium	mg/kg-dry	T			2720.	:	4880.	:	4300.	:	2820.	:	2920.	:	3920.	:
Chromium	mg/kg-dry	T			9.7	:	22.5	:	19.6	:	13.7	:	12.6	:	20.6	:
Cobalt	mg/kg-dry	T			9.3	:	9.4	:	8.3	:	7.	:	7.	:	8.9	:
Copper	mg/kg-dry	T			35.9	:	39.5	:	43.8	:	25.2	:	20.9	:	49.5	:
Iron	mg/kg-dry	T			14400.	:	23200.	:	19800.	:	15400.	:	15700.	:	21600.	:
Lead	mg/kg-dry	T			39.5	:	54.2	:	43.8	:	34.8	:	39.7	:	51.8	:
Magnesium	mg/kg-dry	T			2390.	:	4850.	:	4430.	:	2910.	:	2630.	:	4390.	:
Manganese	mg/kg-dry	T			960.	:	734.	:	541.	:	579.	:	644.	:	527.	:

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T = Total Fraction

Appendix A-7b
Soil - Non-Random 0-6 inches
Validated Analytical Results

Parameter	Units	Exposure Area Fraction	Site ID / Sample Date / Sample ID / Exposure Area											
			PR5-1 5/10/2004 PR5-1-T01N-SOL Tailings Spill		PR5-2 5/10/2004 PR5-2-T01N-SOL Tailings Spill		PR5-3 5/10/2004 PR5-3-T01N-SOL Tailings Spill		PR5-4 5/10/2004 PR5-4-T01N-SOL Tailings Spill		PR5-5 5/10/2004 PR5-5-T01N-SOL Tailings Spill		PR5-6 5/10/2004 PR5-6-T01N-SOL Tailings Spill	
Mercury	mg/kg-dry	T	<0.017	:	<0.017	:	<0.017	:	<0.017	:	<0.017	:	<0.018	:
Molybdenum	mg/kg-dry	T	7.4	:	27.2	:	16.8	:	13.5	:	8.3	:	31.6	:
Nickel	mg/kg-dry	T	23.1	J	19.8	J	17.8	J	13.3	J	12.5	J	22.	J
Potassium	mg/kg-dry	T	1910.	J	3480.	J	2190.	J	2700.	J	2330.	J	2380.	J
Selenium	mg/kg-dry	T	<0.74	:	<0.73	:	<0.72	:	<0.73	:	<0.74	:	0.76	J
Silver	mg/kg-dry	T	<0.11	:	0.2	:	0.24	:	0.18	:	0.11	:	0.47	:
Sodium	mg/kg-dry	T	<87.2	:	<60.3	J	<60.8	:	<72.4	:	<59.7	:	<134.	:
Thallium	mg/kg-dry	T	0.21	:	0.29	:	0.22	:	0.21	:	0.23	:	0.24	:
Vanadium	mg/kg-dry	T	16.6	:	28.5	:	22.3	:	18.9	:	18.8	:	21.3	:
Zinc	mg/kg-dry	T	197.	J	124.	J	108.	J	86.1	J	87.7	J	124.	J

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T = Total Fraction

Appendix A-7b
Soil - Non-Random 0-6 inches
Validated Analytical Results

Parameter	Units	Exposure Area Fraction	Site ID / Sample Date / Sample ID / Exposure Area													
			PR5-7		RIP-1		RIP-10		RIP-11		RIP-12		RIP-2	
			5/10/2004		8/9/2003		8/9/2003		8/26/2003		8/26/2003		8/8/2003	
			PR5-7-T01N-SOL		RIP-1-T01N-SOL		RIP-10-T01N-SOL		RIP-11-T01N-SOL		RIP-12-T01N-SOL		RIP-2-T01N-SOL	
			Tailings Spill		SS9		SS9		RefMineR		RefMineR		RefMineR	
General Chemistry														
Ammonia	mg/kg-dry	T	145.	:	34.2	:	125.	J	31.3	:	54.9	:	83.5	:
Chloride	mg/kg-dry	T	3.8	:	<2.2	:	2.5	:	4.	:	2.8	:	3.2	:
Fluoride	mg/kg-dry	T	3.8	:	0.39	:	0.36	:	0.15	:	<0.12	:	<0.23	:
Nitrate	mg/kg-dry	T	3.7	J	3.7	J	9.	J	<2.3	J	4.9	J	5.3	J
Phosphorus	mg/kg-dry	T	477.	J	2140.	J	619.	J	599.	J	747.	J	901.	J
Sulfate	mg/kg-dry	T	9.7	J	8.5	:	9.2	:	12.9	:	4.	:	19.2	:
Total Kjeldahl Nitrogen	mg/kg-dry	T	1140.	:	604.	:	1720.	:	224.	:	987.	:	271.	:
Total Organic Carbon	mg/kg-dry	T	15200.	:	8880.	:	43900.	:	8490.	:	15100.	:	40000.	:
Laboratory Parameters														
pH	SU	T	7.1	J	7.	:	7.4	:	8.1	J	7.4	J	7.2	:
Solids, Percent	%	T	91.3	:	92.5	:	89.6	:	89.6	:	85.4	:	89.1	:
Specific Conductance	umhos/cm	T	79.3	J	68.8	:	122.	:	62.2	J	60.	J	104.	:
Geotechnical														
Organic Soils	%	T	4.4	:	4.5	:	7.4	:	2.3	:	3.9	:	7.1	:
Physical Properties														
Cation-Exchange Capacity	meq/100g	T	18.2	:	17.5	:	24.3	:	11.7	:	26.6	:	22.6	:
Sodium Absorption Ratio	ratio	T	0.13	:	0.1	:	0.04	:	0.07	:	0.06	:	0.14	:
Metals														
Aluminum	mg/kg-dry	T	6430.	:	12700.	:	7180.	:	8000.	:	9110.	:	8800.	:
Antimony	mg/kg-dry	T	0.79	J	<0.44	J	<0.47	J	<0.55	J	<0.56	J	<0.46	J
Arsenic	mg/kg-dry	T	3.3	:	4.6	:	4.2	:	2.7	:	<2.6	:	4.5	:
Barium	mg/kg-dry	T	136.	:	225.	:	233.	:	60.3	:	53.7	:	289.	:
Beryllium	mg/kg-dry	T	0.7	J	0.98	:	0.72	:	0.54	:	0.67	:	0.64	:
Boron	mg/kg-dry	T	<0.19	:	3.3	J	4.	J	2.6	:	2.8	:	2.4	J
Cadmium	mg/kg-dry	T	0.34	:	<0.068	:	<0.064	:	<0.031	:	<0.035	:	<0.068	:
Calcium	mg/kg-dry	T	2770.	:	2650.	:	4470.	:	3030.	:	2970.	:	3190.	:
Chromium	mg/kg-dry	T	28.8	:	31.	:	16.8	:	21.5	:	15.1	:	17.6	:
Cobalt	mg/kg-dry	T	6.2	:	9.3	:	7.7	:	6.8	:	7.5	:	8.5	:
Copper	mg/kg-dry	T	46.3	:	125.	:	43.6	:	14.6	:	18.9	:	67.4	:
Iron	mg/kg-dry	T	16900.	:	40500.	:	19800.	:	15000.	:	16900.	:	21500.	:
Lead	mg/kg-dry	T	37.5	:	101.	:	51.9	:	13.5	:	29.6	:	75.1	:
Magnesium	mg/kg-dry	T	4040.	:	5260.	:	3960.	:	5120.	:	4550.	:	4230.	:
Manganese	mg/kg-dry	T	340.	:	508.	:	418.	:	288.	:	409.	:	470.	:

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T = Total Fraction

Appendix A-7b
Soil - Non-Random 0-6 inches
Validated Analytical Results

Parameter	Units	Exposure Area Fraction	Site ID / Sample Date / Sample ID / Exposure Area													
			PR5-7 / 5/10/2004 / PR5-7-T01N-SOL / Tailings Spill		RIP-1 / 8/9/2003 / RIP-1-T01N-SOL / SS9		RIP-10 / 8/9/2003 / RIP-10-T01N-SOL / SS9		RIP-11 / 8/26/2003 / RIP-11-T01N-SOL / RefMineR		RIP-12 / 8/26/2003 / RIP-12-T01N-SOL / RefMineR		RIP-2 / 8/8/2003 / RIP-2-T01N-SOL / RefMineR	
Mercury	mg/kg-dry	T	<0.018	:	0.023	:	0.035	:	<0.016	:	0.02	:	0.026	:
Molybdenum	mg/kg-dry	T	58.3	:	32.2	:	<49.2	:	<1.	:	<1.7	:	18.7	:
Nickel	mg/kg-dry	T	19.7	J	20.2	:	14.7	:	16.4	J	12.9	:	20.8	:
Potassium	mg/kg-dry	T	1540.	J	4030.	J	2410.	J	1360.	J	2380.	J	2130.	J
Selenium	mg/kg-dry	T	<0.75	:	0.79	:	0.63	:	0.37	:	<0.34	:	1.3	:
Silver	mg/kg-dry	T	0.2	:	0.91	:	0.77	:	<0.094	J	<0.1	J	0.44	:
Sodium	mg/kg-dry	T	<67.	:	361.	:	177.	:	<256.	:	<315.	:	133.	:
Thallium	mg/kg-dry	T	0.19	:	0.27	:	0.13	:	<0.11	:	<0.11	:	0.14	:
Vanadium	mg/kg-dry	T	19.	:	33.2	:	20.2	:	22.4	:	22.	:	20.9	:
Zinc	mg/kg-dry	T	86.1	J	96.1	:	106.	:	49.3	:	66.2	:	121.	:

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T = Total Fraction

Appendix A-7b
Soil - Non-Random 0-6 inches
Validated Analytical Results

Parameter	Units	Exposure Area Fraction	Site ID / Sample Date / Sample ID		RIP-3 8/13/2003 RIP-3-T01N-SOL SS16		RIP-4 8/13/2003 RIP-4-T01N-SOL SS16		RIP-5 8/13/2003 RIP-5-T01N-SOL SS16		RIP-6 8/13/2003 RIP-6-T01N-SOL SS16		RIP-7 8/13/2003 RIP-7-T01N-SOL SS16		RIP-8 8/9/2003 RIP-8-T01N-SOL SS9	
General Chemistry																
Ammonia	mg/kg-dry	T			218.	:	970.	:	48.8	:	105.	:	65.5	:	117.	:
Chloride	mg/kg-dry	T			59.8	:	56.3	:	<2.3	:	<2.4	:	2.4	:	4.2	:
Fluoride	mg/kg-dry	T			2.7	:	3.	:	0.27	:	0.68	:	0.67	:	0.26	:
Nitrate	mg/kg-dry	T			-		-		-		-		-		5.6	J
Phosphorus	mg/kg-dry	T			28.1	J	58.5	J	41.6	J	27.3	J	45.5	J	1440.	J
Sulfate	mg/kg-dry	T			1280.	:	2130.	:	5.8	:	9.7	:	7.6	:	3.7	:
Total Kjeldahl Nitrogen	mg/kg-dry	T			2350.	:	10700.	:	759.	:	1600.	:	842.	:	2570.	:
Total Organic Carbon	mg/kg-dry	T			59700.	:	167400.	:	7280.	:	21500.	:	7810.	:	67900.	:
Laboratory Parameters																
pH	SU	T			7.3	J	7.4	J	8.7	J	8.2	J	8.7	J	7.8	:
Solids, Percent	%	T			40.	:	24.6	:	87.5	:	84.7	:	85.9	:	84.7	:
Specific Conductance	umhos/cm	T			3350.	J	4620.	J	187.	J	286.	J	146.	J	101.	:
Geotechnical																
Organic Soils	%	T			11.6	:	42.5	:	5.	:	6.	:	4.5	:	11.3	:
Physical Properties																
Cation-Exchange Capacity	meq/100g	T			43.4	:	15.8	:	37.7	:	32.2	:	35.5	:	38.5	:
Sodium Absorption Ratio	ratio	T			0.61	:	0.74	:	0.03	:	0.02	:	0.18	:	1.57	:
Metals																
Aluminum	mg/kg-dry	T			7460.	:	9860.	:	32100.	:	13600.	:	25500.	:	9880.	:
Antimony	mg/kg-dry	T			<1.2	J	<2.	J	<0.55	J	<0.57	J	<0.57	J	<0.51	J
Arsenic	mg/kg-dry	T			3.6	:	2.1	:	2.3	:	2.5	:	2.4	:	3.6	:
Barium	mg/kg-dry	T			204.	:	160.	:	293.	:	192.	:	259.	:	265.	:
Beryllium	mg/kg-dry	T			0.74	:	<0.64	:	1.6	:	0.91	:	1.3	:	0.78	:
Boron	mg/kg-dry	T			5.7	:	24.1	:	13.3	:	7.6	:	10.4	:	6.9	:
Cadmium	mg/kg-dry	T			<0.075	:	<0.12	:	<0.032	:	<0.031	:	<0.034	:	0.49	:
Calcium	mg/kg-dry	T			5020.	:	43000.	:	12300.	:	6470.	:	7900.	:	9240.	:
Chromium	mg/kg-dry	T			17.7	:	16.1	:	25.8	:	18.1	:	21.5	:	22.2	:
Cobalt	mg/kg-dry	T			8.5	:	7.6	:	16.	:	9.9	:	12.9	:	9.	:
Copper	mg/kg-dry	T			38.7	:	27.2	:	34.2	:	32.1	:	30.3	:	46.	:
Iron	mg/kg-dry	T			16100.	:	21200.	:	29400.	:	20100.	:	25200.	:	20000.	:
Lead	mg/kg-dry	T			31.2	:	23.3	:	19.7	:	33.4	:	21.8	:	47.4	:
Magnesium	mg/kg-dry	T			4010.	:	4200.	:	10200.	:	4590.	:	7180.	:	4850.	:
Manganese	mg/kg-dry	T			396.	:	875.	:	773.	:	524.	:	784.	:	496.	:

J = Qualified as estimated during data validation

R = Qualified as rejected value from data validation and results are considered unusable for any purpose

T = Total Fraction

Appendix A-7b
Soil - Non-Random 0-6 inches
Validated Analytical Results

Parameter	Units	Exposure Area Fraction	Site ID / Sample Date / Sample ID		RIP-3 8/13/2003 RIP-3-T01N-SOL SS16		RIP-4 8/13/2003 RIP-4-T01N-SOL SS16		RIP-5 8/13/2003 RIP-5-T01N-SOL SS16		RIP-6 8/13/2003 RIP-6-T01N-SOL SS16		RIP-7 8/13/2003 RIP-7-T01N-SOL SS16		RIP-8 8/9/2003 RIP-8-T01N-SOL SS9	
Mercury	mg/kg-dry	T			<0.038	:	0.13	:	0.021	:	0.038	:	0.027	:	0.027	:
Molybdenum	mg/kg-dry	T			82.8	:	75.8	:	0.86	:	5.1	:	2.3	:	41.7	:
Nickel	mg/kg-dry	T			21.9	:	13.3	:	29.6	:	18.2	:	21.7	:	17.9	J
Potassium	mg/kg-dry	T			1820.	:	1890.	:	7390.	:	3070.	J	5590.	J	2970.	J
Selenium	mg/kg-dry	T			<0.75	:	1.8	:	<0.33	:	0.41	:	<0.34	:	0.65	:
Silver	mg/kg-dry	T			<0.23	:	<0.36	:	0.37	:	0.24	:	0.26	:	0.3	J
Sodium	mg/kg-dry	T			585.	:	914.	:	734.	:	354.	:	523.	:	290.	:
Thallium	mg/kg-dry	T			<0.25	:	<0.41	:	0.3	:	0.16	:	0.24	:	0.15	:
Vanadium	mg/kg-dry	T			19.4	:	27.5	:	43.1	:	29.5	:	35.6	:	23.7	:
Zinc	mg/kg-dry	T			83.5	:	68.3	:	86.3	:	79.6	:	86.	:	294.	J

J = Qualified as estimated during data validation
R = Qualified as rejected value from data validation and results are considered unusable for any purpose
T = Total Fraction

Appendix A-7b
Soil - Non-Random 0-6 inches
Validated Analytical Results

Parameter	Units	Exposure Area Fraction	Site ID / Sample Date / Sample ID / Exposure Area					
			RIP-9 / 8/9/2003 / RIP-9-T01N-SOL / SS9	----	----	----	----	----
General Chemistry								
Ammonia	mg/kg-dry	T	175. :	-	-	-	-	-
Chloride	mg/kg-dry	T	<2.4 :	-	-	-	-	-
Fluoride	mg/kg-dry	T	<0.24 :	-	-	-	-	-
Nitrate	mg/kg-dry	T	3.2 J	-	-	-	-	-
Phosphorus	mg/kg-dry	T	1410. J	-	-	-	-	-
Sulfate	mg/kg-dry	T	5.4 :	-	-	-	-	-
Total Kjeldahl Nitrogen	mg/kg-dry	T	3500. :	-	-	-	-	-
Total Organic Carbon	mg/kg-dry	T	126000. :	-	-	-	-	-
Laboratory Parameters								
pH	SU	T	8. :	-	-	-	-	-
Solids, Percent	%	T	84. :	-	-	-	-	-
Specific Conductance	umhos/cm	T	138. :	-	-	-	-	-
Geotechnical								
Organic Soils	%	T	17.2 :	-	-	-	-	-
Physical Properties								
Cation-Exchange Capacity	meq/100g	T	52.7 :	-	-	-	-	-
Sodium Absorption Ratio	ratio	T	0.03 :	-	-	-	-	-
Metals								
Aluminum	mg/kg-dry	T	9030. :	-	-	-	-	-
Antimony	mg/kg-dry	T	<0.5 J	-	-	-	-	-
Arsenic	mg/kg-dry	T	4.2 :	-	-	-	-	-
Barium	mg/kg-dry	T	356. :	-	-	-	-	-
Beryllium	mg/kg-dry	T	0.74 :	-	-	-	-	-
Boron	mg/kg-dry	T	13.1 :	-	-	-	-	-
Cadmium	mg/kg-dry	T	0.34 :	-	-	-	-	-
Calcium	mg/kg-dry	T	13700. :	-	-	-	-	-
Chromium	mg/kg-dry	T	34.9 :	-	-	-	-	-
Cobalt	mg/kg-dry	T	9.1 :	-	-	-	-	-
Copper	mg/kg-dry	T	57.6 :	-	-	-	-	-
Iron	mg/kg-dry	T	20800. :	-	-	-	-	-
Lead	mg/kg-dry	T	53.3 :	-	-	-	-	-
Magnesium	mg/kg-dry	T	5000. :	-	-	-	-	-
Manganese	mg/kg-dry	T	457. :	-	-	-	-	-

J = Qualified as estimated during data validation
R = Qualified as rejected value from data validation and results are considered unusable for any purpose
T = Total Fraction

Appendix A-7b
Soil - Non-Random 0-6 inches
Validated Analytical Results

Parameter	Units	Exposure Area Fraction	Site ID / Sample Date / Sample ID / Exposure Area					
			RIP-9 / 8/9/2003 / RIP-9-T01N-SOL / SS9	----	----	----	----	----
Mercury	mg/kg-dry	T	0.07 :	-	-	-	-	-
Molybdenum	mg/kg-dry	T	47.7 :	-	-	-	-	-
Nickel	mg/kg-dry	T	17.1 :	-	-	-	-	-
Potassium	mg/kg-dry	T	3010. J	-	-	-	-	-
Selenium	mg/kg-dry	T	0.83 :	-	-	-	-	-
Silver	mg/kg-dry	T	0.5 :	-	-	-	-	-
Sodium	mg/kg-dry	T	148. :	-	-	-	-	-
Thallium	mg/kg-dry	T	0.16 :	-	-	-	-	-
Vanadium	mg/kg-dry	T	24.2 :	-	-	-	-	-
Zinc	mg/kg-dry	T	208. :	-	-	-	-	-

J = Qualified as estimated during data validation
R = Qualified as rejected value from data validation and results are considered unusable for any purpose
T = Total Fraction

Appendix A-7c
Soil - Random 0-6 inches
Validated Analytical Results

Parameter	Units	Fraction						
		Site ID	CR-10	CR-11	CR-13	CR-14	CR-2	CR-4
		Sample Date	6/9/2003	6/9/2003	6/10/2003	6/11/2003	6/10/2003	6/10/2003
		Sample ID	CR-10-T01N-SOL	CR-11-T01N-SOL	CR-13-T01N-SOL	CR-14-T01N-SOL	CR-2-T01N-SOL	CR-4-T01N-SOL
		Exposure Area	RCR	RCR	RCR	RCR	RCR	RCR
General Chemistry								
Ammonia	mg/kg-dry	T	51.8 :	64.2 :	69.5 :	48.1 :	152. :	86.6 :
Chloride	mg/kg-dry	T	2.9 :	4. :	5.8 :	2.4 :	10.5 :	2.4 :
Fluoride	mg/kg-dry	T	0.11 :	<0.11 :	0.19 :	0.29 :	1.4 :	1.5 :
Nitrate	mg/kg-dry	T	2.9 J	4. J	5.2 J	9.4 J	53.9 J	8.7 J
Phosphorus	mg/kg-dry	T	1240. :	902. :	897. :	521. :	1750. :	1670. :
Sulfate	mg/kg-dry	T	4.2 :	4. :	5.2 :	5.9 :	25.6 :	11.4 :
Total Kjeldahl Nitrogen	mg/kg-dry	T	-	-	-	305. J	-	-
Total Organic Carbon	mg/kg-dry	T	9370. :	8440. :	5310. :	8600. :	41200. :	8160. :
Laboratory Parameters								
pH	SU	T	6.3 J	6.8 J	7.5 J	8.3 J	7.9 J	8.3 J
Solids, Percent	%	T	94.9 :	98.3 :	96.4 :	99.1 :	91.9 :	95.4 :
Specific Conductance	umhos/cm	T	69.1 J	58.7 J	88.9 J	264. J	609. J	275. J
Geotechnical								
Organic Soils	%	T	3.2 :	2.9 :	3. :	2.2 :	14.7 :	8.9 :
Physical Properties								
Cation-Exchange Capacity	meq/100g	T	17.7 :	15.8 :	17.8 :	8.1 :	42. :	27.7 :
Sodium Absorption Ratio	ratio	T	0.06 :	0.06 :	0.06 :	0.1 :	0.25 :	0.99 :
Metals								
Aluminum	mg/kg-dry	T	13100. :	10700. :	13100. J	7640. :	11400. :	11900. :
Antimony	mg/kg-dry	T	<0.51 J	<0.5 J	<0.48 J	<0.46 J	<0.5 J	<0.51 J
Arsenic	mg/kg-dry	T	2.2 :	2.1 :	1.9 :	1.2 :	2.1 :	1.7 :
Barium	mg/kg-dry	T	105. :	104. :	94.4 J	56. :	205. :	146. :
Beryllium	mg/kg-dry	T	0.92 :	0.81 :	0.91 :	0.48 J	0.68 :	0.72 :
Boron	mg/kg-dry	T	<5.2 :	<3.9 :	<4.5 :	3.2 :	15.8 :	16. :
Cadmium	mg/kg-dry	T	<0.03 :	<0.029 :	<0.029 :	<0.023 :	<0.03 :	<0.028 J
Calcium	mg/kg-dry	T	4850. :	3430. :	4630. J	3730. :	93300. :	51300. :
Chromium	mg/kg-dry	T	21.5 :	17. :	19.9 J	13.9 :	14.7 :	18.8 :
Cobalt	mg/kg-dry	T	8.9 :	9.4 :	9. J	6.4 :	7.1 :	7.3 :
Copper	mg/kg-dry	T	16.5 :	14.9 :	15.8 J	11. :	22.6 :	17.1 :
Iron	mg/kg-dry	T	16800. :	14400. :	16700. J	12000. :	15000. :	14800. :
Lead	mg/kg-dry	T	9. :	9.9 :	8.7 J	5.1 :	6.3 :	7. :
Magnesium	mg/kg-dry	T	5000. :	3750. :	4300. J	3660. :	20600. :	19900. :
Manganese	mg/kg-dry	T	364. :	469. :	323. J	259. :	474. :	434. :

J = Qualified as estimated during data validation
R = Qualified as rejected value from data validation and results are considered unusable for any purpose
T = Total Fraction

Appendix A-7c
Soil - Random 0-6 inches
Validated Analytical Results

Parameter	Units	Exposure Area Fraction	Site ID / Sample Date / Sample ID		Site ID / Sample Date / Sample ID		Site ID / Sample Date / Sample ID		Site ID / Sample Date / Sample ID		Site ID / Sample Date / Sample ID		Site ID / Sample Date / Sample ID	
			CR-10 6/9/2003 CR-10-T01N-SOL		CR-11 6/9/2003 CR-11-T01N-SOL		CR-13 6/10/2003 CR-13-T01N-SOL		CR-14 6/11/2003 CR-14-T01N-SOL		CR-2 6/10/2003 CR-2-T01N-SOL		CR-4 6/10/2003 CR-4-T01N-SOL	
			RCR		RCR		RCR		RCR		RCR		RCR	
Mercury	mg/kg-dry	T	0.079	:	0.026	:	<0.016	:	<0.015	:	0.02	:	<0.016	:
Molybdenum	mg/kg-dry	T	<0.16	:	0.5	:	<0.16	:	0.25	:	0.24	:	0.49	J
Nickel	mg/kg-dry	T	15.7	:	12.9	:	13.4	J	9.4	:	14.3	:	12.8	:
Potassium	mg/kg-dry	T	2240.	J	2260.	J	2240.	J	2620.	J	4390.	J	4750.	J
Selenium	mg/kg-dry	T	<0.82	:	<0.8	:	<0.76	:	<0.74	:	0.97	:	<0.82	:
Silver	mg/kg-dry	T	<0.091	:	0.11	:	<0.088	:	<0.17	:	0.097	J	0.15	J
Sodium	mg/kg-dry	T	487.	:	455.	:	460.	:	458.	:	558.	:	946.	:
Thallium	mg/kg-dry	T	0.14	:	0.14	:	0.14	:	<0.093	:	0.1	:	<0.1	:
Vanadium	mg/kg-dry	T	27.7	:	24.7	:	26.6	J	22.2	:	26.	:	28.3	:
Zinc	mg/kg-dry	T	50.4	:	49.8	:	52.1	J	32.7	:	52.8	:	51.8	:

J = Qualified as estimated during data validation
R = Qualified as rejected value from data validation and results are considered unusable for any purpose
T = Total Fraction

Appendix A-7c
Soil - Random 0-6 inches
Validated Analytical Results

Parameter	Units	Exposure Area Fraction	Site ID / Sample Date / Sample ID		CR-5 6/11/2003 CR-5-T01N-SOL RCR		CR-6 6/10/2003 CR-6-T01N-SOL RCR		CR-7 6/9/2003 CR-7-T01N-SOL RCR		CR-8 6/9/2003 CR-8-T01N-SOL RCR		MRSS-1 10/6/2002 MRSS-1-T01N-SOL RefMine		MRSS-10 10/6/2002 MRSS-10-T01N-SOL RSCAR	
General Chemistry																
Ammonia	mg/kg-dry	T			62.7	:	46.6	:	44.9	:	52.9	:	87.8	:	67.7	:
Chloride	mg/kg-dry	T			3.6	:	2.7	:	2.9	:	<2.1	:	<2.3	:	2.4	:
Fluoride	mg/kg-dry	T			0.4	:	0.97	:	3.7	:	0.25	:	-		0.13	J
Nitrate	mg/kg-dry	T			25.2	J	2.7	J	<2.2	J	6.9	J	2.3	J	<2.3	J
Phosphorus	mg/kg-dry	T			3350.	:	1310.	:	1070.	:	1180.	:	554.	J	801.	J
Sulfate	mg/kg-dry	T			10.7	:	4.8	:	4.9	:	2.7	:	4.4	:	<27.7	J
Total Kjeldahl Nitrogen	mg/kg-dry	T			2850.	J	-		-		-		947.	:	310.	:
Total Organic Carbon	mg/kg-dry	T			19100.	:	8820.	:	4980.	:	8910.	:	10100.	J	14500.	J
Laboratory Parameters																
pH	SU	T			8.3	J	8.	J	8.3	J	7.3	J	6.5	:	5.5	:
Solids, Percent	%	T			95.3	:	94.2	:	94.8	:	95.4	:	87.1	:	90.4	:
Specific Conductance	umhos/cm	T			249.	J	134.	J	188.	J	120.	J	68.	:	62.2	:
Geotechnical																
Organic Soils	%	T			6.3	:	6.7	:	4.6	:	3.	:	5.34	:	4.31	:
Physical Properties																
Cation-Exchange Capacity	meq/100g	T			31.8	:	24.7	:	17.9	:	16.5	:	17.6	:	14.7	:
Sodium Absorption Ratio	ratio	T			0.06	:	0.1	:	0.97	:	<0.03	:	0.25	:	0.3	:
Metals																
Aluminum	mg/kg-dry	T			14100.	J	13900.	:	11400.	:	11600.	:	8110.	:	7160.	:
Antimony	mg/kg-dry	T			<0.48	J	<0.52	J	<0.52	J	<0.48	J	<0.18	J	<0.18	J
Arsenic	mg/kg-dry	T			1.8	J	2.5	:	3.2	:	2.1	:	7.3	:	7.2	:
Barium	mg/kg-dry	T			115.	J	182.	:	212.	:	87.1	:	482.	:	274.	:
Beryllium	mg/kg-dry	T			0.9	J	0.86	:	0.75	:	0.84	:	0.41	:	0.63	:
Boron	mg/kg-dry	T			7.2	J	8.9	:	7.2	:	<4.7	:	11.	J	10.	J
Cadmium	mg/kg-dry	T			<0.024	:	<0.028	J	<0.03	:	<0.031	:	<0.024	J	<0.023	J
Calcium	mg/kg-dry	T			18000.	J	51700.	:	49900.	:	4980.	:	2760.	:	1490.	:
Chromium	mg/kg-dry	T			21.8	J	20.3	:	13.7	:	19.8	:	11.9	:	10.9	:
Cobalt	mg/kg-dry	T			8.6	J	8.9	:	7.8	:	8.7	:	4.3	:	4.4	:
Copper	mg/kg-dry	T			23.2	J	18.3	:	16.7	:	15.9	:	20.2	:	22.8	:
Iron	mg/kg-dry	T			17000.	J	18800.	:	14800.	:	16000.	:	22300.	:	26300.	:
Lead	mg/kg-dry	T			8.	J	7.7	:	7.4	:	8.2	:	65.8	:	33.4	:
Magnesium	mg/kg-dry	T			6860.	J	11900.	:	8510.	:	4740.	:	2830.	:	2160.	:
Manganese	mg/kg-dry	T			332.	J	419.	:	360.	:	340.	:	406.	J	160.	J

J = Qualified as estimated during data validation

R = Qualified as rejected value from data validation and results are considered unusable for any purpose

T = Total Fraction

Appendix A-7c
Soil - Random 0-6 inches
Validated Analytical Results

Parameter	Units	Exposure Area Fraction	Site ID / Sample Date / Sample ID		CR-5 6/11/2003 CR-5-T01N-SOL RCR		CR-6 6/10/2003 CR-6-T01N-SOL RCR		CR-7 6/9/2003 CR-7-T01N-SOL RCR		CR-8 6/9/2003 CR-8-T01N-SOL RCR		MRSS-1 10/6/2002 MRSS-1-T01N-SOL RefMine		MRSS-10 10/6/2002 MRSS-10-T01N-SOL RSCAR	
Mercury	mg/kg-dry	T		<0.017	:	<0.016	:	0.021	:	<0.017	:	0.02	:	0.039	:
Molybdenum	mg/kg-dry	T		0.26	:	<0.15	J	<0.16	:	0.19	:	9.5	:	13.8	:
Nickel	mg/kg-dry	T		14.2	J	15.2	:	11.6	:	14.5	:	9.4	J	10.7	J
Potassium	mg/kg-dry	T		3990.	J	3770.	J	2320.	J	2270.	J	3370.	J	2800.	J
Selenium	mg/kg-dry	T		<0.76	:	<0.82	:	<0.83	:	<0.76	:	1.1	J	1.2	J
Silver	mg/kg-dry	T		<0.15	:	0.16	J	0.098	:	0.13	:	0.18	:	1.3	:
Sodium	mg/kg-dry	T		641.	:	843.	:	653.	:	526.	:	269.	:	102.	:
Thallium	mg/kg-dry	T		0.11	:	0.11	:	0.13	:	0.11	:	0.16	:	0.13	:
Vanadium	mg/kg-dry	T		33.	J	33.6	:	39.9	:	28.4	:	17.2	:	12.2	:
Zinc	mg/kg-dry	T		54.9	J	47.4	:	41.6	:	47.8	:	32.2	J	52.	J
Pesticides-PCBs															
a-Chlordane	mg/kg-dry	T		<0.0018	:	-		-		<0.0018	:	<0.002	:	-	
Aldrin	mg/kg-dry	T		<0.0018	:	-		-		<0.0018	:	<0.002	:	-	
alpha-Hexachlorocyclohexane	mg/kg-dry	T		<0.0018	:	-		-		<0.0018	:	<0.002	:	-	
beta-Hexachlorocyclohexane	mg/kg-dry	T		<0.0018	:	-		-		<0.0018	:	<0.002	:	-	
delta-Hexachlorocyclohexane	mg/kg-dry	T		<0.0018	:	-		-		<0.0018	:	<0.002	:	-	
Dichlorodiphenyldichloroethane	mg/kg-dry	T		<0.0035	:	-		-		<0.0035	:	<0.0038	:	-	
Dichlorodiphenyldichloroethylene	mg/kg-dry	T		<0.0035	:	-		-		<0.0035	:	<0.0038	:	-	
Dichlorodiphenyltrichloroethane	mg/kg-dry	T		<0.0035	:	-		-		<0.0035	:	<0.0038	J	-	
Dieldrin	mg/kg-dry	T		<0.0035	:	-		-		<0.0035	:	<0.0038	:	-	
Endosulfan I	mg/kg-dry	T		<0.0018	:	-		-		<0.0018	:	<0.002	:	-	
Endosulfan II	mg/kg-dry	T		<0.0035	:	-		-		<0.0035	:	<0.0038	:	-	
Endosulfan sulfate	mg/kg-dry	T		<0.0035	:	-		-		<0.0035	:	<0.0038	:	-	
Endrin	mg/kg-dry	T		<0.0035	:	-		-		<0.0035	:	<0.0038	:	-	
Endrin aldehyde	mg/kg-dry	T		<0.0035	:	-		-		<0.0035	:	<0.0038	:	-	
Endrin ketone	mg/kg-dry	T		<0.0035	:	-		-		<0.0035	:	<0.0038	:	-	
g-Chlordane	mg/kg-dry	T		<0.0018	:	-		-		<0.0018	:	<0.002	:	-	
Heptachlor	mg/kg-dry	T		<0.0018	:	-		-		<0.0018	:	<0.002	:	-	
Heptachlor epoxide	mg/kg-dry	T		<0.0018	:	-		-		<0.0018	:	<0.002	:	-	
Lindane	mg/kg-dry	T		<0.0018	:	-		-		<0.0018	:	<0.002	:	-	
Methoxychlor	mg/kg-dry	T		<0.018	:	-		-		<0.018	:	<0.02	:	-	
Toxaphene	mg/kg-dry	T		-		-		-		-		<0.2	:	-	
Dibenzodioxins-Dibenzofurans															
1,2,3,4,6,7,8,9-Octachlorodibenzofur	pg/g	T		<0.67	:	-		-		3.2	J	<0.42	:	-	

J = Qualified as estimated during data validation
R = Qualified as rejected value from data validation and results are considered unusable for any purpose
T = Total Fraction

Appendix A-7c
Soil - Random 0-6 inches
Validated Analytical Results

Parameter	Units	Site ID / Sample Date / Sample ID / Exposure Area / Fraction	CR-5 6/11/2003 CR-5-T01N-SOL RCR		CR-6 6/10/2003 CR-6-T01N-SOL RCR		CR-7 6/9/2003 CR-7-T01N-SOL RCR		CR-8 6/9/2003 CR-8-T01N-SOL RCR		MRSS-1 10/6/2002 MRSS-1-T01N-SOL RefMine		MRSS-10 10/6/2002 MRSS-10-T01N-SOL RSCAR	
1,2,3,4,6,7,8,9-Octachlorodibenzo-p	pg/g	T	4.8	J	-		-		19.	:	<2.4	J	-	
1,2,3,4,6,7,8-Heptachlorodibenzofur	pg/g	T	<0.32	:	-		-		1.1	J	<0.13	:	-	
1,2,3,4,6,7,8-Heptachlorodibenzo-p-	pg/g	T	<0.94	:	-		-		3.1	J	<0.54	:	-	
1,2,3,4,7,8,9-Heptachlorodibenzofur	pg/g	T	<0.14	:	-		-		<0.19	:	<0.18	:	-	
1,2,3,4,7,8-Hexachlorodibenzofuran	pg/g	T	<0.22	:	-		-		<0.18	:	<0.086	:	-	
1,2,3,4,7,8-hexachlorodibenzo-p-dio	pg/g	T	<0.21	:	-		-		<0.14	:	<0.2	:	-	
1,2,3,6,7,8-Hexachlorodibenzofuran	pg/g	T	<0.092	:	-		-		<0.12	:	<0.081	:	-	
1,2,3,6,7,8-Hexachlorodibenzo-p-dio	pg/g	T	<0.2	:	-		-		0.2	J	<0.19	:	-	
1,2,3,7,8,9-Hexachlorodibenzofuran	pg/g	T	<0.11	:	-		-		<0.089	:	<0.12	:	-	
1,2,3,7,8,9-Hexachlorodibenzo-p-dio	pg/g	T	<0.2	:	-		-		0.24	J	<0.19	:	-	
1,2,3,7,8-Pentachlorodibenzofuran	pg/g	T	<0.11	:	-		-		0.095	J	<0.19	:	-	
1,2,3,7,8-Pentachlorodibenzo-p-diox	pg/g	T	<0.13	:	-		-		<0.084	:	<0.16	:	-	
2,3,4,6,7,8-Hexachlorodibenzofuran	pg/g	T	<0.1	:	-		-		0.12	J	<0.09	:	-	
2,3,4,7,8-Pentachlorodibenzofuran	pg/g	T	<0.11	:	-		-		<0.07	:	<0.18	:	-	
2,3,7,8-Tetrachlorodibenzofuran	pg/g	T	<0.15	:	-		-		<0.1	:	<0.33	:	-	
2,3,7,8-Tetrachlorodibenzo-p-dioxin	pg/g	T	<0.17	:	-		-		<0.11	:	<0.41	:	-	

J = Qualified as estimated during data validation
R = Qualified as rejected value from data validation and results are considered unusable for any purpose
T = Total Fraction

Appendix A-7c
Soil - Random 0-6 inches
Validated Analytical Results

Parameter	Units	Fraction	MRSS-11	MRSS-12	MRSS-13	MRSS-14	MRSS-15	MRSS-16
		Sample Date	10/6/2002	10/8/2002	10/8/2002	10/8/2002	10/7/2002	10/8/2002
		Sample ID	MRSS-11-T01N-SOL	MRSS-12-T01N-SOL	MRSS-13-T01N-SOL	MRSS-14-T01N-SOL	MRSS-15-T01N-SOL	MRSS-16-T01N-SOL
		Exposure Area	RSCAR	RSCAR	RSCAR	RSCAR	RSCAR	RefMine
General Chemistry								
Ammonia	mg/kg-dry	T	93.6 :	33. :	68.4 :	46.3 :	18.8 J	87.8 J
Chloride	mg/kg-dry	T	2.4 :	3.5 J	<2.3 J	<2.2 J	<2.3 J	2.5 J
Fluoride	mg/kg-dry	T	0.12 J	0.14 J	-	-	-	-
Nitrate	mg/kg-dry	T	<2.3 J	<2.3 J	<2.3 J	<2.2 J	<2.3 J	<2.3 J
Phosphorus	mg/kg-dry	T	738. J	203. J	2030. J	1340. J	1340. J	924. J
Sulfate	mg/kg-dry	T	1990. :	1280. J	875. J	1100. J	7. J	8.8 J
Total Kjeldahl Nitrogen	mg/kg-dry	T	57. :	29.1 :	149. :	62.8 :	212. :	625. J
Total Organic Carbon	mg/kg-dry	T	1620. J	<111. J	794. J	110. J	3460. J	21200. J
Laboratory Parameters								
pH	SU	T	4.4 :	3.1 :	3.5 :	3.6 :	5.1 :	5.4 :
Solids, Percent	%	T	89.9 :	90.6 :	87.6 :	91.2 :	88.4 :	87.7 :
Specific Conductance	umhos/cm	T	2160. :	916. :	988. :	1050. :	15.8 :	16.9 :
Geotechnical								
Organic Soils	%	T	3.57 :	2.38 :	4.22 :	2.95 :	-	-
Physical Properties								
Cation-Exchange Capacity	meq/100g	T	15.2 :	7.8 :	13.5 :	16.7 :	13.6 :	18.7 :
Sodium Absorption Ratio	ratio	T	0.04 :	<0.03 :	0.02 :	<0.02 :	0.75 :	0.48 :
Metals								
Aluminum	mg/kg-dry	T	7270. :	4140. :	6100. :	8330. :	9660. :	5970. :
Antimony	mg/kg-dry	T	<0.18 J	<0.17 J	<0.16 J	<0.17 J	0.14 J	<0.16 J
Arsenic	mg/kg-dry	T	8.1 :	5.4 :	22.9 :	8.8 :	6.6 :	3.8 :
Barium	mg/kg-dry	T	186. :	154. :	390. :	191. :	533. :	107. :
Beryllium	mg/kg-dry	T	0.92 :	0.21 :	0.17 :	0.24 :	0.36 :	0.38 :
Boron	mg/kg-dry	T	9.3 J	<0.45 J	<0.45 J	<0.39 J	9.1 J	8.4 J
Cadmium	mg/kg-dry	T	<0.026 J	<0.062 J	<0.063 J	<0.055 J	<0.025 J	<0.025 J
Calcium	mg/kg-dry	T	9590. :	711. :	2120. :	4620. :	352. :	1400. :
Chromium	mg/kg-dry	T	10.1 :	12.3 :	16.9 :	19.3 :	11.9 :	4.5 :
Cobalt	mg/kg-dry	T	9.1 :	2.6 J	2.1 J	2.6 J	1.9 :	1.6 :
Copper	mg/kg-dry	T	22.1 :	21.3 :	11.6 :	35.1 :	21.3 :	5.4 :
Iron	mg/kg-dry	T	25100. :	18400. :	34400. :	33400. :	20700. :	16900. :
Lead	mg/kg-dry	T	30. :	86.1 :	210. :	253. :	47.9 :	32.1 :
Magnesium	mg/kg-dry	T	1930. :	3090. :	5760. :	7150. :	1920. :	945. :
Manganese	mg/kg-dry	T	321. J	156. J	286. J	366. J	74.4 J	109. J

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T = Total Fraction

Appendix A-7c
Soil - Random 0-6 inches
Validated Analytical Results

Parameter	Units	Exposure Area Fraction	Site ID / Sample Date / Sample ID		MRSS-11 10/6/2002 MRSS-11-T01N-SOL RSCAR		MRSS-12 10/8/2002 MRSS-12-T01N-SOL RSCAR		MRSS-13 10/8/2002 MRSS-13-T01N-SOL RSCAR		MRSS-14 10/8/2002 MRSS-14-T01N-SOL RSCAR		MRSS-15 10/7/2002 MRSS-15-T01N-SOL RSCAR		MRSS-16 10/8/2002 MRSS-16-T01N-SOL RefMine	
Mercury	mg/kg-dry	T			<0.017	:	<0.017	:	<0.018	:	<0.018	:	<0.017	J	<0.019	J
Molybdenum	mg/kg-dry	T			2.7	:	8.	:	23.	:	5.6	:	2.7	:	3.4	:
Nickel	mg/kg-dry	T			15.9	J	7.2	J	3.5	J	5.8	J	6.3	J	2.7	J
Potassium	mg/kg-dry	T			2930.	J	1440.	J	2280.	J	2050.	J	3320.	J	2300.	J
Selenium	mg/kg-dry	T			1.2	J	1.2	J	7.7	J	1.7	J	0.58	J	<0.45	J
Silver	mg/kg-dry	T			<0.12	:	<0.72	J	2.3	:	1.5	:	0.21	:	<0.12	:
Sodium	mg/kg-dry	T			91.9	:	<53.5	:	774.	:	417.	:	<84.5	:	<56.6	:
Thallium	mg/kg-dry	T			0.12	:	0.14	:	0.24	:	0.17	:	0.32	:	0.12	:
Vanadium	mg/kg-dry	T			10.9	:	10.6	:	15.6	:	17.2	:	13.1	:	10.1	:
Zinc	mg/kg-dry	T			67.	J	35.2	J	18.5	J	42.6	J	19.7	J	31.8	J
Pesticides-PCBs																
a-Chlordane	mg/kg-dry	T			-		-		-		-		-		<0.0019	:
Aldrin	mg/kg-dry	T			-		-		-		-		-		<0.0019	:
alpha-Hexachlorocyclohexane	mg/kg-dry	T			-		-		-		-		-		<0.0019	:
beta-Hexachlorocyclohexane	mg/kg-dry	T			-		-		-		-		-		<0.0019	:
delta-Hexachlorocyclohexane	mg/kg-dry	T			-		-		-		-		-		<0.0019	:
Dichlorodiphenyldichloroethane	mg/kg-dry	T			-		-		-		-		-		<0.0038	:
Dichlorodiphenyldichloroethylene	mg/kg-dry	T			-		-		-		-		-		<0.0038	:
Dichlorodiphenyltrichloroethane	mg/kg-dry	T			-		-		-		-		-		0.0047	J
Dieldrin	mg/kg-dry	T			-		-		-		-		-		<0.0038	:
Endosulfan I	mg/kg-dry	T			-		-		-		-		-		<0.0019	:
Endosulfan II	mg/kg-dry	T			-		-		-		-		-		<0.0038	:
Endosulfan sulfate	mg/kg-dry	T			-		-		-		-		-		<0.0038	:
Endrin	mg/kg-dry	T			-		-		-		-		-		<0.0038	:
Endrin aldehyde	mg/kg-dry	T			-		-		-		-		-		<0.0038	:
Endrin ketone	mg/kg-dry	T			-		-		-		-		-		<0.0038	:
g-Chlordane	mg/kg-dry	T			-		-		-		-		-		<0.0019	:
Heptachlor	mg/kg-dry	T			-		-		-		-		-		<0.0019	:
Heptachlor epoxide	mg/kg-dry	T			-		-		-		-		-		<0.0019	:
Lindane	mg/kg-dry	T			-		-		-		-		-		<0.0019	:
Methoxychlor	mg/kg-dry	T			-		-		-		-		-		<0.019	:
Toxaphene	mg/kg-dry	T			-		-		-		-		-		<0.19	:
Dibenzodioxins-Dibenzofurans																
1,2,3,4,6,7,8,9-Octachlorodibenzofur	pg/g	T			-		-		-		-		-		<1.4	J

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Appendix A-7c
Soil - Random 0-6 inches
Validated Analytical Results

Parameter	Units	Site ID / Sample Date / Sample ID / Exposure Area	Fraction	MRSS-11 10/6/2002 MRSS-11-T01N-SOL RSCAR	MRSS-12 10/8/2002 MRSS-12-T01N-SOL RSCAR	MRSS-13 10/8/2002 MRSS-13-T01N-SOL RSCAR	MRSS-14 10/8/2002 MRSS-14-T01N-SOL RSCAR	MRSS-15 10/7/2002 MRSS-15-T01N-SOL RSCAR	MRSS-16 10/8/2002 MRSS-16-T01N-SOL RefMine
1,2,3,4,6,7,8,9-Octachlorodibenzo-p	pg/g	T		-	-	-	-	-	8.7 J
1,2,3,4,6,7,8-Heptachlorodibenzofur	pg/g	T		-	-	-	-	-	<0.44 :
1,2,3,4,6,7,8-Heptachlorodibenzo-p-	pg/g	T		-	-	-	-	-	<1.7 :
1,2,3,4,7,8,9-Heptachlorodibenzofur	pg/g	T		-	-	-	-	-	<0.54 :
1,2,3,4,7,8-Hexachlorodibenzofuran	pg/g	T		-	-	-	-	-	<0.17 :
1,2,3,4,7,8-hexachlorodibenzo-p-dio	pg/g	T		-	-	-	-	-	<0.41 :
1,2,3,6,7,8-Hexachlorodibenzofuran	pg/g	T		-	-	-	-	-	<0.16 :
1,2,3,6,7,8-Hexachlorodibenzo-p-dio	pg/g	T		-	-	-	-	-	<0.38 :
1,2,3,7,8,9-Hexachlorodibenzofuran	pg/g	T		-	-	-	-	-	<0.2 :
1,2,3,7,8,9-Hexachlorodibenzo-p-dio	pg/g	T		-	-	-	-	-	<0.4 :
1,2,3,7,8-Pentachlorodibenzofuran	pg/g	T		-	-	-	-	-	<0.2 :
1,2,3,7,8-Pentachlorodibenzo-p-diox	pg/g	T		-	-	-	-	-	<0.22 :
2,3,4,6,7,8-Hexachlorodibenzofuran	pg/g	T		-	-	-	-	-	<0.18 :
2,3,4,7,8-Pentachlorodibenzofuran	pg/g	T		-	-	-	-	-	<0.19 :
2,3,7,8-Tetrachlorodibenzofuran	pg/g	T		-	-	-	-	-	<0.34 :
2,3,7,8-Tetrachlorodibenzo-p-dioxin	pg/g	T		-	-	-	-	-	<0.5 :

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T = Total Fraction

Appendix A-7c
Soil - Random 0-6 inches
Validated Analytical Results

Parameter	Units	Exposure Area Fraction	Site ID / Sample Date / Sample ID / Exposure Area											
			MRSS-17 10/8/2002 MRSS-17-T01N-SOL RefMine		MRSS-18 10/8/2002 MRSS-18-T01N-SOL RefMine		MRSS-19 10/8/2002 MRSS-19-T01N-SOL RefMine		MRSS-2 10/7/2002 MRSS-2-T01N-SOL RefMine		MRSS-20 10/9/2002 MRSS-20-T01N-SOL RefMine		MRSS-3 10/6/2002 MRSS-3-T01N-SOL RefMine	
General Chemistry														
Ammonia	mg/kg-dry	T	179.	:	137.	J	58.5	:	<54.7	J	63.3	:	25.9	J
Chloride	mg/kg-dry	T	<2.4	J	<2.9	J	2.7	:	<2.4	J	3.2	J	<2.3	:
Fluoride	mg/kg-dry	T	0.19	J	0.16	J	-		0.15	J	0.18	J	-	
Nitrate	mg/kg-dry	T	<2.4	J	<2.9	J	<2.5	J	7.1	J	<2.6	J	<2.3	J
Phosphorus	mg/kg-dry	T	272.	J	406.	J	296.	J	1320.	J	538.	J	848.	J
Sulfate	mg/kg-dry	T	<2.4	J	8.7	J	8.7	J	3.5	J	8.3	J	13.2	J
Total Kjeldahl Nitrogen	mg/kg-dry	T	811.	:	2100.	:	771.	:	1300.	:	775.	:	241.	:
Total Organic Carbon	mg/kg-dry	T	35100.	J	106700.	J	22800.	J	19600.	J	37100.	J	10500.	J
Laboratory Parameters														
pH	SU	T	6.9	:	6.9	:	6.8	:	6.2	:	5.5	:	4.8	:
Solids, Percent	%	T	85.1	:	69.6	:	82.3	:	85.4	:	79.2	:	89.2	:
Specific Conductance	umhos/cm	T	36.7	:	98.1	:	46.6	:	66.4	:	34.4	:	62.1	:
Geotechnical														
Organic Soils	%	T	4.79	:	11.54	:	-		-		-		4.14	:
Physical Properties														
Cation-Exchange Capacity	meq/100g	T	14.5	:	28.6	:	16.9	:	23.4	:	19.6	:	13.8	:
Sodium Absorption Ratio	ratio	T	<0.12	:	<0.06	:	0.24	:	0.25	:	0.07	:	0.37	:
Metals														
Aluminum	mg/kg-dry	T	4370.	:	7900.	:	4810.	:	14600.	:	8300.	:	7050.	:
Antimony	mg/kg-dry	T	<0.17	:	<0.21	J	<0.18	J	<0.14	J	<0.2	J	<0.17	J
Arsenic	mg/kg-dry	T	3.	:	4.	:	2.	:	7.7	:	1.4	:	5.9	:
Barium	mg/kg-dry	T	86.7	:	157.	:	68.8	:	260.	:	199.	:	272.	:
Beryllium	mg/kg-dry	T	0.3	:	0.43	:	0.21	:	0.8	:	0.3	:	0.45	:
Boron	mg/kg-dry	T	<0.97	:	<6.9	:	5.1	:	15.5	J	6.5	:	<0.44	J
Cadmium	mg/kg-dry	T	<0.059	:	0.39	:	<0.026	:	<0.021	J	<0.03	:	<0.071	:
Calcium	mg/kg-dry	T	2240.	:	8050.	:	2530.	:	2950.	:	2610.	:	717.	:
Chromium	mg/kg-dry	T	3.8	:	5.7	:	3.7	:	44.3	:	7.4	:	13.2	:
Cobalt	mg/kg-dry	T	1.7	:	3.4	:	1.5	:	13.7	:	2.6	:	3.4	:
Copper	mg/kg-dry	T	4.5	:	9.2	:	3.	:	40.5	:	5.5	:	22.6	:
Iron	mg/kg-dry	T	8970.	:	9140.	:	4640.	:	35000.	:	9540.	:	28900.	:
Lead	mg/kg-dry	T	19.2	:	27.3	:	8.6	:	70.	:	37.8	:	57.9	J
Magnesium	mg/kg-dry	T	833.	:	1670.	:	775.	:	7650.	:	1510.	:	3350.	:
Manganese	mg/kg-dry	T	151.	J	400.	J	64.4	J	901.	J	82.8	J	244.	J

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R = Qualified as rejected value from data validation and results are considered unusable for any purpose

T = Total Fraction

Appendix A-7c
Soil - Random 0-6 inches
Validated Analytical Results

Parameter	Units	Exposure Area Fraction	Site ID / Sample Date / Sample ID / Exposure Area											
			MRSS-17 10/8/2002 MRSS-17-T01N-SOL RefMine		MRSS-18 10/8/2002 MRSS-18-T01N-SOL RefMine		MRSS-19 10/8/2002 MRSS-19-T01N-SOL RefMine		MRSS-2 10/7/2002 MRSS-2-T01N-SOL RefMine		MRSS-20 10/9/2002 MRSS-20-T01N-SOL RefMine		MRSS-3 10/6/2002 MRSS-3-T01N-SOL RefMine	
Mercury	mg/kg-dry	T	<0.018	:	0.066	:	<0.019	J	0.022	J	<0.021	:	<0.017	:
Molybdenum	mg/kg-dry	T	2.5	:	3.	:	0.82	:	7.3	:	1.2	:	7.7	:
Nickel	mg/kg-dry	T	3.	J	4.6	J	1.9	J	31.1	J	3.3	J	12.1	J
Potassium	mg/kg-dry	T	1530.	J	1800.	J	1220.	J	3100.	J	1540.	J	2280.	J
Selenium	mg/kg-dry	T	<0.82	J	<1.2	J	<0.28	J	0.77	J	<0.2	J	1.2	J
Silver	mg/kg-dry	T	<0.21	:	<0.44	:	<0.12	:	0.51	:	<0.14	:	<0.52	:
Sodium	mg/kg-dry	T	<50.5	:	<66.5	:	<47.5	:	188.	:	<54.9	:	<149.	:
Thallium	mg/kg-dry	T	0.09	:	0.12	:	0.098	:	0.19	:	0.13	:	0.11	:
Vanadium	mg/kg-dry	T	7.1	:	11.1	:	7.9	:	38.1	:	17.3	:	15.7	:
Zinc	mg/kg-dry	T	32.5	J	46.7	J	17.1	:	94.6	J	17.5	J	62.1	J
Pesticides-PCBs														
a-Chlordane	mg/kg-dry	T	<0.002	:	-		-		<0.002	:	-		-	
Aldrin	mg/kg-dry	T	<0.002	:	-		-		<0.002	:	-		-	
alpha-Hexachlorocyclohexane	mg/kg-dry	T	<0.002	:	-		-		<0.002	:	-		-	
beta-Hexachlorocyclohexane	mg/kg-dry	T	<0.002	:	-		-		<0.002	:	-		-	
delta-Hexachlorocyclohexane	mg/kg-dry	T	<0.002	:	-		-		<0.002	:	-		-	
Dichlorodiphenyldichloroethane	mg/kg-dry	T	<0.0039	:	-		-		<0.0039	:	-		-	
Dichlorodiphenyldichloroethylene	mg/kg-dry	T	<0.0039	:	-		-		<0.0039	:	-		-	
Dichlorodiphenyltrichloroethane	mg/kg-dry	T	<0.0039	J	-		-		<0.0039	J	-		-	
Dieldrin	mg/kg-dry	T	<0.0039	:	-		-		<0.0039	:	-		-	
Endosulfan I	mg/kg-dry	T	<0.002	:	-		-		<0.002	:	-		-	
Endosulfan II	mg/kg-dry	T	<0.0039	:	-		-		<0.0039	:	-		-	
Endosulfan sulfate	mg/kg-dry	T	<0.0039	:	-		-		<0.0039	:	-		-	
Endrin	mg/kg-dry	T	<0.0039	:	-		-		<0.0039	:	-		-	
Endrin aldehyde	mg/kg-dry	T	<0.0039	:	-		-		<0.0039	:	-		-	
Endrin ketone	mg/kg-dry	T	<0.0039	:	-		-		<0.0039	:	-		-	
g-Chlordane	mg/kg-dry	T	<0.002	:	-		-		<0.002	:	-		-	
Heptachlor	mg/kg-dry	T	<0.002	:	-		-		<0.002	:	-		-	
Heptachlor epoxide	mg/kg-dry	T	<0.002	:	-		-		<0.002	:	-		-	
Lindane	mg/kg-dry	T	<0.002	:	-		-		<0.002	:	-		-	
Methoxychlor	mg/kg-dry	T	<0.02	:	-		-		<0.02	:	-		-	
Toxaphene	mg/kg-dry	T	<0.2	:	-		-		<0.2	:	-		-	
Dibenzodioxins-Dibenzofurans														
1,2,3,4,6,7,8,9-Octachlorodibenzofur	pg/g	T	<0.51	:	-		-		<0.48	:	-		-	

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T = Total Fraction

Appendix A-7c
Soil - Random 0-6 inches
Validated Analytical Results

Parameter	Units	Exposure Area Fraction	Site ID / Sample Date / Sample ID		MRSS-17 10/8/2002 MRSS-17-T01N-SOL RefMine		MRSS-18 10/8/2002 MRSS-18-T01N-SOL RefMine		MRSS-19 10/8/2002 MRSS-19-T01N-SOL RefMine		MRSS-2 10/7/2002 MRSS-2-T01N-SOL RefMine		MRSS-20 10/9/2002 MRSS-20-T01N-SOL RefMine	MRSS-3 10/6/2002 MRSS-3-T01N-SOL RefMine
1,2,3,4,6,7,8,9-Octachlorodibenzo-p	pg/g	T	<2.9	:	-		-		<4.5	:	-	-	
1,2,3,4,6,7,8-Heptachlorodibenzofur	pg/g	T	<0.31	:	-		-		<0.21	J	-	-	
1,2,3,4,6,7,8-Heptachlorodibenzo-p-	pg/g	T	<0.42	:	-		-		<1.2	J	-	-	
1,2,3,4,7,8,9-Heptachlorodibenzofur	pg/g	T	<0.39	:	-		-		<0.13	:	-	-	
1,2,3,4,7,8-Hexachlorodibenzofuran	pg/g	T	<0.15	:	-		-		<0.11	J	-	-	
1,2,3,4,7,8-hexachlorodibenzo-p-dio	pg/g	T	<0.34	:	-		-		<0.13	:	-	-	
1,2,3,6,7,8-Hexachlorodibenzofuran	pg/g	T	<0.14	:	-		-		<0.069	:	-	-	
1,2,3,6,7,8-Hexachlorodibenzo-p-dio	pg/g	T	<0.32	:	-		-		<0.12	:	-	-	
1,2,3,7,8,9-Hexachlorodibenzofuran	pg/g	T	<0.18	:	-		-		<0.087	:	-	-	
1,2,3,7,8,9-Hexachlorodibenzo-p-dio	pg/g	T	<0.33	:	-		-		<0.13	:	-	-	
1,2,3,7,8-Pentachlorodibenzofuran	pg/g	T	<0.24	:	-		-		<0.12	:	-	-	
1,2,3,7,8-Pentachlorodibenzo-p-diox	pg/g	T	<0.28	:	-		-		<0.14	:	-	-	
2,3,4,6,7,8-Hexachlorodibenzofuran	pg/g	T	<0.16	:	-		-		<0.079	:	-	-	
2,3,4,7,8-Pentachlorodibenzofuran	pg/g	T	<0.23	:	-		-		<0.11	:	-	-	
2,3,7,8-Tetrachlorodibenzofuran	pg/g	T	<0.5	:	-		-		<0.22	:	-	-	
2,3,7,8-Tetrachlorodibenzo-p-dioxin	pg/g	T	<0.77	:	-		-		<0.34	:	-	-	

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Appendix A-7c
Soil - Random 0-6 inches
Validated Analytical Results

Parameter	Units	Exposure Area Fraction	Site ID / Sample Date / Sample ID		MRSS-4 10/6/2002 MRSS-4-T01N-SOL RefMine		MRSS-5 10/7/2002 MRSS-5-T01N-SOL RefMine		MRSS-6 10/7/2002 MRSS-6-T01N-SOL RSCAR		MRSS-7 10/7/2002 MRSS-7-T01N-SOL RSCAR		MRSS-8 10/7/2002 MRSS-8-T01N-SOL RSCAR		MRSS-9 10/6/2002 MRSS-9-T01N-SOL RSCAR	
General Chemistry																
Ammonia	mg/kg-dry	T			52.9	:	31.7	J	17.4	:	30.2	:	17.5	:	44.	:
Chloride	mg/kg-dry	T			2.8	:	<2.3	J	<2.1	:	<2.2	:	2.7	:	12.9	:
Fluoride	mg/kg-dry	T			0.11	J	0.16	J	0.16	J	0.17	J	0.14	J	0.12	J
Nitrate	mg/kg-dry	T			10.3	J	<2.3	J	<2.1	:	<2.2	:	<2.3	:	<2.2	J
Phosphorus	mg/kg-dry	T			1350.	J	1160.	J	237.	J	39.1	J	180.	J	927.	J
Sulfate	mg/kg-dry	T			59.	J	23.2	J	662.	:	506.	:	774.	:	4840.	J
Total Kjeldahl Nitrogen	mg/kg-dry	T			176.	:	447.	:	53.9	:	119.	:	74.6	:	62.	:
Total Organic Carbon	mg/kg-dry	T			2010.	J	22900.	J	<104.	J	307.	J	<111.	J	<109.	J
Laboratory Parameters																
pH	SU	T			4.9	:	6.2	:	3.2	:	3.5	:	3.4	:	2.9	:
Solids, Percent	%	T			95.8	:	88.2	:	96.3	:	92.	:	90.2	:	92.2	:
Specific Conductance	umhos/cm	T			190.	:	170.	:	1500.	:	2110.	:	2850.	:	3460.	:
Geotechnical																
Organic Soils	%	T			5.3	:	-		3.08	:	4.26	:	4.95	:	4.3	:
Physical Properties																
Cation-Exchange Capacity	meq/100g	T			24.8	:	15.2	:	12.6	:	12.1	:	13.5	:	9.5	:
Sodium Absorption Ratio	ratio	T			0.1	:	0.09	:	<0.02	:	0.02	:	0.05	:	<0.02	:
Metals																
Aluminum	mg/kg-dry	T			9960.	:	7520.	:	7380.	:	5230.	:	5640.	:	3760.	:
Antimony	mg/kg-dry	T			<0.17	J	<0.14	J	<0.17	J	<0.16	J	<0.18	J	<0.18	J
Arsenic	mg/kg-dry	T			7.9	:	5.9	:	9.1	:	3.6	:	5.1	:	8.7	:
Barium	mg/kg-dry	T			385.	:	365.	:	195.	:	611.	:	438.	:	213.	:
Beryllium	mg/kg-dry	T			2.6	:	0.63	:	0.21	:	0.15	:	0.15	:	0.17	:
Boron	mg/kg-dry	T			21.2	J	10.1	J	<0.43	J	<0.41	J	<0.41	J	<0.43	J
Cadmium	mg/kg-dry	T			<0.024	J	<0.019	J	0.17	J	0.17	J	0.24	J	0.11	J
Calcium	mg/kg-dry	T			787.	:	5950.	:	12900.	:	11100.	:	25000.	:	1630.	:
Chromium	mg/kg-dry	T			9.	:	8.9	:	22.2	:	15.8	:	32.3	:	5.1	:
Cobalt	mg/kg-dry	T			17.6	:	7.7	:	3.6	:	0.94	:	0.52	:	0.96	:
Copper	mg/kg-dry	T			76.4	:	25.1	:	19.3	:	9.2	:	12.8	:	6.9	:
Iron	mg/kg-dry	T			65300.	:	25300.	:	32300.	:	32700.	:	42200.	:	35000.	:
Lead	mg/kg-dry	T			140.	:	29.5	:	72.1	:	52.	:	68.3	:	92.8	:
Magnesium	mg/kg-dry	T			6880.	:	3560.	:	6620.	:	4500.	:	5780.	:	2310.	:
Manganese	mg/kg-dry	T			597.	J	319.	J	304.	J	204.	J	141.	J	111.	J

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T = Total Fraction

Appendix A-7c
Soil - Random 0-6 inches
Validated Analytical Results

Parameter	Units	Exposure Area Fraction	Site ID / Sample Date / Sample ID											
			MRSS-4 10/6/2002 MRSS-4-T01N-SOL		MRSS-5 10/7/2002 MRSS-5-T01N-SOL		MRSS-6 10/7/2002 MRSS-6-T01N-SOL		MRSS-7 10/7/2002 MRSS-7-T01N-SOL		MRSS-8 10/7/2002 MRSS-8-T01N-SOL		MRSS-9 10/6/2002 MRSS-9-T01N-SOL	
			RefMine		RefMine		RSCAR		RSCAR		RSCAR		RSCAR	
Mercury	mg/kg-dry	T	<0.015	:	<0.019	J	<0.017	:	<0.017	:	<0.017	:	<0.016	:
Molybdenum	mg/kg-dry	T	10.2	:	7.7	:	14.6	:	7.7	:	8.	:	79.6	:
Nickel	mg/kg-dry	T	68.8	J	18.5	J	9.2	J	3.3	J	3.6	J	2.6	J
Potassium	mg/kg-dry	T	2390.	J	2580.	J	1860.	J	3450.	J	3320.	J	4010.	J
Selenium	mg/kg-dry	T	3.3	J	0.73	J	<1.4	J	<2.8	J	<2.2	J	<1.2	J
Silver	mg/kg-dry	T	1.6	:	0.11	:	<0.51	:	<0.48	:	<0.49	:	1.8	:
Sodium	mg/kg-dry	T	138.	:	<60.	:	<347.	:	734.	:	1100.	:	<300.	:
Thallium	mg/kg-dry	T	0.15	:	0.15	:	0.091	:	0.14	:	0.16	:	0.33	:
Vanadium	mg/kg-dry	T	16.1	:	12.4	:	21.2	:	22.9	:	27.	:	20.4	:
Zinc	mg/kg-dry	T	460.	J	51.8	J	35.5	J	21.2	J	16.4	J	19.2	J

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Appendix A-7c
Soil - Random 0-6 inches
Validated Analytical Results

Parameter	Units	Exposure Area Fraction	Site ID / Sample Date / Sample ID / Exposure Area											
			MSS1-1 10/13/2002 MSS1-1-T01N-SOL SS1		MSS1-10 10/14/2002 MSS1-10-T01N-SOL SS1		MSS1-2 10/13/2002 MSS1-2-T01N-SOL SS1		MSS1-3 10/13/2002 MSS1-3-T01N-SOL SS1		MSS1-4 10/14/2002 MSS1-4-T01N-SOLDL SS1		MSS1-4 10/14/2002 MSS1-4-T01N-SOL SS1	
General Chemistry														
Ammonia	mg/kg-dry	T	17.1	J	22.7	J	<9.4	J	12.7	J	-		9.1	J
Chloride	mg/kg-dry	T	4.6	J	5.6	J	12.2	J	<2.2	J	-		<2.2	J
Fluoride	mg/kg-dry	T	0.28	J	1.5	J	1.	J	0.76	J	-		1.6	J
Nitrate	mg/kg-dry	T	5.2	J	<2.2	J	<2.1	J	<2.2	J	-		<2.2	J
Phosphorus	mg/kg-dry	T	341.	J	935.	J	1170.	J	836.	J	-		572.	:
Sulfate	mg/kg-dry	T	23.	J	448.	J	1010.	J	11.5	J	-		240.	J
Total Kjeldahl Nitrogen	mg/kg-dry	T	65.4	J	352.	:	<22.2	J	736.	J	-		104.	:
Total Organic Carbon	mg/kg-dry	T	<104.	J	8380.	J	<104.	J	3570.	J	-		1040.	:
Laboratory Parameters														
pH	SU	T	7.	:	6.7	:	7.1	:	8.1	:	-		7.1	:
Solids, Percent	%	T	96.4	:	91.4	:	96.7	:	94.3	:	-		94.8	:
Specific Conductance	umhos/cm	T	4190.	:	279.	:	425.	:	37.7	:	-		174.	:
Geotechnical														
Organic Soils	%	T	1.13	J	2.15	J	1.47	J	1.69	J	-		1.05	J
Physical Properties														
Cation-Exchange Capacity	meq/100g	T	7.2	:	14.3	:	8.1	:	12.2	:	-		17.8	:
Sodium Absorption Ratio	ratio	T	0.26	:	0.09	:	0.46	:	<0.05	:	-		0.04	:
Metals														
Aluminum	mg/kg-dry	T	6210.	:	13500.	:	9540.	:	11200.	:	-		9800.	:
Antimony	mg/kg-dry	T	<0.17	J	<0.16	:	<0.17	J	<0.15	J	-		<0.17	:
Arsenic	mg/kg-dry	T	2.9	:	4.8	:	2.	:	3.3	:	-		4.	:
Barium	mg/kg-dry	T	23.1	:	94.9	:	87.8	:	46.2	:	-		68.5	:
Beryllium	mg/kg-dry	T	1.4	:	1.6	:	1.3	:	1.3	:	-		1.7	:
Boron	mg/kg-dry	T	<1.8	:	5.1	J	<1.3	:	<2.3	:	-		3.	:
Cadmium	mg/kg-dry	T	4.3	:	1.5	J	0.44	:	1.3	:	-		3.	:
Calcium	mg/kg-dry	T	4450.	:	9300.	:	19500.	:	11500.	:	-		9090.	:
Chromium	mg/kg-dry	T	9.5	:	55.4	:	37.4	:	33.3	:	-		29.9	:
Cobalt	mg/kg-dry	T	3.9	:	11.7	:	11.3	:	12.1	:	-		6.8	:
Copper	mg/kg-dry	T	100.	:	156.	:	156.	:	136.	:	-		173.	:
Iron	mg/kg-dry	T	10500.	:	25700.	:	18400.	:	21000.	:	-		16400.	:
Lead	mg/kg-dry	T	341.	:	149.	:	41.1	:	198.	:	-		191.	:
Magnesium	mg/kg-dry	T	2450.	:	9580.	:	7160.	:	8020.	:	-		6450.	:
Manganese	mg/kg-dry	T	1860.	J	944.	:	391.	J	1300.	J	-		1090.	:

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Appendix A-7c
Soil - Random 0-6 inches
Validated Analytical Results

Parameter	Units	Exposure Area Fraction	Site ID: MSS1-1		Site ID: MSS1-10		Site ID: MSS1-2		Site ID: MSS1-3		Site ID: MSS1-4		Site ID: MSS1-4	
		Sample Date	10/13/2002		10/14/2002		10/13/2002		10/13/2002		10/14/2002		10/14/2002	
		Sample ID	MSS1-1-T01N-SOL		MSS1-10-T01N-SOL		MSS1-2-T01N-SOL		MSS1-3-T01N-SOL		MSS1-4-T01N-SOLDL		MSS1-4-T01N-SOL	
		Exposure Area	SS1		SS1		SS1		SS1		SS1		SS1	
Mercury	mg/kg-dry	T	<0.017	:	0.041	:	<0.016	:	<0.017	:	-		0.024	:
Molybdenum	mg/kg-dry	T	311.	:	1660.	:	2250.	:	381.	:	-		1690.	:
Nickel	mg/kg-dry	T	7.3	J	35.5	:	33.9	J	23.2	J	-		21.2	:
Potassium	mg/kg-dry	T	1920.	J	3390.	:	4670.	J	2430.	J	-		3400.	:
Selenium	mg/kg-dry	T	0.53	J	0.74	:	1.4	J	0.97	J	-		0.69	:
Silver	mg/kg-dry	T	1.3	:	1.1	:	0.71	:	1.8	:	-		1.6	:
Sodium	mg/kg-dry	T	74.2	:	<47.2	:	45.	:	<46.1	:	-		<45.1	:
Thallium	mg/kg-dry	T	0.18	:	0.3	:	0.49	:	0.28	:	-		0.25	:
Vanadium	mg/kg-dry	T	14.6	:	51.7	:	47.7	:	38.9	:	-		36.	:
Zinc	mg/kg-dry	T	538.	J	171.	:	89.9	J	177.	J	-		337.	:
Volatile Organics														
1,1,1-Trichloroethane	mg/kg-dry	T	<0.009	:	<0.01	:	<0.006	:	<0.007	:	-		<0.006	:
1,1,2,2-Tetrachloroethane	mg/kg-dry	T	<0.009	:	<0.01	:	<0.006	:	<0.007	:	-		<0.006	:
1,1,2-Trichloro-1,2,2-trifluoroethane	mg/kg-dry	T	<0.009	:	<0.01	:	<0.006	:	<0.007	:	-		<0.006	:
1,1,2-Trichloroethane	mg/kg-dry	T	<0.009	:	<0.01	:	<0.006	:	<0.007	:	-		<0.006	:
1,1-Dichloroethane	mg/kg-dry	T	<0.009	:	<0.01	:	<0.006	:	<0.007	:	-		<0.006	:
1,1-Dichloroethene	mg/kg-dry	T	<0.009	:	<0.01	:	<0.006	:	<0.007	:	-		<0.006	:
1,2,4-Trichlorobenzene	mg/kg-dry	T	<0.009	:	<0.01	:	<0.006	:	<0.007	:	-		<0.006	:
1,2-Dibromo-3-chloropropane	mg/kg-dry	T	<0.009	:	<0.01	:	<0.006	:	<0.007	:	-		<0.006	:
1,2-Dichlorobenzene	mg/kg-dry	T	<0.009	:	<0.01	:	<0.006	:	<0.007	:	-		<0.006	:
1,2-Dichloroethane	mg/kg-dry	T	<0.009	:	<0.01	:	<0.006	:	<0.007	:	-		<0.006	:
1,2-Dichloroethene (total)	mg/kg-dry	T	<0.009	:	<0.01	:	<0.006	:	<0.007	:	-		<0.006	:
1,2-Dichloropropane	mg/kg-dry	T	<0.009	:	<0.01	:	<0.006	:	<0.007	:	-		<0.006	:
1,3-Dichlorobenzene	mg/kg-dry	T	<0.009	:	<0.01	:	<0.006	:	<0.007	:	-		<0.006	:
1,4-Dichlorobenzene	mg/kg-dry	T	<0.009	:	<0.01	:	<0.006	:	<0.007	:	-		<0.006	:
2-Butanone	mg/kg-dry	T	<0.009	J	<0.01	:	<0.006	J	<0.007	J	-		<0.006	:
2-Hexanone	mg/kg-dry	T	<0.009	J	<0.01	:	<0.006	J	<0.007	J	-		<0.006	:
4-Methyl-2-pentanone	mg/kg-dry	T	<0.009	J	<0.01	:	<0.006	J	<0.007	J	-		<0.006	:
Acetone	mg/kg-dry	T	<0.009	:	<0.01	:	<0.006	:	<0.007	:	-		<0.006	:
Benzene	mg/kg-dry	T	<0.009	:	<0.01	:	<0.006	:	<0.007	:	-		<0.006	:
Bromodichloromethane	mg/kg-dry	T	<0.009	:	<0.01	:	<0.006	:	<0.007	:	-		<0.006	:
Bromoform	mg/kg-dry	T	<0.009	:	<0.01	:	<0.006	:	<0.007	:	-		<0.006	:
Bromomethane	mg/kg-dry	T	<0.009	:	<0.01	:	<0.006	:	<0.007	:	-		<0.006	:
Carbon disulfide	mg/kg-dry	T	<0.009	:	<0.01	:	<0.006	:	<0.007	:	-		<0.006	:

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Appendix A-7c
Soil - Random 0-6 inches
Validated Analytical Results

Parameter	Units	Exposure Area Fraction	Site ID / Sample Date / Sample ID											
			MSS1-1 10/13/2002 MSS1-1-T01N-SOL	SS1	MSS1-10 10/14/2002 MSS1-10-T01N-SOL	SS1	MSS1-2 10/13/2002 MSS1-2-T01N-SOL	SS1	MSS1-3 10/13/2002 MSS1-3-T01N-SOL	SS1	MSS1-4 10/14/2002 MSS1-4-T01N-SOLDL	SS1	MSS1-4 10/14/2002 MSS1-4-T01N-SOL	SS1
Carbon tetrachloride	mg/kg-dry	T	<0.009	:	<0.01	:	<0.006	:	<0.007	:	-		<0.006	:
Chlorobenzene	mg/kg-dry	T	<0.009	:	<0.01	:	<0.006	:	<0.007	:	-		<0.006	:
Chloroethane	mg/kg-dry	T	<0.009	:	<0.01	:	<0.006	:	<0.007	:	-		<0.006	:
Chloroform	mg/kg-dry	T	<0.009	:	<0.01	:	<0.006	:	<0.007	:	-		<0.006	:
Chloromethane	mg/kg-dry	T	<0.009	:	<0.01	:	<0.006	:	<0.007	:	-		<0.006	:
cis-1,2-Dichloroethene	mg/kg-dry	T	<0.009	:	<0.01	:	<0.006	:	<0.007	:	-		<0.006	:
cis-1,3-Dichloropropene	mg/kg-dry	T	<0.009	:	<0.01	:	<0.006	:	<0.007	:	-		<0.006	:
Dibromochloromethane	mg/kg-dry	T	<0.009	:	<0.01	:	<0.006	:	<0.007	:	-		<0.006	:
Dichlorodifluoromethane	mg/kg-dry	T	<0.009	J	<0.01	:	<0.006	J	<0.007	J	-		<0.006	:
Ethylbenzene	mg/kg-dry	T	<0.009	:	<0.01	:	<0.006	:	<0.007	:	-		<0.006	:
Methylene chloride	mg/kg-dry	T	<0.009	:	<0.01	:	<0.006	:	<0.007	:	-		<0.006	:
Styrene	mg/kg-dry	T	<0.009	:	<0.01	:	<0.006	:	<0.007	:	-		<0.006	:
Tetrachloroethene	mg/kg-dry	T	<0.009	:	<0.01	:	<0.006	:	<0.007	:	-		<0.006	:
Toluene	mg/kg-dry	T	<0.009	:	<0.01	:	<0.006	:	<0.007	:	-		<0.006	:
Total Xylene	mg/kg-dry	T	<0.009	:	<0.01	:	<0.006	:	<0.007	:	-		<0.006	:
trans-1,2-Dichloroethene	mg/kg-dry	T	<0.009	:	<0.01	J	<0.006	:	<0.007	:	-		<0.006	J
trans-1,3-Dichloropropene	mg/kg-dry	T	<0.009	:	<0.01	:	<0.006	:	<0.007	:	-		<0.006	:
Trichloroethene	mg/kg-dry	T	<0.009	:	<0.01	:	<0.006	:	<0.007	:	-		<0.006	:
Trichlorofluoromethane	mg/kg-dry	T	<0.009	J	<0.01	:	<0.006	J	<0.007	J	-		<0.006	:
Vinyl chloride	mg/kg-dry	T	<0.009	J	<0.01	:	<0.006	J	<0.007	J	-		<0.006	:
Semi-Volatile Organics														
1,1`-Biphenyl	mg/kg-dry	T	<0.34	:	<0.36	:	<0.34	:	<0.35	:	-		<0.35	:
2,4,5-Trichlorophenol	mg/kg-dry	T	<0.86	:	<0.91	:	<0.85	:	<0.88	:	-		<0.87	:
2,4,6-Trichlorophenol	mg/kg-dry	T	<0.34	:	<0.36	:	<0.34	:	<0.35	:	-		<0.35	:
2,4-Dichlorophenol	mg/kg-dry	T	<0.34	:	<0.36	:	<0.34	:	<0.35	:	-		<0.35	:
2,4-Dimethylphenol	mg/kg-dry	T	<0.34	:	<0.36	:	<0.34	:	<0.35	:	-		<0.35	:
2,4-Dinitrophenol	mg/kg-dry	T	<0.86	:	<0.91	:	<0.85	:	<0.88	:	-		<0.87	:
2,4-Dinitrotoluene	mg/kg-dry	T	<0.34	:	<0.36	:	<0.34	:	<0.35	:	-		<0.35	:
2,6-Dinitrotoluene	mg/kg-dry	T	<0.34	:	<0.36	:	<0.34	:	<0.35	:	-		<0.35	:
2-Chloronaphthalene	mg/kg-dry	T	<0.34	:	<0.36	:	<0.34	:	<0.35	:	-		<0.35	:
2-Chlorophenol	mg/kg-dry	T	<0.34	:	<0.36	:	<0.34	:	<0.35	:	-		<0.35	:
2-Methylnaphthalene	mg/kg-dry	T	<0.34	:	<0.36	:	<0.34	:	<0.35	:	-		<0.35	:
2-Methylphenol	mg/kg-dry	T	<0.34	:	<0.36	:	<0.34	:	<0.35	:	-		<0.35	:
2-Nitroaniline	mg/kg-dry	T	<0.86	:	<0.91	:	<0.85	:	<0.88	:	-		<0.87	:

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Appendix A-7c
Soil - Random 0-6 inches
Validated Analytical Results

Parameter	Units	Fraction	MSS1-1	MSS1-10	MSS1-2	MSS1-3	MSS1-4	MSS1-4
		Sample Date	10/13/2002	10/14/2002	10/13/2002	10/13/2002	10/14/2002	10/14/2002
		Sample ID	MSS1-1-T01N-SOL	MSS1-10-T01N-SOL	MSS1-2-T01N-SOL	MSS1-3-T01N-SOL	MSS1-4-T01N-SOLDL	MSS1-4-T01N-SOL
		Exposure Area	SS1	SS1	SS1	SS1	SS1	SS1
2-Nitrophenol	mg/kg-dry	T	<0.34 :	<0.36 :	<0.34 :	<0.35 :	-	<0.35 :
3,3-Dichlorobenzidine	mg/kg-dry	T	<0.34 :	<0.36 :	<0.34 :	<0.35 :	-	<0.35 :
3-Nitroaniline	mg/kg-dry	T	<0.86 :	<0.91 :	<0.85 :	<0.88 :	-	<0.87 :
4,6-Dinitro-2-methylphenol	mg/kg-dry	T	<0.86 :	<0.91 :	<0.85 :	<0.88 :	-	<0.87 :
4-Bromophenyl phenyl ether	mg/kg-dry	T	<0.34 :	<0.36 :	<0.34 :	<0.35 :	-	<0.35 :
4-Chloro-3-methylphenol	mg/kg-dry	T	<0.34 :	<0.36 :	<0.34 :	<0.35 :	-	<0.35 :
4-Chloroaniline	mg/kg-dry	T	<0.34 :	<0.36 :	<0.34 :	<0.35 :	-	<0.35 :
4-Chlorophenyl phenyl ether	mg/kg-dry	T	<0.34 :	<0.36 :	<0.34 :	<0.35 :	-	<0.35 :
4-Methylphenol	mg/kg-dry	T	<0.34 :	<0.36 :	<0.34 :	<0.35 :	-	<0.35 :
4-Nitroaniline	mg/kg-dry	T	<0.86 :	<0.91 :	<0.85 :	<0.88 :	-	<0.87 :
4-Nitrophenol	mg/kg-dry	T	<0.86 :	<0.91 :	<0.85 :	<0.88 :	-	<0.87 J
Acenaphthene	mg/kg-dry	T	<0.34 :	<0.36 :	<0.34 :	<0.35 :	-	<0.35 :
Acenaphthylene	mg/kg-dry	T	<0.34 :	<0.36 :	<0.34 :	<0.35 :	-	<0.35 :
Anthracene	mg/kg-dry	T	<0.34 :	<0.36 J	<0.34 :	<0.35 :	-	<0.35 J
Benzaldehyde	mg/kg-dry	T	<0.34 J	0.032 J	<0.34 J	<0.35 J	-	<0.35 J
Benzo(a)anthracene	mg/kg-dry	T	<0.34 :	<0.36 :	<0.34 :	<0.35 :	-	<0.35 :
Benzo(a)pyrene	mg/kg-dry	T	<0.34 :	<0.36 :	<0.34 :	<0.35 :	-	<0.35 :
Benzo(b)fluoranthene	mg/kg-dry	T	<0.34 :	<0.36 :	<0.34 :	<0.35 :	-	<0.35 :
Benzo(g,h,i)perylene	mg/kg-dry	T	<0.34 :	<0.36 :	<0.34 :	<0.35 :	-	<0.35 :
Benzo(k)fluoranthene	mg/kg-dry	T	<0.34 :	<0.36 J	<0.34 :	<0.35 :	-	<0.35 :
Bis(2-chloroethoxy)methane	mg/kg-dry	T	<0.34 :	<0.36 :	<0.34 :	<0.35 :	-	<0.35 :
Bis(2-chloroethyl)ether	mg/kg-dry	T	<0.34 :	<0.36 :	<0.34 :	<0.35 :	-	<0.35 :
Bis(2-ethylhexyl)phthalate	mg/kg-dry	T	0.018 J	<0.36 :	0.088 J	<0.35 :	-	0.025 J
Butyl benzyl phthalate	mg/kg-dry	T	<0.34 :	<0.36 :	<0.34 :	<0.35 :	-	<0.35 :
Carbazole	mg/kg-dry	T	<0.34 :	<0.36 :	<0.34 :	<0.35 :	-	<0.35 :
Chrysene	mg/kg-dry	T	<0.34 :	<0.36 :	<0.34 :	<0.35 :	-	<0.35 :
Dibenz(a,h)anthracene	mg/kg-dry	T	<0.34 J	<0.36 :	<0.34 J	<0.35 J	-	<0.35 :
Dibenzofuran	mg/kg-dry	T	<0.34 :	<0.36 :	<0.34 :	<0.35 :	-	<0.35 :
Dichlorodiisopropyl ether	mg/kg-dry	T	<0.34 :	<0.36 :	<0.34 :	<0.35 :	-	<0.35 :
Diethylphthalate	mg/kg-dry	T	<0.34 :	<0.36 :	<0.34 :	<0.35 :	-	<0.35 :
Dimethylphthalate	mg/kg-dry	T	<0.34 :	<0.36 :	<0.34 :	<0.35 :	-	<0.35 :
Di-n-Butyl phthalate	mg/kg-dry	T	<0.34 :	<0.36 :	<0.34 :	<0.35 :	-	0.021 J
Di-n-Octyl phthalate	mg/kg-dry	T	<0.34 :	<0.36 :	<0.34 :	<0.35 :	-	<0.35 :
Fluoranthene	mg/kg-dry	T	<0.34 :	<0.36 :	<0.34 :	<0.35 :	-	<0.35 :

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Appendix A-7c
Soil - Random 0-6 inches
Validated Analytical Results

Parameter	Units	Exposure Area Fraction	Site ID / Sample Date / Sample ID / Exposure Area											
			MSS1-1 10/13/2002 MSS1-1-T01N-SOL SS1		MSS1-10 10/14/2002 MSS1-10-T01N-SOL SS1		MSS1-2 10/13/2002 MSS1-2-T01N-SOL SS1		MSS1-3 10/13/2002 MSS1-3-T01N-SOL SS1		MSS1-4 10/14/2002 MSS1-4-T01N-SOLDL SS1		MSS1-4 10/14/2002 MSS1-4-T01N-SOL SS1	
Fluorene	mg/kg-dry	T	<0.34	:	<0.36	:	<0.34	:	<0.35	:	-		<0.35	:
Hexachlorobenzene	mg/kg-dry	T	<0.34	:	<0.36	:	<0.34	:	<0.35	:	-		<0.35	:
Hexachlorobutadiene	mg/kg-dry	T	<0.34	:	<0.36	:	<0.34	:	<0.35	:	-		<0.35	:
Hexachlorocyclopentadiene	mg/kg-dry	T	<0.34	J	<0.36	:	<0.34	J	<0.35	J	-		<0.35	:
Hexachloroethane	mg/kg-dry	T	<0.34	:	<0.36	:	<0.34	:	<0.35	:	-		<0.35	:
Indeno(1,2,3-cd)pyrene	mg/kg-dry	T	<0.34	:	<0.36	:	<0.34	:	<0.35	:	-		<0.35	:
Isophorone	mg/kg-dry	T	<0.34	:	<0.36	:	<0.34	:	<0.35	:	-		<0.35	:
Naphthalene	mg/kg-dry	T	<0.34	:	<0.36	:	<0.34	:	<0.35	:	-		<0.35	:
Nitrobenzene	mg/kg-dry	T	<0.34	:	<0.36	:	<0.34	:	<0.35	:	-		<0.35	:
N-Nitrosodi-n-propylamine	mg/kg-dry	T	<0.34	:	<0.36	:	<0.34	:	<0.35	:	-		<0.35	:
N-Nitrosodiphenylamine	mg/kg-dry	T	<0.34	:	<0.36	:	<0.34	:	<0.35	:	-		<0.35	:
Pentachlorophenol	mg/kg-dry	T	<0.86	J	<0.91	:	<0.85	J	<0.88	J	-		<0.87	:
Phenanthrene	mg/kg-dry	T	<0.34	:	<0.36	:	<0.34	:	<0.35	:	-		<0.35	:
Phenol	mg/kg-dry	T	<0.34	:	<0.36	:	<0.34	:	<0.35	:	-		<0.35	:
Pyrene	mg/kg-dry	T	<0.34	:	<0.36	:	<0.34	:	<0.35	:	-		<0.35	:
Pesticides-PCBs														
a-Chlordane	mg/kg-dry	T	<0.0018	J	-		-		-		-		-	
Aldrin	mg/kg-dry	T	<0.0018	J	-		-		-		-		-	
alpha-Hexachlorocyclohexane	mg/kg-dry	T	<0.0018	:	-		-		-		-		-	
Aroclor 1016	mg/kg-dry	T	<0.034	:	<0.036	:	<0.034	:	<0.035	:	-		<0.035	:
Aroclor 1221	mg/kg-dry	T	<0.07	:	<0.074	:	<0.069	:	<0.071	:	-		<0.07	:
Aroclor 1232	mg/kg-dry	T	<0.034	:	<0.036	:	<0.034	:	<0.035	:	-		<0.035	:
Aroclor 1242	mg/kg-dry	T	<0.034	:	<0.036	:	<0.034	:	<0.035	:	-		<0.035	:
Aroclor 1248	mg/kg-dry	T	<0.034	:	<0.036	:	<0.034	:	<0.035	:	-		<0.035	:
Aroclor 1254	mg/kg-dry	T	<0.034	:	1.6	:	<0.034	:	<0.035	:	3.3	:	-	
Aroclor 1260	mg/kg-dry	T	<0.034	:	<0.036	:	<0.034	:	<0.035	:	-		<0.035	:
beta-Hexachlorocyclohexane	mg/kg-dry	T	<0.0018	:	-		-		-		-		-	
delta-Hexachlorocyclohexane	mg/kg-dry	T	<0.0018	:	-		-		-		-		-	
Dichlorodiphenyldichloroethane	mg/kg-dry	T	<0.0034	J	-		-		-		-		-	
Dichlorodiphenyldichloroethylene	mg/kg-dry	T	<0.0034	J	-		-		-		-		-	
Dichlorodiphenyltrichloroethane	mg/kg-dry	T	<0.0034	J	-		-		-		-		-	
Dieldrin	mg/kg-dry	T	<0.0034	J	-		-		-		-		-	
Endosulfan I	mg/kg-dry	T	<0.0018	J	-		-		-		-		-	
Endosulfan II	mg/kg-dry	T	<0.0034	J	-		-		-		-		-	

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Appendix A-7c
Soil - Random 0-6 inches
Validated Analytical Results

Parameter	Units	Exposure Area Fraction	Site ID / Sample Date / Sample ID / Exposure Area						
			MSS1-1	MSS1-10	MSS1-2	MSS1-3	MSS1-4	MSS1-4
			10/13/2002	10/14/2002	10/13/2002	10/13/2002	10/14/2002	10/14/2002
			MSS1-1-T01N-SOL	MSS1-10-T01N-SOL	MSS1-2-T01N-SOL	MSS1-3-T01N-SOL	MSS1-4-T01N-SOLDL	MSS1-4-T01N-SOL
			SS1	SS1	SS1	SS1	SS1	SS1
Endosulfan sulfate	mg/kg-dry	T	<0.0034 :	-	-	-	-	-
Endrin	mg/kg-dry	T	<0.0034 J	-	-	-	-	-
Endrin aldehyde	mg/kg-dry	T	<0.0034 :	-	-	-	-	-
Endrin ketone	mg/kg-dry	T	<0.0034 :	-	-	-	-	-
g-Chlordane	mg/kg-dry	T	<0.0018 J	-	-	-	-	-
Heptachlor	mg/kg-dry	T	<0.0018 J	-	-	-	-	-
Heptachlor epoxide	mg/kg-dry	T	<0.0018 :	-	-	-	-	-
Lindane	mg/kg-dry	T	<0.0018 :	-	-	-	-	-
Methoxychlor	mg/kg-dry	T	<0.018 :	-	-	-	-	-
Toxaphene	mg/kg-dry	T	<0.18 :	-	-	-	-	-
Dibenzodioxins-Dibenzofurans								
1,2,3,4,6,7,8,9-Octachlorodibenzofur	pg/g	T	<0.87 J	-	-	-	-	-
1,2,3,4,6,7,8,9-Octachlorodibenzo-p	pg/g	T	<18. :	-	-	-	-	-
1,2,3,4,6,7,8-Heptachlorodibenzofur	pg/g	T	<0.4 J	-	-	-	-	-
1,2,3,4,6,7,8-Heptachlorodibenzo-p-	pg/g	T	<1.7 J	-	-	-	-	-
1,2,3,4,7,8,9-Heptachlorodibenzofur	pg/g	T	<0.12 :	-	-	-	-	-
1,2,3,4,7,8-Hexachlorodibenzofuran	pg/g	T	<0.4 :	-	-	-	-	-
1,2,3,4,7,8-hexachlorodibenzo-p-dio	pg/g	T	<0.11 :	-	-	-	-	-
1,2,3,6,7,8-Hexachlorodibenzofuran	pg/g	T	<0.12 :	-	-	-	-	-
1,2,3,6,7,8-Hexachlorodibenzo-p-dio	pg/g	T	<0.11 :	-	-	-	-	-
1,2,3,7,8,9-Hexachlorodibenzofuran	pg/g	T	<0.064 :	-	-	-	-	-
1,2,3,7,8,9-Hexachlorodibenzo-p-dio	pg/g	T	<0.11 :	-	-	-	-	-
1,2,3,7,8-Pentachlorodibenzofuran	pg/g	T	<0.11 :	-	-	-	-	-
1,2,3,7,8-Pentachlorodibenzo-p-diox	pg/g	T	<0.12 :	-	-	-	-	-
2,3,4,6,7,8-Hexachlorodibenzofuran	pg/g	T	<0.059 :	-	-	-	-	-
2,3,4,7,8-Pentachlorodibenzofuran	pg/g	T	<0.26 J	-	-	-	-	-
2,3,7,8-Tetrachlorodibenzofuran	pg/g	T	0.34 J	-	-	-	-	-
2,3,7,8-Tetrachlorodibenzo-p-dioxin	pg/g	T	<0.24 :	-	-	-	-	-

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Appendix A-7c
Soil - Random 0-6 inches
Validated Analytical Results

Parameter	Units	Exposure Area Fraction	Site ID / Sample Date / Sample ID / Exposure Area	MSS1-5 10/14/2002 MSS1-5-T01N-SOL SS1		MSS1-6 10/15/2002 MSS1-6-T01N-SOL SS1		MSS1-7 10/14/2002 MSS1-7-T01N-SOL SS1		MSS1-8 10/13/2002 MSS1-8-T01N-SOL SS1		MSS1-9 10/14/2002 MSS1-9-T01N-SOL SS1		MSS2-1 10/13/2002 MSS2-1-T01N-SOL SS2	
General Chemistry															
Ammonia	mg/kg-dry	T		34.8	:	16.8	:	39.3	:	93.7	:	37.9	:	82.4	:
Chloride	mg/kg-dry	T		80.9	J	<2.1	J	2.4	J	<2.2	J	2.5	J	4.2	J
Fluoride	mg/kg-dry	T		2.6	J	0.5	J	0.63	J	0.86	J	0.95	J	4.3	J
Nitrate	mg/kg-dry	T		9.7	J	3.3	J	<2.1	J	3.3	J	2.8	J	2.2	J
Phosphorus	mg/kg-dry	T		698.	J	980.	:	1010.	J	142.	J	662.	J	665.	J
Sulfate	mg/kg-dry	T		1860.	J	11.5	J	45.5	J	9.5	J	32.	J	702.	J
Total Kjeldahl Nitrogen	mg/kg-dry	T		121.	:	397.	:	304.	:	463.	:	486.	:	198.	:
Total Organic Carbon	mg/kg-dry	T		3100.	J	5010.	:	6360.	J	10600.	J	10100.	J	5710.	J
Laboratory Parameters															
pH	SU	T		7.3	:	8.2	:	8.	:	8.2	:	8.	:	4.	:
Solids, Percent	%	T		93.5	:	96.8	:	95.6	:	92.9	:	94.7	:	96.5	:
Specific Conductance	umhos/cm	T		526.	:	54.1	:	70.1	:	51.2	J	58.	:	466.	:
Geotechnical															
Organic Soils	%	T		1.87	J	2.56	J	2.09	J	4.48	J	2.56	J	3.6	:
Physical Properties															
Cation-Exchange Capacity	meq/100g	T		15.9	:	15.2	:	12.9	:	25.	:	15.4	:	9.8	:
Sodium Absorption Ratio	ratio	T		0.65	:	0.08	:	0.13	:	0.13	:	0.08	:	0.05	:
Metals															
Aluminum	mg/kg-dry	T		11200.	:	15900.	:	10000.	:	21700.	J	9260.	:	3610.	:
Antimony	mg/kg-dry	T		<0.26	J	<0.17	:	<0.26	J	<0.17	J	<0.24	J	<0.16	J
Arsenic	mg/kg-dry	T		4.	:	4.	:	4.7	:	3.	:	3.8	:	6.1	:
Barium	mg/kg-dry	T		78.4	:	76.2	:	70.2	:	135.	:	81.7	:	162.	:
Beryllium	mg/kg-dry	T		1.2	:	1.2	:	0.81	:	1.3	J	0.93	:	0.19	:
Boron	mg/kg-dry	T		3.2	:	5.5	J	2.5	:	<0.56	J	2.9	:	<0.38	J
Cadmium	mg/kg-dry	T		0.81	:	0.94	J	0.64	:	<0.025	:	2.5	:	<0.024	J
Calcium	mg/kg-dry	T		10800.	:	11800.	:	10400.	:	18600.	J	6430.	:	991.	:
Chromium	mg/kg-dry	T		32.2	:	63.	:	41.4	:	73.7	:	29.9	:	8.4	:
Cobalt	mg/kg-dry	T		9.9	:	18.4	:	9.1	:	24.3	J	8.7	:	0.75	:
Copper	mg/kg-dry	T		77.4	:	86.2	:	74.	:	74.9	:	93.3	:	45.5	:
Iron	mg/kg-dry	T		20100.	:	28800.	:	19000.	:	33400.	J	22800.	:	22600.	:
Lead	mg/kg-dry	T		61.	:	70.7	:	70.2	:	29.5	J	105.	:	127.	:
Magnesium	mg/kg-dry	T		6770.	:	13200.	:	7130.	:	17900.	:	5810.	:	1320.	:
Manganese	mg/kg-dry	T		660.	J	903.	:	638.	J	927.	J	1100.	J	89.7	J

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R = Qualified as rejected value from data validation and results are considered unusable for any purpose

T = Total Fraction

Appendix A-7c
Soil - Random 0-6 inches
Validated Analytical Results

Parameter	Units	Exposure Area Fraction	Site ID	MSS1-5		MSS1-6		MSS1-7		MSS1-8		MSS1-9		MSS2-1	
			Sample Date	10/14/2002		10/15/2002		10/14/2002		10/13/2002		10/14/2002		10/13/2002	
			Sample ID	MSS1-5-T01N-SOL		MSS1-6-T01N-SOL		MSS1-7-T01N-SOL		MSS1-8-T01N-SOL		MSS1-9-T01N-SOL		MSS2-1-T01N-SOL	
			Exposure Area	SS1		SS1		SS1		SS1		SS1		SS2	
Mercury	mg/kg-dry	T		<0.017	:	<0.015	J	<0.017	:	<0.017	:	0.04	:	<0.017	:
Molybdenum	mg/kg-dry	T		1200.	:	88.2	:	863.	:	33.1	:	618.	:	42.2	:
Nickel	mg/kg-dry	T		23.5	J	43.5	:	25.6	J	54.8	J	22.	J	3.5	J
Potassium	mg/kg-dry	T		2400.	J	3510.	:	2320.	J	5150.	J	2260.	J	3140.	J
Selenium	mg/kg-dry	T		<0.68	J	0.63	J	<0.69	J	0.53	J	<0.65	J	1.4	J
Silver	mg/kg-dry	T		0.84	:	0.39	J	0.71	:	0.51	:	1.1	:	0.95	:
Sodium	mg/kg-dry	T		<73.1	:	<45.6	:	<82.2	:	<45.7	:	<85.4	:	197.	:
Thallium	mg/kg-dry	T		0.21	:	0.23	:	0.22	:	0.37	:	0.21	:	0.28	:
Vanadium	mg/kg-dry	T		37.	:	62.	:	39.1	:	67.6	:	29.9	:	10.7	:
Zinc	mg/kg-dry	T		130.	J	109.	:	126.	J	90.9	J	205.	J	21.1	J
Volatile Organics															
1,1,1-Trichloroethane	mg/kg-dry	T		<0.008	:	<0.008	:	<0.008	:	<0.007	:	<0.011	:	<0.011	:
1,1,2,2-Tetrachloroethane	mg/kg-dry	T		<0.008	:	<0.008	:	<0.008	:	<0.007	:	<0.011	:	<0.011	:
1,1,2-Trichloro-1,2,2-trifluoroethane	mg/kg-dry	T		<0.008	:	<0.008	:	<0.008	:	<0.007	:	<0.011	:	<0.011	:
1,1,2-Trichloroethane	mg/kg-dry	T		<0.008	:	<0.008	:	<0.008	:	<0.007	:	<0.011	:	<0.011	:
1,1-Dichloroethane	mg/kg-dry	T		<0.008	:	<0.008	:	<0.008	:	<0.007	:	<0.011	:	<0.011	:
1,1-Dichloroethene	mg/kg-dry	T		<0.008	:	<0.008	:	<0.008	:	<0.007	:	<0.011	:	<0.011	J
1,2,4-Trichlorobenzene	mg/kg-dry	T		<0.008	:	<0.008	:	<0.008	:	<0.007	:	<0.011	:	<0.011	:
1,2-Dibromo-3-chloropropane	mg/kg-dry	T		<0.008	:	<0.008	:	<0.008	:	<0.007	:	<0.011	:	<0.011	:
1,2-Dichlorobenzene	mg/kg-dry	T		<0.008	:	<0.008	:	<0.008	:	<0.007	:	<0.011	:	<0.011	:
1,2-Dichloroethane	mg/kg-dry	T		<0.008	:	<0.008	:	<0.008	:	<0.007	:	<0.011	:	<0.011	:
1,2-Dichloroethene (total)	mg/kg-dry	T		<0.008	:	<0.008	:	<0.008	:	<0.007	:	<0.011	:	<0.011	:
1,2-Dichloropropane	mg/kg-dry	T		<0.008	:	<0.008	:	<0.008	:	<0.007	:	<0.011	:	<0.011	:
1,3-Dichlorobenzene	mg/kg-dry	T		<0.008	:	<0.008	:	<0.008	:	<0.007	:	<0.011	:	<0.011	:
1,4-Dichlorobenzene	mg/kg-dry	T		<0.008	:	<0.008	:	<0.008	:	<0.007	:	<0.011	:	<0.011	:
2-Butanone	mg/kg-dry	T		<0.008	:	<0.008	:	<0.008	:	<0.007	:	<0.011	:	<0.011	:
2-Hexanone	mg/kg-dry	T		<0.008	:	<0.008	:	<0.008	J	<0.007	:	<0.011	J	<0.011	J
4-Methyl-2-pentanone	mg/kg-dry	T		<0.008	:	<0.008	:	<0.008	:	<0.007	:	<0.011	:	<0.011	J
Acetone	mg/kg-dry	T		0.002	J	0.11	:	<0.008	:	<0.007	J	<0.011	:	<0.011	:
Benzene	mg/kg-dry	T		<0.008	:	<0.008	:	<0.008	:	<0.007	:	<0.011	:	<0.011	:
Bromodichloromethane	mg/kg-dry	T		<0.008	:	<0.008	:	<0.008	:	<0.007	:	<0.011	:	<0.011	:
Bromoform	mg/kg-dry	T		<0.008	:	<0.008	:	<0.008	:	<0.007	:	<0.011	:	<0.011	:
Bromomethane	mg/kg-dry	T		<0.008	:	<0.008	:	<0.008	:	<0.007	:	<0.011	:	<0.011	:
Carbon disulfide	mg/kg-dry	T		<0.008	:	<0.008	:	<0.008	:	<0.007	:	<0.011	:	<0.011	:

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T = Total Fraction

Appendix A-7c
Soil - Random 0-6 inches
Validated Analytical Results

Parameter	Units	Exposure Area Fraction	Site ID / Sample Date / Sample ID		MSS1-5 10/14/2002 MSS1-5-T01N-SOL SS1		MSS1-6 10/15/2002 MSS1-6-T01N-SOL SS1		MSS1-7 10/14/2002 MSS1-7-T01N-SOL SS1		MSS1-8 10/13/2002 MSS1-8-T01N-SOL SS1		MSS1-9 10/14/2002 MSS1-9-T01N-SOL SS1		MSS2-1 10/13/2002 MSS2-1-T01N-SOL SS2	
Carbon tetrachloride	mg/kg-dry	T		<0.008	:	<0.008	:	<0.008	:	<0.007	:	<0.011	:	<0.011	:
Chlorobenzene	mg/kg-dry	T		<0.008	:	<0.008	:	<0.008	:	<0.007	:	<0.011	:	<0.011	:
Chloroethane	mg/kg-dry	T		<0.008	:	<0.008	:	<0.008	:	<0.007	:	<0.011	:	<0.011	:
Chloroform	mg/kg-dry	T		<0.008	:	<0.008	:	<0.008	:	<0.007	:	<0.011	:	<0.011	:
Chloromethane	mg/kg-dry	T		<0.008	:	<0.008	:	<0.008	:	<0.007	:	<0.011	:	<0.011	:
cis-1,2-Dichloroethene	mg/kg-dry	T		<0.008	:	<0.008	:	<0.008	:	<0.007	:	<0.011	:	<0.011	:
cis-1,3-Dichloropropene	mg/kg-dry	T		<0.008	:	<0.008	:	<0.008	:	<0.007	:	<0.011	:	<0.011	:
Dibromochloromethane	mg/kg-dry	T		<0.008	:	<0.008	:	<0.008	:	<0.007	:	<0.011	:	<0.011	:
Dichlorodifluoromethane	mg/kg-dry	T		<0.008	:	<0.008	:	<0.008	:	<0.007	:	<0.011	:	<0.011	J
Ethylbenzene	mg/kg-dry	T		<0.008	:	<0.008	:	<0.008	:	<0.007	:	<0.011	:	<0.011	:
Methylene chloride	mg/kg-dry	T		<0.008	:	<0.008	:	<0.008	:	<0.007	:	<0.011	:	<0.011	:
Styrene	mg/kg-dry	T		<0.008	:	<0.008	:	<0.008	:	<0.007	:	<0.011	:	<0.011	:
Tetrachloroethene	mg/kg-dry	T		<0.008	:	<0.008	:	<0.008	:	<0.007	:	<0.011	:	<0.011	:
Toluene	mg/kg-dry	T		<0.008	:	<0.008	:	<0.008	:	<0.007	:	<0.011	:	<0.011	:
Total Xylene	mg/kg-dry	T		<0.008	:	<0.008	:	<0.008	:	<0.007	:	<0.011	:	<0.011	:
trans-1,2-Dichloroethene	mg/kg-dry	T		<0.008	J	<0.008	J	<0.008	:	<0.007	J	<0.011	:	<0.011	:
trans-1,3-Dichloropropene	mg/kg-dry	T		<0.008	:	<0.008	:	<0.008	:	<0.007	:	<0.011	:	<0.011	:
Trichloroethene	mg/kg-dry	T		<0.008	:	<0.008	:	<0.008	:	<0.007	:	<0.011	:	<0.011	:
Trichlorofluoromethane	mg/kg-dry	T		<0.008	:	<0.008	:	<0.008	:	<0.007	:	<0.011	:	<0.011	J
Vinyl chloride	mg/kg-dry	T		<0.008	:	<0.008	:	<0.008	:	<0.007	:	<0.011	:	<0.011	J
Semi-Volatile Organics																
1,1`-Biphenyl	mg/kg-dry	T		<0.35	J	<0.34	:	<0.34	:	<0.35	:	<0.35	:	<0.34	:
2,4,5-Trichlorophenol	mg/kg-dry	T		<0.88	:	<0.85	:	<0.86	:	<0.89	:	<0.87	:	<0.86	:
2,4,6-Trichlorophenol	mg/kg-dry	T		<0.35	:	<0.34	:	<0.34	:	<0.35	:	<0.35	:	<0.34	:
2,4-Dichlorophenol	mg/kg-dry	T		<0.35	:	<0.34	:	<0.34	:	<0.35	:	<0.35	:	<0.34	:
2,4-Dimethylphenol	mg/kg-dry	T		<0.35	:	<0.34	:	<0.34	:	<0.35	:	<0.35	:	<0.34	:
2,4-Dinitrophenol	mg/kg-dry	T		<0.88	:	<0.85	:	<0.86	:	<0.89	:	<0.87	:	<0.86	:
2,4-Dinitrotoluene	mg/kg-dry	T		<0.35	:	<0.34	:	<0.34	:	<0.35	:	<0.35	:	<0.34	:
2,6-Dinitrotoluene	mg/kg-dry	T		<0.35	:	<0.34	:	<0.34	:	<0.35	:	<0.35	:	<0.34	:
2-Chloronaphthalene	mg/kg-dry	T		<0.35	:	<0.34	:	<0.34	:	<0.35	J	<0.35	:	<0.34	J
2-Chlorophenol	mg/kg-dry	T		<0.35	:	<0.34	:	<0.34	:	<0.35	:	<0.35	:	<0.34	:
2-Methylnaphthalene	mg/kg-dry	T		<0.35	:	<0.34	:	<0.34	:	<0.35	:	<0.35	:	<0.34	:
2-Methylphenol	mg/kg-dry	T		<0.35	:	<0.34	:	<0.34	:	<0.35	:	<0.35	:	<0.34	:
2-Nitroaniline	mg/kg-dry	T		<0.88	:	<0.85	:	<0.86	:	<0.89	:	<0.87	:	<0.86	:

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T = Total Fraction

Appendix A-7c
Soil - Random 0-6 inches
Validated Analytical Results

Parameter	Units	Exposure Area Fraction	Site ID / Sample Date / Sample ID		MSS1-5 10/14/2002 MSS1-5-T01N-SOL SS1		MSS1-6 10/15/2002 MSS1-6-T01N-SOL SS1		MSS1-7 10/14/2002 MSS1-7-T01N-SOL SS1		MSS1-8 10/13/2002 MSS1-8-T01N-SOL SS1		MSS1-9 10/14/2002 MSS1-9-T01N-SOL SS1		MSS2-1 10/13/2002 MSS2-1-T01N-SOL SS2	
2-Nitrophenol	mg/kg-dry	T		<0.35	:	<0.34	:	<0.34	:	<0.35	:	<0.35	:	<0.34	:
3,3-Dichlorobenzidine	mg/kg-dry	T		<0.35	:	<0.34	:	<0.34	:	<0.35	:	<0.35	:	<0.34	:
3-Nitroaniline	mg/kg-dry	T		<0.88	:	<0.85	:	<0.86	:	<0.89	:	<0.87	:	<0.86	:
4,6-Dinitro-2-methylphenol	mg/kg-dry	T		<0.88	:	<0.85	:	<0.86	:	<0.89	:	<0.87	:	<0.86	:
4-Bromophenyl phenyl ether	mg/kg-dry	T		<0.35	:	<0.34	:	<0.34	:	<0.35	:	<0.35	:	<0.34	:
4-Chloro-3-methylphenol	mg/kg-dry	T		<0.35	:	<0.34	:	<0.34	:	<0.35	:	<0.35	:	<0.34	:
4-Chloroaniline	mg/kg-dry	T		<0.35	:	<0.34	:	<0.34	:	<0.35	:	<0.35	:	<0.34	:
4-Chlorophenyl phenyl ether	mg/kg-dry	T		<0.35	:	<0.34	:	<0.34	:	<0.35	:	<0.35	:	<0.34	:
4-Methylphenol	mg/kg-dry	T		<0.35	:	<0.34	:	<0.34	:	<0.35	:	<0.35	:	<0.34	:
4-Nitroaniline	mg/kg-dry	T		<0.88	:	<0.85	:	<0.86	:	<0.89	:	<0.87	:	<0.86	:
4-Nitrophenol	mg/kg-dry	T		<0.88	:	<0.85	:	<0.86	:	<0.89	:	<0.87	:	<0.86	:
Acenaphthene	mg/kg-dry	T		<0.35	:	<0.34	:	<0.34	:	<0.35	:	<0.35	:	<0.34	:
Acenaphthylene	mg/kg-dry	T		<0.35	:	<0.34	:	<0.34	:	<0.35	:	<0.35	:	<0.34	:
Anthracene	mg/kg-dry	T		<0.35	:	<0.34	J	<0.34	J	<0.35	:	<0.35	J	<0.34	:
Benzaldehyde	mg/kg-dry	T		<0.35	J	<0.34	J	<0.34	J	<0.35	J	<0.35	J	<0.34	J
Benzo(a)anthracene	mg/kg-dry	T		<0.35	:	<0.34	:	<0.34	:	0.017	J	<0.35	:	<0.34	:
Benzo(a)pyrene	mg/kg-dry	T		<0.35	:	<0.34	:	<0.34	:	0.018	J	<0.35	:	<0.34	:
Benzo(b)fluoranthene	mg/kg-dry	T		<0.35	:	<0.34	:	<0.34	:	0.018	J	<0.35	:	<0.34	:
Benzo(g,h,i)perylene	mg/kg-dry	T		<0.35	:	<0.34	:	<0.34	:	<0.35	:	<0.35	:	<0.34	:
Benzo(k)fluoranthene	mg/kg-dry	T		<0.35	:	<0.34	:	<0.34	:	0.019	J	<0.35	:	<0.34	:
Bis(2-chloroethoxy)methane	mg/kg-dry	T		<0.35	:	<0.34	:	<0.34	:	<0.35	:	<0.35	:	<0.34	:
Bis(2-chloroethyl)ether	mg/kg-dry	T		<0.35	:	<0.34	:	<0.34	:	<0.35	:	<0.35	:	<0.34	:
Bis(2-ethylhexyl)phthalate	mg/kg-dry	T		<0.35	:	<0.34	:	<0.34	:	<0.35	:	0.017	J	<0.34	:
Butyl benzyl phthalate	mg/kg-dry	T		<0.35	J	<0.34	:	<0.34	:	<0.35	:	<0.35	:	<0.34	:
Carbazole	mg/kg-dry	T		<0.35	:	<0.34	:	<0.34	:	<0.35	:	<0.35	:	<0.34	:
Chrysene	mg/kg-dry	T		<0.35	:	<0.34	:	<0.34	:	0.02	J	0.017	J	<0.34	:
Dibenz(a,h)anthracene	mg/kg-dry	T		<0.35	:	<0.34	:	<0.34	:	<0.35	:	<0.35	:	<0.34	:
Dibenzofuran	mg/kg-dry	T		<0.35	:	<0.34	:	<0.34	:	<0.35	:	<0.35	:	<0.34	:
Dichlorodiisopropyl ether	mg/kg-dry	T		<0.35	:	<0.34	:	<0.34	:	<0.35	:	<0.35	:	<0.34	:
Diethylphthalate	mg/kg-dry	T		<0.35	:	<0.34	:	<0.34	:	<0.35	:	<0.35	:	<0.34	:
Dimethylphthalate	mg/kg-dry	T		<0.35	:	<0.34	:	<0.34	:	<0.35	:	<0.35	:	<0.34	:
Di-n-Butyl phthalate	mg/kg-dry	T		<0.35	:	<0.34	:	<0.34	:	<0.35	:	<0.35	:	<0.34	:
Di-n-Octyl phthalate	mg/kg-dry	T		<0.35	:	<0.34	:	<0.34	:	<0.35	:	<0.35	:	<0.34	:
Fluoranthene	mg/kg-dry	T		<0.35	:	<0.34	:	<0.34	:	0.02	J	<0.35	:	<0.34	J

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T = Total Fraction

Appendix A-7c
Soil - Random 0-6 inches
Validated Analytical Results

Parameter	Units	Exposure Area Fraction	Site ID / Sample Date / Sample ID	MSS1-5 10/14/2002 MSS1-5-T01N-SOL SS1	MSS1-6 10/15/2002 MSS1-6-T01N-SOL SS1	MSS1-7 10/14/2002 MSS1-7-T01N-SOL SS1	MSS1-8 10/13/2002 MSS1-8-T01N-SOL SS1	MSS1-9 10/14/2002 MSS1-9-T01N-SOL SS1	MSS2-1 10/13/2002 MSS2-1-T01N-SOL SS2
Fluorene	mg/kg-dry	T		<0.35 :	<0.34 :	<0.34 :	<0.35 :	<0.35 :	<0.34 :
Hexachlorobenzene	mg/kg-dry	T		<0.35 :	<0.34 :	<0.34 J	<0.35 :	<0.35 :	<0.34 :
Hexachlorobutadiene	mg/kg-dry	T		<0.35 :	<0.34 :	<0.34 :	<0.35 :	<0.35 :	<0.34 :
Hexachlorocyclopentadiene	mg/kg-dry	T		<0.35 :	<0.34 :	<0.34 :	<0.35 :	<0.35 :	<0.34 :
Hexachloroethane	mg/kg-dry	T		<0.35 :	<0.34 :	<0.34 :	<0.35 :	<0.35 :	<0.34 :
Indeno(1,2,3-cd)pyrene	mg/kg-dry	T		<0.35 :	<0.34 :	<0.34 :	<0.35 :	<0.35 :	<0.34 :
Isophorone	mg/kg-dry	T		<0.35 :	<0.34 :	<0.34 :	<0.35 :	<0.35 :	<0.34 :
Naphthalene	mg/kg-dry	T		<0.35 :	<0.34 :	<0.34 :	<0.35 :	<0.35 :	<0.34 :
Nitrobenzene	mg/kg-dry	T		<0.35 :	<0.34 :	<0.34 :	<0.35 :	<0.35 :	<0.34 :
N-Nitrosodi-n-propylamine	mg/kg-dry	T		<0.35 :	<0.34 :	<0.34 :	<0.35 :	<0.35 :	<0.34 :
N-Nitrosodiphenylamine	mg/kg-dry	T		<0.35 :	<0.34 :	<0.34 :	<0.35 :	<0.35 :	<0.34 :
Pentachlorophenol	mg/kg-dry	T		<0.88 J	<0.85 J	<0.86 :	<0.89 :	<0.87 J	<0.86 :
Phenanthrene	mg/kg-dry	T		<0.35 :	<0.34 :	<0.34 :	<0.35 :	<0.35 :	<0.34 :
Phenol	mg/kg-dry	T		<0.35 :	<0.34 :	<0.34 :	<0.35 :	<0.35 :	<0.34 :
Pyrene	mg/kg-dry	T		<0.35 J	<0.34 :	<0.34 :	0.027 J	0.019 J	<0.34 :
Pesticides-PCBs									
a-Chlordane	mg/kg-dry	T		-	-	-	-	-	<0.0018 :
Aldrin	mg/kg-dry	T		-	-	-	-	-	<0.0018 :
alpha-Hexachlorocyclohexane	mg/kg-dry	T		-	-	-	-	-	<0.0018 :
Aroclor 1016	mg/kg-dry	T		<0.035 :	<0.034 :	<0.034 :	<0.036 :	<0.035 :	-
Aroclor 1221	mg/kg-dry	T		<0.071 :	<0.069 :	<0.07 :	<0.072 :	<0.07 :	-
Aroclor 1232	mg/kg-dry	T		<0.035 :	<0.034 :	<0.034 :	<0.036 :	<0.035 :	-
Aroclor 1242	mg/kg-dry	T		<0.035 :	<0.034 :	<0.034 :	<0.036 :	<0.035 :	-
Aroclor 1248	mg/kg-dry	T		<0.035 :	<0.034 :	<0.034 :	<0.036 :	<0.035 :	-
Aroclor 1254	mg/kg-dry	T		0.78 J	0.12 J	0.39 J	<0.036 :	0.65 J	-
Aroclor 1260	mg/kg-dry	T		<0.035 :	<0.034 :	<0.034 :	<0.036 :	<0.035 :	-
beta-Hexachlorocyclohexane	mg/kg-dry	T		-	-	-	-	-	<0.0018 :
delta-Hexachlorocyclohexane	mg/kg-dry	T		-	-	-	-	-	<0.0018 :
Dichlorodiphenyldichloroethane	mg/kg-dry	T		-	-	-	-	-	<0.0034 :
Dichlorodiphenyldichloroethylene	mg/kg-dry	T		-	-	-	-	-	<0.0034 :
Dichlorodiphenyltrichloroethane	mg/kg-dry	T		-	-	-	-	-	<0.0034 :
Dieldrin	mg/kg-dry	T		-	-	-	-	-	<0.0034 :
Endosulfan I	mg/kg-dry	T		-	-	-	-	-	<0.0018 :
Endosulfan II	mg/kg-dry	T		-	-	-	-	-	<0.0034 :

J = Qualified as estimated during data validation
R = Qualified as rejected value from data validation and results are considered unusable for any purpose
T = Total Fraction

Appendix A-7c
Soil - Random 0-6 inches
Validated Analytical Results

Parameter	Units	Exposure Area Fraction	Site ID / Sample Date / Sample ID	MSS1-5 10/14/2002 MSS1-5-T01N-SOL SS1	MSS1-6 10/15/2002 MSS1-6-T01N-SOL SS1	MSS1-7 10/14/2002 MSS1-7-T01N-SOL SS1	MSS1-8 10/13/2002 MSS1-8-T01N-SOL SS1	MSS1-9 10/14/2002 MSS1-9-T01N-SOL SS1	MSS2-1 10/13/2002 MSS2-1-T01N-SOL SS2	
Endosulfan sulfate	mg/kg-dry	T		-	-	-	-	-	<0.0034	:
Endrin	mg/kg-dry	T		-	-	-	-	-	<0.0034	:
Endrin aldehyde	mg/kg-dry	T		-	-	-	-	-	<0.0034	:
Endrin ketone	mg/kg-dry	T		-	-	-	-	-	<0.0034	:
g-Chlordane	mg/kg-dry	T		-	-	-	-	-	<0.0018	:
Heptachlor	mg/kg-dry	T		-	-	-	-	-	<0.0018	:
Heptachlor epoxide	mg/kg-dry	T		-	-	-	-	-	<0.0018	:
Lindane	mg/kg-dry	T		-	-	-	-	-	<0.0018	:
Methoxychlor	mg/kg-dry	T		-	-	-	-	-	<0.018	:
Toxaphene	mg/kg-dry	T		-	-	-	-	-	<0.18	:
Dibenzodioxins-Dibenzofurans										
1,2,3,4,6,7,8,9-Octachlorodibenzofur	pg/g	T		-	-	-	-	-	<0.59	:
1,2,3,4,6,7,8,9-Octachlorodibenzo-p	pg/g	T		-	-	-	-	-	<5.	:
1,2,3,4,6,7,8-Heptachlorodibenzofur	pg/g	T		-	-	-	-	-	<0.48	J
1,2,3,4,6,7,8-Heptachlorodibenzo-p-	pg/g	T		-	-	-	-	-	<0.77	:
1,2,3,4,7,8,9-Heptachlorodibenzofur	pg/g	T		-	-	-	-	-	<0.14	:
1,2,3,4,7,8-Hexachlorodibenzofuran	pg/g	T		-	-	-	-	-	<0.064	:
1,2,3,4,7,8-hexachlorodibenzo-p-dio	pg/g	T		-	-	-	-	-	<0.15	:
1,2,3,6,7,8-Hexachlorodibenzofuran	pg/g	T		-	-	-	-	-	<0.086	J
1,2,3,6,7,8-Hexachlorodibenzo-p-dio	pg/g	T		-	-	-	-	-	<0.14	:
1,2,3,7,8,9-Hexachlorodibenzofuran	pg/g	T		-	-	-	-	-	<0.072	:
1,2,3,7,8,9-Hexachlorodibenzo-p-dio	pg/g	T		-	-	-	-	-	<0.17	J
1,2,3,7,8-Pentachlorodibenzofuran	pg/g	T		-	-	-	-	-	<0.12	:
1,2,3,7,8-Pentachlorodibenzo-p-diox	pg/g	T		-	-	-	-	-	<0.17	:
2,3,4,6,7,8-Hexachlorodibenzofuran	pg/g	T		-	-	-	-	-	<0.067	:
2,3,4,7,8-Pentachlorodibenzofuran	pg/g	T		-	-	-	-	-	<0.12	:
2,3,7,8-Tetrachlorodibenzofuran	pg/g	T		-	-	-	-	-	<0.22	:
2,3,7,8-Tetrachlorodibenzo-p-dioxin	pg/g	T		-	-	-	-	-	<0.29	:

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T = Total Fraction

Appendix A-7c
Soil - Random 0-6 inches
Validated Analytical Results

Parameter	Units	Exposure Area Fraction	Site ID	MSS2-10	MSS2-2	MSS2-3	MSS2-4	MSS2-5	MSS2-6
			Sample Date	10/13/2002	10/14/2002	10/14/2002	10/13/2002	10/14/2002	10/13/2002
			Sample ID	MSS2-10-T01N-SOL	MSS2-2-T01N-SOL	MSS2-3-T01N-SOL	MSS2-4-T01N-SOL	MSS2-5-T01N-SOL	MSS2-6-T01N-SOL
			Exposure Area	SS2	SS2	SS2	SS2	SS2	SS2
General Chemistry									
Ammonia	mg/kg-dry	T		53.8 :	29.4 :	80.9 J	91. :	37.4 :	49.2 :
Chloride	mg/kg-dry	T		11.5 J	6.4 J	3.5 J	2.5 J	2.8 J	7.6 J
Fluoride	mg/kg-dry	T		5.6 J	2.2 J	0.76 J	0.36 J	1. J	0.37 J
Nitrate	mg/kg-dry	T		4.1 J	2.2 J	2.2 J	2.3 J	2.3 J	2.5 J
Phosphorus	mg/kg-dry	T		648. J	720. J	509. :	1090. J	605. J	1470. :
Sulfate	mg/kg-dry	T		4800. J	1710. J	11.3 J	3.4 J	135. J	2030. J
Total Kjeldahl Nitrogen	mg/kg-dry	T		148. J	139. :	596. :	337. :	167. :	104. :
Total Organic Carbon	mg/kg-dry	T		507. J	2900. J	18700. :	3930. J	2950. J	920. J
Laboratory Parameters									
pH	SU	T		6.4 :	3.8 :	6.6 :	6.8 :	7.4 :	3.6 :
Solids, Percent	%	T		95.2 :	93.3 :	95.2 :	93.2 :	95.8 :	96. :
Specific Conductance	umhos/cm	T		882. :	461. :	19.9 :	28.1 :	108. :	1010. :
Geotechnical									
Organic Soils	%	T		1.62 J	4.55 J	4.99 J	4.21 :	2.28 J	3.3 :
Physical Properties									
Cation-Exchange Capacity	meq/100g	T		15.3 :	17.2 :	14. :	26. :	18.3 :	10.7 :
Sodium Absorption Ratio	ratio	T		0.03 :	0.11 :	0.22 :	0.1 :	0.11 :	0.04 :
Metals									
Aluminum	mg/kg-dry	T		9450. :	5140. :	6170. :	19300. :	10900. :	6130. :
Antimony	mg/kg-dry	T		<0.21 J	<0.27 J	<0.17 :	<0.17 J	<0.24 J	<0.17 J
Arsenic	mg/kg-dry	T		2.9 :	7.3 :	4.1 :	6.1 :	12.3 :	1.3 :
Barium	mg/kg-dry	T		209. :	243. :	212. :	198. :	81. :	467. :
Beryllium	mg/kg-dry	T		4. :	0.31 :	0.35 :	1.9 :	0.93 :	0.24 :
Boron	mg/kg-dry	T		6.1 :	2.6 :	4.5 J	<0.41 J	2.6 :	<0.41 J
Cadmium	mg/kg-dry	T		1.8 :	<0.06 :	0.48 J	0.052 J	0.36 :	<0.026 J
Calcium	mg/kg-dry	T		18200. :	1370. :	2170. :	5000. :	10900. :	2470. :
Chromium	mg/kg-dry	T		8.3 :	9.3 :	10.5 :	51.3 :	29.6 :	12.4 :
Cobalt	mg/kg-dry	T		8.5 :	0.94 :	2.7 :	27.6 :	7. :	2.3 :
Copper	mg/kg-dry	T		79.7 :	45.3 :	27.4 :	293. :	49. :	27.2 :
Iron	mg/kg-dry	T		15900. :	30300. :	18800. :	37000. :	20800. :	27200. :
Lead	mg/kg-dry	T		123. :	143. :	78.2 :	45. :	36.9 :	44.2 :
Magnesium	mg/kg-dry	T		2400. :	1620. :	1920. :	8370. :	4810. :	2150. :
Manganese	mg/kg-dry	T		719. J	127. J	301. J	1380. J	499. J	162. J

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T = Total Fraction

Appendix A-7c
Soil - Random 0-6 inches
Validated Analytical Results

Parameter	Units	Exposure Area Fraction	Site ID	MSS2-10	MSS2-2	MSS2-3	MSS2-4	MSS2-5	MSS2-6
			Sample Date	10/13/2002	10/14/2002	10/14/2002	10/13/2002	10/14/2002	10/13/2002
			Sample ID	MSS2-10-T01N-SOL	MSS2-2-T01N-SOL	MSS2-3-T01N-SOL	MSS2-4-T01N-SOL	MSS2-5-T01N-SOL	MSS2-6-T01N-SOL
			Exposure Area	SS2	SS2	SS2	SS2	SS2	SS2
Mercury	mg/kg-dry	T		<0.017 :	<0.018 :	0.019 :	<0.018 :	0.019 :	<0.017 :
Molybdenum	mg/kg-dry	T		364. :	23.9 :	27. :	11.6 :	279. :	5.5 :
Nickel	mg/kg-dry	T		14.5 J	4.4 J	6.8 :	48.9 J	17.6 J	7.8 J
Potassium	mg/kg-dry	T		2240. J	3940. J	2760. J	2290. J	1910. J	2600. J
Selenium	mg/kg-dry	T		<1.4 J	1.3 J	0.56 :	1.3 J	<0.65 J	1.6 J
Silver	mg/kg-dry	T		1.6 :	1.1 :	0.64 J	0.79 :	0.55 :	0.68 :
Sodium	mg/kg-dry	T		<153. :	247. :	137. :	<45.9 :	<70.5 :	368. :
Thallium	mg/kg-dry	T		0.25 :	0.32 :	0.16 :	0.25 :	0.19 :	0.2 :
Vanadium	mg/kg-dry	T		14.7 :	14.2 :	13.9 :	48.9 :	30.1 :	18.3 :
Zinc	mg/kg-dry	T		261. J	34.8 J	34.4 J	116. J	82.8 J	28.2 J
Volatile Organics									
1,1,1-Trichloroethane	mg/kg-dry	T		<0.009 :	<0.008 :	<0.008 :	<0.01 :	<0.008 :	<0.018 :
1,1,2,2-Tetrachloroethane	mg/kg-dry	T		<0.009 :	<0.008 :	<0.008 :	<0.01 :	<0.008 :	<0.018 :
1,1,2-Trichloro-1,2,2-trifluoroethane	mg/kg-dry	T		<0.009 :	<0.008 :	<0.008 :	<0.01 :	<0.008 :	<0.018 :
1,1,2-Trichloroethane	mg/kg-dry	T		<0.009 :	<0.008 :	<0.008 :	<0.01 :	<0.008 :	<0.018 :
1,1-Dichloroethane	mg/kg-dry	T		<0.009 :	<0.008 :	<0.008 :	<0.01 :	<0.008 :	<0.018 :
1,1-Dichloroethene	mg/kg-dry	T		<0.009 :	<0.008 :	<0.008 :	<0.01 J	<0.008 :	<0.018 :
1,2,4-Trichlorobenzene	mg/kg-dry	T		<0.009 :	<0.008 :	<0.008 :	<0.01 :	<0.008 :	<0.018 :
1,2-Dibromo-3-chloropropane	mg/kg-dry	T		<0.009 :	<0.008 :	<0.008 :	<0.01 :	<0.008 :	<0.018 :
1,2-Dichlorobenzene	mg/kg-dry	T		<0.009 :	<0.008 :	<0.008 :	<0.01 :	<0.008 :	<0.018 :
1,2-Dichloroethane	mg/kg-dry	T		<0.009 :	<0.008 :	<0.008 :	<0.01 :	<0.008 :	<0.018 :
1,2-Dichloroethene (total)	mg/kg-dry	T		<0.009 :	<0.008 :	<0.008 :	<0.01 :	<0.008 :	<0.018 :
1,2-Dichloropropane	mg/kg-dry	T		<0.009 :	<0.008 :	<0.008 :	<0.01 :	<0.008 :	<0.018 :
1,3-Dichlorobenzene	mg/kg-dry	T		<0.009 :	<0.008 :	<0.008 :	<0.01 :	<0.008 :	<0.018 :
1,4-Dichlorobenzene	mg/kg-dry	T		<0.009 :	<0.008 :	<0.008 :	<0.01 :	<0.008 :	<0.018 :
2-Butanone	mg/kg-dry	T		<0.009 J	<0.008 :	<0.008 :	<0.01 :	<0.008 :	<0.018 :
2-Hexanone	mg/kg-dry	T		<0.009 J	<0.008 :	<0.008 :	<0.01 J	<0.008 :	<0.018 :
4-Methyl-2-pentanone	mg/kg-dry	T		<0.009 J	<0.008 :	<0.008 :	<0.01 J	<0.008 :	<0.018 :
Acetone	mg/kg-dry	T		<0.009 :	<0.008 J	0.002 J	<0.01 :	<0.008 J	<0.018 J
Benzene	mg/kg-dry	T		<0.009 :	<0.008 :	<0.008 :	<0.01 :	<0.008 :	<0.018 :
Bromodichloromethane	mg/kg-dry	T		<0.009 :	<0.008 :	<0.008 :	<0.01 :	<0.008 :	<0.018 :
Bromoform	mg/kg-dry	T		<0.009 :	<0.008 :	<0.008 :	<0.01 :	<0.008 :	<0.018 :
Bromomethane	mg/kg-dry	T		<0.009 :	<0.008 :	<0.008 :	<0.01 :	<0.008 :	<0.018 :
Carbon disulfide	mg/kg-dry	T		<0.009 :	<0.008 :	<0.008 :	<0.01 :	<0.008 :	<0.018 :

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Appendix A-7c
Soil - Random 0-6 inches
Validated Analytical Results

Parameter	Units	Exposure Area Fraction	Site ID / Sample Date / Sample ID	MSS2-10 10/13/2002 MSS2-10-T01N-SOL SS2	MSS2-2 10/14/2002 MSS2-2-T01N-SOL SS2	MSS2-3 10/14/2002 MSS2-3-T01N-SOL SS2	MSS2-4 10/13/2002 MSS2-4-T01N-SOL SS2	MSS2-5 10/14/2002 MSS2-5-T01N-SOL SS2	MSS2-6 10/13/2002 MSS2-6-T01N-SOL SS2
Carbon tetrachloride	mg/kg-dry	T		<0.009 :	<0.008 :	<0.008 :	<0.01 :	<0.008 :	<0.018 :
Chlorobenzene	mg/kg-dry	T		<0.009 :	<0.008 :	<0.008 :	<0.01 :	<0.008 :	<0.018 :
Chloroethane	mg/kg-dry	T		<0.009 :	<0.008 :	<0.008 :	<0.01 :	<0.008 :	<0.018 :
Chloroform	mg/kg-dry	T		<0.009 :	<0.008 :	<0.008 :	<0.01 :	<0.008 :	<0.018 :
Chloromethane	mg/kg-dry	T		<0.009 :	<0.008 :	<0.008 :	<0.01 :	<0.008 :	<0.018 :
cis-1,2-Dichloroethene	mg/kg-dry	T		<0.009 :	<0.008 :	<0.008 :	<0.01 :	<0.008 :	<0.018 :
cis-1,3-Dichloropropene	mg/kg-dry	T		<0.009 :	<0.008 :	<0.008 :	<0.01 :	<0.008 :	<0.018 :
Dibromochloromethane	mg/kg-dry	T		<0.009 :	<0.008 :	<0.008 :	<0.01 :	<0.008 :	<0.018 :
Dichlorodifluoromethane	mg/kg-dry	T		<0.009 J	<0.008 :	<0.008 :	<0.01 J	<0.008 :	<0.018 :
Ethylbenzene	mg/kg-dry	T		<0.009 :	<0.008 :	<0.008 :	<0.01 :	<0.008 :	<0.018 :
Methylene chloride	mg/kg-dry	T		<0.009 :	<0.008 :	<0.008 :	<0.01 :	<0.008 :	<0.018 :
Styrene	mg/kg-dry	T		<0.009 :	<0.008 :	<0.008 :	<0.01 :	<0.008 :	<0.018 :
Tetrachloroethene	mg/kg-dry	T		<0.009 :	<0.008 :	<0.008 :	<0.01 :	<0.008 :	<0.018 :
Toluene	mg/kg-dry	T		<0.009 :	<0.008 :	<0.008 :	<0.01 :	<0.008 :	<0.018 :
Total Xylene	mg/kg-dry	T		<0.009 :	<0.008 :	<0.008 :	<0.01 :	<0.008 :	<0.018 :
trans-1,2-Dichloroethene	mg/kg-dry	T		<0.009 :	<0.008 J	<0.008 J	<0.01 :	<0.008 J	<0.018 J
trans-1,3-Dichloropropene	mg/kg-dry	T		<0.009 :	<0.008 :	<0.008 :	<0.01 :	<0.008 :	<0.018 :
Trichloroethene	mg/kg-dry	T		<0.009 :	<0.008 :	<0.008 :	<0.01 :	<0.008 :	<0.018 :
Trichlorofluoromethane	mg/kg-dry	T		<0.009 J	<0.008 :	<0.008 :	<0.01 J	<0.008 :	<0.018 :
Vinyl chloride	mg/kg-dry	T		<0.009 J	<0.008 :	<0.008 :	<0.01 J	<0.008 :	<0.018 :
Semi-Volatile Organics									
1,1`-Biphenyl	mg/kg-dry	T		<0.35 J	<0.35 :	<0.35 :	<0.35 :	<0.34 :	<0.34 :
2,4,5-Trichlorophenol	mg/kg-dry	T		<0.87 :	<0.89 :	<0.87 :	<0.89 :	<0.86 :	<0.86 :
2,4,6-Trichlorophenol	mg/kg-dry	T		<0.35 :	<0.35 :	<0.35 :	<0.35 :	<0.34 :	<0.34 :
2,4-Dichlorophenol	mg/kg-dry	T		<0.35 :	<0.35 :	<0.35 :	<0.35 :	<0.34 :	<0.34 :
2,4-Dimethylphenol	mg/kg-dry	T		<0.35 :	<0.35 :	<0.35 :	<0.35 :	<0.34 :	<0.34 :
2,4-Dinitrophenol	mg/kg-dry	T		<0.87 :	<0.89 :	<0.87 :	<0.89 :	<0.86 :	<0.86 :
2,4-Dinitrotoluene	mg/kg-dry	T		<0.35 :	<0.35 :	<0.35 :	<0.35 :	<0.34 :	<0.34 :
2,6-Dinitrotoluene	mg/kg-dry	T		<0.35 :	<0.35 :	<0.35 :	<0.35 :	<0.34 :	<0.34 :
2-Chloronaphthalene	mg/kg-dry	T		<0.35 :	<0.35 :	<0.35 :	<0.35 J	<0.34 :	<0.34 :
2-Chlorophenol	mg/kg-dry	T		<0.35 :	<0.35 :	<0.35 :	<0.35 :	<0.34 :	<0.34 :
2-Methylnaphthalene	mg/kg-dry	T		<0.35 :	<0.35 :	<0.35 :	<0.35 :	<0.34 :	<0.34 :
2-Methylphenol	mg/kg-dry	T		<0.35 :	<0.35 :	<0.35 :	<0.35 :	<0.34 :	<0.34 :
2-Nitroaniline	mg/kg-dry	T		<0.87 :	<0.89 :	<0.87 :	<0.89 :	<0.86 :	<0.86 :

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Appendix A-7c
Soil - Random 0-6 inches
Validated Analytical Results

Parameter	Units	Exposure Area Fraction	Site ID / Sample Date / Sample ID	MSS2-10 10/13/2002 MSS2-10-T01N-SOL SS2	MSS2-2 10/14/2002 MSS2-2-T01N-SOL SS2	MSS2-3 10/14/2002 MSS2-3-T01N-SOL SS2	MSS2-4 10/13/2002 MSS2-4-T01N-SOL SS2	MSS2-5 10/14/2002 MSS2-5-T01N-SOL SS2	MSS2-6 10/13/2002 MSS2-6-T01N-SOL SS2
2-Nitrophenol	mg/kg-dry	T		<0.35 :	<0.35 :	<0.35 :	<0.35 :	<0.34 :	<0.34 :
3,3-Dichlorobenzidine	mg/kg-dry	T		<0.35 :	<0.35 :	<0.35 :	<0.35 :	<0.34 :	<0.34 :
3-Nitroaniline	mg/kg-dry	T		<0.87 :	<0.89 :	<0.87 :	<0.89 :	<0.86 :	<0.86 :
4,6-Dinitro-2-methylphenol	mg/kg-dry	T		<0.87 :	<0.89 :	<0.87 :	<0.89 :	<0.86 :	<0.86 :
4-Bromophenyl phenyl ether	mg/kg-dry	T		<0.35 :	<0.35 :	<0.35 :	<0.35 :	<0.34 :	<0.34 :
4-Chloro-3-methylphenol	mg/kg-dry	T		<0.35 :	<0.35 :	<0.35 :	<0.35 :	<0.34 :	<0.34 :
4-Chloroaniline	mg/kg-dry	T		<0.35 :	<0.35 :	<0.35 :	<0.35 :	<0.34 :	<0.34 :
4-Chlorophenyl phenyl ether	mg/kg-dry	T		<0.35 :	<0.35 :	<0.35 :	<0.35 :	<0.34 :	<0.34 :
4-Methylphenol	mg/kg-dry	T		<0.35 :	<0.35 :	<0.35 :	<0.35 :	<0.34 :	<0.34 :
4-Nitroaniline	mg/kg-dry	T		<0.87 :	<0.89 :	<0.87 :	<0.89 :	<0.86 :	<0.86 :
4-Nitrophenol	mg/kg-dry	T		<0.87 :	<0.89 :	<0.87 J	<0.89 :	<0.86 :	<0.86 :
Acenaphthene	mg/kg-dry	T		<0.35 :	<0.35 :	<0.35 :	<0.35 :	<0.34 :	<0.34 :
Acenaphthylene	mg/kg-dry	T		<0.35 :	<0.35 :	<0.35 :	<0.35 :	<0.34 :	<0.34 :
Anthracene	mg/kg-dry	T		<0.35 :	<0.35 :	<0.35 J	<0.35 :	<0.34 :	<0.34 :
Benzaldehyde	mg/kg-dry	T		<0.35 J	<0.35 J	<0.35 J	<0.35 J	<0.34 J	0.11 J
Benzo(a)anthracene	mg/kg-dry	T		<0.35 :	<0.35 :	<0.35 :	<0.35 :	<0.34 :	<0.34 :
Benzo(a)pyrene	mg/kg-dry	T		<0.35 :	<0.35 :	<0.35 :	<0.35 :	<0.34 :	<0.34 :
Benzo(b)fluoranthene	mg/kg-dry	T		<0.35 :	<0.35 :	<0.35 :	<0.35 :	<0.34 :	<0.34 :
Benzo(g,h,i)perylene	mg/kg-dry	T		<0.35 :	<0.35 :	<0.35 :	<0.35 :	<0.34 :	<0.34 :
Benzo(k)fluoranthene	mg/kg-dry	T		<0.35 :	<0.35 :	<0.35 :	<0.35 :	<0.34 :	<0.34 :
Bis(2-chloroethoxy)methane	mg/kg-dry	T		<0.35 :	<0.35 :	<0.35 :	<0.35 :	<0.34 :	<0.34 :
Bis(2-chloroethyl)ether	mg/kg-dry	T		<0.35 :	<0.35 :	<0.35 :	<0.35 :	<0.34 :	<0.34 :
Bis(2-ethylhexyl)phthalate	mg/kg-dry	T		<0.35 :	<0.35 :	<0.35 :	<0.35 :	0.11 J	<0.34 :
Butyl benzyl phthalate	mg/kg-dry	T		<0.35 J	<0.35 :	<0.35 :	<0.35 :	<0.34 :	<0.34 :
Carbazole	mg/kg-dry	T		<0.35 :	<0.35 :	<0.35 :	<0.35 :	<0.34 :	<0.34 :
Chrysene	mg/kg-dry	T		<0.35 :	<0.35 :	<0.35 :	<0.35 :	<0.34 :	<0.34 :
Dibenz(a,h)anthracene	mg/kg-dry	T		<0.35 :	<0.35 J	<0.35 :	<0.35 :	<0.34 J	<0.34 :
Dibenzofuran	mg/kg-dry	T		<0.35 :	<0.35 :	<0.35 :	<0.35 :	<0.34 :	<0.34 :
Dichlorodiisopropyl ether	mg/kg-dry	T		<0.35 :	<0.35 :	<0.35 :	<0.35 :	<0.34 :	<0.34 :
Diethylphthalate	mg/kg-dry	T		<0.35 :	<0.35 :	<0.35 :	<0.35 :	<0.34 :	<0.34 :
Dimethylphthalate	mg/kg-dry	T		<0.35 :	<0.35 :	<0.35 :	<0.35 :	<0.34 :	<0.34 :
Di-n-Butyl phthalate	mg/kg-dry	T		<0.35 :	<0.35 :	<0.35 :	<0.35 :	<0.34 :	<0.34 :
Di-n-Octyl phthalate	mg/kg-dry	T		<0.35 :	<0.35 :	<0.35 :	<0.35 :	<0.34 :	<0.34 :
Fluoranthene	mg/kg-dry	T		<0.35 :	<0.35 :	<0.35 :	<0.35 J	<0.34 :	<0.34 J

J = Qualified as estimated during data validation
R = Qualified as rejected value from data validation and results are considered unusable for any purpose
T = Total Fraction

Appendix A-7c
Soil - Random 0-6 inches
Validated Analytical Results

Parameter	Units	Fraction	Site ID	Sample Date	Sample ID	Exposure Area	MSS2-10	MSS2-2	MSS2-3	MSS2-4	MSS2-5	MSS2-6
							10/13/2002 MSS2-10-T01N-SOL SS2	10/14/2002 MSS2-2-T01N-SOL SS2	10/14/2002 MSS2-3-T01N-SOL SS2	10/13/2002 MSS2-4-T01N-SOL SS2	10/14/2002 MSS2-5-T01N-SOL SS2	10/13/2002 MSS2-6-T01N-SOL SS2
Fluorene	mg/kg-dry	T					<0.35 :	<0.35 :	<0.35 :	<0.35 :	<0.34 :	<0.34 :
Hexachlorobenzene	mg/kg-dry	T					<0.35 :	<0.35 :	<0.35 :	<0.35 :	<0.34 :	<0.34 :
Hexachlorobutadiene	mg/kg-dry	T					<0.35 :	<0.35 :	<0.35 :	<0.35 :	<0.34 :	<0.34 :
Hexachlorocyclopentadiene	mg/kg-dry	T					<0.35 :	<0.35 J	<0.35 :	<0.35 :	<0.34 J	<0.34 :
Hexachloroethane	mg/kg-dry	T					<0.35 :	<0.35 :	<0.35 :	<0.35 :	<0.34 :	<0.34 :
Indeno(1,2,3-cd)pyrene	mg/kg-dry	T					<0.35 :	<0.35 :	<0.35 :	<0.35 :	<0.34 :	<0.34 :
Isophorone	mg/kg-dry	T					<0.35 :	<0.35 :	<0.35 :	<0.35 :	<0.34 :	<0.34 :
Naphthalene	mg/kg-dry	T					<0.35 :	<0.35 :	<0.35 :	<0.35 :	<0.34 :	<0.34 :
Nitrobenzene	mg/kg-dry	T					<0.35 :	<0.35 :	<0.35 :	<0.35 :	<0.34 :	<0.34 :
N-Nitrosodi-n-propylamine	mg/kg-dry	T					<0.35 :	<0.35 :	<0.35 :	<0.35 :	<0.34 :	<0.34 :
N-Nitrosodiphenylamine	mg/kg-dry	T					<0.35 :	<0.35 :	<0.35 :	<0.35 :	<0.34 :	<0.34 :
Pentachlorophenol	mg/kg-dry	T					<0.87 J	<0.89 J	<0.87 :	<0.89 :	<0.86 J	<0.86 :
Phenanthrene	mg/kg-dry	T					<0.35 :	<0.35 :	<0.35 :	<0.35 :	<0.34 :	<0.34 :
Phenol	mg/kg-dry	T					<0.35 :	<0.35 :	<0.35 :	<0.35 :	<0.34 :	<0.34 :
Pyrene	mg/kg-dry	T					<0.35 J	<0.35 :	<0.35 :	<0.35 :	<0.34 :	<0.34 :

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T = Total Fraction

Appendix A-7c
Soil - Random 0-6 inches
Validated Analytical Results

Parameter	Units	Exposure Area Fraction	Site ID / Sample Date / Sample ID	MSS2-7 10/13/2002 MSS2-7-T01N-SOL SS2	MSS2-8 10/14/2002 MSS2-8-T01N-SOL SS2	MSS2-9 10/13/2002 MSS2-9-T01N-SOL SS2	MSS3-1 9/27/2002 MSS3-1-T01N-SOL SS3	MSS3-10 10/1/2002 MSS3-10-T01N-SOL SS3	MSS3-2 9/27/2002 MSS3-2-T01N-SOL SS3
General Chemistry									
Ammonia	mg/kg-dry	T		57. :	19.1 J	72.2 :	29.7 :	140. :	188. :
Chloride	mg/kg-dry	T		6.2 J	14.1 J	3.4 J	<1.2 :	<30.3 :	<5.6 :
Fluoride	mg/kg-dry	T		0.32 J	4.8 J	0.2 J	0.12 J	0.24 J	-
Nitrate	mg/kg-dry	T		<2.3 J	2.4 J	4.2 J	<1.2 J	<1.3 J	3.6 J
Phosphorus	mg/kg-dry	T		57.2 J	1000. :	251. J	156. J	568. J	7.1 J
Sulfate	mg/kg-dry	T		2540. J	12700. J	44.9 J	1.9 :	<122. :	2.1 :
Total Kjeldahl Nitrogen	mg/kg-dry	T		41.5 J	178. :	621. J	629. :	1350. :	1100. :
Total Organic Carbon	mg/kg-dry	T		<111. J	8200. :	21900. J	6150. J	4260. J	17300. J
Laboratory Parameters									
pH	SU	T		3.5 :	4.6 :	5.9 :	6.1 :	6.7 :	6.9 :
Solids, Percent	%	T		90.2 :	94.1 :	93.2 :	90.8 :	82.6 :	89.6 :
Specific Conductance	umhos/cm	T		779. :	1510. :	18.5 :	113. :	68.8 :	30.5 :
Geotechnical									
Organic Soils	%	T		4.15 J	2.64 J	4.24 J	3.51 :	8.58 :	4.45 :
Physical Properties									
Cation-Exchange Capacity	meq/100g	T		25.3 :	13.8 :	28. :	24.4 :	20.8 :	21.2 :
Sodium Absorption Ratio	ratio	T		0.02 :	0.05 :	0.15 :	0.08 :	0.06 :	<0.05 :
Metals									
Aluminum	mg/kg-dry	T		19300. J	13400. :	23900. :	2390. :	12800. :	8490. :
Antimony	mg/kg-dry	T		<0.22 J	<0.17 :	<0.2 J	<0.51 J	<0.19 J	0.1 J
Arsenic	mg/kg-dry	T		3.5 :	3.1 :	3.3 :	11.5 :	3.8 :	5. :
Barium	mg/kg-dry	T		198. :	155. :	308. :	7.8 :	549. :	145. :
Beryllium	mg/kg-dry	T		0.8 :	1.4 :	1.5 :	0.13 :	0.62 :	0.49 :
Boron	mg/kg-dry	T		13. J	4.2 J	11.9 J	<0.55 :	4.2 :	6. :
Cadmium	mg/kg-dry	T		<0.025 J	0.75 J	<0.027 J	0.1 :	0.11 :	0.38 J
Calcium	mg/kg-dry	T		1890. J	10500. :	7280. :	538. :	4560. :	3600. :
Chromium	mg/kg-dry	T		88.2 J	39. :	66.5 :	<0.65 :	17.9 :	8.3 :
Cobalt	mg/kg-dry	T		7.3 :	16.5 :	30.7 :	0.34 :	6.4 :	3.7 :
Copper	mg/kg-dry	T		54.4 :	121. :	65.8 :	3.3 :	27.2 :	7.5 :
Iron	mg/kg-dry	T		40900. :	24600. :	43100. :	3330. :	24700. :	16400. :
Lead	mg/kg-dry	T		38.3 J	45.9 :	35.1 :	10.9 :	51.4 J	31.6 :
Magnesium	mg/kg-dry	T		8740. :	7840. :	13800. :	206. :	3370. J	1720. :
Manganese	mg/kg-dry	T		331. J	559. :	1150. J	41.8 J	484. J	631. J

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T = Total Fraction

Appendix A-7c
Soil - Random 0-6 inches
Validated Analytical Results

Parameter	Units	Fraction	MSS2-7	MSS2-8	MSS2-9	MSS3-1	MSS3-10	MSS3-2
Sample Date			10/13/2002	10/14/2002	10/13/2002	9/27/2002	10/1/2002	9/27/2002
Sample ID			MSS2-7-T01N-SOL	MSS2-8-T01N-SOL	MSS2-9-T01N-SOL	MSS3-1-T01N-SOL	MSS3-10-T01N-SOL	MSS3-2-T01N-SOL
Exposure Area			SS2	SS2	SS2	SS3	SS3	SS3
Mercury	mg/kg-dry	T	<0.018 :	<0.017 :	<0.018 :	0.043 :	0.029 :	0.017 :
Molybdenum	mg/kg-dry	T	1.3 :	784. :	22.7 :	1.3 :	35.4 :	7.9 :
Nickel	mg/kg-dry	T	42.1 J	43.7 :	53.9 J	<0.22 J	11.2 J	5. J
Potassium	mg/kg-dry	T	6030. J	3510. :	6020. J	386. J	3500. J	2740. J
Selenium	mg/kg-dry	T	2.6 J	1.2 :	<0.95 J	<0.37 J	1.2 J	0.4 J
Silver	mg/kg-dry	T	0.25 :	0.58 J	0.15 :	<0.45 :	0.15 :	<0.46 :
Sodium	mg/kg-dry	T	<254. :	87.5 :	<106. :	<84.7 :	<85.8 :	<85.8 :
Thallium	mg/kg-dry	T	0.56 :	0.3 :	0.28 :	0.24 :	0.23 :	0.19 :
Vanadium	mg/kg-dry	T	61.4 :	40.1 :	68.9 :	0.96 :	30.3 :	22.2 :
Zinc	mg/kg-dry	T	73.8 J	90.9 :	107. J	24.4 J	51.6 J	67. J
Volatile Organics								
1,1,1-Trichloroethane	mg/kg-dry	T	<0.009 :	<0.01 :	<0.008 :	-	-	-
1,1,2,2-Tetrachloroethane	mg/kg-dry	T	<0.009 :	<0.01 :	<0.008 :	-	-	-
1,1,2-Trichloro-1,2,2-trifluoroethane	mg/kg-dry	T	<0.009 :	<0.01 :	<0.008 :	-	-	-
1,1,2-Trichloroethane	mg/kg-dry	T	<0.009 :	<0.01 :	<0.008 :	-	-	-
1,1-Dichloroethane	mg/kg-dry	T	<0.009 :	<0.01 :	<0.008 :	-	-	-
1,1-Dichloroethene	mg/kg-dry	T	<0.009 :	<0.01 :	<0.008 :	-	-	-
1,2,4-Trichlorobenzene	mg/kg-dry	T	<0.009 :	<0.01 :	<0.008 :	-	-	-
1,2-Dibromo-3-chloropropane	mg/kg-dry	T	<0.009 :	<0.01 :	<0.008 :	-	-	-
1,2-Dichlorobenzene	mg/kg-dry	T	<0.009 :	<0.01 :	<0.008 :	-	-	-
1,2-Dichloroethane	mg/kg-dry	T	<0.009 :	<0.01 :	<0.008 :	-	-	-
1,2-Dichloroethene (total)	mg/kg-dry	T	<0.009 :	<0.01 :	<0.008 :	-	-	-
1,2-Dichloropropane	mg/kg-dry	T	<0.009 :	<0.01 :	<0.008 :	-	-	-
1,3-Dichlorobenzene	mg/kg-dry	T	<0.009 :	<0.01 :	<0.008 :	-	-	-
1,4-Dichlorobenzene	mg/kg-dry	T	<0.009 :	<0.01 :	<0.008 :	-	-	-
2-Butanone	mg/kg-dry	T	<0.009 J	<0.01 :	<0.008 J	-	-	-
2-Hexanone	mg/kg-dry	T	<0.009 J	<0.01 :	<0.008 J	-	-	-
4-Methyl-2-pentanone	mg/kg-dry	T	<0.009 J	<0.01 :	<0.008 J	-	-	-
Acetone	mg/kg-dry	T	<0.009 :	0.002 J	0.016 :	-	-	-
Benzene	mg/kg-dry	T	<0.009 :	<0.01 :	<0.008 :	-	-	-
Bromodichloromethane	mg/kg-dry	T	<0.009 :	<0.01 :	<0.008 :	-	-	-
Bromoform	mg/kg-dry	T	<0.009 :	<0.01 :	<0.008 :	-	-	-
Bromomethane	mg/kg-dry	T	<0.009 :	<0.01 :	<0.008 :	-	-	-
Carbon disulfide	mg/kg-dry	T	<0.009 :	<0.01 :	<0.008 :	-	-	-

J = Qualified as estimated during data validation
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T = Total Fraction

Appendix A-7c
Soil - Random 0-6 inches
Validated Analytical Results

Parameter	Units	Exposure Area Fraction	Site ID / Sample Date / Sample ID		MSS2-7 10/13/2002 MSS2-7-T01N-SOL SS2		MSS2-8 10/14/2002 MSS2-8-T01N-SOL SS2		MSS2-9 10/13/2002 MSS2-9-T01N-SOL SS2		MSS3-1 9/27/2002 MSS3-1-T01N-SOL SS3	MSS3-10 10/1/2002 MSS3-10-T01N-SOL SS3	MSS3-2 9/27/2002 MSS3-2-T01N-SOL SS3
Carbon tetrachloride	mg/kg-dry	T		<0.009	:	<0.01	:	<0.008	:	-	-	-
Chlorobenzene	mg/kg-dry	T		<0.009	:	<0.01	:	<0.008	:	-	-	-
Chloroethane	mg/kg-dry	T		<0.009	:	<0.01	:	<0.008	:	-	-	-
Chloroform	mg/kg-dry	T		<0.009	:	<0.01	:	<0.008	:	-	-	-
Chloromethane	mg/kg-dry	T		<0.009	:	<0.01	:	<0.008	:	-	-	-
cis-1,2-Dichloroethene	mg/kg-dry	T		<0.009	:	<0.01	:	<0.008	:	-	-	-
cis-1,3-Dichloropropene	mg/kg-dry	T		<0.009	:	<0.01	:	<0.008	:	-	-	-
Dibromochloromethane	mg/kg-dry	T		<0.009	:	<0.01	:	<0.008	:	-	-	-
Dichlorodifluoromethane	mg/kg-dry	T		<0.009	J	<0.01	:	<0.008	J	-	-	-
Ethylbenzene	mg/kg-dry	T		<0.009	:	<0.01	:	<0.008	:	-	-	-
Methylene chloride	mg/kg-dry	T		<0.009	:	<0.01	:	<0.008	:	-	-	-
Styrene	mg/kg-dry	T		<0.009	:	<0.01	:	<0.008	:	-	-	-
Tetrachloroethene	mg/kg-dry	T		<0.009	:	<0.01	:	<0.008	:	-	-	-
Toluene	mg/kg-dry	T		<0.009	:	<0.01	:	<0.008	:	-	-	-
Total Xylene	mg/kg-dry	T		<0.009	:	<0.01	:	<0.008	:	-	-	-
trans-1,2-Dichloroethene	mg/kg-dry	T		<0.009	:	<0.01	J	<0.008	:	-	-	-
trans-1,3-Dichloropropene	mg/kg-dry	T		<0.009	:	<0.01	:	<0.008	:	-	-	-
Trichloroethene	mg/kg-dry	T		<0.009	:	<0.01	:	<0.008	:	-	-	-
Trichlorofluoromethane	mg/kg-dry	T		<0.009	J	<0.01	:	<0.008	J	-	-	-
Vinyl chloride	mg/kg-dry	T		<0.009	J	<0.01	:	<0.008	J	-	-	-
Semi-Volatile Organics													
1,1`-Biphenyl	mg/kg-dry	T		<0.37	J	<0.35	:	<0.35	J	-	-	-
2,4,5-Trichlorophenol	mg/kg-dry	T		<0.92	:	<0.88	:	<0.89	:	-	-	-
2,4,6-Trichlorophenol	mg/kg-dry	T		<0.37	:	<0.35	:	<0.35	:	-	-	-
2,4-Dichlorophenol	mg/kg-dry	T		<0.37	:	<0.35	:	<0.35	:	-	-	-
2,4-Dimethylphenol	mg/kg-dry	T		<0.37	:	<0.35	:	<0.35	:	-	-	-
2,4-Dinitrophenol	mg/kg-dry	T		<0.92	:	<0.88	:	<0.89	:	-	-	-
2,4-Dinitrotoluene	mg/kg-dry	T		<0.37	:	<0.35	:	<0.35	:	-	-	-
2,6-Dinitrotoluene	mg/kg-dry	T		<0.37	:	<0.35	:	<0.35	:	-	-	-
2-Chloronaphthalene	mg/kg-dry	T		<0.37	:	<0.35	:	<0.35	:	-	-	-
2-Chlorophenol	mg/kg-dry	T		<0.37	:	<0.35	:	<0.35	:	-	-	-
2-Methylnaphthalene	mg/kg-dry	T		<0.37	:	<0.35	:	<0.35	:	-	-	-
2-Methylphenol	mg/kg-dry	T		<0.37	:	<0.35	:	<0.35	:	-	-	-
2-Nitroaniline	mg/kg-dry	T		<0.92	:	<0.88	:	<0.89	:	-	-	-

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R = Qualified as rejected value from data validation and results are considered unusable for any purpose
T = Total Fraction

Appendix A-7c
Soil - Random 0-6 inches
Validated Analytical Results

Parameter	Units	Fraction	Site ID	MSS2-7		MSS2-8		MSS2-9		MSS3-1	MSS3-10	MSS3-2
			Sample Date	10/13/2002		10/14/2002		10/13/2002		9/27/2002	10/1/2002	9/27/2002
			Sample ID	MSS2-7-T01N-SOL		MSS2-8-T01N-SOL		MSS2-9-T01N-SOL		MSS3-1-T01N-SOL	MSS3-10-T01N-SOL	MSS3-2-T01N-SOL
			Exposure Area	SS2		SS2		SS2		SS3	SS3	SS3
2-Nitrophenol	mg/kg-dry	T		<0.37	:	<0.35	:	<0.35	:	-	-	-
3,3-Dichlorobenzidine	mg/kg-dry	T		<0.37	:	<0.35	:	<0.35	:	-	-	-
3-Nitroaniline	mg/kg-dry	T		<0.92	:	<0.88	:	<0.89	:	-	-	-
4,6-Dinitro-2-methylphenol	mg/kg-dry	T		<0.92	:	<0.88	:	<0.89	:	-	-	-
4-Bromophenyl phenyl ether	mg/kg-dry	T		<0.37	:	<0.35	:	<0.35	:	-	-	-
4-Chloro-3-methylphenol	mg/kg-dry	T		<0.37	:	<0.35	:	<0.35	:	-	-	-
4-Chloroaniline	mg/kg-dry	T		<0.37	:	<0.35	:	<0.35	:	-	-	-
4-Chlorophenyl phenyl ether	mg/kg-dry	T		<0.37	:	<0.35	:	<0.35	:	-	-	-
4-Methylphenol	mg/kg-dry	T		<0.37	:	<0.35	:	<0.35	:	-	-	-
4-Nitroaniline	mg/kg-dry	T		<0.92	:	<0.88	:	<0.89	:	-	-	-
4-Nitrophenol	mg/kg-dry	T		<0.92	:	<0.88	J	<0.89	:	-	-	-
Acenaphthene	mg/kg-dry	T		<0.37	:	<0.35	:	<0.35	:	-	-	-
Acenaphthylene	mg/kg-dry	T		<0.37	:	<0.35	:	<0.35	:	-	-	-
Anthracene	mg/kg-dry	T		<0.37	:	<0.35	J	<0.35	:	-	-	-
Benzaldehyde	mg/kg-dry	T		<0.37	:	<0.35	J	<0.35	J	-	-	-
Benzo(a)anthracene	mg/kg-dry	T		<0.37	:	<0.35	:	<0.35	:	-	-	-
Benzo(a)pyrene	mg/kg-dry	T		<0.37	:	<0.35	:	<0.35	:	-	-	-
Benzo(b)fluoranthene	mg/kg-dry	T		<0.37	:	<0.35	:	<0.35	:	-	-	-
Benzo(g,h,i)perylene	mg/kg-dry	T		<0.37	:	<0.35	:	<0.35	:	-	-	-
Benzo(k)fluoranthene	mg/kg-dry	T		<0.37	:	<0.35	:	<0.35	:	-	-	-
Bis(2-chloroethoxy)methane	mg/kg-dry	T		<0.37	:	<0.35	:	<0.35	:	-	-	-
Bis(2-chloroethyl)ether	mg/kg-dry	T		<0.37	:	<0.35	:	<0.35	:	-	-	-
Bis(2-ethylhexyl)phthalate	mg/kg-dry	T		<0.37	:	0.017	J	<0.35	:	-	-	-
Butyl benzyl phthalate	mg/kg-dry	T		<0.37	J	<0.35	:	<0.35	J	-	-	-
Carbazole	mg/kg-dry	T		<0.37	:	<0.35	:	<0.35	:	-	-	-
Chrysene	mg/kg-dry	T		<0.37	:	<0.35	:	<0.35	:	-	-	-
Dibenz(a,h)anthracene	mg/kg-dry	T		<0.37	:	<0.35	:	<0.35	:	-	-	-
Dibenzofuran	mg/kg-dry	T		<0.37	:	<0.35	:	<0.35	:	-	-	-
Dichlorodiisopropyl ether	mg/kg-dry	T		<0.37	:	<0.35	:	<0.35	:	-	-	-
Diethylphthalate	mg/kg-dry	T		<0.37	:	<0.35	:	<0.35	:	-	-	-
Dimethylphthalate	mg/kg-dry	T		<0.37	:	<0.35	:	<0.35	:	-	-	-
Di-n-Butyl phthalate	mg/kg-dry	T		<0.37	:	<0.35	:	<0.35	:	-	-	-
Di-n-Octyl phthalate	mg/kg-dry	T		<0.37	:	<0.35	:	<0.35	:	-	-	-
Fluoranthene	mg/kg-dry	T		<0.37	:	<0.35	:	<0.35	:	-	-	-

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Appendix A-7c
Soil - Random 0-6 inches
Validated Analytical Results

Parameter	Units	Exposure Area Fraction	Site ID / Sample Date / Sample ID		MSS2-7 10/13/2002 MSS2-7-T01N-SOL SS2		MSS2-8 10/14/2002 MSS2-8-T01N-SOL SS2		MSS2-9 10/13/2002 MSS2-9-T01N-SOL SS2		MSS3-1 9/27/2002 MSS3-1-T01N-SOL SS3	MSS3-10 10/1/2002 MSS3-10-T01N-SOL SS3	MSS3-2 9/27/2002 MSS3-2-T01N-SOL SS3
Fluorene	mg/kg-dry	T			<0.37	:	<0.35	:	<0.35	:	-	-	-
Hexachlorobenzene	mg/kg-dry	T			<0.37	:	<0.35	:	<0.35	:	-	-	-
Hexachlorobutadiene	mg/kg-dry	T			<0.37	:	<0.35	:	<0.35	:	-	-	-
Hexachlorocyclopentadiene	mg/kg-dry	T			<0.37	:	<0.35	:	<0.35	:	-	-	-
Hexachloroethane	mg/kg-dry	T			<0.37	:	<0.35	:	<0.35	:	-	-	-
Indeno(1,2,3-cd)pyrene	mg/kg-dry	T			<0.37	:	<0.35	:	<0.35	:	-	-	-
Isophorone	mg/kg-dry	T			<0.37	:	<0.35	:	<0.35	:	-	-	-
Naphthalene	mg/kg-dry	T			<0.37	:	<0.35	:	<0.35	:	-	-	-
Nitrobenzene	mg/kg-dry	T			<0.37	:	<0.35	:	<0.35	:	-	-	-
N-Nitrosodi-n-propylamine	mg/kg-dry	T			<0.37	:	<0.35	:	<0.35	:	-	-	-
N-Nitrosodiphenylamine	mg/kg-dry	T			<0.37	:	<0.35	:	<0.35	:	-	-	-
Pentachlorophenol	mg/kg-dry	T			<0.92	J	<0.88	:	<0.89	J	-	-	-
Phenanthrene	mg/kg-dry	T			<0.37	:	<0.35	:	<0.35	:	-	-	-
Phenol	mg/kg-dry	T			<0.37	:	<0.35	:	<0.35	:	-	-	-
Pyrene	mg/kg-dry	T			<0.37	J	<0.35	:	<0.35	J	-	-	-

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T = Total Fraction

Appendix A-7c
Soil - Random 0-6 inches
Validated Analytical Results

Parameter	Units	Fraction	MSS3-3	MSS3-4	MSS3-5	MSS3-6	MSS3-7	MSS3-8
		Site ID	MSS3-3	MSS3-4	MSS3-5	MSS3-6	MSS3-7	MSS3-8
		Sample Date	9/30/2002	9/30/2002	10/22/2002	10/3/2002	10/1/2002	10/9/2002
		Sample ID	MSS3-3-T01N-SOL	MSS3-4-T01N-SOL	MSS3-5-T01N-SOL	MSS3-6-T01N-SOL	MSS3-7-T01N-SOL	MSS3-8-T01N-SOL
		Exposure Area	SS3	SS3	SS3	SS3	SS3	SS3
General Chemistry								
Ammonia	mg/kg-dry	T	132. J	120. :	49.2 :	7.5 :	80.6 :	79. :
Chloride	mg/kg-dry	T	<31.8 :	<28.5 :	<26.3 :	<27.6 :	<28.1 :	<2.3 J
Fluoride	mg/kg-dry	T	-	-	0.13 J	-	0.13 J	0.36 J
Nitrate	mg/kg-dry	T	<2.6 J	<5.7 J	<2.1 J	<2.3 J	<2.3 J	3.3 J
Phosphorus	mg/kg-dry	T	632. J	109. J	386. J	284. J	582. J	1180. J
Sulfate	mg/kg-dry	T	28.9 :	<114. :	<105. J	<27.6 :	7.6 :	11.9 J
Total Kjeldahl Nitrogen	mg/kg-dry	T	2250. :	1250. :	354. J	140. :	563. :	820. :
Total Organic Carbon	mg/kg-dry	T	38900. J	15900. J	8270. J	2300. J	15200. J	19200. J
Laboratory Parameters								
pH	SU	T	7.1 :	7.1 :	6.7 :	6.8 :	7.7 :	7.3 :
Solids, Percent	%	T	78.8 :	88. :	95. :	90.7 :	89.1 :	88.5 :
Specific Conductance	umhos/cm	T	245. :	130. :	27.6 :	7.3 :	85.9 :	39.4 :
Geotechnical								
Organic Soils	%	T	-	-	3.67 J	2.78 :	4.61 :	-
Physical Properties								
Cation-Exchange Capacity	meq/100g	T	33.9 :	23.4 :	1.9 :	7.3 :	13.7 :	24.3 :
Sodium Absorption Ratio	ratio	T	0.1 :	<0.06 :	0.06 :	<0.12 :	0.05 :	0.12 :
Metals								
Aluminum	mg/kg-dry	T	16400. :	10900. :	5270. :	4650. :	8450. :	19200. :
Antimony	mg/kg-dry	T	0.07 J	<0.18 J	<0.24 J	<0.16 J	<0.19 J	<0.16 J
Arsenic	mg/kg-dry	T	3.3 :	11.9 :	11.8 :	9.8 :	6.7 :	2.2 :
Barium	mg/kg-dry	T	204. :	37.9 :	176. :	192. :	189. :	150. :
Beryllium	mg/kg-dry	T	1.7 :	0.6 :	0.39 :	0.23 :	0.51 :	0.98 :
Boron	mg/kg-dry	T	9.2 :	2.8 :	2.3 :	<2.4 :	4.5 :	14.4 J
Cadmium	mg/kg-dry	T	0.34 J	0.047 :	<0.063 :	<0.025 :	<0.024 :	<0.027 J
Calcium	mg/kg-dry	T	8510. :	2650. :	1560. :	963. :	3620. :	4370. :
Chromium	mg/kg-dry	T	27. :	7. :	4.4 :	5.2 :	10.7 :	63.9 :
Cobalt	mg/kg-dry	T	13.6 :	2.2 :	2.1 :	1.9 :	5.5 :	23.3 :
Copper	mg/kg-dry	T	34.1 :	11.7 :	35.7 :	26.3 J	52.4 :	43.6 :
Iron	mg/kg-dry	T	24800. :	15900. :	26200. :	20800. :	28500. :	32900. :
Lead	mg/kg-dry	T	45.9 :	43.9 :	208. :	92.4 :	214. :	30.2 :
Magnesium	mg/kg-dry	T	8370. :	1440. :	888. :	889. :	1770. :	7880. :
Manganese	mg/kg-dry	T	1310. J	311. J	92.1 J	66.4 J	320. J	1020. J

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Appendix A-7c
Soil - Random 0-6 inches
Validated Analytical Results

Parameter	Units	Fraction	MSS3-3		MSS3-4		MSS3-5		MSS3-6		MSS3-7		MSS3-8	
Sample Date			9/30/2002		9/30/2002		10/22/2002		10/3/2002		10/1/2002		10/9/2002	
Sample ID			MSS3-3-T01N-SOL		MSS3-4-T01N-SOL		MSS3-5-T01N-SOL		MSS3-6-T01N-SOL		MSS3-7-T01N-SOL		MSS3-8-T01N-SOL	
Exposure Area			SS3		SS3		SS3		SS3		SS3		SS3	
Mercury	mg/kg-dry	T	0.031	J	0.02	J	<0.017	:	<0.017	:	0.024	:	0.016	:
Molybdenum	mg/kg-dry	T	1.7	:	12.9	:	9.9	:	8.6	:	14.3	:	6.2	J
Nickel	mg/kg-dry	T	33.5	J	4.	J	2.7	J	2.4	J	6.7	J	62.2	J
Potassium	mg/kg-dry	T	3810.	J	2030.	J	3530.	J	2890.	J	3910.	J	4160.	J
Selenium	mg/kg-dry	T	0.55	J	1.6	J	0.68	J	0.88	J	0.81	J	0.88	J
Silver	mg/kg-dry	T	<0.14	:	0.2	:	0.78	:	0.6	:	2.1	:	0.13	:
Sodium	mg/kg-dry	T	64.6	:	67.	:	<89.8	:	102.	:	<157.	:	<48.	:
Thallium	mg/kg-dry	T	0.16	:	0.23	:	0.32	:	0.23	:	0.36	:	0.23	:
Vanadium	mg/kg-dry	T	29.9	:	8.	:	15.6	:	12.2	:	19.1	:	50.	:
Zinc	mg/kg-dry	T	151.	J	102.	J	25.2	J	15.2	J	43.5	J	119.	J

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Appendix A-7c
Soil - Random 0-6 inches
Validated Analytical Results

		Site ID	MSS3-9		MSS4A1-1		MSS4A1-10		MSS4A1-2		MSS4A1-3		MSS4A1-4	
		Sample Date	10/9/2002		9/29/2002		10/8/2002		10/4/2002		9/27/2002		9/29/2002	
		Sample ID	MSS3-9-T01N-SOL		MSS4A1-1-T01N-SOL		MSS4A1-10-T01N-SOL		MSS4A1-2-T01N-SOL		MSS4A1-3-T01N-SOL		MSS4A1-4-T01N-SOL	
		Exposure Area	SS3		SS4A1		SS4A1		SS4A1		SS4A1		SS4A1	
Parameter	**Units**	**Fraction**												
General Chemistry														
Ammonia	mg/kg-dry	T	70.	:	12.1	:	81.3	:	20.3	:	11.8	:	6.9	:
Chloride	mg/kg-dry	T	3.1	J	3.5	:	3.2	J	<28.	:	50.9	:	<27.4	:
Fluoride	mg/kg-dry	T	0.19	J	-		-		0.18	J	-		-	
Nitrate	mg/kg-dry	T	<2.4	J	<1.	J	<2.3	J	<1.2	J	<1.1	J	<2.2	J
Phosphorus	mg/kg-dry	T	1510.	J	329.	J	1660.	J	22.5	J	444.	J	299.	J
Sulfate	mg/kg-dry	T	3.8	J	10100.	:	1970.	J	1140.	:	50.9	:	2400.	:
Total Kjeldahl Nitrogen	mg/kg-dry	T	649.	:	50.2	:	40.1	:	102.	:	52.6	:	31.7	:
Total Organic Carbon	mg/kg-dry	T	26900.	J	<113.	J	<115.	J	1590.	J	<106.	J	<110.	J
Laboratory Parameters														
pH	SU	T	7.2	:	3.3	:	3.3	:	3.7	:	4.	:	3.6	:
Solids, Percent	%	T	84.5	:	89.	:	87.	:	89.3	:	94.8	:	91.5	:
Specific Conductance	umhos/cm	T	34.2	:	2320.	:	670.	:	1610.	:	53.9	:	143.	:
Geotechnical														
Organic Soils	%	T	-		4.52	:	5.6	:	2.91	:	2.4	:	-	
Physical Properties														
Cation-Exchange Capacity	meq/100g	T	20.4	:	20.4	:	21.	:	15.4	:	12.3	:	8.9	:
Sodium Absorption Ratio	ratio	T	0.52	:	<0.02	:	<0.04	:	0.04	:	0.28	:	<0.12	:
Metals														
Aluminum	mg/kg-dry	T	14500.	:	5570.	:	15200.	:	8920.	:	6320.	:	1990.	:
Antimony	mg/kg-dry	T	<0.19	J	<0.04	J	<0.18	J	<0.17	J	<0.04	J	<0.04	J
Arsenic	mg/kg-dry	T	2.9	:	4.1	:	15.1	:	6.3	:	6.9	:	6.4	:
Barium	mg/kg-dry	T	204.	:	80.	:	200.	:	91.9	:	45.9	:	32.3	:
Beryllium	mg/kg-dry	T	0.83	:	0.41	:	0.55	:	0.6	:	0.59	:	0.21	:
Boron	mg/kg-dry	T	13.	J	<0.51	:	<0.43	J	<0.44	J	<0.44	:	<0.49	J
Cadmium	mg/kg-dry	T	0.21	J	<0.071	:	<0.06	J	<0.026	J	0.19	J	<0.031	J
Calcium	mg/kg-dry	T	2920.	:	12000.	:	1070.	:	1830.	:	219.	:	77.1	:
Chromium	mg/kg-dry	T	20.6	:	12.9	:	21.7	:	27.	:	8.8	:	2.7	:
Cobalt	mg/kg-dry	T	10.4	:	1.5	:	5.9	:	4.2	:	3.	:	<0.23	:
Copper	mg/kg-dry	T	38.7	:	21.1	:	77.7	:	35.3	:	70.6	:	31.	:
Iron	mg/kg-dry	T	30500.	:	37500.	:	47400.	:	29000.	:	31000.	:	21400.	:
Lead	mg/kg-dry	T	98.4	:	51.5	:	238.	:	118.	:	170.	:	162.	:
Magnesium	mg/kg-dry	T	6330.	:	2380.	:	6710.	:	5280.	:	1840.	:	435.	:
Manganese	mg/kg-dry	T	733.	j	196.	J	674.	J	390.	J	837.	J	179.	J

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Appendix A-7c
Soil - Random 0-6 inches
Validated Analytical Results

Parameter	Units	Fraction	Site ID	MSS3-9		MSS4A1-1		MSS4A1-10		MSS4A1-2		MSS4A1-3		MSS4A1-4	
			Sample Date	10/9/2002		9/29/2002		10/8/2002		10/4/2002		9/27/2002		9/29/2002	
			Sample ID	MSS3-9-T01N-SOL		MSS4A1-1-T01N-SOL		MSS4A1-10-T01N-SOL		MSS4A1-2-T01N-SOL		MSS4A1-3-T01N-SOL		MSS4A1-4-T01N-SOL	
			Exposure Area	SS3		SS4A1		SS4A1		SS4A1		SS4A1		SS4A1	
Mercury	mg/kg-dry	T		<0.018	J	<0.018	:	<0.018	:	<0.017	:	<0.017	:	<0.017	J
Molybdenum	mg/kg-dry	T		9.	:	7.4	:	9.3	:	15.4	:	15.7	:	15.8	:
Nickel	mg/kg-dry	T		12.9	J	9.7	J	19.5	J	16.6	J	4.8	J	<1.4	J
Potassium	mg/kg-dry	T		2710.	J	4230.	J	5000.	J	2680.	J	2060.	J	2170.	J
Selenium	mg/kg-dry	T		1.1	J	1.2	J	<0.87	J	0.82	J	0.87	J	0.59	J
Silver	mg/kg-dry	T		0.42	:	0.98	:	2.1	:	0.85	:	0.87	:	1.6	:
Sodium	mg/kg-dry	T		90.6	:	<98.8	:	<51.2	:	153.	:	99.3	:	107.	:
Thallium	mg/kg-dry	T		0.22	:	0.16	:	0.37	:	0.15	:	0.14	:	0.13	:
Vanadium	mg/kg-dry	T		34.5	:	15.5	:	23.4	:	22.3	:	10.3	:	2.7	:
Zinc	mg/kg-dry	T		150.	J	26.1	J	111.	J	71.9	J	98.1	J	54.7	J

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T = Total Fraction

Appendix A-7c
Soil - Random 0-6 inches
Validated Analytical Results

Parameter	Units	Exposure Area Fraction	Site ID / Sample Date / Sample ID		Site ID / Sample Date / Sample ID		Site ID / Sample Date / Sample ID		Site ID / Sample Date / Sample ID		Site ID / Sample Date / Sample ID		Site ID / Sample Date / Sample ID	
			MSS4A1-5 9/29/2002 MSS4A1-5-T01N-SOL SS4A1		MSS4A1-6 10/4/2002 MSS4A1-6-T01N-SOL SS4A1		MSS4A1-7 10/4/2002 MSS4A1-7-T01N-SOL SS4A1		MSS4A1-8 10/3/2002 MSS4A1-8-T01N-SOL SS4A1		MSS4A1-9 9/29/2002 MSS4A1-9-T01N-SOL SS4A1		MSS4A2-1 10/3/2002 MSS4A2-1-T01N-SOL SS4A2	
General Chemistry														
Ammonia	mg/kg-dry	T	9.1	:	8.1	:	6.5	:	6.	J	5.1	:	29.8	J
Chloride	mg/kg-dry	T	<28.	:	<28.	:	<27.4	:	<29.2	:	<27.7	:	<27.8	:
Fluoride	mg/kg-dry	T	-		0.32	J	0.13	J	-		-		-	
Fluoride	mg/Kg	T	-		-		-		-		-		0.14	J
Nitrate	mg/kg-dry	T	<2.3	J	<1.2	J	<1.1	J	<2.4	J	<2.3	J	3.5	J
Phosphorus	mg/kg-dry	T	704.	J	94.	J	32.2	J	117.	J	396.	J	10.4	J
Sulfate	mg/kg-dry	T	265.	:	<1.2	:	947.	:	111.	:	46.3	:	3300.	:
Total Kjeldahl Nitrogen	mg/kg-dry	T	<26.1	:	103.	:	48.5	:	33.1	:	34.1	:	48.3	:
Total Organic Carbon	mg/kg-dry	T	<112.	J	450.	J	<110.	J	<117.	J	<111.	J	974.	J
Laboratory Parameters														
pH	SU	T	3.3	:	6.1	:	3.5	:	3.9	:	4.	:	3.2	:
Solids, Percent	%	T	89.4	:	89.3	:	91.5	:	85.7	:	90.4	:	90.1	:
Specific Conductance	umhos/cm	T	353.	:	46.8	:	2140.	:	189.	:	79.9	:	1600.	:
Geotechnical														
Organic Soils	%	T	-		2.9	:	2.05	:	2.4	:	-		3.	:
Physical Properties														
Cation-Exchange Capacity	meq/100g	T	16.8	:	20.8	:	7.2	:	12.1	:	7.3	:	11.3	:
Sodium Absorption Ratio	ratio	T	0.1	:	<0.14	:	<0.02	:	0.08	:	<0.11	:	<0.02	:
Metals														
Aluminum	mg/kg-dry	T	4990.	:	12700.	:	4320.	:	5440.	:	4120.	:	5560.	:
Antimony	mg/kg-dry	T	<0.04	J	<0.17	J	<0.17	J	<0.18	:	<0.04	J	<0.18	J
Arsenic	mg/kg-dry	T	4.7	:	7.3	:	3.7	:	4.9	:	6.8	:	3.	:
Barium	mg/kg-dry	T	121.	:	49.	:	74.2	:	39.2	:	40.3	:	69.9	:
Beryllium	mg/kg-dry	T	0.24	:	1.	:	0.34	:	0.53	:	0.25	:	0.23	:
Boron	mg/kg-dry	T	0.54	J	<0.44	J	<0.43	:	<1.4	:	<0.48	:	<0.82	:
Cadmium	mg/kg-dry	T	<0.032	J	1.3	:	<0.026	:	0.2	:	<0.03	:	<0.027	:
Calcium	mg/kg-dry	T	459.	:	2060.	:	1920.	:	570.	:	776.	:	7940.	:
Chromium	mg/kg-dry	T	8.4	:	28.6	:	7.7	:	11.2	:	4.2	:	13.8	:
Cobalt	mg/kg-dry	T	1.4	:	14.5	:	2.6	:	4.6	:	0.68	:	1.5	:
Copper	mg/kg-dry	T	23.5	:	85.	:	25.1	:	31.9	:	48.4	:	39.1	:
Iron	mg/kg-dry	T	22200.	:	24800.	:	15900.	:	22600.	:	18000.	:	22000.	:
Lead	mg/kg-dry	T	190.	:	143.	:	148.	:	125.	:	869.	:	51.8	:
Magnesium	mg/kg-dry	T	1690.	:	5100.	:	1930.	:	1760.	:	1150.	:	3400.	:

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R = Qualified as rejected value from data validation and results are considered unusable for any purpose

T = Total Fraction

Appendix A-7c
Soil - Random 0-6 inches
Validated Analytical Results

Parameter	Units	Fraction	Site ID	Sample Date	Sample ID	Exposure Area											
			MSS4A1-5	9/29/2002	MSS4A1-5-T01N-SOL	SS4A1	MSS4A1-6	10/4/2002	MSS4A1-6-T01N-SOL	SS4A1	MSS4A1-7	10/4/2002	MSS4A1-7-T01N-SOL	SS4A1	MSS4A1-8	10/3/2002	MSS4A1-8-T01N-SOL	SS4A1	MSS4A1-9	9/29/2002	MSS4A1-9-T01N-SOL	SS4A1	MSS4A2-1	10/3/2002	MSS4A2-1-T01N-SOL	SS4A2
Manganese	mg/kg-dry	T	231.	J			2580.	J			409.	J			1030.	J			281.	J			185.	J		
Mercury	mg/kg-dry	T	<0.019	J			<0.018	:			<0.017	:			<0.019	:			<0.018	J			<0.018	:		
Molybdenum	mg/kg-dry	T	13.4	:			4.7	:			9.2	:			7.1	:			9.9	:			9.	:		
Nickel	mg/kg-dry	T	5.2	J			25.6	J			5.9	J			8.4	J			2.7	J			8.9	J		
Potassium	mg/kg-dry	T	2750.	J			1000.	J			1970.	J			1740.	J			2310.	J			2500.	J		
Selenium	mg/kg-dry	T	0.85	J			1.4	J			0.33	J			1.3	J			0.72	J			0.73	J		
Silver	mg/kg-dry	T	1.2	:			0.6	:			0.45	:			0.58	:			1.9	:			0.63	:		
Sodium	mg/kg-dry	T	169.	:			54.	:			137.	:			123.	:			82.6	:			106.	:		
Thallium	mg/kg-dry	T	0.19	:			0.12	:			0.09	:			0.17	:			0.16	:			0.29	:		
Vanadium	mg/kg-dry	T	8.5	:			26.	:			6.7	:			10.2	:			4.	:			16.	:		
Zinc	mg/kg-dry	T	55.5	J			357.	J			46.1	J			138.	J			49.9	J			28.6	J		

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Appendix A-7c
Soil - Random 0-6 inches
Validated Analytical Results

Parameter	Units	Exposure Area Fraction	Site ID		Sample Date		Sample ID		Exposure Area		Site ID		Sample Date		Sample ID		Exposure Area		Site ID		Sample Date		Sample ID		Exposure Area		Site ID		Sample Date		Sample ID		Exposure Area	
			MSS4A2-10		10/4/2002		MSS4A2-10-T01N-SOL		SS4A2		MSS4A2-2		10/4/2002		MSS4A2-2-T01N-SOL		SS4A2		MSS4A2-3		10/4/2002		MSS4A2-3-T01N-SOL		SS4A2		MSS4A2-4		10/11/2002		MSS4A2-4-T01N-SOL		SS4A2	
			MSS4A2-5		10/11/2002		MSS4A2-5-T01N-SOL		SS4A2		MSS4A2-6		10/11/2002		MSS4A2-6-T01N-SOL		SS4A2													
General Chemistry																																
Ammonia	mg/kg-dry	T	33.3	:	124.	J	9.8	:	31.3	:	28.2	:	24.	:																		
Chloride	mg/kg-dry	T	15.3	:	<27.7	:	3.4	:	<2.2	J	16.3	J	3.3	J																		
Fluoride	mg/kg-dry	T	0.19	J	0.11	J	0.16	J	0.32	J	0.88	J	5.5	J																		
Nitrate	mg/kg-dry	T	<2.4	J	<1.2	J	<2.2	J	<2.2	J	<2.3	J	2.3	J																		
Phosphorus	mg/kg-dry	T	1470.	J	410.	J	299.	J	1260.	J	2140.	J	123.	J																		
Sulfate	mg/kg-dry	T	<5810.	J	744.	J	135.	J	10200.	J	10200.	J	6850.	J																		
Total Kjeldahl Nitrogen	mg/kg-dry	T	49.1	:	39.5	J	37.2	:	382.	J	226.	J	37.1	J																		
Total Organic Carbon	mg/kg-dry	T	811.	J	<111.	J	<110.	J	1580.	J	<112.	J	<106.	J																		
Laboratory Parameters																																
pH	SU	T	3.1	:	3.4	:	3.3	:	3.7	:	3.3	:	7.5	:																		
Solids, Percent	%	T	86.1	:	90.3	:	91.6	:	93.9	:	89.8	:	94.9	:																		
Specific Conductance	umhos/cm	T	4700.	:	1830.	:	1220.	:	1630.	:	1740.	:	1070.	J																		
Geotechnical																																
Organic Soils	%	T	4.64	:	2.86	:	2.67	:	4.25	J	5.71	J	2.68	J																		
Physical Properties																																
Cation-Exchange Capacity	meq/100g	T	16.4	:	8.2	:	10.2	:	23.3	:	17.8	:	9.2	:																		
Sodium Absorption Ratio	ratio	T	<0.02	:	<0.02	:	<0.03	:	<0.02	:	<0.01	:	0.05	:																		
Metals																																
Aluminum	mg/kg-dry	T	15500.	:	2550.	:	5660.	:	16000.	J	12400.	:	13300.	:																		
Antimony	mg/kg-dry	T	<0.19	J	<0.18	J	<0.15	J	<0.16	J	<0.18	J	<0.17	J																		
Arsenic	mg/kg-dry	T	1.3	:	4.1	:	3.3	:	4.1	:	1.4	:	3.3	:																		
Barium	mg/kg-dry	T	163.	:	30.7	:	76.7	:	159.	:	240.	:	121.	:																		
Beryllium	mg/kg-dry	T	0.52	:	0.18	:	0.34	:	0.81	:	0.48	:	1.4	J																		
Boron	mg/kg-dry	T	13.8	J	<0.43	:	<0.4	:	<0.41	J	<0.41	J	<0.41	J																		
Cadmium	mg/kg-dry	T	<0.024	J	<0.026	:	<0.024	:	<0.025	J	<0.026	J	0.41	:																		
Calcium	mg/kg-dry	T	14900.	:	9700.	:	1750.	:	6620.	J	6090.	:	22600.	:																		
Chromium	mg/kg-dry	T	67.9	:	3.6	:	12.1	:	50.1	J	51.9	:	40.1	:																		
Cobalt	mg/kg-dry	T	9.6	J	0.24	:	3.5	:	13.3	J	7.4	:	24.1	J																		
Copper	mg/kg-dry	T	76.	:	15.7	:	34.1	:	138.	:	94.6	:	184.	:																		
Iron	mg/kg-dry	T	43700.	:	17100.	:	21200.	:	45300.	J	55100.	:	35800.	:																		
Lead	mg/kg-dry	T	9.8	:	164.	:	91.8	:	202.	J	64.7	:	95.6	J																		
Magnesium	mg/kg-dry	T	13000.	:	810.	:	3060.	:	10500.	:	9000.	:	9930.	:																		
Manganese	mg/kg-dry	T	192.	J	98.8	J	513.	J	965.	J	440.	J	850.	J																		

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Appendix A-7c
Soil - Random 0-6 inches
Validated Analytical Results

Parameter	Units	Fraction	Site ID	Sample Date	Sample ID	Exposure Area
			MSS4A2-10	10/4/2002	MSS4A2-10-T01N-SOL	SS4A2
			MSS4A2-2	10/4/2002	MSS4A2-2-T01N-SOL	SS4A2
			MSS4A2-3	10/4/2002	MSS4A2-3-T01N-SOL	SS4A2
			MSS4A2-4	10/11/2002	MSS4A2-4-T01N-SOL	SS4A2
			MSS4A2-5	10/11/2002	MSS4A2-5-T01N-SOL	SS4A2
			MSS4A2-6	10/11/2002	MSS4A2-6-T01N-SOL	SS4A2
Mercury	mg/kg-dry	T	<0.018 :	<0.016 :	<0.016 :	<0.018 :	<0.019 :	<0.015 :
Molybdenum	mg/kg-dry	T	24.2 :	31.6 :	12.4 :	27.4 J	82. :	693. :
Nickel	mg/kg-dry	T	34.5 J	1.9 J	8.8 J	32. J	24.4 J	48.5 J
Potassium	mg/kg-dry	T	7690. J	2600. J	2060. J	5420. J	6710. J	4720. J
Selenium	mg/kg-dry	T	1.8 J	0.53 J	0.73 J	1. J	2.3 J	1.7 J
Silver	mg/kg-dry	T	<0.11 :	1.7 :	0.78 :	0.72 :	0.81 :	1.2 :
Sodium	mg/kg-dry	T	262. :	98.1 :	103. :	258. :	270. :	<46.6 :
Thallium	mg/kg-dry	T	1.3 :	0.17 :	0.16 :	0.96 :	0.89 :	0.72 :
Vanadium	mg/kg-dry	T	58.3 :	6. :	12.7 :	46.9 J	60.3 :	47.3 :
Zinc	mg/kg-dry	T	20.1 J	24.2 J	52.3 J	114. J	55.9 J	125. J

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Appendix A-7c
Soil - Random 0-6 inches
Validated Analytical Results

Parameter	Units	Exposure Area Fraction	Site ID	Sample Date	Sample ID	Exposure Area
			MSS4A2-7	10/3/2002	MSS4A2-7-T01N-SOL	SS4A2
			MSS4A2-8	10/11/2002	MSS4A2-8-T01N-SOL	SS4A2
			MSS4A2-9	10/11/2002	MSS4A2-9-T01N-SOL	SS4A2
			MSS4A3-1	9/30/2002	MSS4A3-1-T01N-SOL	SS4A3
			MSS4A3-10	9/26/2002	MSS4A3-30-T01N-SOL	SS4A3
			MSS4A3-2	9/30/2002	MSS4A3-2-T01N-SOL	SS4A3
General Chemistry						
Ammonia	mg/kg-dry	T	<4.1 :	28.1 :	26.5 :	28.9 :	<2.6 :	55. :
Chloride	mg/kg-dry	T	<27.5 :	12.5 J	<2.1 J	<27.7 :	<27.4 :	<27.2 :
Fluoride	mg/kg-dry	T	0.2 J	1.5 J	0.68 J	0.18 J	4.3 J	-
Nitrate	mg/kg-dry	T	<2.2 J	<2.2 J	3.8 J	<2.3 J	1.1 J	<2.2 J
Phosphorus	mg/kg-dry	T	951. J	1300. J	882. J	602. J	638. J	1060. J
Sulfate	mg/kg-dry	T	3100. :	7810. J	1110. J	2060. :	1970. J	8280. :
Total Kjeldahl Nitrogen	mg/kg-dry	T	29.6 :	52.2 J	143. J	90.6 J	46.8 :	144. J
Total Organic Carbon	mg/kg-dry	T	<110. J	<107. J	2210. J	443. J	<110. J	3040. J
Laboratory Parameters								
pH	SU	T	3.4 :	3.5 :	7.4 :	3.4 :	5.2 :	3.1 :
Solids, Percent	%	T	91.2 :	93.5 :	95.9 :	90.3 :	91.3 :	92.2 :
Specific Conductance	umhos/cm	T	1390. :	1080. :	580. J	453. :	1485. :	837. :
Geotechnical								
Organic Soils	%	T	2.51 :	3.8 J	1.86 J	-	-	-
Physical Properties								
Cation-Exchange Capacity	meq/100g	T	7.2 :	13.8 :	10.7 :	7.6 :	14.9 :	10.7 :
Sodium Absorption Ratio	ratio	T	<0.02 :	<0.02 :	0.04 :	0.05 :	0.02 :	0.05 :
Metals								
Aluminum	mg/kg-dry	T	5420. :	11300. :	12100. :	4950. :	13400. :	7870. :
Antimony	mg/kg-dry	T	<0.17 J	<0.16 J	<0.16 J	0.04 J	<0.04 J	<0.03 J
Arsenic	mg/kg-dry	T	0.89 :	0.98 :	1.4 J	3.8 :	2.2 :	3.3 :
Barium	mg/kg-dry	T	146. :	173. :	88.7 :	140. :	133. :	113. :
Beryllium	mg/kg-dry	T	0.22 :	0.5 :	1. :	0.23 :	1.2 :	0.31 :
Boron	mg/kg-dry	T	<1. :	<0.39 J	<0.36 J	1. J	<0.51 J	1.2 J
Cadmium	mg/kg-dry	T	<0.024 :	<0.024 J	0.29 J	<0.025 J	0.045 J	<0.02 J
Calcium	mg/kg-dry	T	8010. :	8030. :	16500. :	693. :	16800. :	1300. :
Chromium	mg/kg-dry	T	11.5 :	53.6 :	65.2 :	7.4 :	42.5 :	15. :
Cobalt	mg/kg-dry	T	0.89 :	5.2 :	13. :	0.67 :	16.9 :	1.1 :
Copper	mg/kg-dry	T	20.9 :	59.7 :	171. :	23.2 :	221. :	44.5 :
Iron	mg/kg-dry	T	22300. :	32200. :	19600. :	26500. :	33300. :	38400. :
Lead	mg/kg-dry	T	18.6 :	19.8 :	30.4 :	55.7 :	57.3 :	32.3 :
Magnesium	mg/kg-dry	T	4180. :	9150. :	11100. :	1910. :	9930. :	4510. :
Manganese	mg/kg-dry	T	179. J	267. J	968. J	74.9 J	611. J	103. J

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Appendix A-7c
Soil - Random 0-6 inches
Validated Analytical Results

Parameter	Units	Fraction	Site ID	Sample Date	Sample ID	Exposure Area											
			MSS4A2-7	10/3/2002	MSS4A2-7-T01N-SOL	SS4A2	MSS4A2-8	10/11/2002	MSS4A2-8-T01N-SOL	SS4A2	MSS4A2-9	10/11/2002	MSS4A2-9-T01N-SOL	SS4A2	MSS4A3-1	9/30/2002	MSS4A3-1-T01N-SOL	SS4A3	MSS4A3-10	9/26/2002	MSS4A3-30-T01N-SOL	SS4A3	MSS4A3-2	9/30/2002	MSS4A3-2-T01N-SOL	SS4A3
Mercury	mg/kg-dry	T	<0.018	:			<0.018	:			<0.017	:			<0.017	J			<0.017	J			<0.017	J		
Molybdenum	mg/kg-dry	T	40.1	:			72.4	:			525.	:			27.2	:			410.	:			28.6	:		
Nickel	mg/kg-dry	T	7.7	J			22.8	J			43.	J			3.	J			36.9	J			7.5	J		
Potassium	mg/kg-dry	T	2670.	J			5280.	J			4480.	J			3320.	J			5490.	J			3930.	J		
Selenium	mg/kg-dry	T	0.78	J			1.3	J			<1.	J			1.	J			0.92	J			0.88	J		
Silver	mg/kg-dry	T	0.46	:			0.22	:			0.36	:			0.69	:			0.68	:			0.45	:		
Sodium	mg/kg-dry	T	146.	:			136.	:			<40.4	:			459.	:			<57.3	:			401.	:		
Thallium	mg/kg-dry	T	0.26	:			0.77	:			0.4	:			0.22	:			0.61	:			0.47	:		
Vanadium	mg/kg-dry	T	24.	:			46.8	:			54.9	:			10.9	:			45.7	:			25.1	:		
Zinc	mg/kg-dry	T	10.5	J			50.2	J			73.2	J			15.2	J			67.4	:			17.5	J		

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Appendix A-7c
Soil - Random 0-6 inches
Validated Analytical Results

Parameter	Units	Exposure Area Fraction	Site ID		Sample Date		Sample ID		Exposure Area															
			MSS4A3-3		9/29/2002		MSS4A3-3-T01N-SOL		SS4A3		MSS4A3-4		9/30/2002		MSS4A3-4-T01N-SOL		SS4A3		MSS4A3-5		9/30/2002		MSS4A3-5-T01N-SOL		SS4A3	
General Chemistry																										
Ammonia	mg/kg-dry	T	6.2	:							37.6	:							7.1	:						
Chloride	mg/kg-dry	T	<27.7	:							<28.6	:							<27.9	:						
Fluoride	mg/kg-dry	T	4.9	J							2.1	J							0.74	J						
Nitrate	mg/kg-dry	T	<1.2	J							<2.3	J							<2.3	J						
Phosphorus	mg/kg-dry	T	939.	J							1300.	J							217.	J						
Sulfate	mg/kg-dry	T	11100.	:							62.4	J							47.3	:						
Total Kjeldahl Nitrogen	mg/kg-dry	T	<25.8	:							208.	:							31.1	:						
Total Organic Carbon	mg/kg-dry	T	<111.	J							13000.	J							426.	J						
Laboratory Parameters																										
pH	SU	T	3.5	:							6.9	:							7.8	:						
Solids, Percent	%	T	90.3	:							87.7	:							89.7	:						
Specific Conductance	umhos/cm	T	1280.	:							330.	:							125.	:						
Geotechnical																										
Organic Soils	%	T	2.89	:							-								-							
Physical Properties																										
Cation-Exchange Capacity	meq/100g	T	15.7	:							17.1	:							9.7	:						
Sodium Absorption Ratio	ratio	T	<0.02	:							<0.03	:							<0.05	:						
Metals																										
Aluminum	mg/kg-dry	T	10800.	:							11600.	:							15600.	:						
Antimony	mg/kg-dry	T	<0.04	J							<0.03	J							<0.03	J						
Arsenic	mg/kg-dry	T	2.1	:							2.6	:							2.8	:						
Barium	mg/kg-dry	T	91.8	:							43.6	:							87.9	:						
Beryllium	mg/kg-dry	T	0.54	:							1.3	:							1.1	:						
Boron	mg/kg-dry	T	<0.49	:							<0.37	J							<0.3	J						
Cadmium	mg/kg-dry	T	0.42	J							1.8	:							<0.019	J						
Calcium	mg/kg-dry	T	10100.	:							7560.	:							13800.	:						
Chromium	mg/kg-dry	T	18.2	:							13.	:							33.3	:						
Cobalt	mg/kg-dry	T	4.	:							10.9	:							17.6	:						
Copper	mg/kg-dry	T	75.2	:							172.	:							200.	:						
Iron	mg/kg-dry	T	23400.	:							13800.	:							29500.	:						
Lead	mg/kg-dry	T	263.	:							64.7	:							10.4	:						
Magnesium	mg/kg-dry	T	5610.	:							4410.	:							12300.	:						
Manganese	mg/kg-dry	T	468.	J							685.	J							1040.	J						

Parameter	Units	Exposure Area Fraction	Site ID		Sample Date		Sample ID		Exposure Area															
			MSS4A3-6		9/29/2002		MSS4A3-6-T01N-SOL		SS4A3		MSS4A3-7		9/29/2002		MSS4A3-7-T01N-SOL		SS4A3		MSS4A3-8		9/29/2002		MSS4A3-8-T01N-SOL		SS4A3	
General Chemistry																										
Ammonia	mg/kg-dry	T	4.9	:							10.	:							4.4	:						
Chloride	mg/kg-dry	T	1180.	:							1.7	:							<27.3	:						
Fluoride	mg/kg-dry	T	2.	J							4.1	J							1.8	J						
Nitrate	mg/kg-dry	T	<1.1	J							<1.2	J							<1.1	J						
Phosphorus	mg/kg-dry	T	1480.	J							992.	J							1010.	J						
Sulfate	mg/kg-dry	T	1180.	:							1130.	:							1800.	:						
Total Kjeldahl Nitrogen	mg/kg-dry	T	49.6	:							64.5	:							25.9	:						
Total Organic Carbon	mg/kg-dry	T	700.	J							432.	J							749.	J						
Laboratory Parameters																										
pH	SU	T	6.6	:							5.	:							6.3	:						
Solids, Percent	%	T	91.9	:							88.8	:							91.9	:						
Specific Conductance	umhos/cm	T	585.	:							1600.	:							674.	:						
Geotechnical																										
Organic Soils	%	T	1.55	:							2.47	:							1.64	:						
Physical Properties																										
Cation-Exchange Capacity	meq/100g	T	14.6	:							24.	:							11.7	:						
Sodium Absorption Ratio	ratio	T	0.02	:							0.03	:							<0.02	:						
Metals																										
Aluminum	mg/kg-dry	T	16400.	:							21700.	:							12500.	:						
Antimony	mg/kg-dry	T	<0.04	J							<0.04	J							<0.04	J						
Arsenic	mg/kg-dry	T	2.2	:							3.1	:							3.2	:						
Barium	mg/kg-dry	T	152.	:							137.	:							104.	:						
Beryllium	mg/kg-dry	T	0.95	:							1.7	:							1.3	:						
Boron	mg/kg-dry	T	<0.52	:							<0.53	:							<0.44	:						
Cadmium	mg/kg-dry	T	0.46	J							0.81	:							0.48	J						
Calcium	mg/kg-dry	T	15800.	:							9150.	:							14600.	:						
Chromium	mg/kg-dry	T	57.5	:							93.1	:							31.8	:						
Cobalt	mg/kg-dry	T	16.8	:							27.2	:							15.4	:						
Copper	mg/kg-dry	T	200.	:							172.	:							214.	:						
Iron	mg/kg-dry	T	26500.	:							41200.	:							24400.	:						
Lead	mg/kg-dry	T	26.8	:							112.	:							32.	:						
Magnesium	mg/kg-dry	T	13200.	:							15300.	:							8790.	:						
Manganese	mg/kg-dry	T	687.	J							753.	J							628.	J						

J = Qualified as estimated during data validation

R = Qualified as rejected value from data validation and results are considered unusable for any purpose

T = Total Fraction

Appendix A-7c
Soil - Random 0-6 inches
Validated Analytical Results

		Site ID	MSS4A3-3		MSS4A3-4		MSS4A3-5		MSS4A3-6		MSS4A3-7		MSS4A3-8	
		Sample Date	9/29/2002		9/30/2002		9/30/2002		9/29/2002		9/29/2002		9/29/2002	
		Sample ID	MSS4A3-3-T01N-SOL		MSS4A3-4-T01N-SOL		MSS4A3-5-T01N-SOL		MSS4A3-6-T01N-SOL		MSS4A3-7-T01N-SOL		MSS4A3-8-T01N-SOL	
		Exposure Area	SS4A3		SS4A3		SS4A3		SS4A3		SS4A3		SS4A3	
Parameter	**Units**	**Fraction**												
Mercury	mg/kg-dry	T	<0.018	:	<0.018	J	<0.017	J	<0.017	:	<0.018	:	0.075	:
Molybdenum	mg/kg-dry	T	203.	:	35.4	:	25.2	:	115.	:	63.8	:	740.	:
Nickel	mg/kg-dry	T	9.1	J	19.3	J	37.3	J	42.4	J	68.4	J	24.9	J
Potassium	mg/kg-dry	T	4190.	J	2390.	J	3300.	J	4740.	J	5680.	J	5100.	J
Selenium	mg/kg-dry	T	0.85	J	0.95	J	1.1	J	0.97	J	1.1	J	0.81	J
Silver	mg/kg-dry	T	0.49	:	0.47	:	0.86	:	0.46	:	0.88	:	6.5	:
Sodium	mg/kg-dry	T	171.	:	42.7	:	<33.6	:	<70.5	:	<101.	:	<79.8	:
Thallium	mg/kg-dry	T	0.57	:	0.29	:	0.33	:	0.43	:	0.74	:	0.5	:
Vanadium	mg/kg-dry	T	28.1	:	15.7	:	56.1	:	58.2	:	66.4	:	44.2	:
Zinc	mg/kg-dry	T	66.7	J	165.	J	32.3	J	57.3	J	106.	J	44.8	J

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T = Total Fraction

Appendix A-7c
Soil - Random 0-6 inches
Validated Analytical Results

Parameter	Units	Exposure Area Fraction	Site ID / Sample Date / Sample ID / Exposure Area		MSS4A3-9 / 9/29/2002 / MSS4A3-29-T01N-SOL / SS4A3		MSS5-1 / 10/2/2002 / MSS5-1-T01N-SOL / SS5		MSS5-10 / 10/1/2002 / MSS5-10-T01N-SOL / SS5		MSS5-2 / 10/1/2002 / MSS5-2-T01N-SOL / SS5		MSS5-3 / 10/2/2002 / MSS5-3-T01N-SOL / SS5		MSS5-4 / 10/2/2002 / MSS5-4-T01N-SOL / SS5	
General Chemistry																
Ammonia	mg/kg-dry	T			3.9	:	61.6	:	22.8	:	<19.5	:	56.6	:	55.9	:
Chloride	mg/kg-dry	T			<27.1	:	<27.3	:	<27.9	:	<26.9	:	<27.6	:	<27.3	:
Fluoride	mg/kg-dry	T			0.79	J	4.	J	-		3.9	J	0.35	J	2.	J
Nitrate	mg/kg-dry	T			<2.2	J	<2.2	J	<2.3	J	<2.2	J	<2.3	J	<2.2	J
Phosphorus	mg/kg-dry	T			959.	J	20.6	J	1180.	J	615.	J	498.	J	723.	J
Sulfate	mg/kg-dry	T			4380.	J	22.2	:	19.2	:	566.	:	109.	:	59.4	:
Total Kjeldahl Nitrogen	mg/kg-dry	T			<24.3	:	64.	:	94.5	:	37.6	:	58.4	:	25.7	:
Total Organic Carbon	mg/kg-dry	T			902.	J	<110.	J	2830.	J	1910.	J	<111.	J	<109.	J
Laboratory Parameters																
pH	SU	T			3.4	:	5.2	:	3.9	:	5.4	:	7.5	:	7.1	:
Solids, Percent	%	T			92.5	:	91.6	:	89.8	:	93.1	:	90.7	:	91.9	:
Specific Conductance	umhos/cm	T			1985.	:	72.8	:	76.9	:	847.	:	180.	:	510.	:
Geotechnical																
Organic Soils	%	T			-		1.7	:	3.42	:	1.77	:	2.27	:	1.99	:
Physical Properties																
Cation-Exchange Capacity	meq/100g	T			13.2	:	10.6	:	10.1	:	15.1	:	16.	:	14.4	:
Sodium Absorption Ratio	ratio	T			<0.02	:	<0.09	:	0.25	:	<0.02	:	<0.04	:	<0.03	:
Metals																
Aluminum	mg/kg-dry	T			9020.	:	7890.	:	7700.	:	8890.	:	21300.	:	16800.	:
Antimony	mg/kg-dry	T			<0.04	J	<0.18	J	<0.18	J	<0.18	J	<0.15	J	<0.17	J
Arsenic	mg/kg-dry	T			1.3	J	2.8	:	2.9	:	1.8	:	1.7	:	2.8	:
Barium	mg/kg-dry	T			90.1	:	76.8	:	341.	:	43.8	:	248.	:	142.	:
Beryllium	mg/kg-dry	T			0.49	:	0.68	:	0.28	:	1.	:	1.	:	1.2	:
Boron	mg/kg-dry	T			<0.49	J	4.7	J	<0.35	J	<0.37	J	7.9	J	5.6	J
Cadmium	mg/kg-dry	T			<0.031	J	0.045	:	<0.021	:	0.048	:	<0.025	:	<0.022	:
Calcium	mg/kg-dry	T			13300.	:	3260.	:	653.	:	9360.	:	18700.	:	22600.	:
Chromium	mg/kg-dry	T			26.3	:	17.6	:	31.5	:	12.2	:	73.8	:	54.3	:
Cobalt	mg/kg-dry	T			7.2	:	8.3	:	2.	:	5.7	:	30.	:	15.7	:
Copper	mg/kg-dry	T			90.8	J	127.	:	33.6	:	198.	:	257.	:	144.	:
Iron	mg/kg-dry	T			27700.	:	17300.	:	31000.	:	15900.	:	41200.	:	30700.	:
Lead	mg/kg-dry	T			34.8	:	249.	:	98.	:	25.4	:	13.7	:	10.9	:
Magnesium	mg/kg-dry	T			6540.	:	3970.	:	4050.	:	4610.	:	21900.	:	11400.	:
Manganese	mg/kg-dry	T			200.	J	624.	J	207.	J	452.	J	672.	J	960.	J

J = Qualified as estimated during data validation

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T = Total Fraction

Appendix A-7c
Soil - Random 0-6 inches
Validated Analytical Results

Parameter	Units	Fraction	Site ID	Sample Date	Sample ID	Exposure Area
			MSS4A3-9	9/29/2002	MSS4A3-29-T01N-SOL	SS4A3
			MSS5-1	10/2/2002	MSS5-1-T01N-SOL	SS5
			MSS5-10	10/1/2002	MSS5-10-T01N-SOL	SS5
			MSS5-2	10/1/2002	MSS5-2-T01N-SOL	SS5
			MSS5-3	10/2/2002	MSS5-3-T01N-SOL	SS5
			MSS5-4	10/2/2002	MSS5-4-T01N-SOL	SS5
Mercury	mg/kg-dry	T	<0.018 J	<0.017 :	<0.018 :	<0.017 :	<0.018 :	<0.017 :
Molybdenum	mg/kg-dry	T	171. J	337. :	102. :	440. :	79.1 :	211. :
Nickel	mg/kg-dry	T	17. J	11.3 J	10.7 J	9.2 J	47.3 J	43.7 J
Potassium	mg/kg-dry	T	4580. J	2340. J	3590. J	2840. J	8030. J	4620. J
Selenium	mg/kg-dry	T	0.65 J	0.93 J	2.7 J	0.77 J	1.1 J	1.1 J
Silver	mg/kg-dry	T	0.53 :	0.51 :	0.56 :	0.46 :	0.31 :	0.31 :
Sodium	mg/kg-dry	T	65.9 :	<46.3 :	666. :	<39.7 :	<44.7 :	<39.6 :
Thallium	mg/kg-dry	T	0.41 :	0.27 :	0.4 :	0.28 :	0.72 :	0.37 :
Vanadium	mg/kg-dry	T	27.6 :	21.6 :	32.3 :	18.3 :	92.9 :	58.4 :
Zinc	mg/kg-dry	T	24.1 J	53.2 J	54. J	31.4 J	48.3 J	34.3 J

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T = Total Fraction

Appendix A-7c
Soil - Random 0-6 inches
Validated Analytical Results

Parameter	Units	Exposure Area Fraction	Site ID / Sample Date / Sample ID / Exposure Area	MSS5-5 10/2/2002 MSS5-5-T01N-SOL SS5	MSS5-6 10/2/2002 MSS5-6-T01N-SOL SS5	MSS5-7 9/26/2002 MSS5-7-T01N-SOL SS5	MSS5-8 9/26/2002 MSS5-8-T01N-SOL SS5	MSS5-9 10/17/2002 MSS5-9-T01N-SOL SS5	MSS6-1 10/9/2002 MSS6-1-T01N-SOL SS6
General Chemistry									
Ammonia	mg/kg-dry	T		<14.5 :	<12.1 :	<2.6 :	28.5 :	23.3 :	33.1 :
Chloride	mg/kg-dry	T		<27.3 :	<27.2 :	<0.22 :	135. :	2.5 J	<2.2 J
Fluoride	mg/kg-dry	T		0.45 J	0.47 J	1. J	3.2 J	2.8 J	1.3 J
Nitrate	mg/kg-dry	T		<2.2 J	<2.2 J	<0.22 J	<4.3 J	<2.2 J	<2.2 J
Phosphorus	mg/kg-dry	T		185. J	230. J	582. J	17.7 J	276. J	1060. J
Sulfate	mg/kg-dry	T		37.1 :	29.3 :	1530. :	27700. :	13.7 J	198. J
Total Kjeldahl Nitrogen	mg/kg-dry	T		<24.9 :	33. :	35.3 :	498. :	51.3 :	<23.9 :
Total Organic Carbon	mg/kg-dry	T		<109. J	<109. J	<108. J	8710. J	<106. J	<106. J
Laboratory Parameters									
pH	SU	T		7.6 :	8.2 :	6.8 :	3.9 :	7. :	5.9 :
Solids, Percent	%	T		91.9 :	92.1 :	93.3 :	94.9 :	94.6 :	94.8 :
Specific Conductance	umhos/cm	T		121. :	107. :	1230. :	3680. :	20.7 :	1060. :
Geotechnical									
Organic Soils	%	T		0.84 :	1.47 :	-	-	0.81 J	2.06 J
Physical Properties									
Cation-Exchange Capacity	meq/100g	T		3.9 :	5.5 :	8.5 :	15.4 :	21. :	9.2 :
Sodium Absorption Ratio	ratio	T		<0.06 :	<0.06 :	0.02 :	0.04 :	<0.05 :	<0.02 :
Metals									
Aluminum	mg/kg-dry	T		5760. :	11500. :	11800. :	8750. :	7400. :	9500. :
Antimony	mg/kg-dry	T		<0.17 J	<0.18 J	<0.04 J	0.12 J	<0.25 J	<0.14 J
Arsenic	mg/kg-dry	T		1.4 :	3. :	2.9 :	7. :	3.3 :	1.5 :
Barium	mg/kg-dry	T		5.6 :	60.9 :	91.9 :	134. :	17. :	66.2 :
Beryllium	mg/kg-dry	T		0.94 :	1.1 :	1.9 :	0.71 :	2.5 :	0.7 :
Boron	mg/kg-dry	T		1.7 J	3.6 :	<0.48 :	0.62 J	<0.42 :	<0.4 J
Cadmium	mg/kg-dry	T		0.3 :	<0.026 :	1. :	1.4 :	1.3 :	<0.025 J
Calcium	mg/kg-dry	T		14900. :	21700. :	22600. :	10400. :	3750. :	15800. :
Chromium	mg/kg-dry	T		1.6 :	23.6 :	22.3 :	43.5 :	5.5 :	30.7 :
Cobalt	mg/kg-dry	T		1.8 :	7.5 :	9.2 :	19.6 :	2.2 :	11.2 :
Copper	mg/kg-dry	T		95.9 :	101. :	154. :	153. :	85.7 :	243. :
Iron	mg/kg-dry	T		5620. :	16600. :	17400. :	34400. :	10300. :	26000. :
Lead	mg/kg-dry	T		32.7 J	14.1 :	97. :	142. :	226. :	44.1 :
Magnesium	mg/kg-dry	T		1280. J	5920. :	5850. :	6820. :	1180. :	7700. :
Manganese	mg/kg-dry	T		848. J	940. J	1230. J	484. J	4650. J	454. J

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T = Total Fraction

Appendix A-7c
Soil - Random 0-6 inches
Validated Analytical Results

Parameter	Units	Site ID / Sample Date / Sample ID / Exposure Area / Fraction	MSS5-5 10/2/2002 MSS5-5-T01N-SOL SS5 T		MSS5-6 10/2/2002 MSS5-6-T01N-SOL SS5 T		MSS5-7 9/26/2002 MSS5-7-T01N-SOL SS5 T		MSS5-8 9/26/2002 MSS5-8-T01N-SOL SS5 T		MSS5-9 10/17/2002 MSS5-9-T01N-SOL SS5 T		MSS6-1 10/9/2002 MSS6-1-T01N-SOL SS6 T	
Mercury	mg/kg-dry	T	<0.018	:	<0.017	:	<0.017	J	<0.018	J	<0.017	:	<0.017	:
Molybdenum	mg/kg-dry	T	162.	:	256.	:	1190.	:	300.	:	271.	:	32.6	:
Nickel	mg/kg-dry	T	1.6	J	17.8	J	23.	J	43.2	J	3.7	J	27.5	J
Potassium	mg/kg-dry	T	937.	J	2470.	J	2580.	J	3990.	J	2430.	J	3210.	J
Selenium	mg/kg-dry	T	0.6	J	0.49	J	0.69	J	1.3	J	<0.67	:	<1.	J
Silver	mg/kg-dry	T	0.33	:	0.39	:	0.84	:	1.6	:	1.9	:	0.4	:
Sodium	mg/kg-dry	T	61.6	:	<47.6	:	<53.5	:	<49.4	:	75.1	:	<44.8	:
Thallium	mg/kg-dry	T	<0.09	:	0.24	:	0.27	:	0.32	:	0.23	:	0.49	:
Vanadium	mg/kg-dry	T	6.6	:	31.6	:	36.6	:	42.1	:	9.2	:	29.3	:
Zinc	mg/kg-dry	T	55.	J	35.3	J	155.	J	249.	J	193.	:	54.	J

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T = Total Fraction

Appendix A-7c
Soil - Random 0-6 inches
Validated Analytical Results

Parameter	Units	Exposure Area Fraction	Site ID / Sample Date / Sample ID / Exposure Area		MSS6-10 10/9/2002 MSS6-10-T01N-SOL SS6		MSS6-2 10/10/2002 MSS6-2-T01N-SOL SS6		MSS6-3 10/9/2002 MSS6-3-T01N-SOL SS6		MSS6-4 10/10/2002 MSS6-4-T01N-SOL SS6		MSS6-5 10/9/2002 MSS6-5-T01N-SOL SS6		MSS6-6 10/9/2002 MSS6-6-T01N-SOL SS6	
General Chemistry																
Ammonia	mg/kg-dry	T			<16.6	:	61.8	:	15.8	:	23.2	:	34.5	:	<16.6	:
Chloride	mg/kg-dry	T			<2.2	J	<2.2	J	<2.1	J	<2.2	J	2.7	J	3.8	J
Fluoride	mg/kg-dry	T			0.48	J	1.8	J	0.64	J	1.6	J	15.9	J	0.6	J
Nitrate	mg/kg-dry	T			<2.2	J	<2.2	J	<2.1	J	<2.2	J	<2.2	J	<2.2	J
Phosphorus	mg/kg-dry	T			1620.	J	72.4	J	867.	J	1270.	J	281.	J	969.	J
Sulfate	mg/kg-dry	T			3.9	J	1470.	J	35.7	J	931.	J	2040.	J	1730.	J
Total Kjeldahl Nitrogen	mg/kg-dry	T			31.8	:	<26.4	:	39.6	:	34.6	:	75.6	:	38.4	:
Total Organic Carbon	mg/kg-dry	T			312.	J	1020.	J	<105.	J	2150.	J	588.	J	789.	J
Laboratory Parameters																
pH	SU	T			6.9	:	7.2	:	6.9	:	7.6	:	5.5	:	6.7	:
Solids, Percent	%	T			92.8	:	93.7	:	95.8	:	93.4	:	93.2	:	92.7	:
Specific Conductance	umhos/cm	T			18.4	:	625.	:	87.	:	461.	:	834.	:	891.	:
Geotechnical																
Organic Soils	%	T			-		2.49	:	1.81	J	1.63	:	1.82	J	-	
Physical Properties																
Cation-Exchange Capacity	meq/100g	T			7.6	:	12.6	:	12.4	:	11.1	:	8.9	:	8.3	:
Sodium Absorption Ratio	ratio	T			<0.09	:	<0.02	:	<0.06	:	0.1	:	<0.02	:	0.09	:
Metals																
Aluminum	mg/kg-dry	T			14900.	:	18000.	:	14100.	:	13700.	:	11900.	:	11300.	:
Antimony	mg/kg-dry	T			<0.17	J	<0.16	J	<0.13	J	<0.17	J	<0.15	J	<0.15	J
Arsenic	mg/kg-dry	T			3.8	:	0.98	:	2.2	:	2.1	:	3.	:	2.2	:
Barium	mg/kg-dry	T			44.3	:	152.	:	112.	:	90.3	:	98.7	:	79.1	:
Beryllium	mg/kg-dry	T			1.2	:	1.	:	1.	:	1.2	:	1.2	:	1.6	:
Boron	mg/kg-dry	T			10.4	J	15.5	J	<0.4	J	10.4	J	<0.4	J	5.3	:
Cadmium	mg/kg-dry	T			1.4	:	0.076	J	<0.025	J	0.18	J	0.86	:	0.64	:
Calcium	mg/kg-dry	T			5250.	:	10900.	:	16800.	:	16200.	:	8370.	:	15200.	:
Chromium	mg/kg-dry	T			47.8	:	95.1	:	32.8	:	38.8	:	39.9	:	42.	:
Cobalt	mg/kg-dry	T			20.3	:	25.9	:	14.3	:	12.9	:	14.8	:	5.4	:
Copper	mg/kg-dry	T			133.	:	194.	:	277.	:	202.	:	162.	:	183.	:
Iron	mg/kg-dry	T			29400.	:	35100.	:	22200.	:	23300.	:	26100.	:	14500.	:
Lead	mg/kg-dry	T			749.	:	30.6	:	15.9	:	49.9	:	60.8	:	63.2	:
Magnesium	mg/kg-dry	T			12400.	:	17600.	:	8430.	:	9460.	:	7840.	:	7540.	:
Manganese	mg/kg-dry	T			2720.	J	592.	J	815.	J	766.	J	885.	J	637.	J

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T = Total Fraction

Appendix A-7c
Soil - Random 0-6 inches
Validated Analytical Results

Parameter	Units	Exposure Area Fraction	Site ID / Sample Date / Sample ID / Exposure Area											
			MSS6-10 10/9/2002 MSS6-10-T01N-SOL SS6		MSS6-2 10/10/2002 MSS6-2-T01N-SOL SS6		MSS6-3 10/9/2002 MSS6-3-T01N-SOL SS6		MSS6-4 10/10/2002 MSS6-4-T01N-SOL SS6		MSS6-5 10/9/2002 MSS6-5-T01N-SOL SS6		MSS6-6 10/9/2002 MSS6-6-T01N-SOL SS6	
Mercury	mg/kg-dry	T	<0.016	:	<0.018	:	<0.017	:	<0.016	:	<0.016	:	<0.017	:
Molybdenum	mg/kg-dry	T	17.7	:	262.	:	90.1	:	374.	:	254.	:	1860.	:
Nickel	mg/kg-dry	T	40.5	J	63.9	J	29.7	J	27.7	J	32.5	J	23.3	J
Potassium	mg/kg-dry	T	584.	J	7610.	J	3260.	J	4540.	J	3490.	J	4440.	J
Selenium	mg/kg-dry	T	0.71	J	1.6	J	<0.84	J	0.8	J	1.2	J	0.83	J
Silver	mg/kg-dry	T	1.	:	0.38	:	0.37	:	0.63	:	1.	:	0.88	:
Sodium	mg/kg-dry	T	<43.7	:	<44.6	:	<45.	:	<42.1	:	<45.2	:	<42.4	:
Thallium	mg/kg-dry	T	0.089	:	1.2	:	0.36	:	0.66	:	0.43	:	0.43	:
Vanadium	mg/kg-dry	T	40.6	:	69.8	:	45.7	:	45.5	:	38.2	:	47.9	:
Zinc	mg/kg-dry	T	596.	J	74.8	J	38.1	J	81.7	J	181.	J	182.	J

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T = Total Fraction

Appendix A-7c
Soil - Random 0-6 inches
Validated Analytical Results

Parameter	Units	Exposure Area Fraction	Site ID / Sample Date / Sample ID / Exposure Area													
			MSS6-7 10/8/2002 MSS6-7-T01N-SOL SS6		MSS6-8 10/8/2002 MSS6-8-T01N-SOL SS6		MSS6-9 10/8/2002 MSS6-9-T01N-SOL SS6		MSS7-1 10/15/2002 MSS7-1-T01N-SOL SS7		MSS7-10 10/15/2002 MSS7-10-T01N-SOL SS7		MSS7-2 10/15/2002 MSS7-2-T01N-SOL SS7	
General Chemistry														
Ammonia	mg/kg-dry	T	42.2	:	28.	:	24.2	:	43.2	:	16.6	:	27.8	:
Chloride	mg/kg-dry	T	<2.2	J	<2.2	J	<2.3	J	2.6	J	<2.1	J	2.3	J
Fluoride	mg/kg-dry	T	0.26	J	0.83	J	0.19	J	0.16	J	0.19	J	0.12	J
Nitrate	mg/kg-dry	T	<2.2	J	<2.2	J	<2.3	J	5.8	J	<2.1	J	5.7	J
Phosphorus	mg/kg-dry	T	487.	J	715.	J	1420.	J	224.	J	292.	:	244.	J
Sulfate	mg/kg-dry	T	6.5	J	820.	J	<2.3	J	4.8	J	<2.1	J	8.5	J
Total Kjeldahl Nitrogen	mg/kg-dry	T	152.	:	47.1	:	<24.	:	410.	:	117.	:	237.	:
Total Organic Carbon	mg/kg-dry	T	2050.	J	1710.	J	<112.	J	11700.	J	1550.	:	9480.	J
Laboratory Parameters														
pH	SU	T	5.5	:	4.3	:	7.5	:	5.8	:	6.5	:	5.2	:
Solids, Percent	%	T	94.9	:	93.3	:	89.3	:	98.	:	97.2	:	95.6	:
Specific Conductance	umhos/cm	T	26.5	:	248.	:	48.8	:	36.1	:	3.	:	22.3	:
Geotechnical														
Organic Soils	%	T	3.36	:	2.02	:	2.53	:	4.22	J	2.2	J	3.12	J
Physical Properties														
Cation-Exchange Capacity	meq/100g	T	11.7	:	16.4	:	17.9	:	11.5	:	5.8	:	11.6	:
Sodium Absorption Ratio	ratio	T	<0.13	:	0.09	:	<0.09	:	0.08	:	<0.11	:	0.15	:
Metals														
Aluminum	mg/kg-dry	T	5010.	:	8830.	:	16700.	:	4090.	:	1490.	:	4680.	:
Antimony	mg/kg-dry	T	<0.17	J	<0.18	J	<0.16	J	<0.24	J	<0.14	:	<0.26	J
Arsenic	mg/kg-dry	T	10.1	:	5.8	:	2.5	:	4.7	:	3.6	:	9.2	:
Barium	mg/kg-dry	T	75.9	:	34.9	:	11.9	:	68.6	:	162.	:	153.	:
Beryllium	mg/kg-dry	T	0.35	:	1.2	:	2.1	:	0.17	:	0.07	J	0.2	:
Boron	mg/kg-dry	T	<0.41	J	<0.42	J	<0.43	J	2.7	J	<2.3	:	3.6	J
Cadmium	mg/kg-dry	T	<0.058	J	1.	:	1.8	:	<0.025	:	0.14	:	<0.024	:
Calcium	mg/kg-dry	T	1020.	:	1380.	:	14400.	:	1030.	:	235.	:	740.	:
Chromium	mg/kg-dry	T	7.1	:	16.2	:	59.9	:	2.2	:	0.99	:	3.3	:
Cobalt	mg/kg-dry	T	3.4	:	13.3	:	16.2	:	0.59	:	0.39	:	1.6	:
Copper	mg/kg-dry	T	37.3	:	69.3	:	58.8	:	15.4	:	5.3	:	10.9	:
Iron	mg/kg-dry	T	34500.	:	21500.	:	26600.	:	17800.	:	9600.	:	17400.	:
Lead	mg/kg-dry	T	228.	:	74.6	:	518.	:	115.	:	61.7	:	286.	:
Magnesium	mg/kg-dry	T	1120.	:	3170.	:	16600.	:	531.	:	197.	:	719.	:
Manganese	mg/kg-dry	T	202.	J	1570.	J	3200.	J	53.3	J	12.1	:	82.2	J

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Appendix A-7c
Soil - Random 0-6 inches
Validated Analytical Results

Parameter	Units	Fraction	MSS6-7		MSS6-8		MSS6-9		MSS7-1		MSS7-10		MSS7-2	
Sample Date			10/8/2002		10/8/2002		10/8/2002		10/15/2002		10/15/2002		10/15/2002	
Sample ID			MSS6-7-T01N-SOL		MSS6-8-T01N-SOL		MSS6-9-T01N-SOL		MSS7-1-T01N-SOL		MSS7-10-T01N-SOL		MSS7-2-T01N-SOL	
Exposure Area			SS6		SS6		SS6		SS7		SS7		SS7	
Mercury	mg/kg-dry	T	<0.017	:	<0.017	:	<0.019	:	<0.017	:	<0.016	J	<0.017	:
Molybdenum	mg/kg-dry	T	23.6	:	10.	:	1.6	:	12.5	:	8.1	:	10.5	:
Nickel	mg/kg-dry	T	5.2	J	17.9	J	55.8	J	<1.1	J	<1.1	:	1.8	J
Potassium	mg/kg-dry	T	3340.	J	1090.	J	304.	J	2010.	J	2040.	J	2510.	J
Selenium	mg/kg-dry	T	<1.7	J	<1.7	J	<0.55	J	1.7	J	0.37	:	0.69	J
Silver	mg/kg-dry	T	1.6	:	<0.51	J	<0.22	J	0.44	:	0.67	:	0.96	:
Sodium	mg/kg-dry	T	174.	:	<50.4	:	<51.8	:	<77.6	:	<43.	:	<43.	:
Thallium	mg/kg-dry	T	0.29	:	0.18	:	<0.081	:	0.32	:	0.11	:	0.3	:
Vanadium	mg/kg-dry	T	6.2	:	15.7	:	44.5	:	5.	:	3.	:	11.1	:
Zinc	mg/kg-dry	T	47.	J	287.	J	855.	J	10.8	J	2.9	:	10.7	J

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Appendix A-7c
Soil - Random 0-6 inches
Validated Analytical Results

Parameter	Units	Exposure Area Fraction	Site ID / Sample Date / Sample ID		MSS7-3 10/3/2002 MSS7-3-T01N-SOL SS7		MSS7-4 10/2/2002 MSS7-4-T01N-SOL SS7		MSS7-5 10/1/2002 MSS7-5-T01N-SOL SS7		MSS7-6 10/2/2002 MSS7-6-T01N-SOL SS7		MSS7-7 10/2/2002 MSS7-7-T01N-SOL SS7		MSS7-8 10/2/2002 MSS7-8-T01N-SOL SS7	
General Chemistry																
Ammonia	mg/kg-dry	T			20.	:	<20.1	:	18.4	:	10.8	:	6.9	:	19.3	:
Chloride	mg/kg-dry	T			<28.2	:	2.6	:	<27.9	:	2.6	:	2.5	:	<27.7	:
Fluoride	mg/kg-dry	T			-		-		-		0.31	J	0.7	J	0.36	J
Nitrate	mg/kg-dry	T			<2.3	J	<2.3	J	<2.3	J	<2.2	J	<2.3	J	<7.4	J
Phosphorus	mg/kg-dry	T			12.4	J	611.	J	883.	J	364.	J	528.	J	948.	J
Sulfate	mg/kg-dry	T			<28.2	:	909.	:	1430.	:	775.	:	559.	:	2400.	:
Total Kjeldahl Nitrogen	mg/kg-dry	T			288.	:	108.	:	55.	:	38.5	:	52.2	:	180.	:
Total Organic Carbon	mg/kg-dry	T			7930.	J	2130.	J	1660.	J	<110.	J	<115.	J	4410.	J
Laboratory Parameters																
pH	SU	T			6.3	:	3.5	:	3.2	:	3.	:	4.8	:	3.9	:
Solids, Percent	%	T			88.7	:	90.3	:	89.9	:	91.2	:	87.5	:	90.4	:
Specific Conductance	umhos/cm	T			15.3	:	850.	:	1510.	:	1240.	:	1180.	:	1130.	:
Geotechnical																
Organic Soils	%	T			3.6	:	3.56	:	4.14	:	2.28	:	2.75	:	3.89	:
Physical Properties																
Cation-Exchange Capacity	meq/100g	T			8.9	:	6.8	:	18.6	:	4.3	:	11.6	:	13.	:
Sodium Absorption Ratio	ratio	T			<0.14	:	<0.02	:	<0.02	:	<0.03	:	<0.02	:	0.04	:
Metals																
Aluminum	mg/kg-dry	T			3200.	:	2530.	:	6140.	:	1050.	:	8810.	:	6420.	:
Antimony	mg/kg-dry	T			<0.18	J	<0.15	J	<0.18	J	<0.16	J	<0.18	J	<0.18	J
Arsenic	mg/kg-dry	T			7.	:	9.6	:	11.2	:	4.4	:	4.3	:	4.3	:
Barium	mg/kg-dry	T			139.	:	152.	:	171.	:	81.2	:	147.	:	274.	:
Beryllium	mg/kg-dry	T			0.13	:	0.23	:	0.4	:	0.099	:	1.	:	0.56	:
Boron	mg/kg-dry	T			<1.9	:	7.	J	<0.36	J	4.3	:	6.7	J	9.4	J
Cadmium	mg/kg-dry	T			<0.027	:	<0.025	:	<0.021	:	<0.027	:	0.21	:	<0.027	:
Calcium	mg/kg-dry	T			809.	:	1390.	:	2480.	:	784.	:	32300.	:	6730.	:
Chromium	mg/kg-dry	T			3.7	:	1.5	:	12.9	:	1.2	:	29.9	:	9.6	:
Cobalt	mg/kg-dry	T			0.85	:	1.	:	0.68	:	<0.2	:	15.9	:	5.	:
Copper	mg/kg-dry	T			26.	:	54.1	:	77.2	:	23.3	:	66.1	:	26.8	:
Iron	mg/kg-dry	T			17000.	:	24100.	:	42000.	:	13300.	:	28800.	:	30900.	:
Lead	mg/kg-dry	T			259.	:	126.	:	186.	:	167.	:	61.3	:	49.9	:
Magnesium	mg/kg-dry	T			632.	:	667.	:	1690.	:	174.	:	5140.	:	2330.	:
Manganese	mg/kg-dry	T			41.4	J	88.	J	188.	J	21.	J	1090.	J	302.	J

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Appendix A-7c
Soil - Random 0-6 inches
Validated Analytical Results

Site ID			MSS7-3		MSS7-4		MSS7-5		MSS7-6		MSS7-7		MSS7-8	
Sample Date			10/3/2002		10/2/2002		10/1/2002		10/2/2002		10/2/2002		10/2/2002	
Sample ID			MSS7-3-T01N-SOL		MSS7-4-T01N-SOL		MSS7-5-T01N-SOL		MSS7-6-T01N-SOL		MSS7-7-T01N-SOL		MSS7-8-T01N-SOL	
Exposure Area			SS7		SS7		SS7		SS7		SS7		SS7	
Parameter	**Units**	**Fraction**												
Mercury	mg/kg-dry	T	<0.018	:	<0.018	:	<0.017	:	<0.017	:	<0.018	:	<0.017	:
Molybdenum	mg/kg-dry	T	18.8	:	17.	J	7.9	:	10.6	:	2.	:	4.4	:
Nickel	mg/kg-dry	T	1.6	J	<1.1	J	4.4	J	<1.2	J	26.4	J	8.	J
Potassium	mg/kg-dry	T	2680.	J	3650.	J	3660.	J	2190.	J	2200.	J	3210.	J
Selenium	mg/kg-dry	T	0.92	J	0.64	J	1.6	J	0.64	J	1.	J	1.5	J
Silver	mg/kg-dry	T	2.3	:	1.1	:	1.6	:	1.4	:	0.33	:	0.34	:
Sodium	mg/kg-dry	T	98.6	:	130.	:	551.	:	96.3	:	173.	:	260.	:
Thallium	mg/kg-dry	T	0.3	:	0.26	:	0.33	:	0.2	:	<0.09	:	0.13	:
Vanadium	mg/kg-dry	T	7.3	:	4.6	:	16.3	:	2.8	:	19.7	:	10.4	:
Zinc	mg/kg-dry	T	10.2	J	21.	J	38.8	J	7.8	J	142.	J	51.3	J

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Appendix A-7c
Soil - Random 0-6 inches
Validated Analytical Results

Parameter	Units	Exposure Area Fraction	Site ID / Sample Date / Sample ID / Exposure Area													
			MSS7-9		RRS-1		RRS-10		RRS-11		RRS-12		RRS-13	
			10/9/2002		9/29/2002		10/15/2002		10/14/2002		10/14/2002		10/14/2002	
			MSS7-9-T01N-SOL		RRS-1-T01N-SOL		RRS-10-T01N-SOL		RRS-11-T01N-SOL		RRS-12-T01N-SOL		RRS-13-T01N-SOL	
			SS7		RefMineR		RefMineR		RefMineR		RefMineR		RefMineR	
General Chemistry														
Ammonia	mg/kg-dry	T	43.8	:	170.	:	16.8	:	94.2	:	215.	:	165.	:
Chloride	mg/kg-dry	T	<2.2	J	32.2	:	3.8	J	4.3	J	8.1	J	29.1	J
Fluoride	mg/kg-dry	T	0.25	J	0.37	J	0.22	J	0.33	J	0.29	J	0.19	J
Nitrate	mg/kg-dry	T	<2.2	J	<1.3	J	<2.3	J	2.8	J	<2.6	J	<2.5	J
Phosphorus	mg/kg-dry	T	1190.	J	949.	J	486.	J	624.	J	636.	:	774.	J
Sulfate	mg/kg-dry	T	35.2	J	300.	:	11.7	J	5.2	J	93.7	J	154.	J
Total Kjeldahl Nitrogen	mg/kg-dry	T	100.	:	1660.	:	187.	:	382.	:	2000.	:	1880.	:
Total Organic Carbon	mg/kg-dry	T	3750.	J	50200.	J	2310.	J	15000.	J	38100.	J	41400.	J
Laboratory Parameters														
pH	SU	T	4.7	:	4.	:	6.6	:	7.4	:	5.6	:	6.3	:
Solids, Percent	%	T	92.5	:	79.8	:	89.9	:	86.1	:	79.9	:	82.3	:
Specific Conductance	umhos/cm	T	68.1	:	129.	:	9.1	:	16.6	:	140.	:	239.	:
Geotechnical														
Organic Soils	%	T	-		8.97	:	1.6	J	3.99	J	8.25	J	8.71	J
Physical Properties														
Cation-Exchange Capacity	meq/100g	T	12.1	:	32.2	:	10.7	:	19.6	:	33.6	:	33.4	:
Sodium Absorption Ratio	ratio	T	<0.1	:	0.89	:	0.18	:	0.1	:	0.2	:	0.19	:
Metals														
Aluminum	mg/kg-dry	T	3940.	:	11000.	:	5460.	:	8730.	:	8910.	:	9670.	:
Antimony	mg/kg-dry	T	<0.16	J	0.05	J	<0.28	J	<0.28	J	<0.31	J	<0.3	J
Arsenic	mg/kg-dry	T	3.9	:	3.1	:	2.	:	3.5	:	2.6	:	2.5	:
Barium	mg/kg-dry	T	354.	:	114.	:	45.6	:	75.5	:	88.2	:	79.3	:
Beryllium	mg/kg-dry	T	0.28	:	0.55	:	0.57	:	1.5	:	0.91	:	1.1	:
Boron	mg/kg-dry	T	5.3	:	<2.1	:	1.5	:	2.2	:	2.3	:	2.9	:
Cadmium	mg/kg-dry	T	<0.024	:	0.27	J	0.048	:	0.33	:	0.17	:	0.19	:
Calcium	mg/kg-dry	T	203.	:	6420.	:	1710.	:	2450.	:	3350.	:	4730.	:
Chromium	mg/kg-dry	T	2.9	:	24.1	:	13.4	:	15.4	:	16.9	:	19.4	:
Cobalt	mg/kg-dry	T	0.26	:	8.9	:	5.2	:	5.8	:	5.8	:	5.9	:
Copper	mg/kg-dry	T	7.4	:	17.4	:	9.4	:	12.8	:	10.7	:	13.6	:
Iron	mg/kg-dry	T	13600.	:	24900.	:	13200.	:	15500.	:	16000.	:	17100.	:
Lead	mg/kg-dry	T	46.	:	12.4	:	12.8	:	26.5	:	24.5	:	28.5	:
Magnesium	mg/kg-dry	T	264.	:	6000.	:	3230.	:	3230.	:	3660.	:	3710.	:
Manganese	mg/kg-dry	T	34.3	J	508.	J	287.	J	495.	J	388.	J	404.	J

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Appendix A-7c
Soil - Random 0-6 inches
Validated Analytical Results

Parameter	Units	Exposure Area / Fraction	Site ID / Sample Date / Sample ID													
			MSS7-9	10/9/2002	MSS7-9-T01N-SOL	RRS-1	9/29/2002	RRS-1-T01N-SOL	RRS-10	10/15/2002	RRS-10-T01N-SOL	RRS-11	10/14/2002	RRS-11-T01N-SOL	RRS-12	10/14/2002	RRS-12-T01N-SOL	RRS-13	10/14/2002	RRS-13-T01N-SOL
			SS7			RefMineR			RefMineR			RefMineR			RefMineR			RefMineR		
Mercury	mg/kg-dry	T	<0.016	:		0.06	:		<0.017	:		0.023	:		<0.021	:		0.031	:	
Molybdenum	mg/kg-dry	T	4.2	:		1.1	J		<0.46	:		3.6	:		<1.2	J		<0.99	J	
Nickel	mg/kg-dry	T	1.1	J		14.8	J		13.7	J		16.5	J		12.4	J		14.1	J	
Potassium	mg/kg-dry	T	3310.	J		2090.	J		878.	J		1330.	J		1240.	J		1410.	J	
Selenium	mg/kg-dry	T	0.48	J		0.55	J		0.95	J		0.98	J		<0.81	J		<0.8	J	
Silver	mg/kg-dry	T	0.19	:		<0.61	:		<0.11	:		<0.42	:		<0.4	:		<0.5	:	
Sodium	mg/kg-dry	T	91.8	:		<114.	:		<43.8	:		<78.9	:		<75.7	:		<94.1	:	
Thallium	mg/kg-dry	T	0.093	:		0.1	:		<0.092	:		0.11	:		0.11	:		0.11	:	
Vanadium	mg/kg-dry	T	5.2	:		49.9	:		16.	:		21.	:		27.3	:		29.9	:	
Zinc	mg/kg-dry	T	8.8	J		61.7	J		74.9	J		190.	J		93.1	J		113.	J	

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Appendix A-7c
Soil - Random 0-6 inches
Validated Analytical Results

Parameter	Units	Exposure Area Fraction	Site ID	RRS-14	RRS-15	RRS-16	RRS-17	RRS-18	RRS-19
			Sample Date	10/14/2002	10/13/2002	10/13/2002	10/18/2002	10/18/2002	10/19/2002
			Sample ID	RRS-14-T01N-SOL	RRS-15-T01N-SOL	RRS-16-T01N-SOL	RRS-17-T01N-SOL	RRS-18-T01N-SOL	RRS-19-T01N-SOL
			Exposure Area	RefMineR	RefMineR	RefMineR	RLCCR	RLCCR	RLCCR
General Chemistry									
Ammonia	mg/kg-dry	T		71.1 J	125. :	48.2 :	15.1 :	5.4 :	74.2 J
Chloride	mg/kg-dry	T		14.5 J	6.8 J	3.1 J	7.6 J	3. J	8. J
Fluoride	mg/kg-dry	T		0.38 J	0.33 J	0.2 J	0.31 J	0.24 J	0.47 J
Nitrate	mg/kg-dry	T		<2.9 J	<2.5 J	5.2 J	3.3 J	4.2 J	17.7 J
Phosphorus	mg/kg-dry	T		585. J	1330. J	496. J	483. J	351. J	1090. J
Sulfate	mg/kg-dry	T		109. J	27.9 J	5.6 J	11.9 J	7.6 J	58.8 J
Total Kjeldahl Nitrogen	mg/kg-dry	T		375. :	1260. J	533. J	1740. :	429. :	3910. :
Total Organic Carbon	mg/kg-dry	T		9640. J	34100. J	25800. J	39900. J	6410. J	72700. J
Laboratory Parameters									
pH	SU	T		6.5 :	5.9 :	6.7 :	7.5 :	7. :	7.3 :
Solids, Percent	%	T		69.6 :	82.4 :	91.2 :	82. :	94.6 :	81. :
Specific Conductance	umhos/cm	T		44.7 :	36.6 :	38.7 :	70.8 :	34.9 :	323. :
Geotechnical									
Organic Soils	%	T		3.42 J	5.98 J	3.04 J	8.14 J	2.48 J	12.97 J
Physical Properties									
Cation-Exchange Capacity	meq/100g	T		12.1 :	21.3 :	11.2 :	28.9 :	8.2 :	28.8 :
Sodium Absorption Ratio	ratio	T		0.16 :	0.15 :	<0.05 :	0.04 :	0.04 :	0.23 :
Metals									
Aluminum	mg/kg-dry	T		7660. :	10500. J	6490. :	11200. :	3850. :	10900. :
Antimony	mg/kg-dry	T		<0.33 J	<0.18 J	<0.17 J	<0.3 J	<0.26 J	<0.3 J
Arsenic	mg/kg-dry	T		1.9 :	3. :	1.4 :	3.6 :	5.3 :	4.8 :
Barium	mg/kg-dry	T		53.7 :	76.8 :	47.7 :	78.5 :	22.9 :	132. :
Beryllium	mg/kg-dry	T		0.75 :	0.92 J	0.49 :	1.2 :	0.61 :	1.1 :
Boron	mg/kg-dry	T		<1.8 :	3.4 J	<2.9 J	<0.75 :	<0.22 :	3.1 J
Cadmium	mg/kg-dry	T		0.21 :	0.14 :	0.071 :	0.29 :	0.1 :	0.53 :
Calcium	mg/kg-dry	T		2420. :	4090. J	2480. :	4760. :	1430. :	8440. :
Chromium	mg/kg-dry	T		16.7 :	21.4 :	15.5 :	18.4 :	7.7 :	24.9 :
Cobalt	mg/kg-dry	T		5.9 :	8. :	5.7 :	6.3 :	3. :	6.5 :
Copper	mg/kg-dry	T		11.1 :	16.7 :	11.5 :	18.8 :	8.5 :	50.7 :
Iron	mg/kg-dry	T		14000. :	20500. J	16400. :	17600. :	10600. :	21500. :
Lead	mg/kg-dry	T		22.9 :	27.8 J	17.7 :	28.7 :	19. :	34.5 :
Magnesium	mg/kg-dry	T		4010. :	4550. J	3870. :	4260. :	1790. :	5180. :
Manganese	mg/kg-dry	T		222. J	486. J	336. J	428. J	218. J	609. J

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T = Total Fraction

Appendix A-7c
Soil - Random 0-6 inches
Validated Analytical Results

Parameter	Units	Exposure Area Fraction	Site ID	RRS-14		RRS-15		RRS-16		RRS-17		RRS-18		RRS-19	
			Sample Date	10/14/2002		10/13/2002		10/13/2002		10/18/2002		10/18/2002		10/19/2002	
			Sample ID	RRS-14-T01N-SOL		RRS-15-T01N-SOL		RRS-16-T01N-SOL		RRS-17-T01N-SOL		RRS-18-T01N-SOL		RRS-19-T01N-SOL	
			Exposure Area	RefMineR		RefMineR		RefMineR		RLCCR		RLCCR		RLCCR	
Mercury	mg/kg-dry	T		<0.024	:	<0.02	:	<0.018	:	<0.019	J	<0.015	J	0.024	J
Molybdenum	mg/kg-dry	T		<0.7	J	1.3	:	<1.	:	0.85	:	2.2	:	41.	:
Nickel	mg/kg-dry	T		14.1	J	15.8	J	10.9	J	14.4	J	5.6	J	17.1	J
Potassium	mg/kg-dry	T		1350.	J	1660.	J	1670.	J	2290.	J	1470.	J	3950.	J
Selenium	mg/kg-dry	T		<0.89	J	<0.98	J	<0.52	J	<0.79	J	<0.7	J	<0.81	J
Silver	mg/kg-dry	T		<0.47	:	<0.12	:	<0.11	:	0.16	:	<0.12	:	0.31	:
Sodium	mg/kg-dry	T		<87.4	:	<46.4	:	<44.1	:	<36.5	:	<29.3	:	<34.7	:
Thallium	mg/kg-dry	T		<0.11	:	0.13	:	0.086	:	0.13	:	0.11	:	0.26	:
Vanadium	mg/kg-dry	T		22.9	:	32.3	:	24.5	:	25.4	:	9.9	:	30.1	:
Zinc	mg/kg-dry	T		120.	J	116.	J	64.8	J	108.	J	63.9	J	138.	J

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T = Total Fraction

Appendix A-7c
Soil - Random 0-6 inches
Validated Analytical Results

Parameter	Units	Exposure Area Fraction	Site ID Sample Date Sample ID Exposure Area	RRS-2 9/29/2002 RRS-2-T01N-SOL RefMineR	RRS-20 10/18/2002 RRS-20-T01N-SOL RLCCR	RRS-21 10/18/2002 RRS-21-T01N-SOL RLCCR	RRS-22 10/13/2002 RRS-22-T01N-SOL RLCCR	RRS-23 10/13/2002 RRS-23-T01N-SOL RLCCR	RRS-24 10/13/2002 RRS-24-T01N-SOL RLCCR
General Chemistry									
Ammonia	mg/kg-dry	T		315. :	22.3 J	16. J	210. :	140. :	82.2 :
Chloride	mg/kg-dry	T		1.8 :	4.9 J	3.1 J	14.1 J	6.4 J	3.1 J
Fluoride	mg/kg-dry	T		-	0.38 J	0.37 J	0.23 J	0.46 J	0.73 J
Nitrate	mg/kg-dry	T		18.7 J	13.5 J	9.1 J	9.6 J	18.7 J	9.5 J
Phosphorus	mg/kg-dry	T		1050. J	530. J	664. J	1040. J	570. J	393. J
Sulfate	mg/kg-dry	T		5. :	16.3 J	10.2 J	28.2 J	61.8 J	18.2 J
Total Kjeldahl Nitrogen	mg/kg-dry	T		2030. :	1070. :	875. J	4890. J	1690. J	780. J
Total Organic Carbon	mg/kg-dry	T		44400. J	23600. J	16400. J	71700. J	30300. J	17400. J
Laboratory Parameters									
pH	SU	T		4.9 :	7.3 :	7.5 :	7.3 :	7.3 :	7.1 :
Solids, Percent	%	T		77. :	85.1 :	87.8 :	73.1 :	83.5 :	85.3 :
Specific Conductance	umhos/cm	T		24.3 :	64.8 :	41.5 :	243. :	152. :	53.4 :
Geotechnical									
Organic Soils	%	T		7.63 :	4.74 J	3.96 J	15.88 J	6.15 J	4.02 J
Physical Properties									
Cation-Exchange Capacity	meq/100g	T		32.3 :	14.7 :	17.1 :	38.6 :	17.5 :	13. :
Sodium Absorption Ratio	ratio	T		0.08 :	0.09 :	0.05 :	0.04 :	0.35 :	0.21 :
Metals									
Aluminum	mg/kg-dry	T		13000. :	6740. :	7960. J	8030. :	6460. :	5880. :
Antimony	mg/kg-dry	T		<0.05 J	<0.28 J	<0.28 J	<0.21 J	<0.19 J	<0.17 J
Arsenic	mg/kg-dry	T		2.7 :	2.8 :	3.9 :	4.4 :	2.4 :	2.2 :
Barium	mg/kg-dry	T		166. :	71. :	84.1 J	73.3 :	54.5 :	32.4 :
Beryllium	mg/kg-dry	T		0.73 :	0.69 :	0.74 :	0.89 :	0.66 :	0.68 :
Boron	mg/kg-dry	T		<2.4 :	<0.25 :	<0.23 J	9.2 :	4.1 :	<2.2 :
Cadmium	mg/kg-dry	T		0.39 J	0.17 :	0.19 J	0.28 :	0.14 :	0.15 :
Calcium	mg/kg-dry	T		6260. :	3000. :	3000. J	9040. :	4100. :	2380. :
Chromium	mg/kg-dry	T		24.4 :	16.7 :	18.1 J	15.8 :	14.5 :	11.9 :
Cobalt	mg/kg-dry	T		9.4 :	5. :	5.7 :	5.7 :	4.9 :	3.7 :
Copper	mg/kg-dry	T		24.8 :	<12.6 :	<13.1 :	15.7 :	10.8 :	9.6 :
Iron	mg/kg-dry	T		23600. :	18100. :	20000. J	17000. :	14300. :	12500. :
Lead	mg/kg-dry	T		23.5 :	22.7 :	23.6 J	23.9 :	15.9 :	15.9 :
Magnesium	mg/kg-dry	T		5910. :	3350. :	3720. J	3920. :	3480. :	3070. :
Manganese	mg/kg-dry	T		446. J	344. J	363. J	439. J	323. J	202. J

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T = Total Fraction

Appendix A-7c
Soil - Random 0-6 inches
Validated Analytical Results

Parameter	Units	Exposure Area / Fraction	Site ID	Sample Date	Sample ID												
			RRS-2	9/29/2002	RRS-2-T01N-SOL	RRS-20	10/18/2002	RRS-20-T01N-SOL	RRS-21	10/18/2002	RRS-21-T01N-SOL	RRS-22	10/13/2002	RRS-22-T01N-SOL	RRS-23	10/13/2002	RRS-23-T01N-SOL	RRS-24	10/13/2002	RRS-24-T01N-SOL
			RefMineR			RLCCR			RLCCR			RLCCR			RLCCR			RLCCR		
Mercury	mg/kg-dry	T	0.026	:		<0.019	J		<0.018	J		<0.022	:		<0.019	:		<0.019	:	
Molybdenum	mg/kg-dry	T	1.4	J		1.4	:		1.9	J		3.6	:		1.6	:		<1.	:	
Nickel	mg/kg-dry	T	17.1	J		11.4	J		12.3	J		12.	J		10.9	J		10.1	J	
Potassium	mg/kg-dry	T	2640.	J		1610.	J		2130.	J		2810.	J		1830.	J		1450.	J	
Selenium	mg/kg-dry	T	0.66	J		<0.75	J		<0.73	J		<1.	J		<0.92	J		<1.	J	
Silver	mg/kg-dry	T	<0.58	:		<0.14	:		0.16	:		<0.16	:		<0.13	:		<0.12	:	
Sodium	mg/kg-dry	T	<108.	:		<33.3	:		<30.6	J		<60.9	:		<51.2	:		<47.2	:	
Thallium	mg/kg-dry	T	0.12	:		0.11	:		0.12	:		0.14	:		0.11	:		0.091	:	
Vanadium	mg/kg-dry	T	44.2	:		27.6	:		30.3	J		23.	:		18.9	:		16.9	:	
Zinc	mg/kg-dry	T	80.4	J		73.6	J		88.9	J		136.	J		90.3	J		88.4	J	

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Appendix A-7c
Soil - Random 0-6 inches
Validated Analytical Results

Parameter	Units	Exposure Area Fraction	Site ID	RRS-25	RRS-26	RRS-27	RRS-28	RRS-29	RRS-3
			Sample Date	10/13/2002	10/13/2002	10/11/2002	10/11/2002	10/11/2002	10/9/2002
			Sample ID	RRS-25-T01N-SOL	RRS-26-T01N-SOL	RRS-27-T01N-SOL	RRS-28-T01N-SOL	RRS-29-T01N-SOL	RRS-3-T01N-SOL
			Exposure Area	RLCCR	RLCCR	RLCCR	RLCCR	RLCCR	RefMineR
General Chemistry									
Ammonia	mg/kg-dry	T		202. :	72.7 :	172. :	28.3 :	69.7 :	207. :
Chloride	mg/kg-dry	T		<2.5 J	2.6 J	51.9 J	5.2 J	8.2 J	3.6 J
Fluoride	mg/kg-dry	T		0.5 J	0.35 J	0.46 J	0.49 J	0.6 J	0.18 J
Nitrate	mg/kg-dry	T		4.3 J	7.4 J	<2.5 J	11.9 J	<2.9 J	<2.3 J
Phosphorus	mg/kg-dry	T		561. J	389. J	621. J	434. J	481. J	692. J
Sulfate	mg/kg-dry	T		28.8 J	7.2 J	590. J	19.3 J	68.8 J	8. J
Total Kjeldahl Nitrogen	mg/kg-dry	T		1180. J	329. J	1940. J	354. J	950. J	196. :
Total Organic Carbon	mg/kg-dry	T		26700. J	6740. J	44400. J	10500. J	19500. J	1910. J
Laboratory Parameters									
pH	SU	T		7. :	7.9 :	5.3 :	6.9 :	6.9 :	6.8 :
Solids, Percent	%	T		82.7 :	91.4 :	81.8 :	92.5 :	70.1 :	88.7 :
Specific Conductance	umhos/cm	T		46.5 :	19.7 :	748. J	68.5 J	57.4 J	13.6 :
Geotechnical									
Organic Soils	%	T		5.54 J	2.19 J	9.53 J	1.99 J	5.28 J	1.35 J
Physical Properties									
Cation-Exchange Capacity	meq/100g	T		22.3 :	16.3 :	34.1 :	14.1 :	11.8 :	7.7 :
Sodium Absorption Ratio	ratio	T		0.1 :	0.14 :	0.56 :	0.16 :	0.15 :	0.25 :
Metals									
Aluminum	mg/kg-dry	T		7610. :	6910. :	9030. :	9530. :	5820. :	7440. :
Antimony	mg/kg-dry	T		<0.24 J	<0.21 J	<0.19 J	<0.17 J	<0.24 J	<0.16 J
Arsenic	mg/kg-dry	T		3. :	2.4 :	2.7 :	2.7 :	2.5 :	1.6 :
Barium	mg/kg-dry	T		49.9 :	47.2 :	70. :	58.7 :	60.8 :	109. :
Beryllium	mg/kg-dry	T		0.88 :	0.68 :	0.85 :	0.78 :	0.78 :	0.43 :
Boron	mg/kg-dry	T		5.5 :	5.3 :	<0.45 :	<0.48 :	<0.51 :	<0.44 J
Cadmium	mg/kg-dry	T		0.095 :	0.042 :	0.049 :	<0.03 :	0.25 :	0.043 J
Calcium	mg/kg-dry	T		3300. :	2220. :	5660. :	3690. :	2420. :	2720. :
Chromium	mg/kg-dry	T		15.5 :	13.6 :	16.4 :	21.1 :	10.9 :	18.3 :
Cobalt	mg/kg-dry	T		5.5 :	5.4 :	6.5 :	6.6 :	6.6 :	8.2 :
Copper	mg/kg-dry	T		12. :	10.2 :	16.1 :	18.5 :	21.2 :	17.6 :
Iron	mg/kg-dry	T		15000. :	13500. :	17100. :	17900. :	12600. :	20300. :
Lead	mg/kg-dry	T		18. :	15.2 :	22.8 :	25.1 :	21.1 :	34.6 :
Magnesium	mg/kg-dry	T		3500. :	3570. :	4590. :	4780. :	2780. :	4600. :
Manganese	mg/kg-dry	T		355. J	323. J	359. J	306. J	500. J	608. J

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Appendix A-7c
Soil - Random 0-6 inches
Validated Analytical Results

Parameter	Units	Exposure Area Fraction	Site ID / Sample Date / Sample ID											
			RRS-25 10/13/2002 RRS-25-T01N-SOL		RRS-26 10/13/2002 RRS-26-T01N-SOL		RRS-27 10/11/2002 RRS-27-T01N-SOL		RRS-28 10/11/2002 RRS-28-T01N-SOL		RRS-29 10/11/2002 RRS-29-T01N-SOL		RRS-3 10/9/2002 RRS-3-T01N-SOL	
			RLCCR		RLCCR		RLCCR		RLCCR		RLCCR		RefMineR	
Mercury	mg/kg-dry	T	<0.02	:	<0.017	:	<0.02	:	<0.017	:	<0.024	:	<0.018	:
Molybdenum	mg/kg-dry	T	2.5	:	1.1	:	2.5	:	2.3	:	5.4	:	1.9	:
Nickel	mg/kg-dry	T	12.7	J	11.4	J	13.5	J	16.7	J	16.6	J	12.4	J
Potassium	mg/kg-dry	T	1620.	J	1490.	J	1740.	J	1800.	J	1180.	J	1180.	J
Selenium	mg/kg-dry	T	<1.1	J	<0.3	J	<0.51	J	<0.66	J	1.4	J	<0.45	J
Silver	mg/kg-dry	T	<0.14	:	<0.11	:	<0.13	:	0.22	:	<0.15	:	<0.13	:
Sodium	mg/kg-dry	T	<52.6	:	<42.1	:	<51.1	:	<53.6	:	<57.8	:	<49.4	:
Thallium	mg/kg-dry	T	0.26	:	<0.1	:	0.1	:	0.11	:	<0.12	:	<0.078	:
Vanadium	mg/kg-dry	T	19.2	:	17.3	:	21.3	:	24.5	:	12.9	:	31.	:
Zinc	mg/kg-dry	T	112.	J	91.	J	102.	J	84.9	J	156.	J	88.1	J

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Appendix A-7c
Soil - Random 0-6 inches
Validated Analytical Results

Parameter	Units	Fraction	RRS-30		RRS-31		RRS-32		RRS-4		RRS-5		RRS-6	
Sample Date			10/11/2002		10/11/2002		10/19/2002		10/9/2002		10/9/2002		10/10/2002	
Sample ID			RRS-30-T01N-SOL		RRS-31-T01N-SOL		RRS-32-T01N-SOL		RRS-4-T01N-SOL		RRS-5-T01N-SOL		RRS-6-T01N-SOL	
Exposure Area			RLCCR		RLCCR		RLCCR		RefMineR		RefMineR		RefMineR	
General Chemistry														
Ammonia	mg/kg-dry	T	57.1	:	61.5	:	58.1	:	25.7	:	52.1	:	82.9	:
Chloride	mg/kg-dry	T	5.6	J	21.9	J	25.5	J	6.	J	<2.4	J	4.5	J
Fluoride	mg/kg-dry	T	0.25	J	0.84	J	0.56	J	0.51	J	0.32	J	0.25	J
Nitrate	mg/kg-dry	T	2.3	J	<2.9	J	16.5	J	<2.6	J	<2.4	J	<2.4	J
Phosphorus	mg/kg-dry	T	446.	J	548.	J	779.	J	714.	J	936.	J	1020.	J
Sulfate	mg/kg-dry	T	10.1	J	354.	J	32.3	J	55.5	J	15.1	J	21.8	J
Total Kjeldahl Nitrogen	mg/kg-dry	T	906.	J	973.	J	1260.	:	261.	:	1020.	:	485.	:
Total Organic Carbon	mg/kg-dry	T	23100.	J	60900.	J	28600.	J	3330.	J	25900.	J	8300.	J
Laboratory Parameters														
pH	SU	T	7.3	:	6.8	:	7.1	:	6.2	:	6.3	:	5.9	:
Solids, Percent	%	T	89.8	:	70.6	:	91.8	:	78.8	:	85.9	:	84.1	:
Specific Conductance	umhos/cm	T	36.9	J	277.	J	174.	:	96.8	:	52.8	:	30.8	:
Geotechnical														
Organic Soils	%	T	4.49	J	10.71	J	5.1	J	1.93	J	6.42	J	2.91	:
Physical Properties														
Cation-Exchange Capacity	meq/100g	T	18.4	:	25.8	:	22.7	:	8.6	:	19.9	:	15.4	:
Sodium Absorption Ratio	ratio	T	0.08	:	0.42	:	0.1	:	0.21	:	0.07	:	0.21	:
Metals														
Aluminum	mg/kg-dry	T	6070.	:	6630.	:	10100.	:	5500.	:	6410.	:	8490.	:
Antimony	mg/kg-dry	T	<0.17	J	<0.23	J	<0.27	J	<0.15	J	<0.15	J	<0.19	J
Arsenic	mg/kg-dry	T	2.3	:	2.2	:	4.4	:	2.9	:	2.2	:	2.9	:
Barium	mg/kg-dry	T	50.6	:	67.9	:	97.8	:	608.	:	122.	:	170.	:
Beryllium	mg/kg-dry	T	0.65	:	0.73	:	1.	:	0.19	:	0.46	:	0.6	:
Boron	mg/kg-dry	T	<0.38	:	<0.56	:	<0.22	J	<0.5	J	<0.45	J	11.7	J
Cadmium	mg/kg-dry	T	0.096	:	0.11	:	0.44	:	<0.031	J	0.15	:	0.16	J
Calcium	mg/kg-dry	T	3400.	:	5700.	:	4110.	:	15500.	:	3430.	:	2440.	:
Chromium	mg/kg-dry	T	14.2	:	16.4	:	20.1	:	16.4	:	15.8	:	21.6	:
Cobalt	mg/kg-dry	T	5.4	:	6.6	:	7.8	:	0.67	:	7.	:	11.7	J
Copper	mg/kg-dry	T	12.4	:	227.	:	27.5	:	10.8	:	69.3	:	91.6	:
Iron	mg/kg-dry	T	13300.	:	15300.	:	18200.	:	37900.	:	18000.	:	23700.	:
Lead	mg/kg-dry	T	16.6	:	22.8	:	34.3	:	54.9	:	45.9	J	46.9	J
Magnesium	mg/kg-dry	T	3550.	:	3740.	:	5200.	:	4700.	:	3780.	:	4580.	:
Manganese	mg/kg-dry	T	340.	J	406.	J	556.	J	176.	J	400.	J	551.	J

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Appendix A-7c
Soil - Random 0-6 inches
Validated Analytical Results

Parameter	Units	Exposure Area Fraction	Site ID / Sample Date / Sample ID		RRS-30 10/11/2002 RRS-30-T01N-SOL RLCCR		RRS-31 10/11/2002 RRS-31-T01N-SOL RLCCR		RRS-32 10/19/2002 RRS-32-T01N-SOL RLCCR		RRS-4 10/9/2002 RRS-4-T01N-SOL RefMineR		RRS-5 10/9/2002 RRS-5-T01N-SOL RefMineR		RRS-6 10/10/2002 RRS-6-T01N-SOL RefMineR	
Mercury	mg/kg-dry	T		<0.018	:	<0.023	:	<0.017	J	<0.019	:	<0.018	:	<0.019	:
Molybdenum	mg/kg-dry	T		3.	:	6.7	:	12.5	:	7.4	:	19.9	:	9.4	:
Nickel	mg/kg-dry	T		12.2	J	15.4	J	18.3	J	2.3	J	14.6	J	19.	J
Potassium	mg/kg-dry	T		1540.	J	1280.	J	2440.	J	3810.	J	1620.	J	1590.	J
Selenium	mg/kg-dry	T		<0.61	J	1.1	J	0.81	J	2.8	J	<0.68	J	1.3	J
Silver	mg/kg-dry	T		<0.11	:	<0.16	:	0.15	:	0.3	:	0.21	:	0.33	:
Sodium	mg/kg-dry	T		<42.6	:	<81.5	:	<29.7	J	948.	:	72.4	:	62.5	:
Thallium	mg/kg-dry	T		<0.087	:	<0.11	:	0.16	:	0.1	:	0.16	:	0.18	:
Vanadium	mg/kg-dry	T		16.7	:	20.	:	25.	:	23.2	:	22.2	:	30.2	:
Zinc	mg/kg-dry	T		93.5	J	105.	J	127.	J	21.5	J	110.	J	140.	J

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Appendix A-7c
Soil - Random 0-6 inches
Validated Analytical Results

Parameter	Units	Exposure Area Fraction	Site ID Sample Date Sample ID RRS-7 10/10/2002 RRS-7-T01N-SOL RefMineR		Site ID Sample Date Sample ID RRS-8 10/10/2002 RRS-8-T01N-SOL RefMineR		Site ID Sample Date Sample ID RRS-9 10/14/2002 RS-9-T01N-SOL RefMineR		Site ID Sample Date Sample ID RS-1 10/17/2002 RS-1-T01N-SOL SS9		Site ID Sample Date Sample ID RS-1 10/22/2002 RS-1-T01N-SOL SS9		Site ID Sample Date Sample ID RS-10 10/10/2002 RRS-10-T01N-SOL SS9	
General Chemistry														
Ammonia	mg/kg-dry	T	<22.7	:	73.7	:	23.	J	34.8	J	-		56.7	:
Chloride	mg/kg-dry	T	<2.3	J	14.3	J	4.3	J	5.2	J	-		5.2	J
Fluoride	mg/kg-dry	T	0.81	J	0.25	J	0.22	J	0.27	J	-		0.7	J
Nitrate	mg/kg-dry	T	<2.3	J	<2.2	J	3.9	J	2.7	J	-		<2.7	J
Phosphorus	mg/kg-dry	T	1270.	J	556.	J	432.	J	1040.	J	-		763.	J
Sulfate	mg/kg-dry	T	931.	J	48.7	J	5.8	J	208.	J	-		207.	J
Total Kjeldahl Nitrogen	mg/kg-dry	T	228.	:	231.	:	354.	:	411.	:	-		1080.	:
Total Organic Carbon	mg/kg-dry	T	3280.	J	12000.	J	3390.	J	7320.	J	-		25300.	J
Laboratory Parameters														
pH	SU	T	4.6	:	6.	:	6.6	:	6.4	:	-		6.2	:
Solids, Percent	%	T	88.3	:	94.6	:	90.	:	90.5	:	91.8	:	76.3	:
Specific Conductance	umhos/cm	T	838.	:	162.	:	11.	:	373.	:	-		164.	:
Geotechnical														
Organic Soils	%	T	3.19	:	2.43	:	2.3	J	3.3	J	-		5.83	:
Physical Properties														
Cation-Exchange Capacity	meq/100g	T	12.7	:	11.3	:	9.8	:	27.8	:	-		17.9	:
Sodium Absorption Ratio	ratio	T	<0.02	:	0.31	:	0.15	:	0.08	:	-		0.13	:
Metals														
Aluminum	mg/kg-dry	T	6950.	:	6100.	:	8180.	:	8280.	:	-		10300.	:
Antimony	mg/kg-dry	T	<0.17	J	<0.16	J	<0.26	J	<0.23	J	-		<0.18	J
Arsenic	mg/kg-dry	T	7.7	:	3.4	:	2.	:	6.4	:	-		3.2	:
Barium	mg/kg-dry	T	314.	:	170.	:	54.8	:	607.	:	-		187.	:
Beryllium	mg/kg-dry	T	0.44	:	0.45	:	0.54	:	0.66	:	-		1.7	:
Boron	mg/kg-dry	T	13.1	J	10.	J	3.3	J	<0.39	J	-		8.4	:
Cadmium	mg/kg-dry	T	<0.027	J	<0.025	J	0.041	:	<0.024	J	-		1.7	:
Calcium	mg/kg-dry	T	4470.	:	1970.	:	2720.	:	2990.	:	-		2600.	:
Chromium	mg/kg-dry	T	17.5	:	15.5	:	24.1	:	20.8	:	-		12.7	:
Cobalt	mg/kg-dry	T	5.5	:	6.9	:	7.4	:	8.9	:	-		17.8	:
Copper	mg/kg-dry	T	40.3	:	39.2	:	12.6	:	65.3	:	-		89.7	:
Iron	mg/kg-dry	T	27500.	:	20900.	:	18800.	:	27900.	:	-		17000.	:
Lead	mg/kg-dry	T	52.5	:	42.8	:	11.5	:	59.7	:	-		44.8	:
Magnesium	mg/kg-dry	T	4320.	:	3610.	:	4440.	:	4240.	:	-		2980.	:
Manganese	mg/kg-dry	T	353.	J	375.	J	359.	J	450.	J	-		1610.	J

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Appendix A-7c
Soil - Random 0-6 inches
Validated Analytical Results

Parameter	Units	Exposure Area Fraction	Site ID / Sample Date / Sample ID		RRS-7 10/10/2002 RRS-7-T01N-SOL RefMineR		RRS-8 10/10/2002 RRS-8-T01N-SOL RefMineR		RRS-9 10/14/2002 RS-9-T01N-SOL RefMineR		RS-1 10/17/2002 RS-1-T01N-SOL SS9		RS-1 10/22/2002 RS-1-T01N-SOL SS9		RS-10 10/10/2002 RRS-10-T01N-SOL SS9	
Mercury	mg/kg-dry	T		<0.018	:	<0.017	:	<0.018	:	<0.018	:	-		<0.021	:
Molybdenum	mg/kg-dry	T		8.9	:	11.3	:	0.68	J	26.	:	-		13.8	:
Nickel	mg/kg-dry	T		13.2	J	15.2	J	16.7	J	17.1	J	-		43.5	J
Potassium	mg/kg-dry	T		2030.	J	1450.	J	1010.	J	2050.	J	-		1370.	J
Selenium	mg/kg-dry	T		1.4	J	1.	J	<0.7	J	1.1	:	-		1.3	J
Silver	mg/kg-dry	T		0.29	:	0.27	:	<0.12	:	<0.4	:	-		0.17	:
Sodium	mg/kg-dry	T		216.	:	100.	:	<47.9	:	152.	:	-		108.	:
Thallium	mg/kg-dry	T		0.13	:	0.097	:	0.092	:	0.14	:	-		0.18	:
Vanadium	mg/kg-dry	T		19.3	:	17.9	:	27.	:	27.7	:	-		16.5	:
Zinc	mg/kg-dry	T		65.7	J	70.7	J	63.5	J	112.	:	-		378.	J
Volatile Organics															
1,1,1-Trichloroethane	mg/kg-dry	T		-		-		-		-		<0.008	:	-	
1,1,2,2-Tetrachloroethane	mg/kg-dry	T		-		-		-		-		<0.008	J	-	
1,1,2-Trichloro-1,2,2-trifluoroethane	mg/kg-dry	T		-		-		-		-		<0.008	:	-	
1,1,2-Trichloroethane	mg/kg-dry	T		-		-		-		-		<0.008	:	-	
1,1-Dichloroethane	mg/kg-dry	T		-		-		-		-		<0.008	:	-	
1,1-Dichloroethene	mg/kg-dry	T		-		-		-		-		<0.008	:	-	
1,2,4-Trichlorobenzene	mg/kg-dry	T		-		-		-		-		<0.008	J	-	
1,2-Dibromo-3-chloropropane	mg/kg-dry	T		-		-		-		-		<0.008	J	-	
1,2-Dichlorobenzene	mg/kg-dry	T		-		-		-		-		<0.008	J	-	
1,2-Dichloroethane	mg/kg-dry	T		-		-		-		-		<0.008	:	-	
1,2-Dichloroethene (total)	mg/kg-dry	T		-		-		-		-		<0.008	:	-	
1,2-Dichloropropane	mg/kg-dry	T		-		-		-		-		<0.008	:	-	
1,3-Dichlorobenzene	mg/kg-dry	T		-		-		-		-		<0.008	:	-	
1,4-Dichlorobenzene	mg/kg-dry	T		-		-		-		-		<0.008	J	-	
2-Butanone	mg/kg-dry	T		-		-		-		-		<0.008	:	-	
2-Hexanone	mg/kg-dry	T		-		-		-		-		<0.008	J	-	
4-Methyl-2-pentanone	mg/kg-dry	T		-		-		-		-		<0.008	J	-	
Acetone	mg/kg-dry	T		-		-		-		-		0.001	J	-	
Benzene	mg/kg-dry	T		-		-		-		-		<0.008	:	-	
Bromodichloromethane	mg/kg-dry	T		-		-		-		-		<0.008	:	-	
Bromoform	mg/kg-dry	T		-		-		-		-		<0.008	:	-	
Bromomethane	mg/kg-dry	T		-		-		-		-		<0.008	:	-	
Carbon disulfide	mg/kg-dry	T		-		-		-		-		<0.008	:	-	

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Appendix A-7c
Soil - Random 0-6 inches
Validated Analytical Results

Parameter	Units	Exposure Area Fraction	Site ID	RRS-7	RRS-8	RRS-9	RS-1	RS-1	RS-10
			Sample Date	10/10/2002	10/10/2002	10/14/2002	10/17/2002	10/22/2002	10/10/2002
			Sample ID	RRS-7-T01N-SOL	RRS-8-T01N-SOL	RRS-9-T01N-SOL	RS-1-T01N-SOL	RS-1-T01N-SOL	RRS-10-T01N-SOL
			Exposure Area	RefMineR	RefMineR	RefMineR	SS9	SS9	SS9
Carbon tetrachloride	mg/kg-dry	T		-	-	-	-	<0.008 :	-
Chlorobenzene	mg/kg-dry	T		-	-	-	-	<0.008 J	-
Chloroethane	mg/kg-dry	T		-	-	-	-	<0.008 :	-
Chloroform	mg/kg-dry	T		-	-	-	-	<0.008 :	-
Chloromethane	mg/kg-dry	T		-	-	-	-	<0.008 :	-
cis-1,2-Dichloroethene	mg/kg-dry	T		-	-	-	-	<0.008 :	-
cis-1,3-Dichloropropene	mg/kg-dry	T		-	-	-	-	<0.008 :	-
Dibromochloromethane	mg/kg-dry	T		-	-	-	-	<0.008 :	-
Dichlorodifluoromethane	mg/kg-dry	T		-	-	-	-	<0.008 :	-
Ethylbenzene	mg/kg-dry	T		-	-	-	-	<0.008 J	-
Methylene chloride	mg/kg-dry	T		-	-	-	-	<0.008 :	-
Styrene	mg/kg-dry	T		-	-	-	-	<0.008 J	-
Tetrachloroethene	mg/kg-dry	T		-	-	-	-	<0.008 J	-
Toluene	mg/kg-dry	T		-	-	-	-	<0.008 J	-
Total Xylene	mg/kg-dry	T		-	-	-	-	<0.008 J	-
trans-1,2-Dichloroethene	mg/kg-dry	T		-	-	-	-	<0.008 :	-
trans-1,3-Dichloropropene	mg/kg-dry	T		-	-	-	-	<0.008 :	-
Trichloroethene	mg/kg-dry	T		-	-	-	-	<0.008 :	-
Trichlorofluoromethane	mg/kg-dry	T		-	-	-	-	<0.008 :	-
Vinyl chloride	mg/kg-dry	T		-	-	-	-	<0.008 :	-
Semi-Volatile Organics									
1,1`-Biphenyl	mg/kg-dry	T		-	-	-	<0.37 :	-	-
2,4,5-Trichlorophenol	mg/kg-dry	T		-	-	-	<0.92 :	-	-
2,4,6-Trichlorophenol	mg/kg-dry	T		-	-	-	<0.37 :	-	-
2,4-Dichlorophenol	mg/kg-dry	T		-	-	-	<0.37 :	-	-
2,4-Dimethylphenol	mg/kg-dry	T		-	-	-	<0.37 :	-	-
2,4-Dinitrophenol	mg/kg-dry	T		-	-	-	<0.92 :	-	-
2,4-Dinitrotoluene	mg/kg-dry	T		-	-	-	<0.37 :	-	-
2,6-Dinitrotoluene	mg/kg-dry	T		-	-	-	<0.37 :	-	-
2-Chloronaphthalene	mg/kg-dry	T		-	-	-	<0.37 :	-	-
2-Chlorophenol	mg/kg-dry	T		-	-	-	<0.37 :	-	-
2-Methylnaphthalene	mg/kg-dry	T		-	-	-	<0.37 :	-	-
2-Methylphenol	mg/kg-dry	T		-	-	-	<0.37 :	-	-
2-Nitroaniline	mg/kg-dry	T		-	-	-	<0.92 :	-	-

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Appendix A-7c
Soil - Random 0-6 inches
Validated Analytical Results

Parameter	Units	Exposure Area Fraction	Site ID / Sample Date / Sample ID					
			RRS-7 10/10/2002 RRS-7-T01N-SOL	RRS-8 10/10/2002 RRS-8-T01N-SOL	RRS-9 10/14/2002 RRS-9-T01N-SOL	RS-1 10/17/2002 RS-1-T01N-SOL	RS-1 10/22/2002 RS-1-T01N-SOL	RS-10 10/10/2002 RRS-10-T01N-SOL
			RefMineR	RefMineR	RefMineR	SS9	SS9	SS9
2-Nitrophenol	mg/kg-dry	T	-	-	-	<0.37 :	-	-
3,3-Dichlorobenzidine	mg/kg-dry	T	-	-	-	<0.37 :	-	-
3-Nitroaniline	mg/kg-dry	T	-	-	-	<0.92 :	-	-
4,6-Dinitro-2-methylphenol	mg/kg-dry	T	-	-	-	<0.92 :	-	-
4-Bromophenyl phenyl ether	mg/kg-dry	T	-	-	-	<0.37 :	-	-
4-Chloro-3-methylphenol	mg/kg-dry	T	-	-	-	<0.37 :	-	-
4-Chloroaniline	mg/kg-dry	T	-	-	-	<0.37 :	-	-
4-Chlorophenyl phenyl ether	mg/kg-dry	T	-	-	-	<0.37 :	-	-
4-Methylphenol	mg/kg-dry	T	-	-	-	<0.37 :	-	-
4-Nitroaniline	mg/kg-dry	T	-	-	-	<0.92 :	-	-
4-Nitrophenol	mg/kg-dry	T	-	-	-	<0.92 :	-	-
Acenaphthene	mg/kg-dry	T	-	-	-	<0.37 :	-	-
Acenaphthylene	mg/kg-dry	T	-	-	-	<0.37 :	-	-
Anthracene	mg/kg-dry	T	-	-	-	<0.37 :	-	-
Benzaldehyde	mg/kg-dry	T	-	-	-	<0.37 :	-	-
Benzo(a)anthracene	mg/kg-dry	T	-	-	-	<0.37 :	-	-
Benzo(a)pyrene	mg/kg-dry	T	-	-	-	<0.37 :	-	-
Benzo(b)fluoranthene	mg/kg-dry	T	-	-	-	<0.37 :	-	-
Benzo(g,h,i)perylene	mg/kg-dry	T	-	-	-	<0.37 :	-	-
Benzo(k)fluoranthene	mg/kg-dry	T	-	-	-	<0.37 :	-	-
Bis(2-chloroethoxy)methane	mg/kg-dry	T	-	-	-	<0.37 :	-	-
Bis(2-chloroethyl)ether	mg/kg-dry	T	-	-	-	<0.37 :	-	-
Bis(2-ethylhexyl)phthalate	mg/kg-dry	T	-	-	-	<0.37 :	-	-
Butyl benzyl phthalate	mg/kg-dry	T	-	-	-	<0.37 :	-	-
Carbazole	mg/kg-dry	T	-	-	-	<0.37 :	-	-
Chrysene	mg/kg-dry	T	-	-	-	<0.37 :	-	-
Dibenz(a,h)anthracene	mg/kg-dry	T	-	-	-	<0.37 :	-	-
Dibenzofuran	mg/kg-dry	T	-	-	-	<0.37 :	-	-
Dichlorodiisopropyl ether	mg/kg-dry	T	-	-	-	<0.37 :	-	-
Diethylphthalate	mg/kg-dry	T	-	-	-	<0.37 :	-	-
Dimethylphthalate	mg/kg-dry	T	-	-	-	<0.37 :	-	-
Di-n-Butyl phthalate	mg/kg-dry	T	-	-	-	<0.37 :	-	-
Di-n-Octyl phthalate	mg/kg-dry	T	-	-	-	<0.37 :	-	-
Fluoranthene	mg/kg-dry	T	-	-	-	<0.37 :	-	-

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Appendix A-7c
Soil - Random 0-6 inches
Validated Analytical Results

Parameter	Units	Exposure Area Fraction	Site ID: RRS-7 Sample Date: 10/10/2002 Sample ID: RRS-7-T01N-SOL RefMineR	Site ID: RRS-8 Sample Date: 10/10/2002 Sample ID: RRS-8-T01N-SOL RefMineR	Site ID: RRS-9 Sample Date: 10/14/2002 Sample ID: RRS-9-T01N-SOL RefMineR	Site ID: RS-1 Sample Date: 10/17/2002 Sample ID: RS-1-T01N-SOL SS9	Site ID: RS-1 Sample Date: 10/22/2002 Sample ID: RS-1-T01N-SOL SS9	Site ID: RS-10 Sample Date: 10/10/2002 Sample ID: RRS-10-T01N-SOL SS9
Fluorene	mg/kg-dry	T	-	-	-	<0.37 :	-	-
Hexachlorobenzene	mg/kg-dry	T	-	-	-	<0.37 :	-	-
Hexachlorobutadiene	mg/kg-dry	T	-	-	-	<0.37 :	-	-
Hexachlorocyclopentadiene	mg/kg-dry	T	-	-	-	<0.37 :	-	-
Hexachloroethane	mg/kg-dry	T	-	-	-	<0.37 :	-	-
Indeno(1,2,3-cd)pyrene	mg/kg-dry	T	-	-	-	<0.37 :	-	-
Isophorone	mg/kg-dry	T	-	-	-	<0.37 :	-	-
Naphthalene	mg/kg-dry	T	-	-	-	<0.37 :	-	-
Nitrobenzene	mg/kg-dry	T	-	-	-	<0.37 :	-	-
N-Nitrosodi-n-propylamine	mg/kg-dry	T	-	-	-	<0.37 :	-	-
N-Nitrosodiphenylamine	mg/kg-dry	T	-	-	-	<0.37 :	-	-
Pentachlorophenol	mg/kg-dry	T	-	-	-	<0.92 :	-	-
Phenanthrene	mg/kg-dry	T	-	-	-	<0.37 :	-	-
Phenol	mg/kg-dry	T	-	-	-	<0.37 :	-	-
Pyrene	mg/kg-dry	T	-	-	-	<0.37 :	-	-
Explosives								
2,4,6-Trinitrotoluene	mg/kg-dry	T	-	-	-	<0.12 :	-	-
2,6-Pyridinediamine,	mg/kg-dry	T	-	-	-	<0.12 :	-	-
Cyclotetramethylenetetranitramine	mg/kg-dry	T	-	-	-	<0.12 :	-	-
Cyclotrimethylenetrinitramine	mg/kg-dry	T	-	-	-	<0.12 :	-	-
Pentaerythritol tetranitrate	mg/kg-dry	T	-	-	-	<5. :	-	-
Pesticides-PCBs								
Aroclor 1016	mg/kg-dry	T	-	-	-	<0.037 J	-	-
Aroclor 1221	mg/kg-dry	T	-	-	-	<0.074 J	-	-
Aroclor 1232	mg/kg-dry	T	-	-	-	<0.037 J	-	-
Aroclor 1242	mg/kg-dry	T	-	-	-	<0.037 J	-	-
Aroclor 1248	mg/kg-dry	T	-	-	-	<0.037 J	-	-
Aroclor 1254	mg/kg-dry	T	-	-	-	<0.037 J	-	-
Aroclor 1260	mg/kg-dry	T	-	-	-	<0.037 J	-	-

J = Qualified as estimated during data validation
R = Qualified as rejected value from data validation and results are considered unusable for any purpose
T = Total Fraction

Appendix A-7c
Soil - Random 0-6 inches
Validated Analytical Results

Parameter	Units	Exposure Area Fraction	Site ID / Sample Date / Sample ID / Exposure Area	RS-11 10/17/2002 RS-11-T01N-SOL SS16		RS-12 10/16/2002 RS-12-T01N-SOL SS16		RS-13 10/16/2002 RS-13-T01N-SOL SS16		RS-14 10/16/2002 RS-14-T01N-SOL SS16		RS-15 10/16/2002 RS-15-T01N-SOL SS16		RS-16 10/18/2002 RRS-16-T01N-SOL SS16	
General Chemistry															
Ammonia	mg/kg-dry	T		34.4	:	19.4	:	20.7	:	35.4	:	58.6	:	18.7	:
Chloride	mg/kg-dry	T		12.2	J	2.2	J	18.6	J	9.1	J	6.4	J	43.2	J
Fluoride	mg/kg-dry	T		0.85	J	0.7	J	2.4	J	0.88	J	2.2	J	0.42	J
Nitrate	mg/kg-dry	T		<2.4	J	<2.1	J	<2.4	J	<2.4	J	<2.3	J	4.5	J
Phosphorus	mg/kg-dry	T		608.	J	382.	J	763.	J	701.	J	867.	J	560.	J
Sulfate	mg/kg-dry	T		367.	J	19.4	J	139.	J	363.	J	361.	J	761.	J
Total Kjeldahl Nitrogen	mg/kg-dry	T		552.	:	136.	:	456.	:	2390.	:	3870.	:	1410.	:
Total Organic Carbon	mg/kg-dry	T		6930.	J	2800.	J	14100.	J	3720.	J	11500.	J	20700.	J
Laboratory Parameters															
pH	SU	T		8.2	:	7.1	:	6.8	:	6.3	:	5.2	:	6.4	:
Solids, Percent	%	T		85.	:	97.4	:	85.3	:	83.5	:	87.4	:	75.9	:
Specific Conductance	umhos/cm	T		182.	:	29.5	:	104.	:	215.	:	223.	:	1010.	:
Geotechnical															
Organic Soils	%	T		3.54	J	1.56	J	2.71	J	2.71	J	3.76	J	6.47	J
Physical Properties															
Cation-Exchange Capacity	meq/100g	T		8.6	:	5.4	:	12.6	:	11.2	:	15.8	:	24.	:
Sodium Absorption Ratio	ratio	T		0.55	:	0.06	:	0.88	:	0.52	:	0.32	:	1.48	:
Metals															
Aluminum	mg/kg-dry	T		8180.	:	5410.	:	7720.	:	8150.	:	9070.	J	12200.	:
Antimony	mg/kg-dry	T		<0.23	J	<0.25	J	<0.27	J	<0.23	J	<0.23	J	<0.33	J
Arsenic	mg/kg-dry	T		2.7	:	2.3	:	2.8	:	3.6	:	4.4	:	4.4	:
Barium	mg/kg-dry	T		294.	:	102.	:	373.	:	301.	:	448.	J	453.	:
Beryllium	mg/kg-dry	T		0.82	:	0.56	:	0.69	:	0.97	:	1.	J	1.1	:
Boron	mg/kg-dry	T		<0.77	J	<0.23	:	2.	J	1.6	J	2.3	J	<0.28	J
Cadmium	mg/kg-dry	T		0.37	:	0.18	:	<0.026	J	0.56	J	0.47	J	0.99	:
Calcium	mg/kg-dry	T		2290.	:	1280.	:	2540.	:	2080.	:	1780.	J	4900.	:
Chromium	mg/kg-dry	T		15.4	:	12.9	:	21.5	:	17.	:	19.4	J	20.5	:
Cobalt	mg/kg-dry	T		9.7	:	6.	:	10.7	:	12.8	:	13.	J	13.6	:
Copper	mg/kg-dry	T		53.8	:	34.	:	33.2	:	58.7	:	60.1	J	68.9	:
Iron	mg/kg-dry	T		18400.	:	14200.	:	20500.	:	18800.	:	22800.	J	22900.	:
Lead	mg/kg-dry	T		38.7	:	42.	:	26.2	:	42.9	:	50.6	J	60.1	:
Magnesium	mg/kg-dry	T		3550.	:	2770.	:	3340.	:	3440.	:	3150.	J	4810.	:
Manganese	mg/kg-dry	T		656.	J	380.	J	611.	J	763.	J	933.	J	1070.	J

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Appendix A-7c
Soil - Random 0-6 inches
Validated Analytical Results

Parameter	Units	Exposure Area Fraction	Site ID	RS-11	RS-12	RS-13	RS-14	RS-15	RS-16
			Sample Date	10/17/2002	10/16/2002	10/16/2002	10/16/2002	10/16/2002	10/18/2002
			Sample ID	RS-11-T01N-SOL	RS-12-T01N-SOL	RS-13-T01N-SOL	RS-14-T01N-SOL	RS-15-T01N-SOL	RRS-16-T01N-SOL
			Exposure Area	SS16	SS16	SS16	SS16	SS16	SS16
Mercury	mg/kg-dry	T		<0.02 :	<0.017 :	<0.018 :	<0.02 :	<0.018 :	0.022 J
Molybdenum	mg/kg-dry	T		14.6 :	14.2 :	10.5 :	15.4 :	28.7 J	27.6 :
Nickel	mg/kg-dry	T		25.5 J	16.6 J	22.3 J	31.5 J	28. :	33.9 J
Potassium	mg/kg-dry	T		1780. J	1460. J	1390. J	1650. J	1720. J	2300. J
Selenium	mg/kg-dry	T		0.9 :	0.84 J	0.76 J	1. J	1.4 J	1.2 J
Silver	mg/kg-dry	T		<0.12 J	<0.13 :	0.17 :	0.19 :	0.24 :	0.36 :
Sodium	mg/kg-dry	T		<169. :	<93.9 :	<86.6 :	<103. :	<71.5 :	294. :
Thallium	mg/kg-dry	T		0.14 :	0.091 :	0.11 :	0.15 :	0.17 :	0.18 :
Vanadium	mg/kg-dry	T		21.5 :	14.8 :	29.7 :	21.7 :	27.1 J	29.7 :
Zinc	mg/kg-dry	T		180. J	106. J	140. J	244. J	221. J	233. J
Volatile Organics									
1,1,1-Trichloroethane	mg/kg-dry	T		<0.007 :	<0.011 :	-	-	-	-
1,1,2,2-Tetrachloroethane	mg/kg-dry	T		<0.007 :	<0.011 :	-	-	-	-
1,1,2-Trichloro-1,2,2-trifluoroethane	mg/kg-dry	T		<0.007 :	<0.011 :	-	-	-	-
1,1,2-Trichloroethane	mg/kg-dry	T		<0.007 :	<0.011 :	-	-	-	-
1,1-Dichloroethane	mg/kg-dry	T		<0.007 :	<0.011 :	-	-	-	-
1,1-Dichloroethene	mg/kg-dry	T		<0.007 :	<0.011 :	-	-	-	-
1,2,4-Trichlorobenzene	mg/kg-dry	T		<0.007 :	<0.011 :	-	-	-	-
1,2-Dibromo-3-chloropropane	mg/kg-dry	T		<0.007 :	<0.011 :	-	-	-	-
1,2-Dichlorobenzene	mg/kg-dry	T		<0.007 :	<0.011 :	-	-	-	-
1,2-Dichloroethane	mg/kg-dry	T		<0.007 :	<0.011 :	-	-	-	-
1,2-Dichloroethene (total)	mg/kg-dry	T		<0.007 :	<0.011 :	-	-	-	-
1,2-Dichloropropane	mg/kg-dry	T		<0.007 :	<0.011 :	-	-	-	-
1,3-Dichlorobenzene	mg/kg-dry	T		<0.007 :	<0.011 :	-	-	-	-
1,4-Dichlorobenzene	mg/kg-dry	T		<0.007 :	<0.011 :	-	-	-	-
2-Butanone	mg/kg-dry	T		0.001 J	<0.011 :	-	-	-	-
2-Hexanone	mg/kg-dry	T		<0.007 :	<0.011 :	-	-	-	-
4-Methyl-2-pentanone	mg/kg-dry	T		<0.007 :	<0.011 :	-	-	-	-
Acetone	mg/kg-dry	T		<0.007 :	<0.011 :	-	-	-	-
Benzene	mg/kg-dry	T		<0.007 :	<0.011 :	-	-	-	-
Bromodichloromethane	mg/kg-dry	T		<0.007 :	<0.011 :	-	-	-	-
Bromoform	mg/kg-dry	T		<0.007 :	<0.011 :	-	-	-	-
Bromomethane	mg/kg-dry	T		<0.007 :	<0.011 :	-	-	-	-
Carbon disulfide	mg/kg-dry	T		<0.007 :	<0.011 :	-	-	-	-

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T = Total Fraction

Appendix A-7c
Soil - Random 0-6 inches
Validated Analytical Results

Parameter	Units	Exposure Area Fraction	Site ID / Sample Date / Sample ID		RS-11 10/17/2002 RS-11-T01N-SOL SS16		RS-12 10/16/2002 RS-12-T01N-SOL SS16		RS-13 10/16/2002 RS-13-T01N-SOL SS16	RS-14 10/16/2002 RS-14-T01N-SOL SS16	RS-15 10/16/2002 RS-15-T01N-SOL SS16	RS-16 10/18/2002 RRS-16-T01N-SOL SS16
Carbon tetrachloride	mg/kg-dry	T		<0.007	:	<0.011	:	-	-	-	-
Chlorobenzene	mg/kg-dry	T		<0.007	:	<0.011	:	-	-	-	-
Chloroethane	mg/kg-dry	T		<0.007	:	<0.011	:	-	-	-	-
Chloroform	mg/kg-dry	T		<0.007	:	<0.011	:	-	-	-	-
Chloromethane	mg/kg-dry	T		<0.007	J	<0.011	:	-	-	-	-
cis-1,2-Dichloroethene	mg/kg-dry	T		<0.007	:	<0.011	:	-	-	-	-
cis-1,3-Dichloropropene	mg/kg-dry	T		<0.007	:	<0.011	:	-	-	-	-
Dibromochloromethane	mg/kg-dry	T		<0.007	:	<0.011	:	-	-	-	-
Dichlorodifluoromethane	mg/kg-dry	T		<0.007	J	<0.011	:	-	-	-	-
Ethylbenzene	mg/kg-dry	T		<0.007	:	<0.011	:	-	-	-	-
Methylene chloride	mg/kg-dry	T		0.001	J	<0.011	:	-	-	-	-
Styrene	mg/kg-dry	T		<0.007	:	<0.011	:	-	-	-	-
Tetrachloroethene	mg/kg-dry	T		<0.007	:	<0.011	:	-	-	-	-
Toluene	mg/kg-dry	T		<0.007	:	<0.011	:	-	-	-	-
Total Xylene	mg/kg-dry	T		<0.007	:	<0.011	:	-	-	-	-
trans-1,2-Dichloroethene	mg/kg-dry	T		<0.007	:	<0.011	:	-	-	-	-
trans-1,3-Dichloropropene	mg/kg-dry	T		<0.007	:	<0.011	:	-	-	-	-
Trichloroethene	mg/kg-dry	T		<0.007	:	<0.011	:	-	-	-	-
Trichlorofluoromethane	mg/kg-dry	T		<0.007	:	<0.011	:	-	-	-	-
Vinyl chloride	mg/kg-dry	T		<0.007	:	<0.011	:	-	-	-	-
Semi-Volatile Organics											
1,1`-Biphenyl	mg/kg-dry	T		<0.39	J	<0.34	:	-	-	-	-
2,4,5-Trichlorophenol	mg/kg-dry	T		<0.98	:	<0.86	:	-	-	-	-
2,4,6-Trichlorophenol	mg/kg-dry	T		<0.39	:	<0.34	:	-	-	-	-
2,4-Dichlorophenol	mg/kg-dry	T		<0.39	:	<0.34	:	-	-	-	-
2,4-Dimethylphenol	mg/kg-dry	T		<0.39	:	<0.34	:	-	-	-	-
2,4-Dinitrophenol	mg/kg-dry	T		<0.98	:	<0.86	:	-	-	-	-
2,4-Dinitrotoluene	mg/kg-dry	T		<0.39	:	<0.34	:	-	-	-	-
2,6-Dinitrotoluene	mg/kg-dry	T		<0.39	:	<0.34	:	-	-	-	-
2-Chloronaphthalene	mg/kg-dry	T		<0.39	:	<0.34	:	-	-	-	-
2-Chlorophenol	mg/kg-dry	T		<0.39	:	<0.34	:	-	-	-	-
2-Methylnaphthalene	mg/kg-dry	T		<0.39	:	<0.34	:	-	-	-	-
2-Methylphenol	mg/kg-dry	T		<0.39	:	<0.34	:	-	-	-	-
2-Nitroaniline	mg/kg-dry	T		<0.98	:	<0.86	:	-	-	-	-

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Appendix A-7c
Soil - Random 0-6 inches
Validated Analytical Results

Parameter	Units	Exposure Area Fraction	Site ID / Sample Date / Sample ID	RS-11 10/17/2002 RS-11-T01N-SOL SS16	RS-12 10/16/2002 RS-12-T01N-SOL SS16	RS-13 10/16/2002 RS-13-T01N-SOL SS16	RS-14 10/16/2002 RS-14-T01N-SOL SS16	RS-15 10/16/2002 RS-15-T01N-SOL SS16	RS-16 10/18/2002 RRS-16-T01N-SOL SS16
2-Nitrophenol	mg/kg-dry	T		<0.39 :	<0.34 :	-	-	-	-
3,3-Dichlorobenzidine	mg/kg-dry	T		<0.39 :	<0.34 :	-	-	-	-
3-Nitroaniline	mg/kg-dry	T		<0.98 :	<0.86 :	-	-	-	-
4,6-Dinitro-2-methylphenol	mg/kg-dry	T		<0.98 :	<0.86 :	-	-	-	-
4-Bromophenyl phenyl ether	mg/kg-dry	T		<0.39 :	<0.34 :	-	-	-	-
4-Chloro-3-methylphenol	mg/kg-dry	T		<0.39 :	<0.34 :	-	-	-	-
4-Chloroaniline	mg/kg-dry	T		<0.39 :	<0.34 :	-	-	-	-
4-Chlorophenyl phenyl ether	mg/kg-dry	T		<0.39 :	<0.34 :	-	-	-	-
4-Methylphenol	mg/kg-dry	T		<0.39 :	<0.34 :	-	-	-	-
4-Nitroaniline	mg/kg-dry	T		<0.98 :	<0.86 :	-	-	-	-
4-Nitrophenol	mg/kg-dry	T		<0.98 :	<0.86 :	-	-	-	-
Acenaphthene	mg/kg-dry	T		<0.39 :	<0.34 :	-	-	-	-
Acenaphthylene	mg/kg-dry	T		<0.39 :	<0.34 :	-	-	-	-
Anthracene	mg/kg-dry	T		<0.39 J	<0.34 J	-	-	-	-
Benzaldehyde	mg/kg-dry	T		0.13 J	<0.34 J	-	-	-	-
Benzo(a)anthracene	mg/kg-dry	T		<0.39 :	<0.34 :	-	-	-	-
Benzo(a)pyrene	mg/kg-dry	T		<0.39 :	<0.34 :	-	-	-	-
Benzo(b)fluoranthene	mg/kg-dry	T		<0.39 :	<0.34 :	-	-	-	-
Benzo(g,h,i)perylene	mg/kg-dry	T		<0.39 :	<0.34 :	-	-	-	-
Benzo(k)fluoranthene	mg/kg-dry	T		<0.39 :	<0.34 J	-	-	-	-
Bis(2-chloroethoxy)methane	mg/kg-dry	T		<0.39 :	<0.34 :	-	-	-	-
Bis(2-chloroethyl)ether	mg/kg-dry	T		<0.39 :	<0.34 :	-	-	-	-
Bis(2-ethylhexyl)phthalate	mg/kg-dry	T		<0.39 :	<0.34 :	-	-	-	-
Butyl benzyl phthalate	mg/kg-dry	T		<0.39 :	<0.34 :	-	-	-	-
Carbazole	mg/kg-dry	T		<0.39 :	<0.34 :	-	-	-	-
Chrysene	mg/kg-dry	T		<0.39 :	<0.34 :	-	-	-	-
Dibenz(a,h)anthracene	mg/kg-dry	T		<0.39 J	<0.34 :	-	-	-	-
Dibenzofuran	mg/kg-dry	T		<0.39 :	<0.34 :	-	-	-	-
Dichlorodiisopropyl ether	mg/kg-dry	T		<0.39 :	<0.34 :	-	-	-	-
Diethylphthalate	mg/kg-dry	T		<0.39 :	<0.34 :	-	-	-	-
Dimethylphthalate	mg/kg-dry	T		<0.39 :	<0.34 :	-	-	-	-
Di-n-Butyl phthalate	mg/kg-dry	T		0.02 J	<0.34 :	-	-	-	-
Di-n-Octyl phthalate	mg/kg-dry	T		<0.39 :	<0.34 :	-	-	-	-
Fluoranthene	mg/kg-dry	T		<0.39 :	<0.34 :	-	-	-	-

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Appendix A-7c
Soil - Random 0-6 inches
Validated Analytical Results

Parameter	Units	Exposure Area Fraction	Site ID / Sample Date / Sample ID		RS-11 10/17/2002 RS-11-T01N-SOL SS16		RS-12 10/16/2002 RS-12-T01N-SOL SS16		RS-13 10/16/2002 RS-13-T01N-SOL SS16	RS-14 10/16/2002 RS-14-T01N-SOL SS16	RS-15 10/16/2002 RS-15-T01N-SOL SS16	RS-16 10/18/2002 RRS-16-T01N-SOL SS16
Fluorene	mg/kg-dry	T		<0.39	:	<0.34	:	-	-	-	-
Hexachlorobenzene	mg/kg-dry	T		<0.39	:	<0.34	:	-	-	-	-
Hexachlorobutadiene	mg/kg-dry	T		<0.39	:	<0.34	:	-	-	-	-
Hexachlorocyclopentadiene	mg/kg-dry	T		<0.39	:	<0.34	:	-	-	-	-
Hexachloroethane	mg/kg-dry	T		<0.39	:	<0.34	:	-	-	-	-
Indeno(1,2,3-cd)pyrene	mg/kg-dry	T		<0.39	:	<0.34	:	-	-	-	-
Isophorone	mg/kg-dry	T		<0.39	:	<0.34	:	-	-	-	-
Naphthalene	mg/kg-dry	T		<0.39	:	<0.34	:	-	-	-	-
Nitrobenzene	mg/kg-dry	T		<0.39	:	<0.34	:	-	-	-	-
N-Nitrosodi-n-propylamine	mg/kg-dry	T		<0.39	:	<0.34	:	-	-	-	-
N-Nitrosodiphenylamine	mg/kg-dry	T		<0.39	:	<0.34	:	-	-	-	-
Pentachlorophenol	mg/kg-dry	T		<0.98	:	<0.86	:	-	-	-	-
Phenanthrene	mg/kg-dry	T		<0.39	:	<0.34	:	-	-	-	-
Phenol	mg/kg-dry	T		<0.39	:	<0.34	:	-	-	-	-
Pyrene	mg/kg-dry	T		<0.39	J	<0.34	:	-	-	-	-
Pesticides-PCBs											
Aroclor 1016	mg/kg-dry	T		-		<0.034	:	-	-	-	-
Aroclor 1221	mg/kg-dry	T		-		<0.069	:	-	-	-	-
Aroclor 1232	mg/kg-dry	T		-		<0.034	:	-	-	-	-
Aroclor 1242	mg/kg-dry	T		-		<0.034	:	-	-	-	-
Aroclor 1248	mg/kg-dry	T		-		<0.034	:	-	-	-	-
Aroclor 1254	mg/kg-dry	T		-		<0.034	:	-	-	-	-
Aroclor 1260	mg/kg-dry	T		-		<0.034	:	-	-	-	-

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Appendix A-7c
Soil - Random 0-6 inches
Validated Analytical Results

Parameter	Units	Exposure Area Fraction	Site ID / Sample Date / Sample ID																					
			RS-17 10/17/2002 RS-17-T01N-SOL				RS-18 10/17/2002 RS-18-T01N-SOL				RS-19 10/16/2002 RS-19-T01N-SOL				RS-2 10/17/2002 RS-2-T01N-SOL				RS-20 10/16/2002 RS-20-T01N-SOL				RS-3 10/14/2002 RS-3-T01N-SOL			
			SS16				SS16				SS16				SS9				SS16				SS9			
General Chemistry																								
Ammonia	mg/kg-dry	T	50.3	J			50.2	:			68.2	:			32.9	:			<12.3	:			28.2	J	
Chloride	mg/kg-dry	T	22.1	J			13.6	J			81.8	J			2.9	J			7.9	J			<2.3	J	
Fluoride	mg/kg-dry	T	2.3	J			0.86	J			1.3	J			0.31	J			1.3	J			0.46	J	
Nitrate	mg/kg-dry	T	7.1	J			<2.6	J			3.1	J			<2.3	J			<2.3	J			<2.3	J	
Phosphorus	mg/kg-dry	T	586.	J			662.	J			944.	J			963.	J			524.	J			883.	J	
Sulfate	mg/kg-dry	T	386.	J			188.	J			532.	J			31.	J			92.4	J			22.6	J	
Total Kjeldahl Nitrogen	mg/kg-dry	T	726.	:			441.	:			1260.	:			369.	:			241.	:			513.	:	
Total Organic Carbon	mg/kg-dry	T	11400.	J			5620.	J			20700.	J			10200.	J			2070.	J			10600.	J	
Laboratory Parameters																								
pH	SU	T	6.8	:			6.9	:			6.7	:			6.9	:			6.3	:			7.6	:	
Solids, Percent	%	T	85.6	:			77.9	:			84.4	:			90.1	:			90.7	:			90.7	:	
Specific Conductance	umhos/cm	T	187.	:			120.	:			483.	:			26.7	:			58.2	:			24.5	:	
Geotechnical																								
Organic Soils	%	T	4.04	J			3.43	J			5.91	J			3.44	J			2.02	J			3.42	J	
Physical Properties																								
Cation-Exchange Capacity	meq/100g	T	19.4	:			15.5	:			18.4	:			14.6	:			9.4	:			17.	:	
Sodium Absorption Ratio	ratio	T	1.21	:			0.88	:			3.06	:			0.13	:			0.35	:			0.09	:	
Metals																								
Aluminum	mg/kg-dry	T	8120.	:			9440.	:			8610.	:			8590.	:			6070.	:			8020.	:	
Antimony	mg/kg-dry	T	<0.19	J			<0.27	J			<0.28	J			<0.24	J			<0.24	J			<0.27	J	
Arsenic	mg/kg-dry	T	3.6	:			3.7	:			3.6	:			6.4	:			2.9	:			3.8	:	
Barium	mg/kg-dry	T	269.	:			247.	:			472.	:			595.	:			225.	:			240.	:	
Beryllium	mg/kg-dry	T	0.77	:			1.3	:			0.75	:			0.54	:			0.67	:			0.6	:	
Boron	mg/kg-dry	T	<1.3	:			<0.49	:			<0.26	J			<0.25	J			<1.5	J			4.2	J	
Cadmium	mg/kg-dry	T	0.2	J			1.	:			0.26	J			<0.026	J			0.084	J			0.25	:	
Calcium	mg/kg-dry	T	2700.	:			2100.	:			3110.	:			1900.	:			1510.	:			2310.	:	
Chromium	mg/kg-dry	T	17.1	:			15.5	:			20.4	:			17.	:			14.9	:			19.5	:	
Cobalt	mg/kg-dry	T	9.	:			16.5	:			9.2	:			6.5	:			8.7	:			8.4	:	
Copper	mg/kg-dry	T	46.4	:			72.5	:			54.2	:			45.7	:			38.6	:			69.4	:	
Iron	mg/kg-dry	T	19200.	:			19000.	:			22900.	:			25900.	:			18100.	:			22200.	:	
Lead	mg/kg-dry	T	39.	:			46.2	:			44.7	:			53.7	:			32.8	:			57.6	:	
Magnesium	mg/kg-dry	T	3530.	:			3490.	:			3570.	:			3910.	:			2960.	:			4150.	:	
Manganese	mg/kg-dry	T	373.	J			1070.	J			521.	J			322.	J			525.	J			468.	J	

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Appendix A-7c
Soil - Random 0-6 inches
Validated Analytical Results

Parameter	Units	Exposure Area Fraction	Site ID / Sample Date / Sample ID		RS-17 10/17/2002 RS-17-T01N-SOL SS16		RS-18 10/17/2002 RS-18-T01N-SOL SS16		RS-19 10/16/2002 RS-19-T01N-SOL SS16		RS-2 10/17/2002 RS-2-T01N-SOL SS9		RS-20 10/16/2002 RS-20-T01N-SOL SS16		RS-3 10/14/2002 RS-3-T01N-SOL SS9	
Mercury	mg/kg-dry	T			<0.019	:	<0.02	:	<0.02	:	<0.018	:	<0.017	:	<0.018	:
Molybdenum	mg/kg-dry	T			23.1	:	16.3	:	31.8	:	15.8	:	12.3	:	18.4	:
Nickel	mg/kg-dry	T			20.4	J	44.	J	19.2	J	12.9	J	21.6	J	17.2	J
Potassium	mg/kg-dry	T			1910.	J	1860.	J	2060.	J	2220.	J	1490.	J	2030.	J
Selenium	mg/kg-dry	T			0.61	J	1.5	J	0.82	J	1.4	J	0.66	J	1.2	J
Silver	mg/kg-dry	T			0.22	:	0.3	:	0.17	:	0.14	J	0.14	:	0.32	:
Sodium	mg/kg-dry	T			192.	:	150.	:	410.	:	<157.	:	<111.	:	<94.1	:
Thallium	mg/kg-dry	T			0.097	:	0.15	:	0.14	:	0.16	:	0.11	:	0.15	:
Vanadium	mg/kg-dry	T			22.7	:	20.2	:	27.5	:	23.1	:	23.1	:	26.1	:
Zinc	mg/kg-dry	T			149.	J	350.	J	130.	J	73.4	J	146.	J	114.	J
Volatile Organics																
1,1,1-Trichloroethane	mg/kg-dry	T			-		-		-		<0.011	:	-		-	
1,1,2,2-Tetrachloroethane	mg/kg-dry	T			-		-		-		<0.011	:	-		-	
1,1,2-Trichloro-1,2,2-trifluoroethane	mg/kg-dry	T			-		-		-		<0.011	:	-		-	
1,1,2-Trichloroethane	mg/kg-dry	T			-		-		-		<0.011	:	-		-	
1,1-Dichloroethane	mg/kg-dry	T			-		-		-		<0.011	:	-		-	
1,1-Dichloroethene	mg/kg-dry	T			-		-		-		<0.011	:	-		-	
1,2,4-Trichlorobenzene	mg/kg-dry	T			-		-		-		<0.011	:	-		-	
1,2-Dibromo-3-chloropropane	mg/kg-dry	T			-		-		-		<0.011	:	-		-	
1,2-Dichlorobenzene	mg/kg-dry	T			-		-		-		<0.011	:	-		-	
1,2-Dichloroethane	mg/kg-dry	T			-		-		-		<0.011	:	-		-	
1,2-Dichloroethene (total)	mg/kg-dry	T			-		-		-		<0.011	:	-		-	
1,2-Dichloropropane	mg/kg-dry	T			-		-		-		<0.011	:	-		-	
1,3-Dichlorobenzene	mg/kg-dry	T			-		-		-		<0.011	:	-		-	
1,4-Dichlorobenzene	mg/kg-dry	T			-		-		-		<0.011	:	-		-	
2-Butanone	mg/kg-dry	T			-		-		-		<0.011	:	-		-	
2-Hexanone	mg/kg-dry	T			-		-		-		<0.011	:	-		-	
4-Methyl-2-pentanone	mg/kg-dry	T			-		-		-		<0.011	:	-		-	
Acetone	mg/kg-dry	T			-		-		-		0.002	J	-		-	
Benzene	mg/kg-dry	T			-		-		-		<0.011	:	-		-	
Bromodichloromethane	mg/kg-dry	T			-		-		-		<0.011	:	-		-	
Bromoform	mg/kg-dry	T			-		-		-		<0.011	:	-		-	
Bromomethane	mg/kg-dry	T			-		-		-		<0.011	J	-		-	
Carbon disulfide	mg/kg-dry	T			-		-		-		<0.011	:	-		-	

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Appendix A-7c
Soil - Random 0-6 inches
Validated Analytical Results

Parameter	Units	Exposure Area Fraction	Site ID / Sample Date / Sample ID					
			RS-17 10/17/2002 RS-17-T01N-SOL SS16	RS-18 10/17/2002 RS-18-T01N-SOL SS16	RS-19 10/16/2002 RS-19-T01N-SOL SS16	RS-2 10/17/2002 RS-2-T01N-SOL SS9	RS-20 10/16/2002 RS-20-T01N-SOL SS16	RS-3 10/14/2002 RS-3-T01N-SOL SS9
Carbon tetrachloride	mg/kg-dry	T	-	-	-	<0.011 :	-	-
Chlorobenzene	mg/kg-dry	T	-	-	-	<0.011 :	-	-
Chloroethane	mg/kg-dry	T	-	-	-	<0.011 :	-	-
Chloroform	mg/kg-dry	T	-	-	-	<0.011 :	-	-
Chloromethane	mg/kg-dry	T	-	-	-	<0.011 J	-	-
cis-1,2-Dichloroethene	mg/kg-dry	T	-	-	-	<0.011 :	-	-
cis-1,3-Dichloropropene	mg/kg-dry	T	-	-	-	<0.011 :	-	-
Dibromochloromethane	mg/kg-dry	T	-	-	-	<0.011 :	-	-
Dichlorodifluoromethane	mg/kg-dry	T	-	-	-	<0.011 J	-	-
Ethylbenzene	mg/kg-dry	T	-	-	-	<0.011 :	-	-
Methylene chloride	mg/kg-dry	T	-	-	-	<0.011 :	-	-
Styrene	mg/kg-dry	T	-	-	-	<0.011 :	-	-
Tetrachloroethene	mg/kg-dry	T	-	-	-	<0.011 :	-	-
Toluene	mg/kg-dry	T	-	-	-	<0.011 :	-	-
Total Xylene	mg/kg-dry	T	-	-	-	<0.011 :	-	-
trans-1,2-Dichloroethene	mg/kg-dry	T	-	-	-	<0.011 :	-	-
trans-1,3-Dichloropropene	mg/kg-dry	T	-	-	-	<0.011 :	-	-
Trichloroethene	mg/kg-dry	T	-	-	-	<0.011 :	-	-
Trichlorofluoromethane	mg/kg-dry	T	-	-	-	<0.011 :	-	-
Vinyl chloride	mg/kg-dry	T	-	-	-	<0.011 J	-	-
Semi-Volatile Organics								
1,1`-Biphenyl	mg/kg-dry	T	-	-	-	<0.37 J	-	-
2,4,5-Trichlorophenol	mg/kg-dry	T	-	-	-	<0.92 :	-	-
2,4,6-Trichlorophenol	mg/kg-dry	T	-	-	-	<0.37 :	-	-
2,4-Dichlorophenol	mg/kg-dry	T	-	-	-	<0.37 :	-	-
2,4-Dimethylphenol	mg/kg-dry	T	-	-	-	<0.37 :	-	-
2,4-Dinitrophenol	mg/kg-dry	T	-	-	-	<0.92 :	-	-
2,4-Dinitrotoluene	mg/kg-dry	T	-	-	-	<0.37 :	-	-
2,6-Dinitrotoluene	mg/kg-dry	T	-	-	-	<0.37 :	-	-
2-Chloronaphthalene	mg/kg-dry	T	-	-	-	<0.37 :	-	-
2-Chlorophenol	mg/kg-dry	T	-	-	-	<0.37 :	-	-
2-Methylnaphthalene	mg/kg-dry	T	-	-	-	<0.37 :	-	-
2-Methylphenol	mg/kg-dry	T	-	-	-	<0.37 :	-	-
2-Nitroaniline	mg/kg-dry	T	-	-	-	<0.92 :	-	-

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Appendix A-7c
Soil - Random 0-6 inches
Validated Analytical Results

Parameter	Units	Exposure Area Fraction	Site ID / Sample Date / Sample ID					
			RS-17 10/17/2002 RS-17-T01N-SOL	RS-18 10/17/2002 RS-18-T01N-SOL	RS-19 10/16/2002 RS-19-T01N-SOL	RS-2 10/17/2002 RS-2-T01N-SOL	RS-20 10/16/2002 RS-20-T01N-SOL	RS-3 10/14/2002 RS-3-T01N-SOL
			SS16	SS16	SS16	SS9	SS16	SS9
2-Nitrophenol	mg/kg-dry	T	-	-	-	<0.37 :	-	-
3,3-Dichlorobenzidine	mg/kg-dry	T	-	-	-	<0.37 :	-	-
3-Nitroaniline	mg/kg-dry	T	-	-	-	<0.92 :	-	-
4,6-Dinitro-2-methylphenol	mg/kg-dry	T	-	-	-	<0.92 :	-	-
4-Bromophenyl phenyl ether	mg/kg-dry	T	-	-	-	<0.37 :	-	-
4-Chloro-3-methylphenol	mg/kg-dry	T	-	-	-	<0.37 :	-	-
4-Chloroaniline	mg/kg-dry	T	-	-	-	<0.37 :	-	-
4-Chlorophenyl phenyl ether	mg/kg-dry	T	-	-	-	<0.37 :	-	-
4-Methylphenol	mg/kg-dry	T	-	-	-	<0.37 :	-	-
4-Nitroaniline	mg/kg-dry	T	-	-	-	<0.92 :	-	-
4-Nitrophenol	mg/kg-dry	T	-	-	-	<0.92 :	-	-
Acenaphthene	mg/kg-dry	T	-	-	-	<0.37 :	-	-
Acenaphthylene	mg/kg-dry	T	-	-	-	<0.37 :	-	-
Anthracene	mg/kg-dry	T	-	-	-	<0.37 J	-	-
Benzaldehyde	mg/kg-dry	T	-	-	-	0.093 J	-	-
Benzo(a)anthracene	mg/kg-dry	T	-	-	-	<0.37 :	-	-
Benzo(a)pyrene	mg/kg-dry	T	-	-	-	<0.37 :	-	-
Benzo(b)fluoranthene	mg/kg-dry	T	-	-	-	<0.37 :	-	-
Benzo(g,h,i)perylene	mg/kg-dry	T	-	-	-	<0.37 :	-	-
Benzo(k)fluoranthene	mg/kg-dry	T	-	-	-	<0.37 :	-	-
Bis(2-chloroethoxy)methane	mg/kg-dry	T	-	-	-	<0.37 :	-	-
Bis(2-chloroethyl)ether	mg/kg-dry	T	-	-	-	<0.37 :	-	-
Bis(2-ethylhexyl)phthalate	mg/kg-dry	T	-	-	-	<0.37 :	-	-
Butyl benzyl phthalate	mg/kg-dry	T	-	-	-	<0.37 :	-	-
Carbazole	mg/kg-dry	T	-	-	-	<0.37 :	-	-
Chrysene	mg/kg-dry	T	-	-	-	<0.37 :	-	-
Dibenz(a,h)anthracene	mg/kg-dry	T	-	-	-	<0.37 J	-	-
Dibenzofuran	mg/kg-dry	T	-	-	-	<0.37 :	-	-
Dichlorodiisopropyl ether	mg/kg-dry	T	-	-	-	<0.37 :	-	-
Diethylphthalate	mg/kg-dry	T	-	-	-	<0.37 :	-	-
Dimethylphthalate	mg/kg-dry	T	-	-	-	<0.37 :	-	-
Di-n-Butyl phthalate	mg/kg-dry	T	-	-	-	<0.37 :	-	-
Di-n-Octyl phthalate	mg/kg-dry	T	-	-	-	<0.37 :	-	-
Fluoranthene	mg/kg-dry	T	-	-	-	<0.37 :	-	-

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Appendix A-7c
Soil - Random 0-6 inches
Validated Analytical Results

Parameter	Units	Exposure Area Fraction	Site ID / Sample Date / Sample ID					
			RS-17 10/17/2002 RS-17-T01N-SOL SS16	RS-18 10/17/2002 RS-18-T01N-SOL SS16	RS-19 10/16/2002 RS-19-T01N-SOL SS16	RS-2 10/17/2002 RS-2-T01N-SOL SS9	RS-20 10/16/2002 RS-20-T01N-SOL SS16	RS-3 10/14/2002 RS-3-T01N-SOL SS9
Fluorene	mg/kg-dry	T	-	-	-	<0.37 :	-	-
Hexachlorobenzene	mg/kg-dry	T	-	-	-	<0.37 :	-	-
Hexachlorobutadiene	mg/kg-dry	T	-	-	-	<0.37 :	-	-
Hexachlorocyclopentadiene	mg/kg-dry	T	-	-	-	<0.37 :	-	-
Hexachloroethane	mg/kg-dry	T	-	-	-	<0.37 :	-	-
Indeno(1,2,3-cd)pyrene	mg/kg-dry	T	-	-	-	<0.37 :	-	-
Isophorone	mg/kg-dry	T	-	-	-	<0.37 :	-	-
Naphthalene	mg/kg-dry	T	-	-	-	<0.37 :	-	-
Nitrobenzene	mg/kg-dry	T	-	-	-	<0.37 :	-	-
N-Nitrosodi-n-propylamine	mg/kg-dry	T	-	-	-	<0.37 :	-	-
N-Nitrosodiphenylamine	mg/kg-dry	T	-	-	-	<0.37 :	-	-
Pentachlorophenol	mg/kg-dry	T	-	-	-	<0.92 :	-	-
Phenanthrene	mg/kg-dry	T	-	-	-	<0.37 :	-	-
Phenol	mg/kg-dry	T	-	-	-	<0.37 :	-	-
Pyrene	mg/kg-dry	T	-	-	-	<0.37 J	-	-
Pesticides-PCBs								
Aroclor 1016	mg/kg-dry	T	-	-	-	<0.037 :	-	-
Aroclor 1221	mg/kg-dry	T	-	-	-	<0.074 :	-	-
Aroclor 1232	mg/kg-dry	T	-	-	-	<0.037 :	-	-
Aroclor 1242	mg/kg-dry	T	-	-	-	<0.037 :	-	-
Aroclor 1248	mg/kg-dry	T	-	-	-	<0.037 :	-	-
Aroclor 1254	mg/kg-dry	T	-	-	-	<0.037 :	-	-
Aroclor 1260	mg/kg-dry	T	-	-	-	<0.037 :	-	-

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Appendix A-7c
Soil - Random 0-6 inches
Validated Analytical Results

Parameter	Units	Exposure Area Fraction	Site ID / Sample Date / Sample ID	RS-4 10/14/2002 RS-4-T01N-SOL SS9	RS-5 10/14/2002 RS-5-T01N-SOL SS9	RS-6 10/14/2002 RS-6-T01N-SOL SS9	RS-7 10/16/2002 RS-7-T01N-SOL SS9	RS-8 10/17/2002 RS-8-T01N-SOL SS9	RS-9 10/17/2002 RS-9-T01N-SOL SS9
General Chemistry									
Ammonia	mg/kg-dry	T		51.9 J	38.8 J	107. J	122. :	72.5 :	75.5 :
Chloride	mg/kg-dry	T		10.3 J	2.6 J	11.7 J	24. J	29.7 J	37.2 J
Fluoride	mg/kg-dry	T		0.37 J	0.33 J	1.1 J	1.8 J	0.89 J	0.52 J
Nitrate	mg/kg-dry	T		<2.7 J	2.6 J	<2.5 J	<3.2 J	<3. J	11.2 J
Phosphorus	mg/kg-dry	T		884. J	932. J	615. J	811. J	891. J	510. J
Sulfate	mg/kg-dry	T		391. J	33.5 J	253. J	1110. J	755. J	885. J
Total Kjeldahl Nitrogen	mg/kg-dry	T		630. :	468. :	1610. :	1940. :	832. :	1230. :
Total Organic Carbon	mg/kg-dry	T		11000. J	5470. J	36800. J	33800. J	15700. J	22100. J
Laboratory Parameters									
pH	SU	T		5.6 :	6.7 :	5.3 :	4.5 :	6.8 :	6.4 :
Solids, Percent	%	T		75.8 :	90.3 :	81.5 :	62.9 :	67. :	92.5 :
Specific Conductance	umhos/cm	T		202. :	20.1 :	273. :	1150. :	257. :	1040. :
Geotechnical									
Organic Soils	%	T		5. J	3.29 J	8.78 J	9.4 J	6.02 J	6.04 J
Physical Properties									
Cation-Exchange Capacity	meq/100g	T		17. :	16.1 :	24.6 :	27.6 :	24.4 :	29.3 :
Sodium Absorption Ratio	ratio	T		0.23 :	0.07 :	0.27 :	0.58 :	0.29 :	0.61 :
Metals									
Aluminum	mg/kg-dry	T		8310. :	8430. :	8260. :	9520. :	12100. :	9820. :
Antimony	mg/kg-dry	T		<0.3 J	<0.27 J	<0.3 J	<0.34 J	<0.3 J	<0.26 J
Arsenic	mg/kg-dry	T		7.1 :	4.2 :	6.6 :	4.6 :	5.3 :	4.4 :
Barium	mg/kg-dry	T		501. :	371. :	536. :	698. :	391. :	285. :
Beryllium	mg/kg-dry	T		0.69 :	0.85 :	0.68 :	2.1 :	1.8 :	0.96 :
Boron	mg/kg-dry	T		5.1 J	3.8 J	4.8 J	2.2 J	<0.43 J	<0.42 J
Cadmium	mg/kg-dry	T		0.26 :	0.72 :	0.12 :	1.1 J	1.5 :	0.37 J
Calcium	mg/kg-dry	T		2020. :	2190. :	2350. :	2570. :	2420. :	4530. :
Chromium	mg/kg-dry	T		17.6 :	18.1 :	18.6 :	22.9 :	19.1 :	22.6 :
Cobalt	mg/kg-dry	T		7.5 :	11.8 :	5.5 :	6.2 :	18. :	11. :
Copper	mg/kg-dry	T		45.8 :	66.2 :	50.2 :	72.8 :	106. :	73.8 :
Iron	mg/kg-dry	T		27600. :	22800. :	26500. :	24000. :	23300. :	23800. :
Lead	mg/kg-dry	T		80.2 :	52.3 :	65.3 :	60.5 :	76.5 :	51.3 :
Magnesium	mg/kg-dry	T		3930. :	3760. :	3690. :	3860. :	3930. :	4930. :
Manganese	mg/kg-dry	T		430. J	740. J	347. J	343. J	1440. J	723. J

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Appendix A-7c
Soil - Random 0-6 inches
Validated Analytical Results

Parameter	Units	Fraction	Site ID / Sample Date / Sample ID / Exposure Area		RS-4 10/14/2002 RS-4-T01N-SOL SS9		RS-5 10/14/2002 RS-5-T01N-SOL SS9		RS-6 10/14/2002 RS-6-T01N-SOL SS9		RS-7 10/16/2002 RS-7-T01N-SOL SS9		RS-8 10/17/2002 RS-8-T01N-SOL SS9		RS-9 10/17/2002 RS-9-T01N-SOL SS9	
Mercury	mg/kg-dry	T			<0.022	:	0.032	:	0.02	:	<0.026	:	<0.025	:	<0.018	:
Molybdenum	mg/kg-dry	T			12.1	:	12.7	:	28.4	:	35.8	:	18.6	:	20.4	:
Nickel	mg/kg-dry	T			18.8	J	28.2	J	14.6	J	27.3	J	53.1	J	24.5	J
Potassium	mg/kg-dry	T			2630.	J	1920.	J	2520.	J	1730.	J	2400.	J	2150.	J
Selenium	mg/kg-dry	T			1.5	J	1.6	J	1.4	J	1.3	J	2.1	J	1.	:
Silver	mg/kg-dry	T			0.43	:	0.26	:	0.4	:	0.43	:	0.43	:	<0.29	:
Sodium	mg/kg-dry	T			<184.	:	<102.	:	<162.	:	<110.	:	143.	:	163.	:
Thallium	mg/kg-dry	T			0.17	:	0.16	:	0.2	:	0.19	:	0.19	:	0.17	:
Vanadium	mg/kg-dry	T			19.1	:	25.1	:	21.4	:	30.7	:	22.6	:	27.9	:
Zinc	mg/kg-dry	T			123.	J	204.	J	83.8	J	165.	J	497.	J	172.	:

J = Qualified as estimated during data validation
R = Qualified as rejected value from data validation and results are considered unusable for any purpose
T = Total Fraction

Appendix A-7c
Soil - Random 0-6 inches
Validated Analytical Results

Parameter	Units	Exposure Area Fraction	Site ID Sample Date Sample ID Exposure Area	TSS14-1 6/11/2003 TSS14-1-T01N-SOL SS14	TSS14-10 6/11/2003 TSS14-10-T01N-SOL SS14	TSS14-2 6/11/2003 TSS14-2-T01N-SOL SS14	TSS14-3 6/11/2003 TSS14-3-T01N-SOL SS14	TSS14-4 6/11/2003 TSS14-4-T01N-SOL SS14	TSS14-5 6/11/2003 TSS14-5-T01N-SOL SS14
General Chemistry									
Ammonia	mg/kg-dry	T		71. J	60.7 :	29.6 :	34.6 J	51.9 J	77.5 :
Chloride	mg/kg-dry	T		2.9 :	3.5 :	<2.1 :	4. :	<2.1 :	2.4 :
Fluoride	mg/kg-dry	T		0.61 :	2.3 J	1.2 :	2.3 :	0.6 :	0.28 J
Nitrate	mg/kg-dry	T		13.6 J	6.9 J	<2.1 J	<2.1 J	<2.1 J	2.1 J
Phosphorus	mg/kg-dry	T		574. :	822. :	455. :	1270. :	973. :	1030. :
Sulfate	mg/kg-dry	T		15.3 :	7.9 :	32.2 :	1320. :	60.1 :	148. :
Total Kjeldahl Nitrogen	mg/kg-dry	T		-	422. J	86.6 J	-	-	236. J
Total Organic Carbon	mg/kg-dry	T		14900. :	8690. :	1120. :	3130. :	4180. :	4930. :
Laboratory Parameters									
pH	SU	T		7.9 J	8.1 J	8.1 J	7.3 J	8. J	8. J
Solids, Percent	%	T		97.6 :	96.5 :	98.8 :	96.3 :	98.3 :	97.3 :
Specific Conductance	umhos/cm	T		335. J	212. J	158. J	2300. J	275. J	469. J
Geotechnical									
Organic Soils	%	T		3.3 :	5.2 :	1.3 :	2.1 :	2.3 :	2.4 :
Physical Properties									
Cation-Exchange Capacity	meq/100g	T		22.7 :	19. :	11. :	18.3 :	26.2 :	15.3 :
Sodium Absorption Ratio	ratio	T		0.03 :	0.03 :	<0.04 :	0.43 :	0.09 :	0.02 :
Metals									
Aluminum	mg/kg-dry	T		5330. :	13700. J	11400. :	12800. :	15800. :	14800. :
Antimony	mg/kg-dry	T		<0.51 J	<0.093 J	<0.48 J	<0.48 J	<0.45 J	<0.093 J
Arsenic	mg/kg-dry	T		2.1 :	6.3 :	3.4 :	2.7 :	4. :	3.8 :
Barium	mg/kg-dry	T		38.2 :	186. J	65.1 :	64.5 :	147. :	98.2 :
Beryllium	mg/kg-dry	T		0.43 :	0.75 :	0.81 :	1.1 :	1.1 :	1. :
Boron	mg/kg-dry	T		4.7 J	4.7 :	2.1 :	2. J	3.7 J	1.3 :
Cadmium	mg/kg-dry	T		<0.028 J	0.2 :	1.1 :	<0.03 J	<0.027 J	0.31 :
Calcium	mg/kg-dry	T		6430. :	39800. J	7460. :	3630. :	18600. :	9960. :
Chromium	mg/kg-dry	T		12. :	16.7 J	25.8 :	24.3 :	36.5 :	27.5 :
Cobalt	mg/kg-dry	T		4.9 :	6.7 :	9.7 :	7.4 :	10.9 :	8.5 :
Copper	mg/kg-dry	T		16. :	21.3 J	107. :	21. :	60. :	53. :
Iron	mg/kg-dry	T		10300. :	16700. J	16400. :	15400. :	20000. :	18400. :
Lead	mg/kg-dry	T		13.8 :	17.7 J	120. :	15.4 :	24.6 :	23.4 :
Magnesium	mg/kg-dry	T		3370. :	6750. J	4470. :	4590. :	7050. :	5970. :
Manganese	mg/kg-dry	T		256. :	325. J	470. :	334. :	485. :	417. :

J = Qualified as estimated during data validation
R = Qualified as rejected value from data validation and results are considered unusable for any purpose
T = Total Fraction

Appendix A-7c
Soil - Random 0-6 inches
Validated Analytical Results

Parameter	Units	Exposure Area Fraction	Site ID / Sample Date / Sample ID		TSS14-1 6/11/2003 TSS14-1-T01N-SOL SS14		TSS14-10 6/11/2003 TSS14-10-T01N-SOL SS14		TSS14-2 6/11/2003 TSS14-2-T01N-SOL SS14		TSS14-3 6/11/2003 TSS14-3-T01N-SOL SS14		TSS14-4 6/11/2003 TSS14-4-T01N-SOL SS14		TSS14-5 6/11/2003 TSS14-5-T01N-SOL SS14	
Mercury	mg/kg-dry	T			<0.017	:	<0.016	:	<0.015	:	<0.017	:	0.022	:	<0.016	:
Molybdenum	mg/kg-dry	T			7.3	:	11.5	J	110.	:	11.	:	56.4	:	40.4	:
Nickel	mg/kg-dry	T			11.2	:	13.7	J	20.4	:	20.2	:	30.8	:	22.4	:
Potassium	mg/kg-dry	T			1350.	J	2430.	J	2540.	J	1340.	J	2790.	J	2430.	J
Selenium	mg/kg-dry	T			<0.81	:	<0.15	:	<0.76	:	<0.76	:	<0.73	:	<0.15	:
Silver	mg/kg-dry	T			<0.085	J	<0.22	:	<0.49	:	0.11	J	0.37	J	<0.22	:
Sodium	mg/kg-dry	T			160.	:	<84.9	:	169.	:	256.	:	413.	:	<47.2	:
Thallium	mg/kg-dry	T			<0.1	:	0.028	:	0.11	:	<0.095	:	0.15	:	0.048	:
Vanadium	mg/kg-dry	T			15.5	:	37.4	J	25.9	:	25.1	:	41.3	:	32.8	:
Zinc	mg/kg-dry	T			51.9	:	52.9	J	258.	:	54.3	:	81.2	:	80.3	:

J = Qualified as estimated during data validation
R = Qualified as rejected value from data validation and results are considered unusable for any purpose
T = Total Fraction

Appendix A-7c
Soil - Random 0-6 inches
Validated Analytical Results

Parameter	Units	Exposure Area Fraction	Site ID / Sample Date / Sample ID									
			TSS14-6 6/11/2003 TSS14-6-T01N-SOL		TSS14-7 6/11/2003 TSS14-7-T01N-SOL		TSS14-8 6/11/2003 TSS14-8-T01N-SOL		TSS14-9 6/11/2003 TSS14-9-T01N-SOL		----	----
			SS14		SS14		SS14		SS14			
General Chemistry												
Ammonia	mg/kg-dry	T	41.9	J	63.9	:	49.9	:	23.3	J	-	-
Chloride	mg/kg-dry	T	4.1	:	2.8	:	3.5	:	2.1	:	-	-
Fluoride	mg/kg-dry	T	5.9	J	0.86	:	2.9	:	1.3	:	-	-
Nitrate	mg/kg-dry	T	2.9	J	8.9	J	2.9	J	<2.1	J	-	-
Phosphorus	mg/kg-dry	T	1460.	:	928.	:	1270.	:	705.	:	-	-
Sulfate	mg/kg-dry	T	22.1	:	8.8	:	78.1	:	20.7	:	-	-
Total Kjeldahl Nitrogen	mg/kg-dry	T	393.	J	349.	J	164.	J	-		-	-
Total Organic Carbon	mg/kg-dry	T	5840.	:	4450.	:	4660.	:	2630.	:	-	-
Laboratory Parameters												
pH	SU	T	8.2	J	7.8	J	8.3	J	8.2	J	-	-
Solids, Percent	%	T	94.7	:	97.8	:	76.5	:	98.1	:	-	-
Specific Conductance	umhos/cm	T	220.	J	152.	J	236.	J	138.	J	-	-
Geotechnical												
Organic Soils	%	T	6.7	:	2.9	:	2.8	:	1.4	:	-	-
Physical Properties												
Cation-Exchange Capacity	meq/100g	T	26.5	:	20.3	:	18.4	:	13.6	:	-	-
Sodium Absorption Ratio	ratio	T	0.89	:	0.2	:	0.32	:	<0.04	:	-	-
Metals												
Aluminum	mg/kg-dry	T	17900.	:	13000.	:	16400.	:	6400.	:	-	-
Antimony	mg/kg-dry	T	<0.099	J	<0.46	J	<0.65	J	<0.49	J	-	-
Arsenic	mg/kg-dry	T	6.3	:	3.5	:	7.3	:	2.9	:	-	-
Barium	mg/kg-dry	T	441.	:	52.7	:	170.	:	35.	:	-	-
Beryllium	mg/kg-dry	T	0.82	:	1.1	:	1.2	:	0.57	:	-	-
Boron	mg/kg-dry	T	7.9	:	3.2	:	4.8	:	1.8	J	-	-
Cadmium	mg/kg-dry	T	0.18	J	<0.024	:	0.092	J	<0.026	J	-	-
Calcium	mg/kg-dry	T	77800.	:	2680.	:	24100.	:	3910.	:	-	-
Chromium	mg/kg-dry	T	17.6	:	18.	:	26.4	:	15.9	:	-	-
Cobalt	mg/kg-dry	T	7.3	:	6.9	:	11.	:	6.	:	-	-
Copper	mg/kg-dry	T	17.1	:	21.1	:	72.2	:	18.7	:	-	-
Iron	mg/kg-dry	T	16300.	:	17000.	:	21700.	:	12300.	:	-	-
Lead	mg/kg-dry	T	12.4	:	14.4	:	34.4	:	12.2	:	-	-
Magnesium	mg/kg-dry	T	8380.	:	4500.	:	7260.	:	4520.	:	-	-
Manganese	mg/kg-dry	T	361.	:	232.	:	521.	:	281.	:	-	-

J = Qualified as estimated during data validation

R = Qualified as rejected value from data validation and results are considered unusable for any purpose

T = Total Fraction

Appendix A-7c
Soil - Random 0-6 inches
Validated Analytical Results

Parameter	Units	Exposure Area Fraction	Site ID / Sample Date / Sample ID / Exposure Area											
			TSS14-6 6/11/2003 TSS14-6-T01N-SOL SS14		TSS14-7 6/11/2003 TSS14-7-T01N-SOL SS14		TSS14-8 6/11/2003 TSS14-8-T01N-SOL SS14		TSS14-9 6/11/2003 TSS14-9-T01N-SOL SS14		----	----
Mercury	mg/kg-dry	T	<0.017	:	<0.017	:	<0.021	:	<0.016	:	-	-
Molybdenum	mg/kg-dry	T	4.3	:	2.6	:	34.5	:	8.4	:	-	-
Nickel	mg/kg-dry	T	14.5	:	22.3	:	23.9	:	17.6	:	-	-
Potassium	mg/kg-dry	T	2400.	J	1900.	J	3240.	J	1030.	J	-	-
Selenium	mg/kg-dry	T	<0.16	:	<0.73	:	<1.	:	<0.78	:	-	-
Silver	mg/kg-dry	T	<0.22	:	<0.16	:	<0.41	:	0.14	J	-	-
Sodium	mg/kg-dry	T	<230.	:	219.	:	383.	:	172.	:	-	-
Thallium	mg/kg-dry	T	0.042	:	0.097	:	0.16	:	0.12	:	-	-
Vanadium	mg/kg-dry	T	40.6	:	25.2	:	50.6	:	23.	:	-	-
Zinc	mg/kg-dry	T	48.	:	67.7	:	105.	:	47.1	:	-	-

J = Qualified as estimated during data validation
R = Qualified as rejected value from data validation and results are considered unusable for any purpose
T = Total Fraction

Appendix A-7d
Soil - SPLP Random 0-6 inches
Validated Analytical Results

Parameter	Units	Exposure Area Fraction	Site ID / Sample Date / Sample ID		MRSS-16 10/8/2002 MRSS-16-T01N-SOL RefMine		MRSS-17 10/8/2002 MRSS-17-T01N-SOL RefMine		MSS3-1 9/27/2002 MSS3-1-T01N-SOL SS3		MSS3-2 9/27/2002 MSS3-2-T01N-SOL SS3		MSS3-3 9/30/2002 MSS3-3-T01N-SOL SS3		MSS3-4 9/30/2002 MSS3-4-T01N-SOL SS3	
General Chemistry																
Ammonia	mg/L	T			0.11	J	0.07	J	0.53	J	0.12	J	0.67	J	0.4	J
Bicarbonate (as CaCO3)	mg/L	T			24.3	J	9.4	J	11.2	J	18.1	J	54.5	J	27.4	J
Carbonate (as CaCO3)	mg/L	T			<1.	J	<1.	J	10.1	J	3.6	J	<1.	J	<1.	J
Chloride	mg/L	T			0.83	:	0.75	:	<5.	:	<5.	:	<5.	:	<5.	:
Fluoride	mg/L	T			<0.1	:	<0.1	:	0.38	J	0.17	J	0.38	J	0.39	J
Hydroxide (as CaCO3)	mg/L	T			<1.	:	<1.	J	<1.	J	<1.	J	<1.	J	<1.	J
Nitrate	mg/L	T			<0.4	J	<0.4	J	<0.5	J	<0.5	J	<0.53	J	<1.4	J
Nitrite	mg/L	T			<0.005	J	-		0.005	J	0.014	J	0.009	:	0.01	:
Phosphate, Ortho As P	mg/L	T			0.021	:	0.025	J	0.028	J	<0.12	J	0.32	J	0.044	J
Phosphorus	mg/L	T			0.066	J	0.056	J	0.062	J	0.21	J	0.5	J	0.12	J
Sulfate	mg/L	T			1.3	:	0.6	:	<5.	:	<5.	:	<5.	:	<5.	:
Total Alkalinity	mg/L	T			24.3	J	9.4	J	21.3	J	21.7	J	54.5	J	27.4	J
Total Kjeldahl Nitrogen	mg/L	T			-		<0.24	J	<0.24	J	<0.24	J	1.7	J	<0.24	J
Inorganics																
Cyanide	mg/L	T			<0.01	J	<0.01	J	<0.01	J	<0.01	J	<0.01	J	<0.01	J
Metals																
Aluminum	mg/L	T			3.52	J	1.84	:	15.9	:	10.6	:	14.5	:	23.9	:
Antimony	mg/L	T			<0.00029	:	<0.00046	:	<0.0067	:	<0.0002	:	<0.0002	:	0.00046	:
Arsenic	mg/L	T			0.00087	:	<0.0012	:	0.0158	J	0.0023	:	0.0013	:	0.0061	:
Barium	mg/L	T			<0.048	:	0.453	:	0.65	:	0.784	:	1.14	:	1.32	:
Beryllium	mg/L	T			<0.0002	:	<0.0002	:	0.00035	:	0.00039	:	0.0012	:	0.00066	:
Boron	mg/L	T			0.213	:	<0.0797	:	<0.182	:	<0.148	:	0.258	:	0.338	:
Cadmium	mg/L	T			<0.0001	:	<0.0002	:	<0.0008	:	<0.0001	:	<0.0001	:	<0.0001	:
Calcium	mg/L	T			<1.27	:	8.38	:	9.01	:	10.3	:	24.7	:	13.7	:
Chromium	mg/L	T			<0.0046	:	<0.0046	:	0.0049	:	0.0066	:	0.0135	:	0.013	:
Cobalt	mg/L	T			<0.0022	:	<0.0022	:	<0.0018	:	<0.0018	:	<0.0018	:	<0.0018	:
Copper	mg/L	T			<0.0032	:	<0.0033	:	0.0156	:	0.0048	:	0.0171	:	0.0135	:
Iron	mg/L	T			2.57	:	1.56	:	10.	:	7.88	:	8.18	:	16.	:
Lead	mg/L	T			0.0059	:	0.0068	:	0.0294	:	0.0108	:	0.0112	:	0.0342	:
Magnesium	mg/L	T			0.467	:	1.07	:	2.24	:	2.48	:	5.43	:	4.46	:
Manganese	mg/L	T			0.0148	:	0.0209	:	0.053	:	0.181	:	0.133	:	0.109	:
Mercury	mg/L	T			<0.01	:	<0.01	:	<0.01	:	<0.01	:	<0.01	:	<0.01	:
Molybdenum	mg/L	T			<0.00071	:	0.001	:	0.0085	:	0.0026	:	0.0015	:	0.0135	:

J = Qualified as estimated during data validation
R = Qualified as rejected value from data validation and results are considered unusable for any purpose
T = Total Fraction

Appendix A-7d
Soil - SPLP Random 0-6 inches
Validated Analytical Results

Parameter	Units	Site ID / Sample Date / Sample ID / Exposure Area / Fraction	MRSS-16 10/8/2002 MRSS-16-T01N-SOL RefMine		MRSS-17 10/8/2002 MRSS-17-T01N-SOL RefMine		MSS3-1 9/27/2002 MSS3-1-T01N-SOL SS3		MSS3-2 9/27/2002 MSS3-2-T01N-SOL SS3		MSS3-3 9/30/2002 MSS3-3-T01N-SOL SS3		MSS3-4 9/30/2002 MSS3-4-T01N-SOL SS3	
Nickel	mg/L	T	0.00063	J	0.0014	:	<0.0002	J	<0.0002	J	0.0028	J	<0.0002	J
Potassium	mg/L	T	<1.45	J	3.56	:	4.27	:	9.06	:	13.9	J	8.96	J
Selenium	mg/L	T	<0.00031	:	<0.0018	:	<0.0045	:	<0.0045	:	<0.0048	:	<0.0048	:
Silver	mg/L	T	<0.0001	:	<0.0002	:	<0.0001	:	<0.0001	:	<0.0001	:	0.00012	:
Thallium	mg/L	T	<0.0001	:	<0.0002	:	0.00022	:	0.00014	:	0.00016	:	0.0003	:
Vanadium	mg/L	T	0.0026	J	0.0058	J	0.0057	J	0.0096	J	0.0137	J	0.0117	J
Zinc	mg/L	T	0.0157	:	0.0912	:	0.229	J	0.175	:	0.296	:	0.392	:

J = Qualified as estimated during data validation
R = Qualified as rejected value from data validation and results are considered unusable for any purpose
T = Total Fraction

Appendix A-7d
Soil - SPLP Random 0-6 inches
Validated Analytical Results

Parameter	Units	Exposure Area Fraction	Site ID		Sample Date		Sample ID		Exposure Area							
			MSS4A1-1		10/4/2002		MSS4A1-1-T01N-SOL		SS4A1		MSS4A2-1		10/3/2002		MSS4A2-1-T01N-SOL		SS4A2	
General Chemistry																		
Ammonia	mg/L	T	0.39	J							0.33	J						
Bicarbonate (as CaCO3)	mg/L	T	<1.	J							<1.	:						
Carbonate (as CaCO3)	mg/L	T	<1.	J							<1.	:						
Chloride	mg/L	T	1.6	:							<5.	:						
Fluoride	mg/L	T	0.12	J							<0.1	:						
Hydroxide (as CaCO3)	mg/L	T	<1.	J							<1.	:						
Nitrate	mg/L	T	<0.4	J							<0.5	J						
Nitrite	mg/L	T	<0.005	J							-							
Phosphate, Ortho As P	mg/L	T	<0.01	:							-							
Phosphorus	mg/L	T	0.013	J							0.036	J						
Sulfate	mg/L	T	823.	:							1500.	:						
Total Alkalinity	mg/L	T	<1.	J							<1.	:						
Total Kjeldahl Nitrogen	mg/L	T	<0.24	J							<0.24	J						
Inorganics																		
Cyanide	mg/L	T	<0.01	J							-							
Metals																		
Aluminum	mg/L	T	2.76	:							4.47	:						
Antimony	mg/L	T	0.0002	:							<0.0002	:						
Arsenic	mg/L	T	<0.0002	:							<0.0002	:						
Barium	mg/L	T	<0.0869	:							0.0106	:						
Beryllium	mg/L	T	0.0011	:							0.0012	:						
Boron	mg/L	T	<0.0679	:							<0.0472	:						
Cadmium	mg/L	T	0.00016	:							0.0001	:						
Calcium	mg/L	T	143.	:							290.	:						
Chromium	mg/L	T	<0.0046	:							0.0044	:						
Cobalt	mg/L	T	0.0063	:							0.007	:						
Copper	mg/L	T	0.105	:							0.141	:						
Iron	mg/L	T	0.539	:							0.461	:						
Lead	mg/L	T	0.0014	:							0.0015	:						
Magnesium	mg/L	T	1.85	:							1.62	:						
Manganese	mg/L	T	0.325	:							0.246	J						
Mercury	mg/L	T	<0.01	:							<0.01	:						
Molybdenum	mg/L	T	<0.0002	:							<0.0002	:						

Parameter	Units	Exposure Area Fraction	Site ID		Sample Date		Sample ID		Exposure Area							
			MSS4A2-2		10/4/2002		MSS4A2-2-T01N-SOL		SS4A2		MSS4A3-1		10/1/2002		MSS4A3-1-T01N-SOL		SS4A3	
General Chemistry																		
Ammonia	mg/L	T	1.1	J							0.11	J						
Bicarbonate (as CaCO3)	mg/L	T	<1.	J							<1.	:						
Carbonate (as CaCO3)	mg/L	T	<1.	J							<1.	:						
Chloride	mg/L	T	2.6	:							<5.	:						
Fluoride	mg/L	T	0.18	J							0.27	J						
Hydroxide (as CaCO3)	mg/L	T	<1.	J							<1.	:						
Nitrate	mg/L	T	<0.4	J							<0.5	:						
Nitrite	mg/L	T	<0.005	J							<0.005	:						
Phosphate, Ortho As P	mg/L	T	<0.01	J							0.014	:						
Phosphorus	mg/L	T	0.015	J							0.026	J						
Sulfate	mg/L	T	1580.	:							529.	:						
Total Alkalinity	mg/L	T	<1.	J							<1.	:						
Total Kjeldahl Nitrogen	mg/L	T	<0.24	J							<0.24	J						
Inorganics																		
Cyanide	mg/L	T	<0.01	J							<0.01	:						
Metals																		
Aluminum	mg/L	T	3.46	:							10.6	:						
Antimony	mg/L	T	0.0002	:							<0.0002	:						
Arsenic	mg/L	T	<0.0002	:							<0.0002	:						
Barium	mg/L	T	0.0094	:							0.0184	:						
Beryllium	mg/L	T	0.00094	:							0.0016	J						
Boron	mg/L	T	0.0809	:							<0.0523	:						
Cadmium	mg/L	T	0.00037	:							0.0006	:						
Calcium	mg/L	T	366.	:							28.7	:						
Chromium	mg/L	T	<0.0046	:							0.0079	:						
Cobalt	mg/L	T	<0.0022	:							0.0339	:						
Copper	mg/L	T	0.0523	:							0.452	:						
Iron	mg/L	T	0.36	:							0.602	:						
Lead	mg/L	T	0.0042	:							0.00023	:						
Magnesium	mg/L	T	0.849	:							8.62	:						
Manganese	mg/L	T	0.36	:							1.14	:						
Mercury	mg/L	T	<0.01	:							<0.01	:						
Molybdenum	mg/L	T	<0.0002	:							<0.0002	:						

Parameter	Units	Exposure Area Fraction	Site ID		Sample Date		Sample ID		Exposure Area							
			----								----					
General Chemistry																
Ammonia	mg/L	T	-								-					
Bicarbonate (as CaCO3)	mg/L	T	-								-					
Carbonate (as CaCO3)	mg/L	T	-								-					
Chloride	mg/L	T	-								-					
Fluoride	mg/L	T	-								-					
Hydroxide (as CaCO3)	mg/L	T	-								-					
Nitrate	mg/L	T	-								-					
Nitrite	mg/L	T	-								-					
Phosphate, Ortho As P	mg/L	T	-								-					
Phosphorus	mg/L	T	-								-					
Sulfate	mg/L	T	-								-					
Total Alkalinity	mg/L	T	-								-					
Total Kjeldahl Nitrogen	mg/L	T	-								-					
Inorganics																
Cyanide	mg/L	T	-								-					
Metals																
Aluminum	mg/L	T	-								-					
Antimony	mg/L	T	-								-					
Arsenic	mg/L	T	-								-					
Barium	mg/L	T	-								-					
Beryllium	mg/L	T	-								-					
Boron	mg/L	T	-								-					
Cadmium	mg/L	T	-								-					
Calcium	mg/L	T	-								-					
Chromium	mg/L	T	-								-					
Cobalt	mg/L	T	-								-					
Copper	mg/L	T	-								-					
Iron	mg/L	T	-								-					
Lead	mg/L	T	-								-					
Magnesium	mg/L	T	-								-					
Manganese	mg/L	T	-								-					
Mercury	mg/L	T	-								-					
Molybdenum	mg/L	T	-								-					

J = Qualified as estimated during data validation

R = Qualified as rejected value from data validation and results are considered unusable for any purpose

T = Total Fraction

Appendix A-7d
Soil - SPLP Random 0-6 inches
Validated Analytical Results

Parameter	Units	Site ID / Sample Date / Sample ID / Exposure Area / Fraction													
		Site ID	MSS4A1-1		MSS4A2-1		MSS4A2-2		MSS4A3-1		----	----
		Sample Date	10/4/2002		10/3/2002		10/4/2002		10/1/2002			
		Sample ID	MSS4A1-1-T01N-SOL		MSS4A2-1-T01N-SOL		MSS4A2-2-T01N-SOL		MSS4A3-1-T01N-SOL			
		Exposure Area	SS4A1		SS4A2		SS4A2		SS4A3			
		Fraction										
Nickel	mg/L	T	0.0163	:	0.0061	J	0.0052	:	0.0644	J	-	-
Potassium	mg/L	T	<1.6	:	0.648	J	0.905	:	1.74	J	-	-
Selenium	mg/L	T	<0.0039	:	<0.0048	:	<0.0039	:	<0.0048	:	-	-
Silver	mg/L	T	<0.0001	:	<0.0001	:	<0.0001	:	<0.0001	:	-	-
Thallium	mg/L	T	<0.0001	:	<0.0001	:	<0.0001	:	<0.0001	:	-	-
Vanadium	mg/L	T	<0.0001	J	0.00022	J	<0.0001	:	0.00018	:	-	-
Zinc	mg/L	T	0.108	:	0.0448	:	0.109	:	0.244	:	-	-

J = Qualified as estimated during data validation
R = Qualified as rejected value from data validation and results are considered unusable for any purpose
T = Total Fraction

Appendix A-7e
Soil - Biased 0-24 inches
Validated Analytical Results

Parameter	Units	Fraction	MSS1-100	MSS1-101	MSS1-102	MSS1-103	MSS1-104	MSS1-104
Site ID			MSS1-100	MSS1-101	MSS1-102	MSS1-103	MSS1-104	MSS1-104
Sample Date			1/16/2003	1/16/2003	1/19/2003	1/16/2003	1/9/2003	1/9/2003
Sample ID			MSS1-100-T02N-SOL	MSS1-101-T02N-SOL	MSS1-102-T02N-SOL	MSS1-103-T02N-SOL	MSS1-104-T02N-SOL DL	MSS1-104-T02N-SOL
Exposure Area			SS1	SS1	SS1	SS1	SS1	SS1
General Chemistry								
Ammonia	mg/kg-dry	T	11.6 :	12.6 :	8.6 :	10.7 :	-	17.8 :
Chloride	mg/kg-dry	T	50.6 :	1230. :	2.6 :	<2.2 :	-	3.7 :
Fluoride	mg/kg-dry	T	2.9 J	1.7 J	0.89 J	0.47 J	-	0.37 J
Nitrate	mg/kg-dry	T	17.3 J	13.2 J	2.2 J	<2.2 J	-	9.3 J
Phosphorus	mg/kg-dry	T	1490. :	2120. :	1000. :	802. :	-	1300. :
Sulfate	mg/kg-dry	T	3290. :	3530. :	556. J	151. :	-	15.3 :
Total Kjeldahl Nitrogen	mg/kg-dry	T	47.3 :	28.9 :	83.9 :	53.7 :	-	1130. :
Total Organic Carbon	mg/kg-dry	T	549. J	614. J	527. J	<106. J	-	15100. J
Laboratory Parameters								
pH	SU	T	8. :	7. :	7.8 :	8.8 :	-	8.4 :
Solids, Percent	%	T	95.7 :	94.9 :	98. :	94.5 :	-	86.8 :
Specific Conductance	umhos/cm	T	2060. J	4140. J	1330. J	549. J	-	275. :
Geotechnical								
Organic Soils	%	T	1.3 :	2.1 :	1.5 :	1.2 :	-	4.8 :
Physical Properties								
Cation-Exchange Capacity	meq/100g	T	16.4 :	14.7 :	12.2 J	9.9 :	-	16.1 :
Sodium Absorption Ratio	ratio	T	0.18 :	3.71 :	0.08 :	0.21 :	-	0.31 :
Metals								
Aluminum	mg/kg-dry	T	12700. :	14300. :	12100. J	9160. :	-	15100. :
Antimony	mg/kg-dry	T	<0.3 J	<0.3 J	<0.25 J	<0.3 J	-	<0.31 J
Arsenic	mg/kg-dry	T	1.9 J	1.2 J	2.7 J	1.3 J	-	3.4 J
Barium	mg/kg-dry	T	95.6 :	106. :	61.2 J	51.5 :	-	86.8 :
Beryllium	mg/kg-dry	T	2. :	2.5 :	1.3 J	0.86 :	-	1. :
Boron	mg/kg-dry	T	<0.23 :	<0.23 :	<1.7 :	<0.9 :	-	4.1 J
Cadmium	mg/kg-dry	T	1.1 :	0.91 :	0.89 :	0.21 :	-	0.39 J
Calcium	mg/kg-dry	T	17900. :	23400. :	13200. J	12200. :	-	10800. :
Chromium	mg/kg-dry	T	50.5 J	49.4 J	44.3 J	19.5 J	-	80.9 J
Cobalt	mg/kg-dry	T	7.1 :	5.1 :	7.2 :	6.3 :	-	15.1 :
Copper	mg/kg-dry	T	122. J	159. J	113. J	60.8 J	-	83.8 J
Iron	mg/kg-dry	T	16800. :	18500. :	15600. J	13200. :	-	29200. :
Lead	mg/kg-dry	T	68.1 :	61.7 :	100. J	32.3 :	-	85. :
Magnesium	mg/kg-dry	T	9100. :	10000. :	6440. J	5020. :	-	11800. :
Manganese	mg/kg-dry	T	1440. :	555. :	1190. :	508. :	-	986. :

J = Qualified as estimated during data validation
R = Qualified as rejected value from data validation and results are considered unusable for any purpose
T = Total Fraction

Appendix A-7e
Soil - Biased 0-24 inches
Validated Analytical Results

Parameter	Units	Exposure Area Fraction	Site ID / Sample Date / Sample ID													
			MSS1-100 1/16/2003 MSS1-100-T02N-SOL SS1		MSS1-101 1/16/2003 MSS1-101-T02N-SOL SS1		MSS1-102 1/19/2003 MSS1-102-T02N-SOL SS1		MSS1-103 1/16/2003 MSS1-103-T02N-SOL SS1		MSS1-104 1/9/2003 MSS1-104-T02N-SOL DL SS1		MSS1-104 1/9/2003 MSS1-104-T02N-SOL SS1	
Mercury	mg/kg-dry	T	<0.017	:	<0.017	:	<0.017	:	<0.018	:	-		0.022	:
Molybdenum	mg/kg-dry	T	2350.	:	6580.	:	1220.	:	493.	:	-		1500.	:
Nickel	mg/kg-dry	T	32.2	:	35.4	:	24.7	J	14.2	:	-		52.9	:
Potassium	mg/kg-dry	T	4620.	J	5800.	J	2930.	J	1820.	J	-		3410.	J
Selenium	mg/kg-dry	T	0.96	J	1.5	J	1.	J	<0.79	J	-		1.8	J
Silver	mg/kg-dry	T	0.89	:	1.4	:	0.87	:	0.15	J	-		0.47	:
Sodium	mg/kg-dry	T	<27.6	:	485.	:	<51.6	:	<26.2	:	-		<151.	J
Thallium	mg/kg-dry	T	0.61	:	0.79	:	0.25	:	0.23	:	-		0.31	:
Vanadium	mg/kg-dry	T	52.1	:	74.	:	37.7	J	28.4	:	-		62.2	:
Zinc	mg/kg-dry	T	159.	:	183.	:	172.	J	79.3	:	-		164.	:
Volatile Organics														
1,1,1-Trichloroethane	mg/kg-dry	T	<0.007	:	<0.005	:	<0.011	:	<0.008	:	-		<0.008	:
1,1,2,2-Tetrachloroethane	mg/kg-dry	T	<0.007	:	<0.005	:	<0.011	:	<0.008	:	-		<0.008	:
1,1,2-Trichloro-1,2,2-trifluoroethane	mg/kg-dry	T	<0.007	:	<0.005	:	<0.011	:	<0.008	:	-		<0.008	:
1,1,2-Trichloroethane	mg/kg-dry	T	<0.007	:	<0.005	:	<0.011	:	<0.008	:	-		<0.008	:
1,1-Dichloroethane	mg/kg-dry	T	<0.007	:	<0.005	:	<0.011	:	<0.008	:	-		<0.008	:
1,1-Dichloroethene	mg/kg-dry	T	<0.007	:	<0.005	:	<0.011	:	<0.008	:	-		<0.008	:
1,2,4-Trichlorobenzene	mg/kg-dry	T	<0.007	:	<0.005	:	<0.011	:	<0.008	:	-		<0.008	:
1,2-Dibromo-3-chloropropane	mg/kg-dry	T	<0.007	:	<0.005	:	<0.011	:	<0.008	:	-		<0.008	:
1,2-Dichlorobenzene	mg/kg-dry	T	<0.007	:	<0.005	:	<0.011	:	<0.008	:	-		<0.008	:
1,2-Dichloroethane	mg/kg-dry	T	<0.007	:	<0.005	:	<0.011	:	<0.008	:	-		<0.008	:
1,2-Dichloroethene (total)	mg/kg-dry	T	<0.007	:	<0.005	:	<0.011	:	<0.008	:	-		<0.008	:
1,2-Dichloropropane	mg/kg-dry	T	<0.007	:	<0.005	:	<0.011	:	<0.008	:	-		<0.008	:
1,3-Dichlorobenzene	mg/kg-dry	T	<0.007	:	<0.005	:	<0.011	:	<0.008	:	-		<0.008	:
1,4-Dichlorobenzene	mg/kg-dry	T	<0.007	:	<0.005	:	<0.011	:	<0.008	:	-		<0.008	:
2-Butanone	mg/kg-dry	T	<0.007	:	0.01	:	<0.011	:	<0.008	:	-		0.002	J
2-Hexanone	mg/kg-dry	T	<0.007	:	<0.005	:	<0.011	:	<0.008	:	-		<0.008	:
4-Methyl-2-pentanone	mg/kg-dry	T	<0.007	:	0.033	:	<0.011	:	<0.008	:	-		<0.008	:
Acetone	mg/kg-dry	T	0.002	J	0.01	:	<0.011	:	0.004	J	-		0.006	J
Benzene	mg/kg-dry	T	<0.007	:	<0.005	:	<0.011	:	<0.008	:	-		<0.008	:
Bromodichloromethane	mg/kg-dry	T	<0.007	:	<0.005	:	<0.011	:	<0.008	:	-		<0.008	:
Bromoform	mg/kg-dry	T	<0.007	:	<0.005	:	<0.011	:	<0.008	:	-		<0.008	:
Bromomethane	mg/kg-dry	T	<0.007	:	<0.005	:	<0.011	:	<0.008	:	-		<0.008	:
Carbon disulfide	mg/kg-dry	T	<0.007	:	0.004	J	<0.011	:	<0.008	:	-		<0.008	:

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R = Qualified as rejected value from data validation and results are considered unusable for any purpose
T = Total Fraction

Appendix A-7e
Soil - Biased 0-24 inches
Validated Analytical Results

Parameter	Units	Exposure Area Fraction	Site ID / Sample Date / Sample ID					
			MSS1-100 1/16/2003 MSS1-100-T02N-SOL	MSS1-101 1/16/2003 MSS1-101-T02N-SOL	MSS1-102 1/19/2003 MSS1-102-T02N-SOL	MSS1-103 1/16/2003 MSS1-103-T02N-SOL	MSS1-104 1/9/2003 MSS1-104-T02N-SOL DL	MSS1-104 1/9/2003 MSS1-104-T02N-SOL
			SS1	SS1	SS1	SS1	SS1	SS1
Carbon tetrachloride	mg/kg-dry	T	<0.007 :	<0.005 :	<0.011 :	<0.008 :	-	<0.008 :
Chlorobenzene	mg/kg-dry	T	<0.007 :	<0.005 :	<0.011 :	<0.008 :	-	<0.008 :
Chloroethane	mg/kg-dry	T	<0.007 :	<0.005 :	<0.011 :	<0.008 :	-	<0.008 :
Chloroform	mg/kg-dry	T	<0.007 :	<0.005 :	<0.011 :	<0.008 :	-	<0.008 :
Chloromethane	mg/kg-dry	T	<0.007 :	<0.005 :	<0.011 :	<0.008 :	-	<0.008 :
cis-1,2-Dichloroethene	mg/kg-dry	T	<0.007 :	<0.005 :	<0.011 :	<0.008 :	-	<0.008 :
cis-1,3-Dichloropropene	mg/kg-dry	T	<0.007 :	<0.005 :	<0.011 :	<0.008 :	-	<0.008 :
Dibromochloromethane	mg/kg-dry	T	<0.007 :	<0.005 :	<0.011 :	<0.008 :	-	<0.008 :
Dichlorodifluoromethane	mg/kg-dry	T	<0.007 :	<0.005 :	<0.011 :	<0.008 :	-	<0.008 :
Ethylbenzene	mg/kg-dry	T	<0.007 :	<0.005 :	<0.011 :	<0.008 :	-	0.012 :
Methylene chloride	mg/kg-dry	T	<0.007 :	<0.005 :	<0.011 :	<0.008 :	-	<0.008 :
Styrene	mg/kg-dry	T	<0.007 :	<0.005 :	<0.011 :	<0.008 :	-	<0.008 :
Tetrachloroethene	mg/kg-dry	T	<0.007 :	<0.005 :	<0.011 :	<0.008 :	-	<0.008 :
Toluene	mg/kg-dry	T	<0.007 :	<0.005 :	<0.011 :	<0.008 :	-	0.001 J
Total Xylene	mg/kg-dry	T	<0.007 :	<0.005 :	<0.011 :	<0.008 :	-	0.11 :
trans-1,2-Dichloroethene	mg/kg-dry	T	<0.007 :	<0.005 :	<0.011 :	<0.008 :	-	<0.008 :
trans-1,3-Dichloropropene	mg/kg-dry	T	<0.007 :	<0.005 :	<0.011 :	<0.008 :	-	<0.008 :
Trichloroethene	mg/kg-dry	T	<0.007 :	<0.005 :	<0.011 :	<0.008 :	-	<0.008 :
Trichlorofluoromethane	mg/kg-dry	T	<0.007 :	<0.005 :	<0.011 :	<0.008 :	-	<0.008 :
Vinyl chloride	mg/kg-dry	T	<0.007 :	<0.005 :	<0.011 :	<0.008 :	-	<0.008 :
Semi-Volatile Organics								
1,1`-Biphenyl	mg/kg-dry	T	<0.34 :	<0.69 :	<0.34 :	<0.35 :	-	<0.38 :
2,4,5-Trichlorophenol	mg/kg-dry	T	<0.86 :	<1.7 :	<0.85 :	<0.88 :	-	<0.95 :
2,4,6-Trichlorophenol	mg/kg-dry	T	<0.34 :	<0.69 :	<0.34 :	<0.35 :	-	<0.38 :
2,4-Dichlorophenol	mg/kg-dry	T	<0.34 :	<0.69 :	<0.34 :	<0.35 :	-	<0.38 :
2,4-Dimethylphenol	mg/kg-dry	T	<0.34 :	<0.69 :	<0.34 :	<0.35 :	-	<0.38 :
2,4-Dinitrophenol	mg/kg-dry	T	<0.86 :	<1.7 J	<0.85 :	<0.88 J	-	<0.95 J
2,4-Dinitrotoluene	mg/kg-dry	T	<0.34 :	<0.69 :	<0.34 :	<0.35 :	-	<0.38 :
2,6-Dinitrotoluene	mg/kg-dry	T	<0.34 :	<0.69 :	<0.34 :	<0.35 :	-	<0.38 :
2-Chloronaphthalene	mg/kg-dry	T	<0.34 :	<0.69 :	<0.34 :	<0.35 :	-	<0.38 :
2-Chlorophenol	mg/kg-dry	T	<0.34 :	<0.69 :	<0.34 :	<0.35 :	-	<0.38 :
2-Methylnaphthalene	mg/kg-dry	T	<0.34 :	<0.69 :	<0.34 :	<0.35 :	-	<0.38 :
2-Methylphenol	mg/kg-dry	T	<0.34 :	<0.69 :	<0.34 :	<0.35 :	-	<0.38 :
2-Nitroaniline	mg/kg-dry	T	<0.86 :	<1.7 :	<0.85 :	<0.88 :	-	<0.95 :

J = Qualified as estimated during data validation
R = Qualified as rejected value from data validation and results are considered unusable for any purpose
T = Total Fraction

Appendix A-7e
Soil - Biased 0-24 inches
Validated Analytical Results

Parameter	Units	Exposure Area Fraction	Site ID	MSS1-100	MSS1-101	MSS1-102	MSS1-103	MSS1-104	MSS1-104
			Sample Date	1/16/2003	1/16/2003	1/19/2003	1/16/2003	1/9/2003	1/9/2003
			Sample ID	MSS1-100-T02N-SOL	MSS1-101-T02N-SOL	MSS1-102-T02N-SOL	MSS1-103-T02N-SOL	MSS1-104-T02N-SOL DL	MSS1-104-T02N-SOL
			Exposure Area	SS1	SS1	SS1	SS1	SS1	SS1
2-Nitrophenol	mg/kg-dry	T		<0.34 :	<0.69 :	<0.34 :	<0.35 :	-	<0.38 :
3,3-Dichlorobenzidine	mg/kg-dry	T		<0.34 :	<0.69 :	<0.34 :	<0.35 :	-	<0.38 :
3-Nitroaniline	mg/kg-dry	T		<0.86 :	<1.7 :	<0.85 J	<0.88 :	-	<0.95 :
4,6-Dinitro-2-methylphenol	mg/kg-dry	T		<0.86 :	<1.7 :	<0.85 :	<0.88 :	-	<0.95 :
4-Bromophenyl phenyl ether	mg/kg-dry	T		<0.34 :	<0.69 :	<0.34 :	<0.35 :	-	<0.38 :
4-Chloro-3-methylphenol	mg/kg-dry	T		<0.34 :	<0.69 :	<0.34 :	<0.35 :	-	<0.38 :
4-Chloroaniline	mg/kg-dry	T		<0.34 :	<0.69 :	<0.34 :	<0.35 :	-	<0.38 :
4-Chlorophenyl phenyl ether	mg/kg-dry	T		<0.34 :	<0.69 :	<0.34 :	<0.35 :	-	<0.38 :
4-Methylphenol	mg/kg-dry	T		<0.34 :	<0.69 :	<0.34 :	<0.35 :	-	<0.38 :
4-Nitroaniline	mg/kg-dry	T		<0.86 :	<1.7 J	<0.85 J	<0.88 :	-	<0.95 :
4-Nitrophenol	mg/kg-dry	T		<0.86 :	<1.7 :	<0.85 :	<0.88 :	-	<0.95 J
Acenaphthene	mg/kg-dry	T		<0.34 :	<0.69 :	<0.34 :	<0.35 :	-	<0.38 :
Acenaphthylene	mg/kg-dry	T		<0.34 :	<0.69 :	<0.34 :	<0.35 :	-	<0.38 :
Anthracene	mg/kg-dry	T		<0.34 :	<0.69 :	<0.34 :	<0.35 :	-	<0.38 :
Benzaldehyde	mg/kg-dry	T		0.028 J	0.28 J	<0.34 :	0.046 J	-	<0.38 J
Benzo(a)anthracene	mg/kg-dry	T		<0.34 :	<0.69 :	<0.34 :	<0.35 :	-	<0.38 :
Benzo(a)pyrene	mg/kg-dry	T		<0.34 :	<0.69 :	<0.34 :	<0.35 :	-	<0.38 :
Benzo(b)fluoranthene	mg/kg-dry	T		<0.34 :	<0.69 :	<0.34 :	<0.35 :	-	<0.38 :
Benzo(g,h,i)perylene	mg/kg-dry	T		<0.34 :	<0.69 :	<0.34 :	<0.35 :	-	<0.38 :
Benzo(k)fluoranthene	mg/kg-dry	T		<0.34 :	<0.69 :	<0.34 :	<0.35 :	-	<0.38 :
Bis(2-chloroethoxy)methane	mg/kg-dry	T		<0.34 :	<0.69 :	<0.34 :	<0.35 :	-	<0.38 :
Bis(2-chloroethyl)ether	mg/kg-dry	T		<0.34 :	<0.69 :	<0.34 :	<0.35 :	-	<0.38 :
Bis(2-ethylhexyl)phthalate	mg/kg-dry	T		0.18 J	0.96 :	<0.34 :	<0.35 :	-	0.13 J
Butyl benzyl phthalate	mg/kg-dry	T		<0.34 :	<0.69 :	<0.34 :	<0.35 :	-	<0.38 :
Carbazole	mg/kg-dry	T		<0.34 :	<0.69 :	<0.34 :	<0.35 :	-	<0.38 :
Chrysene	mg/kg-dry	T		<0.34 :	<0.69 :	<0.34 :	<0.35 :	-	<0.38 :
Dibenz(a,h)anthracene	mg/kg-dry	T		<0.34 :	<0.69 :	<0.34 :	<0.35 :	-	<0.38 J
Dibenzofuran	mg/kg-dry	T		<0.34 :	<0.69 :	<0.34 :	<0.35 :	-	<0.38 :
Dichlorodiisopropyl ether	mg/kg-dry	T		<0.34 :	<0.69 :	<0.34 :	<0.35 :	-	<0.38 :
Diethylphthalate	mg/kg-dry	T		<0.34 :	<0.69 :	<0.34 :	<0.35 :	-	0.039 J
Dimethylphthalate	mg/kg-dry	T		<0.34 :	<0.69 :	<0.34 :	<0.35 :	-	<0.38 :
Di-n-Butyl phthalate	mg/kg-dry	T		<0.34 :	0.21 J	<0.34 :	<0.35 :	-	<0.38 :
Di-n-Octyl phthalate	mg/kg-dry	T		0.042 J	<0.69 :	<0.34 :	<0.35 :	-	<0.38 :
Fluoranthene	mg/kg-dry	T		<0.34 :	<0.69 :	<0.34 :	<0.35 :	-	<0.38 :

J = Qualified as estimated during data validation
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T = Total Fraction

Appendix A-7e
Soil - Biased 0-24 inches
Validated Analytical Results

Parameter	Units	Fraction	MSS1-100	MSS1-101	MSS1-102	MSS1-103	MSS1-104	MSS1-104
Sample Date			1/16/2003	1/16/2003	1/19/2003	1/16/2003	1/9/2003	1/9/2003
Sample ID			MSS1-100-T02N-SOL	MSS1-101-T02N-SOL	MSS1-102-T02N-SOL	MSS1-103-T02N-SOL	MSS1-104-T02N-SOL DL	MSS1-104-T02N-SOL
Exposure Area			SS1	SS1	SS1	SS1	SS1	SS1
Fluorene	mg/kg-dry	T	<0.34 :	<0.69 :	<0.34 :	<0.35 :	-	<0.38 :
Hexachlorobenzene	mg/kg-dry	T	<0.34 :	<0.69 :	<0.34 :	<0.35 :	-	<0.38 :
Hexachlorobutadiene	mg/kg-dry	T	<0.34 :	<0.69 :	<0.34 :	<0.35 :	-	<0.38 :
Hexachlorocyclopentadiene	mg/kg-dry	T	<0.34 :	<0.69 :	<0.34 :	<0.35 :	-	<0.38 :
Hexachloroethane	mg/kg-dry	T	<0.34 :	<0.69 :	<0.34 :	<0.35 :	-	<0.38 :
Indeno(1,2,3-cd)pyrene	mg/kg-dry	T	<0.34 :	<0.69 :	<0.34 :	<0.35 :	-	<0.38 :
Isophorone	mg/kg-dry	T	<0.34 :	<0.69 :	<0.34 :	<0.35 :	-	<0.38 :
Naphthalene	mg/kg-dry	T	<0.34 :	<0.69 :	<0.34 :	<0.35 :	-	<0.38 :
Nitrobenzene	mg/kg-dry	T	<0.34 :	<0.69 :	<0.34 :	<0.35 :	-	<0.38 :
N-Nitrosodi-n-propylamine	mg/kg-dry	T	<0.34 :	<0.69 :	<0.34 :	<0.35 :	-	<0.38 :
N-Nitrosodiphenylamine	mg/kg-dry	T	<0.34 :	0.079 J	<0.34 :	<0.35 :	-	<0.38 :
Pentachlorophenol	mg/kg-dry	T	<0.86 :	<1.7 :	<0.85 :	<0.88 :	-	<0.95 J
Phenanthrene	mg/kg-dry	T	<0.34 :	<0.69 :	<0.34 :	<0.35 :	-	<0.38 :
Phenol	mg/kg-dry	T	<0.34 :	<0.69 :	<0.34 :	<0.35 :	-	<0.38 :
Pyrene	mg/kg-dry	T	<0.34 :	<0.69 :	<0.34 :	<0.35 :	-	<0.38 :
Pesticides-PCBs								
Aroclor 1016	mg/kg-dry	T	<0.034 :	<0.035 :	<0.034 :	<0.035 :	-	<0.038 :
Aroclor 1221	mg/kg-dry	T	<0.07 :	<0.071 :	<0.068 :	<0.071 :	-	<0.077 :
Aroclor 1232	mg/kg-dry	T	<0.034 :	<0.035 :	<0.034 :	<0.035 :	-	<0.038 :
Aroclor 1242	mg/kg-dry	T	<0.034 :	<0.035 :	<0.034 :	<0.035 :	-	<0.038 :
Aroclor 1248	mg/kg-dry	T	<0.034 :	<0.035 :	<0.034 :	<0.035 :	-	<0.038 :
Aroclor 1254	mg/kg-dry	T	<0.034 :	<0.035 :	1.1 :	<0.035 :	-	<0.038 :
Aroclor 1260	mg/kg-dry	T	<0.034 :	<0.035 :	<0.034 :	<0.035 :	1.5 :	-

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Appendix A-7e
Soil - Biased 0-24 inches
Validated Analytical Results

		Site ID	MSS1-105	MSS1-106	MSS1-107	MSS1-108	MSS1-109	MSS1-11
		Sample Date	1/19/2003	1/19/2003	1/19/2003	1/19/2003	1/19/2003	10/16/2002
		Sample ID	MSS1-105-T02N-SOL	MSS1-106-T02N-SOL	MSS1-107-T02N-SOL	MSS1-108-T02N-SOL	MSS1-109-T02N-SOL	MSS1-11-T02N-SOL
		Exposure Area	SS1	SS1	SS1	SS1	SS1	SS1
Parameter	**Units**	**Fraction**						
General Chemistry								
Ammonia	mg/kg-dry	T	12.1 :	11.4 :	8.3 :	15. :	15.2 :	14.3 J
Chloride	mg/kg-dry	T	3. :	7.1 :	<2.1 :	<2.2 :	<2.3 :	6.8 J
Fluoride	mg/kg-dry	T	10.1 J	3.8 J	0.49 J	1.4 J	1.3 J	1.2 J
Nitrate	mg/kg-dry	T	<2.1 J	<2.1 J	<2.1 J	<2.2 J	<2.3 J	4.8 J
Phosphorus	mg/kg-dry	T	654. :	1370. :	1490. :	993. :	807. :	201. J
Sulfate	mg/kg-dry	T	20.9 :	1480. J	1640. J	285. :	132. :	96.3 J
Total Kjeldahl Nitrogen	mg/kg-dry	T	85. J	80.7 J	134. J	193. :	170. :	145. :
Total Organic Carbon	mg/kg-dry	T	143. J	6460. J	3390. J	25400. J	28500. J	1390. J
Laboratory Parameters								
pH	SU	T	7.3 :	7.3 :	7.4 :	8.1 :	8. :	7.7 :
Solids, Percent	%	T	96.7 :	97. :	97. :	93.6 :	89.4 :	93.4 :
Specific Conductance	umhos/cm	T	139. J	1800. J	1450. J	226. J	266. J	80. :
Geotechnical								
Organic Soils	%	T	1. :	1.8 :	2.7 :	3.8 :	3.1 :	1.96 J
Physical Properties								
Cation-Exchange Capacity	meq/100g	T	10.4 :	12.8 :	9.6 :	17.6 :	11.5 :	9.9 :
Sodium Absorption Ratio	ratio	T	0.45 :	0.69 :	0.02 :	0.05 :	<0.03 :	0.57 :
Metals								
Aluminum	mg/kg-dry	T	8970. :	12300. :	19000. :	10300. :	10800. :	8600. :
Antimony	mg/kg-dry	T	<0.29 J	<0.28 J	<0.29 J	<0.29 J	<0.33 J	<0.22 J
Arsenic	mg/kg-dry	T	4. J	3.2 J	4.1 J	2.6 J	2.3 J	4.8 :
Barium	mg/kg-dry	T	21. :	106. :	157. :	67. :	124. :	154. :
Beryllium	mg/kg-dry	T	1.7 :	1.1 :	1.7 :	2.6 :	2.3 :	0.66 :
Boron	mg/kg-dry	T	<0.25 :	<0.26 J	<0.24 J	<0.28 :	<0.28 :	1.2 :
Cadmium	mg/kg-dry	T	0.2 :	2. :	1.7 :	1.8 :	1.6 :	0.079 J
Calcium	mg/kg-dry	T	7040. :	12200. :	19900. :	12000. :	13900. :	3490. :
Chromium	mg/kg-dry	T	17.6 J	69.7 J	71.9 J	24.1 J	30.7 J	24.3 :
Cobalt	mg/kg-dry	T	4.2 :	11.2 :	14. :	4.8 :	6.6 :	8.5 :
Copper	mg/kg-dry	T	98.7 :	130. :	229. :	274. J	205. J	48.8 :
Iron	mg/kg-dry	T	11100. :	23000. :	28400. :	13800. :	14200. :	21500. :
Lead	mg/kg-dry	T	50.9 :	45.6 :	101. :	192. :	160. :	69.2 :
Magnesium	mg/kg-dry	T	1640. :	8230. :	11600. :	4610. :	5340. :	5220. :
Manganese	mg/kg-dry	T	728. :	795. :	1330. :	890. :	862. :	478. J

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T = Total Fraction

Appendix A-7e
Soil - Biased 0-24 inches
Validated Analytical Results

Parameter	Units	Fraction	MSS1-105	MSS1-106	MSS1-107	MSS1-108	MSS1-109	MSS1-11
Site ID			MSS1-105	MSS1-106	MSS1-107	MSS1-108	MSS1-109	MSS1-11
Sample Date			1/19/2003	1/19/2003	1/19/2003	1/19/2003	1/19/2003	10/16/2002
Sample ID			MSS1-105-T02N-SOL	MSS1-106-T02N-SOL	MSS1-107-T02N-SOL	MSS1-108-T02N-SOL	MSS1-109-T02N-SOL	MSS1-11-T02N-SOL
Exposure Area			SS1	SS1	SS1	SS1	SS1	SS1
Mercury	mg/kg-dry	T	<0.016 :	<0.017 :	<0.015 :	0.026 :	<0.018 :	0.02 :
Molybdenum	mg/kg-dry	T	418. :	451. :	1260. :	1990. :	1710. :	189. :
Nickel	mg/kg-dry	T	11.9 :	32.3 :	43.3 :	14.4 :	17.8 :	21.4 J
Potassium	mg/kg-dry	T	1940. J	4230. J	5300. J	2850. J	3020. J	1960. J
Selenium	mg/kg-dry	T	0.86 J	0.88 J	0.91 J	0.88 J	<0.87 J	0.68 J
Silver	mg/kg-dry	T	0.46 :	<0.85 :	1.1 :	2.2 :	1.6 :	0.37 :
Sodium	mg/kg-dry	T	<87.3 :	99.7 :	<29.1 :	<61.7 :	<43.8 :	116. :
Thallium	mg/kg-dry	T	0.33 :	0.39 :	0.46 :	0.4 :	0.35 :	0.13 :
Vanadium	mg/kg-dry	T	12.8 :	45.3 :	62.4 :	34.9 :	37. :	25. :
Zinc	mg/kg-dry	T	91.5 :	317. :	297. :	281. :	255. :	103. J
Volatile Organics								
1,1,1-Trichloroethane	mg/kg-dry	T	<0.006 :	0.014 J	<0.008 :	<0.012 :	<0.51 :	<0.008 :
1,1,2,2-Tetrachloroethane	mg/kg-dry	T	<0.006 :	<0.01 J	<0.008 :	<0.012 :	<0.51 :	<0.008 :
1,1,2-Trichloro-1,2,2-trifluoroethane	mg/kg-dry	T	<0.006 :	<0.01 J	<0.008 :	<0.012 :	<0.51 :	<0.008 :
1,1,2-Trichloroethane	mg/kg-dry	T	<0.006 :	<0.01 J	<0.008 :	<0.012 :	<0.51 :	<0.008 :
1,1-Dichloroethane	mg/kg-dry	T	<0.006 :	<0.01 J	<0.008 :	<0.012 :	<0.51 :	<0.008 :
1,1-Dichloroethene	mg/kg-dry	T	<0.006 :	<0.01 J	<0.008 :	<0.012 :	<0.51 :	<0.008 :
1,2,4-Trichlorobenzene	mg/kg-dry	T	<0.006 :	<0.01 J	<0.008 :	<0.012 :	<0.51 :	<0.008 :
1,2-Dibromo-3-chloropropane	mg/kg-dry	T	<0.006 :	<0.01 J	<0.008 :	<0.012 :	<0.51 :	<0.008 :
1,2-Dichlorobenzene	mg/kg-dry	T	<0.006 :	<0.01 J	<0.008 :	<0.012 :	<0.51 :	<0.008 :
1,2-Dichloroethane	mg/kg-dry	T	<0.006 :	<0.01 J	<0.008 :	<0.012 :	<0.51 :	<0.008 :
1,2-Dichloroethene (total)	mg/kg-dry	T	<0.006 :	<0.01 J	<0.008 :	<0.012 :	<0.51 :	<0.008 :
1,2-Dichloropropane	mg/kg-dry	T	<0.006 :	<0.01 J	<0.008 :	<0.012 :	<0.51 :	<0.008 :
1,3-Dichlorobenzene	mg/kg-dry	T	<0.006 :	<0.01 J	<0.008 :	<0.012 :	<0.51 :	<0.008 :
1,4-Dichlorobenzene	mg/kg-dry	T	<0.006 :	<0.01 J	<0.008 :	<0.012 :	<0.51 :	<0.008 :
2-Butanone	mg/kg-dry	T	0.002 J	0.004 J	<0.008 :	<0.012 :	<0.51 :	<0.008 :
2-Hexanone	mg/kg-dry	T	<0.006 :	<0.01 J	<0.008 :	<0.012 :	<0.51 :	<0.008 :
4-Methyl-2-pentanone	mg/kg-dry	T	<0.006 :	<0.01 J	<0.008 :	<0.012 :	<0.51 :	<0.008 :
Acetone	mg/kg-dry	T	0.005 J	0.008 J	0.001 J	0.007 J	<0.51 :	0.002 J
Benzene	mg/kg-dry	T	<0.006 :	<0.01 J	<0.008 :	<0.012 :	<0.51 :	<0.008 :
Bromodichloromethane	mg/kg-dry	T	<0.006 :	<0.01 J	<0.008 :	<0.012 :	<0.51 :	<0.008 :
Bromoform	mg/kg-dry	T	<0.006 :	<0.01 J	<0.008 :	<0.012 :	<0.51 :	<0.008 :
Bromomethane	mg/kg-dry	T	<0.006 :	<0.01 J	<0.008 :	<0.012 :	<0.51 :	<0.008 J
Carbon disulfide	mg/kg-dry	T	<0.006 :	0.001 J	<0.008 :	0.002 J	<0.51 :	<0.008 :

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Appendix A-7e
Soil - Biased 0-24 inches
Validated Analytical Results

Parameter	Units	Exposure Area Fraction	Site ID / Sample Date / Sample ID		MSS1-105 1/19/2003 MSS1-105-T02N-SOL SS1		MSS1-106 1/19/2003 MSS1-106-T02N-SOL SS1		MSS1-107 1/19/2003 MSS1-107-T02N-SOL SS1		MSS1-108 1/19/2003 MSS1-108-T02N-SOL SS1		MSS1-109 1/19/2003 MSS1-109-T02N-SOL SS1		MSS1-11 10/16/2002 MSS1-11-T02N-SOL SS1	
Carbon tetrachloride	mg/kg-dry	T		<0.006	:	<0.01	J	<0.008	:	<0.012	:	<0.51	:	<0.008	:
Chlorobenzene	mg/kg-dry	T		<0.006	:	<0.01	J	<0.008	:	<0.012	:	<0.51	:	<0.008	:
Chloroethane	mg/kg-dry	T		<0.006	:	<0.01	J	<0.008	:	<0.012	:	<0.51	:	<0.008	:
Chloroform	mg/kg-dry	T		<0.006	:	<0.01	J	<0.008	:	<0.012	:	<0.51	:	<0.008	:
Chloromethane	mg/kg-dry	T		<0.006	:	<0.01	J	<0.008	:	<0.012	:	<0.51	:	<0.008	J
cis-1,2-Dichloroethene	mg/kg-dry	T		<0.006	:	<0.01	J	<0.008	:	<0.012	:	<0.51	:	<0.008	:
cis-1,3-Dichloropropene	mg/kg-dry	T		<0.006	:	<0.01	J	<0.008	:	<0.012	:	<0.51	:	<0.008	:
Dibromochloromethane	mg/kg-dry	T		<0.006	:	<0.01	J	<0.008	:	<0.012	:	<0.51	:	<0.008	:
Dichlorodifluoromethane	mg/kg-dry	T		<0.006	:	<0.01	J	<0.008	:	<0.012	:	<0.51	:	<0.008	J
Ethylbenzene	mg/kg-dry	T		<0.006	:	<0.01	J	<0.008	:	<0.012	:	<0.51	:	<0.008	:
Methylene chloride	mg/kg-dry	T		<0.006	:	<0.01	J	<0.008	:	<0.012	:	<0.51	:	<0.008	:
Styrene	mg/kg-dry	T		<0.006	:	<0.01	J	<0.008	:	<0.012	:	<0.51	:	<0.008	:
Tetrachloroethene	mg/kg-dry	T		<0.006	:	<0.01	J	<0.008	:	<0.012	:	<0.51	:	<0.008	:
Toluene	mg/kg-dry	T		<0.006	:	<0.01	J	<0.008	:	<0.012	:	<0.51	:	<0.008	:
Total Xylene	mg/kg-dry	T		<0.006	:	0.003	J	<0.008	:	<0.012	:	0.36	J	<0.008	:
trans-1,2-Dichloroethene	mg/kg-dry	T		<0.006	:	<0.01	J	<0.008	:	<0.012	:	<0.51	:	<0.008	:
trans-1,3-Dichloropropene	mg/kg-dry	T		<0.006	:	<0.01	J	<0.008	:	<0.012	:	<0.51	:	<0.008	:
Trichloroethene	mg/kg-dry	T		<0.006	:	<0.01	J	<0.008	:	<0.012	:	<0.51	:	<0.008	:
Trichlorofluoromethane	mg/kg-dry	T		<0.006	:	<0.01	J	<0.008	:	<0.012	:	<0.51	:	<0.008	:
Vinyl chloride	mg/kg-dry	T		<0.006	:	<0.01	J	<0.008	:	<0.012	:	<0.51	:	<0.008	J
Semi-Volatile Organics																
1,1`-Biphenyl	mg/kg-dry	T		<0.34	:	0.076	J	<0.34	:	<3.5	:	<3.7	:	<0.36	:
2,4,5-Trichlorophenol	mg/kg-dry	T		<0.85	:	<0.86	:	<0.86	:	<8.8	:	<9.3	:	<0.89	:
2,4,6-Trichlorophenol	mg/kg-dry	T		<0.34	:	<0.34	:	<0.34	:	<3.5	:	<3.7	:	<0.36	:
2,4-Dichlorophenol	mg/kg-dry	T		<0.34	:	<0.34	:	<0.34	:	<3.5	:	<3.7	:	<0.36	:
2,4-Dimethylphenol	mg/kg-dry	T		<0.34	:	<0.34	:	<0.34	:	<3.5	:	<3.7	:	<0.36	:
2,4-Dinitrophenol	mg/kg-dry	T		<0.85	:	<0.86	:	<0.86	:	<8.8	:	<9.3	:	<0.89	J
2,4-Dinitrotoluene	mg/kg-dry	T		<0.34	:	<0.34	:	<0.34	:	<3.5	J	<3.7	J	<0.36	:
2,6-Dinitrotoluene	mg/kg-dry	T		<0.34	:	<0.34	:	<0.34	:	<3.5	:	<3.7	:	<0.36	:
2-Chloronaphthalene	mg/kg-dry	T		<0.34	:	<0.34	:	<0.34	:	<3.5	:	<3.7	:	<0.36	:
2-Chlorophenol	mg/kg-dry	T		<0.34	:	<0.34	:	<0.34	:	<3.5	:	<3.7	:	<0.36	:
2-Methylnaphthalene	mg/kg-dry	T		<0.34	:	0.81	:	<0.34	:	<3.5	:	<3.7	:	<0.36	:
2-Methylphenol	mg/kg-dry	T		<0.34	:	<0.34	:	<0.34	:	<3.5	:	<3.7	:	<0.36	:
2-Nitroaniline	mg/kg-dry	T		<0.85	:	<0.86	:	<0.86	:	<8.8	:	<9.3	:	<0.89	:

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T = Total Fraction

Appendix A-7e
Soil - Biased 0-24 inches
Validated Analytical Results

Parameter	Units	Exposure Area Fraction	Site ID / Sample Date / Sample ID					
			MSS1-105 1/19/2003 MSS1-105-T02N-SOL	MSS1-106 1/19/2003 MSS1-106-T02N-SOL	MSS1-107 1/19/2003 MSS1-107-T02N-SOL	MSS1-108 1/19/2003 MSS1-108-T02N-SOL	MSS1-109 1/19/2003 MSS1-109-T02N-SOL	MSS1-11 10/16/2002 MSS1-11-T02N-SOL
			SS1	SS1	SS1	SS1	SS1	SS1
2-Nitrophenol	mg/kg-dry	T	<0.34 :	<0.34 :	<0.34 :	<3.5 :	<3.7 :	<0.36 :
3,3-Dichlorobenzidine	mg/kg-dry	T	<0.34 :	<0.34 :	<0.34 :	<3.5 J	<3.7 J	<0.36 :
3-Nitroaniline	mg/kg-dry	T	<0.85 J	<0.86 J	<0.86 J	<8.8 J	<9.3 J	<0.89 :
4,6-Dinitro-2-methylphenol	mg/kg-dry	T	<0.85 :	<0.86 :	<0.86 :	<8.8 J	<9.3 J	<0.89 :
4-Bromophenyl phenyl ether	mg/kg-dry	T	<0.34 :	<0.34 :	<0.34 :	<3.5 J	<3.7 J	<0.36 :
4-Chloro-3-methylphenol	mg/kg-dry	T	<0.34 :	<0.34 :	<0.34 :	<3.5 :	<3.7 :	<0.36 :
4-Chloroaniline	mg/kg-dry	T	<0.34 :	<0.34 :	<0.34 :	<3.5 :	<3.7 :	<0.36 :
4-Chlorophenyl phenyl ether	mg/kg-dry	T	<0.34 :	<0.34 :	<0.34 :	<3.5 :	<3.7 :	<0.36 :
4-Methylphenol	mg/kg-dry	T	<0.34 :	<0.34 :	<0.34 :	<3.5 :	<3.7 J	<0.36 :
4-Nitroaniline	mg/kg-dry	T	<0.85 :	<0.86 :	<0.86 :	<8.8 J	<9.3 J	<0.89 :
4-Nitrophenol	mg/kg-dry	T	<0.85 :	<0.86 :	<0.86 :	<8.8 J	<9.3 :	<0.89 :
Acenaphthene	mg/kg-dry	T	<0.34 :	<0.34 :	<0.34 :	<3.5 :	2.2 J	<0.36 :
Acenaphthylene	mg/kg-dry	T	<0.34 :	<0.34 :	<0.34 :	<3.5 :	<3.7 :	<0.36 :
Anthracene	mg/kg-dry	T	<0.34 :	<0.34 :	<0.34 :	<3.5 J	1. J	<0.36 J
Benzaldehyde	mg/kg-dry	T	<0.34 :	<0.34 :	<0.34 :	<3.5 :	<3.7 :	<0.36 J
Benzo(a)anthracene	mg/kg-dry	T	<0.34 :	<0.34 :	<0.34 :	<3.5 J	<3.7 J	<0.36 :
Benzo(a)pyrene	mg/kg-dry	T	<0.34 :	<0.34 :	<0.34 :	<3.5 :	<3.7 :	<0.36 :
Benzo(b)fluoranthene	mg/kg-dry	T	<0.34 :	<0.34 :	<0.34 :	<3.5 :	<3.7 :	<0.36 :
Benzo(g,h,i)perylene	mg/kg-dry	T	<0.34 :	<0.34 :	<0.34 :	<3.5 J	<3.7 J	<0.36 :
Benzo(k)fluoranthene	mg/kg-dry	T	<0.34 :	<0.34 :	<0.34 :	<3.5 :	<3.7 :	<0.36 :
Bis(2-chloroethoxy)methane	mg/kg-dry	T	<0.34 :	<0.34 :	<0.34 :	<3.5 :	<3.7 :	<0.36 :
Bis(2-chloroethyl)ether	mg/kg-dry	T	<0.34 :	<0.34 :	<0.34 :	<3.5 :	<3.7 :	<0.36 :
Bis(2-ethylhexyl)phthalate	mg/kg-dry	T	<0.34 :	<0.34 :	0.12 J	<3.5 J	<3.7 J	0.03 J
Butyl benzyl phthalate	mg/kg-dry	T	<0.34 :	<0.34 :	<0.34 :	<3.5 J	<3.7 J	<0.36 :
Carbazole	mg/kg-dry	T	<0.34 :	<0.34 :	<0.34 :	<3.5 J	<3.7 J	<0.36 :
Chrysene	mg/kg-dry	T	<0.34 :	<0.34 :	<0.34 :	<3.5 J	<3.7 J	<0.36 :
Dibenz(a,h)anthracene	mg/kg-dry	T	<0.34 :	<0.34 :	<0.34 :	<3.5 :	<3.7 :	<0.36 :
Dibenzofuran	mg/kg-dry	T	<0.34 :	0.21 J	<0.34 :	<3.5 :	1.7 J	<0.36 :
Dichlorodiisopropyl ether	mg/kg-dry	T	<0.34 :	<0.34 :	<0.34 :	<3.5 :	<3.7 :	<0.36 :
Diethylphthalate	mg/kg-dry	T	<0.34 :	<0.34 :	<0.34 :	<3.5 :	<3.7 :	<0.36 :
Dimethylphthalate	mg/kg-dry	T	<0.34 :	<0.34 :	<0.34 :	<3.5 :	<3.7 :	<0.36 :
Di-n-Butyl phthalate	mg/kg-dry	T	<0.34 :	<0.34 :	0.024 J	<3.5 J	<3.7 J	<0.36 :
Di-n-Octyl phthalate	mg/kg-dry	T	<0.34 :	<0.34 :	<0.34 :	<3.5 :	<3.7 :	<0.36 :
Fluoranthene	mg/kg-dry	T	<0.34 :	<0.34 :	<0.34 :	<3.5 J	<3.7 J	<0.36 :

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Appendix A-7e
Soil - Biased 0-24 inches
Validated Analytical Results

Parameter	Units	Exposure Area Fraction	Site ID / Sample Date / Sample ID		MSS1-105 1/19/2003 MSS1-105-T02N-SOL SS1		MSS1-106 1/19/2003 MSS1-106-T02N-SOL SS1		MSS1-107 1/19/2003 MSS1-107-T02N-SOL SS1		MSS1-108 1/19/2003 MSS1-108-T02N-SOL SS1		MSS1-109 1/19/2003 MSS1-109-T02N-SOL SS1		MSS1-11 10/16/2002 MSS1-11-T02N-SOL SS1	
Fluorene	mg/kg-dry	T		<0.34	:	0.33	J	<0.34	:	<3.5	:	3.8	:	<0.36	:
Hexachlorobenzene	mg/kg-dry	T		<0.34	:	<0.34	:	<0.34	:	<3.5	J	<3.7	J	<0.36	:
Hexachlorobutadiene	mg/kg-dry	T		<0.34	:	<0.34	:	<0.34	:	<3.5	:	<3.7	:	<0.36	:
Hexachlorocyclopentadiene	mg/kg-dry	T		<0.34	:	<0.34	:	<0.34	:	<3.5	:	<3.7	:	<0.36	:
Hexachloroethane	mg/kg-dry	T		<0.34	:	<0.34	:	<0.34	:	<3.5	:	<3.7	:	<0.36	:
Indeno(1,2,3-cd)pyrene	mg/kg-dry	T		<0.34	:	<0.34	:	<0.34	:	<3.5	:	<3.7	:	<0.36	:
Isophorone	mg/kg-dry	T		<0.34	:	<0.34	:	<0.34	:	<3.5	:	<3.7	:	<0.36	:
Naphthalene	mg/kg-dry	T		<0.34	:	0.053	J	<0.34	:	<3.5	:	5.1	:	<0.36	:
Nitrobenzene	mg/kg-dry	T		<0.34	:	<0.34	:	<0.34	:	<3.5	:	<3.7	:	<0.36	:
N-Nitrosodi-n-propylamine	mg/kg-dry	T		<0.34	:	<0.34	:	<0.34	:	<3.5	:	<3.7	:	<0.36	:
N-Nitrosodiphenylamine	mg/kg-dry	T		<0.34	:	<0.34	:	<0.34	:	<3.5	J	13.	:	<0.36	:
Pentachlorophenol	mg/kg-dry	T		<0.85	:	<0.86	:	<0.86	:	<8.8	J	<9.3	J	<0.89	J
Phenanthrene	mg/kg-dry	T		<0.34	:	0.88	:	<0.34	:	<3.5	J	15.	:	<0.36	:
Phenol	mg/kg-dry	T		<0.34	:	<0.34	:	<0.34	:	<3.5	:	<3.7	:	<0.36	:
Pyrene	mg/kg-dry	T		<0.34	:	0.096	J	0.024	J	<3.5	J	1.8	J	<0.36	:
Pesticides-PCBs																
Aroclor 1016	mg/kg-dry	T		<0.034	:	<0.034	:	<0.034	:	<0.035	J	<0.037	J	<0.035	:
Aroclor 1221	mg/kg-dry	T		<0.069	:	<0.069	:	<0.069	:	<0.071	J	<0.075	J	<0.072	:
Aroclor 1232	mg/kg-dry	T		<0.034	:	<0.034	:	<0.034	:	<0.035	J	<0.037	J	<0.035	:
Aroclor 1242	mg/kg-dry	T		<0.034	:	<0.034	:	<0.034	:	<0.035	J	<0.037	J	<0.035	:
Aroclor 1248	mg/kg-dry	T		<0.034	:	<0.034	:	<0.034	:	0.78	J	<0.037	J	<0.035	:
Aroclor 1254	mg/kg-dry	T		0.019	J	0.032	J	0.027	J	0.98	J	<0.037	J	0.018	J
Aroclor 1260	mg/kg-dry	T		<0.034	:	<0.034	:	<0.034	:	<0.035	J	<0.037	J	<0.035	:

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Appendix A-7e
Soil - Biased 0-24 inches
Validated Analytical Results

Parameter	Units	Exposure Area Fraction	Site ID / Sample Date / Sample ID											
			MSS1-110 1/19/2003 MSS1-110-T02N-SOL RE SS1		MSS1-110 1/19/2003 MSS1-110-T02N-SOL SS1		MSS1-112 2/9/2003 MSS1-12-T02N-SOL SS1		MSS1-112 4/8/2003 MSS1-112R-T02N-SOL SS1		MSS1-113 2/9/2003 MSS1-13-T02N-SOL SS1		MSS1-113 4/8/2003 MSS1-113R-T02N-SOL SS1	
General Chemistry														
Ammonia	mg/kg-dry	T	-		23.	:	25.1	:	-		33.4	:	-	
Chloride	mg/kg-dry	T	-		29.	J	<2.2	:	-		3.4	:	-	
Fluoride	mg/kg-dry	T	-		1.3	J	2.	J	-		1.4	J	-	
Nitrate	mg/kg-dry	T	-		<2.1	J	<2.2	J	-		4.4	J	-	
Phosphorus	mg/kg-dry	T	-		1590.	:	1180.	:	-		1230.	:	-	
Sulfate	mg/kg-dry	T	-		219.	:	60.3	:	-		133.	:	-	
Total Kjeldahl Nitrogen	mg/kg-dry	T	-		178.	:	196.	:	-		264.	:	-	
Total Organic Carbon	mg/kg-dry	T	-		11900.	J	4660.	J	-		6570.	J	-	
Laboratory Parameters														
pH	SU	T	-		8.	:	7.7	:	-		7.6	:	-	
Solids, Percent	%	T	-		97.9	:	91.3	:	91.7	:	90.9	:	85.3	:
Specific Conductance	umhos/cm	T	-		585.	J	317.	:	-		427.	:	-	
Geotechnical														
Organic Soils	%	T	-		3.1	:	2.7	:	-		2.8	:	-	
Physical Properties														
Cation-Exchange Capacity	meq/100g	T	-		11.6	:	15.3	:	-		22.2	:	-	
Sodium Absorption Ratio	ratio	T	-		0.61	:	0.14	:	-		0.21	:	-	
Metals														
Aluminum	mg/kg-dry	T	-		12300.	:	12800.	:	-		13100.	:	-	
Antimony	mg/kg-dry	T	-		<0.24	J	<0.26	J	-		<0.26	J	-	
Arsenic	mg/kg-dry	T	-		2.4	J	3.6	J	-		4.1	J	-	
Barium	mg/kg-dry	T	-		65.9	:	88.2	:	-		91.1	:	-	
Beryllium	mg/kg-dry	T	-		0.74	:	1.3	:	-		1.4	:	-	
Boron	mg/kg-dry	T	-		<1.6	:	7.	J	-		7.9	J	-	
Cadmium	mg/kg-dry	T	-		<0.04	J	0.84	:	-		0.58	J	-	
Calcium	mg/kg-dry	T	-		8180.	:	10900.	:	-		11600.	:	-	
Chromium	mg/kg-dry	T	-		48.5	J	53.4	J	-		32.1	J	-	
Cobalt	mg/kg-dry	T	-		11.5	:	13.5	:	-		14.4	:	-	
Copper	mg/kg-dry	T	-		50.8	J	95.6	J	-		88.8	J	-	
Iron	mg/kg-dry	T	-		21600.	:	21900.	:	-		23700.	:	-	
Lead	mg/kg-dry	T	-		33.8	:	160.	:	-		82.9	:	-	
Magnesium	mg/kg-dry	T	-		10300.	:	10100.	:	-		8500.	:	-	
Manganese	mg/kg-dry	T	-		528.	:	1630.	:	-		1440.	:	-	

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Appendix A-7e
Soil - Biased 0-24 inches
Validated Analytical Results

Parameter	Units	Exposure Area Fraction	Site ID / Sample Date / Sample ID					
			MSS1-110 1/19/2003 MSS1-110-T02N-SOL RE SS1	MSS1-110 1/19/2003 MSS1-110-T02N-SOL SS1	MSS1-112 2/9/2003 MSS1-12-T02N-SOL SS1	MSS1-112 4/8/2003 MSS1-112R-T02N-SOL SS1	MSS1-113 2/9/2003 MSS1-13-T02N-SOL SS1	MSS1-113 4/8/2003 MSS1-113R-T02N-SOL SS1
Mercury	mg/kg-dry	T	-	<0.017 :	<0.018 :	-	<0.017 :	-
Molybdenum	mg/kg-dry	T	-	243. :	172. :	-	385. :	-
Nickel	mg/kg-dry	T	-	34.2 :	32.3 :	-	26.2 :	-
Potassium	mg/kg-dry	T	-	2830. J	2650. J	-	2540. J	-
Selenium	mg/kg-dry	T	-	0.64 J	<0.7 J	-	0.96 J	-
Silver	mg/kg-dry	T	-	0.21 :	1.1 :	-	0.68 :	-
Sodium	mg/kg-dry	T	-	<47. :	<27.4 :	-	<27.5 :	-
Thallium	mg/kg-dry	T	-	0.24 :	0.26 :	-	0.26 :	-
Vanadium	mg/kg-dry	T	-	44.2 :	39.3 :	-	38.2 :	-
Zinc	mg/kg-dry	T	-	84.6 :	187. :	-	138. :	-
Volatile Organics								
1,1,1-Trichloroethane	mg/kg-dry	T	-	<0.011 :	-	<0.01 :	-	<0.018 :
1,1,2,2-Tetrachloroethane	mg/kg-dry	T	-	<0.011 :	-	<0.01 :	-	<0.018 :
1,1,2-Trichloro-1,2,2-trifluoroethane	mg/kg-dry	T	-	<0.011 :	-	<0.01 :	-	<0.018 :
1,1,2-Trichloroethane	mg/kg-dry	T	-	<0.011 :	-	<0.01 :	-	<0.018 :
1,1-Dichloroethane	mg/kg-dry	T	-	<0.011 :	-	<0.01 :	-	<0.018 :
1,1-Dichloroethene	mg/kg-dry	T	-	<0.011 :	-	<0.01 :	-	<0.018 :
1,2,4-Trichlorobenzene	mg/kg-dry	T	-	<0.011 :	-	<0.01 :	-	<0.018 :
1,2-Dibromo-3-chloropropane	mg/kg-dry	T	-	<0.011 :	-	<0.01 :	-	<0.018 :
1,2-Dichlorobenzene	mg/kg-dry	T	-	<0.011 :	-	<0.01 :	-	<0.018 :
1,2-Dichloroethane	mg/kg-dry	T	-	<0.011 :	-	<0.01 :	-	<0.018 :
1,2-Dichloroethene (total)	mg/kg-dry	T	-	<0.011 :	-	<0.01 :	-	<0.018 :
1,2-Dichloropropane	mg/kg-dry	T	-	<0.011 :	-	<0.01 :	-	<0.018 :
1,3-Dichlorobenzene	mg/kg-dry	T	-	<0.011 :	-	<0.01 :	-	<0.018 :
1,4-Dichlorobenzene	mg/kg-dry	T	-	<0.011 :	-	<0.01 :	-	<0.018 :
2-Butanone	mg/kg-dry	T	-	0.003 J	-	<0.01 :	-	<0.018 :
2-Hexanone	mg/kg-dry	T	-	<0.011 :	-	<0.01 :	-	<0.018 :
4-Methyl-2-pentanone	mg/kg-dry	T	-	<0.011 :	-	<0.01 :	-	<0.018 :
Acetone	mg/kg-dry	T	-	0.006 J	-	<0.01 :	-	<0.018 :
Benzene	mg/kg-dry	T	-	<0.011 :	-	<0.01 :	-	<0.018 :
Bromodichloromethane	mg/kg-dry	T	-	<0.011 :	-	<0.01 :	-	<0.018 :
Bromoform	mg/kg-dry	T	-	<0.011 :	-	<0.01 :	-	<0.018 :
Bromomethane	mg/kg-dry	T	-	<0.011 :	-	<0.01 :	-	<0.018 :
Carbon disulfide	mg/kg-dry	T	-	0.002 J	-	<0.01 :	-	<0.018 :

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Appendix A-7e
Soil - Biased 0-24 inches
Validated Analytical Results

Parameter	Units	Exposure Area Fraction	Site ID / Sample Date / Sample ID											
			MSS1-110	1/19/2003	MSS1-110-T02N-SOL RE	MSS1-110	1/19/2003	MSS1-110-T02N-SOL	MSS1-112	2/9/2003	MSS1-12-T02N-SOL	MSS1-112	4/8/2003	MSS1-112R-T02N-SOL
			SS1			SS1			SS1			SS1		
Carbon tetrachloride	mg/kg-dry	T	-			<0.011	:		-			<0.01	:	
Chlorobenzene	mg/kg-dry	T	-			<0.011	:		-			<0.01	:	
Chloroethane	mg/kg-dry	T	-			<0.011	:		-			<0.01	:	
Chloroform	mg/kg-dry	T	-			<0.011	:		-			<0.01	:	
Chloromethane	mg/kg-dry	T	-			<0.011	:		-			<0.01	:	
cis-1,2-Dichloroethene	mg/kg-dry	T	-			<0.011	:		-			<0.01	:	
cis-1,3-Dichloropropene	mg/kg-dry	T	-			<0.011	:		-			<0.01	:	
Dibromochloromethane	mg/kg-dry	T	-			<0.011	:		-			<0.01	:	
Dichlorodifluoromethane	mg/kg-dry	T	-			<0.011	:		-			<0.01	:	
Ethylbenzene	mg/kg-dry	T	-			0.002	J		-			<0.01	:	
Methylene chloride	mg/kg-dry	T	-			<0.011	:		-			<0.01	:	
Styrene	mg/kg-dry	T	-			<0.011	:		-			<0.01	:	
Tetrachloroethene	mg/kg-dry	T	-			<0.011	:		-			<0.01	:	
Toluene	mg/kg-dry	T	-			<0.011	:		-			<0.01	:	
Total Xylene	mg/kg-dry	T	-			0.026	J		-			0.002	J	
trans-1,2-Dichloroethene	mg/kg-dry	T	-			<0.011	:		-			<0.01	:	
trans-1,3-Dichloropropene	mg/kg-dry	T	-			<0.011	:		-			<0.01	:	
Trichloroethene	mg/kg-dry	T	-			<0.011	:		-			<0.01	:	
Trichlorofluoromethane	mg/kg-dry	T	-			<0.011	:		-			<0.01	:	
Vinyl chloride	mg/kg-dry	T	-			<0.011	:		-			<0.01	:	
Semi-Volatile Organics														
1,1`-Biphenyl	mg/kg-dry	T	-			0.13	J		<0.36	:		-		
2,4,5-Trichlorophenol	mg/kg-dry	T	-			<0.84	:		<0.91	:		-		
2,4,6-Trichlorophenol	mg/kg-dry	T	-			<0.34	:		<0.36	:		-		
2,4-Dichlorophenol	mg/kg-dry	T	-			<0.34	:		<0.36	:		-		
2,4-Dimethylphenol	mg/kg-dry	T	-			<0.34	:		<0.36	:		-		
2,4-Dinitrophenol	mg/kg-dry	T	-			<0.84	:		<0.91	J		-		
2,4-Dinitrotoluene	mg/kg-dry	T	-			<0.34	:		<0.36	:		-		
2,6-Dinitrotoluene	mg/kg-dry	T	-			<0.34	:		<0.36	:		-		
2-Chloronaphthalene	mg/kg-dry	T	-			<0.34	:		<0.36	:		-		
2-Chlorophenol	mg/kg-dry	T	-			<0.34	:		<0.36	:		-		
2-Methylnaphthalene	mg/kg-dry	T	-			1.1	:		<0.36	:		-		
2-Methylphenol	mg/kg-dry	T	-			<0.34	:		<0.36	:		-		
2-Nitroaniline	mg/kg-dry	T	-			<0.84	:		<0.91	:		-		

Parameter	Units	Exposure Area Fraction	Site ID / Sample Date / Sample ID											
			MSS1-113	2/9/2003	MSS1-13-T02N-SOL	MSS1-113	4/8/2003	MSS1-113R-T02N-SOL						
			SS1			SS1								
Carbon tetrachloride	mg/kg-dry	T	-			<0.018	:							
Chlorobenzene	mg/kg-dry	T	-			<0.018	:							
Chloroethane	mg/kg-dry	T	-			<0.018	:							
Chloroform	mg/kg-dry	T	-			<0.018	:							
Chloromethane	mg/kg-dry	T	-			<0.018	:							
cis-1,2-Dichloroethene	mg/kg-dry	T	-			<0.018	:							
cis-1,3-Dichloropropene	mg/kg-dry	T	-			<0.018	:							
Dibromochloromethane	mg/kg-dry	T	-			<0.018	:							
Dichlorodifluoromethane	mg/kg-dry	T	-			<0.018	:							
Ethylbenzene	mg/kg-dry	T	-			<0.018	:							
Methylene chloride	mg/kg-dry	T	-			<0.018	:							
Styrene	mg/kg-dry	T	-			<0.018	:							
Tetrachloroethene	mg/kg-dry	T	-			<0.018	:							
Toluene	mg/kg-dry	T	-			<0.018	:							
Total Xylene	mg/kg-dry	T	-			<0.018	:							
trans-1,2-Dichloroethene	mg/kg-dry	T	-			<0.018	:							
trans-1,3-Dichloropropene	mg/kg-dry	T	-			<0.018	:							
Trichloroethene	mg/kg-dry	T	-			<0.018	:							
Trichlorofluoromethane	mg/kg-dry	T	-			<0.018	:							
Vinyl chloride	mg/kg-dry	T	-			<0.018	:							
Semi-Volatile Organics														
1,1`-Biphenyl	mg/kg-dry	T	-			-								
2,4,5-Trichlorophenol	mg/kg-dry	T	-			-								
2,4,6-Trichlorophenol	mg/kg-dry	T	-			-								
2,4-Dichlorophenol	mg/kg-dry	T	-			-								
2,4-Dimethylphenol	mg/kg-dry	T	-			-								
2,4-Dinitrophenol	mg/kg-dry	T	-			-								
2,4-Dinitrotoluene	mg/kg-dry	T	-			-								
2,6-Dinitrotoluene	mg/kg-dry	T	-			-								
2-Chloronaphthalene	mg/kg-dry	T	-			-								
2-Chlorophenol	mg/kg-dry	T	-			-								
2-Methylnaphthalene	mg/kg-dry	T	-			-								
2-Methylphenol	mg/kg-dry	T	-			-								
2-Nitroaniline	mg/kg-dry	T	-			-								

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T = Total Fraction

Appendix A-7e
Soil - Biased 0-24 inches
Validated Analytical Results

Parameter	Units	Exposure Area Fraction	Site ID / Sample Date / Sample ID											
			MSS1-110	1/19/2003	MSS1-110-T02N-SOL RE	MSS1-110	1/19/2003	MSS1-110-T02N-SOL	MSS1-112	2/9/2003	MSS1-12-T02N-SOL	MSS1-112	4/8/2003	MSS1-112R-T02N-SOL
			SS1			SS1			SS1			SS1		
2-Nitrophenol	mg/kg-dry	T	-			<0.34		:	<0.36		:	-		
3,3-Dichlorobenzidine	mg/kg-dry	T	-			<0.34		:	<0.36		:	-		
3-Nitroaniline	mg/kg-dry	T	-			<0.84	J	:	<0.91		:	-		
4,6-Dinitro-2-methylphenol	mg/kg-dry	T	-			<0.84		:	<0.91		:	-		
4-Bromophenyl phenyl ether	mg/kg-dry	T	-			<0.34		:	<0.36		:	-		
4-Chloro-3-methylphenol	mg/kg-dry	T	-			<0.34		:	<0.36		:	-		
4-Chloroaniline	mg/kg-dry	T	-			<0.34		:	<0.36		:	-		
4-Chlorophenyl phenyl ether	mg/kg-dry	T	-			<0.34		:	<0.36		:	-		
4-Methylphenol	mg/kg-dry	T	-			<0.34		:	<0.36		:	-		
4-Nitroaniline	mg/kg-dry	T	-			<0.84		:	<0.91	J		-		
4-Nitrophenol	mg/kg-dry	T	-			<0.84		:	<0.91		:	-		
Acenaphthene	mg/kg-dry	T	-			<0.34		:	<0.36		:	-		
Acenaphthylene	mg/kg-dry	T	-			<0.34		:	<0.36		:	-		
Anthracene	mg/kg-dry	T	-			<0.34		:	<0.36		:	-		
Benzaldehyde	mg/kg-dry	T	-			<0.34		:	<0.36		:	-		
Benzo(a)anthracene	mg/kg-dry	T	-			<0.34		:	<0.36		:	-		
Benzo(a)pyrene	mg/kg-dry	T	-			<0.34		:	<0.36		:	-		
Benzo(b)fluoranthene	mg/kg-dry	T	-			<0.34		:	<0.36		:	-		
Benzo(g,h,i)perylene	mg/kg-dry	T	-			<0.34		:	<0.36		:	-		
Benzo(k)fluoranthene	mg/kg-dry	T	-			<0.34		:	<0.36		:	-		
Bis(2-chloroethoxy)methane	mg/kg-dry	T	-			<0.34		:	<0.36		:	-		
Bis(2-chloroethyl)ether	mg/kg-dry	T	-			<0.34		:	<0.36		:	-		
Bis(2-ethylhexyl)phthalate	mg/kg-dry	T	-			<0.34		:	<0.36		:	-		
Butyl benzyl phthalate	mg/kg-dry	T	-			<0.34		:	<0.36		:	-		
Carbazole	mg/kg-dry	T	-			<0.34		:	<0.36		:	-		
Chrysene	mg/kg-dry	T	-			<0.34		:	<0.36		:	-		
Dibenz(a,h)anthracene	mg/kg-dry	T	-			<0.34		:	<0.36		:	-		
Dibenzofuran	mg/kg-dry	T	-			0.08	J		<0.36		:	-		
Dichlorodiisopropyl ether	mg/kg-dry	T	-			<0.34		:	<0.36		:	-		
Diethylphthalate	mg/kg-dry	T	-			<0.34		:	<0.36		:	-		
Dimethylphthalate	mg/kg-dry	T	-			<0.34		:	<0.36		:	-		
Di-n-Butyl phthalate	mg/kg-dry	T	-			<0.34		:	<0.36		:	-		
Di-n-Octyl phthalate	mg/kg-dry	T	-			<0.34		:	<0.36		:	-		
Fluoranthene	mg/kg-dry	T	-			<0.34		:	<0.36		:	-		

Parameter	Units	Exposure Area Fraction	Site ID / Sample Date / Sample ID											
			MSS1-113	2/9/2003	MSS1-13-T02N-SOL	MSS1-113	4/8/2003	MSS1-113R-T02N-SOL						
			SS1			SS1								
2-Nitrophenol	mg/kg-dry	T	<0.36		:	-								
3,3-Dichlorobenzidine	mg/kg-dry	T	<0.36		:	-								
3-Nitroaniline	mg/kg-dry	T	<0.91		:	-								
4,6-Dinitro-2-methylphenol	mg/kg-dry	T	<0.91		:	-								
4-Bromophenyl phenyl ether	mg/kg-dry	T	<0.36		:	-								
4-Chloro-3-methylphenol	mg/kg-dry	T	<0.36		:	-								
4-Chloroaniline	mg/kg-dry	T	<0.36		:	-								
4-Chlorophenyl phenyl ether	mg/kg-dry	T	<0.36		:	-								
4-Methylphenol	mg/kg-dry	T	<0.36		:	-								
4-Nitroaniline	mg/kg-dry	T	<0.91	J		-								
4-Nitrophenol	mg/kg-dry	T	<0.91		:	-								
Acenaphthene	mg/kg-dry	T	<0.36		:	-								
Acenaphthylene	mg/kg-dry	T	<0.36		:	-								
Anthracene	mg/kg-dry	T	<0.36		:	-								
Benzaldehyde	mg/kg-dry	T	<0.36		:	-								
Benzo(a)anthracene	mg/kg-dry	T	<0.36		:	-								
Benzo(a)pyrene	mg/kg-dry	T	<0.36		:	-								
Benzo(b)fluoranthene	mg/kg-dry	T	<0.36		:	-								
Benzo(g,h,i)perylene	mg/kg-dry	T	<0.36		:	-								
Benzo(k)fluoranthene	mg/kg-dry	T	<0.36		:	-								
Bis(2-chloroethoxy)methane	mg/kg-dry	T	<0.36		:	-								
Bis(2-chloroethyl)ether	mg/kg-dry	T	<0.36		:	-								
Bis(2-ethylhexyl)phthalate	mg/kg-dry	T	<0.36		:	-								
Butyl benzyl phthalate	mg/kg-dry	T	<0.36		:	-								
Carbazole	mg/kg-dry	T	<0.36		:	-								
Chrysene	mg/kg-dry	T	<0.36		:	-								
Dibenz(a,h)anthracene	mg/kg-dry	T	<0.36		:	-								
Dibenzofuran	mg/kg-dry	T	<0.36		:	-								
Dichlorodiisopropyl ether	mg/kg-dry	T	<0.36		:	-								
Diethylphthalate	mg/kg-dry	T	<0.36		:	-								
Dimethylphthalate	mg/kg-dry	T	<0.36		:	-								
Di-n-Butyl phthalate	mg/kg-dry	T	<0.36		:	-								
Di-n-Octyl phthalate	mg/kg-dry	T	<0.36		:	-								
Fluoranthene	mg/kg-dry	T	<0.36		:	-								

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Appendix A-7e
Soil - Biased 0-24 inches
Validated Analytical Results

Parameter	Units	Exposure Area Fraction	Site ID / Sample Date / Sample ID											
			MSS1-110 1/19/2003 MSS1-110-T02N-SOL RE SS1		MSS1-110 1/19/2003 MSS1-110-T02N-SOL SS1		MSS1-112 2/9/2003 MSS1-12-T02N-SOL SS1		MSS1-112 4/8/2003 MSS1-112R-T02N-SOL SS1		MSS1-113 2/9/2003 MSS1-13-T02N-SOL SS1		MSS1-113 4/8/2003 MSS1-113R-T02N-SOL SS1	
Fluorene	mg/kg-dry	T	-		0.15	J	<0.36	:	-		<0.36	:	-	
Hexachlorobenzene	mg/kg-dry	T	-		<0.34	:	<0.36	:	-		<0.36	:	-	
Hexachlorobutadiene	mg/kg-dry	T	-		<0.34	:	<0.36	:	-		<0.36	:	-	
Hexachlorocyclopentadiene	mg/kg-dry	T	-		<0.34	:	<0.36	:	-		<0.36	:	-	
Hexachloroethane	mg/kg-dry	T	-		<0.34	:	<0.36	:	-		<0.36	:	-	
Indeno(1,2,3-cd)pyrene	mg/kg-dry	T	-		<0.34	:	<0.36	:	-		<0.36	:	-	
Isophorone	mg/kg-dry	T	-		<0.34	:	<0.36	:	-		<0.36	:	-	
Naphthalene	mg/kg-dry	T	-		0.13	J	<0.36	:	-		<0.36	:	-	
Nitrobenzene	mg/kg-dry	T	-		<0.34	:	<0.36	:	-		<0.36	:	-	
N-Nitrosodi-n-propylamine	mg/kg-dry	T	-		<0.34	:	<0.36	:	-		<0.36	:	-	
N-Nitrosodiphenylamine	mg/kg-dry	T	-		<0.34	:	<0.36	:	-		<0.36	:	-	
Pentachlorophenol	mg/kg-dry	T	-		<0.84	:	<0.91	:	-		<0.91	:	-	
Phenanthrene	mg/kg-dry	T	-		0.27	J	<0.36	:	-		<0.36	:	-	
Phenol	mg/kg-dry	T	-		<0.34	:	<0.36	:	-		<0.36	:	-	
Pyrene	mg/kg-dry	T	-		0.11	J	<0.36	:	-		<0.36	:	-	
Pesticides-PCBs														
Aroclor 1016	mg/kg-dry	T	-		<0.034	J	<0.036	:	-		<0.036	:	-	
Aroclor 1221	mg/kg-dry	T	-		<0.068	J	<0.074	:	-		<0.074	:	-	
Aroclor 1232	mg/kg-dry	T	-		<0.034	J	<0.036	:	-		<0.036	:	-	
Aroclor 1242	mg/kg-dry	T	-		<0.034	J	<0.036	:	-		<0.036	:	-	
Aroclor 1248	mg/kg-dry	T	0.26	J	-		<0.036	:	-		0.019	J	-	
Aroclor 1254	mg/kg-dry	T	0.24	J	-		0.056	J	-		0.084	:	-	
Aroclor 1260	mg/kg-dry	T	-		<0.034	J	<0.036	:	-		<0.036	:	-	

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Appendix A-7e
Soil - Biased 0-24 inches
Validated Analytical Results

Parameter	Units	Exposure Area Fraction	Site ID / Sample Date / Sample ID																					
			MSS1-12		10/16/2002		MSS1-12-T02N-SOL		MSS1-13		10/16/2002		MSS1-13-T02N-SOL		MSS1-14		10/16/2002		MSS1-14-T02N-SOL		MSS1-15		10/17/2002		MSS1-15-T02N-SOLRE
			SS1						SS1						SS1						SS1			
General Chemistry																								
Ammonia	mg/kg-dry	T	33.3	:					24.4	:					21.2	:					-			
Chloride	mg/kg-dry	T	14.	J					4.3	J					12.2	J					-			
Fluoride	mg/kg-dry	T	1.1	J					0.55	J					0.96	J					-			
Nitrate	mg/kg-dry	T	5.7	J					3.3	J					<2.1	J					-			
Phosphorus	mg/kg-dry	T	717.	J					666.	J					595.	J					-			
Sulfate	mg/kg-dry	T	150.	J					27.6	J					733.	J					-			
Total Kjeldahl Nitrogen	mg/kg-dry	T	208.	:					282.	:					215.	:					-			
Total Organic Carbon	mg/kg-dry	T	5210.	J					5920.	J					35700.	J					-			
Laboratory Parameters																								
pH	SU	T	7.7	:					7.9	:					7.2	:					-			
Solids, Percent	%	T	94.3	:					92.1	:					95.8	:					-			
Specific Conductance	umhos/cm	T	177.	:					70.	:					357.	:					-			
Geotechnical																								
Organic Soils	%	T	2.08	J					2.54	J					2.64	J					-			
Physical Properties																								
Cation-Exchange Capacity	meq/100g	T	10.9	:					14.	:					8.1	:					-			
Sodium Absorption Ratio	ratio	T	0.62	:					0.17	:					0.43	:					-			
Metals																								
Aluminum	mg/kg-dry	T	10600.	:					11300.	:					8320.	:					-			
Antimony	mg/kg-dry	T	<0.25	J					<0.27	J					<0.26	J					-			
Arsenic	mg/kg-dry	T	4.8	:					6.4	:					4.3	:					-			
Barium	mg/kg-dry	T	103.	:					158.	:					93.2	:					-			
Beryllium	mg/kg-dry	T	0.84	:					0.79	:					0.94	:					-			
Boron	mg/kg-dry	T	<0.2	J					1.5	J					<1.2	J					-			
Cadmium	mg/kg-dry	T	0.65	:					0.76	:					1.8	:					-			
Calcium	mg/kg-dry	T	6820.	:					7100.	:					8180.	:					-			
Chromium	mg/kg-dry	T	34.7	:					31.9	:					30.4	:					-			
Cobalt	mg/kg-dry	T	8.9	:					8.6	:					4.2	:					-			
Copper	mg/kg-dry	T	68.8	:					56.	:					80.9	:					-			
Iron	mg/kg-dry	T	21900.	:					19100.	:					14100.	:					-			
Lead	mg/kg-dry	T	102.	:					85.5	:					127.	:					-			
Magnesium	mg/kg-dry	T	6340.	:					5700.	:					4040.	:					-			
Manganese	mg/kg-dry	T	528.	J					574.	J					512.	J					-			

Parameter	Units	Exposure Area Fraction	Site ID / Sample Date / Sample ID																					
			MSS1-15		10/17/2002		MSS1-15-T02N-SOL		MSS1-15		10/24/2002		MSS1-15-T02N-SOL											
			SS1						SS1															
General Chemistry																								
Ammonia	mg/kg-dry	T	56.8	J					-															
Chloride	mg/kg-dry	T	45.1	J					-															
Fluoride	mg/kg-dry	T	1.8	J					-															
Nitrate	mg/kg-dry	T	31.9	J					-															
Phosphorus	mg/kg-dry	T	992.	J					-															
Sulfate	mg/kg-dry	T	802.	J					-															
Total Kjeldahl Nitrogen	mg/kg-dry	T	721.	:					-															
Total Organic Carbon	mg/kg-dry	T	20200.	J					-															
Laboratory Parameters																								
pH	SU	T	6.7	:					-															
Solids, Percent	%	T	89.3	:					88.6	:														
Specific Conductance	umhos/cm	T	899.	:					-															
Geotechnical																								
Organic Soils	%	T	4.34	J					-															
Physical Properties																								
Cation-Exchange Capacity	meq/100g	T	26.6	:					-															
Sodium Absorption Ratio	ratio	T	1.88	:					-															
Metals																								
Aluminum	mg/kg-dry	T	9850.	:					-															
Antimony	mg/kg-dry	T	<0.26	J					-															
Arsenic	mg/kg-dry	T	5.3	:					-															
Barium	mg/kg-dry	T	159.	:					-															
Beryllium	mg/kg-dry	T	1.5	:					-															
Boron	mg/kg-dry	T	1.7	J					-															
Cadmium	mg/kg-dry	T	1.4	:					-															
Calcium	mg/kg-dry	T	11000.	:					-															
Chromium	mg/kg-dry	T	32.6	:					-															
Cobalt	mg/kg-dry	T	9.2	:					-															
Copper	mg/kg-dry	T	99.4	:					-															
Iron	mg/kg-dry	T	20600.	:					-															
Lead	mg/kg-dry	T	156.	:					-															
Magnesium	mg/kg-dry	T	5750.	:					-															
Manganese	mg/kg-dry	T	686.	J					-															

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T = Total Fraction

Appendix A-7e
Soil - Biased 0-24 inches
Validated Analytical Results

Parameter	Units	Fraction	MSS1-12	MSS1-13	MSS1-14	MSS1-15	MSS1-15	MSS1-15
Site ID			MSS1-12	MSS1-13	MSS1-14	MSS1-15	MSS1-15	MSS1-15
Sample Date			10/16/2002	10/16/2002	10/16/2002	10/17/2002	10/17/2002	10/24/2002
Sample ID			MSS1-12-T02N-SOL	MSS1-13-T02N-SOL	MSS1-14-T02N-SOL	MSS1-15-T02N-SOLRE	MSS1-15-T02N-SOL	MSS1-15-T02N-SOL
Exposure Area			SS1	SS1	SS1	SS1	SS1	SS1
Mercury	mg/kg-dry	T	<0.017 :	<0.018 :	<0.016 :	-	0.41 :	-
Molybdenum	mg/kg-dry	T	622. :	385. :	2710. :	-	1280. :	-
Nickel	mg/kg-dry	T	23.5 J	21.4 J	16.1 J	-	23.1 J	-
Potassium	mg/kg-dry	T	2330. J	2200. J	2230. J	-	2560. J	-
Selenium	mg/kg-dry	T	<0.68 J	<0.72 J	1. J	-	<0.68 :	-
Silver	mg/kg-dry	T	0.59 :	0.29 :	0.85 :	-	0.72 :	-
Sodium	mg/kg-dry	T	<152. :	<141. :	<182. :	-	313. :	-
Thallium	mg/kg-dry	T	0.21 :	0.19 :	0.3 :	-	0.25 :	-
Vanadium	mg/kg-dry	T	37.9 :	36.3 :	40.5 :	-	38.6 :	-
Zinc	mg/kg-dry	T	143. J	150. J	253. J	-	244. :	-
Volatile Organics								
1,1,1-Trichloroethane	mg/kg-dry	T	<0.007 :	<0.009 :	<0.009 :	-	-	<0.006 :
1,1,2,2-Tetrachloroethane	mg/kg-dry	T	<0.007 :	<0.009 :	<0.009 :	-	-	<0.006 :
1,1,2-Trichloro-1,2,2-trifluoroethane	mg/kg-dry	T	<0.007 :	<0.009 :	<0.009 :	-	-	<0.006 :
1,1,2-Trichloroethane	mg/kg-dry	T	<0.007 :	<0.009 :	<0.009 :	-	-	<0.006 :
1,1-Dichloroethane	mg/kg-dry	T	<0.007 :	<0.009 :	<0.009 :	-	-	<0.006 :
1,1-Dichloroethene	mg/kg-dry	T	<0.007 :	<0.009 :	<0.009 :	-	-	<0.006 :
1,2,4-Trichlorobenzene	mg/kg-dry	T	<0.007 :	<0.009 :	<0.009 :	-	-	<0.006 :
1,2-Dibromo-3-chloropropane	mg/kg-dry	T	<0.007 :	<0.009 :	<0.009 :	-	-	<0.006 :
1,2-Dichlorobenzene	mg/kg-dry	T	<0.007 :	<0.009 :	<0.009 :	-	-	<0.006 :
1,2-Dichloroethane	mg/kg-dry	T	<0.007 :	<0.009 :	<0.009 :	-	-	<0.006 :
1,2-Dichloroethene (total)	mg/kg-dry	T	<0.007 :	<0.009 :	<0.009 :	-	-	<0.006 :
1,2-Dichloropropane	mg/kg-dry	T	<0.007 :	<0.009 :	<0.009 :	-	-	<0.006 :
1,3-Dichlorobenzene	mg/kg-dry	T	<0.007 :	<0.009 :	<0.009 :	-	-	<0.006 :
1,4-Dichlorobenzene	mg/kg-dry	T	<0.007 :	<0.009 :	<0.009 :	-	-	<0.006 :
2-Butanone	mg/kg-dry	T	<0.007 :	<0.009 :	<0.009 :	-	-	<0.006 J
2-Hexanone	mg/kg-dry	T	<0.007 :	<0.009 :	<0.009 :	-	-	<0.006 J
4-Methyl-2-pentanone	mg/kg-dry	T	<0.007 :	<0.009 :	<0.009 :	-	-	<0.006 J
Acetone	mg/kg-dry	T	0.002 J	<0.009 :	0.002 J	-	-	<0.006 :
Benzene	mg/kg-dry	T	<0.007 :	<0.009 :	<0.009 :	-	-	<0.006 :
Bromodichloromethane	mg/kg-dry	T	<0.007 :	<0.009 :	<0.009 :	-	-	<0.006 :
Bromoform	mg/kg-dry	T	<0.007 :	<0.009 :	<0.009 :	-	-	<0.006 :
Bromomethane	mg/kg-dry	T	<0.007 :	<0.009 :	<0.009 :	-	-	<0.006 :
Carbon disulfide	mg/kg-dry	T	<0.007 :	<0.009 :	<0.009 :	-	-	<0.006 :

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Appendix A-7e
Soil - Biased 0-24 inches
Validated Analytical Results

Parameter	Units	Exposure Area Fraction	Site ID / Sample Date / Sample ID					
			MSS1-12 10/16/2002 MSS1-12-T02N-SOL	MSS1-13 10/16/2002 MSS1-13-T02N-SOL	MSS1-14 10/16/2002 MSS1-14-T02N-SOL	MSS1-15 10/17/2002 MSS1-15-T02N-SOLRE	MSS1-15 10/17/2002 MSS1-15-T02N-SOL	MSS1-15 10/24/2002 MSS1-15-T02N-SOL
			SS1	SS1	SS1	SS1	SS1	SS1
Carbon tetrachloride	mg/kg-dry	T	<0.007 :	<0.009 :	<0.009 :	-	-	<0.006 :
Chlorobenzene	mg/kg-dry	T	<0.007 :	<0.009 :	<0.009 :	-	-	<0.006 :
Chloroethane	mg/kg-dry	T	<0.007 :	<0.009 :	<0.009 :	-	-	<0.006 :
Chloroform	mg/kg-dry	T	<0.007 :	<0.009 :	<0.009 :	-	-	<0.006 :
Chloromethane	mg/kg-dry	T	<0.007 :	<0.009 :	<0.009 :	-	-	<0.006 :
cis-1,2-Dichloroethene	mg/kg-dry	T	<0.007 :	<0.009 :	<0.009 :	-	-	<0.006 :
cis-1,3-Dichloropropene	mg/kg-dry	T	<0.007 :	<0.009 :	<0.009 :	-	-	<0.006 :
Dibromochloromethane	mg/kg-dry	T	<0.007 :	<0.009 :	<0.009 :	-	-	<0.006 :
Dichlorodifluoromethane	mg/kg-dry	T	<0.007 :	<0.009 :	<0.009 :	-	-	<0.006 :
Ethylbenzene	mg/kg-dry	T	<0.007 :	<0.009 :	<0.009 :	-	-	<0.006 :
Methylene chloride	mg/kg-dry	T	<0.007 :	<0.009 :	<0.009 :	-	-	<0.006 :
Styrene	mg/kg-dry	T	<0.007 :	<0.009 :	<0.009 :	-	-	<0.006 :
Tetrachloroethene	mg/kg-dry	T	<0.007 :	<0.009 :	<0.009 :	-	-	<0.006 :
Toluene	mg/kg-dry	T	0.001 J	0.0009 J	<0.009 :	-	-	<0.006 :
Total Xylene	mg/kg-dry	T	<0.007 :	<0.009 :	<0.009 :	-	-	0.001 J
trans-1,2-Dichloroethene	mg/kg-dry	T	<0.007 :	<0.009 :	<0.009 :	-	-	<0.006 :
trans-1,3-Dichloropropene	mg/kg-dry	T	<0.007 :	<0.009 :	<0.009 :	-	-	<0.006 :
Trichloroethene	mg/kg-dry	T	<0.007 :	<0.009 :	<0.009 :	-	-	<0.006 :
Trichlorofluoromethane	mg/kg-dry	T	<0.007 :	<0.009 :	<0.009 :	-	-	<0.006 :
Vinyl chloride	mg/kg-dry	T	<0.007 :	<0.009 :	<0.009 :	-	-	<0.006 :
Semi-Volatile Organics								
1,1`-Biphenyl	mg/kg-dry	T	<0.35 :	<0.36 :	<0.69 :	<0.74 :	-	-
2,4,5-Trichlorophenol	mg/kg-dry	T	<0.88 :	<0.9 :	<1.7 :	<1.9 :	-	-
2,4,6-Trichlorophenol	mg/kg-dry	T	<0.35 :	<0.36 :	<0.69 :	<0.74 :	-	-
2,4-Dichlorophenol	mg/kg-dry	T	<0.35 :	<0.36 :	<0.69 :	<0.74 :	-	-
2,4-Dimethylphenol	mg/kg-dry	T	<0.35 :	<0.36 :	<0.69 :	<0.74 :	-	-
2,4-Dinitrophenol	mg/kg-dry	T	<0.88 :	<0.9 :	<1.7 :	<1.9 :	-	-
2,4-Dinitrotoluene	mg/kg-dry	T	<0.35 :	<0.36 :	<0.69 :	<0.74 :	-	-
2,6-Dinitrotoluene	mg/kg-dry	T	<0.35 :	<0.36 :	<0.69 :	<0.74 :	-	-
2-Chloronaphthalene	mg/kg-dry	T	<0.35 :	<0.36 :	<0.69 :	<0.74 :	-	-
2-Chlorophenol	mg/kg-dry	T	<0.35 :	<0.36 :	<0.69 :	<0.74 :	-	-
2-Methylnaphthalene	mg/kg-dry	T	<0.35 :	<0.36 :	<0.69 :	<0.74 :	-	-
2-Methylphenol	mg/kg-dry	T	<0.35 :	<0.36 :	<0.69 :	<0.74 :	-	-
2-Nitroaniline	mg/kg-dry	T	<0.88 :	<0.9 :	<1.7 :	<1.9 :	-	-

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Appendix A-7e
Soil - Biased 0-24 inches
Validated Analytical Results

Parameter	Units	Exposure Area Fraction	Site ID / Sample Date / Sample ID					
			MSS1-12 10/16/2002 MSS1-12-T02N-SOL	MSS1-13 10/16/2002 MSS1-13-T02N-SOL	MSS1-14 10/16/2002 MSS1-14-T02N-SOL	MSS1-15 10/17/2002 MSS1-15-T02N-SOLRE	MSS1-15 10/17/2002 MSS1-15-T02N-SOL	MSS1-15 10/24/2002 MSS1-15-T02N-SOL
			SS1	SS1	SS1	SS1	SS1	SS1
2-Nitrophenol	mg/kg-dry	T	<0.35 :	<0.36 :	<0.69 :	<0.74 :	-	-
3,3-Dichlorobenzidine	mg/kg-dry	T	<0.35 :	<0.36 :	<0.69 :	<0.74 J	-	-
3-Nitroaniline	mg/kg-dry	T	<0.88 :	<0.9 :	<1.7 :	<1.9 :	-	-
4,6-Dinitro-2-methylphenol	mg/kg-dry	T	<0.88 :	<0.9 :	<1.7 :	<1.9 :	-	-
4-Bromophenyl phenyl ether	mg/kg-dry	T	<0.35 :	<0.36 :	<0.69 :	<0.74 :	-	-
4-Chloro-3-methylphenol	mg/kg-dry	T	<0.35 :	<0.36 :	<0.69 :	<0.74 :	-	-
4-Chloroaniline	mg/kg-dry	T	<0.35 :	<0.36 :	<0.69 :	<0.74 :	-	-
4-Chlorophenyl phenyl ether	mg/kg-dry	T	<0.35 :	<0.36 :	<0.69 :	<0.74 :	-	-
4-Methylphenol	mg/kg-dry	T	<0.35 :	<0.36 :	<0.69 :	<0.74 :	-	-
4-Nitroaniline	mg/kg-dry	T	<0.88 :	<0.9 :	<1.7 :	<1.9 :	-	-
4-Nitrophenol	mg/kg-dry	T	<0.88 :	<0.9 :	<1.7 :	<1.9 :	-	-
Acenaphthene	mg/kg-dry	T	<0.35 :	<0.36 :	<0.69 :	<0.74 :	-	-
Acenaphthylene	mg/kg-dry	T	<0.35 :	<0.36 :	<0.69 :	<0.74 :	-	-
Anthracene	mg/kg-dry	T	<0.35 J	<0.36 J	<0.69 J	0.067 J	-	-
Benzaldehyde	mg/kg-dry	T	<0.35 J	<0.36 J	<0.69 J	4.5 :	-	-
Benzo(a)anthracene	mg/kg-dry	T	<0.35 :	0.071 J	<0.69 :	1.2 :	-	-
Benzo(a)pyrene	mg/kg-dry	T	<0.35 :	0.062 J	<0.69 :	0.98 :	-	-
Benzo(b)fluoranthene	mg/kg-dry	T	<0.35 :	0.086 J	<0.69 :	1. :	-	-
Benzo(g,h,i)perylene	mg/kg-dry	T	<0.35 :	0.036 J	<0.69 :	0.52 J	-	-
Benzo(k)fluoranthene	mg/kg-dry	T	<0.35 J	0.081 J	<0.69 J	1.1 :	-	-
Bis(2-chloroethoxy)methane	mg/kg-dry	T	<0.35 :	<0.36 :	<0.69 :	<0.74 :	-	-
Bis(2-chloroethyl)ether	mg/kg-dry	T	<0.35 :	<0.36 :	<0.69 :	<0.74 :	-	-
Bis(2-ethylhexyl)phthalate	mg/kg-dry	T	0.063 J	0.083 J	0.73 :	0.26 J	-	-
Butyl benzyl phthalate	mg/kg-dry	T	<0.35 :	0.1 J	<0.69 :	<0.74 J	-	-
Carbazole	mg/kg-dry	T	<0.35 :	<0.36 :	<0.69 :	0.058 J	-	-
Chrysene	mg/kg-dry	T	<0.35 :	0.1 J	<0.69 :	1.6 :	-	-
Dibenz(a,h)anthracene	mg/kg-dry	T	<0.35 :	<0.36 :	<0.69 :	0.17 J	-	-
Dibenzofuran	mg/kg-dry	T	<0.35 :	<0.36 :	<0.69 :	<0.74 :	-	-
Dichlorodiisopropyl ether	mg/kg-dry	T	<0.35 :	<0.36 :	<0.69 :	<0.74 :	-	-
Diethylphthalate	mg/kg-dry	T	<0.35 :	<0.36 :	<0.69 :	<0.74 :	-	-
Dimethylphthalate	mg/kg-dry	T	<0.35 :	<0.36 :	<0.69 :	<0.74 :	-	-
Di-n-Butyl phthalate	mg/kg-dry	T	<0.35 :	0.017 J	<0.69 :	<0.74 :	-	-
Di-n-Octyl phthalate	mg/kg-dry	T	<0.35 :	<0.36 :	<0.69 :	<0.74 :	-	-
Fluoranthene	mg/kg-dry	T	<0.35 :	0.092 J	<0.69 :	1.2 :	-	-

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Appendix A-7e
Soil - Biased 0-24 inches
Validated Analytical Results

Parameter	Units	Exposure Area Fraction	Site ID / Sample Date / Sample ID											
			MSS1-12	10/16/2002	MSS1-12-T02N-SOL	MSS1-13	10/16/2002	MSS1-13-T02N-SOL	MSS1-14	10/16/2002	MSS1-14-T02N-SOL	MSS1-15	10/17/2002	MSS1-15-T02N-SOLRE
			SS1			SS1			SS1			SS1		
Fluorene	mg/kg-dry	T	<0.35	:		<0.36	:		<0.69	:		<0.74	:	
Hexachlorobenzene	mg/kg-dry	T	<0.35	:		<0.36	:		<0.69	:		<0.74	:	
Hexachlorobutadiene	mg/kg-dry	T	<0.35	:		<0.36	:		<0.69	:		<0.74	:	
Hexachlorocyclopentadiene	mg/kg-dry	T	<0.35	:		<0.36	:		<0.69	:		<0.74	:	
Hexachloroethane	mg/kg-dry	T	<0.35	:		<0.36	:		<0.69	:		<0.74	:	
Indeno(1,2,3-cd)pyrene	mg/kg-dry	T	<0.35	:		0.032	J		<0.69	:		0.54	J	
Isophorone	mg/kg-dry	T	<0.35	:		<0.36	:		<0.69	:		<0.74	:	
Naphthalene	mg/kg-dry	T	<0.35	:		<0.36	:		<0.69	:		<0.74	:	
Nitrobenzene	mg/kg-dry	T	<0.35	:		<0.36	:		<0.69	:		<0.74	:	
N-Nitrosodi-n-propylamine	mg/kg-dry	T	<0.35	:		<0.36	:		<0.69	:		<0.74	:	
N-Nitrosodiphenylamine	mg/kg-dry	T	<0.35	:		<0.36	:		<0.69	:		<0.74	:	
Pentachlorophenol	mg/kg-dry	T	<0.88	J		<0.9	J		<1.7	J		<1.9	:	
Phenanthrene	mg/kg-dry	T	<0.35	:		<0.36	:		<0.69	:		0.19	J	
Phenol	mg/kg-dry	T	<0.35	:		<0.36	:		<0.69	:		<0.74	:	
Pyrene	mg/kg-dry	T	<0.35	:		0.1	J		0.076	J		1.5	:	
Pesticides-PCBs														
Aroclor 1016	mg/kg-dry	T	<0.035	:		<0.036	:		<0.034	J		-		
Aroclor 1221	mg/kg-dry	T	<0.071	:		<0.073	:		<0.07	J		-		
Aroclor 1232	mg/kg-dry	T	<0.035	:		<0.036	:		<0.034	J		-		
Aroclor 1242	mg/kg-dry	T	<0.035	:		<0.036	:		<0.034	J		-		
Aroclor 1248	mg/kg-dry	T	<0.035	:		<0.036	:		<0.034	J		-		
Aroclor 1254	mg/kg-dry	T	0.07	:		0.057	:		0.04	J		-		
Aroclor 1260	mg/kg-dry	T	<0.035	:		<0.036	:		<0.034	J		-		

Parameter	Units	Exposure Area Fraction	Site ID / Sample Date / Sample ID											
			MSS1-15	10/17/2002	MSS1-15-T02N-SOL	MSS1-15	10/24/2002	MSS1-15-T02N-SOL						
			SS1			SS1								
Fluorene	mg/kg-dry	T	-			-								
Hexachlorobenzene	mg/kg-dry	T	-			-								
Hexachlorobutadiene	mg/kg-dry	T	-			-								
Hexachlorocyclopentadiene	mg/kg-dry	T	-			-								
Hexachloroethane	mg/kg-dry	T	-			-								
Indeno(1,2,3-cd)pyrene	mg/kg-dry	T	-			-								
Isophorone	mg/kg-dry	T	-			-								
Naphthalene	mg/kg-dry	T	-			-								
Nitrobenzene	mg/kg-dry	T	-			-								
N-Nitrosodi-n-propylamine	mg/kg-dry	T	-			-								
N-Nitrosodiphenylamine	mg/kg-dry	T	-			-								
Pentachlorophenol	mg/kg-dry	T	-			-								
Phenanthrene	mg/kg-dry	T	-			-								
Phenol	mg/kg-dry	T	-			-								
Pyrene	mg/kg-dry	T	-			-								
Pesticides-PCBs														
Aroclor 1016	mg/kg-dry	T	<0.037	J		-								
Aroclor 1221	mg/kg-dry	T	<0.075	J		-								
Aroclor 1232	mg/kg-dry	T	<0.037	J		-								
Aroclor 1242	mg/kg-dry	T	<0.037	J		-								
Aroclor 1248	mg/kg-dry	T	<0.037	J		-								
Aroclor 1254	mg/kg-dry	T	0.089	J		-								
Aroclor 1260	mg/kg-dry	T	<0.037	J		-								

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Appendix A-7e
Soil - Biased 0-24 inches
Validated Analytical Results

Parameter	Units	Exposure Area Fraction	Site ID / Sample Date / Sample ID											
			MSS1-16 10/17/2002 MSS1-16-T02N-SOL		MSS1-16 10/22/2002 MSS1-16-T02N-SOL		MSS1-17R 10/17/2002 MSS1-17-T02N-SOL		MSS1-17R 1/7/2003 MSS1-17R-T02N-SOL		MSS1-17R 1/10/2003 MSS1-17R-T02N-SOL		MSS1-19 10/17/2002 MSS1-19-T02N-SOLD L	
			SS1		SS1		SS1		SS1		SS1		SS1	
General Chemistry														
Ammonia	mg/kg-dry	T	20.2	J	-		-		5.1	:	-		-	
Chloride	mg/kg-dry	T	92.7	J	-		-		47.1	:	-		-	
Fluoride	mg/kg-dry	T	1.1	J	-		-		0.96	J	-		-	
Nitrate	mg/kg-dry	T	14.6	J	-		-		14.8	J	-		-	
Phosphorus	mg/kg-dry	T	832.	J	-		-		904.	:	-		-	
Sulfate	mg/kg-dry	T	470.	J	-		-		211.	:	-		-	
Total Kjeldahl Nitrogen	mg/kg-dry	T	242.	:	-		-		276.	:	-		-	
Total Organic Carbon	mg/kg-dry	T	7510.	J	-		-		9940.	J	-		-	
Laboratory Parameters														
pH	SU	T	6.4	:	-		-		7.6	:	-		-	
Solids, Percent	%	T	94.1	:	94.4	:	95.6	:	94.	:	96.9	:	-	
Specific Conductance	umhos/cm	T	563.	:	-		-		820.	:	-		-	
Geotechnical														
Organic Soils	%	T	2.4	J	-		-		2.5	:	-		-	
Physical Properties														
Cation-Exchange Capacity	meq/100g	T	23.	:	-		-		11.6	:	-		-	
Sodium Absorption Ratio	ratio	T	1.29	:	-		-		1.3	:	-		-	
Metals														
Aluminum	mg/kg-dry	T	9930.	:	-		-		10100.	:	-		-	
Antimony	mg/kg-dry	T	<0.57	J	-		-		<0.26	J	-		-	
Arsenic	mg/kg-dry	T	6.1	:	-		-		3.8	J	-		-	
Barium	mg/kg-dry	T	132.	:	-		-		174.	:	-		-	
Beryllium	mg/kg-dry	T	0.83	:	-		-		0.73	:	-		-	
Boron	mg/kg-dry	T	0.71	J	-		-		3.8	J	-		-	
Cadmium	mg/kg-dry	T	0.48	J	-		-		0.07	J	-		-	
Calcium	mg/kg-dry	T	7420.	:	-		-		6940.	:	-		-	
Chromium	mg/kg-dry	T	35.5	:	-		-		35.2	J	-		-	
Cobalt	mg/kg-dry	T	11.6	:	-		-		10.8	:	-		-	
Copper	mg/kg-dry	T	84.8	:	-		-		51.9	J	-		-	
Iron	mg/kg-dry	T	23600.	:	-		-		21500.	:	-		-	
Lead	mg/kg-dry	T	102.	:	-		-		57.8	:	-		-	
Magnesium	mg/kg-dry	T	7010.	:	-		-		6820.	:	-		-	
Manganese	mg/kg-dry	T	607.	J	-		-		532.	:	-		-	

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Appendix A-7e
Soil - Biased 0-24 inches
Validated Analytical Results

Parameter	Units	Exposure Area Fraction	Site ID / Sample Date / Sample ID					
			MSS1-16 10/17/2002 MSS1-16-T02N-SOL	MSS1-16 10/22/2002 MSS1-16-T02N-SOL	MSS1-17R 10/17/2002 MSS1-17-T02N-SOL	MSS1-17R 1/7/2003 MSS1-17R-T02N-SOL	MSS1-17R 1/10/2003 MSS1-17R-T02N-SOL	MSS1-19 10/17/2002 MSS1-19-T02N-SOLDL
			SS1	SS1	SS1	SS1	SS1	SS1
Mercury	mg/kg-dry	T	<0.016 :	-	-	<0.017 :	-	-
Molybdenum	mg/kg-dry	T	633. :	-	-	148. :	-	-
Nickel	mg/kg-dry	T	27.3 J	-	-	25.8 :	-	-
Potassium	mg/kg-dry	T	2750. J	-	-	2430. J	-	-
Selenium	mg/kg-dry	T	<0.64 :	-	-	<0.7 J	-	-
Silver	mg/kg-dry	T	<0.41 :	-	-	0.2 :	-	-
Sodium	mg/kg-dry	T	202. :	-	-	<155. :	-	-
Thallium	mg/kg-dry	T	0.22 :	-	-	0.17 :	-	-
Vanadium	mg/kg-dry	T	37.1 :	-	-	35.1 :	-	-
Zinc	mg/kg-dry	T	161. :	-	-	97.6 :	-	-
Volatile Organics								
1,1,1-Trichloroethane	mg/kg-dry	T	-	<0.016 :	-	-	<0.009 :	-
1,1,2,2-Tetrachloroethane	mg/kg-dry	T	-	<0.016 :	-	-	<0.009 :	-
1,1,2-Trichloro-1,2,2-trifluoroethane	mg/kg-dry	T	-	<0.016 :	-	-	<0.009 :	-
1,1,2-Trichloroethane	mg/kg-dry	T	-	<0.016 :	-	-	<0.009 :	-
1,1-Dichloroethane	mg/kg-dry	T	-	<0.016 :	-	-	<0.009 :	-
1,1-Dichloroethene	mg/kg-dry	T	-	<0.016 :	-	-	<0.009 :	-
1,2,4-Trichlorobenzene	mg/kg-dry	T	-	<0.016 :	-	-	<0.009 :	-
1,2-Dibromo-3-chloropropane	mg/kg-dry	T	-	<0.016 :	-	-	<0.009 :	-
1,2-Dichlorobenzene	mg/kg-dry	T	-	<0.016 :	-	-	<0.009 :	-
1,2-Dichloroethane	mg/kg-dry	T	-	<0.016 :	-	-	<0.009 :	-
1,2-Dichloroethene (total)	mg/kg-dry	T	-	<0.016 :	-	-	<0.009 :	-
1,2-Dichloropropane	mg/kg-dry	T	-	<0.016 :	-	-	<0.009 :	-
1,3-Dichlorobenzene	mg/kg-dry	T	-	<0.016 :	-	-	<0.009 :	-
1,4-Dichlorobenzene	mg/kg-dry	T	-	<0.016 :	-	-	<0.009 :	-
2-Butanone	mg/kg-dry	T	-	<0.016 :	-	-	<0.009 :	-
2-Hexanone	mg/kg-dry	T	-	<0.016 :	-	-	<0.009 :	-
4-Methyl-2-pentanone	mg/kg-dry	T	-	<0.016 :	-	-	<0.009 :	-
Acetone	mg/kg-dry	T	-	0.003 J	-	-	0.002 J	-
Benzene	mg/kg-dry	T	-	<0.016 :	-	-	<0.009 :	-
Bromodichloromethane	mg/kg-dry	T	-	<0.016 :	-	-	<0.009 :	-
Bromoform	mg/kg-dry	T	-	<0.016 :	-	-	<0.009 :	-
Bromomethane	mg/kg-dry	T	-	<0.016 :	-	-	<0.009 :	-
Carbon disulfide	mg/kg-dry	T	-	<0.016 :	-	-	<0.009 :	-

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Appendix A-7e
Soil - Biased 0-24 inches
Validated Analytical Results

Parameter	Units	Exposure Area Fraction	Site ID	Sample Date	Sample ID	Exposure Area		Site ID	Sample Date	Sample ID	Exposure Area		Site ID	Sample Date	Sample ID	Exposure Area		Site ID	Sample Date	Sample ID	Exposure Area		Site ID	Sample Date	Sample ID	Exposure Area	
			MSS1-16	10/17/2002	MSS1-16-T02N-SOL	SS1		MSS1-16	10/22/2002	MSS1-16-T02N-SOL	SS1		MSS1-17R	10/17/2002	MSS1-17-T02N-SOL	SS1		MSS1-17R	1/7/2003	MSS1-17R-T02N-SOL	SS1		MSS1-17R	1/10/2003	MSS1-17R-T02N-SOL	SS1		MSS1-19	10/17/2002	MSS1-19-T02N-SOLDL	SS1	
Carbon tetrachloride	mg/kg-dry	T	-					<0.016				:	-					-				:	<0.009				:	-				
Chlorobenzene	mg/kg-dry	T	-					<0.016				:	-					-				:	<0.009				:	-				
Chloroethane	mg/kg-dry	T	-					<0.016				:	-					-				:	<0.009				:	-				
Chloroform	mg/kg-dry	T	-					<0.016				:	-					-				:	<0.009				:	-				
Chloromethane	mg/kg-dry	T	-					<0.016				:	-					-				:	<0.009				:	-				
cis-1,2-Dichloroethene	mg/kg-dry	T	-					<0.016				:	-					-				:	<0.009				:	-				
cis-1,3-Dichloropropene	mg/kg-dry	T	-					<0.016				:	-					-				:	<0.009				:	-				
Dibromochloromethane	mg/kg-dry	T	-					<0.016				:	-					-				:	<0.009				:	-				
Dichlorodifluoromethane	mg/kg-dry	T	-					<0.016				:	-					-				:	<0.009				:	-				
Ethylbenzene	mg/kg-dry	T	-					0.02				:	-					-				:	<0.009				:	-				
Methylene chloride	mg/kg-dry	T	-					<0.016				:	-					-				:	<0.009				:	-				
Styrene	mg/kg-dry	T	-					<0.016				:	-					-				:	<0.009				:	-				
Tetrachloroethene	mg/kg-dry	T	-					<0.016				:	-					-				:	<0.009				:	-				
Toluene	mg/kg-dry	T	-					<0.016				:	-					-				:	<0.009				:	-				
Total Xylene	mg/kg-dry	T	-					0.12				:	-					-				:	0.002				J	-				
trans-1,2-Dichloroethene	mg/kg-dry	T	-					<0.016				:	-					-				:	<0.009				:	-				
trans-1,3-Dichloropropene	mg/kg-dry	T	-					<0.016				:	-					-				:	<0.009				:	-				
Trichloroethene	mg/kg-dry	T	-					<0.016				:	-					-				:	<0.009				:	-				
Trichlorofluoromethane	mg/kg-dry	T	-					<0.016				:	-					-				:	<0.009				:	-				
Vinyl chloride	mg/kg-dry	T	-					<0.016				:	-					-				:	<0.009				:	-				
Semi-Volatile Organics																																
1,1`-Biphenyl	mg/kg-dry	T	<0.7				:	-					-					<0.35				:	-					-				
2,4,5-Trichlorophenol	mg/kg-dry	T	<1.8				:	-					-					<0.88				:	-					-				
2,4,6-Trichlorophenol	mg/kg-dry	T	<0.7				:	-					-					<0.35				:	-					-				
2,4-Dichlorophenol	mg/kg-dry	T	<0.7				:	-					-					<0.35				:	-					-				
2,4-Dimethylphenol	mg/kg-dry	T	<0.7				:	-					-					<0.35				:	-					-				
2,4-Dinitrophenol	mg/kg-dry	T	<1.8				:	-					-					<0.88				:	-					-				
2,4-Dinitrotoluene	mg/kg-dry	T	<0.7				:	-					-					<0.35				:	-					-				
2,6-Dinitrotoluene	mg/kg-dry	T	<0.7				:	-					-					<0.35				:	-					-				
2-Chloronaphthalene	mg/kg-dry	T	<0.7				:	-					-					<0.35				:	-					-				
2-Chlorophenol	mg/kg-dry	T	<0.7				:	-					-					<0.35				:	-					-				
2-Methylnaphthalene	mg/kg-dry	T	<0.7				:	-					-					<0.35				:	-					-				
2-Methylphenol	mg/kg-dry	T	<0.7				:	-					-					<0.35				:	-					-				
2-Nitroaniline	mg/kg-dry	T	<1.8				:	-					-					<0.88				:	-					-				

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Appendix A-7e
Soil - Biased 0-24 inches
Validated Analytical Results

Parameter	Units	Site ID / Sample Date / Sample ID / Exposure Area / Fraction	MSS1-16 10/17/2002 MSS1-16-T02N-SOL SS1		MSS1-16 10/22/2002 MSS1-16-T02N-SOL SS1		MSS1-17R 10/17/2002 MSS1-17-T02N-SOL SS1		MSS1-17R 1/7/2003 MSS1-17R-T02N-SOL SS1		MSS1-17R 1/10/2003 MSS1-17R-T02N-SOL SS1		MSS1-19 10/17/2002 MSS1-19-T02N-SOLDL SS1	
2-Nitrophenol	mg/kg-dry	T	<0.7	:	-		-		<0.35	:	-		-	
3,3-Dichlorobenzidine	mg/kg-dry	T	<0.7	:	-		-		<0.35	J	-		-	
3-Nitroaniline	mg/kg-dry	T	<1.8	:	-		-		<0.88	:	-		-	
4,6-Dinitro-2-methylphenol	mg/kg-dry	T	<1.8	:	-		-		<0.88	:	-		-	
4-Bromophenyl phenyl ether	mg/kg-dry	T	<0.7	:	-		-		<0.35	:	-		-	
4-Chloro-3-methylphenol	mg/kg-dry	T	<0.7	:	-		-		<0.35	:	-		-	
4-Chloroaniline	mg/kg-dry	T	<0.7	:	-		-		<0.35	:	-		-	
4-Chlorophenyl phenyl ether	mg/kg-dry	T	<0.7	:	-		-		<0.35	:	-		-	
4-Methylphenol	mg/kg-dry	T	<0.7	:	-		-		<0.35	:	-		-	
4-Nitroaniline	mg/kg-dry	T	<1.8	:	-		-		<0.88	:	-		-	
4-Nitrophenol	mg/kg-dry	T	<1.8	:	-		-		<0.88	:	-		-	
Acenaphthene	mg/kg-dry	T	<0.7	:	-		-		<0.35	:	-		-	
Acenaphthylene	mg/kg-dry	T	<0.7	:	-		-		<0.35	:	-		-	
Anthracene	mg/kg-dry	T	<0.7	:	-		-		<0.35	:	-		-	
Benzaldehyde	mg/kg-dry	T	<0.7	:	-		-		<0.35	J	-		-	
Benzo(a)anthracene	mg/kg-dry	T	0.11	J	-		-		0.016	J	-		-	
Benzo(a)pyrene	mg/kg-dry	T	0.086	J	-		-		0.02	J	-		-	
Benzo(b)fluoranthene	mg/kg-dry	T	0.078	J	-		-		0.02	J	-		-	
Benzo(g,h,i)perylene	mg/kg-dry	T	<0.7	:	-		-		0.025	J	-		-	
Benzo(k)fluoranthene	mg/kg-dry	T	0.12	J	-		-		0.019	J	-		-	
Bis(2-chloroethoxy)methane	mg/kg-dry	T	<0.7	:	-		-		<0.35	:	-		-	
Bis(2-chloroethyl)ether	mg/kg-dry	T	<0.7	:	-		-		<0.35	:	-		-	
Bis(2-ethylhexyl)phthalate	mg/kg-dry	T	0.47	J	-		-		0.098	J	-		-	
Butyl benzyl phthalate	mg/kg-dry	T	<0.7	:	-		-		<0.35	:	-		-	
Carbazole	mg/kg-dry	T	<0.7	:	-		-		<0.35	:	-		-	
Chrysene	mg/kg-dry	T	0.14	J	-		-		0.023	J	-		-	
Dibenz(a,h)anthracene	mg/kg-dry	T	<0.7	:	-		-		<0.35	:	-		-	
Dibenzofuran	mg/kg-dry	T	<0.7	:	-		-		<0.35	:	-		-	
Dichlorodiisopropyl ether	mg/kg-dry	T	<0.7	:	-		-		<0.35	:	-		-	
Diethylphthalate	mg/kg-dry	T	<0.7	:	-		-		<0.35	:	-		-	
Dimethylphthalate	mg/kg-dry	T	<0.7	:	-		-		<0.35	:	-		-	
Di-n-Butyl phthalate	mg/kg-dry	T	<0.7	:	-		-		<0.35	:	-		-	
Di-n-Octyl phthalate	mg/kg-dry	T	<0.7	:	-		-		<0.35	:	-		-	
Fluoranthene	mg/kg-dry	T	0.14	J	-		-		0.019	J	-		-	

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Appendix A-7e
Soil - Biased 0-24 inches
Validated Analytical Results

Parameter	Units	Fraction	Site ID	Sample Date	Sample ID	Exposure Area
			MSS1-16	10/17/2002	MSS1-16-T02N-SOL	SS1
			MSS1-16	10/22/2002	MSS1-16-T02N-SOL	SS1
			MSS1-17R	10/17/2002	MSS1-17-T02N-SOL	SS1
			MSS1-17R	1/7/2003	MSS1-17R-T02N-SOL	SS1
			MSS1-17R	1/10/2003	MSS1-17R-T02N-SOL	SS1
			MSS1-19	10/17/2002	MSS1-19-T02N-SOLD L	SS1
Fluorene	mg/kg-dry	T	<0.7 :	-	-	<0.35 :	-	-
Hexachlorobenzene	mg/kg-dry	T	<0.7 :	-	-	<0.35 :	-	-
Hexachlorobutadiene	mg/kg-dry	T	<0.7 :	-	-	<0.35 :	-	-
Hexachlorocyclopentadiene	mg/kg-dry	T	<0.7 :	-	-	<0.35 :	-	-
Hexachloroethane	mg/kg-dry	T	<0.7 :	-	-	<0.35 :	-	-
Indeno(1,2,3-cd)pyrene	mg/kg-dry	T	<0.7 :	-	-	<0.35 :	-	-
Isophorone	mg/kg-dry	T	<0.7 :	-	-	<0.35 :	-	-
Naphthalene	mg/kg-dry	T	<0.7 :	-	-	<0.35 :	-	-
Nitrobenzene	mg/kg-dry	T	<0.7 :	-	-	<0.35 :	-	-
N-Nitrosodi-n-propylamine	mg/kg-dry	T	<0.7 :	-	-	<0.35 :	-	-
N-Nitrosodiphenylamine	mg/kg-dry	T	<0.7 :	-	-	<0.35 :	-	-
Pentachlorophenol	mg/kg-dry	T	<1.8 :	-	-	<0.88 :	-	-
Phenanthrene	mg/kg-dry	T	0.065 J	-	-	<0.35 :	-	-
Phenol	mg/kg-dry	T	<0.7 :	-	-	<0.35 :	-	-
Pyrene	mg/kg-dry	T	0.15 J	-	-	0.032 J	-	-
Pesticides-PCBs								
Aroclor 1016	mg/kg-dry	T	<0.035 J	-	-	<0.035 :	-	-
Aroclor 1221	mg/kg-dry	T	<0.071 J	-	-	<0.071 :	-	-
Aroclor 1232	mg/kg-dry	T	<0.035 J	-	-	<0.035 :	-	-
Aroclor 1242	mg/kg-dry	T	<0.035 J	-	-	<0.035 :	-	-
Aroclor 1248	mg/kg-dry	T	1.6 J	-	-	0.032 J	-	8.2 J
Aroclor 1254	mg/kg-dry	T	<0.035 J	-	-	0.074 :	-	-
Aroclor 1260	mg/kg-dry	T	<0.035 J	-	-	<0.035 :	-	-

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Appendix A-7e
Soil - Biased 0-24 inches
Validated Analytical Results

Parameter	Units	Exposure Area Fraction	Site ID / Sample Date / Sample ID											
			MSS1-19 10/17/2002 MSS1-19-T02N-SOL		MSS1-19 10/22/2002 MSS1-19-T02N-SOL		MSS1-20R 10/17/2002 MSS1-20-T02N-SOL		MSS1-20R 1/7/2003 MSS1-20R-T02N-SOL		MSS1-20R 1/8/2003 MSS1-20R-T02N-SOL		MSS1-21 10/17/2002 MSS1-21-T02N-SOL	
			SS1		SS1		SS1		SS1		SS1		SS1	
General Chemistry														
Ammonia	mg/kg-dry	T	20.6	J	-		31.3	:	5.1	:	-		10.4	:
Chloride	mg/kg-dry	T	15.2	J	-		148.	J	51.6	:	-		4.9	J
Fluoride	mg/kg-dry	T	0.68	J	-		1.3	J	0.61	J	-		1.7	J
Nitrate	mg/kg-dry	T	4.	J	-		23.4	J	7.5	J	-		2.5	J
Phosphorus	mg/kg-dry	T	893.	J	-		735.	J	920.	:	-		802.	J
Sulfate	mg/kg-dry	T	90.4	J	-		1260.	J	1430.	:	-		63.4	J
Total Kjeldahl Nitrogen	mg/kg-dry	T	175.	:	-		230.	:	142.	:	-		192.	:
Total Organic Carbon	mg/kg-dry	T	3620.	J	-		5450.	J	3200.	J	-		3310.	J
Laboratory Parameters														
pH	SU	T	6.6	:	-		7.6	:	7.6	:	-		10.2	:
Solids, Percent	%	T	93.6	:	93.6	:	92.8	:	91.9	:	91.8	:	94.6	:
Specific Conductance	umhos/cm	T	92.5	:	-		498.	:	1790.	:	-		97.9	:
Geotechnical														
Organic Soils	%	T	1.91	J	-		2.21	J	2.	:	-		2.61	J
Physical Properties														
Cation-Exchange Capacity	meq/100g	T	19.1	:	-		13.5	:	13.4	:	-		12.	:
Sodium Absorption Ratio	ratio	T	1.59	:	-		6.03	:	3.93	:	-		0.84	:
Metals														
Aluminum	mg/kg-dry	T	8300.	:	-		8480.	:	8020.	:	-		11800.	:
Antimony	mg/kg-dry	T	<0.26	J	-		<0.24	J	<0.25	J	-		<0.17	J
Arsenic	mg/kg-dry	T	4.5	:	-		4.3	:	3.5	J	-		4.2	:
Barium	mg/kg-dry	T	265.	:	-		169.	:	233.	:	-		158.	:
Beryllium	mg/kg-dry	T	0.66	:	-		0.65	:	0.58	:	-		0.88	:
Boron	mg/kg-dry	T	<0.41	J	-		<2.9	:	3.8	:	-		<1.6	J
Cadmium	mg/kg-dry	T	0.15	J	-		0.19	J	<0.04	:	-		0.33	J
Calcium	mg/kg-dry	T	4380.	:	-		5130.	:	4390.	:	-		8560.	:
Chromium	mg/kg-dry	T	25.4	:	-		23.4	:	27.5	J	-		32.6	:
Cobalt	mg/kg-dry	T	9.2	:	-		8.2	:	7.3	:	-		11.	:
Copper	mg/kg-dry	T	56.2	:	-		55.7	:	40.6	J	-		62.4	:
Iron	mg/kg-dry	T	20900.	:	-		20300.	:	18700.	:	-		22200.	:
Lead	mg/kg-dry	T	61.7	:	-		59.8	:	48.4	:	-		71.1	:
Magnesium	mg/kg-dry	T	5400.	:	-		4820.	:	4650.	:	-		7280.	:
Manganese	mg/kg-dry	T	507.	J	-		460.	J	411.	:	-		646.	J

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Appendix A-7e
Soil - Biased 0-24 inches
Validated Analytical Results

Parameter	Units	Exposure Area Fraction	Site ID / Sample Date / Sample ID											
			MSS1-19 10/17/2002 MSS1-19-T02N-SOL		MSS1-19 10/22/2002 MSS1-19-T02N-SOL		MSS1-20R 10/17/2002 MSS1-20-T02N-SOL		MSS1-20R 1/7/2003 MSS1-20R-T02N-SOL		MSS1-20R 1/8/2003 MSS1-20R-T02N-SOL		MSS1-21 10/17/2002 MSS1-21-T02N-SOL	
			SS1		SS1		SS1		SS1		SS1		SS1	
Mercury	mg/kg-dry	T	<0.016	:	-		0.017	:	<0.018	:	-		0.054	:
Molybdenum	mg/kg-dry	T	228.	:	-		289.	:	177.	:	-		151.	:
Nickel	mg/kg-dry	T	21.5	J	-		19.4	J	19.4	:	-		27.1	J
Potassium	mg/kg-dry	T	2240.	J	-		2220.	J	2290.	J	-		2630.	J
Selenium	mg/kg-dry	T	1.1	:	-		0.97	J	0.76	J	-		0.71	J
Silver	mg/kg-dry	T	<0.32	:	-		0.4	:	<0.16	:	-		0.28	J
Sodium	mg/kg-dry	T	163.	:	-		635.	:	576.	:	-		<160.	:
Thallium	mg/kg-dry	T	0.16	:	-		0.17	:	0.16	:	-		0.22	:
Vanadium	mg/kg-dry	T	27.8	:	-		27.3	:	24.7	:	-		35.4	:
Zinc	mg/kg-dry	T	108.	:	-		104.	J	77.7	:	-		122.	J
Volatile Organics														
1,1,1-Trichloroethane	mg/kg-dry	T	-		<0.01	:	<0.008	:	-		<0.008	:	<0.004	:
1,1,2,2-Tetrachloroethane	mg/kg-dry	T	-		<0.01	:	<0.008	:	-		<0.008	:	<0.004	:
1,1,2-Trichloro-1,2,2-trifluoroethane	mg/kg-dry	T	-		<0.01	:	<0.008	:	-		<0.008	:	<0.004	:
1,1,2-Trichloroethane	mg/kg-dry	T	-		<0.01	:	<0.008	:	-		<0.008	:	<0.004	:
1,1-Dichloroethane	mg/kg-dry	T	-		<0.01	:	<0.008	:	-		<0.008	:	<0.004	:
1,1-Dichloroethene	mg/kg-dry	T	-		<0.01	:	<0.008	:	-		<0.008	:	<0.004	:
1,2,4-Trichlorobenzene	mg/kg-dry	T	-		<0.01	:	<0.008	:	-		<0.008	:	<0.004	:
1,2-Dibromo-3-chloropropane	mg/kg-dry	T	-		<0.01	:	<0.008	:	-		<0.008	:	<0.004	:
1,2-Dichlorobenzene	mg/kg-dry	T	-		<0.01	:	<0.008	:	-		<0.008	:	<0.004	:
1,2-Dichloroethane	mg/kg-dry	T	-		<0.01	:	<0.008	:	-		<0.008	:	<0.004	:
1,2-Dichloroethene (total)	mg/kg-dry	T	-		<0.01	:	<0.008	:	-		<0.008	:	<0.004	:
1,2-Dichloropropane	mg/kg-dry	T	-		<0.01	:	<0.008	:	-		<0.008	:	<0.004	:
1,3-Dichlorobenzene	mg/kg-dry	T	-		<0.01	:	<0.008	:	-		<0.008	:	<0.004	:
1,4-Dichlorobenzene	mg/kg-dry	T	-		<0.01	:	<0.008	:	-		<0.008	:	<0.004	:
2-Butanone	mg/kg-dry	T	-		<0.01	:	<0.008	:	-		0.005	J	<0.004	:
2-Hexanone	mg/kg-dry	T	-		<0.01	:	<0.008	:	-		<0.008	:	<0.004	:
4-Methyl-2-pentanone	mg/kg-dry	T	-		<0.01	:	<0.008	:	-		0.001	J	<0.004	:
Acetone	mg/kg-dry	T	-		0.003	J	0.003	J	-		0.015	:	0.0006	J
Benzene	mg/kg-dry	T	-		<0.01	:	<0.008	:	-		<0.008	:	<0.004	:
Bromodichloromethane	mg/kg-dry	T	-		<0.01	:	<0.008	:	-		<0.008	:	<0.004	:
Bromoform	mg/kg-dry	T	-		<0.01	:	<0.008	:	-		<0.008	:	<0.004	:
Bromomethane	mg/kg-dry	T	-		<0.01	:	<0.008	:	-		<0.008	J	<0.004	J
Carbon disulfide	mg/kg-dry	T	-		<0.01	:	<0.008	:	-		0.001	J	<0.004	:

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Appendix A-7e
Soil - Biased 0-24 inches
Validated Analytical Results

Parameter	Units	Exposure Area Fraction	Site ID / Sample Date / Sample ID					
			MSS1-19 10/17/2002 MSS1-19-T02N-SOL	MSS1-19 10/22/2002 MSS1-19-T02N-SOL	MSS1-20R 10/17/2002 MSS1-20-T02N-SOL	MSS1-20R 1/7/2003 MSS1-20R-T02N-SOL	MSS1-20R 1/8/2003 MSS1-20R-T02N-SOL	MSS1-21 10/17/2002 MSS1-21-T02N-SOL
			SS1	SS1	SS1	SS1	SS1	SS1
Carbon tetrachloride	mg/kg-dry	T	-	<0.01 :	<0.008 :	-	<0.008 :	<0.004 :
Chlorobenzene	mg/kg-dry	T	-	<0.01 :	<0.008 :	-	<0.008 :	<0.004 :
Chloroethane	mg/kg-dry	T	-	<0.01 :	<0.008 :	-	<0.008 :	<0.004 :
Chloroform	mg/kg-dry	T	-	<0.01 :	<0.008 :	-	<0.008 :	<0.004 :
Chloromethane	mg/kg-dry	T	-	<0.01 :	<0.008 :	-	<0.008 :	<0.004 J
cis-1,2-Dichloroethene	mg/kg-dry	T	-	<0.01 :	<0.008 :	-	<0.008 :	<0.004 :
cis-1,3-Dichloropropene	mg/kg-dry	T	-	<0.01 :	<0.008 :	-	<0.008 :	<0.004 :
Dibromochloromethane	mg/kg-dry	T	-	<0.01 :	<0.008 :	-	<0.008 :	<0.004 :
Dichlorodifluoromethane	mg/kg-dry	T	-	<0.01 :	<0.008 :	-	<0.008 :	<0.004 J
Ethylbenzene	mg/kg-dry	T	-	0.001 J	<0.008 :	-	0.002 J	<0.004 :
Methylene chloride	mg/kg-dry	T	-	<0.01 :	<0.008 :	-	<0.008 :	<0.004 :
Styrene	mg/kg-dry	T	-	<0.01 :	<0.008 :	-	<0.008 :	<0.004 :
Tetrachloroethene	mg/kg-dry	T	-	<0.01 :	<0.008 :	-	<0.008 :	<0.004 :
Toluene	mg/kg-dry	T	-	<0.01 :	<0.008 :	-	0.0008 J	<0.004 :
Total Xylene	mg/kg-dry	T	-	0.007 J	0.001 J	-	0.01 :	<0.004 :
trans-1,2-Dichloroethene	mg/kg-dry	T	-	<0.01 :	<0.008 :	-	<0.008 :	<0.004 :
trans-1,3-Dichloropropene	mg/kg-dry	T	-	<0.01 :	<0.008 :	-	<0.008 :	<0.004 :
Trichloroethene	mg/kg-dry	T	-	<0.01 :	<0.008 :	-	<0.008 :	<0.004 :
Trichlorofluoromethane	mg/kg-dry	T	-	<0.01 :	<0.008 :	-	<0.008 :	<0.004 :
Vinyl chloride	mg/kg-dry	T	-	<0.01 :	<0.008 :	-	<0.008 :	<0.004 J
Semi-Volatile Organics								
1,1`-Biphenyl	mg/kg-dry	T	<0.35 :	-	<0.36 :	<0.36 :	-	<0.35 J
2,4,5-Trichlorophenol	mg/kg-dry	T	<0.88 :	-	<0.89 :	<0.9 :	-	<0.87 :
2,4,6-Trichlorophenol	mg/kg-dry	T	<0.35 :	-	<0.36 :	<0.36 :	-	<0.35 :
2,4-Dichlorophenol	mg/kg-dry	T	<0.35 :	-	<0.36 :	<0.36 :	-	<0.35 :
2,4-Dimethylphenol	mg/kg-dry	T	<0.35 :	-	<0.36 :	<0.36 :	-	<0.35 :
2,4-Dinitrophenol	mg/kg-dry	T	<0.88 :	-	<0.89 J	<0.9 :	-	<0.87 :
2,4-Dinitrotoluene	mg/kg-dry	T	<0.35 :	-	<0.36 :	<0.36 :	-	<0.35 :
2,6-Dinitrotoluene	mg/kg-dry	T	<0.35 :	-	<0.36 :	<0.36 :	-	<0.35 :
2-Chloronaphthalene	mg/kg-dry	T	<0.35 :	-	<0.36 :	<0.36 :	-	<0.35 :
2-Chlorophenol	mg/kg-dry	T	<0.35 :	-	<0.36 :	<0.36 :	-	<0.35 :
2-Methylnaphthalene	mg/kg-dry	T	<0.35 :	-	<0.36 :	<0.36 :	-	<0.35 :
2-Methylphenol	mg/kg-dry	T	<0.35 :	-	<0.36 :	<0.36 :	-	<0.35 :
2-Nitroaniline	mg/kg-dry	T	<0.88 :	-	<0.89 :	<0.9 :	-	<0.87 :

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Appendix A-7e
Soil - Biased 0-24 inches
Validated Analytical Results

Parameter	Units	Exposure Area Fraction	Site ID / Sample Date / Sample ID					
			MSS1-19 10/17/2002 MSS1-19-T02N-SOL	MSS1-19 10/22/2002 MSS1-19-T02N-SOL	MSS1-20R 10/17/2002 MSS1-20-T02N-SOL	MSS1-20R 1/7/2003 MSS1-20R-T02N-SOL	MSS1-20R 1/8/2003 MSS1-20R-T02N-SOL	MSS1-21 10/17/2002 MSS1-21-T02N-SOL
			SS1	SS1	SS1	SS1	SS1	SS1
2-Nitrophenol	mg/kg-dry	T	<0.35 :	-	<0.36 :	<0.36 :	-	<0.35 :
3,3-Dichlorobenzidine	mg/kg-dry	T	<0.35 :	-	<0.36 :	<0.36 J	-	<0.35 :
3-Nitroaniline	mg/kg-dry	T	<0.88 :	-	<0.89 :	<0.9 :	-	<0.87 :
4,6-Dinitro-2-methylphenol	mg/kg-dry	T	<0.88 :	-	<0.89 J	<0.9 :	-	<0.87 :
4-Bromophenyl phenyl ether	mg/kg-dry	T	<0.35 :	-	<0.36 :	<0.36 :	-	<0.35 :
4-Chloro-3-methylphenol	mg/kg-dry	T	<0.35 :	-	<0.36 :	<0.36 :	-	<0.35 :
4-Chloroaniline	mg/kg-dry	T	<0.35 :	-	<0.36 :	<0.36 :	-	<0.35 :
4-Chlorophenyl phenyl ether	mg/kg-dry	T	<0.35 :	-	<0.36 :	<0.36 :	-	<0.35 :
4-Methylphenol	mg/kg-dry	T	<0.35 :	-	<0.36 :	<0.36 :	-	<0.35 :
4-Nitroaniline	mg/kg-dry	T	<0.88 :	-	<0.89 :	<0.9 :	-	<0.87 :
4-Nitrophenol	mg/kg-dry	T	<0.88 :	-	<0.89 :	<0.9 :	-	<0.87 :
Acenaphthene	mg/kg-dry	T	<0.35 :	-	<0.36 :	<0.36 :	-	<0.35 :
Acenaphthylene	mg/kg-dry	T	<0.35 :	-	<0.36 :	<0.36 :	-	<0.35 :
Anthracene	mg/kg-dry	T	<0.35 :	-	<0.36 J	<0.36 :	-	<0.35 J
Benzaldehyde	mg/kg-dry	T	<0.35 :	-	0.072 J	<0.36 J	-	0.088 J
Benzo(a)anthracene	mg/kg-dry	T	0.018 J	-	0.02 J	<0.36 :	-	<0.35 :
Benzo(a)pyrene	mg/kg-dry	T	<0.35 :	-	<0.36 :	<0.36 :	-	<0.35 :
Benzo(b)fluoranthene	mg/kg-dry	T	<0.35 :	-	<0.36 :	<0.36 :	-	<0.35 :
Benzo(g,h,i)perylene	mg/kg-dry	T	<0.35 :	-	<0.36 :	<0.36 :	-	<0.35 :
Benzo(k)fluoranthene	mg/kg-dry	T	<0.35 :	-	<0.36 J	<0.36 :	-	<0.35 :
Bis(2-chloroethoxy)methane	mg/kg-dry	T	<0.35 :	-	<0.36 :	<0.36 :	-	<0.35 :
Bis(2-chloroethyl)ether	mg/kg-dry	T	<0.35 :	-	<0.36 :	<0.36 :	-	<0.35 :
Bis(2-ethylhexyl)phthalate	mg/kg-dry	T	0.079 J	-	0.076 J	0.049 J	-	0.023 J
Butyl benzyl phthalate	mg/kg-dry	T	<0.35 :	-	<0.36 J	<0.36 :	-	<0.35 :
Carbazole	mg/kg-dry	T	<0.35 :	-	<0.36 :	<0.36 :	-	<0.35 :
Chrysene	mg/kg-dry	T	0.027 J	-	0.028 J	0.02 J	-	<0.35 :
Dibenz(a,h)anthracene	mg/kg-dry	T	<0.35 :	-	<0.36 :	<0.36 :	-	<0.35 J
Dibenzofuran	mg/kg-dry	T	<0.35 :	-	<0.36 :	<0.36 :	-	<0.35 :
Dichlorodiisopropyl ether	mg/kg-dry	T	<0.35 :	-	<0.36 :	<0.36 :	-	<0.35 :
Diethylphthalate	mg/kg-dry	T	<0.35 :	-	<0.36 :	<0.36 :	-	<0.35 :
Dimethylphthalate	mg/kg-dry	T	<0.35 :	-	<0.36 :	<0.36 :	-	<0.35 :
Di-n-Butyl phthalate	mg/kg-dry	T	<0.35 :	-	<0.36 :	0.017 J	-	<0.35 :
Di-n-Octyl phthalate	mg/kg-dry	T	<0.35 :	-	<0.36 :	<0.36 :	-	<0.35 :
Fluoranthene	mg/kg-dry	T	0.024 J	-	0.022 J	0.024 J	-	<0.35 :

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Appendix A-7e
Soil - Biased 0-24 inches
Validated Analytical Results

Parameter	Units	Exposure Area Fraction	Site ID / Sample Date / Sample ID											
			MSS1-19 10/17/2002 MSS1-19-T02N-SOL		MSS1-19 10/22/2002 MSS1-19-T02N-SOL		MSS1-20R 10/17/2002 MSS1-20-T02N-SOL		MSS1-20R 1/7/2003 MSS1-20R-T02N-SOL		MSS1-20R 1/8/2003 MSS1-20R-T02N-SOL		MSS1-21 10/17/2002 MSS1-21-T02N-SOL	
			SS1		SS1		SS1		SS1		SS1		SS1	
Fluorene	mg/kg-dry	T	<0.35	:	-		<0.36	:	<0.36	:	-		<0.35	:
Hexachlorobenzene	mg/kg-dry	T	<0.35	:	-		<0.36	:	<0.36	:	-		<0.35	:
Hexachlorobutadiene	mg/kg-dry	T	<0.35	:	-		<0.36	:	<0.36	:	-		<0.35	:
Hexachlorocyclopentadiene	mg/kg-dry	T	<0.35	:	-		<0.36	:	<0.36	:	-		<0.35	:
Hexachloroethane	mg/kg-dry	T	<0.35	:	-		<0.36	:	<0.36	:	-		<0.35	:
Indeno(1,2,3-cd)pyrene	mg/kg-dry	T	<0.35	:	-		<0.36	:	<0.36	:	-		<0.35	:
Isophorone	mg/kg-dry	T	<0.35	:	-		<0.36	:	<0.36	:	-		<0.35	:
Naphthalene	mg/kg-dry	T	<0.35	:	-		<0.36	:	<0.36	:	-		<0.35	:
Nitrobenzene	mg/kg-dry	T	<0.35	:	-		<0.36	:	<0.36	:	-		<0.35	:
N-Nitrosodi-n-propylamine	mg/kg-dry	T	<0.35	:	-		<0.36	:	<0.36	:	-		<0.35	:
N-Nitrosodiphenylamine	mg/kg-dry	T	<0.35	:	-		<0.36	:	<0.36	:	-		<0.35	:
Pentachlorophenol	mg/kg-dry	T	<0.88	:	-		<0.89	J	<0.9	:	-		<0.87	:
Phenanthrene	mg/kg-dry	T	<0.35	:	-		<0.36	:	<0.36	:	-		<0.35	:
Phenol	mg/kg-dry	T	<0.35	:	-		<0.36	:	<0.36	:	-		<0.35	:
Pyrene	mg/kg-dry	T	0.027	J	-		0.019	J	0.023	J	-		<0.35	J
Pesticides-PCBs														
Aroclor 1016	mg/kg-dry	T	<0.18	J	-		-		<0.036	:	-		<0.035	:
Aroclor 1221	mg/kg-dry	T	<0.36	J	-		-		<0.073	:	-		<0.07	:
Aroclor 1232	mg/kg-dry	T	<0.18	J	-		-		<0.036	:	-		<0.035	:
Aroclor 1242	mg/kg-dry	T	<0.18	J	-		-		<0.036	:	-		<0.035	:
Aroclor 1248	mg/kg-dry	T	-		-		-		1.6	J	-		<0.035	:
Aroclor 1254	mg/kg-dry	T	<0.18	J	-		-		<0.036	:	-		0.53	J
Aroclor 1260	mg/kg-dry	T	<0.18	J	-		-		<0.036	:	-		1.1	:

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Appendix A-7e
Soil - Biased 0-24 inches
Validated Analytical Results

Parameter	Units	Fraction	MSS1-22		MSS1-23		MSS1-26		MSS1-27R		MSS1-27R		MSS1-28	
Sample Date			10/17/2002		10/17/2002		10/17/2002		10/17/2002		1/7/2003		10/21/2002	
Sample ID			MSS1-22-T02N-SOL		MSS1-23-T02N-SOL		MSS1-26-T02N-SOL		MSS1-27-T02N-SOL		MSS1-27R-T02N-SOL		MSS1-28-T01N-SOL	
Exposure Area			SS1		SS1		SS1		SS1		SS1		SS1	
General Chemistry														
Ammonia	mg/kg-dry	T	<8.8	:	29.9	:	<9.2	:	-		4.8	:	42.	:
Chloride	mg/kg-dry	T	3.	J	701.	J	43.4	J	-		<2.2	:	<26.1	:
Fluoride	mg/kg-dry	T	1.6	J	1.1	J	1.1	J	-		0.91	J	1.7	J
Nitrate	mg/kg-dry	T	<2.2	J	18.3	J	12.9	J	-		<2.2	J	6.1	:
Phosphorus	mg/kg-dry	T	796.	J	1100.	J	793.	J	-		1020.	:	715.	J
Sulfate	mg/kg-dry	T	20.2	J	467.	J	1660.	J	-		585.	:	3170.	:
Total Kjeldahl Nitrogen	mg/kg-dry	T	108.	:	193.	:	132.	:	-		121.	:	222.	:
Total Organic Carbon	mg/kg-dry	T	1270.	J	5310.	J	2330.	J	-		3820.	J	4540.	J
Laboratory Parameters														
pH	SU	T	9.1	:	7.6	:	8.	:	-		6.9	:	7.2	:
Solids, Percent	%	T	95.2	:	95.3	:	94.6	:	88.3	:	93.7	:	95.9	:
Specific Conductance	umhos/cm	T	76.9	:	791.	:	490.	:	-		1460.	:	1110.	:
Geotechnical														
Organic Soils	%	T	2.42	J	2.62	J	2.48	J	-		1.7	:	1.93	J
Physical Properties														
Cation-Exchange Capacity	meq/100g	T	8.	:	14.4	:	10.8	:	-		11.1	:	15.2	:
Sodium Absorption Ratio	ratio	T	9.62	:	4.59	:	1.01	:	-		2.03	:	0.67	:
Metals														
Aluminum	mg/kg-dry	T	14700.	:	14700.	:	13300.	:	-		11800.	:	11800.	:
Antimony	mg/kg-dry	T	<0.25	J	<0.24	J	<0.19	J	-		<0.26	J	<0.24	J
Arsenic	mg/kg-dry	T	5.4	:	4.2	:	3.4	J	-		2.9	J	4.6	:
Barium	mg/kg-dry	T	72.2	:	110.	:	86.1	:	-		97.6	:	122.	:
Beryllium	mg/kg-dry	T	1.3	:	1.2	:	1.1	:	-		1.	:	1.1	:
Boron	mg/kg-dry	T	<1.9	J	<2.	:	<0.89	J	-		3.	J	<2.3	:
Cadmium	mg/kg-dry	T	0.38	J	0.43	J	0.57	J	-		0.43	J	1.3	:
Calcium	mg/kg-dry	T	11400.	:	15100.	:	13800.	:	-		11800.	:	9730.	:
Chromium	mg/kg-dry	T	29.4	:	50.8	:	41.	:	-		51.2	J	35.	:
Cobalt	mg/kg-dry	T	14.	:	14.3	:	19.8	:	-		13.5	:	8.9	:
Copper	mg/kg-dry	T	45.6	:	96.1	:	90.9	:	-		91.3	J	91.8	:
Iron	mg/kg-dry	T	23400.	:	27100.	:	23500.	:	-		24900.	:	20400.	:
Lead	mg/kg-dry	T	51.6	:	81.4	:	78.1	:	-		97.3	:	161.	:
Magnesium	mg/kg-dry	T	9500.	:	11100.	:	9260.	:	-		9210.	:	6730.	:
Manganese	mg/kg-dry	T	1030.	J	902.	J	1180.	J	-		922.	:	903.	J

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Appendix A-7e
Soil - Biased 0-24 inches
Validated Analytical Results

Parameter	Units	Exposure Area Fraction	Site ID / Sample Date / Sample ID / Exposure Area	MSS1-22 10/17/2002 MSS1-22-T02N-SOL SS1		MSS1-23 10/17/2002 MSS1-23-T02N-SOL SS1		MSS1-26 10/17/2002 MSS1-26-T02N-SOL SS1		MSS1-27R 10/17/2002 MSS1-27-T02N-SOL SS1		MSS1-27R 1/7/2003 MSS1-27R-T02N-SOL SS1		MSS1-28 10/21/2002 MSS1-28-T01N-SOL SS1	
Mercury	mg/kg-dry	T		0.19	:	<0.017	:	<0.017	:	-		<0.016	:	0.13	:
Molybdenum	mg/kg-dry	T		64.8	:	382.	:	295.	:	-		465.	:	1700.	:
Nickel	mg/kg-dry	T		29.8	J	35.5	J	32.4	J	-		32.8	:	23.8	J
Potassium	mg/kg-dry	T		3050.	J	3450.	J	2770.	J	-		2580.	J	2600.	J
Selenium	mg/kg-dry	T		<0.66	J	0.92	J	0.56	J	-		0.74	J	0.93	J
Silver	mg/kg-dry	T		0.16	J	0.59	:	0.55	J	-		0.63	:	1.1	:
Sodium	mg/kg-dry	T		633.	:	541.	:	<409.	:	-		<210.	:	229.	:
Thallium	mg/kg-dry	T		0.34	:	0.28	:	0.25	:	-		0.22	:	0.27	:
Vanadium	mg/kg-dry	T		38.4	:	53.1	:	47.6	:	-		46.2	:	31.9	:
Zinc	mg/kg-dry	T		109.	J	151.	J	135.	J	-		143.	:	222.	J
Volatile Organics															
1,1,1-Trichloroethane	mg/kg-dry	T		<0.006	:	<0.01	:	<0.009	:	-		<0.011	:	<0.009	:
1,1,2,2-Tetrachloroethane	mg/kg-dry	T		<0.006	:	<0.01	:	<0.009	:	-		<0.011	:	<0.009	:
1,1,2-Trichloro-1,2,2-trifluoroethane	mg/kg-dry	T		<0.006	:	<0.01	:	<0.009	:	-		<0.011	:	<0.009	:
1,1,2-Trichloroethane	mg/kg-dry	T		<0.006	:	<0.01	:	<0.009	:	-		<0.011	:	<0.009	:
1,1-Dichloroethane	mg/kg-dry	T		<0.006	:	<0.01	:	<0.009	:	-		<0.011	:	<0.009	:
1,1-Dichloroethene	mg/kg-dry	T		<0.006	:	<0.01	:	<0.009	:	-		<0.011	:	<0.009	:
1,2,4-Trichlorobenzene	mg/kg-dry	T		<0.006	:	<0.01	:	<0.009	:	-		<0.011	:	<0.009	:
1,2-Dibromo-3-chloropropane	mg/kg-dry	T		<0.006	:	<0.01	:	<0.009	:	-		<0.011	:	<0.009	:
1,2-Dichlorobenzene	mg/kg-dry	T		<0.006	:	<0.01	:	<0.009	:	-		<0.011	:	<0.009	:
1,2-Dichloroethane	mg/kg-dry	T		<0.006	:	<0.01	:	<0.009	:	-		<0.011	:	<0.009	:
1,2-Dichloroethene (total)	mg/kg-dry	T		<0.006	:	<0.01	:	<0.009	:	-		<0.011	:	<0.009	:
1,2-Dichloropropane	mg/kg-dry	T		<0.006	:	<0.01	:	<0.009	:	-		<0.011	:	<0.009	:
1,3-Dichlorobenzene	mg/kg-dry	T		<0.006	:	<0.01	:	<0.009	:	-		<0.011	:	<0.009	:
1,4-Dichlorobenzene	mg/kg-dry	T		<0.006	:	<0.01	:	<0.009	:	-		<0.011	:	<0.009	:
2-Butanone	mg/kg-dry	T		<0.006	:	<0.01	:	<0.009	:	-		<0.011	:	<0.009	:
2-Hexanone	mg/kg-dry	T		<0.006	:	<0.01	:	<0.009	:	-		<0.011	:	<0.009	:
4-Methyl-2-pentanone	mg/kg-dry	T		<0.006	:	<0.01	:	<0.009	:	-		<0.011	:	<0.009	:
Acetone	mg/kg-dry	T		0.002	J	0.004	J	<0.009	:	-		0.002	J	0.014	:
Benzene	mg/kg-dry	T		<0.006	:	<0.01	:	<0.009	:	-		<0.011	:	<0.009	:
Bromodichloromethane	mg/kg-dry	T		<0.006	:	<0.01	:	<0.009	:	-		<0.011	:	<0.009	:
Bromoform	mg/kg-dry	T		<0.006	:	<0.01	:	<0.009	:	-		<0.011	:	<0.009	:
Bromomethane	mg/kg-dry	T		<0.006	J	<0.01	:	<0.009	J	-		<0.011	J	<0.009	:
Carbon disulfide	mg/kg-dry	T		<0.006	:	<0.01	:	<0.009	:	-		<0.011	:	<0.009	:

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Appendix A-7e
Soil - Biased 0-24 inches
Validated Analytical Results

Site ID			MSS1-22		MSS1-23		MSS1-26		MSS1-27R		MSS1-27R		MSS1-28	
Sample Date			10/17/2002		10/17/2002		10/17/2002		10/17/2002		1/7/2003		10/21/2002	
Sample ID			MSS1-22-T02N-SOL		MSS1-23-T02N-SOL		MSS1-26-T02N-SOL		MSS1-27-T02N-SOL		MSS1-27R-T02N-SOL		MSS1-28-T01N-SOL	
Exposure Area			SS1		SS1		SS1		SS1		SS1		SS1	
Parameter	Units	Fraction												
Carbon tetrachloride	mg/kg-dry	T	<0.006	:	<0.01	:	<0.009	:	-		<0.011	:	<0.009	:
Chlorobenzene	mg/kg-dry	T	<0.006	:	<0.01	:	<0.009	:	-		<0.011	:	<0.009	:
Chloroethane	mg/kg-dry	T	<0.006	:	<0.01	:	<0.009	:	-		<0.011	:	<0.009	:
Chloroform	mg/kg-dry	T	<0.006	:	<0.01	:	<0.009	:	-		<0.011	:	<0.009	:
Chloromethane	mg/kg-dry	T	<0.006	J	<0.01	:	<0.009	J	-		<0.011	:	<0.009	J
cis-1,2-Dichloroethene	mg/kg-dry	T	<0.006	:	<0.01	:	<0.009	:	-		<0.011	:	<0.009	:
cis-1,3-Dichloropropene	mg/kg-dry	T	<0.006	:	<0.01	:	<0.009	:	-		<0.011	:	<0.009	:
Dibromochloromethane	mg/kg-dry	T	<0.006	:	<0.01	:	<0.009	:	-		<0.011	:	<0.009	:
Dichlorodifluoromethane	mg/kg-dry	T	<0.006	J	<0.01	:	<0.009	J	-		<0.011	:	<0.009	J
Ethylbenzene	mg/kg-dry	T	<0.006	:	0.002	J	<0.009	:	-		<0.011	:	<0.009	:
Methylene chloride	mg/kg-dry	T	<0.006	:	<0.01	:	<0.009	:	-		<0.011	:	<0.009	:
Styrene	mg/kg-dry	T	<0.006	:	<0.01	:	<0.009	:	-		<0.011	:	<0.009	:
Tetrachloroethene	mg/kg-dry	T	<0.006	:	<0.01	:	<0.009	:	-		<0.011	:	<0.009	:
Toluene	mg/kg-dry	T	<0.006	:	<0.01	:	<0.009	:	-		<0.011	:	<0.009	:
Total Xylene	mg/kg-dry	T	<0.006	:	0.012	:	<0.009	:	-		<0.011	:	<0.009	:
trans-1,2-Dichloroethene	mg/kg-dry	T	<0.006	:	<0.01	:	<0.009	:	-		<0.011	:	<0.009	:
trans-1,3-Dichloropropene	mg/kg-dry	T	<0.006	:	<0.01	:	<0.009	:	-		<0.011	:	<0.009	:
Trichloroethene	mg/kg-dry	T	<0.006	:	<0.01	:	<0.009	:	-		<0.011	:	<0.009	:
Trichlorofluoromethane	mg/kg-dry	T	<0.006	:	<0.01	:	<0.009	:	-		<0.011	:	<0.009	:
Vinyl chloride	mg/kg-dry	T	<0.006	J	<0.01	:	<0.009	J	-		<0.011	:	<0.009	:
Semi-Volatile Organics														
1,1`-Biphenyl	mg/kg-dry	T	<0.35	J	<0.35	:	<0.35	:	-		<0.35	:	<0.34	:
2,4,5-Trichlorophenol	mg/kg-dry	T	<0.87	:	<0.87	:	<0.87	:	-		<0.88	:	<0.86	:
2,4,6-Trichlorophenol	mg/kg-dry	T	<0.35	:	<0.35	:	<0.35	:	-		<0.35	:	<0.34	:
2,4-Dichlorophenol	mg/kg-dry	T	<0.35	:	<0.35	:	<0.35	:	-		<0.35	:	<0.34	:
2,4-Dimethylphenol	mg/kg-dry	T	<0.35	:	<0.35	:	<0.35	:	-		<0.35	:	<0.34	:
2,4-Dinitrophenol	mg/kg-dry	T	<0.87	:	<0.87	J	<0.87	J	-		<0.88	:	<0.86	:
2,4-Dinitrotoluene	mg/kg-dry	T	<0.35	:	<0.35	:	<0.35	:	-		<0.35	:	<0.34	:
2,6-Dinitrotoluene	mg/kg-dry	T	<0.35	:	<0.35	:	<0.35	:	-		<0.35	:	<0.34	:
2-Chloronaphthalene	mg/kg-dry	T	<0.35	:	<0.35	:	<0.35	:	-		<0.35	:	<0.34	:
2-Chlorophenol	mg/kg-dry	T	<0.35	:	<0.35	:	<0.35	:	-		<0.35	:	<0.34	J
2-Methylnaphthalene	mg/kg-dry	T	<0.35	:	<0.35	:	<0.35	:	-		<0.35	:	<0.34	:
2-Methylphenol	mg/kg-dry	T	<0.35	:	<0.35	:	<0.35	:	-		<0.35	:	<0.34	:
2-Nitroaniline	mg/kg-dry	T	<0.87	:	<0.87	:	<0.87	:	-		<0.88	:	<0.86	:

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Appendix A-7e
Soil - Biased 0-24 inches
Validated Analytical Results

Parameter	Units	Exposure Area Fraction	Site ID / Sample Date / Sample ID											
			MSS1-22 10/17/2002 MSS1-22-T02N-SOL		MSS1-23 10/17/2002 MSS1-23-T02N-SOL		MSS1-26 10/17/2002 MSS1-26-T02N-SOL		MSS1-27R 10/17/2002 MSS1-27-T02N-SOL		MSS1-27R 1/7/2003 MSS1-27R-T02N-SOL		MSS1-28 10/21/2002 MSS1-28-T01N-SOL	
			SS1		SS1		SS1		SS1		SS1		SS1	
2-Nitrophenol	mg/kg-dry	T	<0.35	:	<0.35	:	<0.35	:	-		<0.35	:	<0.34	:
3,3-Dichlorobenzidine	mg/kg-dry	T	<0.35	:	<0.35	:	<0.35	:	-		<0.35	:	<0.34	:
3-Nitroaniline	mg/kg-dry	T	<0.87	:	<0.87	:	<0.87	:	-		<0.88	:	<0.86	:
4,6-Dinitro-2-methylphenol	mg/kg-dry	T	<0.87	:	<0.87	J	<0.87	J	-		<0.88	:	<0.86	:
4-Bromophenyl phenyl ether	mg/kg-dry	T	<0.35	:	<0.35	:	<0.35	:	-		<0.35	:	<0.34	:
4-Chloro-3-methylphenol	mg/kg-dry	T	<0.35	:	<0.35	:	<0.35	:	-		<0.35	:	<0.34	:
4-Chloroaniline	mg/kg-dry	T	<0.35	:	<0.35	:	<0.35	:	-		<0.35	:	<0.34	:
4-Chlorophenyl phenyl ether	mg/kg-dry	T	<0.35	:	<0.35	:	<0.35	:	-		<0.35	:	<0.34	:
4-Methylphenol	mg/kg-dry	T	<0.35	:	<0.35	:	<0.35	:	-		<0.35	:	<0.34	:
4-Nitroaniline	mg/kg-dry	T	<0.87	:	<0.87	:	<0.87	:	-		<0.88	:	<0.86	:
4-Nitrophenol	mg/kg-dry	T	<0.87	:	<0.87	:	<0.87	:	-		<0.88	:	<0.86	J
Acenaphthene	mg/kg-dry	T	<0.35	:	<0.35	:	<0.35	:	-		<0.35	:	<0.34	:
Acenaphthylene	mg/kg-dry	T	<0.35	:	<0.35	:	<0.35	:	-		<0.35	:	<0.34	:
Anthracene	mg/kg-dry	T	<0.35	J	<0.35	J	<0.35	J	-		<0.35	:	<0.34	:
Benzaldehyde	mg/kg-dry	T	<0.35	J	0.046	J	<0.35	J	-		0.35	J	<0.34	:
Benzo(a)anthracene	mg/kg-dry	T	<0.35	:	0.017	J	<0.35	:	-		<0.35	:	0.019	J
Benzo(a)pyrene	mg/kg-dry	T	<0.35	:	<0.35	:	<0.35	:	-		<0.35	:	0.016	J
Benzo(b)fluoranthene	mg/kg-dry	T	<0.35	:	<0.35	:	<0.35	:	-		<0.35	:	0.018	J
Benzo(g,h,i)perylene	mg/kg-dry	T	<0.35	:	<0.35	:	<0.35	:	-		<0.35	:	<0.34	:
Benzo(k)fluoranthene	mg/kg-dry	T	<0.35	:	<0.35	J	<0.35	J	-		<0.35	:	0.019	J
Bis(2-chloroethoxy)methane	mg/kg-dry	T	<0.35	:	<0.35	:	<0.35	:	-		<0.35	:	<0.34	:
Bis(2-chloroethyl)ether	mg/kg-dry	T	<0.35	:	<0.35	:	<0.35	:	-		<0.35	:	<0.34	:
Bis(2-ethylhexyl)phthalate	mg/kg-dry	T	0.12	J	0.11	J	<0.35	:	-		0.027	J	0.023	J
Butyl benzyl phthalate	mg/kg-dry	T	<0.35	:	<0.35	J	<0.35	J	-		<0.35	:	<0.34	:
Carbazole	mg/kg-dry	T	<0.35	:	<0.35	:	<0.35	:	-		<0.35	:	<0.34	:
Chrysene	mg/kg-dry	T	<0.35	:	0.025	J	<0.35	:	-		<0.35	:	0.026	J
Dibenz(a,h)anthracene	mg/kg-dry	T	<0.35	J	<0.35	:	<0.35	J	-		<0.35	:	<0.34	:
Dibenzofuran	mg/kg-dry	T	<0.35	:	<0.35	:	<0.35	:	-		<0.35	:	<0.34	:
Dichlorodiisopropyl ether	mg/kg-dry	T	<0.35	:	<0.35	:	<0.35	:	-		<0.35	:	<0.34	:
Diethylphthalate	mg/kg-dry	T	<0.35	:	<0.35	:	<0.35	:	-		<0.35	:	<0.34	:
Dimethylphthalate	mg/kg-dry	T	<0.35	:	<0.35	:	<0.35	:	-		<0.35	:	<0.34	:
Di-n-Butyl phthalate	mg/kg-dry	T	<0.35	:	0.016	J	<0.35	:	-		0.017	J	<0.34	:
Di-n-Octyl phthalate	mg/kg-dry	T	<0.35	:	<0.35	:	<0.35	:	-		<0.35	:	<0.34	:
Fluoranthene	mg/kg-dry	T	<0.35	:	0.027	J	<0.35	:	-		<0.35	:	0.027	J

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Appendix A-7e
Soil - Biased 0-24 inches
Validated Analytical Results

Parameter	Units	Site ID / Sample Date / Sample ID / Exposure Area / Fraction	MSS1-22 10/17/2002 MSS1-22-T02N-SOL SS1	MSS1-23 10/17/2002 MSS1-23-T02N-SOL SS1	MSS1-26 10/17/2002 MSS1-26-T02N-SOL SS1	MSS1-27R 10/17/2002 MSS1-27-T02N-SOL SS1	MSS1-27R 1/7/2003 MSS1-27R-T02N-SOL SS1	MSS1-28 10/21/2002 MSS1-28-T01N-SOL SS1
Fluorene	mg/kg-dry	T	<0.35 :	<0.35 :	<0.35 :	-	<0.35 :	<0.34 :
Hexachlorobenzene	mg/kg-dry	T	<0.35 :	<0.35 :	<0.35 :	-	<0.35 :	<0.34 :
Hexachlorobutadiene	mg/kg-dry	T	<0.35 :	<0.35 :	<0.35 :	-	<0.35 :	<0.34 :
Hexachlorocyclopentadiene	mg/kg-dry	T	<0.35 :	<0.35 :	<0.35 :	-	<0.35 :	<0.34 :
Hexachloroethane	mg/kg-dry	T	<0.35 :	<0.35 :	<0.35 :	-	<0.35 :	<0.34 :
Indeno(1,2,3-cd)pyrene	mg/kg-dry	T	<0.35 :	<0.35 :	<0.35 :	-	<0.35 :	<0.34 :
Isophorone	mg/kg-dry	T	<0.35 :	<0.35 :	<0.35 :	-	<0.35 :	<0.34 :
Naphthalene	mg/kg-dry	T	<0.35 :	<0.35 :	<0.35 :	-	<0.35 :	<0.34 :
Nitrobenzene	mg/kg-dry	T	<0.35 :	<0.35 :	<0.35 :	-	<0.35 :	<0.34 :
N-Nitrosodi-n-propylamine	mg/kg-dry	T	<0.35 :	<0.35 :	<0.35 :	-	<0.35 :	<0.34 :
N-Nitrosodiphenylamine	mg/kg-dry	T	<0.35 :	<0.35 :	<0.35 :	-	<0.35 :	<0.34 :
Pentachlorophenol	mg/kg-dry	T	<0.87 :	<0.87 J	<0.87 :	-	<0.88 :	<0.86 J
Phenanthrene	mg/kg-dry	T	<0.35 :	0.026 J	<0.35 :	-	<0.35 :	0.018 J
Phenol	mg/kg-dry	T	<0.35 :	<0.35 :	<0.35 :	-	<0.35 :	<0.34 :
Pyrene	mg/kg-dry	T	<0.35 J	0.02 J	<0.35 J	-	<0.35 :	0.032 J
Pesticides-PCBs								
Aroclor 1016	mg/kg-dry	T	-	-	-	-	<0.035 :	-
Aroclor 1221	mg/kg-dry	T	-	-	-	-	<0.071 :	-
Aroclor 1232	mg/kg-dry	T	-	-	-	-	<0.035 :	-
Aroclor 1242	mg/kg-dry	T	-	-	-	-	<0.035 :	-
Aroclor 1248	mg/kg-dry	T	-	-	-	-	0.51 J	-
Aroclor 1254	mg/kg-dry	T	-	-	-	-	1.5 :	-
Aroclor 1260	mg/kg-dry	T	-	-	-	-	<0.035 :	-

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Appendix A-7e
Soil - Biased 0-24 inches
Validated Analytical Results

Parameter	Units	Exposure Area Fraction	Site ID	MSS1-29	MSS1-30	MSS1-31	MSS1-32	MSS1-33	MSS1-34
			Sample Date	10/21/2002	10/21/2002	10/21/2002	10/21/2002	10/21/2002	10/21/2002
			Sample ID	MSS1-29-T02N-SOL	MSS1-30-T02N-SOL	MSS1-31-T02N-SOL	MSS1-32-T02N-SOL	MSS1-33-T02N-SOL	MSS1-34-T02N-SOL
			Exposure Area	SS1	SS1	SS1	SS1	SS1	SS1
General Chemistry									
Ammonia	mg/kg-dry	T		43.5 :	39. :	17.5 :	6.2 J	20.4 :	13.3 :
Chloride	mg/kg-dry	T		57.1 :	308. J	<26.1 :	51.8 :	491. J	31.4 :
Fluoride	mg/kg-dry	T		2.4 J	2.9 J	1.6 J	1.4 J	3.3 J	2. J
Nitrate	mg/kg-dry	T		14.9 J	36.1 J	<2.1 J	<2.1 J	7.5 J	3.9 J
Phosphorus	mg/kg-dry	T		772. J	117. J	488. J	1010. J	810. J	419. J
Sulfate	mg/kg-dry	T		2820. J	5170. J	1470. J	643. J	369. J	217. J
Total Kjeldahl Nitrogen	mg/kg-dry	T		334. :	252. :	179. J	270. :	163. J	137. J
Total Organic Carbon	mg/kg-dry	T		5770. J	4300. J	9720. J	2520. J	5000. J	4080. J
Laboratory Parameters									
pH	SU	T		7.4 :	7.3 :	7.4 :	7.3 :	8.9 :	8.4 :
Solids, Percent	%	T		93.3 :	95. :	95.8 :	94.2 :	90.4 :	94.8 :
Specific Conductance	umhos/cm	T		1190. :	1530. :	816. :	578. :	1120. :	251. :
Geotechnical									
Organic Soils	%	T		2.57 J	1.94 J	2.18 J	2.53 J	1.8 J	1.38 J
Physical Properties									
Cation-Exchange Capacity	meq/100g	T		16.8 :	13.8 :	2.3 :	18.7 :	2. :	1.7 :
Sodium Absorption Ratio	ratio	T		0.89 :	1.57 :	0.51 :	0.59 :	19.78 :	2.87 :
Metals									
Aluminum	mg/kg-dry	T		17600. :	13700. :	10200. :	16600. :	10100. :	6750. :
Antimony	mg/kg-dry	T		<0.26 J	<0.24 J	<0.23 J	<0.24 J	<0.27 J	<0.25 J
Arsenic	mg/kg-dry	T		4.4 :	4.6 :	3.5 :	5.4 :	4.6 :	3.2 :
Barium	mg/kg-dry	T		98.7 :	100. :	112. :	96.1 :	146. :	44.9 :
Beryllium	mg/kg-dry	T		1.4 :	1.3 :	0.96 :	1.3 :	0.95 :	1.2 :
Boron	mg/kg-dry	T		4.6 :	3.6 :	2.1 :	2.9 :	6.3 :	2. :
Cadmium	mg/kg-dry	T		0.97 :	1.6 :	1.3 :	1. :	2.2 :	2.2 :
Calcium	mg/kg-dry	T		11100. :	11300. :	7420. :	11200. :	8510. :	5280. :
Chromium	mg/kg-dry	T		49. :	38.6 :	35.1 :	45.5 :	86. :	165. :
Cobalt	mg/kg-dry	T		14.1 :	12. :	9.9 :	13.5 :	12. :	5.6 :
Copper	mg/kg-dry	T		100. :	119. :	87.7 :	90.3 :	158. :	105. :
Iron	mg/kg-dry	T		28000. :	24300. :	24000. :	27800. :	41400. :	14400. :
Lead	mg/kg-dry	T		122. :	167. :	144. :	112. :	102. :	155. :
Magnesium	mg/kg-dry	T		10800. :	8170. :	6630. :	11100. :	7330. :	3430. :
Manganese	mg/kg-dry	T		1110. J	1230. J	712. J	971. J	1010. :	1230. J

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Appendix A-7e
Soil - Biased 0-24 inches
Validated Analytical Results

Parameter	Units	Exposure Area Fraction	Site ID	MSS1-29		MSS1-30		MSS1-31		MSS1-32		MSS1-33		MSS1-34	
			Sample Date	10/21/2002		10/21/2002		10/21/2002		10/21/2002		10/21/2002		10/21/2002	
			Sample ID	MSS1-29-T02N-SOL		MSS1-30-T02N-SOL		MSS1-31-T02N-SOL		MSS1-32-T02N-SOL		MSS1-33-T02N-SOL		MSS1-34-T02N-SOL	
			Exposure Area	SS1		SS1		SS1		SS1		SS1		SS1	
Mercury	mg/kg-dry	T		<0.017	:	<0.017	:	0.018	:	<0.016	:	0.025	:	0.02	:
Molybdenum	mg/kg-dry	T		499.	:	2250.	:	952.	:	1380.	:	1240.	:	340.	:
Nickel	mg/kg-dry	T		35.	J	28.9	J	25.1	J	34.2	J	74.6	J	14.7	J
Potassium	mg/kg-dry	T		3240.	J	3180.	J	2100.	J	3600.	J	3980.	J	1610.	J
Selenium	mg/kg-dry	T		<0.7	J	1.2	J	0.71	J	0.97	J	<0.73	J	<0.68	J
Silver	mg/kg-dry	T		0.96	:	1.4	:	0.6	:	1.2	:	0.98	:	1.1	:
Sodium	mg/kg-dry	T		101.	J	359.	:	<123.	:	68.7	J	844.	:	256.	:
Thallium	mg/kg-dry	T		0.26	:	0.3	:	0.2	:	0.38	:	0.21	:	0.15	:
Vanadium	mg/kg-dry	T		52.6	:	40.4	:	38.9	:	49.2	:	42.9	:	20.9	:
Zinc	mg/kg-dry	T		165.	J	200.	J	136.	J	174.	J	299.	J	286.	J
Volatile Organics															
1,1,1-Trichloroethane	mg/kg-dry	T		<0.01	:	<0.019	:	<0.006	:	<0.007	:	<0.011	:	<0.008	:
1,1,2,2-Tetrachloroethane	mg/kg-dry	T		<0.01	:	<0.019	:	<0.006	:	<0.007	J	<0.011	:	<0.008	:
1,1,2-Trichloro-1,2,2-trifluoroethane	mg/kg-dry	T		<0.01	:	<0.019	:	<0.006	:	<0.007	:	<0.011	:	<0.008	:
1,1,2-Trichloroethane	mg/kg-dry	T		<0.01	:	<0.019	:	<0.006	:	<0.007	:	<0.011	:	<0.008	:
1,1-Dichloroethane	mg/kg-dry	T		<0.01	:	<0.019	:	<0.006	:	<0.007	:	<0.011	:	<0.008	:
1,1-Dichloroethene	mg/kg-dry	T		<0.01	:	<0.019	:	<0.006	:	<0.007	:	<0.011	:	<0.008	:
1,2,4-Trichlorobenzene	mg/kg-dry	T		<0.01	:	<0.019	:	<0.006	:	<0.007	J	<0.011	:	<0.008	:
1,2-Dibromo-3-chloropropane	mg/kg-dry	T		<0.01	:	<0.019	:	<0.006	:	<0.007	J	<0.011	:	<0.008	:
1,2-Dichlorobenzene	mg/kg-dry	T		<0.01	:	<0.019	:	<0.006	:	<0.007	J	<0.011	:	<0.008	:
1,2-Dichloroethane	mg/kg-dry	T		<0.01	:	<0.019	:	<0.006	:	<0.007	:	<0.011	:	<0.008	:
1,2-Dichloroethene (total)	mg/kg-dry	T		<0.01	:	<0.019	:	<0.006	:	<0.007	:	<0.011	:	<0.008	:
1,2-Dichloropropane	mg/kg-dry	T		<0.01	:	<0.019	:	<0.006	:	<0.007	:	<0.011	:	<0.008	:
1,3-Dichlorobenzene	mg/kg-dry	T		<0.01	:	<0.019	:	<0.006	:	<0.007	J	<0.011	:	<0.008	:
1,4-Dichlorobenzene	mg/kg-dry	T		<0.01	:	<0.019	:	<0.006	:	<0.007	J	<0.011	:	<0.008	:
2-Butanone	mg/kg-dry	T		<0.01	:	<0.019	:	<0.006	:	<0.007	:	<0.011	:	<0.008	:
2-Hexanone	mg/kg-dry	T		<0.01	:	<0.019	:	<0.006	:	<0.007	J	<0.011	:	<0.008	:
4-Methyl-2-pentanone	mg/kg-dry	T		<0.01	:	<0.019	:	<0.006	:	<0.007	J	<0.011	:	<0.008	:
Acetone	mg/kg-dry	T		<0.01	:	0.011	J	0.001	J	<0.007	:	0.002	J	0.002	J
Benzene	mg/kg-dry	T		<0.01	:	<0.019	:	<0.006	:	<0.007	:	<0.011	:	<0.008	:
Bromodichloromethane	mg/kg-dry	T		<0.01	:	<0.019	:	<0.006	:	<0.007	:	<0.011	:	<0.008	:
Bromoform	mg/kg-dry	T		<0.01	:	<0.019	:	<0.006	:	<0.007	J	<0.011	:	<0.008	:
Bromomethane	mg/kg-dry	T		<0.01	:	<0.019	:	<0.006	:	<0.007	:	<0.011	:	<0.008	:
Carbon disulfide	mg/kg-dry	T		<0.01	:	<0.019	:	<0.006	:	<0.007	:	<0.011	:	<0.008	:

J = Qualified as estimated during data validation
R = Qualified as rejected value from data validation and results are considered unusable for any purpose
T = Total Fraction

Appendix A-7e
Soil - Biased 0-24 inches
Validated Analytical Results

Parameter	Units	Exposure Area Fraction	Site ID	MSS1-29	MSS1-30	MSS1-31	MSS1-32	MSS1-33	MSS1-34
			Sample Date	10/21/2002	10/21/2002	10/21/2002	10/21/2002	10/21/2002	10/21/2002
			Sample ID	MSS1-29-T02N-SOL	MSS1-30-T02N-SOL	MSS1-31-T02N-SOL	MSS1-32-T02N-SOL	MSS1-33-T02N-SOL	MSS1-34-T02N-SOL
			Exposure Area	SS1	SS1	SS1	SS1	SS1	SS1
Carbon tetrachloride	mg/kg-dry	T		<0.01 :	<0.019 :	<0.006 :	<0.007 :	<0.011 :	<0.008 :
Chlorobenzene	mg/kg-dry	T		<0.01 :	<0.019 :	<0.006 :	<0.007 J	<0.011 :	<0.008 :
Chloroethane	mg/kg-dry	T		<0.01 :	<0.019 :	<0.006 :	<0.007 :	<0.011 :	<0.008 :
Chloroform	mg/kg-dry	T		<0.01 :	<0.019 :	<0.006 :	<0.007 :	<0.011 :	<0.008 :
Chloromethane	mg/kg-dry	T		<0.01 J	0.017 J	<0.006 J	<0.007 J	<0.011 J	<0.008 J
cis-1,2-Dichloroethene	mg/kg-dry	T		<0.01 :	<0.019 :	<0.006 :	<0.007 :	<0.011 :	<0.008 :
cis-1,3-Dichloropropene	mg/kg-dry	T		<0.01 :	<0.019 :	<0.006 :	<0.007 :	<0.011 :	<0.008 :
Dibromochloromethane	mg/kg-dry	T		<0.01 :	<0.019 :	<0.006 :	<0.007 J	<0.011 :	<0.008 :
Dichlorodifluoromethane	mg/kg-dry	T		<0.01 J	<0.019 J	<0.006 J	<0.007 J	<0.011 J	<0.008 J
Ethylbenzene	mg/kg-dry	T		<0.01 :	<0.019 :	0.001 J	<0.007 J	<0.011 :	<0.008 :
Methylene chloride	mg/kg-dry	T		0.001 J	0.009 J	0.0008 J	<0.007 :	0.002 J	0.002 J
Styrene	mg/kg-dry	T		<0.01 :	<0.019 :	<0.006 :	<0.007 J	<0.011 :	<0.008 :
Tetrachloroethene	mg/kg-dry	T		<0.01 :	<0.019 :	0.0008 J	<0.007 J	<0.011 :	<0.008 :
Toluene	mg/kg-dry	T		<0.01 :	<0.019 :	<0.006 :	<0.007 J	<0.011 :	<0.008 :
Total Xylene	mg/kg-dry	T		<0.01 :	<0.019 :	0.01 :	0.002 J	<0.011 :	0.001 J
trans-1,2-Dichloroethene	mg/kg-dry	T		<0.01 :	<0.019 :	<0.006 :	<0.007 :	<0.011 :	<0.008 :
trans-1,3-Dichloropropene	mg/kg-dry	T		<0.01 :	<0.019 :	<0.006 :	<0.007 J	<0.011 :	<0.008 :
Trichloroethene	mg/kg-dry	T		<0.01 :	<0.019 :	<0.006 :	<0.007 :	<0.011 :	<0.008 :
Trichlorofluoromethane	mg/kg-dry	T		<0.01 :	<0.019 :	<0.006 :	<0.007 :	<0.011 :	<0.008 :
Vinyl chloride	mg/kg-dry	T		<0.01 :	<0.019 J	<0.006 J	<0.007 :	<0.011 J	<0.008 J
Semi-Volatile Organics									
1,1`-Biphenyl	mg/kg-dry	T		<0.35 :	<0.35 :	<0.34 :	<0.35 :	<0.37 :	<0.35 :
2,4,5-Trichlorophenol	mg/kg-dry	T		<0.89 :	<0.87 :	<0.86 :	<0.88 :	<0.92 :	<0.87 :
2,4,6-Trichlorophenol	mg/kg-dry	T		<0.35 :	<0.35 :	<0.34 :	<0.35 :	<0.37 :	<0.35 :
2,4-Dichlorophenol	mg/kg-dry	T		<0.35 :	<0.35 :	<0.34 :	<0.35 :	<0.37 :	<0.35 :
2,4-Dimethylphenol	mg/kg-dry	T		<0.35 :	<0.35 :	<0.34 :	<0.35 :	<0.37 :	<0.35 :
2,4-Dinitrophenol	mg/kg-dry	T		<0.89 :	<0.87 :	<0.86 J	<0.88 :	<0.92 J	<0.87 J
2,4-Dinitrotoluene	mg/kg-dry	T		<0.35 :	<0.35 :	<0.34 :	<0.35 :	<0.37 :	<0.35 :
2,6-Dinitrotoluene	mg/kg-dry	T		<0.35 :	<0.35 :	<0.34 :	<0.35 :	<0.37 :	<0.35 :
2-Chloronaphthalene	mg/kg-dry	T		<0.35 :	<0.35 :	<0.34 :	<0.35 :	<0.37 :	<0.35 :
2-Chlorophenol	mg/kg-dry	T		<0.35 :	<0.35 :	<0.34 :	<0.35 :	<0.37 :	<0.35 :
2-Methylnaphthalene	mg/kg-dry	T		<0.35 :	<0.35 :	<0.34 :	<0.35 :	<0.37 :	<0.35 :
2-Methylphenol	mg/kg-dry	T		<0.35 :	<0.35 :	<0.34 :	<0.35 :	<0.37 :	<0.35 :
2-Nitroaniline	mg/kg-dry	T		<0.89 :	<0.87 :	<0.86 :	<0.88 :	<0.92 :	<0.87 :

J = Qualified as estimated during data validation
R = Qualified as rejected value from data validation and results are considered unusable for any purpose
T = Total Fraction

Appendix A-7e
Soil - Biased 0-24 inches
Validated Analytical Results

Parameter	Units	Exposure Area Fraction	Site ID	MSS1-29	MSS1-30	MSS1-31	MSS1-32	MSS1-33	MSS1-34
			Sample Date	10/21/2002	10/21/2002	10/21/2002	10/21/2002	10/21/2002	10/21/2002
			Sample ID	MSS1-29-T02N-SOL	MSS1-30-T02N-SOL	MSS1-31-T02N-SOL	MSS1-32-T02N-SOL	MSS1-33-T02N-SOL	MSS1-34-T02N-SOL
			Exposure Area	SS1	SS1	SS1	SS1	SS1	SS1
2-Nitrophenol	mg/kg-dry	T		<0.35 :	<0.35 :	<0.34 :	<0.35 :	<0.37 :	<0.35 :
3,3-Dichlorobenzidine	mg/kg-dry	T		<0.35 :	<0.35 :	<0.34 :	<0.35 :	<0.37 :	<0.35 :
3-Nitroaniline	mg/kg-dry	T		<0.89 :	<0.87 :	<0.86 :	<0.88 :	<0.92 :	<0.87 :
4,6-Dinitro-2-methylphenol	mg/kg-dry	T		<0.89 :	<0.87 :	<0.86 :	<0.88 :	<0.92 :	<0.87 :
4-Bromophenyl phenyl ether	mg/kg-dry	T		<0.35 :	<0.35 :	<0.34 :	<0.35 :	<0.37 :	<0.35 :
4-Chloro-3-methylphenol	mg/kg-dry	T		<0.35 :	<0.35 :	<0.34 :	<0.35 :	<0.37 :	<0.35 :
4-Chloroaniline	mg/kg-dry	T		<0.35 :	<0.35 :	<0.34 :	<0.35 :	<0.37 :	<0.35 :
4-Chlorophenyl phenyl ether	mg/kg-dry	T		<0.35 :	<0.35 :	<0.34 :	<0.35 :	<0.37 :	<0.35 :
4-Methylphenol	mg/kg-dry	T		<0.35 :	<0.35 :	<0.34 :	<0.35 :	<0.37 :	<0.35 :
4-Nitroaniline	mg/kg-dry	T		<0.89 :	<0.87 :	<0.86 :	<0.88 :	<0.92 :	<0.87 :
4-Nitrophenol	mg/kg-dry	T		<0.89 J	<0.87 J	<0.86 J	<0.88 J	<0.92 J	<0.87 J
Acenaphthene	mg/kg-dry	T		<0.35 :	<0.35 :	<0.34 :	0.056 J	<0.37 :	<0.35 :
Acenaphthylene	mg/kg-dry	T		<0.35 :	<0.35 :	<0.34 :	<0.35 :	<0.37 :	<0.35 :
Anthracene	mg/kg-dry	T		<0.35 :	<0.35 :	<0.34 :	0.097 J	<0.37 :	<0.35 :
Benzaldehyde	mg/kg-dry	T		<0.35 :	<0.35 :	<0.34 J	<0.35 :	<0.37 J	<0.35 J
Benzo(a)anthracene	mg/kg-dry	T		0.02 J	<0.35 :	<0.34 :	0.26 J	<0.37 :	<0.35 :
Benzo(a)pyrene	mg/kg-dry	T		<0.35 :	<0.35 :	<0.34 :	0.19 J	<0.37 :	<0.35 :
Benzo(b)fluoranthene	mg/kg-dry	T		<0.35 :	<0.35 :	<0.34 :	0.23 J	<0.37 :	<0.35 :
Benzo(g,h,i)perylene	mg/kg-dry	T		<0.35 :	<0.35 :	<0.34 :	0.091 J	<0.37 :	<0.35 :
Benzo(k)fluoranthene	mg/kg-dry	T		<0.35 :	<0.35 :	<0.34 :	0.2 J	<0.37 :	<0.35 :
Bis(2-chloroethoxy)methane	mg/kg-dry	T		<0.35 :	<0.35 :	<0.34 :	<0.35 :	<0.37 :	<0.35 :
Bis(2-chloroethyl)ether	mg/kg-dry	T		<0.35 :	<0.35 :	<0.34 :	<0.35 :	<0.37 :	<0.35 :
Bis(2-ethylhexyl)phthalate	mg/kg-dry	T		<0.35 :	0.093 J	0.63 :	0.045 J	0.65 :	1. :
Butyl benzyl phthalate	mg/kg-dry	T		<0.35 :	<0.35 :	<0.34 :	<0.35 :	<0.37 :	<0.35 :
Carbazole	mg/kg-dry	T		<0.35 :	<0.35 :	<0.34 :	0.069 J	<0.37 :	<0.35 :
Chrysene	mg/kg-dry	T		0.019 J	<0.35 :	<0.34 :	0.27 J	<0.37 :	<0.35 :
Dibenz(a,h)anthracene	mg/kg-dry	T		<0.35 :	<0.35 :	<0.34 :	0.042 J	<0.37 :	<0.35 :
Dibenzofuran	mg/kg-dry	T		<0.35 :	<0.35 :	<0.34 :	0.028 J	<0.37 :	<0.35 :
Dichlorodiisopropyl ether	mg/kg-dry	T		<0.35 J	<0.35 J	<0.34 :	<0.35 J	<0.37 :	<0.35 :
Diethylphthalate	mg/kg-dry	T		<0.35 :	<0.35 :	<0.34 :	<0.35 :	<0.37 :	<0.35 :
Dimethylphthalate	mg/kg-dry	T		<0.35 :	<0.35 :	<0.34 :	<0.35 :	<0.37 :	<0.35 :
Di-n-Butyl phthalate	mg/kg-dry	T		<0.35 :	<0.35 :	<0.34 :	<0.35 :	0.019 J	<0.35 :
Di-n-Octyl phthalate	mg/kg-dry	T		<0.35 :	<0.35 :	<0.34 J	<0.35 :	<0.37 J	<0.35 J
Fluoranthene	mg/kg-dry	T		0.034 J	<0.35 :	<0.34 :	0.57 :	<0.37 :	<0.35 :

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R = Qualified as rejected value from data validation and results are considered unusable for any purpose
T = Total Fraction

Appendix A-7e
Soil - Biased 0-24 inches
Validated Analytical Results

Parameter	Units	Exposure Area Fraction	Site ID	MSS1-29		MSS1-30		MSS1-31		MSS1-32		MSS1-33		MSS1-34	
			Sample Date	10/21/2002		10/21/2002		10/21/2002		10/21/2002		10/21/2002		10/21/2002	
			Sample ID	MSS1-29-T02N-SOL		MSS1-30-T02N-SOL		MSS1-31-T02N-SOL		MSS1-32-T02N-SOL		MSS1-33-T02N-SOL		MSS1-34-T02N-SOL	
			Exposure Area	SS1		SS1		SS1		SS1		SS1		SS1	
Fluorene	mg/kg-dry	T		<0.35	:	<0.35	:	<0.34	:	0.048	J	<0.37	:	<0.35	:
Hexachlorobenzene	mg/kg-dry	T		<0.35	:	<0.35	:	<0.34	:	<0.35	:	<0.37	:	<0.35	:
Hexachlorobutadiene	mg/kg-dry	T		<0.35	:	<0.35	:	<0.34	:	<0.35	:	<0.37	:	<0.35	:
Hexachlorocyclopentadiene	mg/kg-dry	T		<0.35	:	<0.35	:	<0.34	:	<0.35	:	<0.37	:	<0.35	:
Hexachloroethane	mg/kg-dry	T		<0.35	:	<0.35	:	<0.34	:	<0.35	:	<0.37	:	<0.35	:
Indeno(1,2,3-cd)pyrene	mg/kg-dry	T		<0.35	:	<0.35	:	<0.34	:	0.09	J	<0.37	:	<0.35	:
Isophorone	mg/kg-dry	T		<0.35	:	<0.35	:	<0.34	:	<0.35	:	<0.37	:	<0.35	:
Naphthalene	mg/kg-dry	T		<0.35	:	<0.35	:	<0.34	:	<0.35	:	<0.37	:	<0.35	:
Nitrobenzene	mg/kg-dry	T		<0.35	:	<0.35	:	<0.34	:	<0.35	:	<0.37	:	<0.35	:
N-Nitrosodi-n-propylamine	mg/kg-dry	T		<0.35	:	<0.35	:	<0.34	:	<0.35	:	<0.37	:	<0.35	:
N-Nitrosodiphenylamine	mg/kg-dry	T		<0.35	:	<0.35	:	<0.34	:	<0.35	:	<0.37	:	<0.35	:
Pentachlorophenol	mg/kg-dry	T		<0.89	J	<0.87	J	<0.86	:	<0.88	J	<0.92	:	<0.87	:
Phenanthrene	mg/kg-dry	T		0.018	J	<0.35	:	0.018	J	0.38	:	<0.37	:	<0.35	:
Phenol	mg/kg-dry	T		<0.35	:	<0.35	:	<0.34	:	<0.35	:	<0.37	:	<0.35	:
Pyrene	mg/kg-dry	T		0.034	J	<0.35	:	0.017	J	0.49	:	<0.37	:	<0.35	:
Pesticides-PCBs															
Aroclor 1016	mg/kg-dry	T		<0.035	:	-		<0.034	:	<0.1	:	-		<0.035	:
Aroclor 1221	mg/kg-dry	T		<0.072	:	-		<0.07	:	<0.21	:	-		<0.07	:
Aroclor 1232	mg/kg-dry	T		<0.035	:	-		<0.034	:	<0.1	:	-		<0.035	:
Aroclor 1242	mg/kg-dry	T		<0.035	:	-		<0.034	:	<0.1	:	-		<0.035	:
Aroclor 1248	mg/kg-dry	T		<0.035	:	-		<0.034	:	<0.1	:	-		<0.035	:
Aroclor 1254	mg/kg-dry	T		0.38	J	-		0.28	J	3.4	J	-		0.47	J
Aroclor 1260	mg/kg-dry	T		0.052	:	-		<0.034	:	<0.1	:	-		<0.035	:

J = Qualified as estimated during data validation
R = Qualified as rejected value from data validation and results are considered unusable for any purpose
T = Total Fraction

Appendix A-7e
Soil - Biased 0-24 inches
Validated Analytical Results

Parameter	Units	Exposure Area Fraction	Site ID	MSS1-35	MSS1-35	MSS1-36	MSS1-36	MSS1-37	MSS1-38
			Sample Date	10/22/2002	10/22/2002	10/22/2002	10/22/2002	10/22/2002	10/22/2002
			Sample ID	MSS1-35-T02N-SOLDL	MSS1-35-T02N-SOL	MSS1-36-T02N-SOLDL	MSS1-36-T02N-SOL	MSS1-37-T02N-SOL	MSS1-38-T02N-SOL
			Exposure Area	SS1	SS1	SS1	SS1	SS1	SS1
General Chemistry									
Ammonia	mg/kg-dry	T		-	29.2 :	-	83.2 :	100. :	19.4 :
Chloride	mg/kg-dry	T		-	41.5 J	-	162. J	286. J	<25.8 :
Fluoride	mg/kg-dry	T		-	2.6 J	-	3.4 J	3.3 J	4. J
Nitrate	mg/kg-dry	T		-	10.8 J	-	10.1 J	12.2 J	3.2 J
Phosphorus	mg/kg-dry	T		-	742. J	-	835. J	1150. J	571. J
Sulfate	mg/kg-dry	T		-	3960. J	-	1430. J	321. J	2490. J
Total Kjeldahl Nitrogen	mg/kg-dry	T		-	165. :	-	366. :	431. :	73.5 :
Total Organic Carbon	mg/kg-dry	T		-	2530. J	-	5570. J	7550. J	<104. J
Laboratory Parameters									
pH	SU	T		-	7.5 :	-	7.1 :	8.1 :	7.6 :
Solids, Percent	%	T		-	93.4 :	-	91.7 :	91.7 :	97. :
Specific Conductance	umhos/cm	T		-	1110. :	-	786. :	907. :	898. :
Geotechnical									
Organic Soils	%	T		-	2.01 J	-	1.95 J	3.05 J	1.07 J
Physical Properties									
Cation-Exchange Capacity	meq/100g	T		-	32.4 :	-	16.5 :	38.8 :	37. :
Sodium Absorption Ratio	ratio	T		-	0.53 :	-	5.97 :	14.89 :	0.85 :
Metals									
Aluminum	mg/kg-dry	T		-	14700. :	-	13200. :	15600. :	11100. :
Antimony	mg/kg-dry	T		-	<0.26 J	-	<0.27 J	<0.28 J	<0.24 J
Arsenic	mg/kg-dry	T		-	4.4 :	-	9.7 :	8.1 :	9.2 :
Barium	mg/kg-dry	T		-	87.7 :	-	81.7 :	99.5 :	54.9 :
Beryllium	mg/kg-dry	T		-	1.6 :	-	1.1 :	1.2 :	0.77 :
Boron	mg/kg-dry	T		-	<0.24 J	-	<0.22 J	<3. J	<0.23 J
Cadmium	mg/kg-dry	T		-	1.4 :	-	1.9 :	1.7 :	1.1 :
Calcium	mg/kg-dry	T		-	12600. :	-	9900. :	13400. :	6610. :
Chromium	mg/kg-dry	T		-	43.9 :	-	85.1 :	64.7 :	43.7 :
Cobalt	mg/kg-dry	T		-	12.5 :	-	13.4 :	17. :	6.2 :
Copper	mg/kg-dry	T		-	112. :	-	215. :	174. :	156. :
Iron	mg/kg-dry	T		-	23700. :	-	53300. :	35200. :	28500. :
Lead	mg/kg-dry	T		-	122. :	-	291. :	677. :	77.7 :
Magnesium	mg/kg-dry	T		-	9030. :	-	9310. :	11400. :	5940. :
Manganese	mg/kg-dry	T		-	1100. J	-	1220. J	927. J	491. J

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T = Total Fraction

Appendix A-7e
Soil - Biased 0-24 inches
Validated Analytical Results

Parameter	Units	Exposure Area Fraction	Site ID	MSS1-35	MSS1-35	MSS1-36	MSS1-36	MSS1-37	MSS1-38
			Sample Date	10/22/2002	10/22/2002	10/22/2002	10/22/2002	10/22/2002	10/22/2002
			Sample ID	MSS1-35-T02N-SOLDL	MSS1-35-T02N-SOL	MSS1-36-T02N-SOLDL	MSS1-36-T02N-SOL	MSS1-37-T02N-SOL	MSS1-38-T02N-SOL
			Exposure Area	SS1	SS1	SS1	SS1	SS1	SS1
Mercury	mg/kg-dry	T		-	<0.016 :	-	0.041 :	0.033 :	<0.016 J
Molybdenum	mg/kg-dry	T		-	1440. :	-	5120. :	1600. :	8640. J
Nickel	mg/kg-dry	T		-	33.5 J	-	61.7 J	56. J	31.1 :
Potassium	mg/kg-dry	T		-	3550. J	-	3530. J	3970. J	2290. :
Selenium	mg/kg-dry	T		-	<0.69 J	-	0.98 J	0.8 J	1.4 :
Silver	mg/kg-dry	T		-	1.3 :	-	2.1 :	1.6 :	1.4 :
Sodium	mg/kg-dry	T		-	66. J	-	604. :	657. :	835. :
Thallium	mg/kg-dry	T		-	0.27 :	-	0.34 :	0.28 :	0.22 :
Vanadium	mg/kg-dry	T		-	43.1 :	-	47. :	52.6 :	36.6 :
Zinc	mg/kg-dry	T		-	197. J	-	194. J	172. J	140. J
Volatile Organics									
1,1,1-Trichloroethane	mg/kg-dry	T		-	<0.006 :	-	<0.004 :	<0.006 :	<0.009 :
1,1,2,2-Tetrachloroethane	mg/kg-dry	T		-	<0.006 :	-	<0.004 :	<0.006 J	<0.009 :
1,1,2-Trichloro-1,2,2-trifluoroethane	mg/kg-dry	T		-	<0.006 :	-	<0.004 :	<0.006 :	<0.009 :
1,1,2-Trichloroethane	mg/kg-dry	T		-	<0.006 :	-	<0.004 :	<0.006 J	<0.009 :
1,1-Dichloroethane	mg/kg-dry	T		-	<0.006 :	-	<0.004 :	<0.006 :	<0.009 :
1,1-Dichloroethene	mg/kg-dry	T		-	<0.006 :	-	<0.004 :	<0.006 :	<0.009 :
1,2,4-Trichlorobenzene	mg/kg-dry	T		-	<0.006 :	-	<0.004 :	<0.006 J	<0.009 :
1,2-Dibromo-3-chloropropane	mg/kg-dry	T		-	<0.006 :	-	<0.004 :	<0.006 J	<0.009 :
1,2-Dichlorobenzene	mg/kg-dry	T		-	<0.006 :	-	<0.004 :	<0.006 J	<0.009 :
1,2-Dichloroethane	mg/kg-dry	T		-	<0.006 :	-	<0.004 :	<0.006 :	<0.009 :
1,2-Dichloroethene (total)	mg/kg-dry	T		-	<0.006 :	-	<0.004 :	<0.006 :	<0.009 :
1,2-Dichloropropane	mg/kg-dry	T		-	<0.006 :	-	<0.004 :	<0.006 :	<0.009 :
1,3-Dichlorobenzene	mg/kg-dry	T		-	<0.006 :	-	<0.004 :	<0.006 J	<0.009 :
1,4-Dichlorobenzene	mg/kg-dry	T		-	<0.006 :	-	<0.004 :	<0.006 J	<0.009 :
2-Butanone	mg/kg-dry	T		-	<0.006 :	-	<0.004 :	<0.006 :	<0.009 :
2-Hexanone	mg/kg-dry	T		-	<0.006 :	-	<0.004 :	<0.006 J	<0.009 :
4-Methyl-2-pentanone	mg/kg-dry	T		-	<0.006 :	-	<0.004 :	<0.006 :	<0.009 :
Acetone	mg/kg-dry	T		-	0.002 J	-	0.0009 J	0.002 J	0.002 J
Benzene	mg/kg-dry	T		-	<0.006 :	-	<0.004 :	<0.006 :	<0.009 :
Bromodichloromethane	mg/kg-dry	T		-	<0.006 :	-	<0.004 :	<0.006 :	<0.009 :
Bromoform	mg/kg-dry	T		-	<0.006 :	-	<0.004 :	<0.006 J	<0.009 :
Bromomethane	mg/kg-dry	T		-	<0.006 :	-	<0.004 :	<0.006 :	<0.009 :
Carbon disulfide	mg/kg-dry	T		-	<0.006 :	-	<0.004 :	<0.006 :	<0.009 :

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T = Total Fraction

Appendix A-7e
Soil - Biased 0-24 inches
Validated Analytical Results

Parameter	Units	Exposure Area Fraction	Site ID	MSS1-35	MSS1-35	MSS1-36	MSS1-36	MSS1-37	MSS1-38
			Sample Date	10/22/2002	10/22/2002	10/22/2002	10/22/2002	10/22/2002	10/22/2002
			Sample ID	MSS1-35-T02N-SOLDL	MSS1-35-T02N-SOL	MSS1-36-T02N-SOLDL	MSS1-36-T02N-SOL	MSS1-37-T02N-SOL	MSS1-38-T02N-SOL
			Exposure Area	SS1	SS1	SS1	SS1	SS1	SS1
Carbon tetrachloride	mg/kg-dry	T		-	<0.006 :	-	<0.004 :	<0.006 :	<0.009 :
Chlorobenzene	mg/kg-dry	T		-	<0.006 :	-	<0.004 :	<0.006 J	<0.009 :
Chloroethane	mg/kg-dry	T		-	<0.006 :	-	<0.004 :	<0.006 :	<0.009 :
Chloroform	mg/kg-dry	T		-	<0.006 :	-	<0.004 :	<0.006 :	<0.009 :
Chloromethane	mg/kg-dry	T		-	<0.006 :	-	<0.004 J	<0.006 J	<0.009 J
cis-1,2-Dichloroethene	mg/kg-dry	T		-	<0.006 :	-	<0.004 :	<0.006 :	<0.009 :
cis-1,3-Dichloropropene	mg/kg-dry	T		-	<0.006 :	-	<0.004 :	<0.006 :	<0.009 :
Dibromochloromethane	mg/kg-dry	T		-	<0.006 :	-	<0.004 :	<0.006 J	<0.009 :
Dichlorodifluoromethane	mg/kg-dry	T		-	<0.006 :	-	<0.004 J	<0.006 J	<0.009 J
Ethylbenzene	mg/kg-dry	T		-	<0.006 :	-	<0.004 :	<0.006 J	<0.009 :
Methylene chloride	mg/kg-dry	T		-	<0.006 :	-	0.0007 J	0.001 J	<0.009 :
Styrene	mg/kg-dry	T		-	<0.006 :	-	<0.004 :	<0.006 J	<0.009 :
Tetrachloroethene	mg/kg-dry	T		-	<0.006 :	-	<0.004 :	<0.006 J	<0.009 :
Toluene	mg/kg-dry	T		-	<0.006 :	-	<0.004 :	<0.006 J	<0.009 :
Total Xylene	mg/kg-dry	T		-	0.001 J	-	<0.004 :	0.003 J	<0.009 :
trans-1,2-Dichloroethene	mg/kg-dry	T		-	<0.006 :	-	<0.004 :	<0.006 :	<0.009 :
trans-1,3-Dichloropropene	mg/kg-dry	T		-	<0.006 :	-	<0.004 :	<0.006 J	<0.009 :
Trichloroethene	mg/kg-dry	T		-	<0.006 :	-	<0.004 :	<0.006 :	<0.009 :
Trichlorofluoromethane	mg/kg-dry	T		-	<0.006 :	-	<0.004 :	<0.006 :	<0.009 :
Vinyl chloride	mg/kg-dry	T		-	<0.006 :	-	<0.004 J	<0.006 J	<0.009 :
Semi-Volatile Organics									
1,1`-Biphenyl	mg/kg-dry	T		-	<0.35 :	-	<0.36 :	<0.36 :	<0.34 :
2,4,5-Trichlorophenol	mg/kg-dry	T		-	<0.89 :	-	<0.9 :	<0.9 :	<0.86 :
2,4,6-Trichlorophenol	mg/kg-dry	T		-	<0.35 :	-	<0.36 :	<0.36 :	<0.34 :
2,4-Dichlorophenol	mg/kg-dry	T		-	<0.35 :	-	<0.36 :	<0.36 :	<0.34 :
2,4-Dimethylphenol	mg/kg-dry	T		-	<0.35 :	-	<0.36 :	<0.36 :	<0.34 :
2,4-Dinitrophenol	mg/kg-dry	T		-	<0.89 J	-	<0.9 J	<0.9 J	<0.86 J
2,4-Dinitrotoluene	mg/kg-dry	T		-	<0.35 :	-	<0.36 :	<0.36 :	<0.34 :
2,6-Dinitrotoluene	mg/kg-dry	T		-	<0.35 :	-	<0.36 :	<0.36 :	<0.34 :
2-Chloronaphthalene	mg/kg-dry	T		-	<0.35 :	-	<0.36 :	<0.36 :	<0.34 :
2-Chlorophenol	mg/kg-dry	T		-	<0.35 :	-	<0.36 :	<0.36 :	<0.34 :
2-Methylnaphthalene	mg/kg-dry	T		-	<0.35 :	-	<0.36 :	<0.36 :	<0.34 :
2-Methylphenol	mg/kg-dry	T		-	<0.35 :	-	<0.36 :	<0.36 :	<0.34 :
2-Nitroaniline	mg/kg-dry	T		-	<0.89 :	-	<0.9 :	<0.9 :	<0.86 :

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R = Qualified as rejected value from data validation and results are considered unusable for any purpose
T = Total Fraction

Appendix A-7e
Soil - Biased 0-24 inches
Validated Analytical Results

Parameter	Units	Exposure Area Fraction	Site ID	MSS1-35	MSS1-35	MSS1-36	MSS1-36	MSS1-37	MSS1-38
			Sample Date	10/22/2002	10/22/2002	10/22/2002	10/22/2002	10/22/2002	10/22/2002
			Sample ID	MSS1-35-T02N-SOLDL	MSS1-35-T02N-SOL	MSS1-36-T02N-SOLDL	MSS1-36-T02N-SOL	MSS1-37-T02N-SOL	MSS1-38-T02N-SOL
			Exposure Area	SS1	SS1	SS1	SS1	SS1	SS1
2-Nitrophenol	mg/kg-dry	T		-	<0.35 :	-	<0.36 :	<0.36 :	<0.34 :
3,3-Dichlorobenzidine	mg/kg-dry	T		-	<0.35 :	-	<0.36 :	<0.36 :	<0.34 :
3-Nitroaniline	mg/kg-dry	T		-	<0.89 :	-	<0.9 :	<0.9 :	<0.86 :
4,6-Dinitro-2-methylphenol	mg/kg-dry	T		-	<0.89 J	-	<0.9 :	<0.9 :	<0.86 J
4-Bromophenyl phenyl ether	mg/kg-dry	T		-	<0.35 :	-	<0.36 :	<0.36 :	<0.34 :
4-Chloro-3-methylphenol	mg/kg-dry	T		-	<0.35 :	-	<0.36 :	<0.36 :	<0.34 :
4-Chloroaniline	mg/kg-dry	T		-	<0.35 :	-	<0.36 :	<0.36 :	<0.34 :
4-Chlorophenyl phenyl ether	mg/kg-dry	T		-	<0.35 :	-	<0.36 :	<0.36 :	<0.34 :
4-Methylphenol	mg/kg-dry	T		-	<0.35 :	-	<0.36 :	<0.36 :	<0.34 :
4-Nitroaniline	mg/kg-dry	T		-	<0.89 J	-	<0.9 :	<0.9 :	<0.86 J
4-Nitrophenol	mg/kg-dry	T		-	<0.89 J	-	<0.9 J	<0.9 J	<0.86 J
Acenaphthene	mg/kg-dry	T		-	<0.35 :	-	<0.36 :	<0.36 :	<0.34 :
Acenaphthylene	mg/kg-dry	T		-	<0.35 :	-	<0.36 :	<0.36 :	<0.34 :
Anthracene	mg/kg-dry	T		-	<0.35 :	-	0.029 J	0.018 J	<0.34 :
Benzaldehyde	mg/kg-dry	T		-	<0.39 :	-	<0.36 J	<0.36 J	<0.34 J
Benzo(a)anthracene	mg/kg-dry	T		-	<0.35 :	-	0.057 J	0.056 J	<0.34 :
Benzo(a)pyrene	mg/kg-dry	T		-	<0.35 :	-	0.043 J	0.043 J	<0.34 :
Benzo(b)fluoranthene	mg/kg-dry	T		-	<0.35 :	-	0.049 J	0.058 J	<0.34 :
Benzo(g,h,i)perylene	mg/kg-dry	T		-	<0.35 :	-	0.026 J	0.026 J	<0.34 :
Benzo(k)fluoranthene	mg/kg-dry	T		-	<0.35 :	-	0.057 J	0.046 J	<0.34 :
Bis(2-chloroethoxy)methane	mg/kg-dry	T		-	<0.35 :	-	<0.36 :	<0.36 :	<0.34 :
Bis(2-chloroethyl)ether	mg/kg-dry	T		-	<0.35 :	-	<0.36 :	<0.36 :	<0.34 :
Bis(2-ethylhexyl)phthalate	mg/kg-dry	T		-	0.12 J	-	0.2 J	0.34 J	0.032 J
Butyl benzyl phthalate	mg/kg-dry	T		-	0.1 J	-	<0.36 :	0.14 J	<0.34 :
Carbazole	mg/kg-dry	T		-	<0.35 :	-	<0.36 :	<0.36 :	<0.34 :
Chrysene	mg/kg-dry	T		-	<0.35 :	-	0.064 J	0.062 J	<0.34 :
Dibenz(a,h)anthracene	mg/kg-dry	T		-	<0.35 :	-	<0.36 :	<0.36 :	<0.34 :
Dibenzofuran	mg/kg-dry	T		-	<0.35 :	-	<0.36 :	<0.36 :	<0.34 :
Dichlorodiisopropyl ether	mg/kg-dry	T		-	<0.35 :	-	<0.36 :	<0.36 :	<0.34 :
Diethylphthalate	mg/kg-dry	T		-	<0.35 :	-	<0.36 :	<0.36 :	<0.34 :
Dimethylphthalate	mg/kg-dry	T		-	0.054 J	-	<0.36 :	<0.36 :	<0.34 :
Di-n-Butyl phthalate	mg/kg-dry	T		-	0.062 J	-	0.036 J	<0.36 :	0.016 J
Di-n-Octyl phthalate	mg/kg-dry	T		-	<0.35 :	-	<0.36 J	0.048 J	<0.34 :
Fluoranthene	mg/kg-dry	T		-	<0.35 :	-	0.13 J	0.12 J	<0.34 :

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T = Total Fraction

Appendix A-7e
Soil - Biased 0-24 inches
Validated Analytical Results

Parameter	Units	Exposure Area Fraction	Site ID	Sample Date	Sample ID	Exposure Area
			MSS1-35	10/22/2002	MSS1-35-T02N-SOLDL	SS1
			MSS1-35	10/22/2002	MSS1-35-T02N-SOL	SS1
			MSS1-36	10/22/2002	MSS1-36-T02N-SOLDL	SS1
			MSS1-36	10/22/2002	MSS1-36-T02N-SOL	SS1
			MSS1-37	10/22/2002	MSS1-37-T02N-SOL	SS1
			MSS1-38	10/22/2002	MSS1-38-T02N-SOL	SS1
Fluorene	mg/kg-dry	T	-	<0.35 :	-	<0.36 :	<0.36 :	<0.34 :
Hexachlorobenzene	mg/kg-dry	T	-	<0.35 :	-	<0.36 :	<0.36 :	<0.34 :
Hexachlorobutadiene	mg/kg-dry	T	-	<0.35 :	-	<0.36 :	<0.36 :	<0.34 :
Hexachlorocyclopentadiene	mg/kg-dry	T	-	<0.35 :	-	<0.36 :	<0.36 :	<0.34 :
Hexachloroethane	mg/kg-dry	T	-	<0.35 :	-	<0.36 :	<0.36 :	<0.34 :
Indeno(1,2,3-cd)pyrene	mg/kg-dry	T	-	<0.35 :	-	0.024 J	0.021 J	<0.34 :
Isophorone	mg/kg-dry	T	-	<0.35 :	-	<0.36 :	<0.36 :	<0.34 :
Naphthalene	mg/kg-dry	T	-	<0.35 :	-	<0.36 :	<0.36 :	<0.34 :
Nitrobenzene	mg/kg-dry	T	-	<0.35 :	-	<0.36 :	<0.36 :	<0.34 :
N-Nitrosodi-n-propylamine	mg/kg-dry	T	-	<0.35 :	-	<0.36 :	<0.36 :	<0.34 :
N-Nitrosodiphenylamine	mg/kg-dry	T	-	<0.35 :	-	<0.36 :	<0.36 :	<0.34 :
Pentachlorophenol	mg/kg-dry	T	-	<0.89 :	-	<0.9 :	<0.9 :	<0.86 :
Phenanthrene	mg/kg-dry	T	-	<0.35 :	-	0.12 J	0.063 J	<0.34 :
Phenol	mg/kg-dry	T	-	<0.35 :	-	<0.36 :	<0.36 :	<0.34 :
Pyrene	mg/kg-dry	T	-	<0.35 :	-	0.096 J	0.11 J	<0.34 :
Pesticides-PCBs								
Aroclor 1016	mg/kg-dry	T	-	<0.35 :	-	<0.036 :	<0.036 :	<0.034 :
Aroclor 1221	mg/kg-dry	T	-	<0.72 :	-	<0.073 :	<0.073 :	<0.069 :
Aroclor 1232	mg/kg-dry	T	-	<0.35 :	-	<0.036 :	<0.036 :	<0.034 :
Aroclor 1242	mg/kg-dry	T	-	<0.35 :	-	<0.036 :	<0.036 :	<0.034 :
Aroclor 1248	mg/kg-dry	T	11. J	-	2.6 J	-	<0.036 :	0.3 :
Aroclor 1254	mg/kg-dry	T	-	<0.35 :	3.1 J	-	1.2 J	0.38 J
Aroclor 1260	mg/kg-dry	T	-	<0.35 :	-	<0.036 :	0.22 :	<0.034 :

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Appendix A-7e
Soil - Biased 0-24 inches
Validated Analytical Results

Parameter	Units	Exposure Area Fraction	Site ID	MSS1-39	MSS1-40	MSS1-41	MSS1-41	MSS1-42	MSS1-42
			Sample Date	10/22/2002	10/22/2002	10/22/2002	10/22/2002	10/22/2002	10/22/2002
			Sample ID	MSS1-39-T02N-SOL	MSS1-40-T02N-SOL	MSS1-41-T02N-SOL DL	MSS1-41-T02N-SOL	MSS1-42-T02N-SOLD L	MSS1-42-T02N-SOL
			Exposure Area	SS1	SS1	SS1	SS1	SS1	SS1
General Chemistry									
Ammonia	mg/kg-dry	T		34.9 :	29.4 :	-	19.5 :	-	20.7 :
Chloride	mg/kg-dry	T		337. J	33.5 :	-	<26.7 :	-	<27.9 :
Fluoride	mg/kg-dry	T		4.5 J	1.1 J	-	7.3 J	-	1.8 J
Nitrate	mg/kg-dry	T		17.2 J	13.2 J	-	<2.1 J	-	<2.2 J
Phosphorus	mg/kg-dry	T		620. J	897. J	-	514. J	-	344. J
Sulfate	mg/kg-dry	T		779. J	1650. J	-	9420. J	-	7070. J
Total Kjeldahl Nitrogen	mg/kg-dry	T		118. :	244. :	-	108. J	-	94.4 J
Total Organic Carbon	mg/kg-dry	T		3760. J	5970. J	-	2080. J	-	3610. J
Laboratory Parameters									
pH	SU	T		7.6 :	7.8 :	-	7. :	-	7.5 :
Solids, Percent	%	T		94.8 :	93.7 :	-	93.5 :	-	89.7 :
Specific Conductance	umhos/cm	T		1040. :	836. :	-	1220. J	-	1020. J
Geotechnical									
Organic Soils	%	T		1.55 J	2.82 J	-	0.94 J	-	1.73 J
Physical Properties									
Cation-Exchange Capacity	meq/100g	T		46.5 :	42.8 :	-	1.7 :	-	2.4 :
Sodium Absorption Ratio	ratio	T		3.86 :	1.05 :	-	0.2 :	-	0.15 :
Metals									
Aluminum	mg/kg-dry	T		11100. :	15100. :	-	11000. :	-	10500. :
Antimony	mg/kg-dry	T		<0.26 J	<0.26 J	-	<0.27 J	-	<0.27 J
Arsenic	mg/kg-dry	T		4.8 :	4.8 :	-	7.8 :	-	10. :
Barium	mg/kg-dry	T		65.9 :	100. :	-	79.8 :	-	91.4 :
Beryllium	mg/kg-dry	T		1.1 :	1.3 :	-	1.2 :	-	0.85 :
Boron	mg/kg-dry	T		<1.5 J	<0.23 J	-	<0.21 :	-	<0.53 :
Cadmium	mg/kg-dry	T		1.7 :	1.3 :	-	2.6 :	-	2.9 :
Calcium	mg/kg-dry	T		8120. :	13800. :	-	13900. :	-	34400. :
Chromium	mg/kg-dry	T		39.4 :	47.8 :	-	35.6 :	-	33.5 :
Cobalt	mg/kg-dry	T		10.1 :	14.2 :	-	<0.12 :	-	<0.13 :
Copper	mg/kg-dry	T		120. :	105. :	-	180. :	-	152. :
Iron	mg/kg-dry	T		20700. :	25200. :	-	20800. :	-	23100. :
Lead	mg/kg-dry	T		133. :	113. :	-	209. :	-	223. :
Magnesium	mg/kg-dry	T		7140. :	10400. :	-	7170. :	-	6500. :
Manganese	mg/kg-dry	T		916. J	913. J	-	820. J	-	626. J

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Appendix A-7e
Soil - Biased 0-24 inches
Validated Analytical Results

Parameter	Units	Fraction	MSS1-39		MSS1-40		MSS1-41		MSS1-41		MSS1-42		MSS1-42	
Sample Date			10/22/2002		10/22/2002		10/22/2002		10/22/2002		10/22/2002		10/22/2002	
Sample ID			MSS1-39-T02N-SOL		MSS1-40-T02N-SOL		MSS1-41-T02N-SOL DL		MSS1-41-T02N-SOL		MSS1-42-T02N-SOLD L		MSS1-42-T02N-SOL	
Exposure Area			SS1		SS1		SS1		SS1		SS1		SS1	
Mercury	mg/kg-dry	T	0.027	:	<0.017	:	-		0.044	:	-		0.043	:
Molybdenum	mg/kg-dry	T	2010.	:	1090.	:	-		18600.	:	-		21900.	:
Nickel	mg/kg-dry	T	29.	J	35.7	J	-		28.5	J	-		28.8	J
Potassium	mg/kg-dry	T	3120.	J	3270.	J	-		2790.	J	-		2280.	J
Selenium	mg/kg-dry	T	0.99	J	<0.7	J	-		2.3	J	-		3.1	J
Silver	mg/kg-dry	T	1.5	:	1.	:	-		1.1	:	-		0.43	:
Sodium	mg/kg-dry	T	477.	:	41.4	J	-		<158.	:	-		<51.2	:
Thallium	mg/kg-dry	T	0.23	:	0.29	:	-		0.52	:	-		0.48	:
Vanadium	mg/kg-dry	T	35.1	:	47.5	:	-		115.	:	-		127.	:
Zinc	mg/kg-dry	T	211.	J	215.	J	-		195.	J	-		228.	J
Volatile Organics														
1,1,1-Trichloroethane	mg/kg-dry	T	<0.006	:	<0.01	:	-		<0.006	:	-		<0.006	:
1,1,2,2-Tetrachloroethane	mg/kg-dry	T	<0.006	:	<0.01	:	-		<0.006	:	-		<0.006	:
1,1,2-Trichloro-1,2,2-trifluoroethane	mg/kg-dry	T	<0.006	:	<0.01	:	-		<0.006	:	-		<0.006	:
1,1,2-Trichloroethane	mg/kg-dry	T	<0.006	:	<0.01	:	-		<0.006	:	-		<0.006	:
1,1-Dichloroethane	mg/kg-dry	T	<0.006	:	<0.01	:	-		<0.006	:	-		<0.006	:
1,1-Dichloroethene	mg/kg-dry	T	<0.006	:	<0.01	:	-		<0.006	:	-		<0.006	:
1,2,4-Trichlorobenzene	mg/kg-dry	T	<0.006	:	<0.01	:	-		<0.006	:	-		<0.006	:
1,2-Dibromo-3-chloropropane	mg/kg-dry	T	<0.006	:	<0.01	:	-		<0.006	:	-		<0.006	:
1,2-Dichlorobenzene	mg/kg-dry	T	<0.006	:	<0.01	:	-		<0.006	:	-		<0.006	:
1,2-Dichloroethane	mg/kg-dry	T	<0.006	:	<0.01	:	-		<0.006	:	-		<0.006	:
1,2-Dichloroethene (total)	mg/kg-dry	T	<0.006	:	<0.01	:	-		<0.006	:	-		<0.006	:
1,2-Dichloropropane	mg/kg-dry	T	<0.006	:	<0.01	:	-		<0.006	:	-		<0.006	:
1,3-Dichlorobenzene	mg/kg-dry	T	<0.006	:	<0.01	:	-		<0.006	:	-		<0.006	:
1,4-Dichlorobenzene	mg/kg-dry	T	<0.006	:	<0.01	:	-		<0.006	:	-		<0.006	:
2-Butanone	mg/kg-dry	T	<0.006	:	<0.01	:	-		<0.006	J	-		<0.006	J
2-Hexanone	mg/kg-dry	T	<0.006	:	<0.01	:	-		<0.006	J	-		<0.006	J
4-Methyl-2-pentanone	mg/kg-dry	T	<0.006	:	<0.01	:	-		<0.006	:	-		<0.006	:
Acetone	mg/kg-dry	T	0.001	J	0.002	J	-		0.001	J	-		0.001	J
Benzene	mg/kg-dry	T	<0.006	:	<0.01	:	-		<0.006	:	-		<0.006	:
Bromodichloromethane	mg/kg-dry	T	<0.006	:	<0.01	:	-		<0.006	:	-		<0.006	:
Bromoform	mg/kg-dry	T	<0.006	:	<0.01	:	-		<0.006	:	-		<0.006	:
Bromomethane	mg/kg-dry	T	<0.006	:	<0.01	:	-		<0.006	:	-		<0.006	:
Carbon disulfide	mg/kg-dry	T	<0.006	:	<0.01	:	-		0.0007	J	-		<0.006	:

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Appendix A-7e
Soil - Biased 0-24 inches
Validated Analytical Results

Parameter	Units	Exposure Area Fraction	Site ID / Sample Date / Sample ID											
			MSS1-39	10/22/2002	MSS1-39-T02N-SOL	SS1	MSS1-40	10/22/2002	MSS1-40-T02N-SOL	SS1	MSS1-41	10/22/2002	MSS1-41-T02N-SOL DL	SS1
Carbon tetrachloride	mg/kg-dry	T	<0.006	:			<0.01	:			-			
Chlorobenzene	mg/kg-dry	T	<0.006	:			<0.01	:			-			
Chloroethane	mg/kg-dry	T	<0.006	:			<0.01	:			-			
Chloroform	mg/kg-dry	T	<0.006	:			<0.01	:			-			
Chloromethane	mg/kg-dry	T	<0.006	J			<0.01	J			-			
cis-1,2-Dichloroethene	mg/kg-dry	T	<0.006	:			<0.01	:			-			
cis-1,3-Dichloropropene	mg/kg-dry	T	<0.006	:			<0.01	:			-			
Dibromochloromethane	mg/kg-dry	T	<0.006	:			<0.01	:			-			
Dichlorodifluoromethane	mg/kg-dry	T	<0.006	J			<0.01	J			-			
Ethylbenzene	mg/kg-dry	T	0.0009	J			<0.01	:			-			
Methylene chloride	mg/kg-dry	T	<0.006	:			<0.01	:			-			
Styrene	mg/kg-dry	T	<0.006	:			<0.01	:			-			
Tetrachloroethene	mg/kg-dry	T	<0.006	:			<0.01	:			-			
Toluene	mg/kg-dry	T	<0.006	:			<0.01	:			-			
Total Xylene	mg/kg-dry	T	0.005	J			<0.01	:			-			
trans-1,2-Dichloroethene	mg/kg-dry	T	<0.006	:			<0.01	:			-			
trans-1,3-Dichloropropene	mg/kg-dry	T	<0.006	:			<0.01	:			-			
Trichloroethene	mg/kg-dry	T	<0.006	:			<0.01	:			-			
Trichlorofluoromethane	mg/kg-dry	T	<0.006	:			<0.01	:			-			
Vinyl chloride	mg/kg-dry	T	<0.006	:			<0.01	:			-			
Semi-Volatile Organics														
1,1`-Biphenyl	mg/kg-dry	T	<0.35	:			<0.35	:			-			
2,4,5-Trichlorophenol	mg/kg-dry	T	<0.87	:			<0.88	:			-			
2,4,6-Trichlorophenol	mg/kg-dry	T	<0.35	:			<0.35	:			-			
2,4-Dichlorophenol	mg/kg-dry	T	<0.35	:			<0.35	:			-			
2,4-Dimethylphenol	mg/kg-dry	T	<0.35	:			<0.35	:			-			
2,4-Dinitrophenol	mg/kg-dry	T	<0.87	J			<0.88	J			-			
2,4-Dinitrotoluene	mg/kg-dry	T	<0.35	:			<0.35	:			-			
2,6-Dinitrotoluene	mg/kg-dry	T	<0.35	:			<0.35	:			-			
2-Chloronaphthalene	mg/kg-dry	T	<0.35	:			<0.35	:			-			
2-Chlorophenol	mg/kg-dry	T	<0.35	:			<0.35	:			-			
2-Methylnaphthalene	mg/kg-dry	T	<0.35	:			<0.35	:			-			
2-Methylphenol	mg/kg-dry	T	<0.35	:			<0.35	:			-			
2-Nitroaniline	mg/kg-dry	T	<0.87	:			<0.88	:			-			

Parameter	Units	Exposure Area Fraction	Site ID / Sample Date / Sample ID											
			MSS1-41	10/22/2002	MSS1-41-T02N-SOL	SS1	MSS1-42	10/22/2002	MSS1-42-T02N-SOLDL	SS1	MSS1-42	10/22/2002	MSS1-42-T02N-SOL	SS1
Carbon tetrachloride	mg/kg-dry	T	<0.006	:			-				<0.006	:		
Chlorobenzene	mg/kg-dry	T	<0.006	:			-				<0.006	:		
Chloroethane	mg/kg-dry	T	<0.006	:			-				<0.006	:		
Chloroform	mg/kg-dry	T	<0.006	:			-				<0.006	:		
Chloromethane	mg/kg-dry	T	<0.006	J			-				<0.006	J		
cis-1,2-Dichloroethene	mg/kg-dry	T	<0.006	:			-				<0.006	:		
cis-1,3-Dichloropropene	mg/kg-dry	T	<0.006	:			-				<0.006	:		
Dibromochloromethane	mg/kg-dry	T	<0.006	:			-				<0.006	:		
Dichlorodifluoromethane	mg/kg-dry	T	<0.006	J			-				<0.006	J		
Ethylbenzene	mg/kg-dry	T	0.002	J			-				<0.006	:		
Methylene chloride	mg/kg-dry	T	<0.006	:			-				<0.006	:		
Styrene	mg/kg-dry	T	<0.006	:			-				<0.006	:		
Tetrachloroethene	mg/kg-dry	T	<0.006	:			-				<0.006	:		
Toluene	mg/kg-dry	T	<0.006	:			-				<0.006	:		
Total Xylene	mg/kg-dry	T	0.016	:			-				<0.006	:		
trans-1,2-Dichloroethene	mg/kg-dry	T	<0.006	:			-				<0.006	:		
trans-1,3-Dichloropropene	mg/kg-dry	T	<0.006	:			-				<0.006	:		
Trichloroethene	mg/kg-dry	T	<0.006	:			-				<0.006	:		
Trichlorofluoromethane	mg/kg-dry	T	<0.006	:			-				<0.006	:		
Vinyl chloride	mg/kg-dry	T	<0.006	:			-				<0.006	:		
Semi-Volatile Organics														
1,1`-Biphenyl	mg/kg-dry	T	<0.35	:			-				<0.37	:		
2,4,5-Trichlorophenol	mg/kg-dry	T	<0.88	:			-				<0.92	:		
2,4,6-Trichlorophenol	mg/kg-dry	T	<0.35	:			-				<0.37	:		
2,4-Dichlorophenol	mg/kg-dry	T	<0.35	:			-				<0.37	:		
2,4-Dimethylphenol	mg/kg-dry	T	<0.35	:			-				<0.37	:		
2,4-Dinitrophenol	mg/kg-dry	T	<0.88	:			-				<0.92	:		
2,4-Dinitrotoluene	mg/kg-dry	T	<0.35	:			-				<0.37	:		
2,6-Dinitrotoluene	mg/kg-dry	T	<0.35	:			-				<0.37	:		
2-Chloronaphthalene	mg/kg-dry	T	<0.35	:			-				<0.37	:		
2-Chlorophenol	mg/kg-dry	T	<0.35	:			-				<0.37	:		
2-Methylnaphthalene	mg/kg-dry	T	<0.35	:			-				<0.37	:		
2-Methylphenol	mg/kg-dry	T	<0.35	:			-				<0.37	:		
2-Nitroaniline	mg/kg-dry	T	<0.88	:			-				<0.92	:		

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Appendix A-7e
Soil - Biased 0-24 inches
Validated Analytical Results

Parameter	Units	Exposure Area Fraction	Site ID	MSS1-39	MSS1-40	MSS1-41	MSS1-41	MSS1-42	MSS1-42
			Sample Date	10/22/2002	10/22/2002	10/22/2002	10/22/2002	10/22/2002	10/22/2002
			Sample ID	MSS1-39-T02N-SOL	MSS1-40-T02N-SOL	MSS1-41-T02N-SOL DL	MSS1-41-T02N-SOL	MSS1-42-T02N-SOLD L	MSS1-42-T02N-SOL
			Exposure Area	SS1	SS1	SS1	SS1	SS1	SS1
2-Nitrophenol	mg/kg-dry	T		<0.35 :	<0.35 :	-	<0.35 :	-	<0.37 :
3,3-Dichlorobenzidine	mg/kg-dry	T		<0.35 :	<0.35 :	-	<0.35 :	-	<0.37 :
3-Nitroaniline	mg/kg-dry	T		<0.87 :	<0.88 :	-	<0.88 :	-	<0.92 :
4,6-Dinitro-2-methylphenol	mg/kg-dry	T		<0.87 J	<0.88 :	-	<0.88 :	-	<0.92 :
4-Bromophenyl phenyl ether	mg/kg-dry	T		<0.35 :	<0.35 :	-	<0.35 :	-	<0.37 :
4-Chloro-3-methylphenol	mg/kg-dry	T		<0.35 :	<0.35 :	-	<0.35 :	-	<0.37 :
4-Chloroaniline	mg/kg-dry	T		<0.35 :	<0.35 :	-	<0.35 :	-	<0.37 :
4-Chlorophenyl phenyl ether	mg/kg-dry	T		<0.35 :	<0.35 :	-	<0.35 :	-	<0.37 :
4-Methylphenol	mg/kg-dry	T		<0.35 :	<0.35 :	-	<0.35 :	-	<0.37 :
4-Nitroaniline	mg/kg-dry	T		<0.87 J	<0.88 :	-	<0.88 :	-	<0.92 :
4-Nitrophenol	mg/kg-dry	T		<0.87 J	<0.88 J	-	<0.88 :	-	<0.92 :
Acenaphthene	mg/kg-dry	T		<0.35 :	<0.35 :	-	<0.35 :	-	<0.37 :
Acenaphthylene	mg/kg-dry	T		<0.35 :	<0.35 :	-	<0.35 :	-	<0.37 :
Anthracene	mg/kg-dry	T		<0.35 :	<0.35 :	-	<0.35 :	-	<0.37 :
Benzaldehyde	mg/kg-dry	T		<0.35 J	<0.35 J	-	0.023 J	-	0.077 J
Benzo(a)anthracene	mg/kg-dry	T		<0.35 :	<0.35 :	-	<0.35 :	-	<0.37 :
Benzo(a)pyrene	mg/kg-dry	T		<0.35 :	<0.35 :	-	<0.35 :	-	<0.37 :
Benzo(b)fluoranthene	mg/kg-dry	T		<0.35 :	<0.35 :	-	<0.35 :	-	<0.37 :
Benzo(g,h,i)perylene	mg/kg-dry	T		<0.35 :	<0.35 :	-	<0.35 :	-	<0.37 :
Benzo(k)fluoranthene	mg/kg-dry	T		<0.35 :	<0.35 :	-	<0.35 :	-	<0.37 :
Bis(2-chloroethoxy)methane	mg/kg-dry	T		<0.35 :	<0.35 :	-	<0.35 :	-	<0.37 :
Bis(2-chloroethyl)ether	mg/kg-dry	T		<0.35 :	<0.35 :	-	<0.35 :	-	<0.37 :
Bis(2-ethylhexyl)phthalate	mg/kg-dry	T		0.097 J	0.026 J	-	0.22 J	-	0.35 J
Butyl benzyl phthalate	mg/kg-dry	T		<0.35 :	<0.35 :	-	<0.35 :	-	<0.37 :
Carbazole	mg/kg-dry	T		<0.35 :	<0.35 :	-	<0.35 :	-	<0.37 :
Chrysene	mg/kg-dry	T		<0.35 :	<0.35 :	-	<0.35 :	-	<0.37 :
Dibenz(a,h)anthracene	mg/kg-dry	T		<0.35 :	<0.35 :	-	<0.35 :	-	<0.37 :
Dibenzofuran	mg/kg-dry	T		<0.35 :	<0.35 :	-	<0.35 :	-	<0.37 :
Dichlorodiisopropyl ether	mg/kg-dry	T		<0.35 :	<0.35 :	-	<0.35 :	-	<0.37 :
Diethylphthalate	mg/kg-dry	T		<0.35 :	<0.35 :	-	<0.35 :	-	<0.37 :
Dimethylphthalate	mg/kg-dry	T		<0.35 :	<0.35 :	-	0.039 J	-	0.037 J
Di-n-Butyl phthalate	mg/kg-dry	T		0.028 J	0.037 J	-	0.31 J	-	1. :
Di-n-Octyl phthalate	mg/kg-dry	T		<0.35 :	<0.35 J	-	<0.35 :	-	<0.37 :
Fluoranthene	mg/kg-dry	T		<0.35 :	<0.35 :	-	<0.35 :	-	<0.37 :

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Appendix A-7e
Soil - Biased 0-24 inches
Validated Analytical Results

Parameter	Units	Fraction	Site ID	Sample Date	Sample ID	Exposure Area
			MSS1-39	10/22/2002	MSS1-39-T02N-SOL	SS1
			MSS1-40	10/22/2002	MSS1-40-T02N-SOL	SS1
			MSS1-41	10/22/2002	MSS1-41-T02N-SOL DL	SS1
			MSS1-41	10/22/2002	MSS1-41-T02N-SOL	SS1
			MSS1-42	10/22/2002	MSS1-42-T02N-SOLD L	SS1
			MSS1-42	10/22/2002	MSS1-42-T02N-SOL	SS1
Fluorene	mg/kg-dry	T	<0.35 :	<0.35 :	-	<0.35 :	-	<0.37 :
Hexachlorobenzene	mg/kg-dry	T	<0.35 :	<0.35 :	-	<0.35 :	-	<0.37 :
Hexachlorobutadiene	mg/kg-dry	T	<0.35 :	<0.35 :	-	<0.35 :	-	<0.37 :
Hexachlorocyclopentadiene	mg/kg-dry	T	<0.35 :	<0.35 :	-	<0.35 :	-	<0.37 :
Hexachloroethane	mg/kg-dry	T	<0.35 :	<0.35 :	-	<0.35 :	-	<0.37 :
Indeno(1,2,3-cd)pyrene	mg/kg-dry	T	<0.35 :	<0.35 :	-	<0.35 :	-	<0.37 :
Isophorone	mg/kg-dry	T	<0.35 :	<0.35 :	-	<0.35 :	-	<0.37 :
Naphthalene	mg/kg-dry	T	<0.35 :	<0.35 :	-	<0.35 :	-	<0.37 :
Nitrobenzene	mg/kg-dry	T	<0.35 :	<0.35 :	-	<0.35 :	-	<0.37 :
N-Nitrosodi-n-propylamine	mg/kg-dry	T	<0.35 :	<0.35 :	-	<0.35 :	-	<0.37 :
N-Nitrosodiphenylamine	mg/kg-dry	T	<0.35 :	<0.35 :	-	<0.35 :	-	<0.37 :
Pentachlorophenol	mg/kg-dry	T	<0.87 J	<0.88 :	-	<0.88 :	-	<0.92 :
Phenanthrene	mg/kg-dry	T	<0.35 :	<0.35 :	-	<0.35 :	-	<0.37 :
Phenol	mg/kg-dry	T	<0.35 :	<0.35 :	-	<0.35 :	-	<0.37 :
Pyrene	mg/kg-dry	T	<0.35 :	<0.35 :	-	<0.35 :	-	<0.37 :
Pesticides-PCBs								
Aroclor 1016	mg/kg-dry	T	<0.035 :	<0.035 :	-	<0.7 :	-	<2.9 :
Aroclor 1221	mg/kg-dry	T	<0.07 :	<0.071 :	-	<1.4 :	-	<6. :
Aroclor 1232	mg/kg-dry	T	<0.035 :	<0.035 :	-	<0.7 :	-	<2.9 :
Aroclor 1242	mg/kg-dry	T	<0.035 :	<0.035 :	-	<0.7 :	-	<2.9 :
Aroclor 1248	mg/kg-dry	T	<0.035 :	<0.035 :	40. :	-	120. :	-
Aroclor 1254	mg/kg-dry	T	0.98 J	0.37 J	-	<0.7 :	-	<2.9 :
Aroclor 1260	mg/kg-dry	T	<0.035 :	<0.035 :	-	<0.7 :	-	<2.9 :

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T = Total Fraction

Appendix A-7e
Soil - Biased 0-24 inches
Validated Analytical Results

Parameter	Units	Exposure Area Fraction	Site ID / Sample Date / Sample ID											
			MSS1-43 1/10/2003 MSS1-43-T02N-SOLD L SS1		MSS1-43 1/10/2003 MSS1-43-T02N-SOL SS1		MSS1-44 1/10/2003 MSS1-44-T02N-SOL SS1		MSS1-45 1/8/2003 MSS1-45-T02N-SOLD L SS1		MSS1-45 1/8/2003 MSS1-45-T02N-SOL SS1		MSS1-46 1/8/2003 MSS1-46-T02N-SOL SS1	
General Chemistry														
Ammonia	mg/kg-dry	T	-		56.7	:	42.1	:	-		3.3	:	<2.4	:
Chloride	mg/kg-dry	T	-		12.8	:	19.9	:	-		21.3	:	4.3	:
Fluoride	mg/kg-dry	T	-		344.	J	5.8	J	-		0.66	J	2.1	J
Nitrate	mg/kg-dry	T	-		5.1	J	5.3	J	-		14.8	J	<2.1	J
Phosphorus	mg/kg-dry	T	-		899.	:	869.	:	-		763.	:	680.	:
Sulfate	mg/kg-dry	T	-		9290.	:	10500.	:	-		1300.	:	77.4	:
Total Kjeldahl Nitrogen	mg/kg-dry	T	-		167.	:	248.	:	-		82.5	:	83.5	:
Total Organic Carbon	mg/kg-dry	T	-		1880.	J	5330.	J	-		724.	J	1860.	J
Laboratory Parameters														
pH	SU	T	-		4.9	:	5.2	:	-		7.5	:	7.9	:
Solids, Percent	%	T	-		91.6	:	94.2	:	-		95.9	:	95.5	:
Solids, Percent - VOCs Only	%	T	-		91.8	:	-		-		-		-	
Specific Conductance	umhos/cm	T	-		2650.	:	2930.	:	-		1310.	:	253.	:
Geotechnical														
Organic Soils	%	T	-		1.8	:	2.3	:	-		0.9	:	1.2	:
Physical Properties														
Cation-Exchange Capacity	meq/100g	T	-		8.4	:	14.4	:	-		8.8	:	9.2	:
Sodium Absorption Ratio	ratio	T	-		0.08	:	0.06	:	-		0.45	:	0.35	:
Metals														
Aluminum	mg/kg-dry	T	-		11400.	:	15500.	:	-		9780.	:	8410.	:
Antimony	mg/kg-dry	T	-		<0.32	J	<0.29	J	-		<0.3	J	<0.28	J
Arsenic	mg/kg-dry	T	-		3.2	J	5.8	J	-		2.9	J	2.9	J
Barium	mg/kg-dry	T	-		72.3	:	96.8	:	-		52.2	:	45.	:
Beryllium	mg/kg-dry	T	-		4.9	:	4.6	:	-		1.	:	1.3	:
Boron	mg/kg-dry	T	-		3.3	J	2.9	:	-		<1.	:	<1.8	:
Cadmium	mg/kg-dry	T	-		0.45	J	1.5	:	-		0.88	J	1.7	:
Calcium	mg/kg-dry	T	-		14300.	:	16000.	:	-		7890.	:	7400.	:
Chromium	mg/kg-dry	T	-		28.4	J	39.3	J	-		58.5	J	35.3	J
Cobalt	mg/kg-dry	T	-		5.8	:	10.6	:	-		8.6	:	7.4	:
Copper	mg/kg-dry	T	-		115.	J	125.	J	-		107.	J	90.6	J
Iron	mg/kg-dry	T	-		26600.	:	28900.	:	-		23700.	:	17100.	:
Lead	mg/kg-dry	T	-		92.	:	134.	:	-		162.	:	111.	:
Magnesium	mg/kg-dry	T	-		5030.	:	7550.	:	-		6900.	:	5090.	:

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Appendix A-7e
Soil - Biased 0-24 inches
Validated Analytical Results

Parameter	Units	Fraction	MSS1-43		MSS1-43		MSS1-44		MSS1-45		MSS1-45		MSS1-46	
Sample Date			1/10/2003		1/10/2003		1/10/2003		1/8/2003		1/8/2003		1/8/2003	
Sample ID			MSS1-43-T02N-SOLDL		MSS1-43-T02N-SOL		MSS1-44-T02N-SOL		MSS1-45-T02N-SOLDL		MSS1-45-T02N-SOL		MSS1-46-T02N-SOL	
Exposure Area			SS1		SS1		SS1		SS1		SS1		SS1	
Manganese	mg/kg-dry	T	-		472.	:	1220.	:	-		785.	:	1120.	:
Mercury	mg/kg-dry	T	-		0.039	:	0.048	:	-		<0.017	:	<0.017	:
Molybdenum	mg/kg-dry	T	-		1120.	:	1200.	:	-		2470.	:	736.	:
Nickel	mg/kg-dry	T	-		16.1	:	24.5	:	-		38.	:	19.2	:
Potassium	mg/kg-dry	T	-		3380.	J	3980.	J	-		2400.	J	2420.	J
Selenium	mg/kg-dry	T	-		1.6	J	1.1	J	-		<0.79	J	<0.75	J
Silver	mg/kg-dry	T	-		1.7	:	4.6	:	-		1.2	:	1.1	:
Sodium	mg/kg-dry	T	-		551.	:	<266.	:	-		<60.	J	<75.	:
Thallium	mg/kg-dry	T	-		0.39	:	0.36	:	-		0.26	:	0.2	:
Vanadium	mg/kg-dry	T	-		37.7	:	49.1	:	-		50.6	:	31.6	:
Zinc	mg/kg-dry	T	-		182.	:	277.	:	-		177.	:	219.	:
Volatile Organics														
1,1,1-Trichloroethane	mg/kg-dry	T	-		<0.007	:	<0.014	:	-		<0.004	:	<0.006	:
1,1,2,2-Tetrachloroethane	mg/kg-dry	T	-		<0.007	:	<0.014	:	-		<0.004	:	<0.006	:
1,1,2-Trichloro-1,2,2-trifluoroethane	mg/kg-dry	T	-		<0.007	:	<0.014	:	-		<0.004	:	<0.006	:
1,1,2-Trichloroethane	mg/kg-dry	T	-		<0.007	:	<0.014	:	-		<0.004	:	<0.006	:
1,1-Dichloroethane	mg/kg-dry	T	-		<0.007	:	<0.014	:	-		<0.004	:	<0.006	:
1,1-Dichloroethene	mg/kg-dry	T	-		<0.007	:	<0.014	:	-		<0.004	:	<0.006	:
1,2,4-Trichlorobenzene	mg/kg-dry	T	-		<0.007	:	<0.014	:	-		<0.004	:	<0.006	:
1,2-Dibromo-3-chloropropane	mg/kg-dry	T	-		<0.007	:	<0.014	:	-		<0.004	:	<0.006	:
1,2-Dichlorobenzene	mg/kg-dry	T	-		<0.007	:	<0.014	:	-		<0.004	:	<0.006	:
1,2-Dichloroethane	mg/kg-dry	T	-		<0.007	:	<0.014	:	-		<0.004	:	<0.006	:
1,2-Dichloroethene (total)	mg/kg-dry	T	-		<0.007	:	<0.014	:	-		<0.004	:	<0.006	:
1,2-Dichloropropane	mg/kg-dry	T	-		<0.007	:	<0.014	:	-		<0.004	:	<0.006	:
1,3-Dichlorobenzene	mg/kg-dry	T	-		<0.007	:	<0.014	:	-		<0.004	:	<0.006	:
1,4-Dichlorobenzene	mg/kg-dry	T	-		<0.007	:	<0.014	:	-		<0.004	:	<0.006	:
2-Butanone	mg/kg-dry	T	-		0.002	J	<0.014	:	-		<0.004	:	<0.006	:
2-Hexanone	mg/kg-dry	T	-		<0.007	:	<0.014	:	-		<0.004	:	<0.006	:
4-Methyl-2-pentanone	mg/kg-dry	T	-		<0.007	:	<0.014	:	-		<0.004	:	<0.006	:
Acetone	mg/kg-dry	T	-		<0.007	:	0.007	J	-		0.004	:	<0.006	:
Benzene	mg/kg-dry	T	-		<0.007	:	<0.014	:	-		<0.004	:	<0.006	:
Bromodichloromethane	mg/kg-dry	T	-		<0.007	:	<0.014	:	-		<0.004	:	<0.006	:
Bromoform	mg/kg-dry	T	-		<0.007	:	<0.014	:	-		<0.004	:	<0.006	:
Bromomethane	mg/kg-dry	T	-		<0.007	:	<0.014	:	-		<0.004	:	<0.006	J

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Appendix A-7e
Soil - Biased 0-24 inches
Validated Analytical Results

Parameter	Units	Exposure Area Fraction	Site ID / Sample Date / Sample ID					
			MSS1-43 1/10/2003 MSS1-43-T02N-SOLD L SS1	MSS1-43 1/10/2003 MSS1-43-T02N-SOL SS1	MSS1-44 1/10/2003 MSS1-44-T02N-SOL SS1	MSS1-45 1/8/2003 MSS1-45-T02N-SOLD L SS1	MSS1-45 1/8/2003 MSS1-45-T02N-SOL SS1	MSS1-46 1/8/2003 MSS1-46-T02N-SOL SS1
Carbon disulfide	mg/kg-dry	T	-	0.0007 J	<0.014 :	-	<0.004 :	<0.006 :
Carbon tetrachloride	mg/kg-dry	T	-	<0.007 :	<0.014 :	-	<0.004 :	<0.006 :
Chlorobenzene	mg/kg-dry	T	-	<0.007 :	<0.014 :	-	<0.004 :	<0.006 :
Chloroethane	mg/kg-dry	T	-	<0.007 :	<0.014 :	-	<0.004 :	<0.006 :
Chloroform	mg/kg-dry	T	-	<0.007 :	<0.014 :	-	<0.004 :	<0.006 :
Chloromethane	mg/kg-dry	T	-	<0.007 :	<0.014 :	-	<0.004 :	<0.006 :
cis-1,2-Dichloroethene	mg/kg-dry	T	-	<0.007 :	<0.014 :	-	<0.004 :	<0.006 :
cis-1,3-Dichloropropene	mg/kg-dry	T	-	<0.007 :	<0.014 :	-	<0.004 :	<0.006 :
Dibromochloromethane	mg/kg-dry	T	-	<0.007 :	<0.014 :	-	<0.004 :	<0.006 :
Dichlorodifluoromethane	mg/kg-dry	T	-	<0.007 :	<0.014 :	-	<0.004 :	<0.006 :
Ethylbenzene	mg/kg-dry	T	-	<0.007 :	<0.014 :	-	<0.004 :	<0.006 :
Methylene chloride	mg/kg-dry	T	-	<0.007 :	<0.014 :	-	<0.004 :	<0.006 :
Styrene	mg/kg-dry	T	-	<0.007 :	<0.014 :	-	<0.004 :	<0.006 :
Tetrachloroethene	mg/kg-dry	T	-	<0.007 :	<0.014 :	-	<0.004 :	<0.006 :
Toluene	mg/kg-dry	T	-	<0.007 :	<0.014 :	-	<0.004 :	<0.006 :
Total Xylene	mg/kg-dry	T	-	<0.007 :	<0.014 :	-	<0.004 :	<0.006 :
trans-1,2-Dichloroethene	mg/kg-dry	T	-	<0.007 :	<0.014 :	-	<0.004 :	<0.006 :
trans-1,3-Dichloropropene	mg/kg-dry	T	-	<0.007 :	<0.014 :	-	<0.004 :	<0.006 :
Trichloroethene	mg/kg-dry	T	-	<0.007 :	<0.014 :	-	<0.004 :	<0.006 :
Trichlorofluoromethane	mg/kg-dry	T	-	<0.007 :	<0.014 :	-	<0.004 :	<0.006 :
Vinyl chloride	mg/kg-dry	T	-	<0.007 :	<0.014 :	-	<0.004 :	<0.006 :
Semi-Volatile Organics								
1,1`-Biphenyl	mg/kg-dry	T	-	<0.36 :	<0.35 :	-	<0.34 :	<0.34 :
2,4,5-Trichlorophenol	mg/kg-dry	T	-	<0.9 :	<0.88 :	-	<0.86 :	<0.86 :
2,4,6-Trichlorophenol	mg/kg-dry	T	-	<0.36 :	<0.35 :	-	<0.34 :	<0.34 :
2,4-Dichlorophenol	mg/kg-dry	T	-	<0.36 :	<0.35 :	-	<0.34 :	<0.34 :
2,4-Dimethylphenol	mg/kg-dry	T	-	<0.36 :	<0.35 :	-	<0.34 :	<0.34 :
2,4-Dinitrophenol	mg/kg-dry	T	-	<0.9 J	<0.88 :	-	<0.86 J	<0.86 :
2,4-Dinitrotoluene	mg/kg-dry	T	-	<0.36 :	<0.35 :	-	<0.34 :	<0.34 :
2,6-Dinitrotoluene	mg/kg-dry	T	-	<0.36 :	<0.35 :	-	<0.34 :	<0.34 :
2-Chloronaphthalene	mg/kg-dry	T	-	<0.36 :	<0.35 :	-	<0.34 :	<0.34 :
2-Chlorophenol	mg/kg-dry	T	-	<0.36 :	<0.35 :	-	<0.34 :	<0.34 :
2-Methylnaphthalene	mg/kg-dry	T	-	<0.36 :	<0.35 :	-	<0.34 :	<0.34 :
2-Methylphenol	mg/kg-dry	T	-	<0.36 :	<0.35 :	-	<0.34 :	<0.34 :

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Appendix A-7e
Soil - Biased 0-24 inches
Validated Analytical Results

Parameter	Units	Exposure Area Fraction	Site ID		Sample Date		Sample ID		Exposure Area	
			MSS1-43		MSS1-43		MSS1-44		MSS1-45	
			1/10/2003		1/10/2003		1/10/2003		1/8/2003	
			MSS1-43-T02N-SOLD L		MSS1-43-T02N-SOL		MSS1-44-T02N-SOL		MSS1-45-T02N-SOLD L	
			SS1		SS1		SS1		SS1	
2-Nitroaniline	mg/kg-dry	T	-		<0.9	:	<0.88	:	-	
2-Nitrophenol	mg/kg-dry	T	-		<0.36	:	<0.35	:	-	
3,3-Dichlorobenzidine	mg/kg-dry	T	-		<0.36	:	<0.35	:	-	
3-Nitroaniline	mg/kg-dry	T	-		<0.9	J	<0.88	:	-	
4,6-Dinitro-2-methylphenol	mg/kg-dry	T	-		<0.9	:	<0.88	:	-	
4-Bromophenyl phenyl ether	mg/kg-dry	T	-		<0.36	:	<0.35	:	-	
4-Chloro-3-methylphenol	mg/kg-dry	T	-		<0.36	:	<0.35	:	-	
4-Chloroaniline	mg/kg-dry	T	-		<0.36	:	<0.35	:	-	
4-Chlorophenyl phenyl ether	mg/kg-dry	T	-		<0.36	:	<0.35	:	-	
4-Methylphenol	mg/kg-dry	T	-		<0.36	:	<0.35	:	-	
4-Nitroaniline	mg/kg-dry	T	-		<0.9	:	<0.88	:	-	
4-Nitrophenol	mg/kg-dry	T	-		<0.9	J	<0.88	:	-	
Acenaphthene	mg/kg-dry	T	-		<0.36	:	<0.35	:	-	
Acenaphthylene	mg/kg-dry	T	-		<0.36	:	<0.35	:	-	
Anthracene	mg/kg-dry	T	-		<0.36	:	<0.35	:	-	
Benzaldehyde	mg/kg-dry	T	-		0.17	J	<0.35	:	-	
Benzo(a)anthracene	mg/kg-dry	T	-		<0.36	:	<0.35	:	-	
Benzo(a)pyrene	mg/kg-dry	T	-		<0.36	:	<0.35	:	-	
Benzo(b)fluoranthene	mg/kg-dry	T	-		<0.36	:	<0.35	:	-	
Benzo(g,h,i)perylene	mg/kg-dry	T	-		<0.36	:	<0.35	J	-	
Benzo(k)fluoranthene	mg/kg-dry	T	-		<0.36	:	<0.35	:	-	
Bis(2-chloroethoxy)methane	mg/kg-dry	T	-		<0.36	:	<0.35	:	-	
Bis(2-chloroethyl)ether	mg/kg-dry	T	-		<0.36	:	<0.35	:	-	
Bis(2-ethylhexyl)phthalate	mg/kg-dry	T	-		0.037	J	0.019	J	-	
Butyl benzyl phthalate	mg/kg-dry	T	-		<0.36	:	<0.35	:	-	
Carbazole	mg/kg-dry	T	-		<0.36	:	<0.35	:	-	
Chrysene	mg/kg-dry	T	-		<0.36	:	<0.35	:	-	
Dibenz(a,h)anthracene	mg/kg-dry	T	-		<0.36	J	<0.35	J	-	
Dibenzofuran	mg/kg-dry	T	-		<0.36	:	<0.35	:	-	
Dichlorodiisopropyl ether	mg/kg-dry	T	-		<0.36	:	<0.35	:	-	
Diethylphthalate	mg/kg-dry	T	-		<0.36	:	<0.35	:	-	
Dimethylphthalate	mg/kg-dry	T	-		<0.36	:	<0.35	:	-	
Di-n-Butyl phthalate	mg/kg-dry	T	-		<0.36	:	<0.35	:	-	
Di-n-Octyl phthalate	mg/kg-dry	T	-		<0.36	:	<0.35	:	-	

Parameter	Units	Exposure Area Fraction	Site ID		Sample Date		Sample ID		Exposure Area	
			MSS1-45		MSS1-45		MSS1-46			
			1/8/2003		1/8/2003		1/8/2003			
			MSS1-45-T02N-SOL		MSS1-46-T02N-SOL					
			SS1		SS1					
2-Nitroaniline	mg/kg-dry	T	<0.86	:	<0.86	:				
2-Nitrophenol	mg/kg-dry	T	<0.34	:	<0.34	:				
3,3-Dichlorobenzidine	mg/kg-dry	T	<0.34	:	<0.34	:				
3-Nitroaniline	mg/kg-dry	T	<0.86	:	<0.86	:				
4,6-Dinitro-2-methylphenol	mg/kg-dry	T	<0.86	:	<0.86	:				
4-Bromophenyl phenyl ether	mg/kg-dry	T	<0.34	:	<0.34	:				
4-Chloro-3-methylphenol	mg/kg-dry	T	<0.34	:	<0.34	:				
4-Chloroaniline	mg/kg-dry	T	<0.34	:	<0.34	:				
4-Chlorophenyl phenyl ether	mg/kg-dry	T	<0.34	:	<0.34	:				
4-Methylphenol	mg/kg-dry	T	<0.34	:	<0.34	:				
4-Nitroaniline	mg/kg-dry	T	<0.86	:	<0.86	:				
4-Nitrophenol	mg/kg-dry	T	<0.86	:	<0.86	:				
Acenaphthene	mg/kg-dry	T	<0.34	:	<0.34	:				
Acenaphthylene	mg/kg-dry	T	<0.34	:	<0.34	:				
Anthracene	mg/kg-dry	T	<0.34	:	<0.34	:				
Benzaldehyde	mg/kg-dry	T	<0.34	J	<0.34	J				
Benzo(a)anthracene	mg/kg-dry	T	<0.34	:	<0.34	:				
Benzo(a)pyrene	mg/kg-dry	T	<0.34	:	<0.34	:				
Benzo(b)fluoranthene	mg/kg-dry	T	<0.34	:	<0.34	:				
Benzo(g,h,i)perylene	mg/kg-dry	T	<0.34	:	<0.34	:				
Benzo(k)fluoranthene	mg/kg-dry	T	<0.34	:	<0.34	:				
Bis(2-chloroethoxy)methane	mg/kg-dry	T	<0.34	:	<0.34	:				
Bis(2-chloroethyl)ether	mg/kg-dry	T	<0.34	:	<0.34	:				
Bis(2-ethylhexyl)phthalate	mg/kg-dry	T	0.35	:	0.028	J				
Butyl benzyl phthalate	mg/kg-dry	T	<0.34	:	<0.34	:				
Carbazole	mg/kg-dry	T	<0.34	:	<0.34	:				
Chrysene	mg/kg-dry	T	<0.34	:	<0.34	:				
Dibenz(a,h)anthracene	mg/kg-dry	T	<0.34	:	<0.34	:				
Dibenzofuran	mg/kg-dry	T	<0.34	:	<0.34	:				
Dichlorodiisopropyl ether	mg/kg-dry	T	<0.34	:	<0.34	:				
Diethylphthalate	mg/kg-dry	T	<0.34	:	<0.34	:				
Dimethylphthalate	mg/kg-dry	T	<0.34	:	<0.34	:				
Di-n-Butyl phthalate	mg/kg-dry	T	0.24	J	<0.34	:				
Di-n-Octyl phthalate	mg/kg-dry	T	<0.34	:	<0.34	:				

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R = Qualified as rejected value from data validation and results are considered unusable for any purpose
T = Total Fraction

Appendix A-7e
Soil - Biased 0-24 inches
Validated Analytical Results

Parameter	Units	Exposure Area Fraction	Site ID / Sample Date / Sample ID					
			MSS1-43 1/10/2003 MSS1-43-T02N-SOLD L SS1	MSS1-43 1/10/2003 MSS1-43-T02N-SOL SS1	MSS1-44 1/10/2003 MSS1-44-T02N-SOL SS1	MSS1-45 1/8/2003 MSS1-45-T02N-SOLD L SS1	MSS1-45 1/8/2003 MSS1-45-T02N-SOL SS1	MSS1-46 1/8/2003 MSS1-46-T02N-SOL SS1
Fluoranthene	mg/kg-dry	T	-	<0.36 J	0.017 J	-	<0.34 :	<0.34 :
Fluorene	mg/kg-dry	T	-	<0.36 :	<0.35 :	-	<0.34 :	<0.34 :
Hexachlorobenzene	mg/kg-dry	T	-	<0.36 :	<0.35 :	-	<0.34 :	<0.34 :
Hexachlorobutadiene	mg/kg-dry	T	-	<0.36 :	<0.35 :	-	<0.34 :	<0.34 :
Hexachlorocyclopentadiene	mg/kg-dry	T	-	<0.36 :	<0.35 J	-	<0.34 :	<0.34 :
Hexachloroethane	mg/kg-dry	T	-	<0.36 :	<0.35 :	-	<0.34 :	<0.34 :
Indeno(1,2,3-cd)pyrene	mg/kg-dry	T	-	<0.36 :	<0.35 J	-	<0.34 :	<0.34 :
Isophorone	mg/kg-dry	T	-	<0.36 :	<0.35 :	-	<0.34 :	<0.34 :
Naphthalene	mg/kg-dry	T	-	<0.36 :	<0.35 :	-	<0.34 :	<0.34 :
Nitrobenzene	mg/kg-dry	T	-	<0.36 :	<0.35 :	-	<0.34 :	<0.34 :
N-Nitrosodi-n-propylamine	mg/kg-dry	T	-	<0.36 :	<0.35 :	-	<0.34 :	<0.34 :
N-Nitrosodiphenylamine	mg/kg-dry	T	-	<0.36 :	<0.35 :	-	<0.34 :	<0.34 :
Pentachlorophenol	mg/kg-dry	T	-	<0.9 :	<0.88 J	-	<0.86 J	<0.86 :
Phenanthrene	mg/kg-dry	T	-	<0.36 :	<0.35 :	-	<0.34 :	<0.34 :
Phenol	mg/kg-dry	T	-	<0.36 :	<0.35 :	-	<0.34 :	<0.34 :
Pyrene	mg/kg-dry	T	-	<0.36 :	0.016 J	-	<0.34 :	<0.34 :
Pesticides-PCBs								
Aroclor 1016	mg/kg-dry	T	-	<0.072 :	<0.07 :	-	<0.69 :	<0.034 :
Aroclor 1221	mg/kg-dry	T	-	<0.15 :	<0.14 :	-	<1.4 :	<0.07 :
Aroclor 1232	mg/kg-dry	T	-	<0.072 :	<0.07 :	-	<0.69 :	<0.034 :
Aroclor 1242	mg/kg-dry	T	-	<0.072 :	<0.07 :	-	<0.69 :	<0.034 :
Aroclor 1248	mg/kg-dry	T	3.8 :	-	2.4 :	37. :	-	<0.034 :
Aroclor 1254	mg/kg-dry	T	-	<0.072 :	2.3 J	-	<0.69 :	1. :
Aroclor 1260	mg/kg-dry	T	-	<0.072 :	<0.07 :	-	<0.69 :	<0.034 :

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T = Total Fraction

Appendix A-7e
Soil - Biased 0-24 inches
Validated Analytical Results

Parameter	Units	Exposure Area Fraction	Site ID	MSS1-47	MSS1-47	MSS1-49	MSS1-50	MSS1-52	MSS1-54
			Sample Date	1/8/2003	1/8/2003	1/8/2003	1/8/2003	1/10/2003	1/10/2003
			Sample ID	MSS1-47-T02N-SOLD L	MSS1-47-T02N-SOL	MSS1-49-T02N-SOL	MSS1-50-T02N-SOL	MSS1-52-T02N-SOL	MSS1-54-T02N-SOLD L
			Exposure Area	SS1	SS1	SS1	SS1	SS1	SS1
General Chemistry									
Ammonia	mg/kg-dry	T		-	39.6 :	3.3 :	3.8 :	5. :	-
Chloride	mg/kg-dry	T		-	5.8 :	3.3 :	18.7 :	8.8 :	-
Fluoride	mg/kg-dry	T		-	2.6 J	2.5 J	0.82 J	6.4 J	-
Nitrate	mg/kg-dry	T		-	3.4 J	<2.2 J	<2.2 J	7.5 J	-
Phosphorus	mg/kg-dry	T		-	703. :	731. :	656. :	798. :	-
Sulfate	mg/kg-dry	T		-	83.7 :	186. :	405. :	2330. :	-
Total Kjeldahl Nitrogen	mg/kg-dry	T		-	192. :	189. :	131. :	154. :	-
Total Organic Carbon	mg/kg-dry	T		-	525. J	4850. J	13000. J	2020. J	-
Laboratory Parameters									
pH	SU	T		-	8.1 :	7.9 :	9.7 :	6.9 :	-
Solids, Percent	%	T		-	94.4 :	93.6 :	91.7 :	95. :	-
Solids, Percent - VOCs Only	%	T		-	-	-	-	94.6 :	-
Specific Conductance	umhos/cm	T		-	300. :	499. :	756. :	1840. :	-
Geotechnical									
Organic Soils	%	T		-	2.2 :	2.8 :	2.4 :	1.6 :	-
Physical Properties									
Cation-Exchange Capacity	meq/100g	T		-	8.2 :	12. :	14.2 :	13.6 :	-
Sodium Absorption Ratio	ratio	T		-	0.3 :	0.26 :	0.4 :	0.15 :	-
Metals									
Aluminum	mg/kg-dry	T		-	8080. :	10400. :	7940. :	11100. :	-
Antimony	mg/kg-dry	T		-	<0.27 J	<0.28 J	<0.28 J	<0.28 J	-
Arsenic	mg/kg-dry	T		-	3.6 J	3.1 J	2.5 J	3.4 J	-
Barium	mg/kg-dry	T		-	59.8 :	65.5 :	60.7 :	56.7 :	-
Beryllium	mg/kg-dry	T		-	1.1 :	1. :	0.91 :	2.6 :	-
Boron	mg/kg-dry	T		-	2.6 :	6. :	7.6 :	<2.7 :	-
Cadmium	mg/kg-dry	T		-	1.3 :	1.6 :	8.9 :	1.8 :	-
Calcium	mg/kg-dry	T		-	14200. :	13100. :	35700. :	8430. :	-
Chromium	mg/kg-dry	T		-	41.5 J	37.4 J	37.6 J	43.1 J	-
Cobalt	mg/kg-dry	T		-	7.1 :	8.9 :	7. :	8.6 J	-
Copper	mg/kg-dry	T		-	97.7 J	88.5 J	167. J	99. J	-
Iron	mg/kg-dry	T		-	27200. :	18500. :	23800. :	21200. :	-
Lead	mg/kg-dry	T		-	83.2 :	148. :	631. :	111. J	-
Magnesium	mg/kg-dry	T		-	5320. :	6970. :	4490. :	6890. :	-

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T = Total Fraction

Appendix A-7e
Soil - Biased 0-24 inches
Validated Analytical Results

Parameter	Units	Fraction	Site ID	Sample Date	Sample ID	Exposure Area
			MSS1-47	1/8/2003	MSS1-47-T02N-SOLD L	SS1
			MSS1-47	1/8/2003	MSS1-47-T02N-SOL	SS1
			MSS1-49	1/8/2003	MSS1-49-T02N-SOL	SS1
			MSS1-50	1/8/2003	MSS1-50-T02N-SOL	SS1
			MSS1-52	1/10/2003	MSS1-52-T02N-SOL	SS1
			MSS1-54	1/10/2003	MSS1-54-T02N-SOLD L	SS1
Manganese	mg/kg-dry	T	-	734. :	1130. :	646. :	1450. :	-
Mercury	mg/kg-dry	T	-	<0.016 :	0.019 :	<0.018 :	0.031 :	-
Molybdenum	mg/kg-dry	T	-	1170. :	673. :	401. :	672. :	-
Nickel	mg/kg-dry	T	-	26.3 :	25.9 :	21.5 :	27.9 J	-
Potassium	mg/kg-dry	T	-	2330. J	2690. J	1920. J	3060. J	-
Selenium	mg/kg-dry	T	-	<0.73 J	<0.74 J	<0.76 J	0.75 J	-
Silver	mg/kg-dry	T	-	<0.15 :	0.79 :	1.7 :	1.4 :	-
Sodium	mg/kg-dry	T	-	<61.1 J	<62.4 :	<165. :	<83.1 :	-
Thallium	mg/kg-dry	T	-	0.19 :	0.21 :	0.14 :	0.34 :	-
Vanadium	mg/kg-dry	T	-	34.8 :	38.4 :	30.2 :	38.5 :	-
Zinc	mg/kg-dry	T	-	180. J	229. :	1260. :	237. J	-
Volatile Organics								
1,1,1-Trichloroethane	mg/kg-dry	T	-	<0.007 :	<0.006 :	<0.005 :	<0.004 :	-
1,1,2,2-Tetrachloroethane	mg/kg-dry	T	-	<0.007 :	<0.006 :	<0.005 :	<0.004 :	-
1,1,2-Trichloro-1,2,2-trifluoroethane	mg/kg-dry	T	-	<0.007 :	<0.006 :	<0.005 :	<0.004 :	-
1,1,2-Trichloroethane	mg/kg-dry	T	-	<0.007 :	<0.006 :	<0.005 :	<0.004 :	-
1,1-Dichloroethane	mg/kg-dry	T	-	<0.007 :	<0.006 :	<0.005 :	<0.004 :	-
1,1-Dichloroethene	mg/kg-dry	T	-	<0.007 :	<0.006 :	<0.005 :	<0.004 :	-
1,2,4-Trichlorobenzene	mg/kg-dry	T	-	<0.007 :	<0.006 :	<0.005 :	<0.004 :	-
1,2-Dibromo-3-chloropropane	mg/kg-dry	T	-	<0.007 :	<0.006 :	<0.005 :	<0.004 :	-
1,2-Dichlorobenzene	mg/kg-dry	T	-	<0.007 :	<0.006 :	<0.005 :	<0.004 :	-
1,2-Dichloroethane	mg/kg-dry	T	-	<0.007 :	<0.006 :	<0.005 :	<0.004 :	-
1,2-Dichloroethene (total)	mg/kg-dry	T	-	<0.007 :	<0.006 :	<0.005 :	<0.004 :	-
1,2-Dichloropropane	mg/kg-dry	T	-	<0.007 :	<0.006 :	<0.005 :	<0.004 :	-
1,3-Dichlorobenzene	mg/kg-dry	T	-	<0.007 :	<0.006 :	<0.005 :	<0.004 :	-
1,4-Dichlorobenzene	mg/kg-dry	T	-	<0.007 :	<0.006 :	<0.005 :	<0.004 :	-
2-Butanone	mg/kg-dry	T	-	<0.007 :	<0.006 :	0.006 :	0.003 J	-
2-Hexanone	mg/kg-dry	T	-	<0.007 :	<0.006 :	<0.005 :	<0.004 :	-
4-Methyl-2-pentanone	mg/kg-dry	T	-	<0.007 :	0.002 J	0.004 J	<0.004 :	-
Acetone	mg/kg-dry	T	-	0.001 J	0.001 J	<0.017 :	<0.008 :	-
Benzene	mg/kg-dry	T	-	<0.007 :	<0.006 :	<0.005 :	0.0007 J	-
Bromodichloromethane	mg/kg-dry	T	-	<0.007 :	<0.006 :	<0.005 :	<0.004 :	-
Bromoform	mg/kg-dry	T	-	<0.007 :	<0.006 :	<0.005 :	<0.004 :	-
Bromomethane	mg/kg-dry	T	-	<0.007 :	<0.006 J	<0.005 :	<0.004 :	-

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T = Total Fraction

Appendix A-7e
Soil - Biased 0-24 inches
Validated Analytical Results

Parameter	Units	Site ID / Sample Date / Sample ID / Exposure Area / Fraction	MSS1-47 1/8/2003 MSS1-47-T02N-SOLD L SS1 -	MSS1-47 1/8/2003 MSS1-47-T02N-SOL SS1	MSS1-49 1/8/2003 MSS1-49-T02N-SOL SS1	MSS1-50 1/8/2003 MSS1-50-T02N-SOL SS1	MSS1-52 1/10/2003 MSS1-52-T02N-SOL SS1	MSS1-54 1/10/2003 MSS1-54-T02N-SOLD L SS1 -
Carbon disulfide	mg/kg-dry	T		<0.007 :	<0.006 :	0.003 J	0.0005 J	
Carbon tetrachloride	mg/kg-dry	T		<0.007 :	<0.006 :	<0.005 :	<0.004 :	
Chlorobenzene	mg/kg-dry	T		<0.007 :	<0.006 :	<0.005 :	<0.004 :	
Chloroethane	mg/kg-dry	T		<0.007 :	<0.006 :	<0.005 :	<0.004 :	
Chloroform	mg/kg-dry	T		<0.007 :	<0.006 :	<0.005 :	<0.004 :	
Chloromethane	mg/kg-dry	T		<0.007 :	<0.006 :	<0.005 :	<0.004 :	
cis-1,2-Dichloroethene	mg/kg-dry	T		<0.007 :	<0.006 :	<0.005 :	<0.004 :	
cis-1,3-Dichloropropene	mg/kg-dry	T		<0.007 :	<0.006 :	<0.005 :	<0.004 :	
Dibromochloromethane	mg/kg-dry	T		<0.007 :	<0.006 :	<0.005 :	<0.004 :	
Dichlorodifluoromethane	mg/kg-dry	T		<0.007 :	<0.006 :	<0.005 :	<0.004 :	
Ethylbenzene	mg/kg-dry	T		<0.007 :	<0.006 :	0.0005 J	<0.004 :	
Methylene chloride	mg/kg-dry	T		<0.007 :	<0.006 :	<0.005 :	<0.004 :	
Styrene	mg/kg-dry	T		<0.007 :	<0.006 :	<0.005 :	<0.004 :	
Tetrachloroethene	mg/kg-dry	T		<0.007 :	<0.006 :	<0.005 :	<0.004 :	
Toluene	mg/kg-dry	T		<0.007 :	<0.006 :	<0.005 :	0.0008 J	
Total Xylene	mg/kg-dry	T		<0.007 :	<0.006 :	0.002 J	<0.004 :	
trans-1,2-Dichloroethene	mg/kg-dry	T		<0.007 :	<0.006 :	<0.005 :	<0.004 :	
trans-1,3-Dichloropropene	mg/kg-dry	T		<0.007 :	<0.006 :	<0.005 :	<0.004 :	
Trichloroethene	mg/kg-dry	T		<0.007 :	<0.006 :	<0.005 :	<0.004 :	
Trichlorofluoromethane	mg/kg-dry	T		<0.007 :	<0.006 :	<0.005 :	<0.004 :	
Vinyl chloride	mg/kg-dry	T		<0.007 :	<0.006 :	<0.005 :	<0.004 :	
Semi-Volatile Organics								
1,1`-Biphenyl	mg/kg-dry	T		<0.35 :	0.033 J	1.7 :	<0.35 :	
2,4,5-Trichlorophenol	mg/kg-dry	T		<0.88 :	<0.88 :	<1.1 :	<0.87 :	
2,4,6-Trichlorophenol	mg/kg-dry	T		<0.35 :	<0.35 :	<0.45 :	<0.35 :	
2,4-Dichlorophenol	mg/kg-dry	T		<0.35 :	<0.35 :	<0.45 :	<0.35 :	
2,4-Dimethylphenol	mg/kg-dry	T		<0.35 :	<0.35 :	<0.45 :	<0.35 :	
2,4-Dinitrophenol	mg/kg-dry	T		<0.88 J	<0.88 :	<1.1 :	<0.87 :	
2,4-Dinitrotoluene	mg/kg-dry	T		<0.35 :	<0.35 :	<0.45 :	<0.35 :	
2,6-Dinitrotoluene	mg/kg-dry	T		<0.35 :	<0.35 :	<0.45 :	<0.35 :	
2-Chloronaphthalene	mg/kg-dry	T		<0.35 :	<0.35 :	<0.45 :	<0.35 :	
2-Chlorophenol	mg/kg-dry	T		<0.35 :	<0.35 :	<0.45 :	<0.35 :	
2-Methylnaphthalene	mg/kg-dry	T		<0.35 :	0.26 J	3.2 :	<0.35 :	
2-Methylphenol	mg/kg-dry	T		<0.35 :	<0.35 :	<0.45 :	<0.35 :	

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Appendix A-7e
Soil - Biased 0-24 inches
Validated Analytical Results

Parameter	Units	Fraction	MSS1-47	MSS1-47	MSS1-49	MSS1-50	MSS1-52	MSS1-54
Sample Date			1/8/2003	1/8/2003	1/8/2003	1/8/2003	1/10/2003	1/10/2003
Sample ID			MSS1-47-T02N-SOLD L	MSS1-47-T02N-SOL	MSS1-49-T02N-SOL	MSS1-50-T02N-SOL	MSS1-52-T02N-SOL	MSS1-54-T02N-SOLD L
Exposure Area			SS1	SS1	SS1	SS1	SS1	SS1
2-Nitroaniline	mg/kg-dry	T	-	<0.88	<0.88	<1.1	<0.87	-
2-Nitrophenol	mg/kg-dry	T	-	<0.35	<0.35	<0.45	<0.35	-
3,3-Dichlorobenzidine	mg/kg-dry	T	-	<0.35	<0.35	<0.45	<0.35 J	-
3-Nitroaniline	mg/kg-dry	T	-	<0.88	<0.88	<1.1 J	<0.87	-
4,6-Dinitro-2-methylphenol	mg/kg-dry	T	-	<0.88	<0.88	<1.1	<0.87	-
4-Bromophenyl phenyl ether	mg/kg-dry	T	-	<0.35	<0.35	<0.45	<0.35	-
4-Chloro-3-methylphenol	mg/kg-dry	T	-	<0.35	<0.35	<0.45	<0.35	-
4-Chloroaniline	mg/kg-dry	T	-	<0.35	<0.35	<0.45 J	<0.35	-
4-Chlorophenyl phenyl ether	mg/kg-dry	T	-	<0.35	<0.35	<0.45	<0.35	-
4-Methylphenol	mg/kg-dry	T	-	<0.35	<0.35	<0.45	<0.35	-
4-Nitroaniline	mg/kg-dry	T	-	<0.88	<0.88	<1.1 J	<0.87	-
4-Nitrophenol	mg/kg-dry	T	-	<0.88	<0.88	<1.1	<0.87	-
Acenaphthene	mg/kg-dry	T	-	<0.35	<0.35	<0.45	<0.35	-
Acenaphthylene	mg/kg-dry	T	-	<0.35	<0.35	<0.45	<0.35	-
Anthracene	mg/kg-dry	T	-	<0.35	<0.35	<0.45	<0.35	-
Benzaldehyde	mg/kg-dry	T	-	<0.35	<0.35 J	<0.45	<0.35	-
Benzo(a)anthracene	mg/kg-dry	T	-	<0.35	<0.35	<0.45	<0.35	-
Benzo(a)pyrene	mg/kg-dry	T	-	<0.35	<0.35 J	<0.45	<0.35	-
Benzo(b)fluoranthene	mg/kg-dry	T	-	<0.35	<0.35 J	<0.45	<0.35	-
Benzo(g,h,i)perylene	mg/kg-dry	T	-	<0.35	<0.35	<0.45	<0.35 J	-
Benzo(k)fluoranthene	mg/kg-dry	T	-	<0.35	<0.35 J	<0.45	<0.35	-
Bis(2-chloroethoxy)methane	mg/kg-dry	T	-	<0.35	<0.35	<0.45	<0.35	-
Bis(2-chloroethyl)ether	mg/kg-dry	T	-	<0.35	<0.35	<0.45	<0.35	-
Bis(2-ethylhexyl)phthalate	mg/kg-dry	T	-	0.51	0.31 J	0.29 J	0.24 J	-
Butyl benzyl phthalate	mg/kg-dry	T	-	<0.35	<0.35	<0.45	<0.35	-
Carbazole	mg/kg-dry	T	-	<0.35	<0.35	<0.45	<0.35	-
Chrysene	mg/kg-dry	T	-	<0.35	<0.35	<0.45	<0.35	-
Dibenz(a,h)anthracene	mg/kg-dry	T	-	<0.35	<0.35 J	<0.45	<0.35 J	-
Dibenzofuran	mg/kg-dry	T	-	<0.35	<0.35	<0.45	<0.35	-
Dichlorodiisopropyl ether	mg/kg-dry	T	-	<0.35	<0.35	<0.45	<0.35	-
Diethylphthalate	mg/kg-dry	T	-	<0.35	<0.35	<0.45	<0.35	-
Dimethylphthalate	mg/kg-dry	T	-	<0.35	<0.35	<0.45	<0.35	-
Di-n-Butyl phthalate	mg/kg-dry	T	-	<0.35	<0.35	<0.45	<0.35	-
Di-n-Octyl phthalate	mg/kg-dry	T	-	<0.35	<0.35 J	0.13 J	<0.35	-

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Appendix A-7e
Soil - Biased 0-24 inches
Validated Analytical Results

Parameter	Units	Fraction	MSS1-47	MSS1-47	MSS1-49	MSS1-50	MSS1-52	MSS1-54
Sample Date			1/8/2003	1/8/2003	1/8/2003	1/8/2003	1/10/2003	1/10/2003
Sample ID			MSS1-47-T02N-SOLD L	MSS1-47-T02N-SOL	MSS1-49-T02N-SOL	MSS1-50-T02N-SOL	MSS1-52-T02N-SOL	MSS1-54-T02N-SOLD L
Exposure Area			SS1	SS1	SS1	SS1	SS1	SS1
Fluoranthene	mg/kg-dry	T	-	0.017 J	<0.35 :	<0.45 :	<0.35 :	-
Fluorene	mg/kg-dry	T	-	<0.35 :	0.1 J	1.1 :	<0.35 :	-
Hexachlorobenzene	mg/kg-dry	T	-	<0.35 :	<0.35 :	<0.45 :	<0.35 :	-
Hexachlorobutadiene	mg/kg-dry	T	-	<0.35 :	<0.35 :	<0.45 :	<0.35 :	-
Hexachlorocyclopentadiene	mg/kg-dry	T	-	<0.35 :	<0.35 :	<0.45 :	<0.35 :	-
Hexachloroethane	mg/kg-dry	T	-	<0.35 :	<0.35 :	<0.45 :	<0.35 :	-
Indeno(1,2,3-cd)pyrene	mg/kg-dry	T	-	<0.35 :	<0.35 J	<0.45 :	<0.35 :	-
Isophorone	mg/kg-dry	T	-	<0.35 :	<0.35 :	<0.45 :	<0.35 :	-
Naphthalene	mg/kg-dry	T	-	<0.35 :	0.038 J	0.48 :	<0.35 :	-
Nitrobenzene	mg/kg-dry	T	-	<0.35 :	<0.35 :	<0.45 :	<0.35 :	-
N-Nitrosodi-n-propylamine	mg/kg-dry	T	-	<0.35 :	<0.35 :	<0.45 :	<0.35 :	-
N-Nitrosodiphenylamine	mg/kg-dry	T	-	<0.35 :	<0.35 :	<0.45 :	<0.35 :	-
Pentachlorophenol	mg/kg-dry	T	-	<0.88 :	<0.88 :	<1.1 :	<0.87 J	-
Phenanthrene	mg/kg-dry	T	-	<0.35 :	0.22 J	2.3 :	<0.35 :	-
Phenol	mg/kg-dry	T	-	<0.35 :	<0.35 :	<0.45 :	<0.35 :	-
Pyrene	mg/kg-dry	T	-	0.018 J	<0.35 :	0.33 J	<0.35 :	-
Pesticides-PCBs								
Aroclor 1016	mg/kg-dry	T	-	<0.035 :	<0.035 :	<0.036 :	<0.035 :	-
Aroclor 1221	mg/kg-dry	T	-	<0.071 :	<0.071 :	<0.073 :	<0.07 :	-
Aroclor 1232	mg/kg-dry	T	-	<0.035 :	<0.035 :	<0.036 :	<0.035 :	-
Aroclor 1242	mg/kg-dry	T	-	<0.035 :	<0.035 :	<0.036 :	<0.035 :	-
Aroclor 1248	mg/kg-dry	T	-	<0.035 :	<0.035 :	0.097 :	<0.035 :	2.2 :
Aroclor 1254	mg/kg-dry	T	1.8 :	-	1.1 :	0.15 J	0.4 :	2.6 :
Aroclor 1260	mg/kg-dry	T	-	<0.035 :	<0.035 :	<0.036 :	<0.035 :	-

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T = Total Fraction

Appendix A-7e
Soil - Biased 0-24 inches
Validated Analytical Results

Parameter	Units	Exposure Area Fraction	Site ID / Sample Date / Sample ID													
			MSS1-54	1/10/2003	MSS1-54-T02N-SOL	SS1	MSS1-55	1/17/2003	MSS1-55-T02N-SOL RE	SS1	MSS1-55	1/17/2003	MSS1-55-T02N-SOL DL	SS1	MSS1-55	1/17/2003	MSS1-55-T02N-SOL	SS1	MSS1-56	1/8/2003	MSS1-56-T02N-SOL	SS1	MSS1-57	1/8/2003	MSS1-57-T02N-SOLRE	SS1
General Chemistry																										
Ammonia	mg/kg-dry	T	2.8	:			-				-				13.6	J			5.9	:			-			
Chloride	mg/kg-dry	T	10.1	:			-				-				8.1	:			4.7	:			-			
Fluoride	mg/kg-dry	T	1.9	J			-				-				1.5	J			2.	J			-			
Nitrate	mg/kg-dry	T	<2.4	J			-				-				<2.2	J			2.2	J			-			
Phosphorus	mg/kg-dry	T	642.	:			-				-				1250.	:			422.	:			-			
Sulfate	mg/kg-dry	T	1140.	:			-				-				365.	J			602.	:			-			
Total Kjeldahl Nitrogen	mg/kg-dry	T	36.3	:			-				-				114.	:			84.5	:			-			
Total Organic Carbon	mg/kg-dry	T	983.	J			-				-				4020.	J			1140.	J			-			
Laboratory Parameters																										
pH	SU	T	7.7	:			-				-				9.	:			6.8	:			-			
Solids, Percent	%	T	86.9	:			-				-				93.8	:			94.2	:			-			
Solids, Percent - VOCs Only	%	T	-				-				-				93.1	:			-				-			
Specific Conductance	umhos/cm	T	1160.	:			-				-				1630.	J			1230.	:			-			
Geotechnical																										
Organic Soils	%	T	1.	:			-				-				1.4	:			1.8	:			-			
Physical Properties																										
Cation-Exchange Capacity	meq/100g	T	8.8	:			-				-				29.9	:			9.8	:			-			
Sodium Absorption Ratio	ratio	T	0.15	:			-				-				0.53	:			0.04	:			-			
Metals																										
Aluminum	mg/kg-dry	T	7040.	:			-				-				12000.	:			7380.	:			-			
Antimony	mg/kg-dry	T	<0.32	J			-				-				<0.29	J			<0.31	J			-			
Arsenic	mg/kg-dry	T	2.2	J			-				-				3.5	J			5.6	J			-			
Barium	mg/kg-dry	T	48.6	:			-				-				93.7	:			47.3	:			-			
Beryllium	mg/kg-dry	T	1.1	:			-				-				0.92	:			1.3	J			-			
Boron	mg/kg-dry	T	<2.7	:			-				-				<0.28	J			2.5	:			-			
Cadmium	mg/kg-dry	T	1.	:			-				-				0.35	J			3.7	:			-			
Calcium	mg/kg-dry	T	10000.	:			-				-				11500.	:			7110.	:			-			
Chromium	mg/kg-dry	T	41.3	J			-				-				77.4	J			58.9	J			-			
Cobalt	mg/kg-dry	T	4.9	:			-				-				10.4	:			<0.15	:			-			
Copper	mg/kg-dry	T	227.	J			-				-				146.	J			443.	J			-			
Iron	mg/kg-dry	T	18900.	:			-				-				32200.	:			38300.	:			-			
Lead	mg/kg-dry	T	120.	:			-				-				114.	:			535.	:			-			
Magnesium	mg/kg-dry	T	4270.	:			-				-				8930.	:			3360.	:			-			

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Appendix A-7e
Soil - Biased 0-24 inches
Validated Analytical Results

Parameter	Units	Exposure Area Fraction	Site ID	MSS1-54	MSS1-55	MSS1-55	MSS1-55	MSS1-56	MSS1-57
			Sample Date	1/10/2003	1/17/2003	1/17/2003	1/17/2003	1/8/2003	1/8/2003
			Sample ID	MSS1-54-T02N-SOL	MSS1-55-T02N-SOL RE	MSS1-55-T02N-SOL DL	MSS1-55-T02N-SOL	MSS1-56-T02N-SOL	MSS1-57-T02N-SOLR E
			Exposure Area	SS1	SS1	SS1	SS1	SS1	SS1
Manganese	mg/kg-dry	T		552. :	-	-	742. :	1600. :	-
Mercury	mg/kg-dry	T		<0.017 :	-	-	<0.017 :	<0.018 :	-
Molybdenum	mg/kg-dry	T		7120. :	-	-	4600. :	16300. :	-
Nickel	mg/kg-dry	T		30.5 :	-	-	43.2 :	35.7 :	-
Potassium	mg/kg-dry	T		2730. J	-	-	3220. J	2640. J	-
Selenium	mg/kg-dry	T		1.2 J	-	-	<0.78 J	2.2 J	-
Silver	mg/kg-dry	T		1.3 :	-	-	1.2 :	2.1 :	-
Sodium	mg/kg-dry	T		<71.1 :	-	-	<106. :	<52.1 :	-
Thallium	mg/kg-dry	T		0.26 :	-	-	0.3 :	0.28 :	-
Vanadium	mg/kg-dry	T		71.8 :	-	-	68.2 :	104. :	-
Zinc	mg/kg-dry	T		182. :	-	-	131. :	688. :	-
Volatile Organics									
1,1,1-Trichloroethane	mg/kg-dry	T		<0.009 :	-	-	<0.014 :	<0.003 :	-
1,1,2,2-Tetrachloroethane	mg/kg-dry	T		<0.009 :	-	-	<0.014 :	<0.003 :	-
1,1,2-Trichloro-1,2,2-trifluoroethane	mg/kg-dry	T		<0.009 :	-	-	<0.014 :	<0.003 :	-
1,1,2-Trichloroethane	mg/kg-dry	T		<0.009 :	-	-	<0.014 :	<0.003 :	-
1,1-Dichloroethane	mg/kg-dry	T		<0.009 :	-	-	<0.014 :	<0.003 :	-
1,1-Dichloroethene	mg/kg-dry	T		<0.009 :	-	-	<0.014 :	<0.003 :	-
1,2,4-Trichlorobenzene	mg/kg-dry	T		<0.009 :	-	-	<0.014 :	<0.003 :	-
1,2-Dibromo-3-chloropropane	mg/kg-dry	T		<0.009 :	-	-	<0.014 :	<0.003 :	-
1,2-Dichlorobenzene	mg/kg-dry	T		<0.009 :	-	-	<0.014 :	<0.003 :	-
1,2-Dichloroethane	mg/kg-dry	T		<0.009 :	-	-	<0.014 :	<0.003 :	-
1,2-Dichloroethene (total)	mg/kg-dry	T		<0.009 :	-	-	<0.014 :	<0.003 :	-
1,2-Dichloropropane	mg/kg-dry	T		<0.009 :	-	-	<0.014 :	<0.003 :	-
1,3-Dichlorobenzene	mg/kg-dry	T		<0.009 :	-	-	<0.014 :	<0.003 :	-
1,4-Dichlorobenzene	mg/kg-dry	T		<0.009 :	-	-	<0.014 :	<0.003 :	-
2-Butanone	mg/kg-dry	T		0.005 J	-	-	0.007 J	<0.003 :	-
2-Hexanone	mg/kg-dry	T		<0.009 :	-	-	<0.014 :	<0.003 :	-
4-Methyl-2-pentanone	mg/kg-dry	T		<0.009 :	-	-	<0.014 :	<0.003 :	-
Acetone	mg/kg-dry	T		0.009 J	-	-	0.011 J	0.001 J	-
Benzene	mg/kg-dry	T		<0.009 :	-	-	<0.014 :	<0.003 :	-
Bromodichloromethane	mg/kg-dry	T		<0.009 :	-	-	<0.014 :	<0.003 :	-
Bromoform	mg/kg-dry	T		<0.009 :	-	-	<0.014 :	<0.003 :	-
Bromomethane	mg/kg-dry	T		<0.009 :	-	-	<0.014 :	<0.003 J	-

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Appendix A-7e
Soil - Biased 0-24 inches
Validated Analytical Results

Parameter	Units	Exposure Area Fraction	Site ID	Sample Date	Sample ID	Exposure Area
			MSS1-54	1/10/2003	MSS1-54-T02N-SOL	SS1
			MSS1-55	1/17/2003	MSS1-55-T02N-SOL RE	SS1
			MSS1-55	1/17/2003	MSS1-55-T02N-SOL DL	SS1
			MSS1-55	1/17/2003	MSS1-55-T02N-SOL	SS1
			MSS1-56	1/8/2003	MSS1-56-T02N-SOL	SS1
			MSS1-57	1/8/2003	MSS1-57-T02N-SOLRE	SS1
Carbon disulfide	mg/kg-dry	T	0.006 J	-	-	<0.014 :	<0.003 :	-
Carbon tetrachloride	mg/kg-dry	T	<0.009 :	-	-	<0.014 :	<0.003 :	-
Chlorobenzene	mg/kg-dry	T	<0.009 :	-	-	<0.014 :	<0.003 :	-
Chloroethane	mg/kg-dry	T	<0.009 :	-	-	<0.014 :	<0.003 :	-
Chloroform	mg/kg-dry	T	<0.009 :	-	-	<0.014 :	<0.003 :	-
Chloromethane	mg/kg-dry	T	<0.009 :	-	-	<0.014 :	<0.003 :	-
cis-1,2-Dichloroethene	mg/kg-dry	T	<0.009 :	-	-	<0.014 :	<0.003 :	-
cis-1,3-Dichloropropene	mg/kg-dry	T	<0.009 :	-	-	<0.014 :	<0.003 :	-
Dibromochloromethane	mg/kg-dry	T	<0.009 :	-	-	<0.014 :	<0.003 :	-
Dichlorodifluoromethane	mg/kg-dry	T	<0.009 :	-	-	<0.014 :	<0.003 :	-
Ethylbenzene	mg/kg-dry	T	<0.009 :	-	-	0.008 J	<0.003 :	-
Methylene chloride	mg/kg-dry	T	<0.009 :	-	-	<0.014 :	0.0004 J	-
Styrene	mg/kg-dry	T	<0.009 :	-	-	<0.014 :	<0.003 :	-
Tetrachloroethene	mg/kg-dry	T	<0.009 :	-	-	<0.014 :	<0.003 :	-
Toluene	mg/kg-dry	T	0.0009 J	-	-	<0.014 :	0.0004 J	-
Total Xylene	mg/kg-dry	T	<0.009 :	-	-	0.075 :	<0.003 :	-
trans-1,2-Dichloroethene	mg/kg-dry	T	<0.009 :	-	-	<0.014 :	<0.003 :	-
trans-1,3-Dichloropropene	mg/kg-dry	T	<0.009 :	-	-	<0.014 :	<0.003 :	-
Trichloroethene	mg/kg-dry	T	<0.009 :	-	-	<0.014 :	<0.003 :	-
Trichlorofluoromethane	mg/kg-dry	T	<0.009 :	-	-	<0.014 :	<0.003 :	-
Vinyl chloride	mg/kg-dry	T	<0.009 :	-	-	<0.014 :	<0.003 :	-
Semi-Volatile Organics								
1,1`-Biphenyl	mg/kg-dry	T	<0.38 :	<1.8 :	-	-	<0.35 :	<0.36 :
2,4,5-Trichlorophenol	mg/kg-dry	T	<0.95 :	<4.4 :	-	-	<0.88 :	<0.9 :
2,4,6-Trichlorophenol	mg/kg-dry	T	<0.38 :	<1.8 :	-	-	<0.35 :	<0.36 :
2,4-Dichlorophenol	mg/kg-dry	T	<0.38 :	<1.8 :	-	-	<0.35 :	<0.36 :
2,4-Dimethylphenol	mg/kg-dry	T	<0.38 :	<1.8 :	-	-	<0.35 :	<0.36 :
2,4-Dinitrophenol	mg/kg-dry	T	<0.95 :	<4.4 J	-	-	<0.88 :	<0.9 :
2,4-Dinitrotoluene	mg/kg-dry	T	<0.38 :	<1.8 :	-	-	<0.35 :	<0.36 :
2,6-Dinitrotoluene	mg/kg-dry	T	<0.38 :	<1.8 :	-	-	<0.35 :	<0.36 :
2-Chloronaphthalene	mg/kg-dry	T	<0.38 :	<1.8 :	-	-	<0.35 :	<0.36 J
2-Chlorophenol	mg/kg-dry	T	<0.38 :	<1.8 :	-	-	<0.35 :	<0.36 :
2-Methylnaphthalene	mg/kg-dry	T	<0.38 :	<1.8 :	-	-	<0.35 :	<0.36 :
2-Methylphenol	mg/kg-dry	T	<0.38 :	<1.8 :	-	-	<0.35 :	<0.36 :

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Appendix A-7e
Soil - Biased 0-24 inches
Validated Analytical Results

Parameter	Units	Exposure Area Fraction	Site ID		Sample Date		Sample ID		Exposure Area	
			MSS1-54		1/10/2003		MSS1-54-T02N-SOL		SS1	
2-Nitroaniline	mg/kg-dry	T	<0.95	:						
2-Nitrophenol	mg/kg-dry	T	<0.38	:						
3,3-Dichlorobenzidine	mg/kg-dry	T	<0.38	:						
3-Nitroaniline	mg/kg-dry	T	<0.95	:						
4,6-Dinitro-2-methylphenol	mg/kg-dry	T	<0.95	:						
4-Bromophenyl phenyl ether	mg/kg-dry	T	<0.38	:						
4-Chloro-3-methylphenol	mg/kg-dry	T	<0.38	:						
4-Chloroaniline	mg/kg-dry	T	<0.38	:						
4-Chlorophenyl phenyl ether	mg/kg-dry	T	<0.38	:						
4-Methylphenol	mg/kg-dry	T	<0.38	:						
4-Nitroaniline	mg/kg-dry	T	<0.95	:						
4-Nitrophenol	mg/kg-dry	T	<0.95	:						
Acenaphthene	mg/kg-dry	T	<0.38	:						
Acenaphthylene	mg/kg-dry	T	<0.38	:						
Anthracene	mg/kg-dry	T	<0.38	:						
Benzaldehyde	mg/kg-dry	T	<0.38	:						
Benzo(a)anthracene	mg/kg-dry	T	<0.38	:						
Benzo(a)pyrene	mg/kg-dry	T	<0.38	:						
Benzo(b)fluoranthene	mg/kg-dry	T	<0.38	:						
Benzo(g,h,i)perylene	mg/kg-dry	T	<0.38	J						
Benzo(k)fluoranthene	mg/kg-dry	T	<0.38	:						
Bis(2-chloroethoxy)methane	mg/kg-dry	T	<0.38	:						
Bis(2-chloroethyl)ether	mg/kg-dry	T	<0.38	:						
Bis(2-ethylhexyl)phthalate	mg/kg-dry	T	0.054	J						
Butyl benzyl phthalate	mg/kg-dry	T	<0.38	:						
Carbazole	mg/kg-dry	T	<0.38	:						
Chrysene	mg/kg-dry	T	<0.38	:						
Dibenz(a,h)anthracene	mg/kg-dry	T	<0.38	J						
Dibenzofuran	mg/kg-dry	T	<0.38	:						
Dichlorodiisopropyl ether	mg/kg-dry	T	<0.38	:						
Diethylphthalate	mg/kg-dry	T	<0.38	:						
Dimethylphthalate	mg/kg-dry	T	<0.38	:						
Di-n-Butyl phthalate	mg/kg-dry	T	<0.38	:						
Di-n-Octyl phthalate	mg/kg-dry	T	<0.38	:						

Parameter	Units	Exposure Area Fraction	Site ID		Sample Date		Sample ID		Exposure Area	
			MSS1-55		1/17/2003		MSS1-55-T02N-SOL RE		SS1	
2-Nitroaniline	mg/kg-dry	T	<4.4	:						
2-Nitrophenol	mg/kg-dry	T	<1.8	:						
3,3-Dichlorobenzidine	mg/kg-dry	T	<1.8	J						
3-Nitroaniline	mg/kg-dry	T	<4.4	:						
4,6-Dinitro-2-methylphenol	mg/kg-dry	T	<4.4	J						
4-Bromophenyl phenyl ether	mg/kg-dry	T	<1.8	J						
4-Chloro-3-methylphenol	mg/kg-dry	T	<1.8	:						
4-Chloroaniline	mg/kg-dry	T	<1.8	:						
4-Chlorophenyl phenyl ether	mg/kg-dry	T	<1.8	:						
4-Methylphenol	mg/kg-dry	T	<1.8	:						
4-Nitroaniline	mg/kg-dry	T	<4.4	J						
4-Nitrophenol	mg/kg-dry	T	<4.4	:						
Acenaphthene	mg/kg-dry	T	<1.8	:						
Acenaphthylene	mg/kg-dry	T	<1.8	:						
Anthracene	mg/kg-dry	T	<1.8	J						
Benzaldehyde	mg/kg-dry	T	<1.8	J						
Benzo(a)anthracene	mg/kg-dry	T	<1.8	J						
Benzo(a)pyrene	mg/kg-dry	T	<1.8	:						
Benzo(b)fluoranthene	mg/kg-dry	T	<1.8	:						
Benzo(g,h,i)perylene	mg/kg-dry	T	<1.8	:						
Benzo(k)fluoranthene	mg/kg-dry	T	<1.8	:						
Bis(2-chloroethoxy)methane	mg/kg-dry	T	<1.8	:						
Bis(2-chloroethyl)ether	mg/kg-dry	T	<1.8	:						
Bis(2-ethylhexyl)phthalate	mg/kg-dry	T	<1.8	J						
Butyl benzyl phthalate	mg/kg-dry	T	<1.8	J						
Carbazole	mg/kg-dry	T	<1.8	J						
Chrysene	mg/kg-dry	T	<1.8	J						
Dibenz(a,h)anthracene	mg/kg-dry	T	<1.8	:						
Dibenzofuran	mg/kg-dry	T	<1.8	:						
Dichlorodiisopropyl ether	mg/kg-dry	T	<1.8	:						
Diethylphthalate	mg/kg-dry	T	<1.8	:						
Dimethylphthalate	mg/kg-dry	T	<1.8	:						
Di-n-Butyl phthalate	mg/kg-dry	T	<1.8	J						
Di-n-Octyl phthalate	mg/kg-dry	T	0.21	J						

Parameter	Units	Exposure Area Fraction	Site ID		Sample Date		Sample ID		Exposure Area	
			MSS1-55		1/17/2003		MSS1-55-T02N-SOL DL		SS1	
2-Nitroaniline	mg/kg-dry	T	-							
2-Nitrophenol	mg/kg-dry	T	-							
3,3-Dichlorobenzidine	mg/kg-dry	T	-							
3-Nitroaniline	mg/kg-dry	T	-							
4,6-Dinitro-2-methylphenol	mg/kg-dry	T	-							
4-Bromophenyl phenyl ether	mg/kg-dry	T	-							
4-Chloro-3-methylphenol	mg/kg-dry	T	-							
4-Chloroaniline	mg/kg-dry	T	-							
4-Chlorophenyl phenyl ether	mg/kg-dry	T	-							
4-Methylphenol	mg/kg-dry	T	-							
4-Nitroaniline	mg/kg-dry	T	-							
4-Nitrophenol	mg/kg-dry	T	-							
Acenaphthene	mg/kg-dry	T	-							
Acenaphthylene	mg/kg-dry	T	-							
Anthracene	mg/kg-dry	T	-							
Benzaldehyde	mg/kg-dry	T	-							
Benzo(a)anthracene	mg/kg-dry	T	-							
Benzo(a)pyrene	mg/kg-dry	T	-							
Benzo(b)fluoranthene	mg/kg-dry	T	-							
Benzo(g,h,i)perylene	mg/kg-dry	T	-							
Benzo(k)fluoranthene	mg/kg-dry	T	-							
Bis(2-chloroethoxy)methane	mg/kg-dry	T	-							
Bis(2-chloroethyl)ether	mg/kg-dry	T	-							
Bis(2-ethylhexyl)phthalate	mg/kg-dry	T	-							
Butyl benzyl phthalate	mg/kg-dry	T	-							
Carbazole	mg/kg-dry	T	-							
Chrysene	mg/kg-dry	T	-							
Dibenz(a,h)anthracene	mg/kg-dry	T	-							
Dibenzofuran	mg/kg-dry	T	-							
Dichlorodiisopropyl ether	mg/kg-dry	T	-							
Diethylphthalate	mg/kg-dry	T	-							
Dimethylphthalate	mg/kg-dry	T	-							
Di-n-Butyl phthalate	mg/kg-dry	T	-							
Di-n-Octyl phthalate	mg/kg-dry	T	-							

Parameter	Units	Exposure Area Fraction	Site ID		Sample Date		Sample ID		Exposure Area	
			MSS1-55		1/17/2003		MSS1-55-T02N-SOL		SS1	
2-Nitroaniline	mg/kg-dry	T	-							
2-Nitrophenol	mg/kg-dry	T	-							
3,3-Dichlorobenzidine	mg/kg-dry	T	-							
3-Nitroaniline	mg/kg-dry	T	-							
4,6-Dinitro-2-methylphenol	mg/kg-dry	T	-							
4-Bromophenyl phenyl ether	mg/kg-dry	T	-							
4-Chloro-3-methylphenol	mg/kg-dry	T	-							
4-Chloroaniline	mg/kg-dry	T	-							
4-Chlorophenyl phenyl ether	mg/kg-dry	T	-							
4-Methylphenol	mg/kg-dry	T	-							
4-Nitroaniline	mg/kg-dry	T	-							
4-Nitrophenol	mg/kg-dry	T	-							
Acenaphthene	mg/kg-dry	T	-							
Acenaphthylene	mg/kg-dry	T	-							
Anthracene	mg/kg-dry	T	-							
Benzaldehyde	mg/kg-dry	T	-							
Benzo(a)anthracene	mg/kg-dry	T	-							
Benzo(a)pyrene	mg/kg-dry	T	-							
Benzo(b)fluoranthene	mg/kg-dry	T	-							
Benzo(g,h,i)perylene	mg/kg-dry	T	-							
Benzo(k)fluoranthene	mg/kg-dry	T	-							
Bis(2-chloroethoxy)methane	mg/kg-dry	T	-							
Bis(2-chloroethyl)ether	mg/kg-dry	T	-							
Bis(2-ethylhexyl)phthalate	mg/kg-dry	T	-							
Butyl benzyl phthalate	mg/kg-dry	T	-							
Carbazole	mg/kg-dry	T	-							
Chrysene	mg/kg-dry	T	-							
Dibenz(a,h)anthracene	mg/kg-dry	T	-							
Dibenzofuran	mg/kg-dry	T	-							
Dichlorodiisopropyl ether	mg/kg-dry	T	-							
Diethylphthalate	mg/kg-dry	T	-							
Dimethylphthalate	mg/kg-dry	T	-							
Di-n-Butyl phthalate	mg/kg-dry	T	-							
Di-n-Octyl phthalate	mg/kg-dry	T	-							

Parameter	Units	Exposure Area Fraction	Site ID		Sample Date		Sample ID		Exposure Area	
			MSS1-56		1/8/2003		MSS1-56-T02N-SOL		SS1	
2-Nitroaniline	mg/kg-dry	T	<0.88	:						
2-Nitrophenol	mg/kg-dry	T	<0.35	:						
3,3-Dichlorobenzidine	mg/kg-dry	T	<0.35	:						
3-Nitroaniline	mg/kg-dry	T	<0.88	:						
4,6-Dinitro-2-methylphenol	mg/kg-dry	T	<0.88	:						
4-Bromophenyl phenyl ether	mg/kg-dry	T	<0.35	:						
4-Chloro-3-methylphenol	mg/kg-dry	T	<0.35	:						
4-Chloroaniline	mg/kg-dry	T	<0.35	:						
4-Chlorophenyl phenyl ether	mg/kg-dry	T	<0.35	:						
4-Methylphenol	mg/kg-dry	T	<0.35	:						
4-Nitroaniline	mg/kg-dry	T	<0.88	:						
4-Nitrophenol	mg/kg-dry	T	<0.88	:						
Acenaphthene	mg/kg-dry	T	<0.35	:						
Acenaphthylene	mg/kg-dry	T	<0.35	:						
Anthracene	mg/kg-dry	T	<0.35	:						
Benzaldehyde	mg/kg-dry	T	<0.35	J						
Benzo(a)anthracene	mg/kg-dry	T	<0.35	:						
Benzo(a)pyrene	mg/kg-dry	T	<0.35	:						
Benzo(b)fluoranthene	mg/kg-dry	T	<0.35	:						
Benzo(g,h,i)perylene	mg/kg-dry	T	<0.35	:						
Benzo(k)fluoranthene	mg/kg-dry	T	<0.35	:						
Bis(2-chloroethoxy)methane	mg/kg-dry	T	<0.35	:						
Bis(2-chloroethyl)ether	mg/kg-dry	T	<0.35	:						
Bis(2-ethylhexyl)phthalate	mg/kg-dry	T	<0.35	:						
Butyl benzyl phthalate	mg/kg-dry	T	<0.35	:						
Carbazole	mg/kg-dry	T	<0.35	:						
Chrysene	mg/kg-dry	T	<0.35	:						
Dibenz(a,h)anthracene	mg/kg-dry	T	<0.35	:						
Dibenzofuran	mg/kg-dry	T	<0.35	:						
Dichlorodiisopropyl ether	mg/kg-dry	T	<0.35	:						
Diethylphthalate	mg/kg-dry	T	<0.35	:						
Dimethylphthalate	mg/kg-dry	T	<0.35	:						
Di-n-Butyl phthalate	mg/kg-dry	T	<0.35	:						
Di-n-Octyl phthalate	mg/kg-dry	T	<0.35	:						

Parameter	Units	Exposure Area Fraction	Site ID		Sample Date		Sample ID		Exposure Area	
			MSS1-57		1/8/2003		MSS1-57-T02N-SOLRE		SS1	
2-Nitroaniline	mg/kg-dry	T	<0.9	:						
2-Nitrophenol	mg/kg-dry	T	<0.36	:						
3,3-Dichlorobenzidine	mg/kg-dry	T	<0.36	:						
3-Nitroaniline	mg/kg-dry	T	<0.9	:						
4,6-Dinitro-2-methylphenol	mg/kg-dry	T	<0.9	:						
4-Bromophenyl phenyl ether	mg/kg-dry	T	<0.36	:						
4-Chloro-3-methylphenol	mg/kg-dry	T	<0.36	:						
4-Chloroaniline	mg/kg-dry	T	<0.36	:						
4-Chlorophenyl phenyl ether	mg/kg-dry	T	<0.36	:						
4-Methylphenol	mg/kg-dry	T	<0.36	:						
4-Nitroaniline	mg/kg-dry	T	<0.9	:						
4-Nitrophenol	mg/kg-dry	T	<0.9	:						
Acenaphthene	mg/kg-dry	T	<0.36	:						
Acenaphthylene	mg/kg-dry	T	<0.36	:						
Anthracene	mg/kg-dry	T	<0.36	:						
Benzaldehyde	mg/kg-dry	T	<0.36	J						
Benzo(a)anthracene	mg/kg-dry	T	<0.36	J						
Benzo(a)pyrene	mg/kg-dry	T	-							
Benzo(b)fluoranthene	mg/kg-dry	T	<0.36	:						
Benzo(g,h,i)perylene	mg/kg-dry	T	<0.36	:						
Benzo(k)fluoranthene	mg/kg-dry	T	-							
Bis(2-chloroethoxy)methane	mg/kg-dry	T	<0.36	:						
Bis(2-chloroethyl)ether	mg/kg-dry	T	<0.36	:						
Bis(2-ethylhexyl)phthalate	mg/kg-dry	T	<0.36	J						
Butyl benzyl phthalate	mg/kg-dry	T	<0.36	J						
Carbazole	mg/kg-dry	T	<0.36	:						
Chrysene	mg/kg-dry	T	<0.36	J						
Dibenz(a,h)anthracene	mg/kg-dry	T	-							
Dibenzofuran	mg/kg-dry	T	<0.36	:						
Dichlorodiisopropyl ether	mg/kg-dry	T	<0.36	:						
Diethylphthalate	mg/kg-dry	T	<0.36	:						
Dimethylphthalate	mg/kg-dry	T	<0.36	:						
Di-n-Butyl phthalate	mg/kg-dry	T	<0.36	:						
Di-n-Octyl phthalate	mg/kg-dry	T	<0.36	:						

J = Qualified as estimated during data validation
R = Qualified as rejected value from data validation and results are considered unusable for any purpose
T = Total Fraction

Appendix A-7e
Soil - Biased 0-24 inches
Validated Analytical Results

Parameter	Units	Exposure Area Fraction	Site ID	Sample Date	Sample ID	Exposure Area
			MSS1-54	1/10/2003	MSS1-54-T02N-SOL	SS1
			MSS1-55	1/17/2003	MSS1-55-T02N-SOL RE	SS1
			MSS1-55	1/17/2003	MSS1-55-T02N-SOL DL	SS1
			MSS1-55	1/17/2003	MSS1-55-T02N-SOL	SS1
			MSS1-56	1/8/2003	MSS1-56-T02N-SOL	SS1
			MSS1-57	1/8/2003	MSS1-57-T02N-SOLRE	SS1
Fluoranthene	mg/kg-dry	T	<0.38 :	<1.8 J	-	-	<0.35 :	<0.36 :
Fluorene	mg/kg-dry	T	<0.38 :	<1.8 :	-	-	<0.35 :	<0.36 :
Hexachlorobenzene	mg/kg-dry	T	<0.38 :	<1.8 J	-	-	<0.35 :	<0.36 :
Hexachlorobutadiene	mg/kg-dry	T	<0.38 :	<1.8 :	-	-	<0.35 :	<0.36 :
Hexachlorocyclopentadiene	mg/kg-dry	T	<0.38 J	<1.8 :	-	-	<0.35 :	<0.36 :
Hexachloroethane	mg/kg-dry	T	<0.38 :	<1.8 :	-	-	<0.35 :	<0.36 :
Indeno(1,2,3-cd)pyrene	mg/kg-dry	T	<0.38 J	<1.8 :	-	-	<0.35 :	-
Isophorone	mg/kg-dry	T	<0.38 :	<1.8 :	-	-	<0.35 :	<0.36 :
Naphthalene	mg/kg-dry	T	<0.38 :	<1.8 :	-	-	<0.35 :	0.03 J
Nitrobenzene	mg/kg-dry	T	<0.38 :	<1.8 :	-	-	<0.35 :	<0.36 :
N-Nitrosodi-n-propylamine	mg/kg-dry	T	<0.38 :	<1.8 :	-	-	<0.35 :	<0.36 :
N-Nitrosodiphenylamine	mg/kg-dry	T	<0.38 :	<1.8 J	-	-	<0.35 :	<0.36 :
Pentachlorophenol	mg/kg-dry	T	<0.95 J	<4.4 J	-	-	<0.88 :	<0.9 :
Phenanthrene	mg/kg-dry	T	0.021 J	<1.8 J	-	-	<0.35 :	0.022 J
Phenol	mg/kg-dry	T	<0.38 :	<1.8 :	-	-	<0.35 :	<0.36 :
Pyrene	mg/kg-dry	T	<0.38 :	<1.8 J	-	-	<0.35 :	<0.36 J
Pesticides-PCBs								
Aroclor 1016	mg/kg-dry	T	<0.038 :	-	-	<0.7 :	<0.035 :	-
Aroclor 1221	mg/kg-dry	T	<0.077 :	-	-	<1.4 :	<0.071 :	-
Aroclor 1232	mg/kg-dry	T	<0.038 :	-	-	<0.7 :	<0.035 :	-
Aroclor 1242	mg/kg-dry	T	<0.038 :	-	-	<0.7 :	<0.035 :	-
Aroclor 1248	mg/kg-dry	T	-	-	17. :	-	<0.035 :	-
Aroclor 1254	mg/kg-dry	T	-	-	17. :	-	0.51 :	-
Aroclor 1260	mg/kg-dry	T	<0.038 :	-	-	<0.7 :	<0.035 :	-

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T = Total Fraction

Appendix A-7e
Soil - Biased 0-24 inches
Validated Analytical Results

Parameter	Units	Fraction						
Site ID			MSS1-57	MSS1-57	MSS1-58	MSS1-58	MSS1-59	MSS1-59
Sample Date			1/8/2003	1/8/2003	1/9/2003	1/9/2003	1/19/2003	1/19/2003
Sample ID			MSS1-57-T02N-SOLDL	MSS1-57-T02N-SOL	MSS1-58-T02N-SOLDL	MSS1-58-T02N-SOL	MSS1-59-T02N-SOLDL	MSS1-59-T02N-SOL
Exposure Area			SS1	SS1	SS1	SS1	SS1	SS1
General Chemistry								
Ammonia	mg/kg-dry	T	-	3. :	-	29.5 :	-	15.2 :
Chloride	mg/kg-dry	T	-	58.5 :	-	37. :	-	12. :
Fluoride	mg/kg-dry	T	-	2. J	-	1.6 J	-	3.5 J
Nitrate	mg/kg-dry	T	-	2.2 J	-	<2.1 J	-	<2.1 J
Phosphorus	mg/kg-dry	T	-	806. :	-	1140. :	-	955. :
Sulfate	mg/kg-dry	T	-	1450. :	-	2760. :	-	1700. J
Total Kjeldahl Nitrogen	mg/kg-dry	T	-	74.3 :	-	102. :	-	147. J
Total Organic Carbon	mg/kg-dry	T	-	1700. J	-	6810. J	-	1370. J
Laboratory Parameters								
pH	SU	T	-	7.2 :	-	7.3 :	-	7.3 :
Solids, Percent	%	T	-	92.5 :	-	95.4 :	-	97.6 :
Specific Conductance	umhos/cm	T	-	2040. :	-	1750. :	-	1940. J
Geotechnical								
Organic Soils	%	T	-	1.4 :	-	1.4 :	-	1.6 :
Physical Properties								
Cation-Exchange Capacity	meq/100g	T	-	7.1 :	-	7.7 :	-	11.3 :
Sodium Absorption Ratio	ratio	T	-	1.43 :	-	2.15 :	-	0.55 :
Metals								
Aluminum	mg/kg-dry	T	-	10100. :	-	11400. :	-	9620. :
Antimony	mg/kg-dry	T	-	<0.28 J	-	<0.3 J	-	<0.3 J
Arsenic	mg/kg-dry	T	-	3.8 J	-	11.9 J	-	2.4 J
Barium	mg/kg-dry	T	-	66.1 :	-	113. :	-	54.9 :
Beryllium	mg/kg-dry	T	-	0.83 :	-	0.71 :	-	1.1 :
Boron	mg/kg-dry	T	-	<1.4 :	-	<0.27 :	-	<0.24 J
Cadmium	mg/kg-dry	T	-	0.32 J	-	0.47 J	-	0.65 :
Calcium	mg/kg-dry	T	-	10300. :	-	12500. :	-	9720. :
Chromium	mg/kg-dry	T	-	102. J	-	74.7 J	-	64. J
Cobalt	mg/kg-dry	T	-	6.4 :	-	<0.16 :	-	5.9 :
Copper	mg/kg-dry	T	-	347. J	-	279. J	-	95.7 :
Iron	mg/kg-dry	T	-	46300. :	-	33100. :	-	21400. :
Lead	mg/kg-dry	T	-	226. :	-	130. :	-	176. :
Magnesium	mg/kg-dry	T	-	7840. :	-	7860. :	-	6990. :
Manganese	mg/kg-dry	T	-	710. :	-	536. :	-	832. :

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T = Total Fraction
R:\Projects\22236252_Database_Management\Task_01\7.0_Project_Working_files\TechMemoAppendix\ZZZ-TechMemoII-\F_Section 7 Soils\appendix a-7e.rpt

Appendix A-7e
Soil - Biased 0-24 inches
Validated Analytical Results

Parameter	Units	Exposure Area Fraction	Site ID	MSS1-57	MSS1-57	MSS1-58	MSS1-58	MSS1-59	MSS1-59
			Sample Date	1/8/2003	1/8/2003	1/9/2003	1/9/2003	1/19/2003	1/19/2003
			Sample ID	MSS1-57-T02N-SOLDL	MSS1-57-T02N-SOL	MSS1-58-T02N-SOLDL	MSS1-58-T02N-SOL	MSS1-59-T02N-SOLDL	MSS1-59-T02N-SOL
			Exposure Area	SS1	SS1	SS1	SS1	SS1	SS1
Mercury	mg/kg-dry	T		-	<0.018 :	-	<0.017 :	-	0.035 :
Molybdenum	mg/kg-dry	T		-	16100. :	-	36400. :	-	4970. :
Nickel	mg/kg-dry	T		-	56.6 :	-	39.2 :	-	26.1 :
Potassium	mg/kg-dry	T		-	3120. J	-	2810. J	-	2470. J
Selenium	mg/kg-dry	T		-	2.3 J	-	1.2 J	-	0.81 J
Silver	mg/kg-dry	T		-	1. :	-	<0.16 :	-	1.5 :
Sodium	mg/kg-dry	T		-	<255. :	-	294. :	-	<102. :
Thallium	mg/kg-dry	T		-	0.35 :	-	0.31 :	-	0.34 :
Vanadium	mg/kg-dry	T		-	129. :	-	143. :	-	59.3 :
Zinc	mg/kg-dry	T		-	166. :	-	133. :	-	151. :
Volatile Organics									
1,1,1-Trichloroethane	mg/kg-dry	T		-	<0.008 :	-	<0.005 :	-	<0.013 :
1,1,2,2-Tetrachloroethane	mg/kg-dry	T		-	<0.008 :	-	<0.005 :	-	<0.013 :
1,1,2-Trichloro-1,2,2-trifluoroethane	mg/kg-dry	T		-	<0.008 :	-	<0.005 :	-	<0.013 :
1,1,2-Trichloroethane	mg/kg-dry	T		-	<0.008 :	-	<0.005 :	-	<0.013 :
1,1-Dichloroethane	mg/kg-dry	T		-	<0.008 :	-	<0.005 :	-	<0.013 :
1,1-Dichloroethene	mg/kg-dry	T		-	<0.008 :	-	<0.005 :	-	<0.013 :
1,2,4-Trichlorobenzene	mg/kg-dry	T		-	<0.008 :	-	<0.005 :	-	<0.013 :
1,2-Dibromo-3-chloropropane	mg/kg-dry	T		-	<0.008 :	-	<0.005 :	-	<0.013 :
1,2-Dichlorobenzene	mg/kg-dry	T		-	<0.008 :	-	<0.005 :	-	<0.013 :
1,2-Dichloroethane	mg/kg-dry	T		-	<0.008 :	-	<0.005 :	-	<0.013 :
1,2-Dichloroethene (total)	mg/kg-dry	T		-	<0.008 :	-	<0.005 :	-	<0.013 :
1,2-Dichloropropane	mg/kg-dry	T		-	<0.008 :	-	<0.005 :	-	<0.013 :
1,3-Dichlorobenzene	mg/kg-dry	T		-	<0.008 :	-	<0.005 :	-	<0.013 :
1,4-Dichlorobenzene	mg/kg-dry	T		-	<0.008 :	-	<0.005 :	-	<0.013 :
2-Butanone	mg/kg-dry	T		-	0.003 J	-	0.01 :	-	<0.013 :
2-Hexanone	mg/kg-dry	T		-	<0.008 :	-	<0.005 :	-	<0.013 :
4-Methyl-2-pentanone	mg/kg-dry	T		-	<0.008 :	-	<0.005 :	-	<0.013 :
Acetone	mg/kg-dry	T		-	0.006 J	-	<0.005 :	-	0.008 J
Benzene	mg/kg-dry	T		-	<0.008 :	-	<0.005 :	-	<0.013 :
Bromodichloromethane	mg/kg-dry	T		-	<0.008 :	-	<0.005 :	-	<0.013 :
Bromoform	mg/kg-dry	T		-	<0.008 :	-	<0.005 :	-	<0.013 :
Bromomethane	mg/kg-dry	T		-	<0.008 J	-	<0.005 :	-	<0.013 :
Carbon disulfide	mg/kg-dry	T		-	<0.008 :	-	0.002 J	-	<0.013 :

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R = Qualified as rejected value from data validation and results are considered unusable for any purpose
T = Total Fraction

Appendix A-7e
Soil - Biased 0-24 inches
Validated Analytical Results

Parameter	Units	Exposure Area Fraction	Site ID		Sample Date		Sample ID		Exposure Area	
			MSS1-57		1/8/2003		MSS1-57-T02N-SOLDL		SS1	
			MSS1-57		1/8/2003		MSS1-57-T02N-SOL		SS1	
			MSS1-58		1/9/2003		MSS1-58-T02N-SOLDL		SS1	
			MSS1-58		1/9/2003		MSS1-58-T02N-SOL		SS1	
			MSS1-59		1/19/2003		MSS1-59-T02N-SOLDL		SS1	
			MSS1-59		1/19/2003		MSS1-59-T02N-SOL		SS1	
Carbon tetrachloride	mg/kg-dry	T	-		<0.008	:	-		<0.005	:	-		<0.013	:
Chlorobenzene	mg/kg-dry	T	-		<0.008	:	-		<0.005	:	-		<0.013	:
Chloroethane	mg/kg-dry	T	-		<0.008	:	-		<0.005	:	-		<0.013	:
Chloroform	mg/kg-dry	T	-		<0.008	:	-		<0.005	:	-		<0.013	:
Chloromethane	mg/kg-dry	T	-		<0.008	:	-		<0.005	:	-		<0.013	:
cis-1,2-Dichloroethene	mg/kg-dry	T	-		<0.008	:	-		<0.005	:	-		<0.013	:
cis-1,3-Dichloropropene	mg/kg-dry	T	-		<0.008	:	-		<0.005	:	-		<0.013	:
Dibromochloromethane	mg/kg-dry	T	-		<0.008	:	-		<0.005	:	-		<0.013	:
Dichlorodifluoromethane	mg/kg-dry	T	-		<0.008	:	-		<0.005	:	-		<0.013	:
Ethylbenzene	mg/kg-dry	T	-		<0.008	:	-		<0.005	:	-		<0.013	:
Methylene chloride	mg/kg-dry	T	-		<0.008	:	-		<0.005	:	-		<0.013	:
Styrene	mg/kg-dry	T	-		<0.008	:	-		<0.005	:	-		<0.013	:
Tetrachloroethene	mg/kg-dry	T	-		<0.008	:	-		<0.005	:	-		<0.013	:
Toluene	mg/kg-dry	T	-		<0.008	:	-		0.0006	J	-		<0.013	:
Total Xylene	mg/kg-dry	T	-		0.001	J	-		0.0008	J	-		<0.013	:
trans-1,2-Dichloroethene	mg/kg-dry	T	-		<0.008	:	-		<0.005	:	-		<0.013	:
trans-1,3-Dichloropropene	mg/kg-dry	T	-		<0.008	:	-		<0.005	:	-		<0.013	:
Trichloroethene	mg/kg-dry	T	-		<0.008	:	-		<0.005	:	-		<0.013	:
Trichlorofluoromethane	mg/kg-dry	T	-		<0.008	:	-		<0.005	:	-		<0.013	:
Vinyl chloride	mg/kg-dry	T	-		<0.008	:	-		<0.005	:	-		<0.013	:
Semi-Volatile Organics														
1,1`-Biphenyl	mg/kg-dry	T	-		-		-		<0.35	:	-		<0.34	:
2,4,5-Trichlorophenol	mg/kg-dry	T	-		-		-		<0.87	:	-		<0.85	:
2,4,6-Trichlorophenol	mg/kg-dry	T	-		-		-		<0.35	:	-		<0.34	:
2,4-Dichlorophenol	mg/kg-dry	T	-		-		-		<0.35	:	-		<0.34	:
2,4-Dimethylphenol	mg/kg-dry	T	-		-		-		<0.35	:	-		<0.34	:
2,4-Dinitrophenol	mg/kg-dry	T	-		-		-		<0.87	:	-		<0.85	:
2,4-Dinitrotoluene	mg/kg-dry	T	-		-		-		<0.35	:	-		<0.34	:
2,6-Dinitrotoluene	mg/kg-dry	T	-		-		-		<0.35	:	-		<0.34	:
2-Chloronaphthalene	mg/kg-dry	T	-		-		-		<0.35	:	-		<0.34	:
2-Chlorophenol	mg/kg-dry	T	-		-		-		<0.35	:	-		<0.34	:
2-Methylnaphthalene	mg/kg-dry	T	-		-		-		<0.35	:	-		<0.34	:
2-Methylphenol	mg/kg-dry	T	-		-		-		<0.35	:	-		<0.34	:
2-Nitroaniline	mg/kg-dry	T	-		-		-		<0.87	:	-		<0.85	:

J = Qualified as estimated during data validation
R = Qualified as rejected value from data validation and results are considered unusable for any purpose
T = Total Fraction

Appendix A-7e
Soil - Biased 0-24 inches
Validated Analytical Results

Parameter	Units	Exposure Area Fraction	Site ID	MSS1-57	MSS1-57	MSS1-58	MSS1-58	MSS1-59	MSS1-59
			Sample Date	1/8/2003	1/8/2003	1/9/2003	1/9/2003	1/19/2003	1/19/2003
			Sample ID	MSS1-57-T02N-SOLDL	MSS1-57-T02N-SOL	MSS1-58-T02N-SOLDL	MSS1-58-T02N-SOL	MSS1-59-T02N-SOLDL	MSS1-59-T02N-SOL
			Exposure Area	SS1	SS1	SS1	SS1	SS1	SS1
2-Nitrophenol	mg/kg-dry	T		-	-	-	<0.35 :	-	<0.34 :
3,3-Dichlorobenzidine	mg/kg-dry	T		-	-	-	<0.35 :	-	<0.34 :
3-Nitroaniline	mg/kg-dry	T		-	-	-	<0.87 :	-	<0.85 J
4,6-Dinitro-2-methylphenol	mg/kg-dry	T		-	-	-	<0.87 :	-	<0.85 :
4-Bromophenyl phenyl ether	mg/kg-dry	T		-	-	-	<0.35 :	-	<0.34 :
4-Chloro-3-methylphenol	mg/kg-dry	T		-	-	-	<0.35 :	-	<0.34 :
4-Chloroaniline	mg/kg-dry	T		-	-	-	<0.35 :	-	<0.34 :
4-Chlorophenyl phenyl ether	mg/kg-dry	T		-	-	-	<0.35 :	-	<0.34 :
4-Methylphenol	mg/kg-dry	T		-	-	-	<0.35 :	-	<0.34 :
4-Nitroaniline	mg/kg-dry	T		-	-	-	<0.87 :	-	<0.85 :
4-Nitrophenol	mg/kg-dry	T		-	-	-	<0.87 :	-	<0.85 J
Acenaphthene	mg/kg-dry	T		-	-	-	<0.35 :	-	0.034 J
Acenaphthylene	mg/kg-dry	T		-	-	-	<0.35 :	-	<0.34 :
Anthracene	mg/kg-dry	T		-	-	-	<0.35 :	-	<0.34 :
Benzaldehyde	mg/kg-dry	T		-	-	-	0.032 J	-	0.029 J
Benzo(a)anthracene	mg/kg-dry	T		-	-	-	<0.35 :	-	<0.34 :
Benzo(a)pyrene	mg/kg-dry	T		-	<0.36 J	-	<0.35 :	-	<0.34 J
Benzo(b)fluoranthene	mg/kg-dry	T		-	<0.36 J	-	<0.35 :	-	<0.34 J
Benzo(g,h,i)perylene	mg/kg-dry	T		-	-	-	<0.35 :	-	<0.34 J
Benzo(k)fluoranthene	mg/kg-dry	T		-	<0.36 J	-	<0.35 :	-	<0.34 J
Bis(2-chloroethoxy)methane	mg/kg-dry	T		-	-	-	<0.35 :	-	<0.34 :
Bis(2-chloroethyl)ether	mg/kg-dry	T		-	-	-	<0.35 :	-	<0.34 :
Bis(2-ethylhexyl)phthalate	mg/kg-dry	T		-	-	-	0.063 J	-	0.13 J
Butyl benzyl phthalate	mg/kg-dry	T		-	-	-	<0.35 :	-	<0.34 :
Carbazole	mg/kg-dry	T		-	-	-	<0.35 :	-	<0.34 :
Chrysene	mg/kg-dry	T		-	-	-	<0.35 :	-	0.024 J
Dibenz(a,h)anthracene	mg/kg-dry	T		-	<0.36 J	-	<0.35 :	-	<0.34 J
Dibenzofuran	mg/kg-dry	T		-	-	-	<0.35 :	-	<0.34 :
Dichlorodiisopropyl ether	mg/kg-dry	T		-	-	-	<0.35 :	-	<0.34 :
Diethylphthalate	mg/kg-dry	T		-	-	-	<0.35 :	-	<0.34 :
Dimethylphthalate	mg/kg-dry	T		-	-	-	<0.35 :	-	0.078 J
Di-n-Butyl phthalate	mg/kg-dry	T		-	-	-	<0.35 :	-	<0.34 :
Di-n-Octyl phthalate	mg/kg-dry	T		-	-	-	<0.35 :	-	<0.34 J
Fluoranthene	mg/kg-dry	T		-	-	-	<0.35 :	-	0.052 J

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Appendix A-7e
Soil - Biased 0-24 inches
Validated Analytical Results

Parameter	Units	Exposure Area Fraction	Site ID / Sample Date / Sample ID					
			MSS1-57 1/8/2003 MSS1-57-T02N-SOLDL SS1	MSS1-57 1/8/2003 MSS1-57-T02N-SOL SS1	MSS1-58 1/9/2003 MSS1-58-T02N-SOLDL SS1	MSS1-58 1/9/2003 MSS1-58-T02N-SOL SS1	MSS1-59 1/19/2003 MSS1-59-T02N-SOLDL SS1	MSS1-59 1/19/2003 MSS1-59-T02N-SOL SS1
Fluorene	mg/kg-dry	T	-	-	-	<0.35 :	-	<0.34 :
Hexachlorobenzene	mg/kg-dry	T	-	-	-	<0.35 :	-	<0.34 :
Hexachlorobutadiene	mg/kg-dry	T	-	-	-	<0.35 :	-	<0.34 :
Hexachlorocyclopentadiene	mg/kg-dry	T	-	-	-	<0.35 :	-	<0.34 :
Hexachloroethane	mg/kg-dry	T	-	-	-	<0.35 :	-	<0.34 :
Indeno(1,2,3-cd)pyrene	mg/kg-dry	T	-	<0.36 J	-	<0.35 :	-	<0.34 J
Isophorone	mg/kg-dry	T	-	-	-	<0.35 :	-	<0.34 :
Naphthalene	mg/kg-dry	T	-	-	-	<0.35 :	-	<0.34 :
Nitrobenzene	mg/kg-dry	T	-	-	-	<0.35 :	-	<0.34 :
N-Nitrosodi-n-propylamine	mg/kg-dry	T	-	-	-	<0.35 :	-	<0.34 :
N-Nitrosodiphenylamine	mg/kg-dry	T	-	-	-	<0.35 :	-	<0.34 :
Pentachlorophenol	mg/kg-dry	T	-	-	-	<0.87 :	-	<0.85 :
Phenanthrene	mg/kg-dry	T	-	-	-	<0.35 :	-	0.19 J
Phenol	mg/kg-dry	T	-	-	-	<0.35 :	-	<0.34 :
Pyrene	mg/kg-dry	T	-	-	-	0.017 J	-	0.072 J
Pesticides-PCBs								
Aroclor 1016	mg/kg-dry	T	-	<0.36 :	-	<0.17 :	-	<0.17 :
Aroclor 1221	mg/kg-dry	T	-	<0.73 :	-	<0.35 :	-	<0.34 :
Aroclor 1232	mg/kg-dry	T	-	<0.36 :	-	<0.17 :	-	<0.17 :
Aroclor 1242	mg/kg-dry	T	-	<0.36 :	-	<0.17 :	-	<0.17 :
Aroclor 1248	mg/kg-dry	T	23. J	-	8.7 :	-	8.2 :	-
Aroclor 1254	mg/kg-dry	T	-	<0.36 :	-	<0.17 :	8.1 :	-
Aroclor 1260	mg/kg-dry	T	-	<0.36 :	-	<0.17 :	-	<0.17 :

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R = Qualified as rejected value from data validation and results are considered unusable for any purpose
T = Total Fraction

Appendix A-7e
Soil - Biased 0-24 inches
Validated Analytical Results

Parameter	Units	Fraction	MSS1-60		MSS1-60		MSS1-61		MSS1-62		MSS1-62		MSS1-63	
Sample Date			1/19/2003		1/19/2003		1/8/2003		1/8/2003		1/8/2003		1/8/2003	
Sample ID			MSS1-60-T02N-SOLDL		MSS1-60-T02N-SOL		MSS1-61-T02N-SOL		MSS1-62-T02N-SOLDL		MSS1-62-T02N-SOL		MSS1-63-T02N-SOL	
Exposure Area			SS1		SS1		SS1		SS1		SS1		SS1	
General Chemistry														
Ammonia	mg/kg-dry	T	-		17.9	:	7.6	:	-		45.3	:	6.	:
Chloride	mg/kg-dry	T	-		18.6	:	4610.	:	-		6.3	:	178.	:
Fluoride	mg/kg-dry	T	-		1.6	J	1.4	J	-		2.2	J	2.	J
Nitrate	mg/kg-dry	T	-		2.3	J	55.8	J	-		<2.4	J	6.2	J
Phosphorus	mg/kg-dry	T	-		1420.	:	1330.	:	-		2060.	:	1010.	:
Sulfate	mg/kg-dry	T	-		1270.	:	6630.	:	-		715.	J	3330.	:
Total Kjeldahl Nitrogen	mg/kg-dry	T	-		116.	:	189.	:	-		242.	:	72.6	:
Total Organic Carbon	mg/kg-dry	T	-		8460.	J	3000.	J	-		4840.	J	<104.	J
Laboratory Parameters														
pH	SU	T	-		7.9	:	7.7	:	-		7.8	:	7.2	:
Solids, Percent	%	T	-		98.4	:	92.2	:	-		86.9	:	96.3	:
Specific Conductance	umhos/cm	T	-		1540.	J	11800.	:	-		1190.	:	2090.	:
Geotechnical														
Organic Soils	%	T	-		1.7	:	2.3	:	-		1.8	:	0.8	:
Physical Properties														
Cation-Exchange Capacity	meq/100g	T	-		13.	:	13.7	:	-		12.8	:	9.3	:
Sodium Absorption Ratio	ratio	T	-		0.79	:	37.39	:	-		0.75	:	1.1	:
Metals														
Aluminum	mg/kg-dry	T	-		11500.	:	15700.	:	-		14600.	:	9370.	:
Antimony	mg/kg-dry	T	-		<0.28	J	<0.29	J	-		<0.34	J	<0.29	J
Arsenic	mg/kg-dry	T	-		2.5	J	4.5	J	-		5.6	J	4.4	J
Barium	mg/kg-dry	T	-		64.2	:	136.	:	-		92.6	:	148.	:
Beryllium	mg/kg-dry	T	-		0.68	:	1.4	:	-		1.1	J	0.81	:
Boron	mg/kg-dry	T	-		<0.25	J	2.2	:	-		1.	:	<0.26	:
Cadmium	mg/kg-dry	T	-		<0.037	J	<0.041	J	-		0.27	J	0.75	J
Calcium	mg/kg-dry	T	-		6770.	:	12400.	:	-		8440.	J	10300.	:
Chromium	mg/kg-dry	T	-		68.2	J	45.3	J	-		45.1	J	71.1	J
Cobalt	mg/kg-dry	T	-		10.2	:	16.3	:	-		8.3	J	4.9	:
Copper	mg/kg-dry	T	-		48.5	J	88.4	J	-		116.	J	200.	J
Iron	mg/kg-dry	T	-		24300.	:	30000.	:	-		29400.	J	26400.	:
Lead	mg/kg-dry	T	-		35.4	:	51.4	:	-		97.4	J	203.	:
Magnesium	mg/kg-dry	T	-		9340.	:	11000.	:	-		10300.	:	6950.	:
Manganese	mg/kg-dry	T	-		550.	:	971.	:	-		550.	J	655.	:

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T = Total Fraction

Appendix A-7e
Soil - Biased 0-24 inches
Validated Analytical Results

Parameter	Units	Exposure Area Fraction	Site ID	MSS1-60	MSS1-60	MSS1-61	MSS1-62	MSS1-62	MSS1-63
			Sample Date	1/19/2003	1/19/2003	1/8/2003	1/8/2003	1/8/2003	1/8/2003
			Sample ID	MSS1-60-T02N-SOLD L	MSS1-60-T02N-SOL	MSS1-61-T02N-SOL	MSS1-62-T02N-SOLD L	MSS1-62-T02N-SOL	MSS1-63-T02N-SOL
			Exposure Area	SS1	SS1	SS1	SS1	SS1	SS1
Mercury	mg/kg-dry	T		-	<0.016 :	0.22 :	-	1.2 :	0.016 :
Molybdenum	mg/kg-dry	T		-	1380. :	756. :	-	7120. J	9900. :
Nickel	mg/kg-dry	T		-	33. :	34.8 :	-	33.1 J	45.1 :
Potassium	mg/kg-dry	T		-	2730. J	3460. J	-	3280. J	2950. J
Selenium	mg/kg-dry	T		-	<0.74 J	<0.78 J	-	5.4 J	1.3 J
Silver	mg/kg-dry	T		-	0.66 :	0.89 :	-	1.5 :	2.4 :
Sodium	mg/kg-dry	T		-	<82.5 :	6180. :	-	<149. :	<158. :
Thallium	mg/kg-dry	T		-	0.19 :	0.29 :	-	0.72 :	0.33 :
Vanadium	mg/kg-dry	T		-	48.1 :	53.7 :	-	88.4 J	93. :
Zinc	mg/kg-dry	T		-	70.9 :	147. :	-	205. J	166. :
Volatile Organics									
1,1,1-Trichloroethane	mg/kg-dry	T		-	<0.006 :	<0.006 :	-	<0.008 :	<0.012 :
1,1,2,2-Tetrachloroethane	mg/kg-dry	T		-	<0.006 J	<0.006 :	-	<0.008 :	<0.012 :
1,1,2-Trichloro-1,2,2-trifluoroethane	mg/kg-dry	T		-	<0.006 :	<0.006 :	-	<0.008 :	<0.012 :
1,1,2-Trichloroethane	mg/kg-dry	T		-	<0.006 :	<0.006 :	-	<0.008 :	<0.012 :
1,1-Dichloroethane	mg/kg-dry	T		-	<0.006 :	<0.006 :	-	<0.008 :	<0.012 :
1,1-Dichloroethene	mg/kg-dry	T		-	<0.006 :	<0.006 :	-	<0.008 :	<0.012 :
1,2,4-Trichlorobenzene	mg/kg-dry	T		-	<0.006 J	<0.006 :	-	<0.008 :	<0.012 :
1,2-Dibromo-3-chloropropane	mg/kg-dry	T		-	<0.006 J	<0.006 :	-	<0.008 :	<0.012 :
1,2-Dichlorobenzene	mg/kg-dry	T		-	<0.006 J	<0.006 :	-	<0.008 :	<0.012 :
1,2-Dichloroethane	mg/kg-dry	T		-	<0.006 :	<0.006 :	-	<0.008 :	<0.012 :
1,2-Dichloroethene (total)	mg/kg-dry	T		-	<0.006 :	<0.006 :	-	<0.008 :	<0.012 :
1,2-Dichloropropane	mg/kg-dry	T		-	<0.006 :	<0.006 :	-	<0.008 :	<0.012 :
1,3-Dichlorobenzene	mg/kg-dry	T		-	<0.006 J	<0.006 :	-	<0.008 :	<0.012 :
1,4-Dichlorobenzene	mg/kg-dry	T		-	<0.006 J	<0.006 :	-	<0.008 :	<0.012 :
2-Butanone	mg/kg-dry	T		-	0.007 J	<0.006 :	-	<0.008 :	<0.012 :
2-Hexanone	mg/kg-dry	T		-	<0.006 J	<0.006 :	-	<0.008 :	<0.012 :
4-Methyl-2-pentanone	mg/kg-dry	T		-	0.002 J	<0.006 :	-	<0.008 :	<0.012 :
Acetone	mg/kg-dry	T		-	0.018 J	0.006 J	-	<0.008 :	0.012 :
Benzene	mg/kg-dry	T		-	<0.006 :	<0.006 :	-	<0.008 :	<0.012 :
Bromodichloromethane	mg/kg-dry	T		-	<0.006 :	<0.006 :	-	<0.008 :	<0.012 :
Bromoform	mg/kg-dry	T		-	<0.006 :	<0.006 :	-	<0.008 :	<0.012 :
Bromomethane	mg/kg-dry	T		-	<0.006 :	<0.006 :	-	<0.008 :	<0.012 :
Carbon disulfide	mg/kg-dry	T		-	<0.006 :	<0.006 :	-	<0.008 :	0.002 J

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T = Total Fraction

Appendix A-7e
Soil - Biased 0-24 inches
Validated Analytical Results

Parameter	Units	Exposure Area Fraction	Site ID		Sample Date		Sample ID		Exposure Area	
			MSS1-60		1/19/2003		MSS1-60-T02N-SOLD L		SS1	
			MSS1-60		1/19/2003		MSS1-60-T02N-SOL		SS1	
			MSS1-61		1/8/2003		MSS1-61-T02N-SOL		SS1	
			MSS1-62		1/8/2003		MSS1-62-T02N-SOLD L		SS1	
			MSS1-62		1/8/2003		MSS1-62-T02N-SOL		SS1	
			MSS1-63		1/8/2003		MSS1-63-T02N-SOL		SS1	
Carbon tetrachloride	mg/kg-dry	T	-		<0.006	:	<0.006	:	-	
Chlorobenzene	mg/kg-dry	T	-		<0.006	J	<0.006	:	-	
Chloroethane	mg/kg-dry	T	-		<0.006	:	<0.006	:	-	
Chloroform	mg/kg-dry	T	-		<0.006	:	<0.006	:	-	
Chloromethane	mg/kg-dry	T	-		<0.006	:	<0.006	:	-	
cis-1,2-Dichloroethene	mg/kg-dry	T	-		<0.006	:	<0.006	:	-	
cis-1,3-Dichloropropene	mg/kg-dry	T	-		<0.006	:	<0.006	:	-	
Dibromochloromethane	mg/kg-dry	T	-		<0.006	:	<0.006	:	-	
Dichlorodifluoromethane	mg/kg-dry	T	-		<0.006	:	<0.006	:	-	
Ethylbenzene	mg/kg-dry	T	-		<0.006	J	<0.006	:	-	
Methylene chloride	mg/kg-dry	T	-		<0.006	:	<0.006	:	-	
Styrene	mg/kg-dry	T	-		<0.006	J	<0.006	:	-	
Tetrachloroethene	mg/kg-dry	T	-		<0.006	J	<0.006	:	-	
Toluene	mg/kg-dry	T	-		0.0008	J	<0.006	:	-	
Total Xylene	mg/kg-dry	T	-		0.002	J	<0.006	:	-	
trans-1,2-Dichloroethene	mg/kg-dry	T	-		<0.006	:	<0.006	:	-	
trans-1,3-Dichloropropene	mg/kg-dry	T	-		<0.006	:	<0.006	:	-	
Trichloroethene	mg/kg-dry	T	-		<0.006	:	<0.006	:	-	
Trichlorofluoromethane	mg/kg-dry	T	-		<0.006	:	<0.006	:	-	
Vinyl chloride	mg/kg-dry	T	-		<0.006	:	<0.006	:	-	
Semi-Volatile Organics										
1,1`-Biphenyl	mg/kg-dry	T	-		<0.34	:	<0.36	:	-	
2,4,5-Trichlorophenol	mg/kg-dry	T	-		<0.85	:	<0.9	:	-	
2,4,6-Trichlorophenol	mg/kg-dry	T	-		<0.34	:	<0.36	:	-	
2,4-Dichlorophenol	mg/kg-dry	T	-		<0.34	:	<0.36	:	-	
2,4-Dimethylphenol	mg/kg-dry	T	-		<0.34	:	<0.36	:	-	
2,4-Dinitrophenol	mg/kg-dry	T	-		<0.85	J	<0.9	J	-	
2,4-Dinitrotoluene	mg/kg-dry	T	-		<0.34	:	<0.36	:	-	
2,6-Dinitrotoluene	mg/kg-dry	T	-		<0.34	:	<0.36	:	-	
2-Chloronaphthalene	mg/kg-dry	T	-		<0.34	:	<0.36	:	-	
2-Chlorophenol	mg/kg-dry	T	-		<0.34	:	<0.36	:	-	
2-Methylnaphthalene	mg/kg-dry	T	-		<0.34	:	<0.36	:	-	
2-Methylphenol	mg/kg-dry	T	-		<0.34	:	<0.36	:	-	
2-Nitroaniline	mg/kg-dry	T	-		<0.85	:	<0.9	:	-	

			MSS1-62		1/8/2003		MSS1-62-T02N-SOL		SS1	
			MSS1-63		1/8/2003		MSS1-63-T02N-SOL		SS1	
Carbon tetrachloride	mg/kg-dry	T	<0.008	:	<0.012	:				
Chlorobenzene	mg/kg-dry	T	<0.008	:	<0.012	:				
Chloroethane	mg/kg-dry	T	<0.008	:	<0.012	:				
Chloroform	mg/kg-dry	T	<0.008	:	<0.012	:				
Chloromethane	mg/kg-dry	T	<0.008	:	<0.012	:				
cis-1,2-Dichloroethene	mg/kg-dry	T	<0.008	:	<0.012	:				
cis-1,3-Dichloropropene	mg/kg-dry	T	<0.008	:	<0.012	:				
Dibromochloromethane	mg/kg-dry	T	<0.008	:	<0.012	:				
Dichlorodifluoromethane	mg/kg-dry	T	<0.008	:	<0.012	:				
Ethylbenzene	mg/kg-dry	T	<0.008	:	<0.012	:				
Methylene chloride	mg/kg-dry	T	<0.008	:	<0.012	:				
Styrene	mg/kg-dry	T	<0.008	:	<0.012	:				
Tetrachloroethene	mg/kg-dry	T	<0.008	:	<0.012	:				
Toluene	mg/kg-dry	T	0.001	J	0.001	J				
Total Xylene	mg/kg-dry	T	<0.008	:	<0.012	:				
trans-1,2-Dichloroethene	mg/kg-dry	T	<0.008	:	<0.012	:				
trans-1,3-Dichloropropene	mg/kg-dry	T	<0.008	:	<0.012	:				
Trichloroethene	mg/kg-dry	T	<0.008	:	<0.012	:				
Trichlorofluoromethane	mg/kg-dry	T	<0.008	:	<0.012	:				
Vinyl chloride	mg/kg-dry	T	<0.008	:	<0.012	:				
Semi-Volatile Organics										
1,1`-Biphenyl	mg/kg-dry	T	<0.38	:	<0.34	:				
2,4,5-Trichlorophenol	mg/kg-dry	T	<0.95	:	<0.86	:				
2,4,6-Trichlorophenol	mg/kg-dry	T	<0.38	:	<0.34	:				
2,4-Dichlorophenol	mg/kg-dry	T	<0.38	:	<0.34	:				
2,4-Dimethylphenol	mg/kg-dry	T	<0.38	:	<0.34	:				
2,4-Dinitrophenol	mg/kg-dry	T	<0.95	J	<0.86	J				
2,4-Dinitrotoluene	mg/kg-dry	T	<0.38	:	<0.34	:				
2,6-Dinitrotoluene	mg/kg-dry	T	<0.38	:	<0.34	:				
2-Chloronaphthalene	mg/kg-dry	T	<0.38	:	<0.34	:				
2-Chlorophenol	mg/kg-dry	T	<0.38	:	<0.34	:				
2-Methylnaphthalene	mg/kg-dry	T	<0.38	:	<0.34	:				
2-Methylphenol	mg/kg-dry	T	<0.38	:	<0.34	:				
2-Nitroaniline	mg/kg-dry	T	<0.95	:	<0.86	:				

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Appendix A-7e
Soil - Biased 0-24 inches
Validated Analytical Results

Parameter	Units	Fraction	MSS1-60		MSS1-60		MSS1-61		MSS1-62		MSS1-62		MSS1-63	
Sample Date			1/19/2003		1/19/2003		1/8/2003		1/8/2003		1/8/2003		1/8/2003	
Sample ID			MSS1-60-T02N-SOLDL		MSS1-60-T02N-SOL		MSS1-61-T02N-SOL		MSS1-62-T02N-SOLDL		MSS1-62-T02N-SOL		MSS1-63-T02N-SOL	
Exposure Area			SS1		SS1		SS1		SS1		SS1		SS1	
2-Nitrophenol	mg/kg-dry	T	-		<0.34	:	<0.36	:	-		<0.38	:	<0.34	:
3,3-Dichlorobenzidine	mg/kg-dry	T	-		<0.34	J	<0.36	:	-		<0.38	:	<0.34	:
3-Nitroaniline	mg/kg-dry	T	-		<0.85	:	<0.9	:	-		<0.95	:	<0.86	:
4,6-Dinitro-2-methylphenol	mg/kg-dry	T	-		<0.85	J	<0.9	:	-		<0.95	:	<0.86	:
4-Bromophenyl phenyl ether	mg/kg-dry	T	-		<0.34	J	<0.36	:	-		<0.38	:	<0.34	:
4-Chloro-3-methylphenol	mg/kg-dry	T	-		<0.34	:	<0.36	:	-		<0.38	:	<0.34	:
4-Chloroaniline	mg/kg-dry	T	-		<0.34	:	<0.36	:	-		<0.38	:	<0.34	:
4-Chlorophenyl phenyl ether	mg/kg-dry	T	-		<0.34	:	<0.36	:	-		<0.38	:	<0.34	:
4-Methylphenol	mg/kg-dry	T	-		<0.34	:	<0.36	:	-		<0.38	:	<0.34	:
4-Nitroaniline	mg/kg-dry	T	-		<0.85	:	<0.9	:	-		<0.95	:	<0.86	:
4-Nitrophenol	mg/kg-dry	T	-		<0.85	:	<0.9	:	-		<0.95	:	<0.86	:
Acenaphthene	mg/kg-dry	T	-		<0.34	:	<0.36	:	-		<0.38	:	<0.34	:
Acenaphthylene	mg/kg-dry	T	-		<0.34	:	<0.36	:	-		<0.38	:	<0.34	:
Anthracene	mg/kg-dry	T	-		<0.34	J	<0.36	:	-		<0.38	:	<0.34	:
Benzaldehyde	mg/kg-dry	T	-		<0.34	J	<0.36	J	-		<0.38	:	<0.34	:
Benzo(a)anthracene	mg/kg-dry	T	-		<0.34	J	<0.36	:	-		<0.38	:	<0.34	:
Benzo(a)pyrene	mg/kg-dry	T	-		<0.34	J	<0.36	:	-		<0.38	:	<0.34	:
Benzo(b)fluoranthene	mg/kg-dry	T	-		<0.34	J	<0.36	:	-		<0.38	:	<0.34	:
Benzo(g,h,i)perylene	mg/kg-dry	T	-		<0.34	J	<0.36	:	-		<0.38	:	<0.34	:
Benzo(k)fluoranthene	mg/kg-dry	T	-		<0.34	J	<0.36	:	-		<0.38	:	<0.34	:
Bis(2-chloroethoxy)methane	mg/kg-dry	T	-		<0.34	:	<0.36	:	-		<0.38	:	<0.34	:
Bis(2-chloroethyl)ether	mg/kg-dry	T	-		<0.34	:	<0.36	:	-		<0.38	:	<0.34	:
Bis(2-ethylhexyl)phthalate	mg/kg-dry	T	-		<0.34	J	0.17	J	-		0.29	J	0.12	J
Butyl benzyl phthalate	mg/kg-dry	T	-		<0.34	J	<0.36	:	-		<0.38	:	<0.34	:
Carbazole	mg/kg-dry	T	-		<0.34	J	<0.36	:	-		<0.38	:	<0.34	:
Chrysene	mg/kg-dry	T	-		<0.34	J	<0.36	:	-		<0.38	:	<0.34	:
Dibenz(a,h)anthracene	mg/kg-dry	T	-		<0.34	J	<0.36	:	-		<0.38	:	<0.34	:
Dibenzofuran	mg/kg-dry	T	-		<0.34	:	<0.36	:	-		<0.38	:	<0.34	:
Dichlorodiisopropyl ether	mg/kg-dry	T	-		<0.34	:	<0.36	:	-		<0.38	:	<0.34	:
Diethylphthalate	mg/kg-dry	T	-		<0.34	:	<0.36	:	-		<0.38	:	<0.34	:
Dimethylphthalate	mg/kg-dry	T	-		<0.34	:	<0.36	:	-		<0.38	:	<0.34	:
Di-n-Butyl phthalate	mg/kg-dry	T	-		<0.34	J	<0.36	:	-		<0.38	:	<0.34	:
Di-n-Octyl phthalate	mg/kg-dry	T	-		<0.34	J	<0.36	:	-		<0.38	:	<0.34	:
Fluoranthene	mg/kg-dry	T	-		<0.34	J	<0.36	:	-		<0.38	:	<0.34	:

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Appendix A-7e
Soil - Biased 0-24 inches
Validated Analytical Results

Parameter	Units	Exposure Area Fraction	Site ID	Sample Date	Sample ID	Exposure Area
			MSS1-60	1/19/2003	MSS1-60-T02N-SOLD L	SS1
			MSS1-60	1/19/2003	MSS1-60-T02N-SOL	SS1
			MSS1-61	1/8/2003	MSS1-61-T02N-SOL	SS1
			MSS1-62	1/8/2003	MSS1-62-T02N-SOLD L	SS1
			MSS1-62	1/8/2003	MSS1-62-T02N-SOL	SS1
			MSS1-63	1/8/2003	MSS1-63-T02N-SOL	SS1
Fluorene	mg/kg-dry	T	- :	<0.34 :	<0.36 :	- :	<0.38 :	<0.34 :
Hexachlorobenzene	mg/kg-dry	T	- :	<0.34 J	<0.36 :	- :	<0.38 :	<0.34 :
Hexachlorobutadiene	mg/kg-dry	T	- :	<0.34 :	<0.36 :	- :	<0.38 :	<0.34 :
Hexachlorocyclopentadiene	mg/kg-dry	T	- :	<0.34 :	<0.36 :	- :	<0.38 :	<0.34 :
Hexachloroethane	mg/kg-dry	T	- :	<0.34 :	<0.36 :	- :	<0.38 :	<0.34 :
Indeno(1,2,3-cd)pyrene	mg/kg-dry	T	- :	<0.34 J	<0.36 :	- :	<0.38 :	<0.34 :
Isophorone	mg/kg-dry	T	- :	<0.34 :	<0.36 :	- :	<0.38 :	<0.34 :
Naphthalene	mg/kg-dry	T	- :	<0.34 :	<0.36 :	- :	<0.38 :	<0.34 :
Nitrobenzene	mg/kg-dry	T	- :	<0.34 :	<0.36 :	- :	<0.38 :	<0.34 :
N-Nitrosodi-n-propylamine	mg/kg-dry	T	- :	<0.34 :	<0.36 :	- :	<0.38 :	<0.34 :
N-Nitrosodiphenylamine	mg/kg-dry	T	- :	<0.34 J	<0.36 :	- :	<0.38 :	<0.34 :
Pentachlorophenol	mg/kg-dry	T	- :	<0.85 J	<0.9 J	- :	<0.95 :	<0.86 :
Phenanthrene	mg/kg-dry	T	- :	<0.34 J	<0.36 :	- :	<0.38 :	<0.34 :
Phenol	mg/kg-dry	T	- :	<0.34 :	<0.36 :	- :	<0.38 :	<0.34 :
Pyrene	mg/kg-dry	T	- :	<0.34 J	<0.36 :	- :	0.019 J	<0.34 :
Pesticides-PCBs								
Aroclor 1016	mg/kg-dry	T	- :	<0.067 :	<0.036 :	- :	<0.038 :	<0.034 :
Aroclor 1221	mg/kg-dry	T	- :	<0.14 :	<0.073 :	- :	<0.077 :	<0.07 :
Aroclor 1232	mg/kg-dry	T	- :	<0.067 :	<0.036 :	- :	<0.038 :	<0.034 :
Aroclor 1242	mg/kg-dry	T	- :	<0.067 :	<0.036 :	- :	<0.038 :	<0.034 :
Aroclor 1248	mg/kg-dry	T	1.7 :	-	0.11 J	- :	<0.038 :	0.13 J
Aroclor 1254	mg/kg-dry	T	2.5 :	-	0.21 :	3. :	-	0.42 :
Aroclor 1260	mg/kg-dry	T	- :	<0.067 :	<0.036 :	- :	<0.038 :	<0.034 :

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T = Total Fraction

Appendix A-7e
Soil - Biased 0-24 inches
Validated Analytical Results

Parameter	Units	Exposure Area Fraction	Site ID		Sample Date		Sample ID		Exposure Area															
			MSS1-64		1/19/2003		MSS1-64-T02N-SOL		SS1		MSS1-65		1/10/2003		MSS1-65-T02N-SOL		SS1		MSS1-66		1/8/2003		MSS1-66-T02N-SOL DL	SS1
General Chemistry																								
Ammonia	mg/kg-dry	T	23.9	:							19.5	:							-					
Chloride	mg/kg-dry	T	<2.4	:							26.6	:							-					
Fluoride	mg/kg-dry	T	40.2	J							2.	J							-					
Nitrate	mg/kg-dry	T	<2.4	J							9.7	J							-					
Phosphorus	mg/kg-dry	T	1350.	:							1220.	:							-					
Sulfate	mg/kg-dry	T	2240.	:							205.	:							-					
Total Kjeldahl Nitrogen	mg/kg-dry	T	34.8	:							207.	:							-					
Total Organic Carbon	mg/kg-dry	T	<116.	J							6070.	J							-					
Laboratory Parameters																								
pH	SU	T	8.2	:							7.1	:							-					
Solids, Percent	%	T	86.9	:							95.8	:							-					
Specific Conductance	umhos/cm	T	1770.	J							798.	:							-					
Geotechnical																								
Organic Soils	%	T	1.	:							1.9	:							-					
Physical Properties																								
Cation-Exchange Capacity	meq/100g	T	11.8	:							12.2	:							-					
Sodium Absorption Ratio	ratio	T	0.15	:							2.34	:							-					
Metals																								
Aluminum	mg/kg-dry	T	10500.	:							15800.	:							-					
Antimony	mg/kg-dry	T	<0.34	J							<0.28	J							-					
Arsenic	mg/kg-dry	T	1.1	J							3.9	J							-					
Barium	mg/kg-dry	T	93.3	:							106.	:							-					
Beryllium	mg/kg-dry	T	1.6	:							1.1	:							-					
Boron	mg/kg-dry	T	<0.29	:							5.3	:							-					
Cadmium	mg/kg-dry	T	1.2	:							0.43	J							-					
Calcium	mg/kg-dry	T	15200.	:							12400.	:							-					
Chromium	mg/kg-dry	T	46.1	J							57.9	J							-					
Cobalt	mg/kg-dry	T	3.5	:							15.1	:							-					
Copper	mg/kg-dry	T	487.	J							182.	J							-					
Iron	mg/kg-dry	T	15600.	:							29400.	:							-					
Lead	mg/kg-dry	T	69.1	:							203.	:							-					
Magnesium	mg/kg-dry	T	8350.	:							11000.	:							-					
Manganese	mg/kg-dry	T	528.	:							865.	:							-					

Parameter	Units	Exposure Area Fraction	Site ID		Sample Date		Sample ID		Exposure Area															
			MSS1-66		1/8/2003		MSS1-66-T02N-SOL		SS1		MSS1-67		1/12/2003		MSS2-67-T02N-SOL		SS1		MSS1-68		1/19/2003		MSS1-68-T02N-SOL	SS1
General Chemistry																								
Ammonia	mg/kg-dry	T	3.2	:							20.5	:							13.9	:				
Chloride	mg/kg-dry	T	34.8	:							<2.2	:							6.5	:				
Fluoride	mg/kg-dry	T	3.3	J							1.1	J							1.4	J				
Nitrate	mg/kg-dry	T	<2.2	J							<2.2	J							<2.1	J				
Phosphorus	mg/kg-dry	T	1020.	:							1000.	:							1350.	:				
Sulfate	mg/kg-dry	T	3340.	:							9.4	:							383.	J				
Total Kjeldahl Nitrogen	mg/kg-dry	T	117.	:							147.	:							76.5	J				
Total Organic Carbon	mg/kg-dry	T	646.	J							7660.	J							223.	J				
Laboratory Parameters																								
pH	SU	T	8.	:							8.1	:							7.7	:				
Solids, Percent	%	T	94.2	:							91.8	:							97.4	:				
Specific Conductance	umhos/cm	T	1880.	:							133.	:							772.	J				
Geotechnical																								
Organic Soils	%	T	1.	:							2.65	:							1.5	:				
Physical Properties																								
Cation-Exchange Capacity	meq/100g	T	10.4	:							9.7	:							7.4	:				
Sodium Absorption Ratio	ratio	T	0.65	:							0.05	:							0.38	:				
Metals																								
Aluminum	mg/kg-dry	T	12400.	:							14500.	:							12400.	:				
Antimony	mg/kg-dry	T	<0.32	J							<0.29	:							<0.28	J				
Arsenic	mg/kg-dry	T	9.5	J							3.3	J							2.7	J				
Barium	mg/kg-dry	T	74.	:							91.5	:							63.6	:				
Beryllium	mg/kg-dry	T	1.1	:							0.99	:							0.79	:				
Boron	mg/kg-dry	T	<0.27	:							3.	:							<0.25	J				
Cadmium	mg/kg-dry	T	0.76	J							<0.039	:							0.34	J				
Calcium	mg/kg-dry	T	16500.	:							7750.	:							7870.	:				
Chromium	mg/kg-dry	T	60.4	J							47.6	J							68.8	J				
Cobalt	mg/kg-dry	T	<15.9	:							15.1	:							12.6	:				
Copper	mg/kg-dry	T	458.	J							59.2	:							57.1	:				
Iron	mg/kg-dry	T	34400.	:							26100.	:							23200.	:				
Lead	mg/kg-dry	T	195.	:							39.8	:							49.7	:				
Magnesium	mg/kg-dry	T	8850.	:							11100.	:							11600.	:				
Manganese	mg/kg-dry	T	673.	:							720.	:							750.	:				

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Appendix A-7e
Soil - Biased 0-24 inches
Validated Analytical Results

Parameter	Units	Exposure Area Fraction	Site ID		Sample Date		Sample ID		Exposure Area	
			MSS1-64		1/19/2003		MSS1-64-T02N-SOL		SS1	
Mercury	mg/kg-dry	T	<0.018	:	0.55	:		-	0.021	:
Molybdenum	mg/kg-dry	T	10700.	:	813.	:		-	29400.	:
Nickel	mg/kg-dry	T	33.8	:	38.5	:		-	46.6	:
Potassium	mg/kg-dry	T	5070.	J	3800.	J		-	3030.	J
Selenium	mg/kg-dry	T	2.5	J	<0.76	J		-	2.8	J
Silver	mg/kg-dry	T	1.8	:	0.67	J		-	0.43	:
Sodium	mg/kg-dry	T	<35.5	:	<132.	:		-	<32.5	J
Thallium	mg/kg-dry	T	0.66	:	0.25	:		-	0.35	:
Vanadium	mg/kg-dry	T	96.8	:	62.2	:		-	145.	:
Zinc	mg/kg-dry	T	228.	:	137.	:		-	198.	:
Volatile Organics										
1,1,1-Trichloroethane	mg/kg-dry	T	<0.008	:	<0.005	:		-	<0.009	:
1,1,2,2-Tetrachloroethane	mg/kg-dry	T	<0.008	:	<0.005	:		-	<0.009	:
1,1,2-Trichloro-1,2,2-trifluoroethane	mg/kg-dry	T	<0.008	:	<0.005	:		-	<0.009	:
1,1,2-Trichloroethane	mg/kg-dry	T	<0.008	:	<0.005	:		-	<0.009	:
1,1-Dichloroethane	mg/kg-dry	T	<0.008	:	<0.005	:		-	<0.009	:
1,1-Dichloroethene	mg/kg-dry	T	<0.008	:	<0.005	:		-	<0.009	:
1,2,4-Trichlorobenzene	mg/kg-dry	T	<0.008	:	<0.005	:		-	<0.009	:
1,2-Dibromo-3-chloropropane	mg/kg-dry	T	<0.008	:	<0.005	:		-	<0.009	:
1,2-Dichlorobenzene	mg/kg-dry	T	<0.008	:	<0.005	:		-	<0.009	:
1,2-Dichloroethane	mg/kg-dry	T	<0.008	:	<0.005	:		-	<0.009	:
1,2-Dichloroethene (total)	mg/kg-dry	T	<0.008	:	<0.005	:		-	<0.009	:
1,2-Dichloropropane	mg/kg-dry	T	<0.008	:	<0.005	:		-	<0.009	:
1,3-Dichlorobenzene	mg/kg-dry	T	<0.008	:	<0.005	:		-	<0.009	:
1,4-Dichlorobenzene	mg/kg-dry	T	<0.008	:	<0.005	:		-	<0.009	:
2-Butanone	mg/kg-dry	T	0.003	J	<0.005	:		-	<0.009	:
2-Hexanone	mg/kg-dry	T	<0.008	:	<0.005	:		-	<0.009	:
4-Methyl-2-pentanone	mg/kg-dry	T	<0.008	:	<0.005	:		-	<0.009	:
Acetone	mg/kg-dry	T	0.011	J	0.001	J		-	<0.009	:
Benzene	mg/kg-dry	T	<0.008	:	<0.005	:		-	<0.009	:
Bromodichloromethane	mg/kg-dry	T	<0.008	:	<0.005	:		-	<0.009	:
Bromoform	mg/kg-dry	T	<0.008	:	<0.005	:		-	<0.009	:
Bromomethane	mg/kg-dry	T	<0.008	:	<0.005	:		-	<0.009	:
Carbon disulfide	mg/kg-dry	T	0.001	J	<0.005	:		-	0.0009	J

Parameter	Units	Exposure Area Fraction	Site ID		Sample Date		Sample ID		Exposure Area	
			MSS1-65		1/10/2003		MSS1-65-T02N-SOL		SS1	
Mercury	mg/kg-dry	T	0.021	:	<0.018	:		-	<0.017	:
Molybdenum	mg/kg-dry	T	29400.	:	175.	:		-	213.	:
Nickel	mg/kg-dry	T	46.6	:	38.2	:		-	42.4	:
Potassium	mg/kg-dry	T	3030.	J	3310.	:		-	3110.	J
Selenium	mg/kg-dry	T	2.8	J	<0.78	J		-	<0.74	J
Silver	mg/kg-dry	T	0.43	:	0.49	:		-	0.38	:
Sodium	mg/kg-dry	T	<32.5	J	<32.1	:		-	<76.2	:
Thallium	mg/kg-dry	T	0.35	:	0.3	:		-	0.18	:
Vanadium	mg/kg-dry	T	145.	:	49.6	:		-	50.3	:
Zinc	mg/kg-dry	T	198.	:	96.2	:		-	120.	:
Volatile Organics										
1,1,1-Trichloroethane	mg/kg-dry	T	<0.009	:	<0.006	:		-	<0.005	:
1,1,2,2-Tetrachloroethane	mg/kg-dry	T	<0.009	:	<0.006	:		-	<0.005	:
1,1,2-Trichloro-1,2,2-trifluoroethane	mg/kg-dry	T	<0.009	:	<0.006	:		-	<0.005	:
1,1,2-Trichloroethane	mg/kg-dry	T	<0.009	:	<0.006	:		-	<0.005	:
1,1-Dichloroethane	mg/kg-dry	T	<0.009	:	<0.006	:		-	<0.005	:
1,1-Dichloroethene	mg/kg-dry	T	<0.009	:	<0.006	:		-	<0.005	:
1,2,4-Trichlorobenzene	mg/kg-dry	T	<0.009	:	<0.006	:		-	<0.005	:
1,2-Dibromo-3-chloropropane	mg/kg-dry	T	<0.009	:	<0.006	:		-	<0.005	:
1,2-Dichlorobenzene	mg/kg-dry	T	<0.009	:	<0.006	:		-	<0.005	:
1,2-Dichloroethane	mg/kg-dry	T	<0.009	:	<0.006	:		-	<0.005	:
1,2-Dichloroethene (total)	mg/kg-dry	T	<0.009	:	<0.006	:		-	<0.005	:
1,2-Dichloropropane	mg/kg-dry	T	<0.009	:	<0.006	:		-	<0.005	:
1,3-Dichlorobenzene	mg/kg-dry	T	<0.009	:	<0.006	:		-	<0.005	:
1,4-Dichlorobenzene	mg/kg-dry	T	<0.009	:	<0.006	:		-	<0.005	:
2-Butanone	mg/kg-dry	T	<0.009	:	0.003	J		-	<0.005	:
2-Hexanone	mg/kg-dry	T	<0.009	:	<0.006	:		-	<0.005	:
4-Methyl-2-pentanone	mg/kg-dry	T	<0.009	:	<0.006	:		-	<0.005	:
Acetone	mg/kg-dry	T	<0.009	:	0.005	J		-	0.004	J
Benzene	mg/kg-dry	T	<0.009	:	<0.006	:		-	<0.005	:
Bromodichloromethane	mg/kg-dry	T	<0.009	:	<0.006	:		-	<0.005	:
Bromoform	mg/kg-dry	T	<0.009	:	<0.006	:		-	<0.005	:
Bromomethane	mg/kg-dry	T	<0.009	:	<0.006	:		-	<0.005	:
Carbon disulfide	mg/kg-dry	T	<0.009	:	<0.006	:		-	<0.005	:

Parameter	Units	Exposure Area Fraction	Site ID		Sample Date		Sample ID		Exposure Area	
			MSS1-66		1/8/2003		MSS1-66-T02N-SOL DL		SS1	
Mercury	mg/kg-dry	T	-		-			-	-	
Molybdenum	mg/kg-dry	T	-		-			-	-	
Nickel	mg/kg-dry	T	-		-			-	-	
Potassium	mg/kg-dry	T	-		-			-	-	
Selenium	mg/kg-dry	T	-		-			-	-	
Silver	mg/kg-dry	T	-		-			-	-	
Sodium	mg/kg-dry	T	-		-			-	-	
Thallium	mg/kg-dry	T	-		-			-	-	
Vanadium	mg/kg-dry	T	-		-			-	-	
Zinc	mg/kg-dry	T	-		-			-	-	
Volatile Organics										
1,1,1-Trichloroethane	mg/kg-dry	T	-		-			-	-	
1,1,2,2-Tetrachloroethane	mg/kg-dry	T	-		-			-	-	
1,1,2-Trichloro-1,2,2-trifluoroethane	mg/kg-dry	T	-		-			-	-	
1,1,2-Trichloroethane	mg/kg-dry	T	-		-			-	-	
1,1-Dichloroethane	mg/kg-dry	T	-		-			-	-	
1,1-Dichloroethene	mg/kg-dry	T	-		-			-	-	
1,2,4-Trichlorobenzene	mg/kg-dry	T	-		-			-	-	
1,2-Dibromo-3-chloropropane	mg/kg-dry	T	-		-			-	-	
1,2-Dichlorobenzene	mg/kg-dry	T	-		-			-	-	
1,2-Dichloroethane	mg/kg-dry	T	-		-			-	-	
1,2-Dichloroethene (total)	mg/kg-dry	T	-		-			-	-	
1,2-Dichloropropane	mg/kg-dry	T	-		-			-	-	
1,3-Dichlorobenzene	mg/kg-dry	T	-		-			-	-	
1,4-Dichlorobenzene	mg/kg-dry	T	-		-			-	-	
2-Butanone	mg/kg-dry	T	-		-			-	-	
2-Hexanone	mg/kg-dry	T	-		-			-	-	
4-Methyl-2-pentanone	mg/kg-dry	T	-		-			-	-	
Acetone	mg/kg-dry	T	-		-			-	-	
Benzene	mg/kg-dry	T	-		-			-	-	
Bromodichloromethane	mg/kg-dry	T	-		-			-	-	
Bromoform	mg/kg-dry	T	-		-			-	-	
Bromomethane	mg/kg-dry	T	-		-			-	-	
Carbon disulfide	mg/kg-dry	T	-		-			-	-	

Parameter	Units	Exposure Area Fraction	Site ID		Sample Date		Sample ID		Exposure Area	
			MSS1-66		1/8/2003		MSS1-66-T02N-SOL		SS1	
Mercury	mg/kg-dry	T	0.021	:	<0.018	:		-	<0.017	:
Molybdenum	mg/kg-dry	T	29400.	:	175.	:		-	213.	:
Nickel	mg/kg-dry	T	46.6	:	38.2	:		-	42.4	:
Potassium	mg/kg-dry	T	3030.	J	3310.	:		-	3110.	J
Selenium	mg/kg-dry	T	2.8	J	<0.78	J		-	<0.74	J
Silver	mg/kg-dry	T	0.43	:	0.49	:		-	0.38	:
Sodium	mg/kg-dry	T	<32.5	J	<32.1	:		-	<76.2	:
Thallium	mg/kg-dry	T	0.35	:	0.3	:		-	0.18	:
Vanadium	mg/kg-dry	T	145.	:	49.6	:		-	50.3	:
Zinc	mg/kg-dry	T	198.	:	96.2	:		-	120.	:
Volatile Organics										
1,1,1-Trichloroethane	mg/kg-dry	T	<0.009	:	<0.006	:		-	<0.005	:
1,1,2,2-Tetrachloroethane	mg/kg-dry	T	<0.009	:	<0.006	:		-	<0.005	:
1,1,2-Trichloro-1,2,2-trifluoroethane	mg/kg-dry	T	<0.009	:	<0.006	:		-	<0.005	:
1,1,2-Trichloroethane	mg/kg-dry	T	<0.009	:	<0.006	:		-	<0.005	:
1,1-Dichloroethane	mg/kg-dry	T	<0.009	:	<0.006	:		-	<0.005	:
1,1-Dichloroethene	mg/kg-dry	T	<0.009	:	<0.006	:		-	<0.005	:
1,2,4-Trichlorobenzene	mg/kg-dry	T	<0.009	:	<0.006	:		-	<0.005	:
1,2-Dibromo-3-chloropropane	mg/kg-dry	T	<0.009	:	<0.006	:		-	<0.005	:
1,2-Dichlorobenzene	mg/kg-dry	T	<0.009	:	<0.006	:		-	<0.005	:
1,2-Dichloroethane	mg/kg-dry	T	<0.009	:	<0.006	:		-	<0.005	:
1,2-Dichloroethene (total)	mg/kg-dry	T	<0.009	:	<0.006	:		-	<0.005	:
1,2-Dichloropropane	mg/kg-dry	T	<0.009	:	<0.006	:		-	<0.005	:
1,3-Dichlorobenzene	mg/kg-dry	T	<0.009	:	<0.006	:		-	<0.005	:
1,4-Dichlorobenzene	mg/kg-dry	T	<0.009	:	<0.006	:		-	<0.005	:
2-Butanone	mg/kg-dry	T	<0.009	:	0.003	J		-	<0.005	:
2-Hexanone	mg/kg-dry	T	<0.009	:	<0.006	:		-	<0.005	:
4-Methyl-2-pentanone	mg/kg-dry	T	<0.009	:	<0.006	:		-	<0.005	:
Acetone	mg/kg-dry	T	<0.009	:	0.005	J		-	0.004	J
Benzene	mg/kg-dry	T	<0.009	:	<0.006	:		-	<0.005	:
Bromodichloromethane	mg/kg-dry	T	<0.009	:	<0.006	:		-	<0.005	:
Bromoform	mg/kg-dry	T	<0.009	:	<0.006	:		-	<0.005	:
Bromomethane	mg/kg-dry	T	<0.009	:	<0.006	:		-	<0.005	:
Carbon disulfide	mg/kg-dry	T	<0.009	:	<0.006	:		-	<0.005	:

Parameter	Units	Exposure Area Fraction	Site ID		Sample Date		Sample ID		Exposure Area	
			MSS1-67		1/12/2003		MSS2-67-T02N-SOL		SS1	
Mercury	mg/kg-dry	T	<0.018	:	0.49	:		-	0.38	:
Molybdenum	mg/kg-dry	T	175.	:	213.	:		-	213.	:
Nickel	mg/kg-dry	T	38.2	:	42.4	:		-	42.4	:
Potassium	mg/kg-dry	T	3310.	:	3110.	J		-	3110.	J
Selenium	mg/kg-dry	T	<0.78	J	<0.74	J		-	<0.74	J
Silver	mg/kg-dry	T	0.49	:	0.38	:		-	0.38	:
Sodium	mg/kg-dry	T	<32.1	:	<76.2	:		-	<76.2	:
Thallium	mg/kg-dry	T	0.3	:	0.18	:		-	0.18	:
Vanadium	mg/kg-dry	T	49.6	:	50.3	:		-	50.3	:
Zinc	mg/kg-dry	T	96.2	:	120.	:		-	120.	:
Volatile Organics										
1,1,1-Trichloroethane	mg/kg-dry	T	<0.006	:	<0.005	:		-	<0.005	:
1,1,2,2-Tetrachloroethane	mg/kg-dry	T	<0.006	:	<0.005	:		-	<0.005	:
1,1,2-Trichloro-1,2,2-trifluoroethane	mg/kg-dry	T	<0.006	:	<0.005	:		-	<0.005	:
1,1,2-Trichloroethane	mg/kg-dry	T	<0.006	:	<0.005	:		-	<0.005	:
1,1-Dichloroethane	mg/kg-dry	T	<0.006	:	<0.005	:		-	<0.005	:
1,1-Dichloroethene	mg/kg-dry	T	<0.006	:	<0.005	:		-	<0.005	:
1,2,4-Trichlorobenzene	mg/kg-dry	T	<0.006	:	<0.005	:		-	<0.005	:
1,2-Dibromo-3-chloropropane	mg/kg-dry	T	<0.006	:	<0.005	:		-	<0.005	:
1,2-Dichlorobenzene	mg/kg-dry	T	<0.006	:	<0.005	:		-	<0.005	:
1,2-Dichloroethane	mg/kg-dry	T	<0.006	:	<0.005	:		-	<0.005	:
1,2-Dichloroethene (total)	mg/kg-dry	T	<0.006	:	<0.005	:		-	<0.005	:
1,2-Dichloropropane	mg/kg-dry	T	<0.006	:	<0.005	:		-	<0.005	:
1,3-Dichlorobenzene	mg/kg-dry	T	<0.006	:	<0.005	:		-	<0.005	:
1,4-Dichlorobenzene	mg/kg-dry	T	<0.006	:	<0.005	:		-	<0.005	:
2-Butanone	mg/kg-dry	T	0.003	J	<0.005	:		-	<0.005	:
2-Hexanone	mg/kg-dry	T	<0.006	:	<0.005	:		-	<0.005	:
4-Methyl-2-pentanone	mg/kg-dry	T	<0.006	:	<0.005	:		-	<0.005	:
Acetone	mg/kg-dry	T	0.005	J	0.004	J		-	0.004	J
Benzene	mg/kg-dry	T	<0.006	:	<0.005	:		-	<0.005	:
Bromodichloromethane	mg/kg-dry	T	<0.006	:	<0.005	:		-	<0.005	:
Bromoform	mg/kg-dry	T	<0.006	:	<0.005	:		-	<0.005	:
Bromomethane	mg/kg-dry	T	<0.006	:	<0.005	:		-	<0.005	:
Carbon disulfide	mg/kg-dry	T	<0.006	:	<0.005	:		-	<0.005	:

Parameter	Units	Exposure Area Fraction	Site ID		Sample Date		Sample ID		Exposure Area	
			MSS1-68		1/19/2003		MSS1-68-T02N-SOL		SS1	
Mercury	mg/kg-dry	T	<0.017	:						
Molybdenum	mg/kg-dry	T	213.	:						
Nickel	mg/kg-dry	T	42.4	:						
Potassium	mg/kg-dry	T	3110.	J						
Selenium	mg/kg-dry	T	<0.74	J						
Silver	mg/kg-dry	T	0.38	:						
Sodium	mg/kg-dry	T	<76.2	:						
Thallium	mg/kg-dry	T	0.18	:						
Vanadium	mg/kg-dry	T	50.3	:						
Zinc	mg/kg-dry	T	120.	:						
Volatile Organics										
1,1,1-Trichloroethane	mg/kg-dry	T	<0.005	:						
1,1,2,2-Tetrachloroethane	mg/kg-dry	T	<0.005	:						
1,1,2-Trichloro-1,2,2-trifluoroethane	mg/kg-dry	T	<0.005	:						
1,1,2-Trichloroethane	mg/kg-dry	T	<0.005	:						
1,1-Dichloroethane	mg/kg-dry	T	<0.005	:						
1,1-Dichloroethene	mg/kg-dry	T	<0.005	:						
1,2,4-Trichlorobenzene	mg/kg-dry	T	<0.005	:						
1,2-Dibromo-3-chloropropane	mg/kg-dry	T	<0.005	:						
1,2-Dichlorobenzene	mg/kg-dry	T	<0.005	:						
1,2-Dichloroethane	mg/kg-dry	T	<0.005	:						
1,2-Dichloroethene (total)	mg/kg-dry	T	<0.005	:						
1,2-Dichloropropane	mg/kg-dry	T	<0.005	:						
1,3-Dichlorobenzene	mg/kg-dry	T	<0.005	:						
1,4-Dichlorobenzene	mg/kg-dry	T	<0.005	:						
2-Butanone	mg/kg-dry	T	<0.005	:						
2-Hexanone	mg/kg-dry	T	<0.005	:						
4-Methyl-2-pentanone	mg/kg-dry	T	<0.005	:						
Acetone	mg/kg-dry	T	0.004	J						
Benzene	mg/kg-dry	T	<0.005	:						
Bromodichloromethane	mg/kg-dry	T	<0.005	:						
Bromoform	mg/kg-dry	T	<0.005	:						
Bromomethane	mg/kg-dry	T	<0.005	:						
Carbon disulfide	mg/kg-dry	T	<0.005	:						

J = Qualified as estimated during data validation
R = Qualified as rejected value from data validation and results are considered unusable for any purpose
T = Total Fraction

Appendix A-7e
Soil - Biased 0-24 inches
Validated Analytical Results

Parameter	Units	Exposure Area Fraction	Site ID / Sample Date / Sample ID					
			MSS1-64 1/19/2003 MSS1-64-T02N-SOL SS1	MSS1-65 1/10/2003 MSS1-65-T02N-SOL SS1	MSS1-66 1/8/2003 MSS1-66-T02N-SOL DL SS1	MSS1-66 1/8/2003 MSS1-66-T02N-SOL SS1	MSS1-67 1/12/2003 MSS2-67-T02N-SOL SS1	MSS1-68 1/19/2003 MSS1-68-T02N-SOL SS1
Carbon tetrachloride	mg/kg-dry	T	<0.008 :	<0.005 :	-	<0.009 :	<0.006 :	<0.005 :
Chlorobenzene	mg/kg-dry	T	<0.008 :	<0.005 :	-	<0.009 :	<0.006 :	<0.005 :
Chloroethane	mg/kg-dry	T	<0.008 :	<0.005 :	-	<0.009 :	<0.006 :	<0.005 :
Chloroform	mg/kg-dry	T	<0.008 :	<0.005 :	-	<0.009 :	<0.006 :	<0.005 :
Chloromethane	mg/kg-dry	T	<0.008 :	<0.005 :	-	<0.009 :	<0.006 :	<0.005 :
cis-1,2-Dichloroethene	mg/kg-dry	T	<0.008 :	<0.005 :	-	<0.009 :	<0.006 :	<0.005 :
cis-1,3-Dichloropropene	mg/kg-dry	T	<0.008 :	<0.005 :	-	<0.009 :	<0.006 :	<0.005 :
Dibromochloromethane	mg/kg-dry	T	<0.008 :	<0.005 :	-	<0.009 :	<0.006 :	<0.005 :
Dichlorodifluoromethane	mg/kg-dry	T	<0.008 :	<0.005 :	-	<0.009 :	<0.006 :	<0.005 :
Ethylbenzene	mg/kg-dry	T	<0.008 :	0.001 J	-	<0.009 :	<0.006 :	<0.005 :
Methylene chloride	mg/kg-dry	T	<0.008 :	<0.005 :	-	<0.009 :	<0.006 :	<0.005 :
Styrene	mg/kg-dry	T	<0.008 :	<0.005 :	-	<0.009 :	<0.006 :	<0.005 :
Tetrachloroethene	mg/kg-dry	T	<0.008 :	<0.005 :	-	<0.009 :	<0.006 :	<0.005 :
Toluene	mg/kg-dry	T	<0.008 :	<0.005 :	-	0.001 J	<0.006 :	<0.005 :
Total Xylene	mg/kg-dry	T	<0.008 :	0.008 :	-	<0.009 :	0.001 J	0.0007 J
trans-1,2-Dichloroethene	mg/kg-dry	T	<0.008 :	<0.005 :	-	<0.009 :	<0.006 :	<0.005 :
trans-1,3-Dichloropropene	mg/kg-dry	T	<0.008 :	<0.005 :	-	<0.009 :	<0.006 :	<0.005 :
Trichloroethene	mg/kg-dry	T	<0.008 :	<0.005 :	-	<0.009 :	<0.006 :	<0.005 :
Trichlorofluoromethane	mg/kg-dry	T	<0.008 :	<0.005 :	-	<0.009 :	<0.006 :	<0.005 :
Vinyl chloride	mg/kg-dry	T	<0.008 :	<0.005 :	-	<0.009 :	<0.006 :	<0.005 :
Semi-Volatile Organics								
1,1`-Biphenyl	mg/kg-dry	T	<0.38 :	<0.34 :	-	<0.35 :	<0.36 :	<0.34 :
2,4,5-Trichlorophenol	mg/kg-dry	T	<0.95 :	<0.86 :	-	<0.88 :	<0.9 :	<0.86 :
2,4,6-Trichlorophenol	mg/kg-dry	T	<0.38 :	<0.34 :	-	<0.35 :	<0.36 :	<0.34 :
2,4-Dichlorophenol	mg/kg-dry	T	<0.38 :	<0.34 :	-	<0.35 :	<0.36 J	<0.34 :
2,4-Dimethylphenol	mg/kg-dry	T	<0.38 :	<0.34 :	-	<0.35 :	<0.36 :	<0.34 :
2,4-Dinitrophenol	mg/kg-dry	T	<0.95 J	<0.86 :	-	<0.88 J	<0.9 :	<0.86 :
2,4-Dinitrotoluene	mg/kg-dry	T	<0.38 :	<0.34 :	-	<0.35 :	<0.36 :	<0.34 :
2,6-Dinitrotoluene	mg/kg-dry	T	<0.38 :	<0.34 :	-	<0.35 :	<0.36 :	<0.34 :
2-Chloronaphthalene	mg/kg-dry	T	<0.38 :	<0.34 :	-	<0.35 :	<0.36 :	<0.34 :
2-Chlorophenol	mg/kg-dry	T	<0.38 :	<0.34 :	-	<0.35 :	<0.36 :	<0.34 :
2-Methylnaphthalene	mg/kg-dry	T	<0.38 :	<0.34 :	-	<0.35 :	<0.36 :	<0.34 :
2-Methylphenol	mg/kg-dry	T	<0.38 :	<0.34 :	-	<0.35 :	<0.36 :	<0.34 :
2-Nitroaniline	mg/kg-dry	T	<0.95 :	<0.86 :	-	<0.88 :	<0.9 :	<0.86 :

J = Qualified as estimated during data validation
R = Qualified as rejected value from data validation and results are considered unusable for any purpose
T = Total Fraction

Appendix A-7e
Soil - Biased 0-24 inches
Validated Analytical Results

Site ID			MSS1-64		MSS1-65		MSS1-66		MSS1-66		MSS1-67		MSS1-68	
Sample Date			1/19/2003		1/10/2003		1/8/2003		1/8/2003		1/12/2003		1/19/2003	
Sample ID			MSS1-64-T02N-SOL		MSS1-65-T02N-SOL		MSS1-66-T02N-SOL DL		MSS1-66-T02N-SOL		MSS2-67-T02N-SOL		MSS1-68-T02N-SOL	
Exposure Area			SS1		SS1		SS1		SS1		SS1		SS1	
Parameter	Units	Fraction												
2-Nitrophenol	mg/kg-dry	T	<0.38	:	<0.34	:	-		<0.35	:	<0.36	:	<0.34	:
3,3-Dichlorobenzidine	mg/kg-dry	T	<0.38	J	<0.34	:	-		<0.35	:	<0.36	:	<0.34	:
3-Nitroaniline	mg/kg-dry	T	<0.95	:	<0.86	:	-		<0.88	:	<0.9	:	<0.86	J
4,6-Dinitro-2-methylphenol	mg/kg-dry	T	<0.95	:	<0.86	:	-		<0.88	:	<0.9	:	<0.86	:
4-Bromophenyl phenyl ether	mg/kg-dry	T	<0.38	:	<0.34	:	-		<0.35	:	<0.36	:	<0.34	:
4-Chloro-3-methylphenol	mg/kg-dry	T	<0.38	:	<0.34	:	-		<0.35	:	<0.36	:	<0.34	:
4-Chloroaniline	mg/kg-dry	T	<0.38	:	<0.34	:	-		<0.35	:	<0.36	:	<0.34	:
4-Chlorophenyl phenyl ether	mg/kg-dry	T	<0.38	:	<0.34	:	-		<0.35	:	<0.36	:	<0.34	:
4-Methylphenol	mg/kg-dry	T	<0.38	:	<0.34	:	-		<0.35	:	<0.36	:	<0.34	:
4-Nitroaniline	mg/kg-dry	T	<0.95	:	<0.86	:	-		<0.88	:	<0.9	:	<0.86	J
4-Nitrophenol	mg/kg-dry	T	<0.95	:	<0.86	:	-		<0.88	:	<0.9	:	<0.86	:
Acenaphthene	mg/kg-dry	T	<0.38	:	<0.34	:	-		<0.35	:	<0.36	:	<0.34	:
Acenaphthylene	mg/kg-dry	T	<0.38	:	<0.34	:	-		<0.35	:	<0.36	:	<0.34	:
Anthracene	mg/kg-dry	T	<0.38	:	<0.34	:	-		<0.35	:	<0.36	:	<0.34	:
Benzaldehyde	mg/kg-dry	T	<0.38	J	0.031	J	-		<0.35	:	<0.36	:	<0.34	:
Benzo(a)anthracene	mg/kg-dry	T	<0.38	J	<0.34	:	-		<0.35	:	<0.36	:	<0.34	:
Benzo(a)pyrene	mg/kg-dry	T	<0.38	J	<0.34	:	-		<0.35	:	<0.36	:	<0.34	:
Benzo(b)fluoranthene	mg/kg-dry	T	<0.38	J	<0.34	:	-		<0.35	:	<0.36	:	<0.34	:
Benzo(g,h,i)perylene	mg/kg-dry	T	<0.38	J	<0.34	:	-		<0.35	:	<0.36	:	<0.34	:
Benzo(k)fluoranthene	mg/kg-dry	T	<0.38	J	<0.34	:	-		<0.35	:	<0.36	:	<0.34	:
Bis(2-chloroethoxy)methane	mg/kg-dry	T	<0.38	:	<0.34	:	-		<0.35	:	<0.36	:	<0.34	:
Bis(2-chloroethyl)ether	mg/kg-dry	T	<0.38	:	<0.34	:	-		<0.35	:	<0.36	:	<0.34	:
Bis(2-ethylhexyl)phthalate	mg/kg-dry	T	<0.38	J	0.05	J	-		0.066	J	0.029	J	0.11	J
Butyl benzyl phthalate	mg/kg-dry	T	<0.38	J	<0.34	:	-		<0.35	:	<0.36	:	<0.34	:
Carbazole	mg/kg-dry	T	<0.38	:	<0.34	:	-		<0.35	:	<0.36	:	<0.34	:
Chrysene	mg/kg-dry	T	<0.38	J	<0.34	:	-		<0.35	:	<0.36	:	<0.34	:
Dibenz(a,h)anthracene	mg/kg-dry	T	<0.38	J	<0.34	J	-		<0.35	:	<0.36	:	<0.34	:
Dibenzofuran	mg/kg-dry	T	<0.38	:	<0.34	:	-		<0.35	:	<0.36	:	<0.34	:
Dichlorodiisopropyl ether	mg/kg-dry	T	<0.38	:	<0.34	:	-		<0.35	:	<0.36	:	<0.34	:
Diethylphthalate	mg/kg-dry	T	<0.38	:	<0.34	:	-		<0.35	:	<0.36	:	<0.34	:
Dimethylphthalate	mg/kg-dry	T	<0.38	:	<0.34	:	-		<0.35	:	<0.36	:	<0.34	:
Di-n-Butyl phthalate	mg/kg-dry	T	0.033	J	<0.34	:	-		<0.35	:	<0.36	:	<0.34	:
Di-n-Octyl phthalate	mg/kg-dry	T	<0.38	J	<0.34	:	-		<0.35	:	<0.36	:	<0.34	:
Fluoranthene	mg/kg-dry	T	<0.38	:	<0.34	:	-		<0.35	:	<0.36	:	<0.34	:

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Appendix A-7e
Soil - Biased 0-24 inches
Validated Analytical Results

Parameter	Units	Exposure Area Fraction	Site ID / Sample Date / Sample ID					
			MSS1-64 1/19/2003 MSS1-64-T02N-SOL SS1	MSS1-65 1/10/2003 MSS1-65-T02N-SOL SS1	MSS1-66 1/8/2003 MSS1-66-T02N-SOL DL SS1	MSS1-66 1/8/2003 MSS1-66-T02N-SOL SS1	MSS1-67 1/12/2003 MSS2-67-T02N-SOL SS1	MSS1-68 1/19/2003 MSS1-68-T02N-SOL SS1
Fluorene	mg/kg-dry	T	<0.38 :	<0.34 :	-	<0.35 :	<0.36 :	<0.34 :
Hexachlorobenzene	mg/kg-dry	T	<0.38 :	<0.34 :	-	<0.35 :	<0.36 :	<0.34 :
Hexachlorobutadiene	mg/kg-dry	T	<0.38 :	<0.34 :	-	<0.35 :	<0.36 :	<0.34 :
Hexachlorocyclopentadiene	mg/kg-dry	T	<0.38 :	<0.34 :	-	<0.35 :	<0.36 :	<0.34 :
Hexachloroethane	mg/kg-dry	T	<0.38 :	<0.34 :	-	<0.35 :	<0.36 :	<0.34 :
Indeno(1,2,3-cd)pyrene	mg/kg-dry	T	<0.38 J	<0.34 :	-	<0.35 :	<0.36 :	<0.34 :
Isophorone	mg/kg-dry	T	<0.38 :	<0.34 :	-	<0.35 :	<0.36 :	<0.34 :
Naphthalene	mg/kg-dry	T	<0.38 :	<0.34 :	-	<0.35 :	<0.36 :	<0.34 :
Nitrobenzene	mg/kg-dry	T	<0.38 :	<0.34 :	-	<0.35 :	<0.36 :	<0.34 :
N-Nitrosodi-n-propylamine	mg/kg-dry	T	<0.38 :	<0.34 :	-	<0.35 :	<0.36 :	<0.34 :
N-Nitrosodiphenylamine	mg/kg-dry	T	<0.38 :	<0.34 :	-	<0.35 :	<0.36 :	<0.34 :
Pentachlorophenol	mg/kg-dry	T	<0.95 :	<0.86 J	-	<0.88 :	<0.9 :	<0.86 :
Phenanthrene	mg/kg-dry	T	0.022 J	<0.34 :	-	0.071 J	<0.36 :	<0.34 :
Phenol	mg/kg-dry	T	<0.38 :	<0.34 :	-	<0.35 :	<0.36 :	<0.34 :
Pyrene	mg/kg-dry	T	<0.38 J	<0.34 :	-	0.02 J	<0.36 :	<0.34 :
Pesticides-PCBs								
Aroclor 1016	mg/kg-dry	T	<0.038 :	<0.034 :	-	<0.035 :	<0.036 :	<0.034 :
Aroclor 1221	mg/kg-dry	T	<0.077 :	<0.07 :	-	<0.071 :	<0.073 :	<0.069 :
Aroclor 1232	mg/kg-dry	T	<0.038 :	<0.034 :	-	<0.035 :	<0.036 :	<0.034 :
Aroclor 1242	mg/kg-dry	T	<0.038 :	<0.034 :	-	<0.035 :	<0.036 :	<0.034 :
Aroclor 1248	mg/kg-dry	T	<0.038 :	<0.034 :	1. J	-	<0.036 :	<0.034 :
Aroclor 1254	mg/kg-dry	T	0.033 J	0.091 :	2. :	-	0.037 :	0.047 :
Aroclor 1260	mg/kg-dry	T	<0.038 :	0.044 :	-	<0.035 :	<0.036 :	<0.034 :

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Appendix A-7e
Soil - Biased 0-24 inches
Validated Analytical Results

Parameter	Units	Exposure Area Fraction	Site ID / Sample Date / Sample ID		MSS1-69 1/10/2003 MSS1-69-T02N-SOL SS1		MSS1-70 1/9/2003 MSS1-70-T02N-SOL SS1		MSS1-71 1/9/2003 MSS1-71-T02N-SOL SS1		MSS1-72 1/9/2003 MSS1-72-T02N-SOLDL SS1		MSS1-72 1/9/2003 MSS1-72-T02N-SOL SS1		MSS1-73 1/9/2003 MSS1-73-T02N-SOLDL SS1	
General Chemistry																
Ammonia	mg/kg-dry	T			28.	:	14.8	:	14.7	:	-		16.8	:	-	
Chloride	mg/kg-dry	T			<2.3	:	<2.2	:	4.1	:	-		7.8	:	-	
Fluoride	mg/kg-dry	T			0.74	J	2.9	J	10.7	J	-		2.9	J	-	
Nitrate	mg/kg-dry	T			<2.3	J	<2.2	J	<2.1	J	-		2.8	J	-	
Phosphorus	mg/kg-dry	T			1530.	:	809.	:	343.	:	-		800.	:	-	
Sulfate	mg/kg-dry	T			8.2	:	53.	:	326.	:	-		6650.	:	-	
Total Kjeldahl Nitrogen	mg/kg-dry	T			251.	:	35.8	:	35.3	:	-		50.3	:	-	
Total Organic Carbon	mg/kg-dry	T			6290.	J	370.	J	208.	J	-		321.	J	-	
Laboratory Parameters																
pH	SU	T			7.7	:	7.5	:	7.2	:	-		7.	:	-	
Solids, Percent	%	T			89.6	:	94.7	:	96.3	:	-		91.6	:	-	
Specific Conductance	umhos/cm	T			156.	:	169.	:	696.	:	-		1670.	:	-	
Geotechnical																
Organic Soils	%	T			2.3	:	1.7	:	0.5	:	-		0.8	:	-	
Physical Properties																
Cation-Exchange Capacity	meq/100g	T			20.1	:	9.6	:	5.7	:	-		8.7	:	-	
Sodium Absorption Ratio	ratio	T			0.14	:	0.16	:	0.13	:	-		0.1	:	-	
Metals																
Aluminum	mg/kg-dry	T			19500.	:	7460.	:	5370.	:	-		10200.	:	-	
Antimony	mg/kg-dry	T			<0.29	J	<0.29	J	<0.29	:	-		<0.31	:	-	
Arsenic	mg/kg-dry	T			5.3	J	5.2	J	1.3	J	-		2.7	J	-	
Barium	mg/kg-dry	T			96.2	:	279.	:	41.4	:	-		91.3	:	-	
Beryllium	mg/kg-dry	T			1.3	:	0.87	:	0.45	:	-		1.2	:	-	
Boron	mg/kg-dry	T			2.7	J	<1.7	:	1.5	:	-		1.4	:	-	
Cadmium	mg/kg-dry	T			<0.04	J	0.22	:	0.99	:	-		1.4	:	-	
Calcium	mg/kg-dry	T			11600.	:	1880.	:	3130.	:	-		12800.	:	-	
Chromium	mg/kg-dry	T			78.7	J	16.8	J	15.6	J	-		34.7	J	-	
Cobalt	mg/kg-dry	T			18.1	:	2.8	:	6.7	:	-		10.8	:	-	
Copper	mg/kg-dry	T			79.3	J	110.	J	125.	:	-		173.	:	-	
Iron	mg/kg-dry	T			35500.	:	18600.	:	10900.	:	-		18400.	:	-	
Lead	mg/kg-dry	T			37.5	:	87.4	:	87.5	:	-		196.	:	-	
Magnesium	mg/kg-dry	T			13700.	:	3490.	:	2410.	:	-		5940.	:	-	
Manganese	mg/kg-dry	T			900.	:	224.	:	507.	:	-		834.	:	-	

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Appendix A-7e
Soil - Biased 0-24 inches
Validated Analytical Results

		Site ID	MSS1-69	MSS1-70	MSS1-71	MSS1-72	MSS1-72	MSS1-73
		Sample Date	1/10/2003	1/9/2003	1/9/2003	1/9/2003	1/9/2003	1/9/2003
		Sample ID	MSS1-69-T02N-SOL	MSS1-70-T02N-SOL	MSS1-71-T02N-SOL	MSS1-72-T02N-SOLD L	MSS1-72-T02N-SOL	MSS1-73-T02N-SOLD L
		Exposure Area	SS1	SS1	SS1	SS1	SS1	SS1
Parameter	Units	Fraction						
Mercury	mg/kg-dry	T	0.018 :	<0.018 :	<0.017 :	-	<0.018 :	-
Molybdenum	mg/kg-dry	T	175. :	3260. :	938. :	-	1360. :	-
Nickel	mg/kg-dry	T	52.8 :	20.2 :	13.9 :	-	28.6 :	-
Potassium	mg/kg-dry	T	4260. J	2430. J	1150. :	-	3500. :	-
Selenium	mg/kg-dry	T	<0.78 J	0.99 J	<0.77 J	-	1.2 J	-
Silver	mg/kg-dry	T	0.51 J	1. :	0.62 :	-	28.8 :	-
Sodium	mg/kg-dry	T	<32.6 :	<121. :	<31.5 :	-	<32.2 :	-
Thallium	mg/kg-dry	T	0.32 :	0.14 :	0.13 :	-	0.25 :	-
Vanadium	mg/kg-dry	T	68.6 :	38.9 :	27.1 :	-	41.2 :	-
Zinc	mg/kg-dry	T	108. :	151. :	113. :	-	255. :	-
Volatile Organics								
1,1,1-Trichloroethane	mg/kg-dry	T	<0.006 :	<0.006 :	<0.007 :	-	<0.007 :	-
1,1,2,2-Tetrachloroethane	mg/kg-dry	T	<0.006 :	<0.006 :	<0.007 :	-	<0.007 :	-
1,1,2-Trichloro-1,2,2-trifluoroethane	mg/kg-dry	T	<0.006 :	<0.006 :	<0.007 :	-	<0.007 :	-
1,1,2-Trichloroethane	mg/kg-dry	T	<0.006 :	<0.006 :	<0.007 :	-	<0.007 :	-
1,1-Dichloroethane	mg/kg-dry	T	<0.006 :	<0.006 :	<0.007 :	-	<0.007 :	-
1,1-Dichloroethene	mg/kg-dry	T	<0.006 :	<0.006 :	<0.007 :	-	<0.007 :	-
1,2,4-Trichlorobenzene	mg/kg-dry	T	<0.006 :	<0.006 :	<0.007 :	-	<0.007 :	-
1,2-Dibromo-3-chloropropane	mg/kg-dry	T	<0.006 :	<0.006 :	<0.007 :	-	<0.007 :	-
1,2-Dichlorobenzene	mg/kg-dry	T	<0.006 :	<0.006 :	<0.007 :	-	<0.007 :	-
1,2-Dichloroethane	mg/kg-dry	T	<0.006 :	<0.006 :	<0.007 :	-	<0.007 :	-
1,2-Dichloroethene (total)	mg/kg-dry	T	<0.006 :	<0.006 :	<0.007 :	-	<0.007 :	-
1,2-Dichloropropane	mg/kg-dry	T	<0.006 :	<0.006 :	<0.007 :	-	<0.007 :	-
1,3-Dichlorobenzene	mg/kg-dry	T	<0.006 :	<0.006 :	<0.007 :	-	<0.007 :	-
1,4-Dichlorobenzene	mg/kg-dry	T	<0.006 :	<0.006 :	<0.007 :	-	<0.007 :	-
2-Butanone	mg/kg-dry	T	<0.006 :	<0.006 :	<0.007 :	-	<0.007 :	-
2-Hexanone	mg/kg-dry	T	<0.006 :	<0.006 :	<0.007 :	-	<0.007 :	-
4-Methyl-2-pentanone	mg/kg-dry	T	<0.006 :	<0.006 :	<0.007 :	-	<0.007 :	-
Acetone	mg/kg-dry	T	0.005 J	<0.006 :	<0.007 :	-	<0.007 :	-
Benzene	mg/kg-dry	T	<0.006 :	<0.006 :	<0.007 :	-	<0.007 :	-
Bromodichloromethane	mg/kg-dry	T	<0.006 :	<0.006 :	<0.007 :	-	<0.007 :	-
Bromoform	mg/kg-dry	T	<0.006 :	<0.006 :	<0.007 :	-	<0.007 :	-
Bromomethane	mg/kg-dry	T	<0.006 :	<0.006 :	<0.007 :	-	<0.007 :	-
Carbon disulfide	mg/kg-dry	T	0.0009 J	0.0008 J	0.0007 J	-	<0.007 :	-

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Appendix A-7e
Soil - Biased 0-24 inches
Validated Analytical Results

Parameter	Units	Exposure Area Fraction	Site ID / Sample Date / Sample ID											
			MSS1-69 1/10/2003 MSS1-69-T02N-SOL		MSS1-70 1/9/2003 MSS1-70-T02N-SOL		MSS1-71 1/9/2003 MSS1-71-T02N-SOL		MSS1-72 1/9/2003 MSS1-72-T02N-SOLDL		MSS1-72 1/9/2003 MSS1-72-T02N-SOL		MSS1-73 1/9/2003 MSS1-73-T02N-SOLDL	
			SS1		SS1		SS1		SS1		SS1		SS1	
Carbon tetrachloride	mg/kg-dry	T	<0.006	:	<0.006	:	<0.007	:	-		<0.007	:	-	
Chlorobenzene	mg/kg-dry	T	<0.006	:	<0.006	:	<0.007	:	-		<0.007	:	-	
Chloroethane	mg/kg-dry	T	<0.006	:	<0.006	:	<0.007	:	-		<0.007	:	-	
Chloroform	mg/kg-dry	T	<0.006	:	<0.006	:	<0.007	:	-		<0.007	:	-	
Chloromethane	mg/kg-dry	T	<0.006	:	<0.006	:	<0.007	:	-		<0.007	:	-	
cis-1,2-Dichloroethene	mg/kg-dry	T	<0.006	:	<0.006	:	<0.007	:	-		<0.007	:	-	
cis-1,3-Dichloropropene	mg/kg-dry	T	<0.006	:	<0.006	:	<0.007	:	-		<0.007	:	-	
Dibromochloromethane	mg/kg-dry	T	<0.006	:	<0.006	:	<0.007	:	-		<0.007	:	-	
Dichlorodifluoromethane	mg/kg-dry	T	<0.006	:	<0.006	:	<0.007	:	-		<0.007	:	-	
Ethylbenzene	mg/kg-dry	T	<0.006	:	<0.006	:	<0.007	:	-		0.003	J	-	
Methylene chloride	mg/kg-dry	T	<0.006	:	<0.006	:	<0.007	:	-		<0.007	:	-	
Styrene	mg/kg-dry	T	<0.006	:	<0.006	:	<0.007	:	-		<0.007	:	-	
Tetrachloroethene	mg/kg-dry	T	<0.006	:	<0.006	:	<0.007	:	-		<0.007	:	-	
Toluene	mg/kg-dry	T	0.0006	J	<0.006	:	<0.007	:	-		<0.007	:	-	
Total Xylene	mg/kg-dry	T	<0.006	:	0.002	J	0.0007	J	-		0.022	:	-	
trans-1,2-Dichloroethene	mg/kg-dry	T	<0.006	:	<0.006	:	<0.007	:	-		<0.007	:	-	
trans-1,3-Dichloropropene	mg/kg-dry	T	<0.006	:	<0.006	:	<0.007	:	-		<0.007	:	-	
Trichloroethene	mg/kg-dry	T	<0.006	:	<0.006	:	<0.007	:	-		<0.007	:	-	
Trichlorofluoromethane	mg/kg-dry	T	<0.006	:	<0.006	:	<0.007	:	-		<0.007	:	-	
Vinyl chloride	mg/kg-dry	T	<0.006	:	<0.006	:	<0.007	:	-		<0.007	:	-	
Semi-Volatile Organics														
1,1`-Biphenyl	mg/kg-dry	T	<0.37	:	<0.35	:	<0.34	:	-		<0.36	:	-	
2,4,5-Trichlorophenol	mg/kg-dry	T	<0.92	:	<0.87	:	<0.86	:	-		<0.9	:	-	
2,4,6-Trichlorophenol	mg/kg-dry	T	<0.37	:	<0.35	:	<0.34	:	-		<0.36	:	-	
2,4-Dichlorophenol	mg/kg-dry	T	<0.37	:	<0.35	:	<0.34	:	-		<0.36	:	-	
2,4-Dimethylphenol	mg/kg-dry	T	<0.37	:	<0.35	:	<0.34	:	-		<0.36	:	-	
2,4-Dinitrophenol	mg/kg-dry	T	<0.92	:	<0.87	:	<0.86	:	-		<0.9	:	-	
2,4-Dinitrotoluene	mg/kg-dry	T	<0.37	:	<0.35	:	<0.34	:	-		<0.36	:	-	
2,6-Dinitrotoluene	mg/kg-dry	T	<0.37	:	<0.35	:	<0.34	:	-		<0.36	:	-	
2-Chloronaphthalene	mg/kg-dry	T	<0.37	:	<0.35	:	<0.34	:	-		<0.36	:	-	
2-Chlorophenol	mg/kg-dry	T	<0.37	:	<0.35	:	<0.34	:	-		<0.36	:	-	
2-Methylnaphthalene	mg/kg-dry	T	<0.37	:	<0.35	:	<0.34	:	-		<0.36	:	-	
2-Methylphenol	mg/kg-dry	T	<0.37	:	<0.35	:	<0.34	:	-		<0.36	:	-	
2-Nitroaniline	mg/kg-dry	T	<0.92	:	<0.87	:	<0.86	:	-		<0.9	:	-	

J = Qualified as estimated during data validation
R = Qualified as rejected value from data validation and results are considered unusable for any purpose
T = Total Fraction

Appendix A-7e
Soil - Biased 0-24 inches
Validated Analytical Results

Parameter	Units	Exposure Area Fraction	Site ID / Sample Date / Sample ID					
			MSS1-69 1/10/2003 MSS1-69-T02N-SOL	MSS1-70 1/9/2003 MSS1-70-T02N-SOL	MSS1-71 1/9/2003 MSS1-71-T02N-SOL	MSS1-72 1/9/2003 MSS1-72-T02N-SOLD L	MSS1-72 1/9/2003 MSS1-72-T02N-SOL	MSS1-73 1/9/2003 MSS1-73-T02N-SOLD L
			SS1	SS1	SS1	SS1	SS1	SS1
2-Nitrophenol	mg/kg-dry	T	<0.37 :	<0.35 :	<0.34 :	-	<0.36 :	-
3,3-Dichlorobenzidine	mg/kg-dry	T	<0.37 :	<0.35 :	<0.34 :	-	<0.36 :	-
3-Nitroaniline	mg/kg-dry	T	<0.92 :	<0.87 :	<0.86 :	-	<0.9 :	-
4,6-Dinitro-2-methylphenol	mg/kg-dry	T	<0.92 :	<0.87 :	<0.86 :	-	<0.9 :	-
4-Bromophenyl phenyl ether	mg/kg-dry	T	<0.37 :	<0.35 :	<0.34 :	-	<0.36 :	-
4-Chloro-3-methylphenol	mg/kg-dry	T	<0.37 :	<0.35 :	<0.34 :	-	<0.36 :	-
4-Chloroaniline	mg/kg-dry	T	<0.37 :	<0.35 :	<0.34 :	-	<0.36 :	-
4-Chlorophenyl phenyl ether	mg/kg-dry	T	<0.37 :	<0.35 :	<0.34 :	-	<0.36 :	-
4-Methylphenol	mg/kg-dry	T	<0.37 :	<0.35 :	<0.34 :	-	<0.36 :	-
4-Nitroaniline	mg/kg-dry	T	<0.92 :	<0.87 :	<0.86 :	-	<0.9 :	-
4-Nitrophenol	mg/kg-dry	T	<0.92 :	<0.87 :	<0.86 :	-	<0.9 :	-
Acenaphthene	mg/kg-dry	T	<0.37 :	<0.35 :	<0.34 :	-	<0.36 :	-
Acenaphthylene	mg/kg-dry	T	<0.37 :	<0.35 :	<0.34 :	-	<0.36 :	-
Anthracene	mg/kg-dry	T	<0.37 :	<0.35 :	<0.34 :	-	<0.36 :	-
Benzaldehyde	mg/kg-dry	T	0.017 J	0.039 J	<0.34 :	-	<0.36 :	-
Benzo(a)anthracene	mg/kg-dry	T	<0.37 :	<0.35 :	<0.34 :	-	<0.36 :	-
Benzo(a)pyrene	mg/kg-dry	T	<0.37 :	<0.35 :	<0.34 :	-	<0.36 :	-
Benzo(b)fluoranthene	mg/kg-dry	T	<0.37 :	<0.35 :	<0.34 :	-	<0.36 :	-
Benzo(g,h,i)perylene	mg/kg-dry	T	<0.37 :	<0.35 :	<0.34 :	-	<0.36 :	-
Benzo(k)fluoranthene	mg/kg-dry	T	<0.37 :	<0.35 :	<0.34 :	-	<0.36 :	-
Bis(2-chloroethoxy)methane	mg/kg-dry	T	<0.37 :	<0.35 :	<0.34 :	-	<0.36 :	-
Bis(2-chloroethyl)ether	mg/kg-dry	T	<0.37 :	<0.35 :	<0.34 :	-	<0.36 :	-
Bis(2-ethylhexyl)phthalate	mg/kg-dry	T	0.023 J	0.069 J	<0.34 :	-	0.025 J	-
Butyl benzyl phthalate	mg/kg-dry	T	<0.37 :	<0.35 :	<0.34 :	-	<0.36 :	-
Carbazole	mg/kg-dry	T	<0.37 :	<0.35 :	<0.34 :	-	<0.36 :	-
Chrysene	mg/kg-dry	T	<0.37 :	<0.35 :	<0.34 :	-	<0.36 :	-
Dibenz(a,h)anthracene	mg/kg-dry	T	<0.37 J	<0.35 :	<0.34 J	-	<0.36 :	-
Dibenzofuran	mg/kg-dry	T	<0.37 :	<0.35 :	<0.34 :	-	<0.36 :	-
Dichlorodiisopropyl ether	mg/kg-dry	T	<0.37 :	<0.35 :	<0.34 :	-	<0.36 :	-
Diethylphthalate	mg/kg-dry	T	<0.37 :	<0.35 :	<0.34 :	-	<0.36 :	-
Dimethylphthalate	mg/kg-dry	T	<0.37 :	<0.35 :	<0.34 :	-	<0.36 :	-
Di-n-Butyl phthalate	mg/kg-dry	T	<0.37 :	<0.35 :	<0.34 :	-	<0.36 :	-
Di-n-Octyl phthalate	mg/kg-dry	T	<0.37 :	<0.35 :	<0.34 :	-	<0.36 :	-
Fluoranthene	mg/kg-dry	T	<0.37 :	<0.35 :	<0.34 :	-	<0.36 :	-

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T = Total Fraction

Appendix A-7e
Soil - Biased 0-24 inches
Validated Analytical Results

Parameter	Units	Exposure Area Fraction	Site ID	Sample Date	Sample ID	Exposure Area		Site ID	Sample Date	Sample ID	Exposure Area		Site ID	Sample Date	Sample ID	Exposure Area		Site ID	Sample Date	Sample ID	Exposure Area		Site ID	Sample Date	Sample ID	Exposure Area	
			MSS1-69	1/10/2003	MSS1-69-T02N-SOL	SS1		MSS1-70	1/9/2003	MSS1-70-T02N-SOL	SS1		MSS1-71	1/9/2003	MSS1-71-T02N-SOL	SS1		MSS1-72	1/9/2003	MSS1-72-T02N-SOLDL	SS1		MSS1-72	1/9/2003	MSS1-72-T02N-SOL	SS1		MSS1-73	1/9/2003	MSS1-73-T02N-SOLDL	SS1	
Fluorene	mg/kg-dry	T	<0.37	:		<0.35	:		<0.34	:		-		<0.36	:		-		
Hexachlorobenzene	mg/kg-dry	T	<0.37	:		<0.35	:		<0.34	:		-		<0.36	:		-		
Hexachlorobutadiene	mg/kg-dry	T	<0.37	:		<0.35	:		<0.34	:		-		<0.36	:		-		
Hexachlorocyclopentadiene	mg/kg-dry	T	<0.37	:		<0.35	:		<0.34	:		-		<0.36	:		-		
Hexachloroethane	mg/kg-dry	T	<0.37	:		<0.35	:		<0.34	:		-		<0.36	:		-		
Indeno(1,2,3-cd)pyrene	mg/kg-dry	T	<0.37	:		<0.35	:		<0.34	:		-		<0.36	:		-		
Isophorone	mg/kg-dry	T	<0.37	:		<0.35	:		<0.34	:		-		<0.36	:		-		
Naphthalene	mg/kg-dry	T	<0.37	:		<0.35	:		<0.34	:		-		<0.36	:		-		
Nitrobenzene	mg/kg-dry	T	<0.37	:		<0.35	:		<0.34	:		-		<0.36	:		-		
N-Nitrosodi-n-propylamine	mg/kg-dry	T	<0.37	:		<0.35	:		<0.34	:		-		<0.36	:		-		
N-Nitrosodiphenylamine	mg/kg-dry	T	<0.37	:		<0.35	:		<0.34	:		-		<0.36	:		-		
Pentachlorophenol	mg/kg-dry	T	<0.92	:		<0.87	:		<0.86	J		-		<0.9	:		-		
Phenanthrene	mg/kg-dry	T	<0.37	J		<0.35	:		<0.34	:		-		<0.36	:		-		
Phenol	mg/kg-dry	T	<0.37	:		<0.35	:		<0.34	:		-		<0.36	:		-		
Pyrene	mg/kg-dry	T	<0.37	:		<0.35	:		<0.34	:		-		<0.36	:		-		
Pesticides-PCBs																											
Aroclor 1016	mg/kg-dry	T	<0.037	:		<0.035	:		<0.034	:		-		<0.036	:		-		
Aroclor 1221	mg/kg-dry	T	<0.075	:		<0.071	:		<0.07	:		-		<0.073	:		-		
Aroclor 1232	mg/kg-dry	T	<0.037	:		<0.035	:		<0.034	:		-		<0.036	:		-		
Aroclor 1242	mg/kg-dry	T	<0.037	:		<0.035	:		<0.034	:		-		<0.036	:		-		
Aroclor 1248	mg/kg-dry	T	<0.037	:		0.58	J		0.094	J		-		0.4	J		-		
Aroclor 1254	mg/kg-dry	T	0.039	:		<0.035	:		0.28	:		1.7	:		-		-		
Aroclor 1260	mg/kg-dry	T	<0.037	:		<0.035	:		0.035	:		-		0.15	:		1.6	:	

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Appendix A-7e
Soil - Biased 0-24 inches
Validated Analytical Results

Parameter	Units	Exposure Area Fraction	Site ID / Sample Date / Sample ID		MSS1-73 1/9/2003 MSS1-73-T02N-SOL SS1		MSS1-74 1/19/2003 MSS1-74-T02N-SOL SS1		MSS1-75 1/9/2003 MSS1-75-T02N-SOL SS1		MSS1-76 1/9/2003 MSS1-76-T02N-SOL SS1		MSS1-77 1/9/2003 MSS1-77-T02N-SOL SS1		MSS1-78 1/9/2003 MSS1-78-T02N-SOL SS1	
General Chemistry																
Ammonia	mg/kg-dry	T			14.9	:	8.9	:	7.2	:	6.1	:	4.5	:	9.7	:
Chloride	mg/kg-dry	T			951.	:	41.9	:	43.8	J	10.9	:	<2.2	:	9.1	:
Fluoride	mg/kg-dry	T			1.7	J	0.99	J	<1.1	J	1.3	J	1.7	J	5.3	J
Nitrate	mg/kg-dry	T			33.3	J	8.3	J	6.5	J	4.7	J	<2.2	J	<2.4	J
Phosphorus	mg/kg-dry	T			1110.	:	1120.	:	629.	:	682.	:	451.	:	833.	:
Sulfate	mg/kg-dry	T			5010.	:	1240.	J	225.	J	284.	:	117.	J	525.	:
Total Kjeldahl Nitrogen	mg/kg-dry	T			97.	:	82.7	J	55.9	:	75.3	:	80.2	:	33.3	:
Total Organic Carbon	mg/kg-dry	T			1810.	J	504.	J	<106.	J	1990.	J	472.	J	1780.	J
Laboratory Parameters																
pH	SU	T			7.1	:	7.3	:	7.3	:	6.8	:	7.	:	10.6	:
Solids, Percent	%	T			96.2	:	97.6	:	94.5	:	95.1	:	92.6	:	83.4	:
Specific Conductance	umhos/cm	T			3250.	:	1840.	J	2250.	:	1730.	:	1400.	:	547.	:
Geotechnical																
Organic Soils	%	T			1.	:	1.4	:	0.8	:	1.1	:	0.9	:	0.7	:
Physical Properties																
Cation-Exchange Capacity	meq/100g	T			11.9	:	7.9	:	10.2	:	10.1	:	7.8	:	4.6	:
Sodium Absorption Ratio	ratio	T			1.15	:	0.43	:	2.14	:	0.32	:	0.03	:	0.46	:
Metals																
Aluminum	mg/kg-dry	T			11600.	:	10900.	:	6890.	:	8740.	:	6980.	:	7290.	:
Antimony	mg/kg-dry	T			<0.3	:	<0.29	J	<0.31	J	<0.3	J	<0.29	J	<0.33	J
Arsenic	mg/kg-dry	T			3.4	J	2.9	J	3.	J	2.1	J	2.2	J	1.9	J
Barium	mg/kg-dry	T			93.9	:	62.9	:	44.8	:	54.4	:	36.1	:	56.8	:
Beryllium	mg/kg-dry	T			1.3	:	1.1	:	0.98	:	1.5	:	1.5	:	1.2	:
Boron	mg/kg-dry	T			1.9	:	<0.25	J	<2.6	:	3.	:	<2.7	:	1.6	:
Cadmium	mg/kg-dry	T			0.97	:	0.34	J	1.7	:	1.	:	0.88	:	0.45	:
Calcium	mg/kg-dry	T			16500.	:	9420.	:	9620.	:	9620.	:	7280.	:	12800.	:
Chromium	mg/kg-dry	T			43.2	J	38.7	J	55.8	J	28.2	J	14.5	J	30.4	J
Cobalt	mg/kg-dry	T			10.8	:	9.5	:	7.5	:	5.1	:	4.1	:	6.5	:
Copper	mg/kg-dry	T			245.	:	70.	:	137.	J	86.	J	78.6	J	81.4	J
Iron	mg/kg-dry	T			23000.	:	20100.	:	19200.	:	13600.	:	12600.	:	14500.	:
Lead	mg/kg-dry	T			129.	:	61.	:	192.	:	120.	:	88.	:	42.3	:
Magnesium	mg/kg-dry	T			7580.	:	7540.	:	3430.	:	4620.	:	2810.	:	4840.	:
Manganese	mg/kg-dry	T			690.	:	725.	:	660.	:	702.	:	810.	:	698.	:

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Appendix A-7e
Soil - Biased 0-24 inches
Validated Analytical Results

Parameter	Units	Fraction	MSS1-73	MSS1-74	MSS1-75	MSS1-76	MSS1-77	MSS1-78
Sample Date			1/9/2003	1/19/2003	1/9/2003	1/9/2003	1/9/2003	1/9/2003
Sample ID			MSS1-73-T02N-SOL	MSS1-74-T02N-SOL	MSS1-75-T02N-SOL	MSS1-76-T02N-SOL	MSS1-77-T02N-SOL	MSS1-78-T02N-SOL
Exposure Area			SS1	SS1	SS1	SS1	SS1	SS1
Mercury	mg/kg-dry	T	0.04 :	<0.017 :	<0.018 :	<0.017 :	<0.017 :	<0.02 :
Molybdenum	mg/kg-dry	T	2810. :	389. :	1620. :	887. :	618. :	864. :
Nickel	mg/kg-dry	T	31.6 :	26.9 :	15.6 :	15.3 :	10. :	17.8 :
Potassium	mg/kg-dry	T	3990. :	2460. J	2530. J	3280. J	2440. J	3400. J
Selenium	mg/kg-dry	T	0.88 J	<0.77 J	<0.81 J	<0.81 J	<0.76 J	<0.88 J
Silver	mg/kg-dry	T	1.5 :	0.57 :	2.3 :	0.77 :	0.68 :	0.44 :
Sodium	mg/kg-dry	T	231. :	<58. :	435. :	<85.4 :	<32.7 :	<72.3 :
Thallium	mg/kg-dry	T	0.34 :	0.23 :	0.19 :	0.28 :	0.15 :	0.27 :
Vanadium	mg/kg-dry	T	58.4 :	37.8 :	30.3 :	32.4 :	20.8 :	32.7 :
Zinc	mg/kg-dry	T	261. :	115. :	268. :	162. :	143. :	95.9 :
Volatile Organics								
1,1,1-Trichloroethane	mg/kg-dry	T	<0.007 :	<0.008 :	-	<0.008 :	<0.004 :	-
1,1,2,2-Tetrachloroethane	mg/kg-dry	T	<0.007 J	<0.008 :	-	<0.008 :	<0.004 :	-
1,1,2-Trichloro-1,2,2-trifluoroethane	mg/kg-dry	T	<0.007 J	<0.008 :	-	<0.008 :	<0.004 :	-
1,1,2-Trichloroethane	mg/kg-dry	T	<0.007 :	<0.008 :	-	<0.008 :	<0.004 :	-
1,1-Dichloroethane	mg/kg-dry	T	<0.007 J	<0.008 :	-	<0.008 :	<0.004 :	-
1,1-Dichloroethene	mg/kg-dry	T	<0.007 J	<0.008 :	-	<0.008 :	<0.004 :	-
1,2,4-Trichlorobenzene	mg/kg-dry	T	<0.007 J	<0.008 :	-	<0.008 :	<0.004 :	-
1,2-Dibromo-3-chloropropane	mg/kg-dry	T	<0.007 J	<0.008 :	-	<0.008 :	<0.004 :	-
1,2-Dichlorobenzene	mg/kg-dry	T	<0.007 J	<0.008 :	-	<0.008 :	<0.004 :	-
1,2-Dichloroethane	mg/kg-dry	T	<0.007 J	<0.008 :	-	<0.008 :	<0.004 :	-
1,2-Dichloroethene (total)	mg/kg-dry	T	<0.007 J	<0.008 :	-	<0.008 :	<0.004 :	-
1,2-Dichloropropane	mg/kg-dry	T	<0.007 :	<0.008 :	-	<0.008 :	<0.004 :	-
1,3-Dichlorobenzene	mg/kg-dry	T	<0.007 J	<0.008 :	-	<0.008 :	<0.004 :	-
1,4-Dichlorobenzene	mg/kg-dry	T	<0.007 J	<0.008 :	-	<0.008 :	<0.004 :	-
2-Butanone	mg/kg-dry	T	<0.007 J	<0.008 :	-	<0.008 J	<0.004 J	-
2-Hexanone	mg/kg-dry	T	<0.007 J	<0.008 :	-	<0.008 :	<0.004 :	-
4-Methyl-2-pentanone	mg/kg-dry	T	<0.007 J	<0.008 :	-	<0.008 :	<0.004 :	-
Acetone	mg/kg-dry	T	<0.007 :	0.002 J	-	<0.008 :	<0.004 :	-
Benzene	mg/kg-dry	T	<0.007 :	<0.008 :	-	<0.008 :	<0.004 :	-
Bromodichloromethane	mg/kg-dry	T	<0.007 :	<0.008 :	-	<0.008 :	<0.004 :	-
Bromoform	mg/kg-dry	T	<0.007 :	<0.008 :	-	<0.008 :	<0.004 :	-
Bromomethane	mg/kg-dry	T	<0.007 J	<0.008 :	-	<0.008 :	<0.004 :	-
Carbon disulfide	mg/kg-dry	T	0.0006 J	<0.008 :	-	<0.008 :	<0.004 :	-

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Appendix A-7e
Soil - Biased 0-24 inches
Validated Analytical Results

Site ID			MSS1-73	MSS1-74	MSS1-75	MSS1-76	MSS1-77	MSS1-78
Sample Date			1/9/2003	1/19/2003	1/9/2003	1/9/2003	1/9/2003	1/9/2003
Sample ID			MSS1-73-T02N-SOL	MSS1-74-T02N-SOL	MSS1-75-T02N-SOL	MSS1-76-T02N-SOL	MSS1-77-T02N-SOL	MSS1-78-T02N-SOL
Exposure Area			SS1	SS1	SS1	SS1	SS1	SS1
Parameter	**Units**	**Fraction**						
Carbon tetrachloride	mg/kg-dry	T	<0.007 :	<0.008 :	-	<0.008 :	<0.004 :	-
Chlorobenzene	mg/kg-dry	T	<0.007 J	<0.008 :	-	<0.008 :	<0.004 :	-
Chloroethane	mg/kg-dry	T	<0.007 J	<0.008 :	-	<0.008 :	<0.004 :	-
Chloroform	mg/kg-dry	T	<0.007 J	<0.008 :	-	<0.008 :	<0.004 :	-
Chloromethane	mg/kg-dry	T	<0.007 J	<0.008 :	-	<0.008 :	<0.004 :	-
cis-1,2-Dichloroethene	mg/kg-dry	T	<0.007 J	<0.008 :	-	<0.008 :	<0.004 :	-
cis-1,3-Dichloropropene	mg/kg-dry	T	<0.007 :	<0.008 :	-	<0.008 :	<0.004 :	-
Dibromochloromethane	mg/kg-dry	T	<0.007 :	<0.008 :	-	<0.008 :	<0.004 :	-
Dichlorodifluoromethane	mg/kg-dry	T	<0.007 J	<0.008 :	-	<0.008 :	<0.004 :	-
Ethylbenzene	mg/kg-dry	T	0.0008 J	<0.008 :	-	<0.008 :	<0.004 :	-
Methylene chloride	mg/kg-dry	T	<0.007 J	<0.008 :	-	<0.008 :	<0.004 :	-
Styrene	mg/kg-dry	T	<0.007 J	<0.008 :	-	<0.008 :	<0.004 :	-
Tetrachloroethene	mg/kg-dry	T	<0.007 J	<0.008 :	-	<0.008 :	<0.004 :	-
Toluene	mg/kg-dry	T	<0.007 J	<0.008 :	-	<0.008 :	<0.004 :	-
Total Xylene	mg/kg-dry	T	0.004 J	<0.008 :	-	0.001 J	0.0004 J	-
trans-1,2-Dichloroethene	mg/kg-dry	T	<0.007 J	<0.008 :	-	<0.008 :	<0.004 :	-
trans-1,3-Dichloropropene	mg/kg-dry	T	<0.007 :	<0.008 :	-	<0.008 :	<0.004 :	-
Trichloroethene	mg/kg-dry	T	<0.007 :	<0.008 :	-	<0.008 :	<0.004 :	-
Trichlorofluoromethane	mg/kg-dry	T	<0.007 J	<0.008 :	-	<0.008 :	<0.004 :	-
Vinyl chloride	mg/kg-dry	T	<0.007 J	<0.008 :	-	<0.008 :	<0.004 :	-
Semi-Volatile Organics								
1,1`-Biphenyl	mg/kg-dry	T	<0.34 :	<0.34 :	<0.35 :	<0.35 :	<0.36 :	<0.4 :
2,4,5-Trichlorophenol	mg/kg-dry	T	<0.86 :	<0.84 :	<0.88 :	<0.87 :	<0.89 :	<1. :
2,4,6-Trichlorophenol	mg/kg-dry	T	<0.34 :	<0.34 :	<0.35 :	<0.35 :	<0.36 :	<0.4 :
2,4-Dichlorophenol	mg/kg-dry	T	<0.34 :	<0.34 :	<0.35 :	<0.35 :	<0.36 :	<0.4 :
2,4-Dimethylphenol	mg/kg-dry	T	<0.34 :	<0.34 :	<0.35 :	<0.35 :	<0.36 :	<0.4 :
2,4-Dinitrophenol	mg/kg-dry	T	<0.86 :	<0.84 :	<0.88 :	<0.87 :	<0.89 :	<1. :
2,4-Dinitrotoluene	mg/kg-dry	T	<0.34 :	<0.34 :	<0.35 :	<0.35 :	<0.36 :	<0.4 :
2,6-Dinitrotoluene	mg/kg-dry	T	<0.34 :	<0.34 :	<0.35 :	<0.35 :	<0.36 :	<0.4 :
2-Chloronaphthalene	mg/kg-dry	T	<0.34 :	<0.34 :	<0.35 :	<0.35 :	<0.36 :	<0.4 :
2-Chlorophenol	mg/kg-dry	T	<0.34 :	<0.34 :	<0.35 :	<0.35 :	<0.36 :	<0.4 :
2-Methylnaphthalene	mg/kg-dry	T	<0.34 :	<0.34 :	<0.35 :	<0.35 :	<0.36 :	<0.4 :
2-Methylphenol	mg/kg-dry	T	<0.34 :	<0.34 :	<0.35 :	<0.35 :	<0.36 :	<0.4 :
2-Nitroaniline	mg/kg-dry	T	<0.86 :	<0.84 :	<0.88 :	<0.87 :	<0.89 :	<1. :

J = Qualified as estimated during data validation
R = Qualified as rejected value from data validation and results are considered unusable for any purpose
T = Total Fraction

Appendix A-7e
Soil - Biased 0-24 inches
Validated Analytical Results

		Site ID	MSS1-73		MSS1-74		MSS1-75		MSS1-76		MSS1-77		MSS1-78	
		Sample Date	1/9/2003		1/19/2003		1/9/2003		1/9/2003		1/9/2003		1/9/2003	
		Sample ID	MSS1-73-T02N-SOL		MSS1-74-T02N-SOL		MSS1-75-T02N-SOL		MSS1-76-T02N-SOL		MSS1-77-T02N-SOL		MSS1-78-T02N-SOL	
		Exposure Area	SS1		SS1		SS1		SS1		SS1		SS1	
Parameter	Units	Fraction												
2-Nitrophenol	mg/kg-dry	T	<0.34	:	<0.34	:	<0.35	:	<0.35	:	<0.36	:	<0.4	:
3,3-Dichlorobenzidine	mg/kg-dry	T	<0.34	:	<0.34	:	<0.35	:	<0.35	:	<0.36	:	<0.4	:
3-Nitroaniline	mg/kg-dry	T	<0.86	:	<0.84	J	<0.88	:	<0.87	:	<0.89	:	<1.	:
4,6-Dinitro-2-methylphenol	mg/kg-dry	T	<0.86	:	<0.84	:	<0.88	:	<0.87	:	<0.89	:	<1.	:
4-Bromophenyl phenyl ether	mg/kg-dry	T	<0.34	:	<0.34	:	<0.35	:	<0.35	:	<0.36	:	<0.4	:
4-Chloro-3-methylphenol	mg/kg-dry	T	<0.34	:	<0.34	:	<0.35	:	<0.35	:	<0.36	:	<0.4	:
4-Chloroaniline	mg/kg-dry	T	<0.34	:	<0.34	:	<0.35	:	<0.35	:	<0.36	:	<0.4	:
4-Chlorophenyl phenyl ether	mg/kg-dry	T	<0.34	:	<0.34	:	<0.35	:	<0.35	:	<0.36	:	<0.4	:
4-Methylphenol	mg/kg-dry	T	<0.34	:	<0.34	:	<0.35	:	<0.35	:	<0.36	:	<0.4	:
4-Nitroaniline	mg/kg-dry	T	<0.86	:	<0.84	:	<0.88	:	<0.87	:	<0.89	:	<1.	:
4-Nitrophenol	mg/kg-dry	T	<0.86	:	<0.84	:	<0.88	:	<0.87	:	<0.89	:	<1.	:
Acenaphthene	mg/kg-dry	T	<0.34	:	<0.34	:	<0.35	:	<0.35	:	<0.36	:	<0.4	:
Acenaphthylene	mg/kg-dry	T	<0.34	:	<0.34	:	<0.35	:	<0.35	:	<0.36	:	<0.4	:
Anthracene	mg/kg-dry	T	<0.34	:	<0.34	:	<0.35	:	<0.35	:	<0.36	:	<0.4	:
Benzaldehyde	mg/kg-dry	T	0.039	J	<0.34	:	<0.35	:	<0.35	:	<0.36	:	0.041	J
Benzo(a)anthracene	mg/kg-dry	T	<0.34	:	<0.34	:	0.017	J	<0.35	:	<0.36	:	<0.4	:
Benzo(a)pyrene	mg/kg-dry	T	<0.34	:	<0.34	:	<0.35	:	<0.35	:	<0.36	:	<0.4	:
Benzo(b)fluoranthene	mg/kg-dry	T	<0.34	:	<0.34	:	<0.35	:	<0.35	:	<0.36	:	<0.4	:
Benzo(g,h,i)perylene	mg/kg-dry	T	<0.34	:	<0.34	:	<0.35	:	<0.35	J	<0.36	:	<0.4	:
Benzo(k)fluoranthene	mg/kg-dry	T	<0.34	:	<0.34	:	<0.35	:	<0.35	:	<0.36	:	<0.4	:
Bis(2-chloroethoxy)methane	mg/kg-dry	T	<0.34	:	<0.34	:	<0.35	:	<0.35	:	<0.36	:	<0.4	:
Bis(2-chloroethyl)ether	mg/kg-dry	T	<0.34	:	<0.34	:	<0.35	:	<0.35	:	<0.36	:	<0.4	:
Bis(2-ethylhexyl)phthalate	mg/kg-dry	T	<0.34	:	0.054	J	0.066	J	1.6	:	0.051	J	0.018	J
Butyl benzyl phthalate	mg/kg-dry	T	<0.34	:	<0.34	:	<0.35	:	<0.35	:	<0.36	:	<0.4	:
Carbazole	mg/kg-dry	T	<0.34	:	<0.34	:	<0.35	:	<0.35	:	<0.36	:	<0.4	:
Chrysene	mg/kg-dry	T	<0.34	:	<0.34	:	0.02	J	<0.35	:	<0.36	:	<0.4	:
Dibenz(a,h)anthracene	mg/kg-dry	T	<0.34	:	<0.34	:	<0.35	:	<0.35	J	<0.36	:	<0.4	:
Dibenzofuran	mg/kg-dry	T	<0.34	:	<0.34	:	<0.35	:	<0.35	:	<0.36	:	<0.4	:
Dichlorodiisopropyl ether	mg/kg-dry	T	<0.34	:	<0.34	:	<0.35	:	<0.35	:	<0.36	:	<0.4	:
Diethylphthalate	mg/kg-dry	T	<0.34	:	<0.34	:	<0.35	:	<0.35	:	<0.36	:	<0.4	:
Dimethylphthalate	mg/kg-dry	T	<0.34	:	<0.34	:	<0.35	:	<0.35	:	<0.36	:	<0.4	:
Di-n-Butyl phthalate	mg/kg-dry	T	<0.34	:	<0.34	:	<0.35	:	<0.35	:	<0.36	:	<0.4	:
Di-n-Octyl phthalate	mg/kg-dry	T	<0.34	:	<0.34	:	0.026	J	<0.35	:	<0.36	:	<0.4	:
Fluoranthene	mg/kg-dry	T	<0.34	:	<0.34	:	0.043	J	<0.35	:	<0.36	:	<0.4	:

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T = Total Fraction

Appendix A-7e
Soil - Biased 0-24 inches
Validated Analytical Results

Parameter	Units	Exposure Area Fraction	Site ID / Sample Date / Sample ID		MSS1-73 1/9/2003 MSS1-73-T02N-SOL SS1		MSS1-74 1/19/2003 MSS1-74-T02N-SOL SS1		MSS1-75 1/9/2003 MSS1-75-T02N-SOL SS1		MSS1-76 1/9/2003 MSS1-76-T02N-SOL SS1		MSS1-77 1/9/2003 MSS1-77-T02N-SOL SS1		MSS1-78 1/9/2003 MSS1-78-T02N-SOL SS1	
Fluorene	mg/kg-dry	T		<0.34	:	<0.34	:	<0.35	:	<0.35	:	<0.36	:	<0.4	:
Hexachlorobenzene	mg/kg-dry	T		<0.34	:	<0.34	:	<0.35	:	<0.35	:	<0.36	:	<0.4	:
Hexachlorobutadiene	mg/kg-dry	T		<0.34	:	<0.34	:	<0.35	:	<0.35	:	<0.36	:	<0.4	:
Hexachlorocyclopentadiene	mg/kg-dry	T		<0.34	:	<0.34	:	<0.35	:	<0.35	:	<0.36	:	<0.4	:
Hexachloroethane	mg/kg-dry	T		<0.34	:	<0.34	:	<0.35	:	<0.35	:	<0.36	:	<0.4	:
Indeno(1,2,3-cd)pyrene	mg/kg-dry	T		<0.34	:	<0.34	:	<0.35	:	<0.35	J	<0.36	:	<0.4	:
Isophorone	mg/kg-dry	T		<0.34	:	<0.34	:	<0.35	:	<0.35	:	<0.36	:	<0.4	:
Naphthalene	mg/kg-dry	T		<0.34	:	<0.34	:	<0.35	:	<0.35	:	<0.36	:	<0.4	:
Nitrobenzene	mg/kg-dry	T		<0.34	:	<0.34	:	<0.35	:	<0.35	:	<0.36	:	<0.4	:
N-Nitrosodi-n-propylamine	mg/kg-dry	T		<0.34	:	<0.34	:	<0.35	:	<0.35	:	<0.36	:	<0.4	:
N-Nitrosodiphenylamine	mg/kg-dry	T		<0.34	:	<0.34	:	<0.35	:	<0.35	:	<0.36	:	<0.4	:
Pentachlorophenol	mg/kg-dry	T		<0.86	:	<0.84	:	<0.88	:	<0.87	:	<0.89	:	<1.	:
Phenanthrene	mg/kg-dry	T		<0.34	:	<0.34	:	0.02	J	<0.35	:	<0.36	:	<0.4	:
Phenol	mg/kg-dry	T		<0.34	:	<0.34	:	<0.35	:	<0.35	:	<0.36	:	<0.4	:
Pyrene	mg/kg-dry	T		<0.34	:	<0.34	:	0.035	J	<0.35	:	<0.36	:	<0.4	:
Pesticides-PCBs																
Aroclor 1016	mg/kg-dry	T		<0.034	:	<0.034	:	<0.035	:	<0.035	:	<0.035	:	<0.04	:
Aroclor 1221	mg/kg-dry	T		<0.07	:	<0.068	:	<0.071	:	<0.071	:	<0.072	:	<0.081	:
Aroclor 1232	mg/kg-dry	T		<0.034	:	<0.034	:	<0.035	:	<0.035	:	<0.035	:	<0.04	:
Aroclor 1242	mg/kg-dry	T		<0.034	:	<0.034	:	<0.035	:	<0.035	:	<0.035	:	<0.04	:
Aroclor 1248	mg/kg-dry	T		<0.034	:	<0.034	:	<0.035	:	<0.035	:	<0.035	:	<0.04	:
Aroclor 1254	mg/kg-dry	T		0.39	:	0.21	:	0.14	:	0.054	:	0.019	J	<0.04	:
Aroclor 1260	mg/kg-dry	T		-	:	<0.034	:	<0.035	:	<0.035	:	<0.035	:	<0.04	:

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T = Total Fraction

Appendix A-7e
Soil - Biased 0-24 inches
Validated Analytical Results

Parameter	Units	Exposure Area Fraction	Site ID / Sample Date / Sample ID / Exposure Area											
			MSS1-78	7/20/2003	MSS1-78R2-T02N-SOL	SS1	MSS1-79	1/9/2003	MSS1-79-T02N-SOL	SS1	MSS1-80	1/7/2003	MSS1-80-T02N-SOL	SS1
General Chemistry														
Ammonia	mg/kg-dry	T	-				4.4	:			5.9	:		
Chloride	mg/kg-dry	T	-				6.6	:			65.5	:		
Fluoride	mg/kg-dry	T	-				3.7	J			0.36	J		
Nitrate	mg/kg-dry	T	-				<2.1	J			11.4	J		
Phosphorus	mg/kg-dry	T	-				967.	:			591.	:		
Sulfate	mg/kg-dry	T	-				218.	J			317.	:		
Total Kjeldahl Nitrogen	mg/kg-dry	T	-				59.	:			241.	:		
Total Organic Carbon	mg/kg-dry	T	-				1760.	J			4780.	J		
Laboratory Parameters														
pH	SU	T	-				7.4	:			7.7	:		
Solids, Percent	%	T	97.3	:			95.4	:			93.4	:		
Solids, Percent - VOCs Only	%	T	-				94.9	:			-			
Specific Conductance	umhos/cm	T	-				1590.	:			889.	:		
Geotechnical														
Organic Soils	%	T	-				1.2	:			2.2	:		
Physical Properties														
Cation-Exchange Capacity	meq/100g	T	-				11.1	:			10.3	:		
Sodium Absorption Ratio	ratio	T	-				0.13	:			1.85	:		
Metals														
Aluminum	mg/kg-dry	T	-				10300.	:			8030.	:		
Antimony	mg/kg-dry	T	-				<0.3	J			<0.25	J		
Arsenic	mg/kg-dry	T	-				2.7	J			4.	J		
Barium	mg/kg-dry	T	-				85.3	:			183.	:		
Beryllium	mg/kg-dry	T	-				1.4	:			0.66	:		
Boron	mg/kg-dry	T	-				<2.4	:			2.7	J		
Cadmium	mg/kg-dry	T	-				1.4	:			0.46	J		
Calcium	mg/kg-dry	T	-				13500.	:			5060.	:		
Chromium	mg/kg-dry	T	-				33.	J			28.	J		
Cobalt	mg/kg-dry	T	-				11.5	:			6.2	:		
Copper	mg/kg-dry	T	-				175.	J			49.8	J		
Iron	mg/kg-dry	T	-				21000.	:			19400.	:		
Lead	mg/kg-dry	T	-				141.	:			59.3	:		
Magnesium	mg/kg-dry	T	-				6030.	:			4020.	:		

Parameter	Units	Exposure Area Fraction	Site ID / Sample Date / Sample ID / Exposure Area											
			MSS1-81	1/7/2003	MSS1-81-T02N-SOL	SS1	MSS1-81	1/10/2003	MSS1-81-T02N-SOL	SS1	MSS1-82	1/7/2003	MSS1-82-T02N-SOL	SS1
General Chemistry														
Ammonia	mg/kg-dry	T	14.3	:			-				3.1	:		
Chloride	mg/kg-dry	T	88.4	:			-				30.6	:		
Fluoride	mg/kg-dry	T	0.86	J			-				0.89	J		
Nitrate	mg/kg-dry	T	8.2	J			-				3.	J		
Phosphorus	mg/kg-dry	T	1040.	:			-				935.	:		
Sulfate	mg/kg-dry	T	423.	:			-				43.2	:		
Total Kjeldahl Nitrogen	mg/kg-dry	T	126.	:			-				95.	:		
Total Organic Carbon	mg/kg-dry	T	3780.	J			-				911.	J		
Laboratory Parameters														
pH	SU	T	7.5	:			-				8.1	:		
Solids, Percent	%	T	95.2	:			90.3	:			92.6	:		
Solids, Percent - VOCs Only	%	T	94.1	:			-				-			
Specific Conductance	umhos/cm	T	1050.	:			-				248.	:		
Geotechnical														
Organic Soils	%	T	3.3	:			-				1.4	:		
Physical Properties														
Cation-Exchange Capacity	meq/100g	T	10.8	:			-				9.3	:		
Sodium Absorption Ratio	ratio	T	2.36	:			-				2.2	:		
Metals														
Aluminum	mg/kg-dry	T	10100.	:			-				12100.	:		
Antimony	mg/kg-dry	T	<0.26	J			-				<0.26	J		
Arsenic	mg/kg-dry	T	2.5	J			-				3.1	J		
Barium	mg/kg-dry	T	150.	:			-				63.4	:		
Beryllium	mg/kg-dry	T	0.81	:			-				0.95	:		
Boron	mg/kg-dry	T	3.7	J			-				<2.1	:		
Cadmium	mg/kg-dry	T	0.078	J			-				<0.039	J		
Calcium	mg/kg-dry	T	10300.	:			-				10100.	:		
Chromium	mg/kg-dry	T	34.4	J			-				49.	J		
Cobalt	mg/kg-dry	T	9.7	:			-				12.2	:		
Copper	mg/kg-dry	T	71.4	J			-				61.7	J		
Iron	mg/kg-dry	T	19500.	:			-				24500.	:		
Lead	mg/kg-dry	T	56.	:			-				50.7	:		
Magnesium	mg/kg-dry	T	6930.	:			-				9560.	:		

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T = Total Fraction

Appendix A-7e
Soil - Biased 0-24 inches
Validated Analytical Results

Parameter	Units	Fraction	Site ID	Sample Date	Sample ID	Exposure Area	
			MSS1-78	7/20/2003	MSS1-78R2-T02N-SOL	SS1	
			MSS1-79	1/9/2003	MSS1-79-T02N-SOL	SS1	
			MSS1-80	1/7/2003	MSS1-80-T02N-SOL	SS1	
			MSS1-81	1/7/2003	MSS1-81-T02N-SOL	SS1	
			MSS1-81	1/10/2003	MSS1-81-T02N-SOL	SS1	
			MSS1-82	1/7/2003	MSS1-82-T02N-SOL	SS1	
Manganese	mg/kg-dry	T	-	722. :	438. :	475. :	-	663. :
Mercury	mg/kg-dry	T	-	<0.016 :	0.054 :	0.046 :	-	<0.017 :
Molybdenum	mg/kg-dry	T	-	1680. :	260. :	916. :	-	199. :
Nickel	mg/kg-dry	T	-	26.8 :	14.8 :	25. :	-	32.2 :
Potassium	mg/kg-dry	T	-	4200. J	2020. J	3140. J	-	3020. J
Selenium	mg/kg-dry	T	-	0.93 J	<0.65 J	0.75 J	-	<0.69 J
Silver	mg/kg-dry	T	-	1.7 :	0.21 :	0.32 :	-	<0.16 :
Sodium	mg/kg-dry	T	-	<33.8 :	<284. :	<277. :	-	<115. :
Thallium	mg/kg-dry	T	-	0.34 :	0.097 :	0.24 :	-	0.22 :
Vanadium	mg/kg-dry	T	-	45. :	21.9 :	41.9 :	-	47.1 :
Zinc	mg/kg-dry	T	-	247. :	151. :	108. :	-	97.4 :
Volatile Organics								
1,1,1-Trichloroethane	mg/kg-dry	T	<0.009 :	<0.004 :	<0.011 :	<0.018 :	<0.008 :	<0.012 :
1,1,2,2-Tetrachloroethane	mg/kg-dry	T	<0.009 :	<0.004 :	<0.011 :	<0.018 :	<0.008 :	<0.012 :
1,1,2-Trichloro-1,2,2-trifluoroethane	mg/kg-dry	T	<0.009 :	<0.004 :	<0.011 :	<0.018 :	<0.008 :	<0.012 :
1,1,2-Trichloroethane	mg/kg-dry	T	<0.009 :	<0.004 :	<0.011 :	<0.018 :	<0.008 :	<0.012 :
1,1-Dichloroethane	mg/kg-dry	T	<0.009 :	<0.004 :	<0.011 :	<0.018 :	<0.008 :	<0.012 :
1,1-Dichloroethene	mg/kg-dry	T	<0.009 :	<0.004 :	<0.011 :	<0.018 :	<0.008 :	<0.012 :
1,2,4-Trichlorobenzene	mg/kg-dry	T	<0.009 :	<0.004 :	<0.011 :	<0.018 :	<0.008 :	<0.012 :
1,2-Dibromo-3-chloropropane	mg/kg-dry	T	<0.009 :	<0.004 :	<0.011 :	<0.018 :	<0.008 :	<0.012 :
1,2-Dichlorobenzene	mg/kg-dry	T	<0.009 :	<0.004 :	<0.011 :	<0.018 :	<0.008 :	<0.012 :
1,2-Dichloroethane	mg/kg-dry	T	<0.009 :	<0.004 :	<0.011 :	<0.018 :	<0.008 :	<0.012 :
1,2-Dichloroethene (total)	mg/kg-dry	T	<0.009 :	<0.004 :	<0.011 :	<0.018 :	<0.008 :	<0.012 :
1,2-Dichloropropane	mg/kg-dry	T	<0.009 :	<0.004 :	<0.011 :	<0.018 :	<0.008 :	<0.012 :
1,3-Dichlorobenzene	mg/kg-dry	T	<0.009 :	<0.004 :	<0.011 :	<0.018 :	<0.008 :	<0.012 :
1,4-Dichlorobenzene	mg/kg-dry	T	<0.009 :	<0.004 :	<0.011 :	<0.018 :	<0.008 :	<0.012 :
2-Butanone	mg/kg-dry	T	<0.009 :	<0.004 :	0.004 J	<0.018 :	<0.008 :	<0.012 :
2-Hexanone	mg/kg-dry	T	<0.009 :	<0.004 :	<0.011 :	<0.018 :	<0.008 :	<0.012 :
4-Methyl-2-pentanone	mg/kg-dry	T	<0.009 :	<0.004 :	<0.011 :	<0.018 :	<0.008 :	<0.012 :
Acetone	mg/kg-dry	T	<0.009 :	0.0008 J	0.011 :	<0.018 :	0.001 J	<0.012 :
Benzene	mg/kg-dry	T	<0.009 :	<0.004 :	<0.011 :	<0.018 :	<0.008 :	<0.012 :
Bromodichloromethane	mg/kg-dry	T	<0.009 :	<0.004 :	<0.011 :	<0.018 :	<0.008 :	<0.012 :
Bromoform	mg/kg-dry	T	<0.009 :	<0.004 :	<0.011 :	<0.018 :	<0.008 :	<0.012 :
Bromomethane	mg/kg-dry	T	<0.009 :	<0.004 :	<0.011 J	<0.018 J	<0.008 :	<0.012 J

J = Qualified as estimated during data validation
R = Qualified as rejected value from data validation and results are considered unusable for any purpose
T = Total Fraction

Appendix A-7e
Soil - Biased 0-24 inches
Validated Analytical Results

Parameter	Units	Fraction	Site ID	MSS1-78	MSS1-79	MSS1-80	MSS1-81	MSS1-81	MSS1-82
			Sample Date	7/20/2003	1/9/2003	1/7/2003	1/7/2003	1/10/2003	1/7/2003
			Sample ID	MSS1-78R2-T02N-SOL	MSS1-79-T02N-SOL	MSS1-80-T02N-SOL	MSS1-81-T02N-SOL	MSS1-81-T02N-SOL	MSS1-82-T02N-SOL
			Exposure Area	SS1	SS1	SS1	SS1	SS1	SS1
Carbon disulfide	mg/kg-dry	T		<0.009 :	<0.004 :	<0.011 :	<0.018 :	0.0008 J	<0.012 :
Carbon tetrachloride	mg/kg-dry	T		<0.009 :	<0.004 :	<0.011 :	<0.018 :	<0.008 :	<0.012 :
Chlorobenzene	mg/kg-dry	T		<0.009 :	<0.004 :	<0.011 :	<0.018 :	<0.008 :	<0.012 :
Chloroethane	mg/kg-dry	T		<0.009 :	<0.004 :	<0.011 :	<0.018 :	<0.008 :	<0.012 :
Chloroform	mg/kg-dry	T		<0.009 :	<0.004 :	<0.011 :	<0.018 :	<0.008 :	<0.012 :
Chloromethane	mg/kg-dry	T		<0.009 :	<0.004 :	<0.011 :	<0.018 :	<0.008 :	<0.012 :
cis-1,2-Dichloroethene	mg/kg-dry	T		<0.009 :	<0.004 :	<0.011 :	<0.018 :	<0.008 :	<0.012 :
cis-1,3-Dichloropropene	mg/kg-dry	T		<0.009 :	<0.004 :	<0.011 :	<0.018 :	<0.008 :	<0.012 :
Dibromochloromethane	mg/kg-dry	T		<0.009 :	<0.004 :	<0.011 :	<0.018 :	<0.008 :	<0.012 :
Dichlorodifluoromethane	mg/kg-dry	T		<0.009 :	<0.004 :	<0.011 :	<0.018 :	<0.008 :	<0.012 :
Ethylbenzene	mg/kg-dry	T		<0.009 :	<0.004 :	<0.011 :	<0.018 :	0.005 J	<0.012 :
Methylene chloride	mg/kg-dry	T		<0.009 :	<0.004 :	0.002 J	<0.018 :	<0.008 :	<0.012 :
Styrene	mg/kg-dry	T		<0.009 :	<0.004 :	<0.011 :	<0.018 :	0.002 J	<0.012 :
Tetrachloroethene	mg/kg-dry	T		<0.009 :	<0.004 :	<0.011 :	<0.018 :	<0.008 :	<0.012 :
Toluene	mg/kg-dry	T		<0.009 :	<0.004 :	<0.011 :	<0.018 :	<0.008 :	0.001 J
Total Xylene	mg/kg-dry	T		<0.009 :	<0.004 :	<0.011 :	<0.018 :	0.034 :	0.005 J
trans-1,2-Dichloroethene	mg/kg-dry	T		<0.009 :	<0.004 :	<0.011 :	<0.018 :	<0.008 :	<0.012 :
trans-1,3-Dichloropropene	mg/kg-dry	T		<0.009 :	<0.004 :	<0.011 :	<0.018 :	<0.008 :	<0.012 :
Trichloroethene	mg/kg-dry	T		<0.009 :	<0.004 :	<0.011 :	<0.018 :	<0.008 :	<0.012 :
Trichlorofluoromethane	mg/kg-dry	T		<0.009 :	<0.004 :	<0.011 :	<0.018 :	<0.008 :	<0.012 :
Vinyl chloride	mg/kg-dry	T		<0.009 :	<0.004 :	<0.011 :	<0.018 :	<0.008 :	<0.012 :
Semi-Volatile Organics									
1,1`-Biphenyl	mg/kg-dry	T		-	<0.35 :	<0.35 :	<0.35 :	-	<0.36 :
2,4,5-Trichlorophenol	mg/kg-dry	T		-	<0.87 :	<0.89 :	<0.88 :	-	<0.89 :
2,4,6-Trichlorophenol	mg/kg-dry	T		-	<0.35 :	<0.35 :	<0.35 :	-	<0.36 :
2,4-Dichlorophenol	mg/kg-dry	T		-	<0.35 :	<0.35 :	<0.35 :	-	<0.36 :
2,4-Dimethylphenol	mg/kg-dry	T		-	<0.35 :	<0.35 :	<0.35 :	-	<0.36 :
2,4-Dinitrophenol	mg/kg-dry	T		-	<0.87 :	<0.89 :	<0.88 :	-	<0.89 :
2,4-Dinitrotoluene	mg/kg-dry	T		-	<0.35 :	<0.35 :	<0.35 :	-	<0.36 :
2,6-Dinitrotoluene	mg/kg-dry	T		-	<0.35 :	<0.35 :	<0.35 :	-	<0.36 :
2-Chloronaphthalene	mg/kg-dry	T		-	<0.35 :	<0.35 :	<0.35 :	-	<0.36 :
2-Chlorophenol	mg/kg-dry	T		-	<0.35 :	<0.35 :	<0.35 :	-	<0.36 :
2-Methylnaphthalene	mg/kg-dry	T		-	<0.35 :	<0.35 :	<0.35 :	-	<0.36 :
2-Methylphenol	mg/kg-dry	T		-	<0.35 :	<0.35 :	<0.35 :	-	<0.36 :

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Appendix A-7e
Soil - Biased 0-24 inches
Validated Analytical Results

		Site ID	MSS1-78	MSS1-79	MSS1-80	MSS1-81	MSS1-81	MSS1-82
		Sample Date	7/20/2003	1/9/2003	1/7/2003	1/7/2003	1/10/2003	1/7/2003
		Sample ID	MSS1-78R2-T02N-SOL	MSS1-79-T02N-SOL	MSS1-80-T02N-SOL	MSS1-81-T02N-SOL	MSS1-81-T02N-SOL	MSS1-82-T02N-SOL
		Exposure Area	SS1	SS1	SS1	SS1	SS1	SS1
Parameter	**Units**	**Fraction**						
2-Nitroaniline	mg/kg-dry	T	-	<0.87 :	<0.89 :	<0.88 :	-	<0.89 :
2-Nitrophenol	mg/kg-dry	T	-	<0.35 :	<0.35 :	<0.35 :	-	<0.36 :
3,3-Dichlorobenzidine	mg/kg-dry	T	-	<0.35 :	<0.35 :	<0.35 :	-	<0.36 :
3-Nitroaniline	mg/kg-dry	T	-	<0.87 :	<0.89 :	<0.88 :	-	<0.89 :
4,6-Dinitro-2-methylphenol	mg/kg-dry	T	-	<0.87 :	<0.89 :	<0.88 :	-	<0.89 :
4-Bromophenyl phenyl ether	mg/kg-dry	T	-	<0.35 :	<0.35 :	<0.35 :	-	<0.36 :
4-Chloro-3-methylphenol	mg/kg-dry	T	-	<0.35 :	<0.35 :	<0.35 :	-	<0.36 :
4-Chloroaniline	mg/kg-dry	T	-	<0.35 :	<0.35 :	<0.35 :	-	<0.36 :
4-Chlorophenyl phenyl ether	mg/kg-dry	T	-	<0.35 :	<0.35 :	<0.35 :	-	<0.36 :
4-Methylphenol	mg/kg-dry	T	-	<0.35 :	<0.35 :	<0.35 :	-	<0.36 :
4-Nitroaniline	mg/kg-dry	T	-	<0.87 :	<0.89 :	<0.88 :	-	<0.89 :
4-Nitrophenol	mg/kg-dry	T	-	<0.87 :	<0.89 :	<0.88 :	-	<0.89 :
Acenaphthene	mg/kg-dry	T	-	<0.35 :	<0.35 :	<0.35 :	-	<0.36 :
Acenaphthylene	mg/kg-dry	T	-	<0.35 :	<0.35 :	<0.35 :	-	<0.36 :
Anthracene	mg/kg-dry	T	-	<0.35 :	<0.35 :	<0.35 :	-	<0.36 :
Benzaldehyde	mg/kg-dry	T	-	<0.35 :	<0.35 J	<0.35 J	-	<0.36 J
Benzo(a)anthracene	mg/kg-dry	T	-	<0.35 :	0.083 J	<0.35 :	-	<0.36 :
Benzo(a)pyrene	mg/kg-dry	T	-	<0.35 :	0.09 J	<0.35 :	-	<0.36 :
Benzo(b)fluoranthene	mg/kg-dry	T	-	<0.35 :	0.08 J	<0.35 :	-	<0.36 :
Benzo(g,h,i)perylene	mg/kg-dry	T	-	<0.35 J	0.055 J	<0.35 :	-	<0.36 :
Benzo(k)fluoranthene	mg/kg-dry	T	-	<0.35 :	0.086 J	<0.35 :	-	<0.36 :
Bis(2-chloroethoxy)methane	mg/kg-dry	T	-	<0.35 :	<0.35 :	<0.35 :	-	<0.36 :
Bis(2-chloroethyl)ether	mg/kg-dry	T	-	<0.35 :	<0.35 :	<0.35 :	-	<0.36 :
Bis(2-ethylhexyl)phthalate	mg/kg-dry	T	-	<0.35 :	0.019 J	0.084 J	-	0.017 J
Butyl benzyl phthalate	mg/kg-dry	T	-	<0.35 :	<0.35 :	0.042 J	-	<0.36 :
Carbazole	mg/kg-dry	T	-	<0.35 :	<0.35 :	<0.35 :	-	<0.36 :
Chrysene	mg/kg-dry	T	-	<0.35 :	0.12 J	0.018 J	-	<0.36 :
Dibenz(a,h)anthracene	mg/kg-dry	T	-	<0.35 J	0.022 J	<0.35 :	-	<0.36 :
Dibenzofuran	mg/kg-dry	T	-	<0.35 :	<0.35 :	<0.35 :	-	<0.36 :
Dichlorodiisopropyl ether	mg/kg-dry	T	-	<0.35 :	<0.35 :	<0.35 :	-	<0.36 :
Diethylphthalate	mg/kg-dry	T	-	<0.35 :	<0.35 :	<0.35 :	-	<0.36 :
Dimethylphthalate	mg/kg-dry	T	-	<0.35 :	<0.35 :	<0.35 :	-	<0.36 :
Di-n-Butyl phthalate	mg/kg-dry	T	-	<0.35 :	<0.35 :	0.016 J	-	<0.36 :
Di-n-Octyl phthalate	mg/kg-dry	T	-	<0.35 :	<0.35 :	<0.35 :	-	<0.36 :

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Appendix A-7e
Soil - Biased 0-24 inches
Validated Analytical Results

Parameter	Units	Exposure Area Fraction	Site ID	Sample Date	Sample ID	Exposure Area
			MSS1-78	7/20/2003	MSS1-78R2-T02N-SOL	SS1
			MSS1-79	1/9/2003	MSS1-79-T02N-SOL	SS1
			MSS1-80	1/7/2003	MSS1-80-T02N-SOL	SS1
			MSS1-81	1/7/2003	MSS1-81-T02N-SOL	SS1
			MSS1-81	1/10/2003	MSS1-81-T02N-SOL	SS1
			MSS1-82	1/7/2003	MSS1-82-T02N-SOL	SS1
Fluoranthene	mg/kg-dry	T	-	<0.35 :	0.14 J	<0.35 :	-	<0.36 :
Fluorene	mg/kg-dry	T	-	<0.35 :	<0.35 :	<0.35 :	-	<0.36 :
Hexachlorobenzene	mg/kg-dry	T	-	<0.35 :	<0.35 :	<0.35 :	-	<0.36 :
Hexachlorobutadiene	mg/kg-dry	T	-	<0.35 :	<0.35 :	<0.35 :	-	<0.36 :
Hexachlorocyclopentadiene	mg/kg-dry	T	-	<0.35 J	<0.35 :	<0.35 :	-	<0.36 :
Hexachloroethane	mg/kg-dry	T	-	<0.35 :	<0.35 :	<0.35 :	-	<0.36 :
Indeno(1,2,3-cd)pyrene	mg/kg-dry	T	-	<0.35 J	0.054 J	<0.35 :	-	<0.36 :
Isophorone	mg/kg-dry	T	-	<0.35 :	<0.35 :	<0.35 :	-	<0.36 :
Naphthalene	mg/kg-dry	T	-	<0.35 :	<0.35 :	<0.35 :	-	<0.36 :
Nitrobenzene	mg/kg-dry	T	-	<0.35 :	<0.35 :	<0.35 :	-	<0.36 :
N-Nitrosodi-n-propylamine	mg/kg-dry	T	-	<0.35 :	<0.35 :	<0.35 :	-	<0.36 :
N-Nitrosodiphenylamine	mg/kg-dry	T	-	<0.35 :	<0.35 :	<0.35 :	-	<0.36 :
Pentachlorophenol	mg/kg-dry	T	-	<0.87 J	<0.89 :	<0.88 :	-	<0.89 :
Phenanthrene	mg/kg-dry	T	-	<0.35 :	0.03 J	<0.35 :	-	<0.36 :
Phenol	mg/kg-dry	T	-	<0.35 :	<0.35 :	<0.35 :	-	<0.36 :
Pyrene	mg/kg-dry	T	-	<0.35 :	0.15 J	0.016 J	-	<0.36 :
Pesticides-PCBs								
Aroclor 1016	mg/kg-dry	T	-	<0.035 :	<0.036 :	<0.035 :	-	<0.036 :
Aroclor 1221	mg/kg-dry	T	-	<0.071 :	<0.072 :	<0.071 :	-	<0.072 :
Aroclor 1232	mg/kg-dry	T	-	<0.035 :	<0.036 :	<0.035 :	-	<0.036 :
Aroclor 1242	mg/kg-dry	T	-	<0.035 :	<0.036 :	<0.035 :	-	<0.036 :
Aroclor 1248	mg/kg-dry	T	-	<0.035 :	<0.036 :	<0.035 :	-	<0.036 :
Aroclor 1254	mg/kg-dry	T	-	0.069 J	<0.036 :	0.1 :	-	0.051 :
Aroclor 1260	mg/kg-dry	T	-	<0.035 :	<0.036 :	0.024 J	-	<0.036 :

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Appendix A-7e
Soil - Biased 0-24 inches
Validated Analytical Results

Parameter	Units	Exposure Area Fraction	Site ID / Sample Date / Sample ID		MSS1-83 1/9/2003 MSS1-83-T02N-SOL SS1		MSS1-84 1/9/2003 MSS1-84-T02N-SOL SS1		MSS1-85 1/9/2003 MSS1-85-T02N-SOL SS1		MSS1-86 1/9/2003 MSS1-86-T02N-SOL SS1		MSS1-87 1/9/2003 MSS1-87-T02N-SOL SS1		MSS1-87 1/10/2003 MSS1-87-T02N-SOL SS1	
General Chemistry																
Ammonia	mg/kg-dry	T			4.5	:	38.2	:	7.5	:	38.6	:	-		7.3	:
Chloride	mg/kg-dry	T			786.	:	4.5	:	4.	:	3.8	:	-		2.9	:
Fluoride	mg/kg-dry	T			0.8	J	-		0.54	J	-		-		2.3	J
Nitrate	mg/kg-dry	T			18.	J	<2.2	J	4.3	J	<2.3	J	-		<2.2	J
Phosphorus	mg/kg-dry	T			1120.	:	793.	:	1160.	:	789.	:	-		866.	:
Sulfate	mg/kg-dry	T			660.	:	54.2	:	36.	:	17.	:	-		1740.	:
Total Kjeldahl Nitrogen	mg/kg-dry	T			218.	:	291.	:	386.	:	350.	:	-		210.	:
Total Organic Carbon	mg/kg-dry	T			6250.	J	7320.	J	9570.	J	8930.	J	-		15900.	J
Laboratory Parameters																
pH	SU	T			7.8	:	8.4	:	8.	:	8.5	:	-		6.8	:
Solids, Percent	%	T			94.8	:	93.8	:	92.9	:	89.5	:	92.3	:	-	
Solids, Percent - VOCs Only	%	T			-		92.8	:	-		87.8	:	-		92.	:
Specific Conductance	umhos/cm	T			2500.	:	249.	:	317.	:	145.	:	-		1610.	:
Geotechnical																
Organic Soils	%	T			2.3	:	2.5	:	3.1	:	2.2	:	-		2.3	:
Physical Properties																
Cation-Exchange Capacity	meq/100g	T			10.9	:	15.6	:	16.	:	12.9	:	-		9.6	:
Sodium Absorption Ratio	ratio	T			2.34	:	0.51	:	0.16	:	0.2	:	-		0.12	:
Metals																
Aluminum	mg/kg-dry	T			12400.	:	10200.	:	13700.	:	11300.	:	-		12600.	:
Antimony	mg/kg-dry	T			<0.29	J	<0.32	J	<0.4	:	<0.29	J	-		<0.28	J
Arsenic	mg/kg-dry	T			4.1	J	3.7	J	3.5	J	3.7	J	-		3.4	J
Barium	mg/kg-dry	T			84.6	:	260.	:	154.	:	170.	:	-		69.2	:
Beryllium	mg/kg-dry	T			1.	:	0.63	:	1.3	:	1.1	:	-		1.	:
Boron	mg/kg-dry	T			3.2	J	2.9	J	3.9	J	3.	J	-		<2.7	:
Cadmium	mg/kg-dry	T			0.14	J	0.11	J	0.27	J	0.35	J	-		0.41	J
Calcium	mg/kg-dry	T			10400.	:	4070.	:	13600.	:	4520.	:	-		9710.	:
Chromium	mg/kg-dry	T			45.6	J	40.7	J	43.4	J	59.9	J	-		79.7	J
Cobalt	mg/kg-dry	T			12.3	:	8.4	:	16.1	:	9.	:	-		11.1	:
Copper	mg/kg-dry	T			78.2	J	47.7	J	93.5	J	66.8	J	-		110.	J
Iron	mg/kg-dry	T			23700.	:	22200.	:	26400.	:	26200.	:	-		28700.	:
Lead	mg/kg-dry	T			70.	:	48.6	:	98.3	:	200.	:	-		106.	:
Magnesium	mg/kg-dry	T			9340.	:	5520.	:	9810.	:	5960.	:	-		8700.	:

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Appendix A-7e
Soil - Biased 0-24 inches
Validated Analytical Results

Parameter	Units	Fraction	MSS1-83		MSS1-84		MSS1-85		MSS1-86		MSS1-87		MSS1-87	
Sample Date			1/9/2003		1/9/2003		1/9/2003		1/9/2003		1/9/2003		1/10/2003	
Sample ID			MSS1-83-T02N-SOL		MSS1-84-T02N-SOL		MSS1-85-T02N-SOL		MSS1-86-T02N-SOL		MSS1-87-T02N-SOL		MSS1-87-T02N-SOL	
Exposure Area			SS1		SS1		SS1		SS1		SS1		SS1	
Manganese	mg/kg-dry	T	697.	:	445.	:	874.	:	707.	:	-		830.	:
Mercury	mg/kg-dry	T	0.02	:	<0.016	:	0.028	:	0.028	:	-		<0.018	:
Molybdenum	mg/kg-dry	T	519.	:	210.	:	571.	:	382.	:	-		2050.	:
Nickel	mg/kg-dry	T	32.2	:	20.3	:	34.3	:	24.2	:	-		51.5	:
Potassium	mg/kg-dry	T	2840.	J	2660.	J	2790.	J	3010.	J	-		3190.	J
Selenium	mg/kg-dry	T	1.4	J	<0.85	J	1.6	J	<0.76	J	-		<0.74	J
Silver	mg/kg-dry	T	0.37	:	0.34	J	0.51	:	0.72	J	-		0.84	:
Sodium	mg/kg-dry	T	338.	:	<94.8	:	<45.	J	<103.	:	-		<33.3	:
Thallium	mg/kg-dry	T	0.25	:	0.17	:	0.27	:	0.23	:	-		0.23	:
Vanadium	mg/kg-dry	T	45.4	:	30.6	:	49.5	:	31.9	:	-		58.2	:
Zinc	mg/kg-dry	T	121.	:	77.	:	145.	:	150.	:	-		168.	:
Volatile Organics														
1,1,1-Trichloroethane	mg/kg-dry	T	<0.009	:	<0.005	:	<0.007	:	<0.012	:	<0.004	:	-	
1,1,2,2-Tetrachloroethane	mg/kg-dry	T	<0.009	:	<0.005	:	<0.007	:	<0.012	:	<0.004	:	-	
1,1,2-Trichloro-1,2,2-trifluoroethane	mg/kg-dry	T	<0.009	:	<0.005	:	<0.007	:	<0.012	:	<0.004	:	-	
1,1,2-Trichloroethane	mg/kg-dry	T	<0.009	:	<0.005	:	<0.007	:	<0.012	:	<0.004	:	-	
1,1-Dichloroethane	mg/kg-dry	T	<0.009	:	<0.005	:	<0.007	:	<0.012	:	<0.004	:	-	
1,1-Dichloroethene	mg/kg-dry	T	<0.009	:	<0.005	:	<0.007	:	<0.012	:	<0.004	:	-	
1,2,4-Trichlorobenzene	mg/kg-dry	T	<0.009	:	<0.005	:	<0.007	:	<0.012	:	<0.004	:	-	
1,2-Dibromo-3-chloropropane	mg/kg-dry	T	<0.009	:	<0.005	:	<0.007	:	<0.012	:	<0.004	:	-	
1,2-Dichlorobenzene	mg/kg-dry	T	<0.009	:	<0.005	:	<0.007	:	<0.012	:	<0.004	:	-	
1,2-Dichloroethane	mg/kg-dry	T	<0.009	:	<0.005	:	<0.007	:	<0.012	:	<0.004	:	-	
1,2-Dichloroethene (total)	mg/kg-dry	T	<0.009	:	<0.005	:	<0.007	:	<0.012	:	<0.004	:	-	
1,2-Dichloropropane	mg/kg-dry	T	<0.009	:	<0.005	:	<0.007	:	<0.012	:	<0.004	:	-	
1,3-Dichlorobenzene	mg/kg-dry	T	<0.009	:	<0.005	:	<0.007	:	<0.012	:	<0.004	:	-	
1,4-Dichlorobenzene	mg/kg-dry	T	<0.009	:	<0.005	:	<0.007	:	<0.012	:	<0.004	:	-	
2-Butanone	mg/kg-dry	T	<0.009	J	<0.005	J	<0.007	J	<0.012	:	<0.004	J	-	
2-Hexanone	mg/kg-dry	T	<0.009	:	<0.005	:	<0.007	:	<0.012	:	<0.004	:	-	
4-Methyl-2-pentanone	mg/kg-dry	T	<0.009	:	<0.005	:	<0.007	:	<0.012	:	<0.004	:	-	
Acetone	mg/kg-dry	T	<0.009	J	<0.015	J	<0.007	J	0.012	J	<0.004	J	-	
Benzene	mg/kg-dry	T	<0.009	:	0.0005	J	<0.007	:	<0.012	:	0.0005	J	-	
Bromodichloromethane	mg/kg-dry	T	<0.009	:	<0.005	:	<0.007	:	<0.012	:	<0.004	:	-	
Bromoform	mg/kg-dry	T	<0.009	:	<0.005	:	<0.007	:	<0.012	:	<0.004	:	-	
Bromomethane	mg/kg-dry	T	<0.009	:	<0.005	:	<0.007	:	<0.012	:	<0.004	:	-	

J = Qualified as estimated during data validation
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T = Total Fraction

Appendix A-7e
Soil - Biased 0-24 inches
Validated Analytical Results

Parameter	Units	Exposure Area Fraction	Site ID / Sample Date / Sample ID					
			MSS1-83 1/9/2003 MSS1-83-T02N-SOL	MSS1-84 1/9/2003 MSS1-84-T02N-SOL	MSS1-85 1/9/2003 MSS1-85-T02N-SOL	MSS1-86 1/9/2003 MSS1-86-T02N-SOL	MSS1-87 1/9/2003 MSS1-87-T02N-SOL	MSS1-87 1/10/2003 MSS1-87-T02N-SOL
			SS1	SS1	SS1	SS1	SS1	SS1
Carbon disulfide	mg/kg-dry	T	0.002 J	0.001 J	<0.007 :	0.004 J	0.0004 J	-
Carbon tetrachloride	mg/kg-dry	T	<0.009 :	<0.005 :	<0.007 :	<0.012 :	<0.004 :	-
Chlorobenzene	mg/kg-dry	T	<0.009 :	<0.005 :	<0.007 :	<0.012 :	<0.004 :	-
Chloroethane	mg/kg-dry	T	<0.009 :	<0.005 :	<0.007 :	<0.012 :	<0.004 :	-
Chloroform	mg/kg-dry	T	<0.009 :	<0.005 :	<0.007 :	<0.012 :	<0.004 :	-
Chloromethane	mg/kg-dry	T	<0.009 :	<0.005 :	<0.007 :	<0.012 :	<0.004 :	-
cis-1,2-Dichloroethene	mg/kg-dry	T	<0.009 :	<0.005 :	<0.007 :	<0.012 :	<0.004 :	-
cis-1,3-Dichloropropene	mg/kg-dry	T	<0.009 :	<0.005 :	<0.007 :	<0.012 :	<0.004 :	-
Dibromochloromethane	mg/kg-dry	T	<0.009 :	<0.005 :	<0.007 :	<0.012 :	<0.004 :	-
Dichlorodifluoromethane	mg/kg-dry	T	<0.009 :	<0.005 :	<0.007 :	<0.012 :	<0.004 :	-
Ethylbenzene	mg/kg-dry	T	<0.009 :	<0.005 :	0.003 J	<0.012 :	<0.004 :	-
Methylene chloride	mg/kg-dry	T	<0.009 :	<0.005 :	<0.007 :	<0.012 :	<0.004 :	-
Styrene	mg/kg-dry	T	<0.009 :	<0.005 :	<0.007 :	<0.012 :	<0.004 :	-
Tetrachloroethene	mg/kg-dry	T	<0.009 :	<0.005 :	<0.007 :	<0.012 :	0.001 J	-
Toluene	mg/kg-dry	T	0.001 J	0.0009 J	0.0007 J	0.002 J	0.0007 J	-
Total Xylene	mg/kg-dry	T	<0.009 :	0.001 J	0.024 :	0.002 J	0.001 J	-
trans-1,2-Dichloroethene	mg/kg-dry	T	<0.009 :	<0.005 :	<0.007 :	<0.012 :	<0.004 :	-
trans-1,3-Dichloropropene	mg/kg-dry	T	<0.009 :	<0.005 :	<0.007 :	<0.012 :	<0.004 :	-
Trichloroethene	mg/kg-dry	T	<0.009 :	<0.005 :	<0.007 :	<0.012 :	<0.004 :	-
Trichlorofluoromethane	mg/kg-dry	T	<0.009 :	<0.005 :	<0.007 :	<0.012 :	<0.004 :	-
Vinyl chloride	mg/kg-dry	T	<0.009 :	<0.005 :	<0.007 :	<0.012 :	<0.004 :	-
Semi-Volatile Organics								
1,1`-Biphenyl	mg/kg-dry	T	<0.35 :	<0.35 :	<0.35 :	<0.37 :	-	<0.36 :
2,4,5-Trichlorophenol	mg/kg-dry	T	<0.87 :	<0.89 :	<0.89 :	<0.92 :	-	<0.9 :
2,4,6-Trichlorophenol	mg/kg-dry	T	<0.35 :	<0.35 :	<0.35 :	<0.37 :	-	<0.36 :
2,4-Dichlorophenol	mg/kg-dry	T	<0.35 :	<0.35 :	<0.35 :	<0.37 :	-	<0.36 :
2,4-Dimethylphenol	mg/kg-dry	T	<0.35 :	<0.35 :	<0.35 :	<0.37 :	-	<0.36 :
2,4-Dinitrophenol	mg/kg-dry	T	<0.87 J	<0.89 :	<0.89 J	<0.92 :	-	<0.9 :
2,4-Dinitrotoluene	mg/kg-dry	T	<0.35 :	<0.35 :	<0.35 :	<0.37 :	-	<0.36 :
2,6-Dinitrotoluene	mg/kg-dry	T	<0.35 :	<0.35 :	<0.35 :	<0.37 :	-	<0.36 :
2-Chloronaphthalene	mg/kg-dry	T	<0.35 :	<0.35 :	<0.35 :	<0.37 :	-	<0.36 :
2-Chlorophenol	mg/kg-dry	T	<0.35 :	<0.35 :	<0.35 :	<0.37 :	-	<0.36 :
2-Methylnaphthalene	mg/kg-dry	T	<0.35 :	<0.35 :	<0.35 :	<0.37 :	-	<0.36 :
2-Methylphenol	mg/kg-dry	T	<0.35 :	<0.35 :	<0.35 :	<0.37 :	-	<0.36 :

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T = Total Fraction

Appendix A-7e
Soil - Biased 0-24 inches
Validated Analytical Results

		Site ID	MSS1-83	MSS1-84	MSS1-85	MSS1-86	MSS1-87	MSS1-87
		Sample Date	1/9/2003	1/9/2003	1/9/2003	1/9/2003	1/9/2003	1/10/2003
		Sample ID	MSS1-83-T02N-SOL	MSS1-84-T02N-SOL	MSS1-85-T02N-SOL	MSS1-86-T02N-SOL	MSS1-87-T02N-SOL	MSS1-87-T02N-SOL
		Exposure Area	SS1	SS1	SS1	SS1	SS1	SS1
Parameter	Units	Fraction						
2-Nitroaniline	mg/kg-dry	T	<0.87 :	<0.89 :	<0.89 :	<0.92 :	-	<0.9 :
2-Nitrophenol	mg/kg-dry	T	<0.35 :	<0.35 :	<0.35 :	<0.37 :	-	<0.36 :
3,3-Dichlorobenzidine	mg/kg-dry	T	<0.35 :	<0.35 :	<0.35 :	<0.37 :	-	<0.36 :
3-Nitroaniline	mg/kg-dry	T	<0.87 :	<0.89 :	<0.89 :	<0.92 :	-	<0.9 :
4,6-Dinitro-2-methylphenol	mg/kg-dry	T	<0.87 :	<0.89 :	<0.89 J	<0.92 :	-	<0.9 :
4-Bromophenyl phenyl ether	mg/kg-dry	T	<0.35 :	<0.35 :	<0.35 :	<0.37 :	-	<0.36 :
4-Chloro-3-methylphenol	mg/kg-dry	T	<0.35 :	<0.35 :	<0.35 :	<0.37 :	-	<0.36 :
4-Chloroaniline	mg/kg-dry	T	<0.35 :	<0.35 :	<0.35 :	<0.37 :	-	<0.36 :
4-Chlorophenyl phenyl ether	mg/kg-dry	T	<0.35 :	<0.35 :	<0.35 :	<0.37 :	-	<0.36 :
4-Methylphenol	mg/kg-dry	T	<0.35 :	<0.35 :	<0.35 :	<0.37 :	-	<0.36 :
4-Nitroaniline	mg/kg-dry	T	<0.87 :	<0.89 :	<0.89 :	<0.92 :	-	<0.9 :
4-Nitrophenol	mg/kg-dry	T	<0.87 J	<0.89 :	<0.89 :	<0.92 :	-	<0.9 :
Acenaphthene	mg/kg-dry	T	<0.35 :	<0.35 :	<0.35 :	<0.37 :	-	<0.36 :
Acenaphthylene	mg/kg-dry	T	<0.35 :	<0.35 :	<0.35 :	<0.37 :	-	<0.36 :
Anthracene	mg/kg-dry	T	<0.35 :	<0.35 :	<0.35 :	<0.37 :	-	<0.36 :
Benzaldehyde	mg/kg-dry	T	<0.35 J	0.53 :	<0.35 :	0.061 J	-	<0.36 :
Benzo(a)anthracene	mg/kg-dry	T	<0.35 :	<0.35 :	<0.35 :	<0.37 :	-	<0.36 :
Benzo(a)pyrene	mg/kg-dry	T	<0.35 :	<0.35 :	<0.35 :	<0.37 :	-	<0.36 :
Benzo(b)fluoranthene	mg/kg-dry	T	<0.35 :	<0.35 :	<0.35 :	<0.37 :	-	<0.36 :
Benzo(g,h,i)perylene	mg/kg-dry	T	<0.35 :	<0.35 :	<0.35 :	<0.37 :	-	<0.36 J
Benzo(k)fluoranthene	mg/kg-dry	T	<0.35 :	<0.35 :	<0.35 :	<0.37 :	-	<0.36 :
Bis(2-chloroethoxy)methane	mg/kg-dry	T	<0.35 :	<0.35 :	<0.35 :	<0.37 :	-	<0.36 :
Bis(2-chloroethyl)ether	mg/kg-dry	T	<0.35 :	<0.35 :	<0.35 :	<0.37 :	-	<0.36 :
Bis(2-ethylhexyl)phthalate	mg/kg-dry	T	0.034 J	0.02 J	0.027 J	0.066 J	-	0.1 J
Butyl benzyl phthalate	mg/kg-dry	T	<0.35 :	<0.35 :	<0.35 :	<0.37 :	-	<0.36 :
Carbazole	mg/kg-dry	T	<0.35 :	<0.35 :	<0.35 :	<0.37 :	-	<0.36 :
Chrysene	mg/kg-dry	T	<0.35 :	<0.35 :	<0.35 :	<0.37 :	-	<0.36 :
Dibenz(a,h)anthracene	mg/kg-dry	T	<0.35 J	<0.35 :	<0.35 :	<0.37 :	-	<0.36 J
Dibenzofuran	mg/kg-dry	T	<0.35 :	<0.35 :	<0.35 :	<0.37 :	-	<0.36 :
Dichlorodiisopropyl ether	mg/kg-dry	T	<0.35 :	<0.35 :	<0.35 :	<0.37 :	-	<0.36 :
Diethylphthalate	mg/kg-dry	T	<0.35 :	<0.35 :	<0.35 :	<0.37 :	-	<0.36 :
Dimethylphthalate	mg/kg-dry	T	<0.35 :	<0.35 :	<0.35 :	<0.37 :	-	<0.36 :
Di-n-Butyl phthalate	mg/kg-dry	T	<0.35 :	<0.35 :	<0.35 :	<0.37 :	-	<0.36 :
Di-n-Octyl phthalate	mg/kg-dry	T	0.032 J	<0.35 :	<0.35 :	<0.37 :	-	<0.36 :

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Appendix A-7e
Soil - Biased 0-24 inches
Validated Analytical Results

Site ID			MSS1-83		MSS1-84		MSS1-85		MSS1-86		MSS1-87		MSS1-87	
Sample Date			1/9/2003		1/9/2003		1/9/2003		1/9/2003		1/9/2003		1/10/2003	
Sample ID			MSS1-83-T02N-SOL		MSS1-84-T02N-SOL		MSS1-85-T02N-SOL		MSS1-86-T02N-SOL		MSS1-87-T02N-SOL		MSS1-87-T02N-SOL	
Exposure Area			SS1		SS1		SS1		SS1		SS1		SS1	
Parameter	**Units**	**Fraction**												
Fluoranthene	mg/kg-dry	T	<0.35	:	<0.35	:	<0.35	:	<0.37	:	-		<0.36	:
Fluorene	mg/kg-dry	T	<0.35	:	<0.35	:	<0.35	:	<0.37	:	-		<0.36	:
Hexachlorobenzene	mg/kg-dry	T	<0.35	:	<0.35	:	<0.35	:	<0.37	:	-		<0.36	:
Hexachlorobutadiene	mg/kg-dry	T	<0.35	:	<0.35	:	<0.35	:	<0.37	:	-		<0.36	:
Hexachlorocyclopentadiene	mg/kg-dry	T	<0.35	:	<0.35	:	<0.35	:	<0.37	:	-		<0.36	J
Hexachloroethane	mg/kg-dry	T	<0.35	:	<0.35	:	<0.35	:	<0.37	:	-		<0.36	:
Indeno(1,2,3-cd)pyrene	mg/kg-dry	T	<0.35	:	<0.35	:	<0.35	:	<0.37	:	-		<0.36	J
Isophorone	mg/kg-dry	T	<0.35	:	<0.35	:	<0.35	:	<0.37	:	-		<0.36	:
Naphthalene	mg/kg-dry	T	<0.35	:	<0.35	:	<0.35	:	<0.37	:	-		<0.36	:
Nitrobenzene	mg/kg-dry	T	<0.35	:	<0.35	:	<0.35	:	<0.37	:	-		<0.36	:
N-Nitrosodi-n-propylamine	mg/kg-dry	T	<0.35	:	<0.35	:	<0.35	:	<0.37	:	-		<0.36	:
N-Nitrosodiphenylamine	mg/kg-dry	T	<0.35	:	<0.35	:	<0.35	:	<0.37	:	-		<0.36	:
Pentachlorophenol	mg/kg-dry	T	<0.87	J	<0.89	:	<0.89	J	<0.92	:	-		<0.9	J
Phenanthrene	mg/kg-dry	T	<0.35	:	<0.35	:	<0.35	:	<0.37	:	-		<0.36	:
Phenol	mg/kg-dry	T	<0.35	:	<0.35	:	<0.35	:	<0.37	:	-		<0.36	:
Pyrene	mg/kg-dry	T	<0.35	:	0.017	J	<0.35	:	<0.37	:	-		<0.36	:
Pesticides-PCBs														
Aroclor 1016	mg/kg-dry	T	<0.035	:	<0.035	:	<0.035	:	<0.037	:	-		<0.036	:
Aroclor 1221	mg/kg-dry	T	<0.07	:	<0.072	:	<0.072	:	<0.074	:	-		<0.073	:
Aroclor 1232	mg/kg-dry	T	<0.035	:	<0.035	:	<0.035	:	<0.037	:	-		<0.036	:
Aroclor 1242	mg/kg-dry	T	<0.035	:	<0.035	:	<0.035	:	<0.037	:	-		<0.036	:
Aroclor 1248	mg/kg-dry	T	<0.035	:	<0.035	:	<0.035	:	<0.037	:	-		1.7	:
Aroclor 1254	mg/kg-dry	T	0.1	J	0.044	:	0.088	J	0.39	:	-		1.6	:
Aroclor 1260	mg/kg-dry	T	<0.035	:	<0.035	:	<0.035	:	<0.037	:	-		<0.036	:

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Appendix A-7e
Soil - Biased 0-24 inches
Validated Analytical Results

Parameter	Units	Exposure Area Fraction	Site ID / Sample Date / Sample ID		MSS1-88 1/9/2003 MSS1-88-T02N-SOL SS1		MSS1-88 1/10/2003 MSS1-88-T02N-SOL SS1		MSS1-89 1/12/2003 MSS1-89-T02N-SOL SS1		MSS1-90 1/12/2003 MSS1-90-T02N-SOL SS1		MSS1-91 1/12/2003 MSS1-91-T02N-SOL SS1		MSS1-92 1/17/2003 MSS1-92-T02N-SOL SS1	
General Chemistry																
Ammonia	mg/kg-dry	T		-		3.2	:	13.3	:	10.	:	14.7	:	11.6	:
Chloride	mg/kg-dry	T		-		3.	:	10.8	:	2.4	:	184.	:	3.8	:
Fluoride	mg/kg-dry	T		-		0.89	J	2.5	J	5.4	J	2.5	J	0.7	J
Nitrate	mg/kg-dry	T		-		<2.2	J	<2.3	J	<2.2	J	2.5	J	3.4	J
Phosphorus	mg/kg-dry	T		-		1220.	:	1430.	:	957.	:	750.	:	1380.	:
Sulfate	mg/kg-dry	T		-		14.3	:	124.	:	538.	:	46.9	J	973.	J
Total Kjeldahl Nitrogen	mg/kg-dry	T		-		166.	:	173.	:	34.3	:	113.	:	91.8	:
Total Organic Carbon	mg/kg-dry	T		-		2140.	J	<111.	J	<108.	J	4800.	J	2190.	J
Laboratory Parameters															
pH	SU	T		-		7.7	:	6.8	:	6.1	:	7.3	:	6.8	:
Solids, Percent	%	T		93.8	:	91.8	:	90.8	:	93.3	:	95.4	:	94.	:
Specific Conductance	umhos/cm	T		-		178.	:	613.	:	1750.	:	1110.	:	1710.	J
Geotechnical															
Organic Soils	%	T		-		2.	:	1.5	:	1.	:	1.5	:	2.	:
Physical Properties															
Cation-Exchange Capacity	meq/100g	T		-		11.9	:	10.3	:	9.8	:	5.6	:	17.8	:
Sodium Absorption Ratio	ratio	T		-		0.19	:	0.45	:	0.13	:	3.86	:	0.1	:
Metals															
Aluminum	mg/kg-dry	T		-		17100.	:	14100.	:	13200.	:	7850.	:	17800.	:
Antimony	mg/kg-dry	T		-		<0.28	J	<0.33	J	<0.3	J	<0.3	J	<0.28	J
Arsenic	mg/kg-dry	T		-		3.9	J	4.4	J	3.1	J	3.2	J	3.3	J
Barium	mg/kg-dry	T		-		84.4	:	73.5	:	113.	:	39.4	:	104.	:
Beryllium	mg/kg-dry	T		-		1.	:	1.4	:	1.4	:	1.2	:	1.9	:
Boron	mg/kg-dry	T		-		<2.7	:	<0.88	:	<0.77	:	2.9	J	<0.25	J
Cadmium	mg/kg-dry	T		-		<0.04	:	2.2	:	0.99	J	1.4	J	0.91	:
Calcium	mg/kg-dry	T		-		8940.	:	8930.	:	16300.	:	9890.	:	16400.	:
Chromium	mg/kg-dry	T		-		70.8	J	44.4	J	28.3	J	62.3	J	53.3	J
Cobalt	mg/kg-dry	T		-		17.4	:	12.6	:	8.2	:	6.7	:	14.9	:
Copper	mg/kg-dry	T		-		65.9	J	548.	J	602.	J	117.	J	118.	:
Iron	mg/kg-dry	T		-		31900.	:	28800.	:	23200.	:	20600.	:	25500.	:
Lead	mg/kg-dry	T		-		51.	:	872.	:	357.	:	215.	:	94.3	:
Magnesium	mg/kg-dry	T		-		12500.	:	12100.	:	9690.	:	4430.	:	12200.	:
Manganese	mg/kg-dry	T		-		739.	:	1190.	:	1040.	:	2030.	:	1520.	:

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T = Total Fraction

Appendix A-7e
Soil - Biased 0-24 inches
Validated Analytical Results

Parameter	Units	Exposure Area Fraction	Site ID	Sample Date	Sample ID	Exposure Area	MSS1-88 1/9/2003 MSS1-88-T02N-SOL SS1	MSS1-88 1/10/2003 MSS1-88-T02N-SOL SS1	MSS1-89 1/12/2003 MSS1-89-T02N-SOL SS1	MSS1-90 1/12/2003 MSS1-90-T02N-SOL SS1	MSS1-91 1/12/2003 MSS1-91-T02N-SOL SS1	MSS1-92 1/17/2003 MSS1-92-T02N-SOL SS1
Mercury	mg/kg-dry	T					-	<0.018 :	<0.018 :	0.026 :	<0.016 :	<0.017 :
Molybdenum	mg/kg-dry	T					-	279. :	9610. :	10900. :	645. :	1430. :
Nickel	mg/kg-dry	T					-	49.1 :	39.6 :	26.3 :	20.5 :	36.8 :
Potassium	mg/kg-dry	T					-	4320. J	2580. J	3280. J	2230. J	4270. J
Selenium	mg/kg-dry	T					-	<0.74 J	2.4 J	2.2 J	1.4 J	1.1 J
Silver	mg/kg-dry	T					-	0.72 :	5.6 :	2.7 :	2.8 :	0.74 :
Sodium	mg/kg-dry	T					-	<32.7 :	<28.2 J	<55.3 J	347. :	<30.6 :
Thallium	mg/kg-dry	T					-	0.28 :	0.72 :	0.5 :	0.2 :	0.49 :
Vanadium	mg/kg-dry	T					-	58.4 :	116. :	101. :	31.5 :	62.2 :
Zinc	mg/kg-dry	T					-	145. :	398. :	214. :	242. :	182. :
Volatile Organics												
1,1,1-Trichloroethane	mg/kg-dry	T					<0.006 :	-	<0.009 :	<0.012 :	<0.011 :	<0.006 :
1,1,2,2-Tetrachloroethane	mg/kg-dry	T					<0.006 :	-	<0.009 :	<0.012 :	<0.011 :	<0.006 :
1,1,2-Trichloro-1,2,2-trifluoroethane	mg/kg-dry	T					<0.006 :	-	<0.009 :	<0.012 :	<0.011 :	<0.006 :
1,1,2-Trichloroethane	mg/kg-dry	T					<0.006 :	-	<0.009 :	<0.012 :	<0.011 :	<0.006 :
1,1-Dichloroethane	mg/kg-dry	T					<0.006 :	-	<0.009 :	<0.012 :	<0.011 :	<0.006 :
1,1-Dichloroethene	mg/kg-dry	T					<0.006 :	-	<0.009 :	<0.012 :	<0.011 :	<0.006 :
1,2,4-Trichlorobenzene	mg/kg-dry	T					<0.006 :	-	<0.009 :	<0.012 :	<0.011 :	<0.006 :
1,2-Dibromo-3-chloropropane	mg/kg-dry	T					<0.006 :	-	<0.009 :	<0.012 :	<0.011 :	<0.006 :
1,2-Dichlorobenzene	mg/kg-dry	T					<0.006 :	-	<0.009 :	<0.012 :	<0.011 :	<0.006 :
1,2-Dichloroethane	mg/kg-dry	T					<0.006 :	-	<0.009 :	<0.012 :	<0.011 :	<0.006 :
1,2-Dichloroethene (total)	mg/kg-dry	T					<0.006 :	-	<0.009 :	<0.012 :	<0.011 :	<0.006 :
1,2-Dichloropropane	mg/kg-dry	T					<0.006 :	-	<0.009 :	<0.012 :	<0.011 :	<0.006 :
1,3-Dichlorobenzene	mg/kg-dry	T					<0.006 :	-	<0.009 :	<0.012 :	<0.011 :	<0.006 :
1,4-Dichlorobenzene	mg/kg-dry	T					<0.006 :	-	<0.009 :	<0.012 :	<0.011 :	<0.006 :
2-Butanone	mg/kg-dry	T					<0.006 J	-	<0.009 :	<0.012 :	0.005 J	0.052 :
2-Hexanone	mg/kg-dry	T					<0.006 :	-	<0.009 :	<0.012 :	<0.011 :	<0.006 :
4-Methyl-2-pentanone	mg/kg-dry	T					<0.006 :	-	<0.009 :	<0.012 :	<0.011 :	0.027 :
Acetone	mg/kg-dry	T					<0.015 J	-	0.002 J	0.007 J	0.022 :	0.086 :
Benzene	mg/kg-dry	T					0.0007 J	-	<0.009 :	<0.012 :	<0.011 :	<0.006 :
Bromodichloromethane	mg/kg-dry	T					<0.006 :	-	<0.009 :	<0.012 :	<0.011 :	<0.006 :
Bromoform	mg/kg-dry	T					<0.006 :	-	<0.009 :	<0.012 :	<0.011 :	<0.006 :
Bromomethane	mg/kg-dry	T					<0.006 :	-	<0.009 :	<0.012 :	<0.011 :	<0.006 :
Carbon disulfide	mg/kg-dry	T					0.0006 J	-	<0.009 :	<0.012 :	<0.011 :	<0.006 :

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Appendix A-7e
Soil - Biased 0-24 inches
Validated Analytical Results

Parameter	Units	Exposure Area Fraction	Site ID / Sample Date / Sample ID					
			MSS1-88 1/9/2003 MSS1-88-T02N-SOL	MSS1-88 1/10/2003 MSS1-88-T02N-SOL	MSS1-89 1/12/2003 MSS1-89-T02N-SOL	MSS1-90 1/12/2003 MSS1-90-T02N-SOL	MSS1-91 1/12/2003 MSS1-91-T02N-SOL	MSS1-92 1/17/2003 MSS1-92-T02N-SOL
			SS1	SS1	SS1	SS1	SS1	SS1
Carbon tetrachloride	mg/kg-dry	T	<0.006 :	-	<0.009 :	<0.012 :	<0.011 :	<0.006 :
Chlorobenzene	mg/kg-dry	T	<0.006 :	-	<0.009 :	<0.012 :	<0.011 :	<0.006 :
Chloroethane	mg/kg-dry	T	<0.006 :	-	<0.009 :	<0.012 :	<0.011 :	<0.006 :
Chloroform	mg/kg-dry	T	<0.006 :	-	<0.009 :	<0.012 :	<0.011 :	<0.006 :
Chloromethane	mg/kg-dry	T	<0.006 :	-	<0.009 :	<0.012 :	<0.011 :	<0.006 :
cis-1,2-Dichloroethene	mg/kg-dry	T	<0.006 :	-	<0.009 :	<0.012 :	<0.011 :	<0.006 :
cis-1,3-Dichloropropene	mg/kg-dry	T	<0.006 :	-	<0.009 :	<0.012 :	<0.011 :	<0.006 :
Dibromochloromethane	mg/kg-dry	T	<0.006 :	-	<0.009 :	<0.012 :	<0.011 :	<0.006 :
Dichlorodifluoromethane	mg/kg-dry	T	<0.006 :	-	<0.009 :	<0.012 :	<0.011 :	<0.006 :
Ethylbenzene	mg/kg-dry	T	0.0007 J	-	<0.009 :	<0.012 :	<0.011 :	0.001 J
Methylene chloride	mg/kg-dry	T	<0.006 :	-	<0.009 :	<0.012 :	<0.011 :	<0.006 :
Styrene	mg/kg-dry	T	<0.006 :	-	<0.009 :	<0.012 :	<0.011 :	<0.006 :
Tetrachloroethene	mg/kg-dry	T	<0.006 :	-	<0.009 :	<0.012 :	<0.011 :	<0.006 :
Toluene	mg/kg-dry	T	0.0009 J	-	<0.009 :	<0.012 :	0.002 J	<0.006 :
Total Xylene	mg/kg-dry	T	0.002 J	-	<0.009 :	<0.012 :	0.001 J	0.008 :
trans-1,2-Dichloroethene	mg/kg-dry	T	<0.006 :	-	<0.009 :	<0.012 :	<0.011 :	<0.006 :
trans-1,3-Dichloropropene	mg/kg-dry	T	<0.006 :	-	<0.009 :	<0.012 :	<0.011 :	<0.006 :
Trichloroethene	mg/kg-dry	T	<0.006 :	-	<0.009 :	<0.012 :	<0.011 :	<0.006 :
Trichlorofluoromethane	mg/kg-dry	T	<0.006 :	-	<0.009 :	<0.012 :	<0.011 :	<0.006 :
Vinyl chloride	mg/kg-dry	T	<0.006 :	-	<0.009 :	<0.012 :	<0.011 :	<0.006 :
Semi-Volatile Organics								
1,1`-Biphenyl	mg/kg-dry	T	-	<0.36 :	<0.36 :	<0.35 :	<0.35 :	<0.7 :
2,4,5-Trichlorophenol	mg/kg-dry	T	-	<0.9 :	<0.91 :	<0.89 :	<0.87 :	<1.8 :
2,4,6-Trichlorophenol	mg/kg-dry	T	-	<0.36 :	<0.36 :	<0.35 :	<0.35 :	<0.7 :
2,4-Dichlorophenol	mg/kg-dry	T	-	<0.36 :	<0.36 :	<0.35 :	<0.35 :	<0.7 :
2,4-Dimethylphenol	mg/kg-dry	T	-	<0.36 :	<0.36 :	<0.35 :	<0.35 :	<0.7 :
2,4-Dinitrophenol	mg/kg-dry	T	-	<0.9 :	<0.91 J	<0.89 J	<0.87 J	<1.8 :
2,4-Dinitrotoluene	mg/kg-dry	T	-	<0.36 :	<0.36 :	<0.35 :	<0.35 :	<0.7 :
2,6-Dinitrotoluene	mg/kg-dry	T	-	<0.36 :	<0.36 :	<0.35 :	<0.35 :	<0.7 :
2-Chloronaphthalene	mg/kg-dry	T	-	<0.36 :	<0.36 :	<0.35 :	<0.35 :	<0.7 :
2-Chlorophenol	mg/kg-dry	T	-	<0.36 :	<0.36 :	<0.35 :	<0.35 :	<0.7 :
2-Methylnaphthalene	mg/kg-dry	T	-	<0.36 :	<0.36 :	<0.35 :	<0.35 :	<0.7 :
2-Methylphenol	mg/kg-dry	T	-	<0.36 :	<0.36 :	<0.35 :	<0.35 :	<0.7 :
2-Nitroaniline	mg/kg-dry	T	-	<0.9 :	<0.91 :	<0.89 :	<0.87 :	<1.8 :

J = Qualified as estimated during data validation
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T = Total Fraction

Appendix A-7e
Soil - Biased 0-24 inches
Validated Analytical Results

Parameter	Units	Exposure Area Fraction	Site ID / Sample Date / Sample ID					
			MSS1-88 1/9/2003 MSS1-88-T02N-SOL	MSS1-88 1/10/2003 MSS1-88-T02N-SOL	MSS1-89 1/12/2003 MSS1-89-T02N-SOL	MSS1-90 1/12/2003 MSS1-90-T02N-SOL	MSS1-91 1/12/2003 MSS1-91-T02N-SOL	MSS1-92 1/17/2003 MSS1-92-T02N-SOL
			SS1	SS1	SS1	SS1	SS1	SS1
2-Nitrophenol	mg/kg-dry	T	-	<0.36 :	<0.36 :	<0.35 :	<0.35 :	<0.7 :
3,3-Dichlorobenzidine	mg/kg-dry	T	-	<0.36 :	<0.36 :	<0.35 :	<0.35 :	<0.7 :
3-Nitroaniline	mg/kg-dry	T	-	<0.9 :	<0.91 :	<0.89 :	<0.87 :	<1.8 J
4,6-Dinitro-2-methylphenol	mg/kg-dry	T	-	<0.9 :	<0.91 :	<0.89 :	<0.87 :	<1.8 :
4-Bromophenyl phenyl ether	mg/kg-dry	T	-	<0.36 :	<0.36 :	<0.35 :	<0.35 :	<0.7 :
4-Chloro-3-methylphenol	mg/kg-dry	T	-	<0.36 :	<0.36 :	<0.35 :	<0.35 :	<0.7 :
4-Chloroaniline	mg/kg-dry	T	-	<0.36 :	<0.36 :	<0.35 :	<0.35 :	<0.7 :
4-Chlorophenyl phenyl ether	mg/kg-dry	T	-	<0.36 :	<0.36 :	<0.35 :	<0.35 :	<0.7 :
4-Methylphenol	mg/kg-dry	T	-	<0.36 :	<0.36 :	<0.35 :	<0.35 :	<0.7 :
4-Nitroaniline	mg/kg-dry	T	-	<0.9 :	<0.91 :	<0.89 :	<0.87 :	<1.8 :
4-Nitrophenol	mg/kg-dry	T	-	<0.9 :	<0.91 J	<0.89 J	<0.87 J	<1.8 :
Acenaphthene	mg/kg-dry	T	-	<0.36 :	<0.36 :	<0.35 :	<0.35 :	<0.7 :
Acenaphthylene	mg/kg-dry	T	-	<0.36 :	<0.36 :	<0.35 :	<0.35 :	<0.7 :
Anthracene	mg/kg-dry	T	-	<0.36 :	<0.36 :	<0.35 :	<0.35 :	<0.7 :
Benzaldehyde	mg/kg-dry	T	-	<0.36 :	<0.36 J	<0.35 J	<0.35 J	<0.7 :
Benzo(a)anthracene	mg/kg-dry	T	-	<0.36 :	<0.36 :	<0.35 :	<0.35 :	<0.7 :
Benzo(a)pyrene	mg/kg-dry	T	-	<0.36 :	<0.36 :	<0.35 :	<0.35 :	<0.7 :
Benzo(b)fluoranthene	mg/kg-dry	T	-	<0.36 :	<0.36 :	<0.35 :	<0.35 :	<0.7 :
Benzo(g,h,i)perylene	mg/kg-dry	T	-	<0.36 J	<0.36 :	<0.35 :	<0.35 :	<0.7 :
Benzo(k)fluoranthene	mg/kg-dry	T	-	<0.36 :	<0.36 :	<0.35 :	<0.35 :	<0.7 :
Bis(2-chloroethoxy)methane	mg/kg-dry	T	-	<0.36 :	<0.36 :	<0.35 :	<0.35 :	<0.7 :
Bis(2-chloroethyl)ether	mg/kg-dry	T	-	<0.36 :	<0.36 :	<0.35 :	<0.35 :	<0.7 :
Bis(2-ethylhexyl)phthalate	mg/kg-dry	T	-	0.024 J	0.024 J	<0.35 :	0.18 J	0.12 J
Butyl benzyl phthalate	mg/kg-dry	T	-	<0.36 :	<0.36 :	<0.35 :	<0.35 :	<0.7 :
Carbazole	mg/kg-dry	T	-	<0.36 :	<0.36 :	<0.35 :	<0.35 :	<0.7 :
Chrysene	mg/kg-dry	T	-	<0.36 :	<0.36 :	<0.35 :	<0.35 :	<0.7 :
Dibenz(a,h)anthracene	mg/kg-dry	T	-	<0.36 J	<0.36 J	<0.35 J	<0.35 J	<0.7 :
Dibenzofuran	mg/kg-dry	T	-	<0.36 :	<0.36 :	<0.35 :	<0.35 :	<0.7 :
Dichlorodiisopropyl ether	mg/kg-dry	T	-	<0.36 :	<0.36 :	<0.35 :	<0.35 :	<0.7 :
Diethylphthalate	mg/kg-dry	T	-	<0.36 :	<0.36 :	<0.35 :	<0.35 :	<0.7 :
Dimethylphthalate	mg/kg-dry	T	-	<0.36 :	<0.36 :	<0.35 :	<0.35 :	<0.7 :
Di-n-Butyl phthalate	mg/kg-dry	T	-	<0.36 :	<0.36 :	<0.35 :	0.031 J	<0.7 :
Di-n-Octyl phthalate	mg/kg-dry	T	-	<0.36 :	<0.36 :	<0.35 :	<0.35 :	<0.7 :
Fluoranthene	mg/kg-dry	T	-	<0.36 :	<0.36 :	<0.35 :	<0.35 :	<0.7 :

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Appendix A-7e
Soil - Biased 0-24 inches
Validated Analytical Results

Parameter	Units	Exposure Area Fraction	Site ID / Sample Date / Sample ID					
			MSS1-88 1/9/2003 MSS1-88-T02N-SOL SS1	MSS1-88 1/10/2003 MSS1-88-T02N-SOL SS1	MSS1-89 1/12/2003 MSS1-89-T02N-SOL SS1	MSS1-90 1/12/2003 MSS1-90-T02N-SOL SS1	MSS1-91 1/12/2003 MSS1-91-T02N-SOL SS1	MSS1-92 1/17/2003 MSS1-92-T02N-SOL SS1
Fluorene	mg/kg-dry	T	-	<0.36 :	<0.36 :	<0.35 :	<0.35 :	<0.7 :
Hexachlorobenzene	mg/kg-dry	T	-	<0.36 :	<0.36 :	<0.35 :	<0.35 J	<0.7 :
Hexachlorobutadiene	mg/kg-dry	T	-	<0.36 :	<0.36 :	<0.35 :	<0.35 :	<0.7 :
Hexachlorocyclopentadiene	mg/kg-dry	T	-	<0.36 J	<0.36 :	<0.35 :	<0.35 :	<0.7 :
Hexachloroethane	mg/kg-dry	T	-	<0.36 :	<0.36 :	<0.35 :	<0.35 :	<0.7 :
Indeno(1,2,3-cd)pyrene	mg/kg-dry	T	-	<0.36 J	<0.36 :	<0.35 :	<0.35 :	<0.7 :
Isophorone	mg/kg-dry	T	-	<0.36 :	<0.36 :	<0.35 :	<0.35 :	<0.7 :
Naphthalene	mg/kg-dry	T	-	<0.36 :	<0.36 :	<0.35 :	<0.35 :	<0.7 :
Nitrobenzene	mg/kg-dry	T	-	<0.36 :	<0.36 :	<0.35 :	<0.35 :	<0.7 :
N-Nitrosodi-n-propylamine	mg/kg-dry	T	-	<0.36 :	<0.36 :	<0.35 :	<0.35 :	<0.7 :
N-Nitrosodiphenylamine	mg/kg-dry	T	-	<0.36 :	<0.36 :	<0.35 :	<0.35 :	<0.7 :
Pentachlorophenol	mg/kg-dry	T	-	<0.9 J	<0.91 J	<0.89 J	<0.87 :	<1.8 :
Phenanthrene	mg/kg-dry	T	-	<0.36 :	<0.36 :	<0.35 :	<0.35 :	<0.7 :
Phenol	mg/kg-dry	T	-	<0.36 :	<0.36 :	<0.35 :	0.46 :	<0.7 :
Pyrene	mg/kg-dry	T	-	<0.36 :	<0.36 :	<0.35 :	<0.35 :	<0.7 :
Pesticides-PCBs								
Aroclor 1016	mg/kg-dry	T	-	<0.036 :	<0.036 :	<0.035 :	<0.035 :	<0.035 :
Aroclor 1221	mg/kg-dry	T	-	<0.073 :	<0.074 :	<0.072 :	<0.071 :	<0.071 :
Aroclor 1232	mg/kg-dry	T	-	<0.036 :	<0.036 :	<0.035 :	<0.035 :	<0.035 :
Aroclor 1242	mg/kg-dry	T	-	<0.036 :	<0.036 :	<0.035 :	<0.035 :	<0.035 :
Aroclor 1248	mg/kg-dry	T	-	0.43 :	0.37 :	0.59 :	<0.035 :	<0.035 :
Aroclor 1254	mg/kg-dry	T	-	0.39 J	<0.036 :	<0.035 :	0.14 :	0.02 J
Aroclor 1260	mg/kg-dry	T	-	<0.036 :	<0.036 :	0.04 :	0.068 :	<0.035 :

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Appendix A-7e
Soil - Biased 0-24 inches
Validated Analytical Results

Parameter	Units	Exposure Area Fraction	Site ID / Sample Date / Sample ID / Exposure Area		MSS1-93 1/17/2003 MSS1-93-T02N-SOL SS1		MSS1-95 1/16/2003 MSS1-95-T02N-SOL SS1		MSS1-96 1/17/2003 MSS1-96-T02N-SOL SS1		MSS1-97 1/16/2003 MSS1-97-T02N-SOL SS1		MSS1-98 1/16/2003 MSS1-98-T02N-SOL SS1		MSS1-99 1/19/2003 MSS1-99-T02N-SOL SS1	
General Chemistry																
Ammonia	mg/kg-dry	T			10.1	:	9.7	:	11.8	J	11.2	:	10.	:	8.8	:
Chloride	mg/kg-dry	T			9.	:	3.1	:	5.3	:	3.8	:	5.6	:	19.2	:
Fluoride	mg/kg-dry	T			1.2	J	0.8	J	2.1	J	4.1	J	3.7	J	1.5	J
Nitrate	mg/kg-dry	T			6.7	J	<2.2	J	<2.1	J	<2.2	J	<2.1	J	15.5	J
Phosphorus	mg/kg-dry	T			1430.	:	1690.	:	1060.	:	1270.	:	979.	:	1560.	:
Sulfate	mg/kg-dry	T			49.8	:	2840.	:	316.	:	16700.	:	113.	:	3370.	J
Total Kjeldahl Nitrogen	mg/kg-dry	T			53.4	:	62.8	J	58.4	:	44.	:	63.7	:	37.3	J
Total Organic Carbon	mg/kg-dry	T			1840.	J	1990.	J	1120.	J	760.	J	259.	J	1350.	J
Laboratory Parameters																
pH	SU	T			7.2	:	7.9	:	7.6	:	7.2	:	8.2	:	7.4	:
Solids, Percent	%	T			95.5	:	95.1	:	95.7	:	93.	:	95.9	:	98.	:
Solids, Percent - VOCs Only	%	T			-		-		96.	:	-		-		-	
Specific Conductance	umhos/cm	T			590.	J	1900.	J	631.	J	1820.	J	1690.	J	2020.	J
Geotechnical																
Organic Soils	%	T			1.5	:	1.6	:	1.2	:	0.9	:	0.9	:	1.	:
Physical Properties																
Cation-Exchange Capacity	meq/100g	T			8.6	:	9.1	:	19.5	:	13.	:	11.2	:	2.8	:
Sodium Absorption Ratio	ratio	T			0.34	:	0.09	:	0.26	:	0.17	:	0.18	:	0.41	:
Metals																
Aluminum	mg/kg-dry	T			12900.	:	9070.	J	10300.	:	11500.	:	8530.	:	12900.	:
Antimony	mg/kg-dry	T			<0.28	J	<0.29	J	<0.3	J	<0.3	J	<0.29	J	<0.29	J
Arsenic	mg/kg-dry	T			3.8	J	10.5	J	1.7	J	2.8	J	1.8	J	1.7	J
Barium	mg/kg-dry	T			64.8	:	56.1	J	52.	:	56.8	:	40.4	:	80.9	:
Beryllium	mg/kg-dry	T			1.3	:	1.	J	1.2	:	1.9	:	2.7	:	2.2	:
Boron	mg/kg-dry	T			4.9	J	<2.6	:	<0.26	J	<3.1	:	3.7	:	<0.23	J
Cadmium	mg/kg-dry	T			0.32	J	0.34	J	0.44	J	0.42	:	1.3	:	0.76	:
Calcium	mg/kg-dry	T			9350.	:	14600.	J	11200.	:	13900.	:	9980.	:	16200.	:
Chromium	mg/kg-dry	T			34.6	J	38.4	J	48.5	J	44.8	J	27.2	J	71.1	J
Cobalt	mg/kg-dry	T			10.	:	7.	:	9.7	:	5.1	:	3.2	:	6.2	:
Copper	mg/kg-dry	T			62.5	J	114.	:	91.5	J	103.	J	92.9	J	112.	:
Iron	mg/kg-dry	T			20300.	:	14700.	J	27800.	:	17800.	:	11300.	:	19600.	:
Lead	mg/kg-dry	T			49.1	:	36.7	J	69.6	:	75.3	:	123.	:	55.8	:
Magnesium	mg/kg-dry	T			9390.	:	7350.	J	7830.	:	4680.	:	4380.	:	9590.	:

J = Qualified as estimated during data validation

R = Qualified as rejected value from data validation and results are considered unusable for any purpose

T = Total Fraction

Appendix A-7e
Soil - Biased 0-24 inches
Validated Analytical Results

Parameter	Units	Exposure Area Fraction	Site ID / Sample Date / Sample ID											
			MSS1-93 1/17/2003 MSS1-93-T02N-SOL		MSS1-95 1/16/2003 MSS1-95-T02N-SOL		MSS1-96 1/17/2003 MSS1-96-T02N-SOL		MSS1-97 1/16/2003 MSS1-97-T02N-SOL		MSS1-98 1/16/2003 MSS1-98-T02N-SOL		MSS1-99 1/19/2003 MSS1-99-T02N-SOL	
			SS1		SS1		SS1		SS1		SS1		SS1	
Manganese	mg/kg-dry	T	774.	:	582.	J	1280.	:	761.	:	2670.	:	755.	:
Mercury	mg/kg-dry	T	<0.016	:	<0.017	:	<0.015	:	<0.018	:	<0.015	:	<0.017	:
Molybdenum	mg/kg-dry	T	434.	:	1510.	:	636.	:	1520.	:	1410.	:	2930.	:
Nickel	mg/kg-dry	T	23.4	:	26.8	J	33.4	:	33.8	:	13.5	:	45.5	:
Potassium	mg/kg-dry	T	3340.	J	3900.	J	3350.	J	3800.	J	3100.	J	5010.	J
Selenium	mg/kg-dry	T	0.84	J	<0.76	J	<0.8	J	<0.8	J	0.77	J	1.1	J
Silver	mg/kg-dry	T	0.39	:	2.7	J	0.61	:	1.6	:	1.1	:	0.84	:
Sodium	mg/kg-dry	T	<47.	:	<28.9	:	<31.7	:	<136.	:	<56.5	:	<38.1	:
Thallium	mg/kg-dry	T	0.45	:	0.47	:	0.32	:	0.37	:	0.4	:	0.5	:
Vanadium	mg/kg-dry	T	39.	:	41.8	J	48.1	:	33.5	:	28.8	:	57.9	:
Zinc	mg/kg-dry	T	112.	:	99.7	J	146.	:	91.8	:	188.	:	183.	:
Volatile Organics														
1,1,1-Trichloroethane	mg/kg-dry	T	<0.007	:	<0.007	:	<0.012	:	-		<0.008	:	<0.008	:
1,1,2,2-Tetrachloroethane	mg/kg-dry	T	<0.007	:	<0.007	:	<0.012	:	-		<0.008	:	<0.008	:
1,1,2-Trichloro-1,2,2-trifluoroethane	mg/kg-dry	T	<0.007	:	<0.007	:	<0.012	:	-		<0.008	:	<0.008	:
1,1,2-Trichloroethane	mg/kg-dry	T	<0.007	:	<0.007	:	<0.012	:	-		<0.008	:	<0.008	:
1,1-Dichloroethane	mg/kg-dry	T	<0.007	:	<0.007	:	<0.012	:	-		<0.008	:	<0.008	:
1,1-Dichloroethene	mg/kg-dry	T	<0.007	:	<0.007	J	<0.012	:	-		<0.008	:	<0.008	:
1,2,4-Trichlorobenzene	mg/kg-dry	T	<0.007	:	<0.007	:	<0.012	:	-		<0.008	:	<0.008	:
1,2-Dibromo-3-chloropropane	mg/kg-dry	T	<0.007	:	<0.007	:	<0.012	:	-		<0.008	:	<0.008	:
1,2-Dichlorobenzene	mg/kg-dry	T	<0.007	:	<0.007	:	<0.012	:	-		<0.008	:	<0.008	:
1,2-Dichloroethane	mg/kg-dry	T	<0.007	:	<0.007	:	<0.012	:	-		<0.008	:	<0.008	:
1,2-Dichloroethene (total)	mg/kg-dry	T	<0.007	:	<0.007	:	<0.012	:	-		<0.008	:	<0.008	:
1,2-Dichloropropane	mg/kg-dry	T	<0.007	:	<0.007	:	<0.012	:	-		<0.008	:	<0.008	:
1,3-Dichlorobenzene	mg/kg-dry	T	<0.007	:	<0.007	:	<0.012	:	-		<0.008	:	<0.008	:
1,4-Dichlorobenzene	mg/kg-dry	T	<0.007	:	<0.007	:	<0.012	:	-		<0.008	:	<0.008	:
2-Butanone	mg/kg-dry	T	<0.007	:	<0.007	:	0.018	J	-		<0.008	:	0.003	J
2-Hexanone	mg/kg-dry	T	<0.007	:	<0.007	:	<0.012	:	-		<0.008	:	<0.008	:
4-Methyl-2-pentanone	mg/kg-dry	T	<0.007	:	<0.007	:	<0.012	:	-		<0.008	:	<0.008	:
Acetone	mg/kg-dry	T	<0.007	:	0.002	J	0.064	J	-		0.002	J	0.008	J
Benzene	mg/kg-dry	T	<0.007	:	<0.007	:	<0.012	:	-		<0.008	:	<0.008	:
Bromodichloromethane	mg/kg-dry	T	<0.007	:	<0.007	:	<0.012	:	-		<0.008	:	<0.008	:
Bromoform	mg/kg-dry	T	<0.007	:	<0.007	:	<0.012	:	-		<0.008	:	<0.008	:
Bromomethane	mg/kg-dry	T	<0.007	:	<0.007	:	<0.012	:	-		<0.008	:	<0.008	:

J = Qualified as estimated during data validation
R = Qualified as rejected value from data validation and results are considered unusable for any purpose
T = Total Fraction

Appendix A-7e
Soil - Biased 0-24 inches
Validated Analytical Results

Parameter	Units	Exposure Area Fraction	Site ID / Sample Date / Sample ID	MSS1-93 1/17/2003 MSS1-93-T02N-SOL SS1	MSS1-95 1/16/2003 MSS1-95-T02N-SOL SS1	MSS1-96 1/17/2003 MSS1-96-T02N-SOL SS1	MSS1-97 1/16/2003 MSS1-97-T02N-SOL SS1	MSS1-98 1/16/2003 MSS1-98-T02N-SOL SS1	MSS1-99 1/19/2003 MSS1-99-T02N-SOL SS1
Carbon disulfide	mg/kg-dry	T		<0.007 :	<0.007 :	0.006 J	-	<0.008 :	<0.008 :
Carbon tetrachloride	mg/kg-dry	T		<0.007 :	<0.007 :	<0.012 :	-	<0.008 :	<0.008 :
Chlorobenzene	mg/kg-dry	T		<0.007 :	<0.007 :	<0.012 :	-	<0.008 :	<0.008 :
Chloroethane	mg/kg-dry	T		<0.007 :	<0.007 :	<0.012 :	-	<0.008 :	<0.008 :
Chloroform	mg/kg-dry	T		<0.007 :	<0.007 :	<0.012 :	-	<0.008 :	<0.008 :
Chloromethane	mg/kg-dry	T		<0.007 :	<0.007 :	<0.012 :	-	<0.008 :	<0.008 :
cis-1,2-Dichloroethene	mg/kg-dry	T		<0.007 :	<0.007 :	<0.012 :	-	<0.008 :	<0.008 :
cis-1,3-Dichloropropene	mg/kg-dry	T		<0.007 :	<0.007 :	<0.012 :	-	<0.008 :	<0.008 :
Dibromochloromethane	mg/kg-dry	T		<0.007 :	<0.007 :	<0.012 :	-	<0.008 :	<0.008 :
Dichlorodifluoromethane	mg/kg-dry	T		<0.007 :	<0.007 :	<0.012 :	-	<0.008 :	<0.008 :
Ethylbenzene	mg/kg-dry	T		<0.007 :	<0.007 :	<0.012 :	-	<0.008 :	0.001 J
Methylene chloride	mg/kg-dry	T		<0.007 :	<0.007 :	<0.012 :	-	0.0008 J	<0.008 :
Styrene	mg/kg-dry	T		<0.007 :	<0.007 :	<0.012 :	-	<0.008 :	<0.008 :
Tetrachloroethene	mg/kg-dry	T		<0.007 :	<0.007 :	<0.012 :	-	<0.008 :	<0.008 :
Toluene	mg/kg-dry	T		<0.007 :	<0.007 :	<0.012 :	-	<0.008 :	<0.008 :
Total Xylene	mg/kg-dry	T		0.001 J	<0.007 :	<0.012 :	-	0.001 J	0.009 :
trans-1,2-Dichloroethene	mg/kg-dry	T		<0.007 :	<0.007 :	<0.012 :	-	<0.008 :	<0.008 :
trans-1,3-Dichloropropene	mg/kg-dry	T		<0.007 :	<0.007 :	<0.012 :	-	<0.008 :	<0.008 :
Trichloroethene	mg/kg-dry	T		<0.007 :	<0.007 :	<0.012 :	-	<0.008 :	<0.008 :
Trichlorofluoromethane	mg/kg-dry	T		<0.007 :	<0.007 :	<0.012 :	-	<0.008 :	<0.008 :
Vinyl chloride	mg/kg-dry	T		<0.007 :	<0.007 :	<0.012 :	-	<0.008 :	<0.008 :
Semi-Volatile Organics									
1,1`-Biphenyl	mg/kg-dry	T		<0.34 :	<0.35 :	<0.34 :	<0.35 :	<0.34 :	<0.34 :
2,4,5-Trichlorophenol	mg/kg-dry	T		<0.86 :	<0.87 :	<0.86 :	<0.89 :	<0.86 :	<0.84 :
2,4,6-Trichlorophenol	mg/kg-dry	T		<0.34 :	<0.35 :	<0.34 :	<0.35 :	<0.34 :	<0.34 :
2,4-Dichlorophenol	mg/kg-dry	T		<0.34 :	<0.35 :	<0.34 :	<0.35 :	<0.34 :	<0.34 :
2,4-Dimethylphenol	mg/kg-dry	T		<0.34 :	<0.35 :	<0.34 :	<0.35 :	<0.34 :	<0.34 :
2,4-Dinitrophenol	mg/kg-dry	T		<0.86 :	<0.87 :	<0.86 :	<0.89 :	<0.86 J	<0.84 :
2,4-Dinitrotoluene	mg/kg-dry	T		<0.34 :	<0.35 :	<0.34 :	<0.35 :	<0.34 :	<0.34 :
2,6-Dinitrotoluene	mg/kg-dry	T		<0.34 :	<0.35 :	<0.34 :	<0.35 :	<0.34 :	<0.34 :
2-Chloronaphthalene	mg/kg-dry	T		<0.34 :	<0.35 :	<0.34 :	<0.35 :	<0.34 :	<0.34 :
2-Chlorophenol	mg/kg-dry	T		<0.34 :	<0.35 :	<0.34 :	<0.35 :	<0.34 :	<0.34 :
2-Methylnaphthalene	mg/kg-dry	T		<0.34 :	<0.35 :	<0.34 :	<0.35 :	<0.34 :	<0.34 :
2-Methylphenol	mg/kg-dry	T		<0.34 :	<0.35 :	<0.34 :	<0.35 :	<0.34 :	<0.34 :

J = Qualified as estimated during data validation
R = Qualified as rejected value from data validation and results are considered unusable for any purpose
T = Total Fraction

Appendix A-7e
Soil - Biased 0-24 inches
Validated Analytical Results

Parameter	Units	Exposure Area Fraction	Site ID / Sample Date / Sample ID											
			MSS1-93 1/17/2003 MSS1-93-T02N-SOL		MSS1-95 1/16/2003 MSS1-95-T02N-SOL		MSS1-96 1/17/2003 MSS1-96-T02N-SOL		MSS1-97 1/16/2003 MSS1-97-T02N-SOL		MSS1-98 1/16/2003 MSS1-98-T02N-SOL		MSS1-99 1/19/2003 MSS1-99-T02N-SOL	
			SS1		SS1		SS1		SS1		SS1		SS1	
2-Nitroaniline	mg/kg-dry	T	<0.86	:	<0.87	:	<0.86	:	<0.89	:	<0.86	J	<0.84	:
2-Nitrophenol	mg/kg-dry	T	<0.34	:	<0.35	:	<0.34	:	<0.35	:	<0.34	:	<0.34	:
3,3-Dichlorobenzidine	mg/kg-dry	T	<0.34	:	<0.35	:	<0.34	:	<0.35	:	<0.34	:	<0.34	:
3-Nitroaniline	mg/kg-dry	T	<0.86	:	<0.87	:	<0.86	:	<0.89	:	<0.86	:	<0.84	J
4,6-Dinitro-2-methylphenol	mg/kg-dry	T	<0.86	:	<0.87	:	<0.86	:	<0.89	:	<0.86	J	<0.84	:
4-Bromophenyl phenyl ether	mg/kg-dry	T	<0.34	:	<0.35	:	<0.34	:	<0.35	:	<0.34	:	<0.34	:
4-Chloro-3-methylphenol	mg/kg-dry	T	<0.34	:	<0.35	:	<0.34	:	<0.35	:	<0.34	:	<0.34	:
4-Chloroaniline	mg/kg-dry	T	<0.34	:	<0.35	:	<0.34	:	<0.35	:	<0.34	J	<0.34	:
4-Chlorophenyl phenyl ether	mg/kg-dry	T	<0.34	:	<0.35	:	<0.34	:	<0.35	:	<0.34	:	<0.34	:
4-Methylphenol	mg/kg-dry	T	<0.34	:	<0.35	:	<0.34	:	<0.35	:	<0.34	:	<0.34	:
4-Nitroaniline	mg/kg-dry	T	<0.86	J	<0.87	J	<0.86	:	<0.89	J	<0.86	J	<0.84	:
4-Nitrophenol	mg/kg-dry	T	<0.86	:	<0.87	:	<0.86	:	<0.89	:	<0.86	:	<0.84	:
Acenaphthene	mg/kg-dry	T	<0.34	:	<0.35	:	<0.34	:	<0.35	:	<0.34	:	<0.34	:
Acenaphthylene	mg/kg-dry	T	<0.34	:	<0.35	:	<0.34	:	<0.35	:	<0.34	:	<0.34	:
Anthracene	mg/kg-dry	T	<0.34	:	<0.35	:	<0.34	:	<0.35	:	<0.34	:	<0.34	:
Benzaldehyde	mg/kg-dry	T	<0.34	:	<0.35	:	<0.34	J	<0.35	:	<0.34	:	<0.34	:
Benzo(a)anthracene	mg/kg-dry	T	0.036	J	<0.35	:	<0.34	:	<0.35	:	<0.34	:	<0.34	:
Benzo(a)pyrene	mg/kg-dry	T	0.031	J	<0.35	:	<0.34	:	<0.35	:	<0.34	:	<0.34	:
Benzo(b)fluoranthene	mg/kg-dry	T	0.031	J	<0.35	:	<0.34	:	<0.35	:	<0.34	:	<0.34	:
Benzo(g,h,i)perylene	mg/kg-dry	T	<0.34	:	<0.35	:	<0.34	:	<0.35	:	<0.34	:	<0.34	:
Benzo(k)fluoranthene	mg/kg-dry	T	0.027	J	<0.35	:	<0.34	:	<0.35	:	<0.34	:	<0.34	:
Bis(2-chloroethoxy)methane	mg/kg-dry	T	<0.34	:	<0.35	:	<0.34	:	<0.35	:	<0.34	:	<0.34	:
Bis(2-chloroethyl)ether	mg/kg-dry	T	<0.34	:	<0.35	:	<0.34	:	<0.35	:	<0.34	:	<0.34	:
Bis(2-ethylhexyl)phthalate	mg/kg-dry	T	0.099	J	0.022	J	0.18	J	0.03	J	0.049	J	0.035	J
Butyl benzyl phthalate	mg/kg-dry	T	<0.34	:	<0.35	:	<0.34	:	<0.35	:	<0.34	:	<0.34	:
Carbazole	mg/kg-dry	T	<0.34	:	<0.35	:	<0.34	:	<0.35	:	<0.34	:	<0.34	:
Chrysene	mg/kg-dry	T	0.042	J	<0.35	:	<0.34	:	<0.35	:	<0.34	:	<0.34	:
Dibenz(a,h)anthracene	mg/kg-dry	T	<0.34	:	<0.35	:	<0.34	:	<0.35	:	<0.34	:	<0.34	:
Dibenzofuran	mg/kg-dry	T	<0.34	:	<0.35	:	<0.34	:	<0.35	:	<0.34	:	<0.34	:
Dichlorodiisopropyl ether	mg/kg-dry	T	<0.34	:	<0.35	:	<0.34	:	<0.35	:	<0.34	:	<0.34	:
Diethylphthalate	mg/kg-dry	T	<0.34	:	<0.35	:	<0.34	:	<0.35	:	<0.34	:	<0.34	:
Dimethylphthalate	mg/kg-dry	T	<0.34	:	<0.35	:	<0.34	:	<0.35	:	<0.34	:	<0.34	:
Di-n-Butyl phthalate	mg/kg-dry	T	<0.34	:	<0.35	:	<0.34	:	0.019	J	0.022	J	<0.34	:
Di-n-Octyl phthalate	mg/kg-dry	T	<0.34	:	<0.35	:	0.018	J	<0.35	:	<0.34	J	<0.34	:

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Appendix A-7e
Soil - Biased 0-24 inches
Validated Analytical Results

Parameter	Units	Fraction	Site ID	Sample Date	Sample ID	Exposure Area
			MSS1-93	1/17/2003	MSS1-93-T02N-SOL	SS1
			MSS1-95	1/16/2003	MSS1-95-T02N-SOL	SS1
			MSS1-96	1/17/2003	MSS1-96-T02N-SOL	SS1
			MSS1-97	1/16/2003	MSS1-97-T02N-SOL	SS1
			MSS1-98	1/16/2003	MSS1-98-T02N-SOL	SS1
			MSS1-99	1/19/2003	MSS1-99-T02N-SOL	SS1
Fluoranthene	mg/kg-dry	T	0.11 J	<0.35 :	<0.34 :	<0.35 :	<0.34 :	<0.34 :
Fluorene	mg/kg-dry	T	<0.34 :	<0.35 :	<0.34 :	<0.35 :	<0.34 :	<0.34 :
Hexachlorobenzene	mg/kg-dry	T	<0.34 :	<0.35 :	<0.34 :	<0.35 :	<0.34 J	<0.34 :
Hexachlorobutadiene	mg/kg-dry	T	<0.34 :	<0.35 :	<0.34 :	<0.35 :	<0.34 :	<0.34 :
Hexachlorocyclopentadiene	mg/kg-dry	T	<0.34 :	<0.35 :	<0.34 :	<0.35 :	<0.34 :	<0.34 :
Hexachloroethane	mg/kg-dry	T	<0.34 :	<0.35 :	<0.34 :	<0.35 :	<0.34 :	<0.34 :
Indeno(1,2,3-cd)pyrene	mg/kg-dry	T	<0.34 :	<0.35 :	<0.34 :	<0.35 :	<0.34 :	<0.34 :
Isophorone	mg/kg-dry	T	<0.34 :	<0.35 :	<0.34 :	<0.35 :	<0.34 :	<0.34 :
Naphthalene	mg/kg-dry	T	<0.34 :	<0.35 :	<0.34 :	<0.35 :	<0.34 :	<0.34 :
Nitrobenzene	mg/kg-dry	T	<0.34 :	<0.35 :	<0.34 :	<0.35 :	<0.34 :	<0.34 :
N-Nitrosodi-n-propylamine	mg/kg-dry	T	<0.34 :	<0.35 :	<0.34 :	<0.35 :	<0.34 :	<0.34 :
N-Nitrosodiphenylamine	mg/kg-dry	T	<0.34 :	<0.35 :	<0.34 :	<0.35 :	<0.34 :	<0.34 :
Pentachlorophenol	mg/kg-dry	T	<0.86 :	<0.87 :	<0.86 :	<0.89 :	<0.86 :	<0.84 :
Phenanthrene	mg/kg-dry	T	0.052 J	<0.35 :	<0.34 :	<0.35 :	<0.34 :	<0.34 :
Phenol	mg/kg-dry	T	<0.34 :	<0.35 :	<0.34 :	<0.35 :	<0.34 :	<0.34 :
Pyrene	mg/kg-dry	T	0.086 J	<0.35 :	<0.34 :	<0.35 :	<0.34 :	<0.34 :
Pesticides-PCBs								
Aroclor 1016	mg/kg-dry	T	<0.034 :	<0.035 :	<0.034 :	<0.035 :	<0.034 :	<0.034 :
Aroclor 1221	mg/kg-dry	T	<0.07 :	<0.071 :	<0.07 :	<0.072 :	<0.07 :	<0.068 :
Aroclor 1232	mg/kg-dry	T	<0.034 :	<0.035 :	<0.034 :	<0.035 :	<0.034 :	<0.034 :
Aroclor 1242	mg/kg-dry	T	<0.034 :	<0.035 :	<0.034 :	<0.035 :	<0.034 :	<0.034 :
Aroclor 1248	mg/kg-dry	T	0.026 J	<0.035 :	<0.034 :	<0.035 :	<0.034 :	<0.034 :
Aroclor 1254	mg/kg-dry	T	0.043 :	<0.035 :	0.021 J	<0.035 :	<0.034 :	<0.034 :
Aroclor 1260	mg/kg-dry	T	<0.034 :	<0.035 :	<0.034 :	<0.035 :	<0.034 :	<0.034 :

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T = Total Fraction

Appendix A-7e
Soil - Biased 0-24 inches
Validated Analytical Results

Parameter	Units	Exposure Area Fraction	Site ID / Sample Date / Sample ID / Exposure Area		MSS2-11 10/22/2002 MSS2-11-T02N-SOL SS2		MSS2-12 10/22/2002 MSS2-12-T02N-SOL SS2		MSS2-13 10/22/2002 MSS2-13-T02N-SOL SS2		MSS2-14 10/22/2002 MSS2-14-T02N-SOL SS2		MSS2-15 10/23/2002 MSS2-15-T02N-SOL SS2		MSS2-16 10/23/2002 MSS2-16-T02N-SOL SS2	
General Chemistry																
Ammonia	mg/kg-dry	T			16.	:	12.7	:	19.7	:	13.7	:	18.4	:	39.4	:
Chloride	mg/kg-dry	T			83.7	J	284.	J	120.	J	109.	:	77.7	J	53.3	J
Fluoride	mg/kg-dry	T			2.2	J	3.5	J	1.9	J	1.1	J	1.8	J	0.69	J
Nitrate	mg/kg-dry	T			3.9	J	6.1	J	<2.1	J	<2.1	J	<2.2	J	<2.2	J
Phosphorus	mg/kg-dry	T			800.	J	887.	J	812.	J	1020.	J	955.	J	1970.	J
Sulfate	mg/kg-dry	T			5530.	J	6690.	J	1570.	J	541.	J	3770.	J	15900.	J
Total Kjeldahl Nitrogen	mg/kg-dry	T			86.4	:	118.	:	149.	:	71.4	J	67.7	:	75.7	:
Total Organic Carbon	mg/kg-dry	T			<106.	J	473.	J	1540.	J	1650.	J	1500.	J	1780.	J
Laboratory Parameters																
pH	SU	T			7.4	:	7.4	:	7.6	:	7.	:	7.4	:	3.7	:
Solids, Percent	%	T			95.	:	94.4	:	93.9	:	95.2	:	91.	:	89.7	:
Specific Conductance	umhos/cm	T			1020.	:	1160.	:	901.	:	1110.	J	1480.	:	2070.	:
Geotechnical																
Organic Soils	%	T			1.84	J	2.2	J	2.23	J	2.53	J	2.64	J	4.28	J
Physical Properties																
Cation-Exchange Capacity	meq/100g	T			45.6	:	46.5	:	15.7	:	3.1	:	13.1	:	18.7	:
Sodium Absorption Ratio	ratio	T			0.62	:	1.13	:	1.46	:	1.24	:	0.9	:	0.07	:
Metals																
Aluminum	mg/kg-dry	T			11700.	:	12100.	:	14300.	:	11500.	:	11600.	:	16700.	:
Antimony	mg/kg-dry	T			<0.26	J	<0.26	J	2.	J	<0.25	J	<0.27	J	<0.25	J
Arsenic	mg/kg-dry	T			2.4	:	3.	:	3.1	:	2.8	:	3.4	:	2.6	:
Barium	mg/kg-dry	T			149.	:	195.	:	180.	:	247.	:	244.	:	188.	:
Beryllium	mg/kg-dry	T			0.83	:	0.85	:	0.83	:	0.85	:	0.8	:	0.6	:
Boron	mg/kg-dry	T			<0.22	J	<0.23	J	<0.3	J	<1.3	:	<0.22	J	<0.23	J
Cadmium	mg/kg-dry	T			0.55	:	0.39	:	0.44	:	0.57	:	0.4	:	0.22	J
Calcium	mg/kg-dry	T			9520.	:	7900.	:	8730.	:	7340.	:	6080.	:	8450.	:
Chromium	mg/kg-dry	T			25.2	:	32.1	:	37.1	:	35.3	:	32.4	:	54.	:
Cobalt	mg/kg-dry	T			9.4	:	9.4	:	9.6	:	8.4	:	7.	:	7.8	:
Copper	mg/kg-dry	T			55.5	:	85.8	:	78.4	:	116.	:	112.	:	59.8	:
Iron	mg/kg-dry	T			24200.	:	29400.	:	28800.	:	39500.	:	41500.	:	43400.	:
Lead	mg/kg-dry	T			61.1	:	59.6	:	55.	:	77.2	:	84.	:	42.6	:
Magnesium	mg/kg-dry	T			6180.	:	6080.	:	7640.	:	5560.	:	5780.	:	8480.	:
Manganese	mg/kg-dry	T			626.	J	515.	J	524.	J	528.	J	479.	J	386.	J

J = Qualified as estimated during data validation
R = Qualified as rejected value from data validation and results are considered unusable for any purpose
T = Total Fraction

Appendix A-7e
Soil - Biased 0-24 inches
Validated Analytical Results

Parameter	Units	Exposure Area Fraction	Site ID / Sample Date / Sample ID		MSS2-11 10/22/2002 MSS2-11-T02N-SOL SS2		MSS2-12 10/22/2002 MSS2-12-T02N-SOL SS2		MSS2-13 10/22/2002 MSS2-13-T02N-SOL SS2		MSS2-14 10/22/2002 MSS2-14-T02N-SOL SS2		MSS2-15 10/23/2002 MSS2-15-T02N-SOL SS2		MSS2-16 10/23/2002 MSS2-16-T02N-SOL SS2	
Mercury	mg/kg-dry	T		<0.017	:	<0.017	:	<0.016	:	<0.017	:	<0.016	:	<0.018	:
Molybdenum	mg/kg-dry	T		46.6	:	61.6	:	134.	:	80.9	:	66.6	:	64.	:
Nickel	mg/kg-dry	T		18.	J	24.5	J	24.9	J	19.6	J	19.8	J	37.	J
Potassium	mg/kg-dry	T		2590.	J	3070.	J	3460.	J	3620.	J	3640.	J	6280.	J
Selenium	mg/kg-dry	T		<0.7	J	<0.71	J	0.9	J	0.72	J	<0.73	J	2.4	J
Silver	mg/kg-dry	T		0.53	:	0.66	:	0.58	:	0.63	:	1.2	:	0.38	:
Sodium	mg/kg-dry	T		68.3	J	172.	J	137.	J	470.	:	<276.	:	<609.	:
Thallium	mg/kg-dry	T		0.16	:	0.2	:	0.24	:	0.3	:	0.31	:	0.59	:
Vanadium	mg/kg-dry	T		31.8	:	34.8	:	42.4	:	37.1	:	40.4	:	52.8	:
Zinc	mg/kg-dry	T		107.	J	97.5	J	93.7	J	105.	J	97.1	J	71.7	J
Volatile Organics															
1,1,1-Trichloroethane	mg/kg-dry	T		<0.006	:	<0.01	:	<0.01	:	<0.006	:	<0.013	:	<0.01	:
1,1,2,2-Tetrachloroethane	mg/kg-dry	T		<0.006	:	<0.01	:	<0.01	:	<0.006	:	<0.013	:	<0.01	:
1,1,2-Trichloro-1,2,2-trifluoroethane	mg/kg-dry	T		<0.006	:	<0.01	:	<0.01	:	<0.006	:	<0.013	:	<0.01	:
1,1,2-Trichloroethane	mg/kg-dry	T		<0.006	:	<0.01	:	<0.01	:	<0.006	:	<0.013	:	<0.01	:
1,1-Dichloroethane	mg/kg-dry	T		<0.006	:	<0.01	:	<0.01	:	<0.006	:	<0.013	:	<0.01	:
1,1-Dichloroethene	mg/kg-dry	T		<0.006	:	<0.01	:	<0.01	:	<0.006	:	<0.013	:	<0.01	:
1,2,4-Trichlorobenzene	mg/kg-dry	T		<0.006	:	<0.01	:	<0.01	:	<0.006	:	<0.013	:	<0.01	:
1,2-Dibromo-3-chloropropane	mg/kg-dry	T		<0.006	:	<0.01	:	<0.01	:	<0.006	:	<0.013	:	<0.01	:
1,2-Dichlorobenzene	mg/kg-dry	T		<0.006	:	<0.01	:	<0.01	:	<0.006	:	<0.013	:	<0.01	:
1,2-Dichloroethane	mg/kg-dry	T		<0.006	:	<0.01	:	<0.01	:	<0.006	:	<0.013	:	<0.01	:
1,2-Dichloroethene (total)	mg/kg-dry	T		<0.006	:	<0.01	:	<0.01	:	<0.006	:	<0.013	:	<0.01	:
1,2-Dichloropropane	mg/kg-dry	T		<0.006	:	<0.01	:	<0.01	:	<0.006	:	<0.013	:	<0.01	:
1,3-Dichlorobenzene	mg/kg-dry	T		<0.006	:	<0.01	:	<0.01	:	<0.006	:	<0.013	:	<0.01	:
1,4-Dichlorobenzene	mg/kg-dry	T		<0.006	:	<0.01	:	<0.01	:	<0.006	:	<0.013	:	<0.01	:
2-Butanone	mg/kg-dry	T		<0.006	:	<0.01	:	<0.01	:	<0.006	J	<0.013	:	<0.01	:
2-Hexanone	mg/kg-dry	T		<0.006	:	<0.01	:	<0.01	:	<0.006	J	<0.013	:	<0.01	:
4-Methyl-2-pentanone	mg/kg-dry	T		<0.006	:	<0.01	:	<0.01	:	<0.006	:	<0.013	:	<0.01	:
Acetone	mg/kg-dry	T		0.001	J	0.002	J	0.002	J	0.002	J	0.006	J	0.005	J
Benzene	mg/kg-dry	T		<0.006	:	<0.01	:	<0.01	:	<0.006	:	<0.013	:	<0.01	:
Bromodichloromethane	mg/kg-dry	T		<0.006	:	<0.01	:	<0.01	:	<0.006	:	<0.013	:	<0.01	:
Bromoform	mg/kg-dry	T		<0.006	:	<0.01	:	<0.01	:	<0.006	:	<0.013	:	<0.01	:
Bromomethane	mg/kg-dry	T		<0.006	:	<0.01	:	<0.01	:	<0.006	:	<0.013	:	<0.01	:
Carbon disulfide	mg/kg-dry	T		<0.006	:	<0.01	:	<0.01	:	<0.006	:	<0.013	:	0.002	J

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T = Total Fraction

Appendix A-7e
Soil - Biased 0-24 inches
Validated Analytical Results

Parameter	Units	Exposure Area Fraction	Site ID	MSS2-11	MSS2-12	MSS2-13	MSS2-14	MSS2-15	MSS2-16
			Sample Date	10/22/2002	10/22/2002	10/22/2002	10/22/2002	10/23/2002	10/23/2002
			Sample ID	MSS2-11-T02N-SOL	MSS2-12-T02N-SOL	MSS2-13-T02N-SOL	MSS2-14-T02N-SOL	MSS2-15-T02N-SOL	MSS2-16-T02N-SOL
			Exposure Area	SS2	SS2	SS2	SS2	SS2	SS2
Carbon tetrachloride	mg/kg-dry	T		<0.006 :	<0.01 :	<0.01 :	<0.006 :	<0.013 :	<0.01 :
Chlorobenzene	mg/kg-dry	T		<0.006 :	<0.01 :	<0.01 :	<0.006 :	<0.013 :	<0.01 :
Chloroethane	mg/kg-dry	T		<0.006 :	<0.01 :	<0.01 :	<0.006 :	<0.013 :	<0.01 :
Chloroform	mg/kg-dry	T		<0.006 :	<0.01 :	<0.01 :	<0.006 :	<0.013 :	<0.01 :
Chloromethane	mg/kg-dry	T		<0.006 J	<0.01 J	<0.01 J	<0.006 J	<0.013 :	<0.01 :
cis-1,2-Dichloroethene	mg/kg-dry	T		<0.006 :	<0.01 :	<0.01 :	<0.006 :	<0.013 :	<0.01 :
cis-1,3-Dichloropropene	mg/kg-dry	T		<0.006 :	<0.01 :	<0.01 :	<0.006 :	<0.013 :	<0.01 :
Dibromochloromethane	mg/kg-dry	T		<0.006 :	<0.01 :	<0.01 :	<0.006 :	<0.013 :	<0.01 :
Dichlorodifluoromethane	mg/kg-dry	T		<0.006 J	<0.01 J	<0.01 J	<0.006 J	<0.013 :	<0.01 :
Ethylbenzene	mg/kg-dry	T		<0.006 :	<0.01 :	<0.01 :	<0.006 :	<0.013 :	<0.01 :
Methylene chloride	mg/kg-dry	T		<0.006 :	0.002 J	<0.01 :	<0.006 :	<0.013 :	<0.01 :
Styrene	mg/kg-dry	T		<0.006 :	<0.01 :	<0.01 :	<0.006 :	<0.013 :	<0.01 :
Tetrachloroethene	mg/kg-dry	T		<0.006 :	<0.01 :	<0.01 :	<0.006 :	<0.013 :	<0.01 :
Toluene	mg/kg-dry	T		<0.006 :	<0.01 :	<0.01 :	<0.006 :	<0.013 :	0.003 J
Total Xylene	mg/kg-dry	T		<0.006 :	<0.01 :	<0.01 :	<0.006 :	<0.013 :	<0.01 :
trans-1,2-Dichloroethene	mg/kg-dry	T		<0.006 :	<0.01 :	<0.01 :	<0.006 :	<0.013 :	<0.01 :
trans-1,3-Dichloropropene	mg/kg-dry	T		<0.006 :	<0.01 :	<0.01 :	<0.006 :	<0.013 :	<0.01 :
Trichloroethene	mg/kg-dry	T		<0.006 :	<0.01 :	<0.01 :	<0.006 :	<0.013 :	<0.01 :
Trichlorofluoromethane	mg/kg-dry	T		<0.006 :	<0.01 :	<0.01 :	<0.006 :	<0.013 :	<0.01 :
Vinyl chloride	mg/kg-dry	T		<0.006 :	<0.01 J	<0.01 :	<0.006 :	<0.013 :	<0.01 :
Semi-Volatile Organics									
1,1`-Biphenyl	mg/kg-dry	T		<0.35 :	<0.35 :	<0.35 :	<0.35 :	<0.36 :	0.05 J
2,4,5-Trichlorophenol	mg/kg-dry	T		<0.87 :	<0.88 :	<0.88 :	<0.87 :	<0.91 :	<0.92 :
2,4,6-Trichlorophenol	mg/kg-dry	T		<0.35 :	<0.35 :	<0.35 :	<0.35 :	<0.36 :	<0.37 :
2,4-Dichlorophenol	mg/kg-dry	T		<0.35 :	<0.35 :	<0.35 :	<0.35 :	<0.36 :	<0.37 :
2,4-Dimethylphenol	mg/kg-dry	T		<0.35 :	<0.35 :	<0.35 :	<0.35 :	<0.36 :	<0.37 :
2,4-Dinitrophenol	mg/kg-dry	T		<0.87 J	<0.88 J	<0.88 J	<0.87 :	<0.91 :	<0.92 :
2,4-Dinitrotoluene	mg/kg-dry	T		<0.35 :	<0.35 :	<0.35 :	<0.35 :	<0.36 :	<0.37 :
2,6-Dinitrotoluene	mg/kg-dry	T		<0.35 :	<0.35 :	<0.35 :	<0.35 :	<0.36 :	<0.37 :
2-Chloronaphthalene	mg/kg-dry	T		<0.35 :	<0.35 :	<0.35 :	<0.35 :	<0.36 :	<0.37 :
2-Chlorophenol	mg/kg-dry	T		<0.35 :	<0.35 :	<0.35 :	<0.35 :	<0.36 :	<0.37 :
2-Methylnaphthalene	mg/kg-dry	T		<0.35 :	<0.35 :	<0.35 :	<0.35 :	<0.36 :	0.044 J
2-Methylphenol	mg/kg-dry	T		<0.35 :	<0.35 :	<0.35 :	<0.35 :	<0.36 :	<0.37 :
2-Nitroaniline	mg/kg-dry	T		<0.87 :	<0.88 :	<0.88 :	<0.87 :	<0.91 :	<0.92 :

J = Qualified as estimated during data validation
R = Qualified as rejected value from data validation and results are considered unusable for any purpose
T = Total Fraction

Appendix A-7e
Soil - Biased 0-24 inches
Validated Analytical Results

Parameter	Units	Exposure Area Fraction	Site ID	MSS2-11	MSS2-12	MSS2-13	MSS2-14	MSS2-15	MSS2-16
			Sample Date	10/22/2002	10/22/2002	10/22/2002	10/22/2002	10/23/2002	10/23/2002
			Sample ID	MSS2-11-T02N-SOL	MSS2-12-T02N-SOL	MSS2-13-T02N-SOL	MSS2-14-T02N-SOL	MSS2-15-T02N-SOL	MSS2-16-T02N-SOL
			Exposure Area	SS2	SS2	SS2	SS2	SS2	SS2
2-Nitrophenol	mg/kg-dry	T		<0.35 :	<0.35 :	<0.35 :	<0.35 :	<0.36 :	<0.37 :
3,3-Dichlorobenzidine	mg/kg-dry	T		<0.35 :	<0.35 :	<0.35 :	<0.35 :	<0.36 :	<0.37 :
3-Nitroaniline	mg/kg-dry	T		<0.87 :	<0.88 :	<0.88 :	<0.87 :	<0.91 :	<0.92 :
4,6-Dinitro-2-methylphenol	mg/kg-dry	T		<0.87 J	<0.88 J	<0.88 J	<0.87 :	<0.91 :	<0.92 :
4-Bromophenyl phenyl ether	mg/kg-dry	T		<0.35 :	<0.35 :	<0.35 :	<0.35 :	<0.36 :	<0.37 :
4-Chloro-3-methylphenol	mg/kg-dry	T		<0.35 :	<0.35 :	<0.35 :	<0.35 :	<0.36 :	<0.37 :
4-Chloroaniline	mg/kg-dry	T		<0.35 :	<0.35 :	<0.35 :	<0.35 :	<0.36 :	<0.37 :
4-Chlorophenyl phenyl ether	mg/kg-dry	T		<0.35 :	<0.35 :	<0.35 :	<0.35 :	<0.36 :	<0.37 :
4-Methylphenol	mg/kg-dry	T		<0.35 :	<0.35 :	<0.35 :	<0.35 :	<0.36 :	<0.37 :
4-Nitroaniline	mg/kg-dry	T		<0.87 J	<0.88 J	<0.88 J	<0.87 :	<0.91 :	<0.92 :
4-Nitrophenol	mg/kg-dry	T		<0.87 J	<0.88 J	<0.88 J	<0.87 :	<0.91 :	<0.92 :
Acenaphthene	mg/kg-dry	T		<0.35 :	<0.35 :	<0.35 :	<0.35 :	<0.36 :	<0.37 :
Acenaphthylene	mg/kg-dry	T		<0.35 :	<0.35 :	<0.35 :	<0.35 :	<0.36 :	<0.37 :
Anthracene	mg/kg-dry	T		<0.35 :	<0.35 :	<0.35 :	<0.35 :	<0.36 :	<0.37 :
Benzaldehyde	mg/kg-dry	T		1. J	<0.35 J	<0.35 J	0.08 J	<0.36 :	<0.37 :
Benzo(a)anthracene	mg/kg-dry	T		<0.35 :	<0.35 :	<0.35 :	<0.35 :	<0.36 :	<0.37 :
Benzo(a)pyrene	mg/kg-dry	T		<0.35 :	<0.35 :	<0.35 :	<0.35 :	<0.36 :	<0.37 :
Benzo(b)fluoranthene	mg/kg-dry	T		<0.35 :	<0.35 :	<0.35 :	<0.35 :	<0.36 :	<0.37 :
Benzo(g,h,i)perylene	mg/kg-dry	T		<0.35 :	<0.35 :	<0.35 :	<0.35 :	<0.36 :	<0.37 :
Benzo(k)fluoranthene	mg/kg-dry	T		<0.35 :	<0.35 :	<0.35 :	<0.35 :	<0.36 :	<0.37 :
Bis(2-chloroethoxy)methane	mg/kg-dry	T		<0.35 :	<0.35 :	<0.35 :	<0.35 :	<0.36 :	<0.37 :
Bis(2-chloroethyl)ether	mg/kg-dry	T		<0.35 :	<0.35 :	<0.35 :	<0.35 :	<0.36 :	<0.37 :
Bis(2-ethylhexyl)phthalate	mg/kg-dry	T		0.035 J	0.048 J	0.027 J	<0.35 :	0.021 J	0.13 J
Butyl benzyl phthalate	mg/kg-dry	T		<0.35 :	<0.35 :	<0.35 :	<0.35 :	<0.36 :	<0.37 :
Carbazole	mg/kg-dry	T		<0.35 :	<0.35 :	<0.35 :	<0.35 :	<0.36 :	<0.37 :
Chrysene	mg/kg-dry	T		<0.35 :	<0.35 :	<0.35 :	<0.35 :	<0.36 :	0.026 J
Dibenz(a,h)anthracene	mg/kg-dry	T		<0.35 :	<0.35 :	<0.35 :	<0.35 :	<0.36 :	<0.37 :
Dibenzofuran	mg/kg-dry	T		<0.35 :	<0.35 :	<0.35 :	<0.35 :	<0.36 :	<0.37 :
Dichlorodiisopropyl ether	mg/kg-dry	T		<0.35 :	<0.35 :	<0.35 :	<0.35 :	<0.36 :	<0.37 :
Diethylphthalate	mg/kg-dry	T		<0.35 :	<0.35 :	<0.35 :	<0.35 :	<0.36 :	<0.37 :
Dimethylphthalate	mg/kg-dry	T		<0.35 :	<0.35 :	<0.35 :	<0.35 :	<0.36 :	<0.37 :
Di-n-Butyl phthalate	mg/kg-dry	T		<0.35 :	<0.35 :	<0.35 :	<0.35 :	<0.36 :	<0.37 :
Di-n-Octyl phthalate	mg/kg-dry	T		<0.35 :	<0.35 :	<0.35 :	<0.35 :	<0.36 :	<0.37 :
Fluoranthene	mg/kg-dry	T		<0.35 :	<0.35 :	<0.35 :	<0.35 :	<0.36 :	<0.37 :

J = Qualified as estimated during data validation
R = Qualified as rejected value from data validation and results are considered unusable for any purpose
T = Total Fraction

Appendix A-7e
Soil - Biased 0-24 inches
Validated Analytical Results

Parameter	Units	Site ID / Sample Date / Sample ID / Exposure Area / Fraction	MSS2-11 10/22/2002 MSS2-11-T02N-SOL SS2 T		MSS2-12 10/22/2002 MSS2-12-T02N-SOL SS2 T		MSS2-13 10/22/2002 MSS2-13-T02N-SOL SS2 T		MSS2-14 10/22/2002 MSS2-14-T02N-SOL SS2 T		MSS2-15 10/23/2002 MSS2-15-T02N-SOL SS2 T		MSS2-16 10/23/2002 MSS2-16-T02N-SOL SS2 T	
Fluorene	mg/kg-dry	T	<0.35	:	<0.35	:	<0.35	:	<0.35	:	<0.36	:	<0.37	:
Hexachlorobenzene	mg/kg-dry	T	<0.35	:	<0.35	:	<0.35	:	<0.35	:	<0.36	:	<0.37	:
Hexachlorobutadiene	mg/kg-dry	T	<0.35	:	<0.35	:	<0.35	:	<0.35	:	<0.36	:	<0.37	:
Hexachlorocyclopentadiene	mg/kg-dry	T	<0.35	:	<0.35	:	<0.35	:	<0.35	:	<0.36	:	<0.37	:
Hexachloroethane	mg/kg-dry	T	<0.35	:	<0.35	:	<0.35	:	<0.35	:	<0.36	:	<0.37	:
Indeno(1,2,3-cd)pyrene	mg/kg-dry	T	<0.35	:	<0.35	:	<0.35	:	<0.35	:	<0.36	:	<0.37	:
Isophorone	mg/kg-dry	T	<0.35	:	<0.35	:	<0.35	:	<0.35	:	<0.36	:	<0.37	:
Naphthalene	mg/kg-dry	T	<0.35	:	<0.35	:	<0.35	:	<0.35	:	<0.36	:	<0.37	:
Nitrobenzene	mg/kg-dry	T	<0.35	:	<0.35	:	<0.35	:	<0.35	:	<0.36	:	<0.37	:
N-Nitrosodi-n-propylamine	mg/kg-dry	T	<0.35	:	<0.35	:	<0.35	:	<0.35	:	<0.36	:	<0.37	:
N-Nitrosodiphenylamine	mg/kg-dry	T	<0.35	:	<0.35	:	<0.35	:	<0.35	:	<0.36	:	<0.37	:
Pentachlorophenol	mg/kg-dry	T	<0.87	J	<0.88	J	<0.88	J	<0.87	:	<0.91	:	<0.92	:
Phenanthrene	mg/kg-dry	T	<0.35	:	<0.35	:	<0.35	:	<0.35	:	<0.36	:	0.31	J
Phenol	mg/kg-dry	T	<0.35	:	<0.35	:	<0.35	:	<0.35	:	<0.36	:	<0.37	:
Pyrene	mg/kg-dry	T	<0.35	:	<0.35	:	<0.35	:	<0.35	:	<0.36	:	0.042	J

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R = Qualified as rejected value from data validation and results are considered unusable for any purpose
T = Total Fraction

Appendix A-7e
Soil - Biased 0-24 inches
Validated Analytical Results

Parameter	Units	Exposure Area Fraction	Site ID	MSS2-17	MSS2-18	MSS2-19	MSS2-20	MSS2-21	MSS2-23
			Sample Date	10/23/2002	10/23/2002	10/23/2002	10/23/2002	10/23/2002	10/24/2002
			Sample ID	MSS2-17-T02N-SOL	MSS2-18-T02N-SOL	MSS2-19-T02N-SOL	MSS2-20-T02N-SOL	MSS2-21-T02N-SOL	MSS2-23-T02N-SOL
			Exposure Area	SS2	SS2	SS2	SS2	SS2	SS2
General Chemistry									
Ammonia	mg/kg-dry	T		20.7 :	19.4 :	16.5 :	20.2 :	16.7 :	18.7 :
Chloride	mg/kg-dry	T		114. :	80.4 :	312. J	16.1 J	63.4 J	81.3 J
Fluoride	mg/kg-dry	T		1.4 J	0.68 J	0.73 J	2.8 J	5.1 J	1.9 J
Nitrate	mg/kg-dry	T		9.4 :	5.3 :	6.2 J	3.4 J	3. J	7.2 J
Phosphorus	mg/kg-dry	T		1280. J	955. J	1020. J	1010. J	1050. J	823. J
Sulfate	mg/kg-dry	T		3370. :	1610. :	774. J	1620. J	3550. J	649. J
Total Kjeldahl Nitrogen	mg/kg-dry	T		75.8 J	68.9 J	49.2 J	113. J	101. J	186. :
Total Organic Carbon	mg/kg-dry	T		180. J	281. J	370. J	1330. J	1960. J	2920. J
Laboratory Parameters									
pH	SU	T		6.4 :	6.8 :	7.6 :	7.5 :	6.9 :	7.5 :
Solids, Percent	%	T		92.5 :	92.7 :	92.7 :	91.4 :	93.1 :	92.3 :
Specific Conductance	umhos/cm	T		1060. :	936. :	1110. :	1030. :	1280. :	687. :
Geotechnical									
Organic Soils	%	T		2.6 J	2.5 J	2.29 J	2.76 J	3.01 J	1.98 J
Physical Properties									
Cation-Exchange Capacity	meq/100g	T		15.4 :	17.9 :	13.8 :	22.4 :	13. :	8.5 :
Sodium Absorption Ratio	ratio	T		0.82 :	0.79 :	1.5 :	0.52 :	0.65 :	1.08 :
Metals									
Aluminum	mg/kg-dry	T		12100. :	11700. :	11000. :	11100. :	10300. :	13400. :
Antimony	mg/kg-dry	T		<0.25 J	<0.25 J	<0.2 J	<0.28 J	<0.23 J	0.41 J
Arsenic	mg/kg-dry	T		3. :	2.6 :	2.7 :	2.9 :	3.2 :	5.2 :
Barium	mg/kg-dry	T		268. :	322. :	253. :	261. :	261. :	144. :
Beryllium	mg/kg-dry	T		0.88 :	0.73 :	0.72 :	0.73 :	0.66 :	0.91 :
Boron	mg/kg-dry	T		5.2 :	4.1 J	3.2 :	2.9 :	2.7 :	<2.2 J
Cadmium	mg/kg-dry	T		0.36 :	0.25 J	0.13 J	0.21 J	0.19 J	1.7 :
Calcium	mg/kg-dry	T		5420. J	4400. :	3950. :	10500. :	6110. :	8580. :
Chromium	mg/kg-dry	T		33.9 :	31. :	28.6 :	26.9 :	31.3 :	50.9 :
Cobalt	mg/kg-dry	T		7.6 :	6.1 :	6.2 :	7.7 :	6.5 :	11. :
Copper	mg/kg-dry	T		101. :	79.4 :	115. :	74.6 :	59.6 :	126. :
Iron	mg/kg-dry	T		35700. :	32200. :	30600. :	29100. :	30000. :	30300. :
Lead	mg/kg-dry	T		79.3 :	69. :	77.7 :	61.9 :	74.2 :	90.4 :
Magnesium	mg/kg-dry	T		5520. :	5310. :	4770. :	4860. :	5090. :	7140. :
Manganese	mg/kg-dry	T		445. J	397. J	382. J	446. J	369. J	539. J

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Appendix A-7e
Soil - Biased 0-24 inches
Validated Analytical Results

Parameter	Units	Exposure Area Fraction	Site ID: MSS2-17 Sample Date: 10/23/2002 Sample ID: MSS2-17-T02N-SOL SS2		Site ID: MSS2-18 Sample Date: 10/23/2002 Sample ID: MSS2-18-T02N-SOL SS2		Site ID: MSS2-19 Sample Date: 10/23/2002 Sample ID: MSS2-19-T02N-SOL SS2		Site ID: MSS2-20 Sample Date: 10/23/2002 Sample ID: MSS2-20-T02N-SOL SS2		Site ID: MSS2-21 Sample Date: 10/23/2002 Sample ID: MSS2-21-T02N-SOL SS2		Site ID: MSS2-23 Sample Date: 10/24/2002 Sample ID: MSS2-23-T02N-SOL SS2	
Mercury	mg/kg-dry	T	<0.017	:	<0.017	:	<0.016	J	0.036	J	<0.016	J	<0.017	:
Molybdenum	mg/kg-dry	T	101.	:	70.7	:	46.5	:	49.1	:	45.2	:	235.	:
Nickel	mg/kg-dry	T	19.8	J	17.5	J	16.5	J	18.9	J	20.7	J	30.2	J
Potassium	mg/kg-dry	T	3610.	J	3430.	J	3320.	J	3350.	J	4060.	J	3050.	J
Selenium	mg/kg-dry	T	0.7	:	0.9	J	0.87	J	<0.66	J	1.3	J	0.88	J
Silver	mg/kg-dry	T	0.65	:	0.7	:	0.46	:	0.59	:	0.62	:	1.1	:
Sodium	mg/kg-dry	T	374.	:	337.	:	401.	:	324.	:	391.	:	<261.	:
Thallium	mg/kg-dry	T	0.31	:	0.32	:	0.28	:	0.27	:	0.28	:	0.2	:
Vanadium	mg/kg-dry	T	36.6	:	32.9	:	32.	:	31.4	:	29.2	:	39.8	:
Zinc	mg/kg-dry	T	81.4	J	71.6	J	65.2	J	70.7	J	71.5	J	116.	J
Volatile Organics														
1,1,1-Trichloroethane	mg/kg-dry	T	<0.008	:	<0.006	:	<0.008	:	<0.014	:	<0.006	:	<0.009	:
1,1,2,2-Tetrachloroethane	mg/kg-dry	T	<0.008	:	<0.006	:	<0.008	:	<0.014	:	<0.006	:	<0.009	:
1,1,2-Trichloro-1,2,2-trifluoroethane	mg/kg-dry	T	<0.008	:	<0.006	:	<0.008	:	<0.014	:	<0.006	:	<0.009	:
1,1,2-Trichloroethane	mg/kg-dry	T	<0.008	:	<0.006	:	<0.008	:	<0.014	:	<0.006	:	<0.009	:
1,1-Dichloroethane	mg/kg-dry	T	<0.008	:	<0.006	:	<0.008	:	<0.014	:	<0.006	:	<0.009	:
1,1-Dichloroethene	mg/kg-dry	T	<0.008	:	<0.006	:	<0.008	:	<0.014	:	<0.006	:	<0.009	:
1,2,4-Trichlorobenzene	mg/kg-dry	T	<0.008	:	<0.006	:	<0.008	:	<0.014	:	<0.006	:	<0.009	:
1,2-Dibromo-3-chloropropane	mg/kg-dry	T	<0.008	:	<0.006	:	<0.008	:	<0.014	:	<0.006	:	<0.009	:
1,2-Dichlorobenzene	mg/kg-dry	T	<0.008	:	<0.006	:	<0.008	:	<0.014	:	<0.006	:	<0.009	:
1,2-Dichloroethane	mg/kg-dry	T	<0.008	:	<0.006	:	<0.008	:	<0.014	:	<0.006	:	<0.009	:
1,2-Dichloroethene (total)	mg/kg-dry	T	<0.008	:	<0.006	:	<0.008	:	<0.014	:	<0.006	:	<0.009	:
1,2-Dichloropropane	mg/kg-dry	T	<0.008	:	<0.006	:	<0.008	:	<0.014	:	<0.006	:	<0.009	:
1,3-Dichlorobenzene	mg/kg-dry	T	<0.008	:	<0.006	:	<0.008	:	<0.014	:	<0.006	:	<0.009	:
1,4-Dichlorobenzene	mg/kg-dry	T	<0.008	:	<0.006	:	<0.008	:	<0.014	:	<0.006	:	<0.009	:
2-Butanone	mg/kg-dry	T	<0.008	:	<0.006	:	<0.008	:	<0.014	:	<0.006	:	<0.009	:
2-Hexanone	mg/kg-dry	T	<0.008	:	<0.006	:	<0.008	:	<0.014	:	<0.006	:	<0.009	:
4-Methyl-2-pentanone	mg/kg-dry	T	<0.008	:	<0.006	:	<0.008	:	<0.014	:	<0.006	:	<0.009	:
Acetone	mg/kg-dry	T	0.002	J	0.002	J	<0.008	:	<0.014	:	<0.006	:	<0.009	:
Benzene	mg/kg-dry	T	<0.008	:	<0.006	:	<0.008	:	<0.014	:	<0.006	:	<0.009	:
Bromodichloromethane	mg/kg-dry	T	<0.008	:	<0.006	:	<0.008	:	<0.014	:	<0.006	:	<0.009	:
Bromoform	mg/kg-dry	T	<0.008	:	<0.006	:	<0.008	:	<0.014	:	<0.006	:	<0.009	:
Bromomethane	mg/kg-dry	T	<0.008	:	<0.006	:	<0.008	:	<0.014	:	<0.006	:	<0.009	J
Carbon disulfide	mg/kg-dry	T	<0.008	:	<0.006	:	<0.008	:	<0.014	:	<0.006	:	0.001	J

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Appendix A-7e
Soil - Biased 0-24 inches
Validated Analytical Results

Parameter	Units	Exposure Area Fraction	Site ID		Sample Date		Sample ID																	
			MSS2-17		10/23/2002		MSS2-17-T02N-SOL		MSS2-18		10/23/2002		MSS2-18-T02N-SOL		MSS2-19		10/23/2002		MSS2-19-T02N-SOL		MSS2-20		10/23/2002		MSS2-20-T02N-SOL	
			SS2						SS2						SS2						SS2					
Carbon tetrachloride	mg/kg-dry	T	<0.008	:					<0.006	:					<0.008	:					<0.014	:				
Chlorobenzene	mg/kg-dry	T	<0.008	:					<0.006	:					<0.008	:					<0.014	:				
Chloroethane	mg/kg-dry	T	<0.008	:					<0.006	:					<0.008	:					<0.014	:				
Chloroform	mg/kg-dry	T	<0.008	:					<0.006	:					<0.008	:					<0.014	:				
Chloromethane	mg/kg-dry	T	<0.008	:					<0.006	:					<0.008	:					<0.014	:				
cis-1,2-Dichloroethene	mg/kg-dry	T	<0.008	:					<0.006	:					<0.008	:					<0.014	:				
cis-1,3-Dichloropropene	mg/kg-dry	T	<0.008	:					<0.006	:					<0.008	:					<0.014	:				
Dibromochloromethane	mg/kg-dry	T	<0.008	:					<0.006	:					<0.008	:					<0.014	:				
Dichlorodifluoromethane	mg/kg-dry	T	<0.008	:					<0.006	:					<0.008	:					<0.014	:				
Ethylbenzene	mg/kg-dry	T	<0.008	:					<0.006	:					<0.008	:					<0.014	:				
Methylene chloride	mg/kg-dry	T	<0.008	:					<0.006	:					<0.008	:					<0.014	:				
Styrene	mg/kg-dry	T	<0.008	:					<0.006	:					<0.008	:					<0.014	:				
Tetrachloroethene	mg/kg-dry	T	<0.008	:					<0.006	:					<0.008	:					<0.014	:				
Toluene	mg/kg-dry	T	<0.008	:					<0.006	:					<0.008	:					<0.014	:				
Total Xylene	mg/kg-dry	T	<0.008	:					<0.006	:					<0.008	:					<0.014	:				
trans-1,2-Dichloroethene	mg/kg-dry	T	<0.008	:					<0.006	:					<0.008	:					<0.014	:				
trans-1,3-Dichloropropene	mg/kg-dry	T	<0.008	:					<0.006	:					<0.008	:					<0.014	:				
Trichloroethene	mg/kg-dry	T	<0.008	:					<0.006	:					<0.008	:					<0.014	:				
Trichlorofluoromethane	mg/kg-dry	T	<0.008	:					<0.006	:					<0.008	:					<0.014	:				
Vinyl chloride	mg/kg-dry	T	<0.008	:					<0.006	:					<0.008	:					<0.014	:				
Semi-Volatile Organics																										
1,1`-Biphenyl	mg/kg-dry	T	<0.36	:					<0.35	:					<0.35	:					<0.36	:				
2,4,5-Trichlorophenol	mg/kg-dry	T	<0.9	:					<0.89	:					<0.89	:					<0.91	:				
2,4,6-Trichlorophenol	mg/kg-dry	T	<0.36	:					<0.35	:					<0.35	:					<0.36	:				
2,4-Dichlorophenol	mg/kg-dry	T	<0.36	:					<0.35	:					<0.35	:					<0.36	:				
2,4-Dimethylphenol	mg/kg-dry	T	<0.36	:					<0.35	:					<0.35	:					<0.36	:				
2,4-Dinitrophenol	mg/kg-dry	T	<0.9	:					<0.89	:					<0.89	:					<0.91	J				
2,4-Dinitrotoluene	mg/kg-dry	T	<0.36	:					<0.35	:					<0.35	:					<0.36	:				
2,6-Dinitrotoluene	mg/kg-dry	T	<0.36	:					<0.35	:					<0.35	:					<0.36	:				
2-Chloronaphthalene	mg/kg-dry	T	<0.36	:					<0.35	:					<0.35	:					<0.36	:				
2-Chlorophenol	mg/kg-dry	T	<0.36	:					<0.35	:					<0.35	:					<0.36	:				
2-Methylnaphthalene	mg/kg-dry	T	<0.36	:					<0.35	:					<0.35	:					<0.36	:				
2-Methylphenol	mg/kg-dry	T	<0.36	:					<0.35	:					<0.35	:					<0.36	:				
2-Nitroaniline	mg/kg-dry	T	<0.9	:					<0.89	:					<0.89	:					<0.91	J				

Parameter	Units	Exposure Area Fraction	Site ID		Sample Date		Sample ID																	
			MSS2-21		10/23/2002		MSS2-21-T02N-SOL		MSS2-23		10/24/2002		MSS2-23-T02N-SOL											
			SS2						SS2															
Carbon tetrachloride	mg/kg-dry	T	<0.006	:					<0.009	:														
Chlorobenzene	mg/kg-dry	T	<0.006	:					<0.009	:														
Chloroethane	mg/kg-dry	T	<0.006	:					<0.009	:														
Chloroform	mg/kg-dry	T	<0.006	:					<0.009	:														
Chloromethane	mg/kg-dry	T	<0.006	:					<0.009	J														
cis-1,2-Dichloroethene	mg/kg-dry	T	<0.006	:					<0.009	:														
cis-1,3-Dichloropropene	mg/kg-dry	T	<0.006	:					<0.009	:														
Dibromochloromethane	mg/kg-dry	T	<0.006	:					<0.009	:														
Dichlorodifluoromethane	mg/kg-dry	T	<0.006	:					<0.009	J														
Ethylbenzene	mg/kg-dry	T	<0.006	:					<0.009	:														
Methylene chloride	mg/kg-dry	T	<0.006	:					<0.009	:														
Styrene	mg/kg-dry	T	<0.006	:					<0.009	:														
Tetrachloroethene	mg/kg-dry	T	<0.006	:					0.005	J														
Toluene	mg/kg-dry	T	<0.006	:					<0.009	:														
Total Xylene	mg/kg-dry	T	<0.006	:					0.006	J														
trans-1,2-Dichloroethene	mg/kg-dry	T	<0.006	:					<0.009	:														
trans-1,3-Dichloropropene	mg/kg-dry	T	<0.006	:					<0.009	:														
Trichloroethene	mg/kg-dry	T	<0.006	:					<0.009	:														
Trichlorofluoromethane	mg/kg-dry	T	<0.006	:					<0.009	:														
Vinyl chloride	mg/kg-dry	T	<0.006	:					<0.009	:														
Semi-Volatile Organics																								
1,1`-Biphenyl	mg/kg-dry	T	<0.35	:					<0.36	:														
2,4,5-Trichlorophenol	mg/kg-dry	T	<0.89	:					<0.9	:														
2,4,6-Trichlorophenol	mg/kg-dry	T	<0.35	:					<0.36	:														
2,4-Dichlorophenol	mg/kg-dry	T	<0.35	:					<0.36	:														
2,4-Dimethylphenol	mg/kg-dry	T	<0.35	:					<0.36	:														
2,4-Dinitrophenol	mg/kg-dry	T	<0.89	:					<0.9	J														
2,4-Dinitrotoluene	mg/kg-dry	T	<0.35	:					<0.36	:														
2,6-Dinitrotoluene	mg/kg-dry	T	<0.35	:					<0.36	:														
2-Chloronaphthalene	mg/kg-dry	T	<0.35	:					<0.36	:														
2-Chlorophenol	mg/kg-dry	T	<0.35	:					<0.36	:														
2-Methylnaphthalene	mg/kg-dry	T	<0.35	:					<0.36	:														
2-Methylphenol	mg/kg-dry	T	<0.35	:					<0.36	:														
2-Nitroaniline	mg/kg-dry	T	<0.89	:					<0.9	:														

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T = Total Fraction

Appendix A-7e
Soil - Biased 0-24 inches
Validated Analytical Results

Parameter	Units	Exposure Area Fraction	Site ID / Sample Date / Sample ID	MSS2-17 10/23/2002 MSS2-17-T02N-SOL SS2		MSS2-18 10/23/2002 MSS2-18-T02N-SOL SS2		MSS2-19 10/23/2002 MSS2-19-T02N-SOL SS2		MSS2-20 10/23/2002 MSS2-20-T02N-SOL SS2		MSS2-21 10/23/2002 MSS2-21-T02N-SOL SS2		MSS2-23 10/24/2002 MSS2-23-T02N-SOL SS2	
2-Nitrophenol	mg/kg-dry	T		<0.36	:	<0.35	:	<0.35	:	<0.36	J	<0.35	:	<0.36	:
3,3-Dichlorobenzidine	mg/kg-dry	T		<0.36	:	<0.35	:	<0.35	:	<0.36	:	<0.35	:	<0.36	:
3-Nitroaniline	mg/kg-dry	T		<0.9	:	<0.89	:	<0.89	:	<0.91	:	<0.89	:	<0.9	:
4,6-Dinitro-2-methylphenol	mg/kg-dry	T		<0.9	:	<0.89	:	<0.89	:	<0.91	:	<0.89	:	<0.9	J
4-Bromophenyl phenyl ether	mg/kg-dry	T		<0.36	:	<0.35	:	<0.35	:	<0.36	:	<0.35	:	<0.36	:
4-Chloro-3-methylphenol	mg/kg-dry	T		<0.36	:	<0.35	:	<0.35	:	<0.36	:	<0.35	:	<0.36	:
4-Chloroaniline	mg/kg-dry	T		<0.36	:	<0.35	:	<0.35	:	<0.36	:	<0.35	:	<0.36	:
4-Chlorophenyl phenyl ether	mg/kg-dry	T		<0.36	:	<0.35	:	<0.35	:	<0.36	:	<0.35	:	<0.36	:
4-Methylphenol	mg/kg-dry	T		<0.36	:	<0.35	:	<0.35	:	<0.36	:	<0.35	:	<0.36	:
4-Nitroaniline	mg/kg-dry	T		<0.9	:	<0.89	:	<0.89	:	<0.91	:	<0.89	:	<0.9	J
4-Nitrophenol	mg/kg-dry	T		<0.9	:	<0.89	:	<0.89	:	<0.91	:	<0.89	:	<0.9	J
Acenaphthene	mg/kg-dry	T		<0.36	:	<0.35	:	<0.35	:	<0.36	:	<0.35	:	<0.36	:
Acenaphthylene	mg/kg-dry	T		<0.36	:	<0.35	:	<0.35	:	<0.36	:	<0.35	:	<0.36	:
Anthracene	mg/kg-dry	T		<0.36	:	<0.35	:	<0.35	:	<0.36	:	<0.35	:	<0.36	:
Benzaldehyde	mg/kg-dry	T		0.082	J	0.1	J	<0.35	:	<0.38	:	<0.35	:	0.048	J
Benzo(a)anthracene	mg/kg-dry	T		<0.36	:	<0.35	:	<0.35	:	<0.36	:	<0.35	:	0.078	J
Benzo(a)pyrene	mg/kg-dry	T		<0.36	:	<0.35	:	<0.35	:	<0.36	:	<0.35	:	0.078	J
Benzo(b)fluoranthene	mg/kg-dry	T		<0.36	:	<0.35	:	<0.35	:	<0.36	:	<0.35	:	0.14	J
Benzo(g,h,i)perylene	mg/kg-dry	T		<0.36	:	<0.35	:	<0.35	:	<0.36	:	<0.35	:	0.029	J
Benzo(k)fluoranthene	mg/kg-dry	T		<0.36	:	<0.35	:	<0.35	:	<0.36	:	<0.35	:	0.14	J
Bis(2-chloroethoxy)methane	mg/kg-dry	T		<0.36	:	<0.35	:	<0.35	:	<0.36	:	<0.35	:	<0.36	:
Bis(2-chloroethyl)ether	mg/kg-dry	T		<0.36	:	<0.35	:	<0.35	:	<0.36	:	<0.35	:	<0.36	:
Bis(2-ethylhexyl)phthalate	mg/kg-dry	T		<0.36	:	0.025	J	<0.35	:	<0.36	:	<0.35	:	0.18	J
Butyl benzyl phthalate	mg/kg-dry	T		<0.36	:	<0.35	:	<0.35	:	<0.36	:	<0.35	:	<0.36	:
Carbazole	mg/kg-dry	T		<0.36	:	<0.35	:	<0.35	:	<0.36	:	<0.35	:	<0.36	:
Chrysene	mg/kg-dry	T		<0.36	:	<0.35	:	<0.35	:	<0.36	:	<0.35	:	0.12	J
Dibenz(a,h)anthracene	mg/kg-dry	T		<0.36	:	<0.35	:	<0.35	:	<0.36	:	<0.35	:	<0.36	:
Dibenzofuran	mg/kg-dry	T		<0.36	:	<0.35	:	<0.35	:	<0.36	:	<0.35	:	<0.36	:
Dichlorodiisopropyl ether	mg/kg-dry	T		<0.36	:	<0.35	:	<0.35	:	<0.36	:	<0.35	:	<0.36	J
Diethylphthalate	mg/kg-dry	T		<0.36	:	<0.35	:	<0.35	:	<0.36	:	<0.35	:	<0.36	:
Dimethylphthalate	mg/kg-dry	T		<0.36	:	<0.35	:	<0.35	:	<0.36	:	<0.35	:	<0.36	:
Di-n-Butyl phthalate	mg/kg-dry	T		<0.36	:	<0.35	:	<0.35	:	<0.36	:	<0.35	:	<0.36	:
Di-n-Octyl phthalate	mg/kg-dry	T		<0.36	:	<0.35	:	<0.35	:	<0.36	:	<0.35	:	<0.36	:
Fluoranthene	mg/kg-dry	T		<0.36	:	<0.35	:	<0.35	:	<0.36	:	<0.35	:	0.28	J

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T = Total Fraction

Appendix A-7e
Soil - Biased 0-24 inches
Validated Analytical Results

Parameter	Units	Site ID / Sample Date / Sample ID / Exposure Area / Fraction	MSS2-17 10/23/2002 MSS2-17-T02N-SOL SS2		MSS2-18 10/23/2002 MSS2-18-T02N-SOL SS2		MSS2-19 10/23/2002 MSS2-19-T02N-SOL SS2		MSS2-20 10/23/2002 MSS2-20-T02N-SOL SS2		MSS2-21 10/23/2002 MSS2-21-T02N-SOL SS2		MSS2-23 10/24/2002 MSS2-23-T02N-SOL SS2	
Fluorene	mg/kg-dry	T	<0.36	:	<0.35	:	<0.35	:	<0.36	:	<0.35	:	<0.36	:
Hexachlorobenzene	mg/kg-dry	T	<0.36	:	<0.35	:	<0.35	:	<0.36	:	<0.35	:	<0.36	:
Hexachlorobutadiene	mg/kg-dry	T	<0.36	:	<0.35	:	<0.35	:	<0.36	:	<0.35	:	<0.36	:
Hexachlorocyclopentadiene	mg/kg-dry	T	<0.36	:	<0.35	:	<0.35	:	<0.36	:	<0.35	:	<0.36	J
Hexachloroethane	mg/kg-dry	T	<0.36	:	<0.35	:	<0.35	:	<0.36	:	<0.35	:	<0.36	:
Indeno(1,2,3-cd)pyrene	mg/kg-dry	T	<0.36	:	<0.35	:	<0.35	:	<0.36	:	<0.35	:	0.032	J
Isophorone	mg/kg-dry	T	<0.36	:	<0.35	:	<0.35	:	<0.36	:	<0.35	:	<0.36	:
Naphthalene	mg/kg-dry	T	<0.36	:	<0.35	:	<0.35	:	<0.36	:	<0.35	:	<0.36	:
Nitrobenzene	mg/kg-dry	T	<0.36	:	<0.35	:	<0.35	:	<0.36	:	<0.35	:	<0.36	:
N-Nitrosodi-n-propylamine	mg/kg-dry	T	<0.36	:	<0.35	:	<0.35	:	<0.36	:	<0.35	:	<0.36	:
N-Nitrosodiphenylamine	mg/kg-dry	T	<0.36	:	<0.35	:	<0.35	:	<0.36	:	<0.35	:	<0.36	:
Pentachlorophenol	mg/kg-dry	T	<0.9	:	<0.89	:	<0.89	:	<0.91	:	<0.89	:	<0.9	:
Phenanthrene	mg/kg-dry	T	<0.36	:	<0.35	:	<0.35	:	<0.36	:	<0.35	:	0.039	J
Phenol	mg/kg-dry	T	<0.36	:	<0.35	:	<0.35	:	<0.36	:	<0.35	:	<0.36	J
Pyrene	mg/kg-dry	T	<0.36	:	<0.35	:	<0.35	:	<0.36	:	<0.35	:	0.22	J

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Appendix A-7e
Soil - Biased 0-24 inches
Validated Analytical Results

Parameter	Units	Exposure Area Fraction	Site ID	MSS2-24		MSS2-26		MSS2-26		MSS2-27		MSS2-28		MSS2-29	
			Sample Date	10/24/2002		10/24/2002		10/24/2002		10/24/2002		10/24/2002		10/23/2002	
			Sample ID	MSS2-24-T02N-SOL		MSS2-26-T02N-SOL RE		MSS2-26-T02N-SOL		MSS2-27-T02N-SOL		MSS2-28-T02N-SOL		MSS2-29-T02N-SOL	
			Exposure Area	SS2		SS2		SS2		SS2		SS2		SS2	
General Chemistry															
Ammonia	mg/kg-dry	T		14.	:	-		13.2	:	11.9	:	22.6	:	16.9	:
Chloride	mg/kg-dry	T		295.	J	-		62.	J	22.8	J	7.3	J	75.1	J
Fluoride	mg/kg-dry	T		2.5	J	-		3.	J	51.3	J	2.2	J	2.	J
Nitrate	mg/kg-dry	T		45.7	J	-		<2.3	J	<2.2	J	<2.4	J	3.7	J
Phosphorus	mg/kg-dry	T		946.	J	-		1160.	J	1320.	J	995.	J	1170.	J
Sulfate	mg/kg-dry	T		1820.	J	-		1930.	J	3070.	J	1940.	J	313.	J
Total Kjeldahl Nitrogen	mg/kg-dry	T		165.	J	-		119.	J	63.6	J	214.	J	69.4	J
Total Organic Carbon	mg/kg-dry	T		1810.	J	-		6290.	J	1030.	J	6550.	J	1380.	J
Laboratory Parameters															
pH	SU	T		7.2	:	-		7.3	:	4.5	:	7.4	:	7.5	:
Solids, Percent	%	T		93.8	:	-		90.2	:	91.2	:	86.5	:	91.6	:
Specific Conductance	umhos/cm	T		1440.	:	-		1290.	:	1270.	:	1110.	:	1240.	:
Geotechnical															
Organic Soils	%	T		1.81	J	-		3.	J	2.71	J	3.9	J	2.89	J
Physical Properties															
Cation-Exchange Capacity	meq/100g	T		8.2	:	-		14.6	:	16.8	:	16.3	:	22.6	:
Sodium Absorption Ratio	ratio	T		1.66	:	-		1.81	:	0.38	:	0.36	:	0.83	:
Metals															
Aluminum	mg/kg-dry	T		13200.	:	-		12900.	:	21200.	:	15000.	:	12400.	:
Antimony	mg/kg-dry	T		0.36	J	-		<0.3	J	<0.3	J	<0.32	J	<0.23	J
Arsenic	mg/kg-dry	T		3.2	:	-		2.9	:	2.3	:	3.3	:	3.3	:
Barium	mg/kg-dry	T		110.	:	-		242.	:	200.	:	259.	:	246.	:
Beryllium	mg/kg-dry	T		0.85	:	-		1.	:	1.1	:	1.	:	0.86	:
Boron	mg/kg-dry	T		<2.2	:	-		6.4	:	<2.7	:	<2.8	:	3.6	:
Cadmium	mg/kg-dry	T		1.8	:	-		1.5	:	0.44	:	0.97	:	0.2	J
Calcium	mg/kg-dry	T		11300.	:	-		16300.	:	8930.	:	18800.	:	6500.	:
Chromium	mg/kg-dry	T		43.2	:	-		43.4	:	39.3	:	42.2	:	36.	:
Cobalt	mg/kg-dry	T		11.2	:	-		11.2	:	13.3	:	10.2	:	7.	:
Copper	mg/kg-dry	T		194.	:	-		86.6	:	75.9	:	132.	:	99.2	:
Iron	mg/kg-dry	T		26300.	:	-		27200.	:	33500.	:	31800.	:	39900.	:
Lead	mg/kg-dry	T		81.7	:	-		100.	:	64.9	:	72.2	:	110.	:
Magnesium	mg/kg-dry	T		7490.	:	-		6630.	:	10500.	:	6740.	:	5520.	:
Manganese	mg/kg-dry	T		582.	J	-		654.	J	677.	J	586.	J	503.	J

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T = Total Fraction

Appendix A-7e
Soil - Biased 0-24 inches
Validated Analytical Results

Parameter	Units	Exposure Area Fraction	Site ID	MSS2-24	MSS2-26	MSS2-26	MSS2-27	MSS2-28	MSS2-29
			Sample Date	10/24/2002	10/24/2002	10/24/2002	10/24/2002	10/24/2002	10/23/2002
			Sample ID	MSS2-24-T02N-SOL	MSS2-26-T02N-SOL RE	MSS2-26-T02N-SOL	MSS2-27-T02N-SOL	MSS2-28-T02N-SOL	MSS2-29-T02N-SOL
			Exposure Area	SS2	SS2	SS2	SS2	SS2	SS2
Mercury	mg/kg-dry	T		0.02 :	-	<0.018 J	<0.017 J	<0.018 J	0.028 J
Molybdenum	mg/kg-dry	T		210. :	-	319. :	58.6 :	182. :	14.4 :
Nickel	mg/kg-dry	T		28.5 J	-	24.3 J	31.6 J	25.5 J	20.3 J
Potassium	mg/kg-dry	T		2720. J	-	3590. J	5380. J	3940. J	3630. J
Selenium	mg/kg-dry	T		<0.72 J	-	0.95 J	0.99 J	0.93 J	1.3 J
Silver	mg/kg-dry	T		2.1 :	-	0.43 :	0.25 :	0.71 :	0.77 :
Sodium	mg/kg-dry	T		348. :	-	455. :	<229. :	<292. :	382. :
Thallium	mg/kg-dry	T		0.15 :	-	0.25 :	0.39 :	0.29 :	0.36 :
Vanadium	mg/kg-dry	T		40.4 :	-	40.2 :	46.6 :	42.3 :	35.1 :
Zinc	mg/kg-dry	T		151. J	-	153. J	111. J	165. J	93.5 J
Volatile Organics									
1,1,1-Trichloroethane	mg/kg-dry	T		<0.008 :	-	<0.009 :	<0.012 :	0.0008 J	<0.01 :
1,1,2,2-Tetrachloroethane	mg/kg-dry	T		<0.008 :	-	<0.009 :	<0.012 :	<0.007 :	<0.01 :
1,1,2-Trichloro-1,2,2-trifluoroethane	mg/kg-dry	T		<0.008 :	-	<0.009 :	<0.012 :	<0.007 :	<0.01 :
1,1,2-Trichloroethane	mg/kg-dry	T		<0.008 :	-	<0.009 :	<0.012 :	<0.007 :	<0.01 :
1,1-Dichloroethane	mg/kg-dry	T		<0.008 :	-	<0.009 :	<0.012 :	<0.007 :	<0.01 :
1,1-Dichloroethene	mg/kg-dry	T		<0.008 :	-	<0.009 :	<0.012 :	<0.007 :	<0.01 :
1,2,4-Trichlorobenzene	mg/kg-dry	T		<0.008 :	-	<0.009 :	<0.012 :	<0.007 :	<0.01 :
1,2-Dibromo-3-chloropropane	mg/kg-dry	T		<0.008 :	-	<0.009 :	<0.012 :	<0.007 :	<0.01 :
1,2-Dichlorobenzene	mg/kg-dry	T		<0.008 :	-	<0.009 :	<0.012 :	<0.007 :	<0.01 :
1,2-Dichloroethane	mg/kg-dry	T		<0.008 :	-	<0.009 :	<0.012 :	<0.007 :	<0.01 :
1,2-Dichloroethene (total)	mg/kg-dry	T		<0.008 :	-	<0.009 :	<0.012 :	<0.007 :	<0.01 :
1,2-Dichloropropane	mg/kg-dry	T		<0.008 :	-	<0.009 :	<0.012 :	<0.007 :	<0.01 :
1,3-Dichlorobenzene	mg/kg-dry	T		<0.008 :	-	<0.009 :	<0.012 :	<0.007 :	<0.01 :
1,4-Dichlorobenzene	mg/kg-dry	T		<0.008 :	-	<0.009 :	<0.012 :	<0.007 :	<0.01 :
2-Butanone	mg/kg-dry	T		<0.008 :	-	<0.009 :	<0.012 :	<0.007 :	<0.01 :
2-Hexanone	mg/kg-dry	T		<0.008 :	-	<0.009 :	<0.012 :	<0.007 :	<0.01 :
4-Methyl-2-pentanone	mg/kg-dry	T		<0.008 :	-	<0.009 :	<0.012 :	<0.007 :	<0.01 :
Acetone	mg/kg-dry	T		<0.008 :	-	<0.009 :	<0.012 :	<0.007 :	<0.01 :
Benzene	mg/kg-dry	T		<0.008 :	-	<0.009 :	<0.012 :	<0.007 :	<0.01 :
Bromodichloromethane	mg/kg-dry	T		<0.008 :	-	<0.009 :	<0.012 :	<0.007 :	<0.01 :
Bromoform	mg/kg-dry	T		<0.008 :	-	<0.009 :	<0.012 :	<0.007 :	<0.01 :
Bromomethane	mg/kg-dry	T		<0.008 J	-	<0.009 J	<0.012 J	<0.007 J	<0.01 :
Carbon disulfide	mg/kg-dry	T		<0.008 :	-	<0.009 :	0.001 J	<0.007 :	<0.01 :

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Appendix A-7e
Soil - Biased 0-24 inches
Validated Analytical Results

Parameter	Units	Exposure Area Fraction	Site ID / Sample Date / Sample ID					
			MSS2-24 10/24/2002 MSS2-24-T02N-SOL	MSS2-26 10/24/2002 MSS2-26-T02N-SOL RE	MSS2-26 10/24/2002 MSS2-26-T02N-SOL	MSS2-27 10/24/2002 MSS2-27-T02N-SOL	MSS2-28 10/24/2002 MSS2-28-T02N-SOL	MSS2-29 10/23/2002 MSS2-29-T02N-SOL
			SS2	SS2	SS2	SS2	SS2	SS2
Carbon tetrachloride	mg/kg-dry	T	<0.008 :	-	<0.009 :	<0.012 :	<0.007 :	<0.01 :
Chlorobenzene	mg/kg-dry	T	<0.008 :	-	<0.009 :	<0.012 :	<0.007 :	<0.01 :
Chloroethane	mg/kg-dry	T	<0.008 :	-	<0.009 :	<0.012 :	<0.007 :	<0.01 :
Chloroform	mg/kg-dry	T	<0.008 :	-	<0.009 :	<0.012 :	<0.007 :	<0.01 :
Chloromethane	mg/kg-dry	T	<0.008 J	-	<0.009 J	<0.012 J	<0.007 J	<0.01 :
cis-1,2-Dichloroethene	mg/kg-dry	T	<0.008 :	-	<0.009 :	<0.012 :	<0.007 :	<0.01 :
cis-1,3-Dichloropropene	mg/kg-dry	T	<0.008 :	-	<0.009 :	<0.012 :	<0.007 :	<0.01 :
Dibromochloromethane	mg/kg-dry	T	<0.008 :	-	<0.009 :	<0.012 :	<0.007 :	<0.01 :
Dichlorodifluoromethane	mg/kg-dry	T	<0.008 J	-	<0.009 J	<0.012 J	<0.007 J	<0.01 :
Ethylbenzene	mg/kg-dry	T	<0.008 :	-	<0.009 :	<0.012 :	<0.007 :	<0.01 :
Methylene chloride	mg/kg-dry	T	<0.008 :	-	<0.009 :	<0.012 :	<0.007 :	<0.01 :
Styrene	mg/kg-dry	T	<0.008 :	-	<0.009 :	<0.012 :	<0.007 :	<0.01 :
Tetrachloroethene	mg/kg-dry	T	<0.008 :	-	<0.009 :	<0.012 :	0.001 J	<0.01 :
Toluene	mg/kg-dry	T	<0.008 :	-	<0.009 :	<0.012 :	<0.007 :	<0.01 :
Total Xylene	mg/kg-dry	T	0.011 :	-	0.002 J	<0.012 :	<0.007 :	0.001 J
trans-1,2-Dichloroethene	mg/kg-dry	T	<0.008 :	-	<0.009 :	<0.012 :	<0.007 :	<0.01 :
trans-1,3-Dichloropropene	mg/kg-dry	T	<0.008 :	-	<0.009 :	<0.012 :	<0.007 :	<0.01 :
Trichloroethene	mg/kg-dry	T	<0.008 :	-	<0.009 :	<0.012 :	<0.007 :	<0.01 :
Trichlorofluoromethane	mg/kg-dry	T	<0.008 :	-	<0.009 :	<0.012 :	<0.007 :	<0.01 :
Vinyl chloride	mg/kg-dry	T	<0.008 :	-	<0.009 :	<0.012 :	<0.007 :	<0.01 :
Semi-Volatile Organics								
1,1`-Biphenyl	mg/kg-dry	T	<0.35 :	<0.37 :	-	<0.36 :	<0.38 :	<0.36 :
2,4,5-Trichlorophenol	mg/kg-dry	T	<0.88 :	<0.92 :	-	<0.91 :	<0.96 :	<0.9 :
2,4,6-Trichlorophenol	mg/kg-dry	T	<0.35 :	<0.37 :	-	<0.36 :	<0.38 :	<0.36 :
2,4-Dichlorophenol	mg/kg-dry	T	<0.35 :	<0.37 :	-	<0.36 :	<0.38 :	<0.36 :
2,4-Dimethylphenol	mg/kg-dry	T	<0.35 :	<0.37 :	-	<0.36 :	<0.38 :	<0.36 :
2,4-Dinitrophenol	mg/kg-dry	T	<0.88 J	<0.92 J	-	<0.91 :	<0.96 J	<0.9 J
2,4-Dinitrotoluene	mg/kg-dry	T	<0.35 :	<0.37 :	-	<0.36 :	<0.38 :	<0.36 :
2,6-Dinitrotoluene	mg/kg-dry	T	<0.35 :	<0.37 :	-	<0.36 :	<0.38 :	<0.36 :
2-Chloronaphthalene	mg/kg-dry	T	<0.35 :	<0.37 :	-	<0.36 :	<0.38 :	<0.36 :
2-Chlorophenol	mg/kg-dry	T	<0.35 :	<0.37 :	-	<0.36 :	<0.38 :	<0.36 :
2-Methylnaphthalene	mg/kg-dry	T	<0.35 :	<0.37 :	-	<0.36 :	<0.38 :	<0.36 :
2-Methylphenol	mg/kg-dry	T	<0.35 :	<0.37 :	-	<0.36 :	<0.38 :	<0.36 :
2-Nitroaniline	mg/kg-dry	T	<0.88 :	<0.92 :	-	<0.91 :	<0.96 :	<0.9 :

J = Qualified as estimated during data validation
R = Qualified as rejected value from data validation and results are considered unusable for any purpose
T = Total Fraction

Appendix A-7e
Soil - Biased 0-24 inches
Validated Analytical Results

Parameter	Units	Fraction	Site ID	Sample Date	Sample ID	Exposure Area
			MSS2-24	10/24/2002	MSS2-24-T02N-SOL	SS2
			MSS2-26	10/24/2002	MSS2-26-T02N-SOL RE	SS2
			MSS2-26	10/24/2002	MSS2-26-T02N-SOL	SS2
			MSS2-27	10/24/2002	MSS2-27-T02N-SOL	SS2
			MSS2-28	10/24/2002	MSS2-28-T02N-SOL	SS2
			MSS2-29	10/23/2002	MSS2-29-T02N-SOL	SS2
2-Nitrophenol	mg/kg-dry	T	<0.35 :	<0.37 :	-	<0.36 :	<0.38 :	<0.36 :
3,3-Dichlorobenzidine	mg/kg-dry	T	<0.35 :	<0.37 :	-	<0.36 :	<0.38 :	<0.36 :
3-Nitroaniline	mg/kg-dry	T	<0.88 :	<0.92 :	-	<0.91 :	<0.96 :	<0.9 :
4,6-Dinitro-2-methylphenol	mg/kg-dry	T	<0.88 J	<0.92 :	-	<0.91 :	<0.96 :	<0.9 :
4-Bromophenyl phenyl ether	mg/kg-dry	T	<0.35 :	<0.37 :	-	<0.36 :	<0.38 :	<0.36 :
4-Chloro-3-methylphenol	mg/kg-dry	T	<0.35 :	<0.37 :	-	<0.36 :	<0.38 :	<0.36 :
4-Chloroaniline	mg/kg-dry	T	<0.35 :	<0.37 J	-	<0.36 :	<0.38 :	<0.36 :
4-Chlorophenyl phenyl ether	mg/kg-dry	T	<0.35 :	<0.37 :	-	<0.36 :	<0.38 :	<0.36 :
4-Methylphenol	mg/kg-dry	T	<0.35 :	<0.37 :	-	<0.36 :	<0.38 :	<0.36 :
4-Nitroaniline	mg/kg-dry	T	<0.88 J	<0.92 :	-	<0.91 :	<0.96 J	<0.9 J
4-Nitrophenol	mg/kg-dry	T	<0.88 J	<0.92 :	-	<0.91 :	<0.96 J	<0.9 J
Acenaphthene	mg/kg-dry	T	<0.35 :	<0.37 :	-	<0.36 :	<0.38 :	<0.36 :
Acenaphthylene	mg/kg-dry	T	<0.35 :	<0.37 :	-	<0.36 :	<0.38 :	<0.36 :
Anthracene	mg/kg-dry	T	<0.35 :	<0.37 :	-	<0.36 :	<0.38 :	<0.36 :
Benzaldehyde	mg/kg-dry	T	<0.35 J	<0.37 :	-	<0.36 :	<0.38 :	0.88 :
Benzo(a)anthracene	mg/kg-dry	T	<0.35 :	<0.37 :	-	<0.36 :	<0.38 :	<0.36 :
Benzo(a)pyrene	mg/kg-dry	T	<0.35 :	<0.37 :	-	<0.36 :	<0.38 :	<0.36 :
Benzo(b)fluoranthene	mg/kg-dry	T	<0.35 :	<0.37 :	-	<0.36 :	<0.38 :	<0.36 :
Benzo(g,h,i)perylene	mg/kg-dry	T	<0.35 :	<0.37 J	-	<0.36 :	<0.38 :	<0.36 :
Benzo(k)fluoranthene	mg/kg-dry	T	<0.35 :	<0.37 :	-	<0.36 :	<0.38 :	<0.36 :
Bis(2-chloroethoxy)methane	mg/kg-dry	T	<0.35 :	<0.37 :	-	<0.36 :	<0.38 :	<0.36 :
Bis(2-chloroethyl)ether	mg/kg-dry	T	<0.35 :	<0.37 :	-	<0.36 :	<0.38 :	<0.36 :
Bis(2-ethylhexyl)phthalate	mg/kg-dry	T	0.22 J	2. :	-	<0.36 :	0.43 :	<0.36 :
Butyl benzyl phthalate	mg/kg-dry	T	<0.35 :	<0.37 :	-	<0.36 :	<0.38 J	<0.36 :
Carbazole	mg/kg-dry	T	<0.35 :	<0.37 :	-	<0.36 :	<0.38 :	<0.36 :
Chrysene	mg/kg-dry	T	<0.35 :	<0.37 :	-	<0.36 :	<0.38 :	<0.36 :
Dibenz(a,h)anthracene	mg/kg-dry	T	<0.35 :	<0.37 :	-	<0.36 :	<0.38 :	<0.36 :
Dibenzofuran	mg/kg-dry	T	<0.35 :	<0.37 :	-	<0.36 :	<0.38 :	<0.36 :
Dichlorodiisopropyl ether	mg/kg-dry	T	<0.35 J	<0.37 J	-	<0.36 :	<0.38 :	<0.36 :
Diethylphthalate	mg/kg-dry	T	<0.35 :	<0.37 :	-	<0.36 :	<0.38 :	<0.36 :
Dimethylphthalate	mg/kg-dry	T	<0.35 :	<0.37 :	-	<0.36 :	<0.38 :	<0.36 :
Di-n-Butyl phthalate	mg/kg-dry	T	<0.35 :	<0.37 :	-	<0.36 :	0.087 J	<0.36 :
Di-n-Octyl phthalate	mg/kg-dry	T	0.081 J	<0.37 :	-	<0.36 :	<0.38 :	<0.36 :
Fluoranthene	mg/kg-dry	T	<0.35 :	<0.37 :	-	<0.36 :	0.026 J	<0.36 :

J = Qualified as estimated during data validation
R = Qualified as rejected value from data validation and results are considered unusable for any purpose
T = Total Fraction

Appendix A-7e
Soil - Biased 0-24 inches
Validated Analytical Results

Parameter	Units	Site ID / Sample Date / Sample ID / Exposure Area / Fraction	MSS2-24 10/24/2002 MSS2-24-T02N-SOL SS2	MSS2-26 10/24/2002 MSS2-26-T02N-SOL RE SS2	MSS2-26 10/24/2002 MSS2-26-T02N-SOL SS2	MSS2-27 10/24/2002 MSS2-27-T02N-SOL SS2	MSS2-28 10/24/2002 MSS2-28-T02N-SOL SS2	MSS2-29 10/23/2002 MSS2-29-T02N-SOL SS2
Fluorene	mg/kg-dry	T	<0.35 :	<0.37 :	-	<0.36 :	<0.38 :	<0.36 :
Hexachlorobenzene	mg/kg-dry	T	<0.35 :	<0.37 :	-	<0.36 :	<0.38 :	<0.36 :
Hexachlorobutadiene	mg/kg-dry	T	<0.35 :	<0.37 :	-	<0.36 :	<0.38 :	<0.36 :
Hexachlorocyclopentadiene	mg/kg-dry	T	<0.35 J	<0.37 :	-	<0.36 :	<0.38 :	<0.36 :
Hexachloroethane	mg/kg-dry	T	<0.35 :	<0.37 :	-	<0.36 :	<0.38 :	<0.36 :
Indeno(1,2,3-cd)pyrene	mg/kg-dry	T	<0.35 :	<0.37 :	-	<0.36 :	<0.38 :	<0.36 :
Isophorone	mg/kg-dry	T	<0.35 :	<0.37 :	-	<0.36 :	<0.38 :	<0.36 :
Naphthalene	mg/kg-dry	T	<0.35 :	<0.37 :	-	<0.36 :	<0.38 :	<0.36 :
Nitrobenzene	mg/kg-dry	T	<0.35 :	<0.37 :	-	<0.36 :	<0.38 :	<0.36 :
N-Nitrosodi-n-propylamine	mg/kg-dry	T	<0.35 :	<0.37 J	-	<0.36 J	<0.38 :	<0.36 :
N-Nitrosodiphenylamine	mg/kg-dry	T	<0.35 :	<0.37 :	-	<0.36 :	<0.38 :	<0.36 :
Pentachlorophenol	mg/kg-dry	T	<0.88 :	<0.92 :	-	<0.91 :	<0.96 :	<0.9 :
Phenanthrene	mg/kg-dry	T	<0.35 :	<0.37 :	-	<0.36 :	<0.38 :	<0.36 :
Phenol	mg/kg-dry	T	<0.35 J	<0.37 :	-	<0.36 :	<0.38 :	<0.36 :
Pyrene	mg/kg-dry	T	0.018 J	0.095 J	-	<0.36 :	0.029 J	<0.36 :

J = Qualified as estimated during data validation
R = Qualified as rejected value from data validation and results are considered unusable for any purpose
T = Total Fraction

Appendix A-7e
Soil - Biased 0-24 inches
Validated Analytical Results

Parameter	Units	Exposure Area Fraction	Site ID / Sample Date / Sample ID											
			MSS2-30 10/23/2002 MSS2-30-T02N-SOL		MSS2-32 10/23/2002 MSS2-32-T02N-SOL		MSS2-34 10/24/2002 MSS2-34-T02N-SOL		MSS2-35 10/23/2002 MSS2-35-T02N-SOL		MSS2-36 10/23/2002 MSS2-36-T02N-SOL		MSS2-37 10/23/2002 MSS2-37-T02N-SOL	
			SS2		SS2		SS2		SS2		SS2		SS2	
General Chemistry														
Ammonia	mg/kg-dry	T	13.	J	12.6	:	22.2	:	15.9	:	31.4	:	13.7	J
Chloride	mg/kg-dry	T	515.	J	198.	J	22.3	J	187.	J	<27.5	:	804.	J
Fluoride	mg/kg-dry	T	2.	J	2.4	J	1.4	J	4.1	J	6.4	J	1.5	J
Nitrate	mg/kg-dry	T	<2.2	J	7.2	J	3.4	J	7.5	J	3.5	J	7.3	J
Phosphorus	mg/kg-dry	T	925.	J	825.	J	468.	J	494.	J	1190.	J	925.	J
Sulfate	mg/kg-dry	T	<109.	J	1340.	J	1320.	J	11200.	J	9290.	J	3610.	J
Total Kjeldahl Nitrogen	mg/kg-dry	T	140.	J	82.1	:	102.	J	70.6	:	99.4	:	79.5	J
Total Organic Carbon	mg/kg-dry	T	7930.	J	796.	J	2050.	J	810.	J	1140.	J	714.	J
Laboratory Parameters														
pH	SU	T	6.8	:	6.8	:	6.4	:	7.1	:	7.2	:	7.1	:
Solids, Percent	%	T	91.7	:	86.5	:	90.9	:	87.2	:	91.	:	91.	:
Specific Conductance	umhos/cm	T	1440.	:	909.	:	947.	:	1770.	:	1240.	:	1610.	:
Geotechnical														
Organic Soils	%	T	2.61	J	2.55	J	3.14	J	3.01	J	1.84	J	2.31	J
Physical Properties														
Cation-Exchange Capacity	meq/100g	T	17.	:	15.	:	15.4	:	18.8	:	18.	:	21.	:
Sodium Absorption Ratio	ratio	T	13.69	:	1.55	:	0.25	:	1.2	:	0.78	:	0.92	:
Metals														
Aluminum	mg/kg-dry	T	12100.	:	9930.	:	12500.	:	15900.	:	15100.	:	14800.	:
Antimony	mg/kg-dry	T	<0.26	J	<0.28	J	<0.31	J	<0.26	J	<0.25	J	<0.25	J
Arsenic	mg/kg-dry	T	3.3	:	3.5	:	3.	:	3.6	:	3.7	:	3.6	:
Barium	mg/kg-dry	T	158.	:	170.	:	261.	:	240.	:	171.	:	203.	:
Beryllium	mg/kg-dry	T	0.8	:	0.91	:	0.88	:	1.2	:	1.2	:	1.1	:
Boron	mg/kg-dry	T	<0.4	J	<0.25	J	<2.7	:	<0.23	J	<0.24	J	<0.21	J
Cadmium	mg/kg-dry	T	0.62	:	0.52	:	0.28	:	0.55	:	0.89	:	0.69	:
Calcium	mg/kg-dry	T	17200.	:	13900.	:	5190.	:	25200.	:	13600.	:	11400.	:
Chromium	mg/kg-dry	T	43.2	:	21.6	:	33.1	:	40.4	:	43.2	:	38.1	:
Cobalt	mg/kg-dry	T	7.3	:	6.2	:	10.5	:	14.9	:	13.8	:	12.4	:
Copper	mg/kg-dry	T	62.4	:	63.7	:	102.	:	80.8	:	99.6	:	87.4	:
Iron	mg/kg-dry	T	26800.	:	25700.	:	36700.	:	31300.	:	25800.	:	31600.	:
Lead	mg/kg-dry	T	98.4	:	71.7	:	74.4	:	66.6	:	100.	:	79.7	:
Magnesium	mg/kg-dry	T	7710.	:	4110.	:	5820.	:	8240.	:	8880.	:	8260.	:
Manganese	mg/kg-dry	T	588.	J	506.	J	537.	J	770.	J	797.	J	661.	J

J = Qualified as estimated during data validation

R = Qualified as rejected value from data validation and results are considered unusable for any purpose

T = Total Fraction

Appendix A-7e
Soil - Biased 0-24 inches
Validated Analytical Results

Parameter	Units	Exposure Area Fraction	Site ID	MSS2-30		MSS2-32		MSS2-34		MSS2-35		MSS2-36		MSS2-37	
			Sample Date	10/23/2002		10/23/2002		10/24/2002		10/23/2002		10/23/2002		10/23/2002	
			Sample ID	MSS2-30-T02N-SOL		MSS2-32-T02N-SOL		MSS2-34-T02N-SOL		MSS2-35-T02N-SOL		MSS2-36-T02N-SOL		MSS2-37-T02N-SOL	
			Exposure Area	SS2		SS2		SS2		SS2		SS2		SS2	
Mercury	mg/kg-dry	T		<0.017	:	<0.017	:	<0.018	J	<0.018	:	<0.017	:	<0.018	:
Molybdenum	mg/kg-dry	T		46.1	:	14.	:	18.6	:	27.	:	173.	:	43.6	:
Nickel	mg/kg-dry	T		24.4	J	14.9	J	23.8	J	34.5	J	35.6	J	30.1	J
Potassium	mg/kg-dry	T		3210.	J	2780.	J	3660.	J	4080.	J	4180.	J	4010.	J
Selenium	mg/kg-dry	T		1.3	J	1.4	J	1.2	J	1.4	J	1.1	J	0.8	J
Silver	mg/kg-dry	T		0.55	:	0.62	:	0.58	:	0.64	:	0.79	:	0.83	:
Sodium	mg/kg-dry	T		<1280.	:	<300.	:	<301.	:	<360.	:	<254.	:	<254.	:
Thallium	mg/kg-dry	T		0.2	:	0.24	:	0.29	:	0.32	:	0.3	:	0.31	:
Vanadium	mg/kg-dry	T		40.1	:	26.	:	36.3	:	42.1	:	43.9	:	42.3	:
Zinc	mg/kg-dry	T		131.	J	108.	J	87.9	J	105.	J	137.	J	121.	J
Volatile Organics															
1,1,1-Trichloroethane	mg/kg-dry	T		<0.011	:	<0.004	:	<0.006	:	<0.008	:	<0.005	:	<0.011	:
1,1,2,2-Tetrachloroethane	mg/kg-dry	T		<0.011	:	<0.004	:	<0.006	:	<0.008	:	<0.005	:	<0.011	:
1,1,2-Trichloro-1,2,2-trifluoroethane	mg/kg-dry	T		<0.011	:	<0.004	:	<0.006	:	<0.008	:	<0.005	:	<0.011	:
1,1,2-Trichloroethane	mg/kg-dry	T		<0.011	:	<0.004	:	<0.006	:	<0.008	:	<0.005	:	<0.011	:
1,1-Dichloroethane	mg/kg-dry	T		<0.011	:	<0.004	:	<0.006	:	<0.008	:	<0.005	:	<0.011	:
1,1-Dichloroethene	mg/kg-dry	T		<0.011	:	<0.004	:	<0.006	:	<0.008	:	<0.005	:	<0.011	:
1,2,4-Trichlorobenzene	mg/kg-dry	T		<0.011	:	<0.004	:	<0.006	:	<0.008	:	<0.005	:	<0.011	:
1,2-Dibromo-3-chloropropane	mg/kg-dry	T		<0.011	:	<0.004	:	<0.006	:	<0.008	:	<0.005	:	<0.011	:
1,2-Dichlorobenzene	mg/kg-dry	T		<0.011	:	<0.004	:	<0.006	:	<0.008	:	<0.005	:	<0.011	:
1,2-Dichloroethane	mg/kg-dry	T		<0.011	:	<0.004	:	<0.006	:	<0.008	:	<0.005	:	<0.011	:
1,2-Dichloroethene (total)	mg/kg-dry	T		<0.011	:	<0.004	:	<0.006	:	<0.008	:	<0.005	:	<0.011	:
1,2-Dichloropropane	mg/kg-dry	T		<0.011	:	<0.004	:	<0.006	:	<0.008	:	<0.005	:	<0.011	:
1,3-Dichlorobenzene	mg/kg-dry	T		<0.011	:	<0.004	:	<0.006	:	<0.008	:	<0.005	:	<0.011	:
1,4-Dichlorobenzene	mg/kg-dry	T		<0.011	:	<0.004	:	<0.006	:	<0.008	:	<0.005	:	<0.011	:
2-Butanone	mg/kg-dry	T		<0.011	:	<0.004	:	<0.006	:	<0.008	:	<0.005	:	<0.011	:
2-Hexanone	mg/kg-dry	T		<0.011	:	<0.004	:	<0.006	:	<0.008	:	<0.005	:	<0.011	:
4-Methyl-2-pentanone	mg/kg-dry	T		<0.011	:	<0.004	:	<0.006	:	<0.008	:	<0.005	:	<0.011	:
Acetone	mg/kg-dry	T		<0.011	:	0.0008	J	<0.006	:	0.002	J	0.001	J	0.005	J
Benzene	mg/kg-dry	T		<0.011	:	<0.004	:	<0.006	:	<0.008	:	<0.005	:	<0.011	:
Bromodichloromethane	mg/kg-dry	T		<0.011	:	<0.004	:	<0.006	:	<0.008	:	<0.005	:	<0.011	:
Bromoform	mg/kg-dry	T		<0.011	:	<0.004	:	<0.006	:	<0.008	:	<0.005	:	<0.011	:
Bromomethane	mg/kg-dry	T		<0.011	:	<0.004	:	<0.006	J	<0.008	:	<0.005	:	<0.011	:
Carbon disulfide	mg/kg-dry	T		<0.011	:	<0.004	:	<0.006	:	<0.008	:	<0.005	:	<0.011	:

J = Qualified as estimated during data validation
R = Qualified as rejected value from data validation and results are considered unusable for any purpose
T = Total Fraction

Appendix A-7e
Soil - Biased 0-24 inches
Validated Analytical Results

Parameter	Units	Exposure Area Fraction	Site ID	Sample Date	Sample ID	Exposure Area
			MSS2-30	10/23/2002	MSS2-30-T02N-SOL	SS2
			MSS2-32	10/23/2002	MSS2-32-T02N-SOL	SS2
			MSS2-34	10/24/2002	MSS2-34-T02N-SOL	SS2
			MSS2-35	10/23/2002	MSS2-35-T02N-SOL	SS2
			MSS2-36	10/23/2002	MSS2-36-T02N-SOL	SS2
			MSS2-37	10/23/2002	MSS2-37-T02N-SOL	SS2
Carbon tetrachloride	mg/kg-dry	T	<0.011 :	<0.004 :	<0.006 :	<0.008 :	<0.005 :	<0.011 :
Chlorobenzene	mg/kg-dry	T	<0.011 :	<0.004 :	<0.006 :	<0.008 :	<0.005 :	<0.011 :
Chloroethane	mg/kg-dry	T	<0.011 :	<0.004 :	<0.006 :	<0.008 :	<0.005 :	<0.011 :
Chloroform	mg/kg-dry	T	<0.011 :	<0.004 :	<0.006 :	<0.008 :	<0.005 :	<0.011 :
Chloromethane	mg/kg-dry	T	<0.011 :	<0.004 :	<0.006 J	<0.008 :	<0.005 :	<0.011 :
cis-1,2-Dichloroethene	mg/kg-dry	T	<0.011 :	<0.004 :	<0.006 :	<0.008 :	<0.005 :	<0.011 :
cis-1,3-Dichloropropene	mg/kg-dry	T	<0.011 :	<0.004 :	<0.006 :	<0.008 :	<0.005 :	<0.011 :
Dibromochloromethane	mg/kg-dry	T	<0.011 :	<0.004 :	<0.006 :	<0.008 :	<0.005 :	<0.011 :
Dichlorodifluoromethane	mg/kg-dry	T	<0.011 :	<0.004 :	<0.006 J	<0.008 :	<0.005 :	<0.011 :
Ethylbenzene	mg/kg-dry	T	<0.011 :	<0.004 :	<0.006 :	<0.008 :	<0.005 :	<0.011 :
Methylene chloride	mg/kg-dry	T	<0.011 :	<0.004 :	<0.006 :	<0.008 :	<0.005 :	<0.011 :
Styrene	mg/kg-dry	T	<0.011 :	<0.004 :	<0.006 :	<0.008 :	<0.005 :	<0.011 :
Tetrachloroethene	mg/kg-dry	T	<0.011 :	<0.004 :	<0.006 :	<0.008 :	<0.005 :	<0.011 :
Toluene	mg/kg-dry	T	<0.011 :	<0.004 :	<0.006 :	<0.008 :	<0.005 :	<0.011 :
Total Xylene	mg/kg-dry	T	<0.011 :	0.0004 J	<0.006 :	0.001 J	<0.005 :	0.003 J
trans-1,2-Dichloroethene	mg/kg-dry	T	<0.011 :	<0.004 :	<0.006 :	<0.008 :	<0.005 :	<0.011 :
trans-1,3-Dichloropropene	mg/kg-dry	T	<0.011 :	<0.004 :	<0.006 :	<0.008 :	<0.005 :	<0.011 :
Trichloroethene	mg/kg-dry	T	<0.011 :	<0.004 :	<0.006 :	<0.008 :	<0.005 :	<0.011 :
Trichlorofluoromethane	mg/kg-dry	T	<0.011 :	<0.004 :	<0.006 :	<0.008 :	<0.005 :	<0.011 :
Vinyl chloride	mg/kg-dry	T	<0.011 :	<0.004 :	<0.006 :	<0.008 :	<0.005 :	<0.011 :
Semi-Volatile Organics								
1,1`-Biphenyl	mg/kg-dry	T	<0.72 :	<0.38 :	<0.36 :	<0.38 :	<0.36 :	<0.36 :
2,4,5-Trichlorophenol	mg/kg-dry	T	<1.8 :	<0.96 :	<0.91 :	<0.95 :	<0.91 :	<0.91 :
2,4,6-Trichlorophenol	mg/kg-dry	T	<0.72 :	<0.38 :	<0.36 :	<0.38 :	<0.36 :	<0.36 :
2,4-Dichlorophenol	mg/kg-dry	T	<0.72 :	<0.38 :	<0.36 :	<0.38 :	<0.36 :	<0.36 :
2,4-Dimethylphenol	mg/kg-dry	T	<0.72 :	<0.38 :	<0.36 :	<0.38 :	<0.36 :	<0.36 :
2,4-Dinitrophenol	mg/kg-dry	T	<1.8 :	<0.96 :	<0.91 :	<0.95 :	<0.91 :	<0.91 :
2,4-Dinitrotoluene	mg/kg-dry	T	<0.72 :	<0.38 :	<0.36 :	<0.38 :	<0.36 :	<0.36 :
2,6-Dinitrotoluene	mg/kg-dry	T	<0.72 :	<0.38 :	<0.36 :	<0.38 :	<0.36 :	<0.36 :
2-Chloronaphthalene	mg/kg-dry	T	<0.72 :	<0.38 :	<0.36 :	<0.38 :	<0.36 :	<0.36 :
2-Chlorophenol	mg/kg-dry	T	<0.72 :	<0.38 :	<0.36 :	<0.38 :	<0.36 :	<0.36 :
2-Methylnaphthalene	mg/kg-dry	T	<0.72 :	<0.38 :	<0.36 :	<0.38 :	<0.36 :	<0.36 :
2-Methylphenol	mg/kg-dry	T	<0.72 :	<0.38 :	<0.36 :	<0.38 :	<0.36 :	<0.36 :
2-Nitroaniline	mg/kg-dry	T	<1.8 :	<0.96 :	<0.91 :	<0.95 :	<0.91 :	<0.91 :

J = Qualified as estimated during data validation
R = Qualified as rejected value from data validation and results are considered unusable for any purpose
T = Total Fraction

Appendix A-7e
Soil - Biased 0-24 inches
Validated Analytical Results

Site ID / Sample Date / Sample ID / Exposure Area			MSS2-30	MSS2-32	MSS2-34	MSS2-35	MSS2-36	MSS2-37
Sample Date			10/23/2002	10/23/2002	10/24/2002	10/23/2002	10/23/2002	10/23/2002
Sample ID			MSS2-30-T02N-SOL	MSS2-32-T02N-SOL	MSS2-34-T02N-SOL	MSS2-35-T02N-SOL	MSS2-36-T02N-SOL	MSS2-37-T02N-SOL
Exposure Area			SS2	SS2	SS2	SS2	SS2	SS2
Parameter	**Units**	**Fraction**						
2-Nitrophenol	mg/kg-dry	T	<0.72 :	<0.38 :	<0.36 :	<0.38 :	<0.36 :	<0.36 :
3,3-Dichlorobenzidine	mg/kg-dry	T	<0.72 :	<0.38 :	<0.36 :	<0.38 :	<0.36 :	<0.36 :
3-Nitroaniline	mg/kg-dry	T	<1.8 :	<0.96 :	<0.91 :	<0.95 :	<0.91 :	<0.91 :
4,6-Dinitro-2-methylphenol	mg/kg-dry	T	<1.8 :	<0.96 :	<0.91 :	<0.95 :	<0.91 :	<0.91 :
4-Bromophenyl phenyl ether	mg/kg-dry	T	<0.72 :	<0.38 :	<0.36 :	<0.38 :	<0.36 :	<0.36 :
4-Chloro-3-methylphenol	mg/kg-dry	T	<0.72 :	<0.38 :	<0.36 :	<0.38 :	<0.36 :	<0.36 :
4-Chloroaniline	mg/kg-dry	T	<0.72 :	<0.38 :	<0.36 :	<0.38 :	<0.36 :	<0.36 :
4-Chlorophenyl phenyl ether	mg/kg-dry	T	<0.72 :	<0.38 :	<0.36 :	<0.38 :	<0.36 :	<0.36 :
4-Methylphenol	mg/kg-dry	T	<0.72 :	<0.38 :	<0.36 :	<0.38 :	<0.36 :	<0.36 :
4-Nitroaniline	mg/kg-dry	T	<1.8 :	<0.96 :	<0.91 :	<0.95 :	<0.91 :	<0.91 :
4-Nitrophenol	mg/kg-dry	T	<1.8 :	<0.96 :	<0.91 :	<0.95 :	<0.91 :	<0.91 :
Acenaphthene	mg/kg-dry	T	<0.72 :	<0.38 :	<0.36 :	<0.38 :	<0.36 :	<0.36 :
Acenaphthylene	mg/kg-dry	T	<0.72 :	<0.38 :	<0.36 :	<0.38 :	<0.36 :	<0.36 :
Anthracene	mg/kg-dry	T	<0.72 :	<0.38 :	<0.36 :	<0.38 :	<0.36 :	<0.36 :
Benzaldehyde	mg/kg-dry	T	<0.72 :	<0.38 :	<0.36 :	<0.38 :	<0.36 :	<0.36 :
Benzo(a)anthracene	mg/kg-dry	T	<0.72 :	<0.38 :	<0.36 :	<0.38 :	<0.36 :	<0.36 :
Benzo(a)pyrene	mg/kg-dry	T	<0.72 :	<0.38 :	<0.36 :	<0.38 :	<0.36 :	<0.36 :
Benzo(b)fluoranthene	mg/kg-dry	T	<0.72 :	<0.38 :	<0.36 :	<0.38 :	<0.36 :	<0.36 :
Benzo(g,h,i)perylene	mg/kg-dry	T	<0.72 :	<0.38 :	<0.36 :	<0.38 :	<0.36 :	<0.36 :
Benzo(k)fluoranthene	mg/kg-dry	T	<0.72 :	<0.38 :	<0.36 :	<0.38 :	<0.36 :	<0.36 :
Bis(2-chloroethoxy)methane	mg/kg-dry	T	<0.72 :	<0.38 :	<0.36 :	<0.38 :	<0.36 :	<0.36 :
Bis(2-chloroethyl)ether	mg/kg-dry	T	<0.72 :	<0.38 :	<0.36 :	<0.38 :	<0.36 :	<0.36 :
Bis(2-ethylhexyl)phthalate	mg/kg-dry	T	0.15 J	<0.38 :	0.026 J	0.027 J	0.022 J	0.017 J
Butyl benzyl phthalate	mg/kg-dry	T	<0.72 :	<0.38 :	<0.36 :	<0.38 :	<0.36 :	<0.36 :
Carbazole	mg/kg-dry	T	<0.72 :	<0.38 :	<0.36 :	<0.38 :	<0.36 :	<0.36 :
Chrysene	mg/kg-dry	T	0.074 J	<0.38 :	<0.36 :	<0.38 :	<0.36 :	<0.36 :
Dibenz(a,h)anthracene	mg/kg-dry	T	<0.72 :	<0.38 :	<0.36 :	<0.38 :	<0.36 :	<0.36 :
Dibenzofuran	mg/kg-dry	T	<0.72 :	<0.38 :	<0.36 :	<0.38 :	<0.36 :	<0.36 :
Dichlorodiisopropyl ether	mg/kg-dry	T	<0.72 :	<0.38 :	<0.36 :	<0.38 :	<0.36 :	<0.36 :
Diethylphthalate	mg/kg-dry	T	<0.72 :	<0.38 :	<0.36 :	<0.38 :	<0.36 :	<0.36 :
Dimethylphthalate	mg/kg-dry	T	<0.72 :	<0.38 :	<0.36 :	<0.38 :	<0.36 :	<0.36 :
Di-n-Butyl phthalate	mg/kg-dry	T	<0.72 :	<0.38 :	<0.36 :	<0.38 :	<0.36 :	<0.36 :
Di-n-Octyl phthalate	mg/kg-dry	T	<0.72 :	<0.38 :	<0.36 :	<0.38 :	<0.36 :	<0.36 :
Fluoranthene	mg/kg-dry	T	<0.72 :	<0.38 :	<0.36 :	<0.38 :	<0.36 :	<0.36 :

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T = Total Fraction

Appendix A-7e
Soil - Biased 0-24 inches
Validated Analytical Results

Parameter	Units	Fraction	Site ID / Sample Date / Sample ID / Exposure Area		MSS2-30 10/23/2002 MSS2-30-T02N-SOL SS2		MSS2-32 10/23/2002 MSS2-32-T02N-SOL SS2		MSS2-34 10/24/2002 MSS2-34-T02N-SOL SS2		MSS2-35 10/23/2002 MSS2-35-T02N-SOL SS2		MSS2-36 10/23/2002 MSS2-36-T02N-SOL SS2		MSS2-37 10/23/2002 MSS2-37-T02N-SOL SS2	
Fluorene	mg/kg-dry	T		<0.72	:	<0.38	:	<0.36	:	<0.38	:	<0.36	:	<0.36	:
Hexachlorobenzene	mg/kg-dry	T		<0.72	:	<0.38	:	<0.36	:	<0.38	:	<0.36	:	<0.36	:
Hexachlorobutadiene	mg/kg-dry	T		<0.72	:	<0.38	:	<0.36	:	<0.38	:	<0.36	:	<0.36	:
Hexachlorocyclopentadiene	mg/kg-dry	T		<0.72	:	<0.38	:	<0.36	:	<0.38	:	<0.36	:	<0.36	:
Hexachloroethane	mg/kg-dry	T		<0.72	:	<0.38	:	<0.36	:	<0.38	:	<0.36	:	<0.36	:
Indeno(1,2,3-cd)pyrene	mg/kg-dry	T		<0.72	:	<0.38	:	<0.36	:	<0.38	:	<0.36	:	<0.36	:
Isophorone	mg/kg-dry	T		<0.72	:	<0.38	:	<0.36	:	<0.38	:	<0.36	:	<0.36	:
Naphthalene	mg/kg-dry	T		<0.72	:	<0.38	:	<0.36	:	<0.38	:	<0.36	:	<0.36	:
Nitrobenzene	mg/kg-dry	T		<0.72	:	<0.38	:	<0.36	:	<0.38	:	<0.36	:	<0.36	:
N-Nitrosodi-n-propylamine	mg/kg-dry	T		<0.72	:	<0.38	:	<0.36	J	<0.38	:	<0.36	:	<0.36	:
N-Nitrosodiphenylamine	mg/kg-dry	T		<0.72	:	<0.38	:	<0.36	:	<0.38	:	<0.36	:	<0.36	:
Pentachlorophenol	mg/kg-dry	T		<1.8	:	<0.96	:	<0.91	:	<0.95	:	<0.91	:	<0.91	:
Phenanthrene	mg/kg-dry	T		0.033	J	<0.38	:	<0.36	:	<0.38	:	<0.36	:	<0.36	:
Phenol	mg/kg-dry	T		<0.72	:	<0.38	:	<0.36	:	<0.38	:	<0.36	:	<0.36	:
Pyrene	mg/kg-dry	T		0.49	J	<0.38	:	<0.36	:	<0.38	:	<0.36	:	<0.36	:

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T = Total Fraction

Appendix A-7e
Soil - Biased 0-24 inches
Validated Analytical Results

Parameter	Units	Exposure Area Fraction	Site ID	MSS2-39		MSS2-40		MSS2-41		MSS2-43		MSS2-44		MSS2-45	
			Sample Date	10/24/2002		10/24/2002		10/24/2002		10/23/2002		10/23/2002		10/27/2002	
			Sample ID	MSS2-39-T02N-SOL		MSS2-40-T02N-SOL		MSS2-41-T02N-SOL		MSS2-43-T02N-SOL		MSS2-44-T02N-SOL		MSS2-45-T02N-SOL	
			Exposure Area	SS2		SS2		SS2		SS2		SS2		SS2	
General Chemistry															
Ammonia	mg/kg-dry	T		32.6	:	18.6	J	17.5	:	17.2	:	21.8	:	16.1	J
Chloride	mg/kg-dry	T		14.2	J	11.5	J	11.2	J	285.	J	564.	J	<36.	:
Fluoride	mg/kg-dry	T		0.92	J	1.6	J	1.8	J	5.	J	3.	J	4.3	J
Nitrate	mg/kg-dry	T		3.6	J	6.2	J	4.5	J	<2.2	J	5.	J	4.1	J
Phosphorus	mg/kg-dry	T		753.	J	158.	J	695.	J	823.	J	554.	J	409.	J
Sulfate	mg/kg-dry	T		193.	J	631.	J	578.	J	11500.	J	6860.	J	800.	:
Total Kjeldahl Nitrogen	mg/kg-dry	T		100.	J	62.6	J	131.	J	66.7	:	48.6	:	49.7	:
Total Organic Carbon	mg/kg-dry	T		1810.	J	1410.	J	1150.	J	282.	J	227.	J	<120.	J
Laboratory Parameters															
pH	SU	T		8.	:	6.8	:	7.7	:	6.2	:	7.4	:	9.3	:
Solids, Percent	%	T		90.7	:	93.7	:	91.3	:	91.9	:	88.8	:	83.9	:
Specific Conductance	umhos/cm	T		395.	:	524.	:	529.	:	2010.	:	1640.	:	728.	:
Geotechnical															
Organic Soils	%	T		2.67	J	2.18	J	2.39	J	2.05	J	2.19	J	2.17	J
Physical Properties															
Cation-Exchange Capacity	meq/100g	T		19.6	:	13.	:	12.1	:	13.8	:	19.8	:	13.8	:
Sodium Absorption Ratio	ratio	T		0.28	:	0.24	:	0.31	:	1.89	:	1.24	:	0.13	:
Metals															
Aluminum	mg/kg-dry	T		23200.	:	16400.	J	15300.	:	11600.	:	8910.	:	12600.	:
Antimony	mg/kg-dry	T		<0.31	J	<0.28	J	<0.31	J	<0.26	J	<0.26	J	<0.28	J
Arsenic	mg/kg-dry	T		3.5	:	3.4	:	3.1	:	3.3	:	3.2	:	2.3	:
Barium	mg/kg-dry	T		231.	:	175.	:	153.	:	197.	:	137.	:	131.	:
Beryllium	mg/kg-dry	T		1.4	:	1.1	:	1.1	:	0.88	:	0.85	:	0.99	:
Boron	mg/kg-dry	T		<2.7	:	<2.4	:	<2.6	:	<3.8	:	<0.44	J	<1.5	:
Cadmium	mg/kg-dry	T		0.43	:	0.59	J	0.42	:	0.47	:	0.46	:	0.53	:
Calcium	mg/kg-dry	T		20400.	:	22300.	J	10500.	:	10200.	:	15400.	:	22600.	:
Chromium	mg/kg-dry	T		65.6	:	48.8	J	43.7	:	37.8	:	18.3	:	29.3	:
Cobalt	mg/kg-dry	T		21.8	:	15.3	J	12.6	:	9.7	:	5.1	:	11.6	J
Copper	mg/kg-dry	T		97.	:	102.	J	81.1	:	66.6	:	36.8	:	50.2	:
Iron	mg/kg-dry	T		37200.	:	34600.	J	35200.	:	28300.	:	19800.	:	17500.	:
Lead	mg/kg-dry	T		50.1	:	47.1	J	56.1	:	72.5	J	53.5	:	17.5	J
Magnesium	mg/kg-dry	T		15200.	:	10700.	J	9120.	:	6210.	:	4000.	:	8630.	:
Manganese	mg/kg-dry	T		885.	J	822.	J	599.	J	563.	J	499.	J	635.	J

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T = Total Fraction

Appendix A-7e
Soil - Biased 0-24 inches
Validated Analytical Results

Parameter	Units	Exposure Area Fraction	Site ID	Sample Date	Sample ID											
			MSS2-39	10/24/2002	MSS2-39-T02N-SOL	MSS2-40	10/24/2002	MSS2-40-T02N-SOL	MSS2-41	10/24/2002	MSS2-41-T02N-SOL	MSS2-43	10/23/2002	MSS2-43-T02N-SOL	MSS2-44	10/23/2002	MSS2-44-T02N-SOL	MSS2-45	10/27/2002	MSS2-45-T02N-SOL
			SS2			SS2			SS2			SS2			SS2			SS2		
Mercury	mg/kg-dry	T	<0.016	J		<0.017	J		<0.017	J		<0.016	:		<0.018	:		<0.019	J	
Molybdenum	mg/kg-dry	T	50.1	:		69.8	:		66.	:		79.7	:		15.4	:		81.7	J	
Nickel	mg/kg-dry	T	52.6	J		37.8	J		32.7	J		29.5	J		11.6	J		40.1	J	
Potassium	mg/kg-dry	T	6610.	J		4760.	J		4180.	J		3320.	J		2330.	J		3410.	J	
Selenium	mg/kg-dry	T	<0.82	J		1.2	J		0.99	J		1.1	J		0.93	J		<0.76	J	
Silver	mg/kg-dry	T	<0.16	:		0.66	:		<0.16	:		0.72	:		0.48	:		0.19	:	
Sodium	mg/kg-dry	T	<52.	:		<88.3	:		<107.	:		467.	:		<280.	:		<129.	:	
Thallium	mg/kg-dry	T	0.46	:		0.32	:		0.26	:		0.29	:		0.2	:		0.2	:	
Vanadium	mg/kg-dry	T	68.4	:		51.8	:		48.2	:		34.1	:		19.7	:		33.5	:	
Zinc	mg/kg-dry	T	108.	J		113.	J		122.	J		109.	J		88.5	J		131.	J	
Volatile Organics																				
1,1,1-Trichloroethane	mg/kg-dry	T	<0.008	:		<0.01	:		<0.01	:		<0.008	:		<0.005	:		<0.012	:	
1,1,2,2-Tetrachloroethane	mg/kg-dry	T	<0.008	:		<0.01	:		<0.01	:		<0.008	:		<0.005	:		<0.012	:	
1,1,2-Trichloro-1,2,2-trifluoroethane	mg/kg-dry	T	<0.008	:		<0.01	:		<0.01	:		<0.008	:		<0.005	:		<0.012	:	
1,1,2-Trichloroethane	mg/kg-dry	T	<0.008	:		<0.01	:		<0.01	:		<0.008	:		<0.005	:		<0.012	:	
1,1-Dichloroethane	mg/kg-dry	T	<0.008	:		<0.01	:		<0.01	:		<0.008	:		<0.005	:		<0.012	:	
1,1-Dichloroethene	mg/kg-dry	T	<0.008	:		<0.01	:		<0.01	:		<0.008	:		<0.005	:		<0.012	:	
1,2,4-Trichlorobenzene	mg/kg-dry	T	<0.008	:		<0.01	:		<0.01	:		<0.008	:		<0.005	:		<0.012	:	
1,2-Dibromo-3-chloropropane	mg/kg-dry	T	<0.008	:		<0.01	:		<0.01	:		<0.008	:		<0.005	:		<0.012	:	
1,2-Dichlorobenzene	mg/kg-dry	T	<0.008	:		<0.01	:		<0.01	:		<0.008	:		<0.005	:		<0.012	:	
1,2-Dichloroethane	mg/kg-dry	T	<0.008	:		<0.01	:		<0.01	:		<0.008	:		<0.005	:		<0.012	:	
1,2-Dichloroethene (total)	mg/kg-dry	T	<0.008	:		<0.01	:		<0.01	:		<0.008	:		<0.005	:		<0.012	:	
1,2-Dichloropropane	mg/kg-dry	T	<0.008	:		<0.01	:		<0.01	:		<0.008	:		<0.005	:		<0.012	:	
1,3-Dichlorobenzene	mg/kg-dry	T	<0.008	:		<0.01	:		<0.01	:		<0.008	:		<0.005	:		<0.012	:	
1,4-Dichlorobenzene	mg/kg-dry	T	<0.008	:		<0.01	:		<0.01	:		<0.008	:		<0.005	:		<0.012	:	
2-Butanone	mg/kg-dry	T	<0.008	:		<0.01	:		<0.01	:		<0.008	:		<0.005	:		<0.012	:	
2-Hexanone	mg/kg-dry	T	<0.008	:		<0.01	:		<0.01	:		<0.008	:		<0.005	:		<0.012	:	
4-Methyl-2-pentanone	mg/kg-dry	T	<0.008	:		<0.01	:		<0.01	:		<0.008	:		<0.005	:		<0.012	:	
Acetone	mg/kg-dry	T	<0.008	:		<0.01	:		<0.01	:		0.007	J		0.001	J		0.011	J	
Benzene	mg/kg-dry	T	<0.008	:		<0.01	:		<0.01	:		<0.008	:		<0.005	:		<0.012	:	
Bromodichloromethane	mg/kg-dry	T	<0.008	:		<0.01	:		<0.01	:		<0.008	:		<0.005	:		<0.012	:	
Bromoform	mg/kg-dry	T	<0.008	:		<0.01	:		<0.01	:		<0.008	:		<0.005	:		<0.012	:	
Bromomethane	mg/kg-dry	T	<0.008	J		<0.01	J		<0.01	:		<0.008	:		<0.005	:		<0.012	:	
Carbon disulfide	mg/kg-dry	T	<0.008	:		<0.01	:		<0.01	:		<0.008	:		<0.005	:		<0.012	:	

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T = Total Fraction

Appendix A-7e
Soil - Biased 0-24 inches
Validated Analytical Results

Parameter	Units	Exposure Area Fraction	Site ID	Sample Date	Sample ID	Exposure Area		Site ID	Sample Date	Sample ID	Exposure Area		Site ID	Sample Date	Sample ID	Exposure Area		Site ID	Sample Date	Sample ID	Exposure Area		Site ID	Sample Date	Sample ID	Exposure Area	
			MSS2-39	10/24/2002	MSS2-39-T02N-SOL	SS2		MSS2-40	10/24/2002	MSS2-40-T02N-SOL	SS2		MSS2-41	10/24/2002	MSS2-41-T02N-SOL	SS2		MSS2-43	10/23/2002	MSS2-43-T02N-SOL	SS2		MSS2-44	10/23/2002	MSS2-44-T02N-SOL	SS2		MSS2-45	10/27/2002	MSS2-45-T02N-SOL	SS2	
Carbon tetrachloride	mg/kg-dry	T	<0.008	:		<0.01	:		<0.01	:		<0.008	:		<0.005	:		<0.012	:	
Chlorobenzene	mg/kg-dry	T	<0.008	:		<0.01	:		<0.01	:		<0.008	:		<0.005	:		<0.012	:	
Chloroethane	mg/kg-dry	T	<0.008	:		<0.01	:		<0.01	:		<0.008	:		<0.005	:		<0.012	:	
Chloroform	mg/kg-dry	T	<0.008	:		<0.01	:		<0.01	:		<0.008	:		<0.005	:		<0.012	:	
Chloromethane	mg/kg-dry	T	<0.008	J		<0.01	J		<0.01	:		<0.008	:		<0.005	:		<0.012	:	
cis-1,2-Dichloroethene	mg/kg-dry	T	<0.008	:		<0.01	:		<0.01	:		<0.008	:		<0.005	:		<0.012	:	
cis-1,3-Dichloropropene	mg/kg-dry	T	<0.008	:		<0.01	:		<0.01	:		<0.008	:		<0.005	:		<0.012	:	
Dibromochloromethane	mg/kg-dry	T	<0.008	:		<0.01	:		<0.01	:		<0.008	:		<0.005	:		<0.012	:	
Dichlorodifluoromethane	mg/kg-dry	T	<0.008	J		<0.01	J		<0.01	:		<0.008	:		<0.005	:		<0.012	:	
Ethylbenzene	mg/kg-dry	T	<0.008	:		<0.01	:		<0.01	:		<0.008	:		<0.005	:		0.002	J	
Methylene chloride	mg/kg-dry	T	<0.008	:		<0.01	:		<0.01	:		<0.008	:		<0.005	:		<0.012	:	
Styrene	mg/kg-dry	T	<0.008	:		<0.01	:		<0.01	:		<0.008	:		<0.005	:		<0.012	:	
Tetrachloroethene	mg/kg-dry	T	<0.008	:		<0.01	:		<0.01	:		<0.008	:		<0.005	:		<0.012	:	
Toluene	mg/kg-dry	T	<0.008	:		<0.01	:		<0.01	:		<0.008	:		<0.005	:		<0.012	:	
Total Xylene	mg/kg-dry	T	<0.008	:		<0.01	:		<0.01	:		<0.008	:		<0.005	:		0.011	J	
trans-1,2-Dichloroethene	mg/kg-dry	T	<0.008	:		<0.01	:		<0.01	:		<0.008	:		<0.005	:		<0.012	:	
trans-1,3-Dichloropropene	mg/kg-dry	T	<0.008	:		<0.01	:		<0.01	:		<0.008	:		<0.005	:		<0.012	:	
Trichloroethene	mg/kg-dry	T	<0.008	:		<0.01	:		<0.01	:		<0.008	:		<0.005	:		<0.012	:	
Trichlorofluoromethane	mg/kg-dry	T	<0.008	:		<0.01	:		<0.01	:		<0.008	:		<0.005	:		<0.012	:	
Vinyl chloride	mg/kg-dry	T	<0.008	:		<0.01	:		<0.01	:		<0.008	:		<0.005	:		<0.012	:	
Semi-Volatile Organics																											
1,1`-Biphenyl	mg/kg-dry	T	<0.36	:		<0.35	:		<0.36	:		<0.36	:		<0.37	:		<0.39	:	
2,4,5-Trichlorophenol	mg/kg-dry	T	<0.91	:		<0.88	:		<0.91	:		<0.9	:		<0.93	:		<0.99	:	
2,4,6-Trichlorophenol	mg/kg-dry	T	<0.36	:		<0.35	:		<0.36	:		<0.36	:		<0.37	:		<0.39	:	
2,4-Dichlorophenol	mg/kg-dry	T	<0.36	:		<0.35	:		<0.36	:		<0.36	:		<0.37	:		<0.39	:	
2,4-Dimethylphenol	mg/kg-dry	T	<0.36	:		<0.35	:		<0.36	:		<0.36	:		<0.37	:		<0.39	:	
2,4-Dinitrophenol	mg/kg-dry	T	<0.91	J		<0.88	:		<0.91	J		<0.9	:		<0.93	:		<0.99	:	
2,4-Dinitrotoluene	mg/kg-dry	T	<0.36	:		<0.35	:		<0.36	:		<0.36	:		<0.37	:		<0.39	:	
2,6-Dinitrotoluene	mg/kg-dry	T	<0.36	:		<0.35	:		<0.36	:		<0.36	:		<0.37	:		<0.39	:	
2-Chloronaphthalene	mg/kg-dry	T	<0.36	:		<0.35	:		<0.36	:		<0.36	:		<0.37	:		<0.39	:	
2-Chlorophenol	mg/kg-dry	T	<0.36	:		0.037	J		<0.36	:		<0.36	:		<0.37	:		<0.39	:	
2-Methylnaphthalene	mg/kg-dry	T	<0.36	:		<0.35	:		<0.36	:		<0.36	:		<0.37	:		<0.39	:	
2-Methylphenol	mg/kg-dry	T	<0.36	:		<0.35	:		<0.36	:		<0.36	:		<0.37	:		<0.39	:	
2-Nitroaniline	mg/kg-dry	T	<0.91	:		<0.88	:		<0.91	:		<0.9	:		<0.93	:		<0.99	:	

J = Qualified as estimated during data validation
R = Qualified as rejected value from data validation and results are considered unusable for any purpose
T = Total Fraction

Appendix A-7e
Soil - Biased 0-24 inches
Validated Analytical Results

Parameter	Units	Exposure Area Fraction	Site ID / Sample Date / Sample ID											
			MSS2-39 10/24/2002 MSS2-39-T02N-SOL		MSS2-40 10/24/2002 MSS2-40-T02N-SOL		MSS2-41 10/24/2002 MSS2-41-T02N-SOL		MSS2-43 10/23/2002 MSS2-43-T02N-SOL		MSS2-44 10/23/2002 MSS2-44-T02N-SOL		MSS2-45 10/27/2002 MSS2-45-T02N-SOL	
			SS2		SS2		SS2		SS2		SS2		SS2	
2-Nitrophenol	mg/kg-dry	T	<0.36	:	<0.35	:	<0.36	:	<0.36	:	<0.37	:	<0.39	:
3,3-Dichlorobenzidine	mg/kg-dry	T	<0.36	:	<0.35	:	<0.36	:	<0.36	:	<0.37	:	<0.39	:
3-Nitroaniline	mg/kg-dry	T	<0.91	:	<0.88	:	<0.91	:	<0.9	:	<0.93	:	<0.99	:
4,6-Dinitro-2-methylphenol	mg/kg-dry	T	<0.91	:	<0.88	:	<0.91	:	<0.9	:	<0.93	:	<0.99	:
4-Bromophenyl phenyl ether	mg/kg-dry	T	<0.36	:	<0.35	:	<0.36	:	<0.36	:	<0.37	:	<0.39	:
4-Chloro-3-methylphenol	mg/kg-dry	T	<0.36	:	0.036	J	<0.36	:	<0.36	:	<0.37	:	<0.39	:
4-Chloroaniline	mg/kg-dry	T	<0.36	:	<0.35	:	<0.36	:	<0.36	:	<0.37	:	<0.39	:
4-Chlorophenyl phenyl ether	mg/kg-dry	T	<0.36	:	<0.35	:	<0.36	:	<0.36	:	<0.37	:	<0.39	:
4-Methylphenol	mg/kg-dry	T	<0.36	:	<0.35	:	<0.36	:	<0.36	:	<0.37	:	<0.39	:
4-Nitroaniline	mg/kg-dry	T	<0.91	J	<0.88	:	<0.91	J	<0.9	:	<0.93	:	<0.99	:
4-Nitrophenol	mg/kg-dry	T	<0.91	J	<0.88	:	<0.91	J	<0.9	:	<0.93	:	<0.99	:
Acenaphthene	mg/kg-dry	T	<0.36	:	0.031	J	<0.36	:	<0.36	:	<0.37	:	<0.39	:
Acenaphthylene	mg/kg-dry	T	<0.36	:	<0.35	:	<0.36	:	<0.36	:	<0.37	:	<0.39	:
Anthracene	mg/kg-dry	T	<0.36	:	<0.35	:	<0.36	:	<0.36	:	<0.37	:	<0.39	:
Benzaldehyde	mg/kg-dry	T	<0.36	:	<0.35	:	<0.36	:	<0.36	:	<0.37	:	<0.39	:
Benzo(a)anthracene	mg/kg-dry	T	<0.36	:	<0.35	:	<0.36	:	<0.36	:	<0.37	:	<0.39	:
Benzo(a)pyrene	mg/kg-dry	T	<0.36	:	<0.35	:	<0.36	:	<0.36	:	<0.37	:	<0.39	:
Benzo(b)fluoranthene	mg/kg-dry	T	<0.36	:	<0.35	:	<0.36	:	<0.36	:	<0.37	:	<0.39	:
Benzo(g,h,i)perylene	mg/kg-dry	T	<0.36	:	<0.35	:	<0.36	:	<0.36	:	<0.37	:	<0.39	:
Benzo(k)fluoranthene	mg/kg-dry	T	<0.36	:	<0.35	:	<0.36	:	<0.36	:	<0.37	:	<0.39	:
Bis(2-chloroethoxy)methane	mg/kg-dry	T	<0.36	:	<0.35	:	<0.36	:	<0.36	:	<0.37	:	<0.39	:
Bis(2-chloroethyl)ether	mg/kg-dry	T	<0.36	:	<0.35	:	<0.36	:	<0.36	:	<0.37	:	<0.39	:
Bis(2-ethylhexyl)phthalate	mg/kg-dry	T	0.029	J	0.023	J	0.021	J	<0.36	:	0.021	J	0.076	J
Butyl benzyl phthalate	mg/kg-dry	T	<0.36	J	<0.35	:	<0.36	J	<0.36	:	<0.37	:	<0.39	:
Carbazole	mg/kg-dry	T	<0.36	:	<0.35	:	<0.36	:	<0.36	:	<0.37	:	<0.39	:
Chrysene	mg/kg-dry	T	<0.36	:	<0.35	:	<0.36	:	<0.36	:	<0.37	:	<0.39	:
Dibenz(a,h)anthracene	mg/kg-dry	T	<0.36	:	<0.35	:	<0.36	:	<0.36	:	<0.37	:	<0.39	:
Dibenzofuran	mg/kg-dry	T	<0.36	:	<0.35	:	<0.36	:	<0.36	:	<0.37	:	<0.39	:
Dichlorodiisopropyl ether	mg/kg-dry	T	<0.36	:	<0.35	:	<0.36	:	<0.36	:	<0.37	:	<0.39	:
Diethylphthalate	mg/kg-dry	T	<0.36	:	<0.35	:	<0.36	:	<0.36	:	<0.37	:	<0.39	:
Dimethylphthalate	mg/kg-dry	T	<0.36	:	<0.35	:	<0.36	:	<0.36	:	<0.37	:	<0.39	:
Di-n-Butyl phthalate	mg/kg-dry	T	<0.36	:	<0.35	:	<0.36	:	<0.36	:	<0.37	:	<0.39	:
Di-n-Octyl phthalate	mg/kg-dry	T	<0.36	:	<0.35	:	<0.36	:	<0.36	:	<0.37	:	<0.39	:
Fluoranthene	mg/kg-dry	T	<0.36	:	<0.35	:	<0.36	:	<0.36	:	<0.37	:	<0.39	:

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Appendix A-7e
Soil - Biased 0-24 inches
Validated Analytical Results

Parameter	Units	Exposure Area Fraction	Site ID / Sample Date / Sample ID											
			MSS2-39 10/24/2002 MSS2-39-T02N-SOL		MSS2-40 10/24/2002 MSS2-40-T02N-SOL		MSS2-41 10/24/2002 MSS2-41-T02N-SOL		MSS2-43 10/23/2002 MSS2-43-T02N-SOL		MSS2-44 10/23/2002 MSS2-44-T02N-SOL		MSS2-45 10/27/2002 MSS2-45-T02N-SOL	
			SS2		SS2		SS2		SS2		SS2		SS2	
Fluorene	mg/kg-dry	T	<0.36	:	<0.35	:	<0.36	:	<0.36	:	<0.37	:	<0.39	:
Hexachlorobenzene	mg/kg-dry	T	<0.36	:	<0.35	:	<0.36	:	<0.36	:	<0.37	:	<0.39	:
Hexachlorobutadiene	mg/kg-dry	T	<0.36	:	<0.35	:	<0.36	:	<0.36	:	<0.37	:	<0.39	:
Hexachlorocyclopentadiene	mg/kg-dry	T	<0.36	:	<0.35	:	<0.36	:	<0.36	:	<0.37	:	<0.39	:
Hexachloroethane	mg/kg-dry	T	<0.36	:	<0.35	:	<0.36	:	<0.36	:	<0.37	:	<0.39	:
Indeno(1,2,3-cd)pyrene	mg/kg-dry	T	<0.36	:	<0.35	:	<0.36	:	<0.36	:	<0.37	:	<0.39	:
Isophorone	mg/kg-dry	T	<0.36	:	<0.35	:	<0.36	:	<0.36	:	<0.37	:	<0.39	:
Naphthalene	mg/kg-dry	T	<0.36	:	<0.35	:	<0.36	:	<0.36	:	<0.37	:	<0.39	:
Nitrobenzene	mg/kg-dry	T	<0.36	:	<0.35	:	<0.36	:	<0.36	:	<0.37	:	<0.39	:
N-Nitrosodi-n-propylamine	mg/kg-dry	T	<0.36	:	0.029	J	<0.36	:	<0.36	:	<0.37	:	<0.39	:
N-Nitrosodiphenylamine	mg/kg-dry	T	<0.36	:	<0.35	:	<0.36	:	<0.36	:	<0.37	:	<0.39	:
Pentachlorophenol	mg/kg-dry	T	<0.91	:	<0.88	:	<0.91	:	<0.9	:	<0.93	:	<0.99	:
Phenanthrene	mg/kg-dry	T	<0.36	:	<0.35	:	<0.36	:	<0.36	:	<0.37	:	<0.39	:
Phenol	mg/kg-dry	T	<0.36	:	0.05	J	<0.36	:	<0.36	:	<0.37	:	<0.39	:
Pyrene	mg/kg-dry	T	<0.36	:	0.035	J	<0.36	:	<0.36	:	<0.37	:	<0.39	:

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T = Total Fraction

Appendix A-7e
Soil - Biased 0-24 inches
Validated Analytical Results

Parameter	Units	Exposure Area Fraction	Site ID	MSS2-46		MSS2-47		MSS2-48		MSS2-49		MSS2-50		MSS2-51	
			Sample Date	10/27/2002		10/27/2002		10/27/2002		10/27/2002		10/27/2002		10/27/2002	
			Sample ID	MSS2-46-T02N-SOL		MSS2-47-T02N-SOL		MSS2-48-T02N-SOL		MSS2-49-T02N-SOL		MSS2-50-T02N-SOL		MSS2-51-T02N-SOL	
			Exposure Area	SS2		SS2		SS2		SS2		SS2		SS2	
General Chemistry															
Ammonia	mg/kg-dry	T		<10.5	:	20.1	:	13.9	:	17.5	:	15.	:	12.5	J
Chloride	mg/kg-dry	T		<33.	:	<35.	:	46.	:	<33.	J	110.	:	51.	:
Fluoride	mg/kg-dry	T		2.	J	0.72	J	1.1	J	4.1	J	0.28	J	1.2	J
Nitrate	mg/kg-dry	T		3.6	J	<5.8	:	1.6	J	<5.6	J	2.1	J	2.	J
Phosphorus	mg/kg-dry	T		907.	J	543.	J	476.	J	669.	J	671.	J	638.	J
Sulfate	mg/kg-dry	T		2300.	:	<58.	:	61.	:	51.	J	150.	:	100.	:
Total Kjeldahl Nitrogen	mg/kg-dry	T		55.4	:	103.	:	50.6	:	58.9	J	50.9	:	81.	J
Total Organic Carbon	mg/kg-dry	T		461.	J	500.	J	345.	J	<112.	J	<111.	J	1200.	J
Laboratory Parameters															
pH	SU	T		7.2	:	3.9	:	4.8	:	5.1	:	8.1	:	7.1	:
Solids, Percent	%	T		90.7	:	86.8	:	93.4	:	89.8	:	90.4	:	96.7	:
Specific Conductance	umhos/cm	T		1340.	:	1770.	:	200.	:	56.7	J	512.	:	372.	:
Geotechnical															
Organic Soils	%	T		2.09	J	3.74	J	2.96	J	3.3	J	3.59	J	3.17	J
Physical Properties															
Cation-Exchange Capacity	meq/100g	T		12.5	:	18.6	:	9.3	:	8.3	J	9.9	:	9.7	:
Sodium Absorption Ratio	ratio	T		0.37	:	0.06	:	1.48	:	0.26	:	1.08	:	0.41	:
Metals															
Aluminum	mg/kg-dry	T		15400.	:	21200.	:	4200.	:	4350.	J	4270.	:	4750.	:
Antimony	mg/kg-dry	T		<0.27	J	<0.29	J	<0.27	J	<0.25	J	<0.27	J	<0.19	J
Arsenic	mg/kg-dry	T		3.4	:	2.7	:	5.	:	5.3	:	6.8	:	3.5	:
Barium	mg/kg-dry	T		202.	:	221.	:	307.	:	316.	:	398.	:	201.	:
Beryllium	mg/kg-dry	T		1.1	:	0.87	:	0.21	:	0.19	:	0.2	:	0.25	:
Boron	mg/kg-dry	T		<1.2	J	2.3	:	<0.22	J	1.9	J	<0.24	J	3.3	J
Cadmium	mg/kg-dry	T		0.043	:	<0.038	J	<0.033	J	<0.024	:	<0.036	J	0.32	J
Calcium	mg/kg-dry	T		13400.	:	12600.	:	489.	:	453.	J	2580.	:	9280.	:
Chromium	mg/kg-dry	T		39.9	:	95.8	:	8.8	:	7.7	:	8.	:	11.1	:
Cobalt	mg/kg-dry	T		10.3	:	13.2	:	0.96	:	0.56	:	0.77	:	2.3	:
Copper	mg/kg-dry	T		63.1	:	62.9	:	28.7	:	26.9	:	30.9	:	29.	:
Iron	mg/kg-dry	T		28300.	:	44600.	:	22300.	:	24800.	:	30700.	:	17500.	:
Lead	mg/kg-dry	T		50.9	:	30.9	:	143.	:	108.	:	162.	:	111.	J
Magnesium	mg/kg-dry	T		7450.	:	16900.	:	1300.	:	1110.	:	1240.	:	1940.	:
Manganese	mg/kg-dry	T		1170.	J	670.	J	84.1	J	59.4	J	83.5	J	141.	J

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Appendix A-7e
Soil - Biased 0-24 inches
Validated Analytical Results

Parameter	Units	Exposure Area Fraction	Site ID	MSS2-46		MSS2-47		MSS2-48		MSS2-49		MSS2-50		MSS2-51	
			Sample Date	10/27/2002		10/27/2002		10/27/2002		10/27/2002		10/27/2002		10/27/2002	
			Sample ID	MSS2-46-T02N-SOL		MSS2-47-T02N-SOL		MSS2-48-T02N-SOL		MSS2-49-T02N-SOL		MSS2-50-T02N-SOL		MSS2-51-T02N-SOL	
			Exposure Area	SS2		SS2		SS2		SS2		SS2		SS2	
Mercury	mg/kg-dry	T		<0.016	:	<0.018	:	<0.017	:	<0.019	:	<0.018	:	<0.016	:
Molybdenum	mg/kg-dry	T		65.2	:	26.2	:	26.3	:	18.9	:	20.7	:	54.	J
Nickel	mg/kg-dry	T		26.7	J	50.9	J	4.3	J	3.2	J	3.2	J	6.3	J
Potassium	mg/kg-dry	T		3510.	J	6480.	J	3140.	J	3180.	J	5320.	J	2930.	J
Selenium	mg/kg-dry	T		0.95	J	1.3	J	0.83	J	1.4	J	0.91	J	0.94	J
Silver	mg/kg-dry	T		0.51	:	<0.15	:	0.82	:	0.91	:	1.2	:	0.62	:
Sodium	mg/kg-dry	T		<284.	:	585.	:	<299.	:	267.	:	385.	:	<204.	:
Thallium	mg/kg-dry	T		0.27	:	0.39	:	0.27	:	0.29	:	0.28	:	0.23	:
Vanadium	mg/kg-dry	T		43.2	:	81.6	:	10.4	:	10.8	:	11.5	:	12.7	:
Zinc	mg/kg-dry	T		95.2	J	103.	J	19.9	J	14.9	J	24.9	J	33.6	J
Volatile Organics															
1,1,1-Trichloroethane	mg/kg-dry	T		<0.008	:	<0.008	:	<0.008	:	<0.008	:	<0.009	:	<0.011	:
1,1,2,2-Tetrachloroethane	mg/kg-dry	T		<0.008	:	<0.008	:	<0.008	:	<0.008	:	<0.009	:	<0.011	:
1,1,2-Trichloro-1,2,2-trifluoroethane	mg/kg-dry	T		<0.008	:	<0.008	:	<0.008	:	<0.008	:	<0.009	:	<0.011	:
1,1,2-Trichloroethane	mg/kg-dry	T		<0.008	:	<0.008	:	<0.008	:	<0.008	:	<0.009	:	<0.011	:
1,1-Dichloroethane	mg/kg-dry	T		<0.008	:	<0.008	:	<0.008	:	<0.008	:	<0.009	:	<0.011	:
1,1-Dichloroethene	mg/kg-dry	T		<0.008	:	<0.008	:	<0.008	:	<0.008	:	<0.009	:	<0.011	:
1,2,4-Trichlorobenzene	mg/kg-dry	T		<0.008	:	<0.008	:	<0.008	:	<0.008	:	<0.009	:	<0.011	:
1,2-Dibromo-3-chloropropane	mg/kg-dry	T		<0.008	:	<0.008	:	<0.008	:	<0.008	:	<0.009	:	<0.011	:
1,2-Dichlorobenzene	mg/kg-dry	T		<0.008	:	<0.008	:	<0.008	:	<0.008	:	<0.009	:	<0.011	:
1,2-Dichloroethane	mg/kg-dry	T		<0.008	:	<0.008	:	<0.008	:	<0.008	:	<0.009	:	<0.011	:
1,2-Dichloroethene (total)	mg/kg-dry	T		<0.008	:	<0.008	:	<0.008	:	<0.008	:	<0.009	:	<0.011	:
1,2-Dichloropropane	mg/kg-dry	T		<0.008	:	<0.008	:	<0.008	:	<0.008	:	<0.009	:	<0.011	:
1,3-Dichlorobenzene	mg/kg-dry	T		<0.008	:	<0.008	:	<0.008	:	<0.008	:	<0.009	:	<0.011	:
1,4-Dichlorobenzene	mg/kg-dry	T		<0.008	:	<0.008	:	<0.008	:	<0.008	:	<0.009	:	<0.011	:
2-Butanone	mg/kg-dry	T		<0.008	:	<0.008	:	<0.008	:	<0.008	J	<0.009	:	<0.011	J
2-Hexanone	mg/kg-dry	T		<0.008	:	<0.008	:	<0.008	:	<0.008	J	<0.009	:	<0.011	J
4-Methyl-2-pentanone	mg/kg-dry	T		<0.008	J	<0.008	:	<0.008	J	<0.008	J	<0.009	:	<0.011	J
Acetone	mg/kg-dry	T		0.002	J	<0.008	:	0.006	J	0.003	J	0.003	J	0.002	J
Benzene	mg/kg-dry	T		<0.008	:	<0.008	:	<0.008	:	<0.008	:	<0.009	:	<0.011	:
Bromodichloromethane	mg/kg-dry	T		<0.008	:	<0.008	:	<0.008	:	<0.008	:	<0.009	:	<0.011	:
Bromoform	mg/kg-dry	T		<0.008	:	<0.008	:	<0.008	:	<0.008	:	<0.009	:	<0.011	:
Bromomethane	mg/kg-dry	T		<0.008	:	<0.008	:	<0.008	:	<0.008	:	<0.009	:	<0.011	:
Carbon disulfide	mg/kg-dry	T		<0.008	:	<0.008	:	<0.008	:	<0.008	:	<0.009	:	<0.011	:

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T = Total Fraction

Appendix A-7e
Soil - Biased 0-24 inches
Validated Analytical Results

Parameter	Units	Exposure Area Fraction	Site ID	MSS2-46		MSS2-47		MSS2-48		MSS2-49		MSS2-50		MSS2-51	
			Sample Date	10/27/2002		10/27/2002		10/27/2002		10/27/2002		10/27/2002		10/27/2002	
			Sample ID	MSS2-46-T02N-SOL		MSS2-47-T02N-SOL		MSS2-48-T02N-SOL		MSS2-49-T02N-SOL		MSS2-50-T02N-SOL		MSS2-51-T02N-SOL	
			Exposure Area	SS2		SS2		SS2		SS2		SS2		SS2	
Carbon tetrachloride	mg/kg-dry	T		<0.008	:	<0.008	:	<0.008	:	<0.008	:	<0.009	:	<0.011	:
Chlorobenzene	mg/kg-dry	T		<0.008	:	<0.008	:	<0.008	:	<0.008	:	<0.009	:	<0.011	:
Chloroethane	mg/kg-dry	T		<0.008	J	<0.008	:	<0.008	J	<0.008	:	<0.009	:	<0.011	:
Chloroform	mg/kg-dry	T		<0.008	:	<0.008	:	<0.008	:	<0.008	:	<0.009	:	<0.011	:
Chloromethane	mg/kg-dry	T		<0.008	J	<0.008	:	<0.008	J	<0.008	:	<0.009	:	<0.011	:
cis-1,2-Dichloroethene	mg/kg-dry	T		<0.008	:	<0.008	:	<0.008	:	<0.008	:	<0.009	:	<0.011	:
cis-1,3-Dichloropropene	mg/kg-dry	T		<0.008	:	<0.008	:	<0.008	:	<0.008	:	<0.009	:	<0.011	:
Dibromochloromethane	mg/kg-dry	T		<0.008	:	<0.008	:	<0.008	:	<0.008	:	<0.009	:	<0.011	:
Dichlorodifluoromethane	mg/kg-dry	T		<0.008	:	<0.008	:	<0.008	:	<0.008	:	<0.009	:	<0.011	:
Ethylbenzene	mg/kg-dry	T		<0.008	:	<0.008	:	<0.008	:	<0.008	:	<0.009	:	<0.011	:
Methylene chloride	mg/kg-dry	T		<0.008	:	<0.008	:	0.002	J	<0.008	:	<0.009	:	<0.011	:
Styrene	mg/kg-dry	T		<0.008	:	<0.008	:	<0.008	:	<0.008	:	<0.009	:	<0.011	:
Tetrachloroethene	mg/kg-dry	T		<0.008	:	<0.008	:	<0.008	:	<0.008	:	<0.009	:	<0.011	:
Toluene	mg/kg-dry	T		<0.008	:	<0.008	:	<0.008	:	<0.008	:	<0.009	:	<0.011	:
Total Xylene	mg/kg-dry	T		<0.008	:	0.001	J	0.004	J	<0.008	:	<0.009	:	<0.011	:
trans-1,2-Dichloroethene	mg/kg-dry	T		<0.008	:	<0.008	:	<0.008	:	<0.008	:	<0.009	:	<0.011	:
trans-1,3-Dichloropropene	mg/kg-dry	T		<0.008	:	<0.008	:	<0.008	:	<0.008	:	<0.009	:	<0.011	:
Trichloroethene	mg/kg-dry	T		<0.008	:	<0.008	:	<0.008	:	<0.008	:	<0.009	:	<0.011	:
Trichlorofluoromethane	mg/kg-dry	T		<0.008	:	<0.008	:	<0.008	:	<0.008	:	<0.009	:	<0.011	:
Vinyl chloride	mg/kg-dry	T		<0.008	J	<0.008	:	<0.008	J	<0.008	:	<0.009	:	<0.011	:
Semi-Volatile Organics															
1,1`-Biphenyl	mg/kg-dry	T		<0.36	:	<0.38	:	<0.35	:	<0.37	:	<0.37	:	<0.34	:
2,4,5-Trichlorophenol	mg/kg-dry	T		<0.91	:	<0.95	:	<0.89	:	<0.92	:	<0.92	:	<0.86	:
2,4,6-Trichlorophenol	mg/kg-dry	T		<0.36	:	<0.38	:	<0.35	:	<0.37	:	<0.37	:	<0.34	:
2,4-Dichlorophenol	mg/kg-dry	T		<0.36	:	<0.38	:	<0.35	:	<0.37	:	<0.37	:	<0.34	:
2,4-Dimethylphenol	mg/kg-dry	T		<0.36	:	<0.38	:	<0.35	:	<0.37	:	<0.37	:	<0.34	:
2,4-Dinitrophenol	mg/kg-dry	T		<0.91	J	<0.95	:	<0.89	:	<0.92	J	<0.92	:	<0.86	J
2,4-Dinitrotoluene	mg/kg-dry	T		<0.36	:	<0.38	:	<0.35	:	<0.37	:	<0.37	:	<0.34	:
2,6-Dinitrotoluene	mg/kg-dry	T		<0.36	:	<0.38	:	<0.35	:	<0.37	:	<0.37	:	<0.34	:
2-Chloronaphthalene	mg/kg-dry	T		<0.36	:	<0.38	:	<0.35	:	<0.37	:	<0.37	:	<0.34	:
2-Chlorophenol	mg/kg-dry	T		<0.36	:	<0.38	:	<0.35	:	<0.37	:	<0.37	:	<0.34	:
2-Methylnaphthalene	mg/kg-dry	T		<0.36	:	<0.38	:	<0.35	:	<0.37	:	<0.37	:	<0.34	:
2-Methylphenol	mg/kg-dry	T		<0.36	:	<0.38	:	<0.35	:	<0.37	:	<0.37	:	<0.34	:
2-Nitroaniline	mg/kg-dry	T		<0.91	:	<0.95	:	<0.89	:	<0.92	:	<0.92	:	<0.86	:

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T = Total Fraction

Appendix A-7e
Soil - Biased 0-24 inches
Validated Analytical Results

Parameter	Units	Exposure Area Fraction	Site ID / Sample Date / Sample ID	MSS2-46 10/27/2002 MSS2-46-T02N-SOL SS2	MSS2-47 10/27/2002 MSS2-47-T02N-SOL SS2	MSS2-48 10/27/2002 MSS2-48-T02N-SOL SS2	MSS2-49 10/27/2002 MSS2-49-T02N-SOL SS2	MSS2-50 10/27/2002 MSS2-50-T02N-SOL SS2	MSS2-51 10/27/2002 MSS2-51-T02N-SOL SS2
2-Nitrophenol	mg/kg-dry	T		<0.36 :	<0.38 :	<0.35 :	<0.37 :	<0.37 :	<0.34 :
3,3-Dichlorobenzidine	mg/kg-dry	T		<0.36 :	<0.38 :	<0.35 :	<0.37 :	<0.37 :	<0.34 :
3-Nitroaniline	mg/kg-dry	T		<0.91 :	<0.95 :	<0.89 :	<0.92 :	<0.92 :	<0.86 :
4,6-Dinitro-2-methylphenol	mg/kg-dry	T		<0.91 :	<0.95 :	<0.89 :	<0.92 :	<0.92 :	<0.86 :
4-Bromophenyl phenyl ether	mg/kg-dry	T		<0.36 :	<0.38 :	<0.35 :	<0.37 :	<0.37 :	<0.34 :
4-Chloro-3-methylphenol	mg/kg-dry	T		<0.36 :	<0.38 :	<0.35 :	<0.37 :	<0.37 :	<0.34 :
4-Chloroaniline	mg/kg-dry	T		<0.36 :	<0.38 :	<0.35 :	<0.37 :	<0.37 :	<0.34 J
4-Chlorophenyl phenyl ether	mg/kg-dry	T		<0.36 :	<0.38 :	<0.35 :	<0.37 :	<0.37 :	<0.34 :
4-Methylphenol	mg/kg-dry	T		<0.36 :	<0.38 :	<0.35 :	<0.37 :	<0.37 :	<0.34 :
4-Nitroaniline	mg/kg-dry	T		<0.91 :	<0.95 :	<0.89 :	<0.92 :	<0.92 :	<0.86 :
4-Nitrophenol	mg/kg-dry	T		<0.91 :	<0.95 :	<0.89 :	<0.92 J	<0.92 :	<0.86 :
Acenaphthene	mg/kg-dry	T		<0.36 :	<0.38 :	<0.35 :	<0.37 :	<0.37 :	<0.34 :
Acenaphthylene	mg/kg-dry	T		<0.36 :	<0.38 :	<0.35 :	<0.37 :	<0.37 :	<0.34 :
Anthracene	mg/kg-dry	T		<0.36 :	<0.38 :	<0.35 :	<0.37 :	<0.37 :	<0.34 :
Benzaldehyde	mg/kg-dry	T		<0.36 :	<0.38 :	2.5 :	<0.37 :	<0.37 :	<0.34 :
Benzo(a)anthracene	mg/kg-dry	T		<0.36 :	<0.38 :	<0.35 :	<0.37 :	<0.37 :	<0.34 :
Benzo(a)pyrene	mg/kg-dry	T		<0.36 :	<0.38 :	<0.35 :	<0.37 :	<0.37 :	<0.34 :
Benzo(b)fluoranthene	mg/kg-dry	T		<0.36 :	<0.38 :	<0.35 :	<0.37 :	<0.37 :	<0.34 :
Benzo(g,h,i)perylene	mg/kg-dry	T		<0.36 :	<0.38 :	<0.35 :	<0.37 :	<0.37 :	<0.34 J
Benzo(k)fluoranthene	mg/kg-dry	T		<0.36 :	<0.38 :	<0.35 :	<0.37 :	<0.37 :	<0.34 :
Bis(2-chloroethoxy)methane	mg/kg-dry	T		<0.36 :	<0.38 :	<0.35 :	<0.37 :	<0.37 :	<0.34 :
Bis(2-chloroethyl)ether	mg/kg-dry	T		<0.36 :	<0.38 :	<0.35 :	<0.37 :	<0.37 :	<0.34 :
Bis(2-ethylhexyl)phthalate	mg/kg-dry	T		<0.36 :	0.046 J	0.087 J	<0.37 :	<0.37 :	0.056 J
Butyl benzyl phthalate	mg/kg-dry	T		<0.36 :	<0.38 :	<0.35 :	<0.37 :	<0.37 :	<0.34 :
Carbazole	mg/kg-dry	T		<0.36 :	<0.38 :	<0.35 :	<0.37 :	<0.37 :	<0.34 :
Chrysene	mg/kg-dry	T		<0.36 :	0.019 J	<0.35 :	<0.37 :	<0.37 :	<0.34 :
Dibenz(a,h)anthracene	mg/kg-dry	T		<0.36 :	<0.38 :	<0.35 :	<0.37 :	<0.37 :	<0.34 :
Dibenzofuran	mg/kg-dry	T		<0.36 :	<0.38 :	<0.35 :	<0.37 :	<0.37 :	<0.34 :
Dichlorodiisopropyl ether	mg/kg-dry	T		<0.36 :	<0.38 :	<0.35 :	<0.37 :	<0.37 :	<0.34 J
Diethylphthalate	mg/kg-dry	T		<0.36 :	<0.38 :	<0.35 :	<0.37 :	<0.37 :	<0.34 :
Dimethylphthalate	mg/kg-dry	T		<0.36 :	<0.38 :	<0.35 :	<0.37 :	<0.37 :	<0.34 :
Di-n-Butyl phthalate	mg/kg-dry	T		<0.36 :	<0.38 :	<0.35 :	<0.37 :	<0.37 :	<0.34 :
Di-n-Octyl phthalate	mg/kg-dry	T		<0.36 :	<0.38 :	<0.35 :	<0.37 :	<0.37 :	<0.34 :
Fluoranthene	mg/kg-dry	T		<0.36 :	0.029 J	<0.35 :	<0.37 :	<0.37 :	<0.34 :

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Appendix A-7e
Soil - Biased 0-24 inches
Validated Analytical Results

Parameter	Units	Exposure Area Fraction	Site ID / Sample Date / Sample ID		Site ID / Sample Date / Sample ID		Site ID / Sample Date / Sample ID		Site ID / Sample Date / Sample ID		Site ID / Sample Date / Sample ID	
			MSS2-46 10/27/2002 MSS2-46-T02N-SOL		MSS2-47 10/27/2002 MSS2-47-T02N-SOL		MSS2-48 10/27/2002 MSS2-48-T02N-SOL		MSS2-49 10/27/2002 MSS2-49-T02N-SOL		MSS2-50 10/27/2002 MSS2-50-T02N-SOL		MSS2-51 10/27/2002 MSS2-51-T02N-SOL	
			SS2		SS2		SS2		SS2		SS2		SS2	
Fluorene	mg/kg-dry	T	<0.36	:	<0.38	J	<0.35	:	<0.37	:	<0.37	:	<0.34	:
Hexachlorobenzene	mg/kg-dry	T	<0.36	:	<0.38	:	<0.35	:	<0.37	:	<0.37	:	<0.34	:
Hexachlorobutadiene	mg/kg-dry	T	<0.36	:	<0.38	:	<0.35	:	<0.37	:	<0.37	:	<0.34	:
Hexachlorocyclopentadiene	mg/kg-dry	T	<0.36	J	<0.38	:	<0.35	:	<0.37	J	<0.37	:	<0.34	:
Hexachloroethane	mg/kg-dry	T	<0.36	:	<0.38	:	<0.35	:	<0.37	:	<0.37	:	<0.34	:
Indeno(1,2,3-cd)pyrene	mg/kg-dry	T	<0.36	:	<0.38	:	<0.35	:	<0.37	:	<0.37	:	<0.34	:
Isophorone	mg/kg-dry	T	<0.36	:	<0.38	:	<0.35	:	<0.37	:	<0.37	:	<0.34	:
Naphthalene	mg/kg-dry	T	<0.36	:	<0.38	:	<0.35	:	<0.37	:	<0.37	:	<0.34	:
Nitrobenzene	mg/kg-dry	T	<0.36	:	<0.38	:	<0.35	:	<0.37	:	<0.37	:	<0.34	:
N-Nitrosodi-n-propylamine	mg/kg-dry	T	<0.36	:	<0.38	:	<0.35	:	<0.37	:	<0.37	:	<0.34	J
N-Nitrosodiphenylamine	mg/kg-dry	T	<0.36	:	<0.38	:	<0.35	:	<0.37	:	<0.37	:	<0.34	:
Pentachlorophenol	mg/kg-dry	T	<0.91	:	<0.95	:	<0.89	:	<0.92	:	<0.92	:	<0.86	:
Phenanthrene	mg/kg-dry	T	<0.36	:	<0.38	:	<0.35	:	<0.37	:	<0.37	:	<0.34	:
Phenol	mg/kg-dry	T	<0.36	:	<0.38	:	0.89	:	<0.37	:	<0.37	:	<0.34	:
Pyrene	mg/kg-dry	T	<0.36	:	0.024	J	<0.35	:	<0.37	:	<0.37	:	<0.34	:

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T = Total Fraction

Appendix A-7e
Soil - Biased 0-24 inches
Validated Analytical Results

Parameter	Units	Exposure Area Fraction	Site ID / Sample Date / Sample ID																					
			MSS2-52	10/27/2002	MSS2-52-T02N-SOL		MSS2-53	10/27/2002	MSS2-53-T02N-SOL		MSS2-54	10/27/2002	MSS2-54-T02N-SOL		MSS2-56R	10/27/2002	MSS2-56-T02N-SOL		MSS2-56R	1/12/2003	MSS2-56R-T02N-SOL		MSS2-56R	1/15/2003	MSS2-56R-T02N-SOL
			SS2				SS2				SS2				SS2				SS2				SS2		
General Chemistry																									
Ammonia	mg/kg-dry	T	19.	:			22.9	:			12.1	:			-				21.7	:			-		
Chloride	mg/kg-dry	T	<33.	:			<33.	:			<33.	:			45.	:			208.	:			-		
Fluoride	mg/kg-dry	T	0.53	J			1.3	J			0.4	J			-				2.	J			-		
Nitrate	mg/kg-dry	T	1.8	J			2.7	J			1.8	J			4.1	J			29.	J			-		
Phosphorus	mg/kg-dry	T	456.	J			479.	J			384.	J			-				1250.	:			-		
Sulfate	mg/kg-dry	T	<55.	:			81.	:			<55.	:			1700.	:			3760.	:			-		
Total Kjeldahl Nitrogen	mg/kg-dry	T	193.	:			86.6	:			109.	:			-				242.	:			-		
Total Organic Carbon	mg/kg-dry	T	863.	J			796.	J			<110.	J			-				6810.	J			-		
Laboratory Parameters																									
pH	SU	T	7.9	:			5.2	:			7.4	:			-				7.5	:			-		
Solids, Percent	%	T	90.1	:			91.5	:			91.1	:			-				92.1	:			94.5	:	
Specific Conductance	umhos/cm	T	144.	:			261.	:			70.3	:			-				1660.	:			-		
Geotechnical																									
Organic Soils	%	T	2.62	J			3.33	J			1.94	J			-				3.62	:			-		
Physical Properties																									
Cation-Exchange Capacity	meq/100g	T	6.9	:			7.5	:			7.1	:			-				10.5	:			-		
Sodium Absorption Ratio	ratio	T	0.25	:			2.05	:			0.27	:			-				0.54	:			-		
Metals																									
Aluminum	mg/kg-dry	T	6450.	:			4580.	:			6160.	:			-				10900.	:			-		
Antimony	mg/kg-dry	T	<0.26	J			<0.25	J			<0.26	J			-				<0.3	J			-		
Arsenic	mg/kg-dry	T	3.9	:			4.9	:			3.1	:			-				1.9	J			-		
Barium	mg/kg-dry	T	220.	:			308.	:			146.	:			-				305.	:			-		
Beryllium	mg/kg-dry	T	0.37	:			0.22	:			0.33	:			-				0.68	:			-		
Boron	mg/kg-dry	T	<1.6	J			<0.25	J			<0.78	:			-				3.2	:			-		
Cadmium	mg/kg-dry	T	0.057	J			<0.034	J			<0.034	:			-				<0.037	J			-		
Calcium	mg/kg-dry	T	2760.	:			611.	:			2370.	:			-				19000.	:			-		
Chromium	mg/kg-dry	T	16.	:			9.	:			10.6	:			-				21.3	J			-		
Cobalt	mg/kg-dry	T	3.4	:			1.4	:			3.4	:			-				7.6	:			-		
Copper	mg/kg-dry	T	26.	:			28.1	:			19.6	:			-				42.7	J			-		
Iron	mg/kg-dry	T	18800.	:			22600.	:			15100.	:			-				31100.	:			-		
Lead	mg/kg-dry	T	93.2	:			108.	:			55.3	:			-				37.4	:			-		
Magnesium	mg/kg-dry	T	2640.	:			1370.	:			2510.	:			-				4600.	:			-		
Manganese	mg/kg-dry	T	182.	J			107.	J			200.	J			-				374.	:			-		

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T = Total Fraction

Appendix A-7e
Soil - Biased 0-24 inches
Validated Analytical Results

		Site ID	MSS2-52	MSS2-53	MSS2-54	MSS2-56R	MSS2-56R	MSS2-56R
		Sample Date	10/27/2002	10/27/2002	10/27/2002	10/27/2002	1/12/2003	1/15/2003
		Sample ID	MSS2-52-T02N-SOL	MSS2-53-T02N-SOL	MSS2-54-T02N-SOL	MSS2-56-T02N-SOL	MSS2-56R-T02N-SOL	MSS2-56R-T02N-SOL
		Exposure Area	SS2	SS2	SS2	SS2	SS2	SS2
Parameter	**Units**	**Fraction**						
Mercury	mg/kg-dry	T	<0.017 :	<0.017 :	<0.018 :	-	<0.017 :	-
Molybdenum	mg/kg-dry	T	41.4 :	22.2 :	24.7 :	-	18.5 :	-
Nickel	mg/kg-dry	T	9. J	4.5 J	7.8 J	-	16.5 :	-
Potassium	mg/kg-dry	T	2530. J	3150. J	1930. J	-	3090. J	-
Selenium	mg/kg-dry	T	<0.69 J	1.3 J	<0.69 J	-	<0.8 J	-
Silver	mg/kg-dry	T	0.44 :	0.91 :	0.28 :	-	0.4 J	-
Sodium	mg/kg-dry	T	<163. :	<306. :	<163. :	-	819. :	-
Thallium	mg/kg-dry	T	0.17 :	0.24 :	0.12 :	-	0.18 :	-
Vanadium	mg/kg-dry	T	16.7 :	10.5 :	16.3 :	-	31.7 :	-
Zinc	mg/kg-dry	T	45.3 J	22.4 J	32.6 J	-	66.7 :	-
Volatile Organics								
1,1,1-Trichloroethane	mg/kg-dry	T	<0.005 :	<0.011 :	<0.006 :	-	-	<0.004 :
1,1,2,2-Tetrachloroethane	mg/kg-dry	T	<0.005 :	<0.011 :	<0.006 :	-	-	<0.004 :
1,1,2-Trichloro-1,2,2-trifluoroethane	mg/kg-dry	T	<0.005 :	<0.011 :	<0.006 :	-	-	<0.004 :
1,1,2-Trichloroethane	mg/kg-dry	T	<0.005 :	<0.011 :	<0.006 :	-	-	<0.004 :
1,1-Dichloroethane	mg/kg-dry	T	<0.005 :	<0.011 :	<0.006 :	-	-	<0.004 :
1,1-Dichloroethene	mg/kg-dry	T	<0.005 :	<0.011 :	<0.006 :	-	-	<0.004 :
1,2,4-Trichlorobenzene	mg/kg-dry	T	<0.005 :	<0.011 :	<0.006 :	-	-	<0.004 :
1,2-Dibromo-3-chloropropane	mg/kg-dry	T	<0.005 :	<0.011 :	<0.006 :	-	-	<0.004 :
1,2-Dichlorobenzene	mg/kg-dry	T	<0.005 :	<0.011 :	<0.006 :	-	-	<0.004 :
1,2-Dichloroethane	mg/kg-dry	T	<0.005 :	<0.011 :	<0.006 :	-	-	<0.004 :
1,2-Dichloroethene (total)	mg/kg-dry	T	<0.005 :	<0.011 :	<0.006 :	-	-	<0.004 :
1,2-Dichloropropane	mg/kg-dry	T	<0.005 :	<0.011 :	<0.006 :	-	-	<0.004 :
1,3-Dichlorobenzene	mg/kg-dry	T	<0.005 :	<0.011 :	<0.006 :	-	-	<0.004 :
1,4-Dichlorobenzene	mg/kg-dry	T	<0.005 :	<0.011 :	<0.006 :	-	-	<0.004 :
2-Butanone	mg/kg-dry	T	<0.005 :	<0.011 :	<0.006 :	-	-	<0.004 :
2-Hexanone	mg/kg-dry	T	0.002 J	<0.011 :	<0.006 :	-	-	<0.004 :
4-Methyl-2-pentanone	mg/kg-dry	T	<0.005 :	<0.011 :	<0.006 :	-	-	<0.004 :
Acetone	mg/kg-dry	T	<0.005 :	<0.011 :	<0.006 :	-	-	<0.004 :
Benzene	mg/kg-dry	T	<0.005 :	<0.011 :	<0.006 :	-	-	<0.004 :
Bromodichloromethane	mg/kg-dry	T	<0.005 :	<0.011 :	<0.006 :	-	-	<0.004 :
Bromoform	mg/kg-dry	T	<0.005 :	<0.011 :	<0.006 :	-	-	<0.004 :
Bromomethane	mg/kg-dry	T	<0.005 :	<0.011 :	<0.006 :	-	-	<0.004 :
Carbon disulfide	mg/kg-dry	T	<0.005 :	<0.011 :	<0.006 :	-	-	<0.004 :

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Appendix A-7e
Soil - Biased 0-24 inches
Validated Analytical Results

Parameter	Units	Exposure Area Fraction	Site ID / Sample Date / Sample ID					
			MSS2-52 10/27/2002 MSS2-52-T02N-SOL	MSS2-53 10/27/2002 MSS2-53-T02N-SOL	MSS2-54 10/27/2002 MSS2-54-T02N-SOL	MSS2-56R 10/27/2002 MSS2-56-T02N-SOL	MSS2-56R 1/12/2003 MSS2-56R-T02N-SOL	MSS2-56R 1/15/2003 MSS2-56R-T02N-SOL
			SS2	SS2	SS2	SS2	SS2	SS2
Carbon tetrachloride	mg/kg-dry	T	<0.005 :	<0.011 :	<0.006 :	-	-	<0.004 :
Chlorobenzene	mg/kg-dry	T	<0.005 :	<0.011 :	<0.006 :	-	-	<0.004 :
Chloroethane	mg/kg-dry	T	<0.005 :	<0.011 :	<0.006 :	-	-	<0.004 :
Chloroform	mg/kg-dry	T	<0.005 :	<0.011 :	<0.006 :	-	-	<0.004 :
Chloromethane	mg/kg-dry	T	<0.005 :	<0.011 :	<0.006 :	-	-	<0.004 :
cis-1,2-Dichloroethene	mg/kg-dry	T	<0.005 :	<0.011 :	<0.006 :	-	-	<0.004 :
cis-1,3-Dichloropropene	mg/kg-dry	T	<0.005 :	<0.011 :	<0.006 :	-	-	<0.004 :
Dibromochloromethane	mg/kg-dry	T	<0.005 :	<0.011 :	<0.006 :	-	-	<0.004 :
Dichlorodifluoromethane	mg/kg-dry	T	<0.005 :	<0.011 :	<0.006 :	-	-	<0.004 :
Ethylbenzene	mg/kg-dry	T	<0.005 :	<0.011 :	<0.006 :	-	-	<0.004 :
Methylene chloride	mg/kg-dry	T	<0.005 :	<0.011 :	<0.006 :	-	-	<0.004 :
Styrene	mg/kg-dry	T	<0.005 :	<0.011 :	<0.006 :	-	-	<0.004 :
Tetrachloroethene	mg/kg-dry	T	<0.005 :	<0.011 :	<0.006 :	-	-	<0.004 :
Toluene	mg/kg-dry	T	<0.005 :	<0.011 :	<0.006 :	-	-	<0.004 :
Total Xylene	mg/kg-dry	T	<0.005 :	<0.011 :	<0.006 :	-	-	<0.004 :
trans-1,2-Dichloroethene	mg/kg-dry	T	<0.005 :	<0.011 :	<0.006 :	-	-	<0.004 :
trans-1,3-Dichloropropene	mg/kg-dry	T	<0.005 :	<0.011 :	<0.006 :	-	-	<0.004 :
Trichloroethene	mg/kg-dry	T	<0.005 :	<0.011 :	<0.006 :	-	-	<0.004 :
Trichlorofluoromethane	mg/kg-dry	T	<0.005 :	<0.011 :	<0.006 :	-	-	<0.004 :
Vinyl chloride	mg/kg-dry	T	<0.005 :	<0.011 :	<0.006 :	-	-	<0.004 :
Semi-Volatile Organics								
1,1`-Biphenyl	mg/kg-dry	T	<0.37 :	<0.36 :	<0.36 :	-	<0.36 :	-
2,4,5-Trichlorophenol	mg/kg-dry	T	<0.92 :	<0.9 :	<0.91 :	-	<0.9 :	-
2,4,6-Trichlorophenol	mg/kg-dry	T	<0.37 :	<0.36 :	<0.36 :	-	<0.36 :	-
2,4-Dichlorophenol	mg/kg-dry	T	<0.37 :	<0.36 :	<0.36 :	-	<0.36 J	-
2,4-Dimethylphenol	mg/kg-dry	T	<0.37 :	<0.36 :	<0.36 :	-	<0.36 :	-
2,4-Dinitrophenol	mg/kg-dry	T	<0.92 :	<0.9 :	<0.91 :	-	<0.9 :	-
2,4-Dinitrotoluene	mg/kg-dry	T	<0.37 :	<0.36 :	<0.36 :	-	<0.36 :	-
2,6-Dinitrotoluene	mg/kg-dry	T	<0.37 :	<0.36 :	<0.36 :	-	<0.36 :	-
2-Chloronaphthalene	mg/kg-dry	T	<0.37 :	<0.36 :	<0.36 :	-	<0.36 :	-
2-Chlorophenol	mg/kg-dry	T	<0.37 :	<0.36 :	<0.36 :	-	<0.36 :	-
2-Methylnaphthalene	mg/kg-dry	T	<0.37 :	<0.36 :	<0.36 :	-	<0.36 :	-
2-Methylphenol	mg/kg-dry	T	<0.37 :	<0.36 :	<0.36 :	-	<0.36 :	-
2-Nitroaniline	mg/kg-dry	T	<0.92 :	<0.9 :	<0.91 :	-	<0.9 :	-

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Appendix A-7e
Soil - Biased 0-24 inches
Validated Analytical Results

Parameter	Units	Exposure Area Fraction	Site ID / Sample Date / Sample ID					
			MSS2-52 10/27/2002 MSS2-52-T02N-SOL	MSS2-53 10/27/2002 MSS2-53-T02N-SOL	MSS2-54 10/27/2002 MSS2-54-T02N-SOL	MSS2-56R 10/27/2002 MSS2-56-T02N-SOL	MSS2-56R 1/12/2003 MSS2-56R-T02N-SOL	MSS2-56R 1/15/2003 MSS2-56R-T02N-SOL
			SS2	SS2	SS2	SS2	SS2	SS2
2-Nitrophenol	mg/kg-dry	T	<0.37 :	<0.36 :	<0.36 :	-	<0.36 :	-
3,3-Dichlorobenzidine	mg/kg-dry	T	<0.37 :	<0.36 :	<0.36 :	-	<0.36 :	-
3-Nitroaniline	mg/kg-dry	T	<0.92 :	<0.9 :	<0.91 :	-	<0.9 :	-
4,6-Dinitro-2-methylphenol	mg/kg-dry	T	<0.92 :	<0.9 :	<0.91 :	-	<0.9 :	-
4-Bromophenyl phenyl ether	mg/kg-dry	T	<0.37 :	<0.36 :	<0.36 :	-	<0.36 :	-
4-Chloro-3-methylphenol	mg/kg-dry	T	<0.37 :	<0.36 :	<0.36 :	-	<0.36 :	-
4-Chloroaniline	mg/kg-dry	T	<0.37 :	<0.36 :	<0.36 :	-	<0.36 :	-
4-Chlorophenyl phenyl ether	mg/kg-dry	T	<0.37 :	<0.36 :	<0.36 :	-	<0.36 :	-
4-Methylphenol	mg/kg-dry	T	<0.37 :	<0.36 :	<0.36 :	-	<0.36 :	-
4-Nitroaniline	mg/kg-dry	T	<0.92 :	<0.9 :	<0.91 :	-	<0.9 :	-
4-Nitrophenol	mg/kg-dry	T	<0.92 :	<0.9 :	<0.91 :	-	<0.9 :	-
Acenaphthene	mg/kg-dry	T	<0.37 :	<0.36 :	<0.36 :	-	<0.36 :	-
Acenaphthylene	mg/kg-dry	T	<0.37 :	<0.36 :	<0.36 :	-	<0.36 :	-
Anthracene	mg/kg-dry	T	<0.37 :	<0.36 :	<0.36 :	-	<0.36 :	-
Benzaldehyde	mg/kg-dry	T	<0.37 :	<0.36 :	<0.36 :	-	<0.36 :	-
Benzo(a)anthracene	mg/kg-dry	T	<0.37 :	<0.36 :	<0.36 :	-	<0.36 :	-
Benzo(a)pyrene	mg/kg-dry	T	<0.37 :	<0.36 :	<0.36 :	-	<0.36 :	-
Benzo(b)fluoranthene	mg/kg-dry	T	<0.37 :	<0.36 :	<0.36 :	-	<0.36 :	-
Benzo(g,h,i)perylene	mg/kg-dry	T	<0.37 :	<0.36 :	<0.36 :	-	<0.36 :	-
Benzo(k)fluoranthene	mg/kg-dry	T	<0.37 :	<0.36 :	<0.36 :	-	<0.36 :	-
Bis(2-chloroethoxy)methane	mg/kg-dry	T	<0.37 :	<0.36 :	<0.36 :	-	<0.36 :	-
Bis(2-chloroethyl)ether	mg/kg-dry	T	<0.37 :	<0.36 :	<0.36 :	-	<0.36 :	-
Bis(2-ethylhexyl)phthalate	mg/kg-dry	T	0.068 J	0.034 J	0.037 J	-	0.52 :	-
Butyl benzyl phthalate	mg/kg-dry	T	<0.37 :	<0.36 :	<0.36 :	-	<0.36 :	-
Carbazole	mg/kg-dry	T	<0.37 :	<0.36 :	<0.36 :	-	<0.36 :	-
Chrysene	mg/kg-dry	T	<0.37 :	<0.36 :	<0.36 :	-	<0.36 :	-
Dibenz(a,h)anthracene	mg/kg-dry	T	<0.37 :	<0.36 :	<0.36 :	-	<0.36 :	-
Dibenzofuran	mg/kg-dry	T	<0.37 :	<0.36 :	<0.36 :	-	<0.36 :	-
Dichlorodiisopropyl ether	mg/kg-dry	T	<0.37 :	<0.36 :	<0.36 :	-	<0.36 :	-
Diethylphthalate	mg/kg-dry	T	<0.37 :	<0.36 :	<0.36 :	-	<0.36 :	-
Dimethylphthalate	mg/kg-dry	T	<0.37 :	<0.36 :	<0.36 :	-	<0.36 :	-
Di-n-Butyl phthalate	mg/kg-dry	T	<0.37 :	<0.36 :	<0.36 :	-	<0.36 :	-
Di-n-Octyl phthalate	mg/kg-dry	T	<0.37 :	<0.36 :	<0.36 :	-	<0.36 :	-
Fluoranthene	mg/kg-dry	T	<0.37 :	<0.36 :	<0.36 :	-	<0.36 :	-

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Appendix A-7e
Soil - Biased 0-24 inches
Validated Analytical Results

Parameter	Units	Exposure Area Fraction	Site ID / Sample Date / Sample ID					
			MSS2-52 10/27/2002 MSS2-52-T02N-SOL	MSS2-53 10/27/2002 MSS2-53-T02N-SOL	MSS2-54 10/27/2002 MSS2-54-T02N-SOL	MSS2-56R 10/27/2002 MSS2-56-T02N-SOL	MSS2-56R 1/12/2003 MSS2-56R-T02N-SOL	MSS2-56R 1/15/2003 MSS2-56R-T02N-SOL
			SS2	SS2	SS2	SS2	SS2	SS2
Fluorene	mg/kg-dry	T	<0.37 :	<0.36 :	<0.36 :	-	<0.36 :	-
Hexachlorobenzene	mg/kg-dry	T	<0.37 :	<0.36 :	<0.36 :	-	<0.36 :	-
Hexachlorobutadiene	mg/kg-dry	T	<0.37 :	<0.36 :	<0.36 :	-	<0.36 :	-
Hexachlorocyclopentadiene	mg/kg-dry	T	<0.37 :	<0.36 :	<0.36 :	-	<0.36 :	-
Hexachloroethane	mg/kg-dry	T	<0.37 :	<0.36 :	<0.36 :	-	<0.36 :	-
Indeno(1,2,3-cd)pyrene	mg/kg-dry	T	<0.37 :	<0.36 :	<0.36 :	-	<0.36 :	-
Isophorone	mg/kg-dry	T	<0.37 :	<0.36 :	<0.36 :	-	<0.36 :	-
Naphthalene	mg/kg-dry	T	<0.37 :	<0.36 :	<0.36 :	-	<0.36 :	-
Nitrobenzene	mg/kg-dry	T	<0.37 :	<0.36 :	<0.36 :	-	<0.36 :	-
N-Nitrosodi-n-propylamine	mg/kg-dry	T	<0.37 :	<0.36 :	<0.36 :	-	<0.36 :	-
N-Nitrosodiphenylamine	mg/kg-dry	T	<0.37 :	<0.36 J	<0.36 :	-	<0.36 :	-
Pentachlorophenol	mg/kg-dry	T	<0.92 :	<0.9 :	<0.91 :	-	<0.9 :	-
Phenanthrene	mg/kg-dry	T	<0.37 :	<0.36 :	<0.36 :	-	<0.36 :	-
Phenol	mg/kg-dry	T	<0.37 :	<0.36 :	<0.36 :	-	<0.36 :	-
Pyrene	mg/kg-dry	T	<0.37 :	<0.36 :	<0.36 :	-	<0.36 :	-
Pesticides-PCBs								
Aroclor 1016	mg/kg-dry	T	-	-	-	-	<0.036 :	-
Aroclor 1221	mg/kg-dry	T	-	-	-	-	<0.073 :	-
Aroclor 1232	mg/kg-dry	T	-	-	-	-	<0.036 :	-
Aroclor 1242	mg/kg-dry	T	-	-	-	-	<0.036 :	-
Aroclor 1248	mg/kg-dry	T	-	-	-	-	<0.036 :	-
Aroclor 1254	mg/kg-dry	T	-	-	-	-	<0.036 :	-
Aroclor 1260	mg/kg-dry	T	-	-	-	-	<0.036 :	-

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Appendix A-7e
Soil - Biased 0-24 inches
Validated Analytical Results

Parameter	Units	Exposure Area Fraction	Site ID / Sample Date / Sample ID											
			MSS2-57R 10/27/2002 MSS2-57-T02N-SOL SS2		MSS2-57R 1/12/2003 MSS2-57R-T02N-SOL SS2		MSS2-57R 1/15/2003 MSS2-57R-T02N-SOL SS2		MSS2-58R2 1/15/2003 MSS2-58R2-T02N-SOL SS2		MSS2-59 10/27/2002 MSS2-59-T02N-SOL SS2		MSS2-59 1/12/2003 MSS2-59R-T02N-SOL SS2	
General Chemistry														
Ammonia	mg/kg-dry	T	-		22.3	:	-		9.2	:	13.1	:	-	
Chloride	mg/kg-dry	T	210.	:	1470.	:	-		483.	:	280.	:	-	
Fluoride	mg/kg-dry	T	-		4.3	J	-		1.9	J	2.5	J	-	
Nitrate	mg/kg-dry	T	2.2	J	5.6	J	-		62.2	J	4.4	J	-	
Phosphorus	mg/kg-dry	T	-		961.	:	-		862.	:	1340.	J	-	
Sulfate	mg/kg-dry	T	600.	:	1610.	:	-		1420.	:	1500.	:	-	
Total Kjeldahl Nitrogen	mg/kg-dry	T	-		106.	:	-		108.	:	141.	J	-	
Total Organic Carbon	mg/kg-dry	T	-		1530.	J	-		774.	J	3250.	J	-	
Laboratory Parameters														
pH	SU	T	-		7.7	:	-		6.8	:	7.	:	-	
Solids, Percent	%	T	-		92.3	:	95.4	:	94.2	:	88.4	:	-	
Specific Conductance	umhos/cm	T	-		3110.	:	-		2890.	J	2440.	J	-	
Geotechnical														
Organic Soils	%	T	-		4.44	:	-		1.4	:	3.76	J	4.08	:
Physical Properties														
Cation-Exchange Capacity	meq/100g	T	-		11.1	:	-		10.4	:	18.6	:	-	
Sodium Absorption Ratio	ratio	T	-		2.4	:	-		0.79	:	2.28	:	-	
Metals														
Aluminum	mg/kg-dry	T	-		10900.	:	-		5920.	:	14300.	:	-	
Antimony	mg/kg-dry	T	-		<0.32	J	-		<0.28	J	<0.25	J	-	
Arsenic	mg/kg-dry	T	-		5.7	J	-		2.4	J	4.2	:	-	
Barium	mg/kg-dry	T	-		218.	:	-		107.	:	239.	:	-	
Beryllium	mg/kg-dry	T	-		1.1	:	-		0.48	:	1.1	:	-	
Boron	mg/kg-dry	T	-		4.4	:	-		<0.43	:	4.	J	-	
Cadmium	mg/kg-dry	T	-		0.29	J	-		0.12	:	0.55	:	-	
Calcium	mg/kg-dry	T	-		29100.	:	-		8380.	:	19100.	:	-	
Chromium	mg/kg-dry	T	-		22.9	J	-		13.4	J	24.	:	-	
Cobalt	mg/kg-dry	T	-		9.2	:	-		5.5	:	11.9	:	-	
Copper	mg/kg-dry	T	-		65.7	J	-		30.	J	155.	:	-	
Iron	mg/kg-dry	T	-		22400.	:	-		15000.	:	27800.	:	-	
Lead	mg/kg-dry	T	-		41.5	:	-		23.8	:	95.5	:	-	
Magnesium	mg/kg-dry	T	-		4710.	:	-		2650.	:	5410.	:	-	
Manganese	mg/kg-dry	T	-		694.	:	-		328.	:	610.	J	-	

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T = Total Fraction

Appendix A-7e
Soil - Biased 0-24 inches
Validated Analytical Results

Parameter	Units	Exposure Area Fraction	Site ID / Sample Date / Sample ID					
			MSS2-57R 10/27/2002 MSS2-57-T02N-SOL SS2	MSS2-57R 1/12/2003 MSS2-57R-T02N-SOL SS2	MSS2-57R 1/15/2003 MSS2-57R-T02N-SOL SS2	MSS2-58R2 1/15/2003 MSS2-58R2-T02N-SOL SS2	MSS2-59 10/27/2002 MSS2-59-T02N-SOL SS2	MSS2-59 1/12/2003 MSS2-59R-T02N-SOL SS2
Mercury	mg/kg-dry	T	-	<0.017 :	-	<0.018 :	0.022 :	-
Molybdenum	mg/kg-dry	T	-	48.9 :	-	12.4 :	45. :	-
Nickel	mg/kg-dry	T	-	19.7 :	-	9.8 :	22.5 J	-
Potassium	mg/kg-dry	T	-	2670. J	-	1350. J	3280. J	-
Selenium	mg/kg-dry	T	-	<0.85 J	-	<0.74 J	1. J	-
Silver	mg/kg-dry	T	-	0.54 :	-	<0.13 :	0.73 :	-
Sodium	mg/kg-dry	T	-	822. :	-	223. :	607. :	-
Thallium	mg/kg-dry	T	-	0.18 :	-	0.11 :	0.29 :	-
Vanadium	mg/kg-dry	T	-	24.7 :	-	20.4 :	30.1 :	-
Zinc	mg/kg-dry	T	-	96.8 :	-	65.1 :	168. J	-
Volatile Organics								
1,1,1-Trichloroethane	mg/kg-dry	T	-	-	<0.005 :	<0.007 :	<0.013 :	-
1,1,2,2-Tetrachloroethane	mg/kg-dry	T	-	-	<0.005 :	<0.007 :	<0.013 :	-
1,1,2-Trichloro-1,2,2-trifluoroethane	mg/kg-dry	T	-	-	<0.005 :	<0.007 :	<0.013 :	-
1,1,2-Trichloroethane	mg/kg-dry	T	-	-	<0.005 :	<0.007 :	<0.013 :	-
1,1-Dichloroethane	mg/kg-dry	T	-	-	<0.005 :	<0.007 :	<0.013 :	-
1,1-Dichloroethene	mg/kg-dry	T	-	-	<0.005 :	<0.007 :	<0.013 :	-
1,2,4-Trichlorobenzene	mg/kg-dry	T	-	-	<0.005 :	<0.007 :	<0.013 :	-
1,2-Dibromo-3-chloropropane	mg/kg-dry	T	-	-	<0.005 :	<0.007 :	<0.013 :	-
1,2-Dichlorobenzene	mg/kg-dry	T	-	-	<0.005 :	<0.007 :	<0.013 :	-
1,2-Dichloroethane	mg/kg-dry	T	-	-	<0.005 :	<0.007 :	<0.013 :	-
1,2-Dichloroethene (total)	mg/kg-dry	T	-	-	<0.005 :	<0.007 :	<0.013 :	-
1,2-Dichloropropane	mg/kg-dry	T	-	-	<0.005 :	<0.007 :	<0.013 :	-
1,3-Dichlorobenzene	mg/kg-dry	T	-	-	<0.005 :	<0.007 :	<0.013 :	-
1,4-Dichlorobenzene	mg/kg-dry	T	-	-	<0.005 :	<0.007 :	<0.013 :	-
2-Butanone	mg/kg-dry	T	-	-	<0.005 :	<0.007 :	<0.013 J	-
2-Hexanone	mg/kg-dry	T	-	-	<0.005 :	<0.007 :	<0.013 J	-
4-Methyl-2-pentanone	mg/kg-dry	T	-	-	<0.005 :	<0.007 :	<0.013 J	-
Acetone	mg/kg-dry	T	-	-	<0.005 :	<0.007 :	0.011 J	-
Benzene	mg/kg-dry	T	-	-	<0.005 :	<0.007 :	<0.013 :	-
Bromodichloromethane	mg/kg-dry	T	-	-	<0.005 :	<0.007 :	<0.013 :	-
Bromoform	mg/kg-dry	T	-	-	<0.005 :	<0.007 :	<0.013 :	-
Bromomethane	mg/kg-dry	T	-	-	<0.005 :	<0.007 :	<0.013 :	-
Carbon disulfide	mg/kg-dry	T	-	-	<0.005 :	<0.007 :	<0.013 :	-

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Appendix A-7e
Soil - Biased 0-24 inches
Validated Analytical Results

Parameter	Units	Exposure Area Fraction	Site ID / Sample Date / Sample ID					
			MSS2-57R 10/27/2002 MSS2-57-T02N-SOL SS2	MSS2-57R 1/12/2003 MSS2-57R-T02N-SOL SS2	MSS2-57R 1/15/2003 MSS2-57R-T02N-SOL SS2	MSS2-58R2 1/15/2003 MSS2-58R2-T02N-SOL SS2	MSS2-59 10/27/2002 MSS2-59-T02N-SOL SS2	MSS2-59 1/12/2003 MSS2-59R-T02N-SOL SS2
Carbon tetrachloride	mg/kg-dry	T	-	-	<0.005 :	<0.007 :	<0.013 :	-
Chlorobenzene	mg/kg-dry	T	-	-	<0.005 :	<0.007 :	<0.013 :	-
Chloroethane	mg/kg-dry	T	-	-	<0.005 :	<0.007 :	<0.013 :	-
Chloroform	mg/kg-dry	T	-	-	<0.005 :	<0.007 :	<0.013 :	-
Chloromethane	mg/kg-dry	T	-	-	<0.005 :	<0.007 :	<0.013 :	-
cis-1,2-Dichloroethene	mg/kg-dry	T	-	-	<0.005 :	<0.007 :	<0.013 :	-
cis-1,3-Dichloropropene	mg/kg-dry	T	-	-	<0.005 :	<0.007 :	<0.013 :	-
Dibromochloromethane	mg/kg-dry	T	-	-	<0.005 :	<0.007 :	<0.013 :	-
Dichlorodifluoromethane	mg/kg-dry	T	-	-	<0.005 :	<0.007 :	<0.013 :	-
Ethylbenzene	mg/kg-dry	T	-	-	<0.005 :	<0.007 :	<0.013 :	-
Methylene chloride	mg/kg-dry	T	-	-	<0.005 :	<0.007 :	<0.013 :	-
Styrene	mg/kg-dry	T	-	-	<0.005 :	<0.007 :	<0.013 :	-
Tetrachloroethene	mg/kg-dry	T	-	-	<0.005 :	<0.007 :	<0.013 :	-
Toluene	mg/kg-dry	T	-	-	<0.005 :	<0.007 :	<0.013 :	-
Total Xylene	mg/kg-dry	T	-	-	0.0009 J	0.001 J	<0.013 :	-
trans-1,2-Dichloroethene	mg/kg-dry	T	-	-	<0.005 :	<0.007 :	<0.013 :	-
trans-1,3-Dichloropropene	mg/kg-dry	T	-	-	<0.005 :	<0.007 :	<0.013 :	-
Trichloroethene	mg/kg-dry	T	-	-	<0.005 :	<0.007 :	<0.013 :	-
Trichlorofluoromethane	mg/kg-dry	T	-	-	<0.005 :	<0.007 :	<0.013 :	-
Vinyl chloride	mg/kg-dry	T	-	-	<0.005 :	<0.007 :	<0.013 :	-
Semi-Volatile Organics								
1,1`-Biphenyl	mg/kg-dry	T	-	<0.36 :	-	<0.35 :	<0.38 :	-
2,4,5-Trichlorophenol	mg/kg-dry	T	-	<0.9 :	-	<0.88 :	<0.94 :	-
2,4,6-Trichlorophenol	mg/kg-dry	T	-	<0.36 :	-	<0.35 :	<0.38 :	-
2,4-Dichlorophenol	mg/kg-dry	T	-	<0.36 J	-	<0.35 :	<0.38 :	-
2,4-Dimethylphenol	mg/kg-dry	T	-	<0.36 :	-	<0.35 :	<0.38 :	-
2,4-Dinitrophenol	mg/kg-dry	T	-	<0.9 :	-	<0.88 :	<0.94 :	-
2,4-Dinitrotoluene	mg/kg-dry	T	-	<0.36 :	-	<0.35 :	<0.38 :	-
2,6-Dinitrotoluene	mg/kg-dry	T	-	<0.36 :	-	<0.35 :	<0.38 :	-
2-Chloronaphthalene	mg/kg-dry	T	-	<0.36 :	-	<0.35 :	<0.38 :	-
2-Chlorophenol	mg/kg-dry	T	-	<0.36 :	-	<0.35 :	<0.38 :	-
2-Methylnaphthalene	mg/kg-dry	T	-	<0.36 :	-	<0.35 :	<0.38 :	-
2-Methylphenol	mg/kg-dry	T	-	<0.36 :	-	<0.35 :	<0.38 :	-
2-Nitroaniline	mg/kg-dry	T	-	<0.9 :	-	<0.88 :	<0.94 :	-

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Appendix A-7e
Soil - Biased 0-24 inches
Validated Analytical Results

Parameter	Units	Exposure Area Fraction	Site ID / Sample Date / Sample ID					
			MSS2-57R 10/27/2002 MSS2-57-T02N-SOL SS2	MSS2-57R 1/12/2003 MSS2-57R-T02N-SOL SS2	MSS2-57R 1/15/2003 MSS2-57R-T02N-SOL SS2	MSS2-58R2 1/15/2003 MSS2-58R2-T02N-SOL SS2	MSS2-59 10/27/2002 MSS2-59-T02N-SOL SS2	MSS2-59 1/12/2003 MSS2-59R-T02N-SOL SS2
2-Nitrophenol	mg/kg-dry	T	-	<0.36 :	-	<0.35 :	<0.38 :	-
3,3-Dichlorobenzidine	mg/kg-dry	T	-	<0.36 :	-	<0.35 :	<0.38 :	-
3-Nitroaniline	mg/kg-dry	T	-	<0.9 :	-	<0.88 :	<0.94 :	-
4,6-Dinitro-2-methylphenol	mg/kg-dry	T	-	<0.9 :	-	<0.88 :	<0.94 :	-
4-Bromophenyl phenyl ether	mg/kg-dry	T	-	<0.36 :	-	<0.35 :	<0.38 :	-
4-Chloro-3-methylphenol	mg/kg-dry	T	-	<0.36 :	-	<0.35 :	<0.38 :	-
4-Chloroaniline	mg/kg-dry	T	-	<0.36 :	-	<0.35 :	<0.38 :	-
4-Chlorophenyl phenyl ether	mg/kg-dry	T	-	<0.36 :	-	<0.35 :	<0.38 :	-
4-Methylphenol	mg/kg-dry	T	-	<0.36 :	-	<0.35 :	<0.38 :	-
4-Nitroaniline	mg/kg-dry	T	-	<0.9 :	-	<0.88 :	<0.94 :	-
4-Nitrophenol	mg/kg-dry	T	-	<0.9 :	-	<0.88 :	<0.94 :	-
Acenaphthene	mg/kg-dry	T	-	<0.36 :	-	<0.35 :	<0.38 :	-
Acenaphthylene	mg/kg-dry	T	-	<0.36 :	-	<0.35 :	<0.38 :	-
Anthracene	mg/kg-dry	T	-	<0.36 :	-	<0.35 :	<0.38 :	-
Benzaldehyde	mg/kg-dry	T	-	0.12 J	-	<0.35 J	<0.38 :	-
Benzo(a)anthracene	mg/kg-dry	T	-	<0.36 :	-	<0.35 :	<0.38 :	-
Benzo(a)pyrene	mg/kg-dry	T	-	<0.36 :	-	<0.35 :	<0.38 :	-
Benzo(b)fluoranthene	mg/kg-dry	T	-	<0.36 :	-	<0.35 :	<0.38 :	-
Benzo(g,h,i)perylene	mg/kg-dry	T	-	<0.36 :	-	<0.35 :	<0.38 :	-
Benzo(k)fluoranthene	mg/kg-dry	T	-	<0.36 :	-	<0.35 :	<0.38 :	-
Bis(2-chloroethoxy)methane	mg/kg-dry	T	-	<0.36 :	-	<0.35 :	<0.38 :	-
Bis(2-chloroethyl)ether	mg/kg-dry	T	-	<0.36 :	-	<0.35 :	<0.38 :	-
Bis(2-ethylhexyl)phthalate	mg/kg-dry	T	-	0.13 J	-	<0.35 :	0.048 J	-
Butyl benzyl phthalate	mg/kg-dry	T	-	0.039 J	-	<0.35 :	<0.38 :	-
Carbazole	mg/kg-dry	T	-	<0.36 :	-	<0.35 :	<0.38 :	-
Chrysene	mg/kg-dry	T	-	<0.36 :	-	<0.35 :	<0.38 :	-
Dibenz(a,h)anthracene	mg/kg-dry	T	-	<0.36 :	-	<0.35 :	<0.38 :	-
Dibenzofuran	mg/kg-dry	T	-	<0.36 :	-	<0.35 :	<0.38 :	-
Dichlorodiisopropyl ether	mg/kg-dry	T	-	<0.36 :	-	<0.35 :	<0.38 :	-
Diethylphthalate	mg/kg-dry	T	-	<0.36 :	-	<0.35 :	<0.38 :	-
Dimethylphthalate	mg/kg-dry	T	-	<0.36 :	-	<0.35 :	<0.38 :	-
Di-n-Butyl phthalate	mg/kg-dry	T	-	<0.36 :	-	<0.35 :	<0.38 :	-
Di-n-Octyl phthalate	mg/kg-dry	T	-	<0.36 :	-	<0.35 :	<0.38 :	-
Fluoranthene	mg/kg-dry	T	-	<0.36 :	-	<0.35 :	<0.38 :	-

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Appendix A-7e
Soil - Biased 0-24 inches
Validated Analytical Results

Parameter	Units	Exposure Area Fraction	Site ID / Sample Date / Sample ID					
			MSS2-57R 10/27/2002 MSS2-57-T02N-SOL SS2	MSS2-57R 1/12/2003 MSS2-57R-T02N-SOL SS2	MSS2-57R 1/15/2003 MSS2-57R-T02N-SOL SS2	MSS2-58R2 1/15/2003 MSS2-58R2-T02N-SOL SS2	MSS2-59 10/27/2002 MSS2-59-T02N-SOL SS2	MSS2-59 1/12/2003 MSS2-59R-T02N-SOL SS2
Fluorene	mg/kg-dry	T	-	<0.36 :	-	<0.35 :	<0.38 :	-
Hexachlorobenzene	mg/kg-dry	T	-	<0.36 :	-	<0.35 :	<0.38 :	-
Hexachlorobutadiene	mg/kg-dry	T	-	<0.36 :	-	<0.35 :	<0.38 :	-
Hexachlorocyclopentadiene	mg/kg-dry	T	-	<0.36 :	-	<0.35 :	<0.38 :	-
Hexachloroethane	mg/kg-dry	T	-	<0.36 :	-	<0.35 :	<0.38 :	-
Indeno(1,2,3-cd)pyrene	mg/kg-dry	T	-	<0.36 :	-	<0.35 :	<0.38 :	-
Isophorone	mg/kg-dry	T	-	<0.36 :	-	<0.35 :	<0.38 :	-
Naphthalene	mg/kg-dry	T	-	<0.36 :	-	<0.35 :	<0.38 :	-
Nitrobenzene	mg/kg-dry	T	-	<0.36 :	-	<0.35 :	<0.38 :	-
N-Nitrosodi-n-propylamine	mg/kg-dry	T	-	<0.36 :	-	<0.35 :	<0.38 :	-
N-Nitrosodiphenylamine	mg/kg-dry	T	-	<0.36 :	-	<0.35 :	<0.38 :	-
Pentachlorophenol	mg/kg-dry	T	-	<0.9 :	-	<0.88 :	<0.94 :	-
Phenanthrene	mg/kg-dry	T	-	<0.36 :	-	<0.35 :	<0.38 :	-
Phenol	mg/kg-dry	T	-	<0.36 :	-	<0.35 :	<0.38 :	-
Pyrene	mg/kg-dry	T	-	<0.36 :	-	<0.35 :	<0.38 :	-
Pesticides-PCBs								
Aroclor 1016	mg/kg-dry	T	-	<0.036 :	-	-	-	-
Aroclor 1221	mg/kg-dry	T	-	<0.073 :	-	-	-	-
Aroclor 1232	mg/kg-dry	T	-	<0.036 :	-	-	-	-
Aroclor 1242	mg/kg-dry	T	-	<0.036 :	-	-	-	-
Aroclor 1248	mg/kg-dry	T	-	<0.036 :	-	-	-	-
Aroclor 1254	mg/kg-dry	T	-	<0.036 :	-	-	-	-
Aroclor 1260	mg/kg-dry	T	-	<0.036 :	-	-	-	-

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Appendix A-7e
Soil - Biased 0-24 inches
Validated Analytical Results

Parameter	Units	Fraction						
		Site ID	MSS2-60	MSS2-61	MSS2-61A	MSS2-62	MSS2-62	MSS2-63
		Sample Date	1/12/2003	10/24/2002	1/12/2003	1/12/2003	1/15/2003	1/12/2003
		Sample ID	MSS2-60R-T02N-SOL	MSS2-61-T02N-SOL	MSS2-61A-T02N-SO L	MSS2-62-T02N-SOL	MSS2-62-T02N-SOL	MSS2-63-T02N-SOL
		Exposure Area	SS2	SS2	SS2	SS2	SS2	SS2
General Chemistry								
Ammonia	mg/kg-dry	T	15. :	19.8 :	16.1 :	15.7 :	-	19.2 :
Chloride	mg/kg-dry	T	49.7 :	458. J	84.6 :	367. :	-	7.5 :
Fluoride	mg/kg-dry	T	2.4 J	1.3 J	2.1 J	6.3 J	-	6.8 J
Nitrate	mg/kg-dry	T	4.8 J	6.6 J	34.4 J	<2.2 J	-	<2.2 J
Phosphorus	mg/kg-dry	T	1400. :	1040. J	677. :	1110. :	-	1240. :
Sulfate	mg/kg-dry	T	1590. :	1120. J	98.7 :	7550. :	-	1930. :
Total Kjeldahl Nitrogen	mg/kg-dry	T	225. :	146. :	179. :	50.9 :	-	130. :
Total Organic Carbon	mg/kg-dry	T	3200. J	764. J	4850. J	594. J	-	3820. J
Laboratory Parameters								
pH	SU	T	5.5 :	7.1 :	7.3 :	5.2 :	-	6.9 :
Solids, Percent	%	T	93.2 :	91.8 :	94.3 :	95.2 :	98.2 :	91.3 :
Specific Conductance	umhos/cm	T	1350. :	1260. :	2210. :	2590. :	-	1550. :
Geotechnical								
Organic Soils	%	T	3.96 :	2.29 J	4.69 :	2.72 :	-	2.2 :
Physical Properties								
Cation-Exchange Capacity	meq/100g	T	16.1 :	11.1 :	10.7 :	10.2 :	-	21.2 :
Sodium Absorption Ratio	ratio	T	0.26 :	0.97 :	0.97 :	0.53 :	-	0.09 :
Metals								
Aluminum	mg/kg-dry	T	18800. :	17100. :	9950. :	12300. :	-	15100. :
Antimony	mg/kg-dry	T	<0.31 J	<0.29 J	<0.29 J	<0.29 J	-	<0.27 J
Arsenic	mg/kg-dry	T	2.8 J	3.3 :	3.7 J	2.1 J	-	4.6 J
Barium	mg/kg-dry	T	277. :	183. :	218. :	225. :	-	248. :
Beryllium	mg/kg-dry	T	1.8 :	1.2 :	0.8 :	1.2 :	-	1.4 :
Boron	mg/kg-dry	T	3.1 :	<0.89 J	5.5 :	<2.7 :	-	<0.27 J
Cadmium	mg/kg-dry	T	0.26 J	0.32 J	0.27 J	0.4 J	-	<0.04 J
Calcium	mg/kg-dry	T	4280. :	15100. :	28300. :	7230. :	-	11000. :
Chromium	mg/kg-dry	T	25.9 J	46.2 :	17.6 J	30.9 J	-	37.5 J
Cobalt	mg/kg-dry	T	38.2 :	15.7 :	8. :	20.4 :	-	16.1 :
Copper	mg/kg-dry	T	330. J	92.9 :	53.3 J	56.1 J	-	70.6 J
Iron	mg/kg-dry	T	35900. :	27100. :	21500. :	24900. :	-	32400. :
Lead	mg/kg-dry	T	84.8 :	65.2 :	39.5 :	27.5 :	-	66.6 :
Magnesium	mg/kg-dry	T	5080. :	10700. :	4240. :	6460. :	-	7580. :
Manganese	mg/kg-dry	T	818. :	767. J	477. :	679. :	-	732. :

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Appendix A-7e
Soil - Biased 0-24 inches
Validated Analytical Results

Parameter	Units	Fraction	MSS2-60	MSS2-61	MSS2-61A	MSS2-62	MSS2-62	MSS2-63
		Sample Date	1/12/2003	10/24/2002	1/12/2003	1/12/2003	1/15/2003	1/12/2003
		Sample ID	MSS2-60R-T02N-SOL	MSS2-61-T02N-SOL	MSS2-61A-T02N-SOL	MSS2-62-T02N-SOL	MSS2-62-T02N-SOL	MSS2-63-T02N-SOL
		Exposure Area	SS2	SS2	SS2	SS2	SS2	SS2
Mercury	mg/kg-dry	T	<0.018 :	<0.016 :	0.21 :	<0.016 :	-	<0.018 :
Molybdenum	mg/kg-dry	T	23.7 :	108. :	52.7 :	39. :	-	16.6 :
Nickel	mg/kg-dry	T	42.9 :	36.5 J	14.2 :	42.3 :	-	30.3 :
Potassium	mg/kg-dry	T	3270. J	4480. J	2320. J	2860. J	-	3580. J
Selenium	mg/kg-dry	T	<0.83 J	<0.79 J	<0.78 J	<0.77 J	-	<0.71 J
Silver	mg/kg-dry	T	0.42 :	0.38 :	0.42 :	0.42 :	-	0.42 :
Sodium	mg/kg-dry	T	<216. :	<300. :	383. :	314. :	-	186. :
Thallium	mg/kg-dry	T	0.28 :	0.29 :	0.15 :	0.19 :	-	0.23 :
Vanadium	mg/kg-dry	T	38. :	48.2 :	25.3 :	31.1 :	-	41.4 :
Zinc	mg/kg-dry	T	218. :	117. J	160. :	88. :	-	89. :
Volatile Organics								
1,1,1-Trichloroethane	mg/kg-dry	T	<0.012 :	<0.008 :	<0.011 :	-	<0.005 :	-
1,1,2,2-Tetrachloroethane	mg/kg-dry	T	<0.012 :	<0.008 :	<0.011 :	-	<0.005 :	-
1,1,2-Trichloro-1,2,2-trifluoroethane	mg/kg-dry	T	<0.012 :	<0.008 :	<0.011 :	-	<0.005 :	-
1,1,2-Trichloroethane	mg/kg-dry	T	<0.012 :	<0.008 :	<0.011 :	-	<0.005 :	-
1,1-Dichloroethane	mg/kg-dry	T	<0.012 :	<0.008 :	<0.011 :	-	<0.005 :	-
1,1-Dichloroethene	mg/kg-dry	T	<0.012 :	<0.008 :	<0.011 :	-	<0.005 :	-
1,2,4-Trichlorobenzene	mg/kg-dry	T	<0.012 :	<0.008 :	<0.011 :	-	<0.005 :	-
1,2-Dibromo-3-chloropropane	mg/kg-dry	T	<0.012 :	<0.008 :	<0.011 :	-	<0.005 :	-
1,2-Dichlorobenzene	mg/kg-dry	T	<0.012 :	<0.008 :	<0.011 :	-	<0.005 :	-
1,2-Dichloroethane	mg/kg-dry	T	<0.012 :	<0.008 :	<0.011 :	-	<0.005 :	-
1,2-Dichloroethene (total)	mg/kg-dry	T	<0.012 :	<0.008 :	<0.011 :	-	<0.005 :	-
1,2-Dichloropropane	mg/kg-dry	T	<0.012 :	<0.008 :	<0.011 :	-	<0.005 :	-
1,3-Dichlorobenzene	mg/kg-dry	T	<0.012 :	<0.008 :	<0.011 :	-	<0.005 :	-
1,4-Dichlorobenzene	mg/kg-dry	T	<0.012 :	<0.008 :	<0.011 :	-	<0.005 :	-
2-Butanone	mg/kg-dry	T	<0.012 :	<0.008 :	<0.011 :	-	<0.005 :	-
2-Hexanone	mg/kg-dry	T	<0.012 :	<0.008 :	<0.011 :	-	<0.005 :	-
4-Methyl-2-pentanone	mg/kg-dry	T	<0.012 :	<0.008 :	<0.011 :	-	<0.005 :	-
Acetone	mg/kg-dry	T	0.004 J	<0.008 :	0.004 J	-	<0.005 :	-
Benzene	mg/kg-dry	T	<0.012 :	<0.008 :	<0.011 :	-	<0.005 :	-
Bromodichloromethane	mg/kg-dry	T	<0.012 :	<0.008 :	<0.011 :	-	<0.005 :	-
Bromoform	mg/kg-dry	T	<0.012 :	<0.008 :	<0.011 :	-	<0.005 :	-
Bromomethane	mg/kg-dry	T	<0.012 :	<0.008 J	<0.011 :	-	<0.005 :	-
Carbon disulfide	mg/kg-dry	T	<0.012 :	<0.008 :	<0.011 :	-	<0.005 :	-

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Appendix A-7e
Soil - Biased 0-24 inches
Validated Analytical Results

Parameter	Units	Exposure Area Fraction	Site ID / Sample Date / Sample ID					
			MSS2-60 1/12/2003 MSS2-60R-T02N-SOL	MSS2-61 10/24/2002 MSS2-61-T02N-SOL	MSS2-61A 1/12/2003 MSS2-61A-T02N-SOL	MSS2-62 1/12/2003 MSS2-62-T02N-SOL	MSS2-62 1/15/2003 MSS2-62-T02N-SOL	MSS2-63 1/12/2003 MSS2-63-T02N-SOL
			SS2	SS2	SS2	SS2	SS2	SS2
Carbon tetrachloride	mg/kg-dry	T	<0.012 :	<0.008 :	<0.011 :	-	<0.005 :	-
Chlorobenzene	mg/kg-dry	T	<0.012 :	<0.008 :	<0.011 :	-	<0.005 :	-
Chloroethane	mg/kg-dry	T	<0.012 :	<0.008 :	<0.011 :	-	<0.005 :	-
Chloroform	mg/kg-dry	T	<0.012 :	<0.008 :	<0.011 :	-	<0.005 :	-
Chloromethane	mg/kg-dry	T	<0.012 :	<0.008 J	<0.011 :	-	<0.005 :	-
cis-1,2-Dichloroethene	mg/kg-dry	T	<0.012 :	<0.008 :	<0.011 :	-	<0.005 :	-
cis-1,3-Dichloropropene	mg/kg-dry	T	<0.012 :	<0.008 :	<0.011 :	-	<0.005 :	-
Dibromochloromethane	mg/kg-dry	T	<0.012 :	<0.008 :	<0.011 :	-	<0.005 :	-
Dichlorodifluoromethane	mg/kg-dry	T	<0.012 :	<0.008 J	<0.011 :	-	<0.005 :	-
Ethylbenzene	mg/kg-dry	T	<0.012 :	<0.008 :	<0.011 :	-	<0.005 :	-
Methylene chloride	mg/kg-dry	T	<0.012 :	<0.008 :	<0.011 :	-	<0.005 :	-
Styrene	mg/kg-dry	T	<0.012 :	<0.008 :	<0.011 :	-	<0.005 :	-
Tetrachloroethene	mg/kg-dry	T	<0.012 :	<0.008 :	<0.011 :	-	<0.005 :	-
Toluene	mg/kg-dry	T	<0.012 :	<0.008 :	<0.011 :	-	<0.005 :	-
Total Xylene	mg/kg-dry	T	<0.012 :	<0.008 :	0.001 J	-	0.002 J	-
trans-1,2-Dichloroethene	mg/kg-dry	T	<0.012 :	<0.008 :	<0.011 :	-	<0.005 :	-
trans-1,3-Dichloropropene	mg/kg-dry	T	<0.012 :	<0.008 :	<0.011 :	-	<0.005 :	-
Trichloroethene	mg/kg-dry	T	<0.012 :	<0.008 :	<0.011 :	-	<0.005 :	-
Trichlorofluoromethane	mg/kg-dry	T	<0.012 :	<0.008 :	<0.011 :	-	<0.005 :	-
Vinyl chloride	mg/kg-dry	T	<0.012 :	<0.008 :	<0.011 :	-	<0.005 :	-
Semi-Volatile Organics								
1,1`-Biphenyl	mg/kg-dry	T	<0.35 :	<0.36 :	<0.35 :	<0.17 :	-	<0.36 :
2,4,5-Trichlorophenol	mg/kg-dry	T	<0.89 :	<0.9 :	<0.88 :	<0.44 :	-	<0.91 :
2,4,6-Trichlorophenol	mg/kg-dry	T	<0.35 :	<0.36 :	<0.35 :	<0.17 :	-	<0.36 :
2,4-Dichlorophenol	mg/kg-dry	T	<0.35 J	<0.36 :	<0.35 J	<0.17 J	-	<0.36 :
2,4-Dimethylphenol	mg/kg-dry	T	<0.35 :	<0.36 :	<0.35 :	<0.17 :	-	<0.36 :
2,4-Dinitrophenol	mg/kg-dry	T	<0.89 :	<0.9 :	<0.88 :	<0.44 :	-	<0.91 :
2,4-Dinitrotoluene	mg/kg-dry	T	<0.35 :	<0.36 :	<0.35 :	<0.17 :	-	<0.36 :
2,6-Dinitrotoluene	mg/kg-dry	T	<0.35 :	<0.36 :	<0.35 :	<0.17 :	-	<0.36 :
2-Chloronaphthalene	mg/kg-dry	T	<0.35 :	<0.36 :	<0.35 :	<0.17 :	-	<0.36 :
2-Chlorophenol	mg/kg-dry	T	<0.35 :	<0.36 :	<0.35 :	<0.17 :	-	<0.36 :
2-Methylnaphthalene	mg/kg-dry	T	<0.35 :	<0.36 :	<0.35 :	<0.17 :	-	<0.36 :
2-Methylphenol	mg/kg-dry	T	<0.35 :	<0.36 :	<0.35 :	<0.17 :	-	<0.36 :
2-Nitroaniline	mg/kg-dry	T	<0.89 :	<0.9 :	<0.88 :	<0.44 :	-	<0.91 :

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Appendix A-7e
Soil - Biased 0-24 inches
Validated Analytical Results

Parameter	Units	Exposure Area Fraction	Site ID / Sample Date / Sample ID					
			MSS2-60 1/12/2003 MSS2-60R-T02N-SOL	MSS2-61 10/24/2002 MSS2-61-T02N-SOL	MSS2-61A 1/12/2003 MSS2-61A-T02N-SOL	MSS2-62 1/12/2003 MSS2-62-T02N-SOL	MSS2-62 1/15/2003 MSS2-62-T02N-SOL	MSS2-63 1/12/2003 MSS2-63-T02N-SOL
			SS2	SS2	SS2	SS2	SS2	SS2
2-Nitrophenol	mg/kg-dry	T	<0.35 :	<0.36 :	<0.35 :	<0.17 :	-	<0.36 :
3,3-Dichlorobenzidine	mg/kg-dry	T	<0.35 :	<0.36 :	<0.35 :	<0.17 :	-	<0.36 J
3-Nitroaniline	mg/kg-dry	T	<0.89 :	<0.9 :	<0.88 :	<0.44 :	-	<0.91 :
4,6-Dinitro-2-methylphenol	mg/kg-dry	T	<0.89 :	<0.9 :	<0.88 :	<0.44 :	-	<0.91 :
4-Bromophenyl phenyl ether	mg/kg-dry	T	<0.35 :	<0.36 :	<0.35 :	<0.17 :	-	<0.36 :
4-Chloro-3-methylphenol	mg/kg-dry	T	<0.35 :	<0.36 :	<0.35 :	<0.17 :	-	<0.36 :
4-Chloroaniline	mg/kg-dry	T	<0.35 :	<0.36 :	<0.35 :	<0.17 :	-	<0.36 :
4-Chlorophenyl phenyl ether	mg/kg-dry	T	<0.35 :	<0.36 :	<0.35 :	<0.17 :	-	<0.36 :
4-Methylphenol	mg/kg-dry	T	<0.35 :	<0.36 :	<0.35 :	<0.17 :	-	<0.36 :
4-Nitroaniline	mg/kg-dry	T	<0.89 :	<0.9 :	<0.88 :	<0.44 :	-	<0.91 J
4-Nitrophenol	mg/kg-dry	T	<0.89 :	<0.9 :	<0.88 :	<0.44 J	-	<0.91 :
Acenaphthene	mg/kg-dry	T	<0.35 :	<0.36 :	<0.35 :	<0.17 :	-	<0.36 :
Acenaphthylene	mg/kg-dry	T	<0.35 :	<0.36 :	<0.35 :	<0.17 :	-	<0.36 :
Anthracene	mg/kg-dry	T	<0.35 :	<0.36 :	<0.35 :	<0.17 :	-	<0.36 :
Benzaldehyde	mg/kg-dry	T	0.054 J	0.062 J	<0.35 :	<0.17 J	-	<0.36 J
Benzo(a)anthracene	mg/kg-dry	T	<0.35 :	<0.36 :	<0.35 :	<0.17 :	-	<0.36 J
Benzo(a)pyrene	mg/kg-dry	T	<0.35 :	<0.36 :	<0.35 :	-	-	<0.36 J
Benzo(b)fluoranthene	mg/kg-dry	T	<0.35 :	<0.36 :	<0.35 :	-	-	<0.36 J
Benzo(g,h,i)perylene	mg/kg-dry	T	<0.35 :	<0.36 :	<0.35 :	<0.17 :	-	<0.36 J
Benzo(k)fluoranthene	mg/kg-dry	T	<0.35 :	<0.36 :	<0.35 :	-	-	<0.36 J
Bis(2-chloroethoxy)methane	mg/kg-dry	T	<0.35 :	<0.36 :	<0.35 :	<0.17 :	-	<0.36 :
Bis(2-chloroethyl)ether	mg/kg-dry	T	<0.35 :	<0.36 :	<0.35 :	<0.17 :	-	<0.36 :
Bis(2-ethylhexyl)phthalate	mg/kg-dry	T	0.082 J	0.029 J	0.12 J	<0.17 :	-	<0.36 J
Butyl benzyl phthalate	mg/kg-dry	T	<0.35 :	<0.36 :	<0.35 :	<0.17 :	-	<0.36 J
Carbazole	mg/kg-dry	T	<0.35 :	<0.36 :	<0.35 :	<0.17 :	-	<0.36 :
Chrysene	mg/kg-dry	T	<0.35 :	<0.36 :	<0.35 :	<0.17 :	-	<0.36 J
Dibenz(a,h)anthracene	mg/kg-dry	T	<0.35 :	<0.36 :	<0.35 :	-	-	<0.36 J
Dibenzofuran	mg/kg-dry	T	<0.35 :	<0.36 :	<0.35 :	<0.17 :	-	<0.36 :
Dichlorodiisopropyl ether	mg/kg-dry	T	<0.35 :	<0.36 :	<0.35 :	<0.17 :	-	<0.36 :
Diethylphthalate	mg/kg-dry	T	<0.35 :	<0.36 :	<0.35 :	<0.17 :	-	<0.36 :
Dimethylphthalate	mg/kg-dry	T	<0.35 :	<0.36 :	<0.35 :	<0.17 :	-	<0.36 :
Di-n-Butyl phthalate	mg/kg-dry	T	<0.35 :	<0.36 :	<0.35 :	<0.17 :	-	<0.36 :
Di-n-Octyl phthalate	mg/kg-dry	T	<0.35 :	<0.36 :	<0.35 :	-	-	<0.36 J
Fluoranthene	mg/kg-dry	T	<0.35 :	<0.36 :	<0.35 :	<0.17 :	-	<0.36 :

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Appendix A-7e
Soil - Biased 0-24 inches
Validated Analytical Results

Parameter	Units	Exposure Area Fraction	Site ID / Sample Date / Sample ID											
			MSS2-60 1/12/2003 MSS2-60R-T02N-SOL		MSS2-61 10/24/2002 MSS2-61-T02N-SOL		MSS2-61A 1/12/2003 MSS2-61A-T02N-SOL		MSS2-62 1/12/2003 MSS2-62-T02N-SOL		MSS2-62 1/15/2003 MSS2-62-T02N-SOL		MSS2-63 1/12/2003 MSS2-63-T02N-SOL	
			SS2		SS2		SS2		SS2		SS2		SS2	
Fluorene	mg/kg-dry	T	<0.35	:	<0.36	:	<0.35	:	<0.17	:	-	:	<0.36	:
Hexachlorobenzene	mg/kg-dry	T	<0.35	:	<0.36	:	<0.35	:	<0.17	:	-	:	<0.36	:
Hexachlorobutadiene	mg/kg-dry	T	<0.35	:	<0.36	:	<0.35	:	<0.17	:	-	:	<0.36	:
Hexachlorocyclopentadiene	mg/kg-dry	T	<0.35	:	<0.36	:	<0.35	:	<0.17	:	-	:	<0.36	:
Hexachloroethane	mg/kg-dry	T	<0.35	:	<0.36	:	<0.35	:	<0.17	:	-	:	<0.36	:
Indeno(1,2,3-cd)pyrene	mg/kg-dry	T	<0.35	:	<0.36	:	<0.35	:	-		-	:	<0.36	J
Isophorone	mg/kg-dry	T	<0.35	:	<0.36	:	<0.35	:	<0.17	:	-	:	<0.36	:
Naphthalene	mg/kg-dry	T	<0.35	:	<0.36	:	<0.35	:	<0.17	:	-	:	<0.36	:
Nitrobenzene	mg/kg-dry	T	<0.35	:	<0.36	:	<0.35	:	<0.17	:	-	:	<0.36	:
N-Nitrosodi-n-propylamine	mg/kg-dry	T	<0.35	:	<0.36	:	<0.35	:	<0.17	:	-	:	<0.36	:
N-Nitrosodiphenylamine	mg/kg-dry	T	<0.35	:	<0.36	:	<0.35	:	<0.17	:	-	:	<0.36	:
Pentachlorophenol	mg/kg-dry	T	<0.89	:	<0.9	:	<0.88	:	<0.44	:	-	:	<0.91	:
Phenanthrene	mg/kg-dry	T	<0.35	:	<0.36	:	0.05	J	<0.17	:	-	:	<0.36	:
Phenol	mg/kg-dry	T	<0.35	:	<0.36	:	<0.35	:	<0.17	:	-	:	<0.36	:
Pyrene	mg/kg-dry	T	<0.35	:	<0.36	:	0.031	J	<0.17	:	-	:	<0.36	J
Pesticides-PCBs														
Aroclor 1016	mg/kg-dry	T	<0.035	:	-		<0.035	:	<0.035	:	-	:	<0.036	:
Aroclor 1221	mg/kg-dry	T	<0.072	:	-		<0.071	:	<0.071	:	-	:	<0.074	:
Aroclor 1232	mg/kg-dry	T	<0.035	:	-		<0.035	:	<0.035	:	-	:	<0.036	:
Aroclor 1242	mg/kg-dry	T	<0.035	:	-		<0.035	:	<0.035	:	-	:	<0.036	:
Aroclor 1248	mg/kg-dry	T	<0.035	:	-		<0.035	:	<0.035	:	-	:	<0.036	:
Aroclor 1254	mg/kg-dry	T	<0.035	:	-		<0.035	:	<0.035	:	-	:	<0.036	:
Aroclor 1260	mg/kg-dry	T	<0.035	:	-		<0.035	:	<0.035	:	-	:	<0.036	:

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Appendix A-7e
Soil - Biased 0-24 inches
Validated Analytical Results

Parameter	Units	Exposure Area Fraction	Site ID / Sample Date / Sample ID / Exposure Area		MSS2-63 1/15/2003 MSS2-63-T02N-SOL SS2		MSS2-64 1/12/2003 MSS2-64-T02N-SOL SS2		MSS2-65 1/12/2003 MSS2-65-T02N-SOL SS2		MSS2-66 1/16/2003 MSS2-66-T02N-SOL SS2		MSS2-67 1/16/2003 MSS2-67-T02N-SOL SS2		MSS2-68 1/16/2003 MSS2-68-T02N-SOL SS2	
General Chemistry																
Ammonia	mg/kg-dry	T		-		18.	:	11.2	:	16.9	:	16.1	:	13.1	:
Chloride	mg/kg-dry	T		-		199.	:	2.3	:	15.6	:	19.3	:	3.5	:
Fluoride	mg/kg-dry	T		-		2.2	J	2.9	J	10.2	J	6.2	J	3.2	J
Nitrate	mg/kg-dry	T		-		<2.3	J	<2.3	J	2.7	J	2.3	J	3.	J
Phosphorus	mg/kg-dry	T		-		2380.	:	647.	:	1710.	:	1230.	:	1440.	J
Sulfate	mg/kg-dry	T		-		12400.	:	747.	:	9150.	:	9170.	:	4450.	J
Total Kjeldahl Nitrogen	mg/kg-dry	T		-		256.	:	107.	:	88.4	:	104.	:	90.6	:
Total Organic Carbon	mg/kg-dry	T		-		2480.	J	1230.	J	977.	J	1540.	:	226.	J
Laboratory Parameters															
pH	SU	T		-		6.6	:	10.	:	5.	:	4.9	:	7.6	:
Solids, Percent	%	T		92.	:	88.4	:	88.4	:	94.	:	93.7	:	94.5	:
Specific Conductance	umhos/cm	T		-		1780.	:	986.	:	2220.	J	2320.	J	1870.	J
Geotechnical															
Organic Soils	%	T		-		6.16	:	3.37	:	2.6	:	3.6	:	2.1	:
Physical Properties															
Cation-Exchange Capacity	meq/100g	T		-		26.2	:	8.3	:	13.2	:	16.1	:	15.2	:
Sodium Absorption Ratio	ratio	T		-		0.78	:	0.12	:	0.1	:	0.12	:	0.07	:
Metals															
Aluminum	mg/kg-dry	T		-		23300.	:	11300.	:	12200.	:	12500.	:	12900.	J
Antimony	mg/kg-dry	T		-		<0.32	J	<0.3	J	<0.29	J	<0.31	J	<0.29	J
Arsenic	mg/kg-dry	T		-		6.1	J	2.8	J	3.1	J	3.3	J	3.1	J
Barium	mg/kg-dry	T		-		456.	:	345.	:	140.	:	152.	:	147.	:
Beryllium	mg/kg-dry	T		-		1.6	:	0.9	:	1.1	:	1.4	:	1.2	:
Boron	mg/kg-dry	T		-		3.2	:	<3.	:	4.8	J	5.5	J	<0.44	:
Cadmium	mg/kg-dry	T		-		<0.042	J	0.37	J	0.13	J	0.32	J	0.049	J
Calcium	mg/kg-dry	T		-		11000.	:	20900.	:	11600.	:	11600.	:	11200.	J
Chromium	mg/kg-dry	T		-		37.5	J	27.4	J	26.6	J	26.9	J	33.5	J
Cobalt	mg/kg-dry	T		-		16.9	:	9.3	:	12.3	:	15.3	:	8.8	J
Copper	mg/kg-dry	T		-		181.	J	49.	J	147.	J	164.	J	185.	J
Iron	mg/kg-dry	T		-		56600.	:	24700.	:	31200.	:	31100.	:	39700.	J
Lead	mg/kg-dry	T		-		142.	:	78.3	:	97.	:	105.	:	62.8	J
Magnesium	mg/kg-dry	T		-		8750.	:	5580.	:	7270.	:	6830.	:	6320.	:
Manganese	mg/kg-dry	T		-		777.	:	570.	:	662.	:	776.	:	601.	J

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Appendix A-7e
Soil - Biased 0-24 inches
Validated Analytical Results

Parameter	Units	Exposure Area Fraction	Site ID / Sample Date / Sample ID / Exposure Area		MSS2-63 1/15/2003 MSS2-63-T02N-SOL SS2		MSS2-64 1/12/2003 MSS2-64-T02N-SOL SS2		MSS2-65 1/12/2003 MSS2-65-T02N-SOL SS2		MSS2-66 1/16/2003 MSS2-66-T02N-SOL SS2		MSS2-67 1/16/2003 MSS2-67-T02N-SOL SS2		MSS2-68 1/16/2003 MSS2-68-T02N-SOL SS2	
Mercury	mg/kg-dry	T		-		0.032	:	<0.019	:	<0.017	:	<0.016	:	<0.018	:
Molybdenum	mg/kg-dry	T		-		29.2	:	75.1	:	28.2	:	55.1	J	128.	:
Nickel	mg/kg-dry	T		-		30.9	:	17.6	:	24.2	:	28.4	:	21.7	J
Potassium	mg/kg-dry	T		-		6280.	J	3570.	J	3380.	J	3320.	J	3060.	J
Selenium	mg/kg-dry	T		-		1.5	J	<0.79	J	0.91	J	<0.82	J	<0.78	J
Silver	mg/kg-dry	T		-		1.5	:	0.65	:	0.66	:	0.65	:	0.43	J
Sodium	mg/kg-dry	T		-		538.	:	<155.	:	<66.4	:	<109.	:	<78.	:
Thallium	mg/kg-dry	T		-		0.67	:	0.17	:	0.46	:	0.44	:	0.33	:
Vanadium	mg/kg-dry	T		-		48.	:	30.7	:	32.6	:	32.1	:	43.1	:
Zinc	mg/kg-dry	T		-		139.	:	119.	:	154.	:	174.	:	119.	J
Volatile Organics															
1,1,1-Trichloroethane	mg/kg-dry	T		<0.004	:	<0.011	:	<0.01	:	<0.012	:	<0.011	:	<0.01	:
1,1,2,2-Tetrachloroethane	mg/kg-dry	T		<0.004	:	<0.011	:	<0.01	:	<0.012	:	<0.011	:	<0.01	:
1,1,2-Trichloro-1,2,2-trifluoroethane	mg/kg-dry	T		<0.004	:	<0.011	:	<0.01	:	<0.012	:	<0.011	:	<0.01	:
1,1,2-Trichloroethane	mg/kg-dry	T		<0.004	:	<0.011	:	<0.01	:	<0.012	:	<0.011	:	<0.01	:
1,1-Dichloroethane	mg/kg-dry	T		<0.004	:	<0.011	:	<0.01	:	<0.012	:	<0.011	:	<0.01	:
1,1-Dichloroethene	mg/kg-dry	T		<0.004	:	<0.011	:	<0.01	:	<0.012	:	<0.011	:	<0.01	:
1,2,4-Trichlorobenzene	mg/kg-dry	T		<0.004	:	<0.011	:	<0.01	:	<0.012	:	<0.011	:	<0.01	:
1,2-Dibromo-3-chloropropane	mg/kg-dry	T		<0.004	:	<0.011	:	<0.01	:	<0.012	:	<0.011	:	<0.01	:
1,2-Dichlorobenzene	mg/kg-dry	T		<0.004	:	<0.011	:	<0.01	:	<0.012	:	<0.011	:	<0.01	:
1,2-Dichloroethane	mg/kg-dry	T		<0.004	:	<0.011	:	<0.01	:	<0.012	:	<0.011	:	<0.01	:
1,2-Dichloroethene (total)	mg/kg-dry	T		<0.004	:	<0.011	:	<0.01	:	<0.012	:	<0.011	:	<0.01	:
1,2-Dichloropropane	mg/kg-dry	T		<0.004	:	<0.011	:	<0.01	:	<0.012	:	<0.011	:	<0.01	:
1,3-Dichlorobenzene	mg/kg-dry	T		<0.004	:	<0.011	:	<0.01	:	<0.012	:	<0.011	:	<0.01	:
1,4-Dichlorobenzene	mg/kg-dry	T		<0.004	:	<0.011	:	<0.01	:	<0.012	:	<0.011	:	<0.01	:
2-Butanone	mg/kg-dry	T		<0.004	:	<0.011	:	0.002	J	<0.012	:	0.003	J	<0.01	:
2-Hexanone	mg/kg-dry	T		<0.004	:	<0.011	:	<0.01	:	<0.012	:	<0.011	:	<0.01	:
4-Methyl-2-pentanone	mg/kg-dry	T		<0.004	:	<0.011	:	<0.01	:	<0.012	:	<0.011	:	<0.01	:
Acetone	mg/kg-dry	T		<0.004	:	0.003	J	0.008	J	0.004	J	0.005	J	0.003	J
Benzene	mg/kg-dry	T		<0.004	:	<0.011	:	<0.01	:	<0.012	:	<0.011	:	<0.01	:
Bromodichloromethane	mg/kg-dry	T		<0.004	:	<0.011	:	<0.01	:	<0.012	:	<0.011	:	<0.01	:
Bromoform	mg/kg-dry	T		<0.004	:	<0.011	:	<0.01	:	<0.012	:	<0.011	:	<0.01	:
Bromomethane	mg/kg-dry	T		<0.004	:	<0.011	:	<0.01	:	<0.012	:	<0.011	:	<0.01	:
Carbon disulfide	mg/kg-dry	T		<0.004	:	<0.011	:	<0.01	:	<0.012	:	<0.011	:	<0.01	:

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T = Total Fraction

Appendix A-7e
Soil - Biased 0-24 inches
Validated Analytical Results

Parameter	Units	Exposure Area Fraction	Site ID / Sample Date / Sample ID	MSS2-63 1/15/2003 MSS2-63-T02N-SOL SS2	MSS2-64 1/12/2003 MSS2-64-T02N-SOL SS2	MSS2-65 1/12/2003 MSS2-65-T02N-SOL SS2	MSS2-66 1/16/2003 MSS2-66-T02N-SOL SS2	MSS2-67 1/16/2003 MSS2-67-T02N-SOL SS2	MSS2-68 1/16/2003 MSS2-68-T02N-SOL SS2
Carbon tetrachloride	mg/kg-dry	T		<0.004 :	<0.011 :	<0.01 :	<0.012 :	<0.011 :	<0.01 :
Chlorobenzene	mg/kg-dry	T		<0.004 :	<0.011 :	<0.01 :	<0.012 :	<0.011 :	<0.01 :
Chloroethane	mg/kg-dry	T		<0.004 :	<0.011 :	<0.01 :	<0.012 :	<0.011 :	<0.01 :
Chloroform	mg/kg-dry	T		<0.004 :	<0.011 :	<0.01 :	<0.012 :	<0.011 :	<0.01 :
Chloromethane	mg/kg-dry	T		<0.004 :	<0.011 :	<0.01 :	<0.012 :	<0.011 :	<0.01 :
cis-1,2-Dichloroethene	mg/kg-dry	T		<0.004 :	<0.011 :	<0.01 :	<0.012 :	<0.011 :	<0.01 :
cis-1,3-Dichloropropene	mg/kg-dry	T		<0.004 :	<0.011 :	<0.01 :	<0.012 :	<0.011 :	<0.01 :
Dibromochloromethane	mg/kg-dry	T		<0.004 :	<0.011 :	<0.01 :	<0.012 :	<0.011 :	<0.01 :
Dichlorodifluoromethane	mg/kg-dry	T		<0.004 :	<0.011 :	<0.01 :	<0.012 :	<0.011 :	<0.01 :
Ethylbenzene	mg/kg-dry	T		<0.004 :	0.003 J	<0.01 :	<0.012 :	<0.011 :	<0.01 :
Methylene chloride	mg/kg-dry	T		<0.004 :	<0.011 :	<0.01 :	0.001 J	<0.011 :	<0.01 :
Styrene	mg/kg-dry	T		<0.004 :	<0.011 :	<0.01 :	<0.012 :	<0.011 :	0.01 :
Tetrachloroethene	mg/kg-dry	T		<0.004 :	<0.011 :	<0.01 :	<0.012 :	<0.011 :	<0.01 :
Toluene	mg/kg-dry	T		<0.004 :	<0.011 :	<0.01 :	<0.012 :	<0.011 :	<0.01 :
Total Xylene	mg/kg-dry	T		<0.004 :	0.025 :	0.004 J	0.001 J	0.002 J	<0.01 :
trans-1,2-Dichloroethene	mg/kg-dry	T		<0.004 :	<0.011 :	<0.01 :	<0.012 :	<0.011 :	<0.01 :
trans-1,3-Dichloropropene	mg/kg-dry	T		<0.004 :	<0.011 :	<0.01 :	<0.012 :	<0.011 :	<0.01 :
Trichloroethene	mg/kg-dry	T		<0.004 :	<0.011 :	<0.01 :	<0.012 :	<0.011 :	<0.01 :
Trichlorofluoromethane	mg/kg-dry	T		<0.004 :	<0.011 :	<0.01 :	<0.012 :	<0.011 :	<0.01 :
Vinyl chloride	mg/kg-dry	T		<0.004 :	<0.011 :	<0.01 :	<0.012 :	<0.011 :	<0.01 :
Semi-Volatile Organics									
1,1`-Biphenyl	mg/kg-dry	T		-	<0.37 :	<0.37 :	<0.35 :	<0.35 :	<0.35 :
2,4,5-Trichlorophenol	mg/kg-dry	T		-	<0.94 :	<0.94 :	<0.88 :	<0.88 :	<0.88 :
2,4,6-Trichlorophenol	mg/kg-dry	T		-	<0.37 :	<0.37 :	<0.35 :	<0.35 :	<0.35 :
2,4-Dichlorophenol	mg/kg-dry	T		-	<0.37 J	<0.37 J	<0.35 :	<0.35 :	<0.35 :
2,4-Dimethylphenol	mg/kg-dry	T		-	<0.37 :	<0.37 :	<0.35 :	<0.35 :	<0.35 :
2,4-Dinitrophenol	mg/kg-dry	T		-	<0.94 :	<0.94 :	<0.88 :	<0.88 :	<0.88 :
2,4-Dinitrotoluene	mg/kg-dry	T		-	<0.37 :	<0.37 :	<0.35 :	<0.35 :	<0.35 :
2,6-Dinitrotoluene	mg/kg-dry	T		-	<0.37 :	<0.37 :	<0.35 :	<0.35 :	<0.35 :
2-Chloronaphthalene	mg/kg-dry	T		-	<0.37 :	<0.37 :	<0.35 J	<0.35 :	<0.35 :
2-Chlorophenol	mg/kg-dry	T		-	<0.37 :	<0.37 :	<0.35 :	<0.35 :	<0.35 :
2-Methylnaphthalene	mg/kg-dry	T		-	<0.37 :	<0.37 :	<0.35 :	<0.35 :	<0.35 :
2-Methylphenol	mg/kg-dry	T		-	<0.37 :	<0.37 :	<0.35 :	<0.35 :	<0.35 :
2-Nitroaniline	mg/kg-dry	T		-	<0.94 :	<0.94 :	<0.88 :	<0.88 :	<0.88 :

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Appendix A-7e
Soil - Biased 0-24 inches
Validated Analytical Results

Parameter	Units	Exposure Area Fraction	Site ID / Sample Date / Sample ID					
			MSS2-63 1/15/2003 MSS2-63-T02N-SOL	MSS2-64 1/12/2003 MSS2-64-T02N-SOL	MSS2-65 1/12/2003 MSS2-65-T02N-SOL	MSS2-66 1/16/2003 MSS2-66-T02N-SOL	MSS2-67 1/16/2003 MSS2-67-T02N-SOL	MSS2-68 1/16/2003 MSS2-68-T02N-SOL
			SS2	SS2	SS2	SS2	SS2	SS2
2-Nitrophenol	mg/kg-dry	T	-	<0.37 :	<0.37 :	<0.35 :	<0.35 :	<0.35 :
3,3-Dichlorobenzidine	mg/kg-dry	T	-	<0.37 :	<0.37 :	<0.35 :	<0.35 :	<0.35 :
3-Nitroaniline	mg/kg-dry	T	-	<0.94 :	<0.94 :	<0.88 J	<0.88 :	<0.88 :
4,6-Dinitro-2-methylphenol	mg/kg-dry	T	-	<0.94 :	<0.94 :	<0.88 :	<0.88 :	<0.88 :
4-Bromophenyl phenyl ether	mg/kg-dry	T	-	<0.37 :	<0.37 :	<0.35 :	<0.35 :	<0.35 :
4-Chloro-3-methylphenol	mg/kg-dry	T	-	<0.37 :	<0.37 :	<0.35 :	<0.35 :	<0.35 :
4-Chloroaniline	mg/kg-dry	T	-	<0.37 :	<0.37 :	<0.35 :	<0.35 :	<0.35 :
4-Chlorophenyl phenyl ether	mg/kg-dry	T	-	<0.37 :	<0.37 :	<0.35 :	<0.35 :	<0.35 :
4-Methylphenol	mg/kg-dry	T	-	<0.37 :	<0.37 :	<0.35 :	<0.35 :	<0.35 :
4-Nitroaniline	mg/kg-dry	T	-	<0.94 :	<0.94 :	<0.88 J	<0.88 J	<0.88 :
4-Nitrophenol	mg/kg-dry	T	-	<0.94 :	<0.94 :	<0.88 :	<0.88 :	<0.88 :
Acenaphthene	mg/kg-dry	T	-	<0.37 :	<0.37 :	<0.35 :	<0.35 :	<0.35 :
Acenaphthylene	mg/kg-dry	T	-	<0.37 :	<0.37 :	<0.35 :	<0.35 :	<0.35 :
Anthracene	mg/kg-dry	T	-	<0.37 :	<0.37 :	<0.35 :	<0.35 :	<0.35 :
Benzaldehyde	mg/kg-dry	T	-	<0.37 :	<0.37 :	<0.35 J	<0.35 :	0.045 J
Benzo(a)anthracene	mg/kg-dry	T	-	<0.37 :	<0.37 :	<0.35 :	<0.35 :	<0.35 :
Benzo(a)pyrene	mg/kg-dry	T	-	<0.37 :	<0.37 :	<0.35 :	<0.35 :	<0.35 :
Benzo(b)fluoranthene	mg/kg-dry	T	-	<0.37 :	<0.37 :	<0.35 :	<0.35 :	<0.35 :
Benzo(g,h,i)perylene	mg/kg-dry	T	-	<0.37 :	<0.37 :	<0.35 :	<0.35 :	<0.35 :
Benzo(k)fluoranthene	mg/kg-dry	T	-	<0.37 :	<0.37 :	<0.35 :	<0.35 :	<0.35 :
Bis(2-chloroethoxy)methane	mg/kg-dry	T	-	<0.37 :	<0.37 :	<0.35 :	<0.35 :	<0.35 :
Bis(2-chloroethyl)ether	mg/kg-dry	T	-	<0.37 :	<0.37 :	<0.35 :	<0.35 :	<0.35 :
Bis(2-ethylhexyl)phthalate	mg/kg-dry	T	-	<0.37 :	<0.37 :	<0.35 :	<0.35 :	0.018 J
Butyl benzyl phthalate	mg/kg-dry	T	-	<0.37 :	<0.37 :	<0.35 :	<0.35 :	<0.35 :
Carbazole	mg/kg-dry	T	-	<0.37 :	<0.37 :	<0.35 :	<0.35 :	<0.35 :
Chrysene	mg/kg-dry	T	-	<0.37 :	<0.37 :	<0.35 :	<0.35 :	<0.35 :
Dibenz(a,h)anthracene	mg/kg-dry	T	-	<0.37 :	<0.37 :	<0.35 :	<0.35 :	<0.35 :
Dibenzofuran	mg/kg-dry	T	-	<0.37 :	<0.37 :	<0.35 :	<0.35 :	<0.35 :
Dichlorodiisopropyl ether	mg/kg-dry	T	-	<0.37 :	<0.37 :	<0.35 J	<0.35 :	<0.35 :
Diethylphthalate	mg/kg-dry	T	-	<0.37 :	<0.37 :	<0.35 :	<0.35 :	<0.35 :
Dimethylphthalate	mg/kg-dry	T	-	<0.37 :	<0.37 :	<0.35 :	<0.35 :	<0.35 :
Di-n-Butyl phthalate	mg/kg-dry	T	-	<0.37 :	<0.37 :	0.023 J	0.02 J	<0.35 :
Di-n-Octyl phthalate	mg/kg-dry	T	-	<0.37 :	<0.37 :	<0.35 J	<0.35 :	<0.35 :
Fluoranthene	mg/kg-dry	T	-	<0.37 :	<0.37 :	<0.35 :	<0.35 :	<0.35 :

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Appendix A-7e
Soil - Biased 0-24 inches
Validated Analytical Results

Parameter	Units	Exposure Area Fraction	Site ID	MSS2-63	MSS2-64	MSS2-65	MSS2-66	MSS2-67	MSS2-68
			Sample Date	1/15/2003	1/12/2003	1/12/2003	1/16/2003	1/16/2003	1/16/2003
			Sample ID	MSS2-63-T02N-SOL	MSS2-64-T02N-SOL	MSS2-65-T02N-SOL	MSS2-66-T02N-SOL	MSS2-67-T02N-SOL	MSS2-68-T02N-SOL
			Exposure Area	SS2	SS2	SS2	SS2	SS2	SS2
Fluorene	mg/kg-dry	T		-	<0.37 :	<0.37 :	<0.35 :	<0.35 :	<0.35 :
Hexachlorobenzene	mg/kg-dry	T		-	<0.37 :	<0.37 :	<0.35 :	<0.35 :	<0.35 :
Hexachlorobutadiene	mg/kg-dry	T		-	<0.37 :	<0.37 :	<0.35 :	<0.35 :	<0.35 :
Hexachlorocyclopentadiene	mg/kg-dry	T		-	<0.37 :	<0.37 :	<0.35 :	<0.35 :	<0.35 :
Hexachloroethane	mg/kg-dry	T		-	<0.37 :	<0.37 :	<0.35 :	<0.35 :	<0.35 :
Indeno(1,2,3-cd)pyrene	mg/kg-dry	T		-	<0.37 :	<0.37 :	<0.35 :	<0.35 :	<0.35 :
Isophorone	mg/kg-dry	T		-	<0.37 :	<0.37 :	<0.35 :	<0.35 :	<0.35 :
Naphthalene	mg/kg-dry	T		-	<0.37 :	<0.37 :	<0.35 :	<0.35 :	<0.35 :
Nitrobenzene	mg/kg-dry	T		-	<0.37 :	<0.37 :	<0.35 :	<0.35 :	<0.35 :
N-Nitrosodi-n-propylamine	mg/kg-dry	T		-	<0.37 :	<0.37 :	<0.35 :	<0.35 :	<0.35 :
N-Nitrosodiphenylamine	mg/kg-dry	T		-	<0.37 :	<0.37 :	<0.35 :	<0.35 :	<0.35 :
Pentachlorophenol	mg/kg-dry	T		-	<0.94 :	<0.94 :	<0.88 :	<0.88 :	<0.88 :
Phenanthrene	mg/kg-dry	T		-	<0.37 :	<0.37 :	<0.35 :	<0.35 :	<0.35 :
Phenol	mg/kg-dry	T		-	<0.37 :	<0.37 :	<0.35 :	<0.35 :	<0.35 :
Pyrene	mg/kg-dry	T		-	<0.37 :	0.11 J	<0.35 :	<0.35 :	<0.35 :
Pesticides-PCBs									
Aroclor 1016	mg/kg-dry	T		-	<0.038 :	<0.038 :	-	-	-
Aroclor 1221	mg/kg-dry	T		-	<0.076 :	<0.076 :	-	-	-
Aroclor 1232	mg/kg-dry	T		-	<0.038 :	<0.038 :	-	-	-
Aroclor 1242	mg/kg-dry	T		-	<0.038 :	<0.038 :	-	-	-
Aroclor 1248	mg/kg-dry	T		-	<0.038 :	<0.038 :	-	-	-
Aroclor 1254	mg/kg-dry	T		-	<0.038 :	<0.038 :	-	-	-
Aroclor 1260	mg/kg-dry	T		-	<0.038 :	<0.038 :	-	-	-

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Appendix A-7e
Soil - Biased 0-24 inches
Validated Analytical Results

Parameter	Units	Exposure Area Fraction	Site ID / Sample Date / Sample ID		MSS2-69 1/16/2003 MSS2-69-T02N-SOL SS2		MSS2-70 1/17/2003 MSS2-70-T02N-SOL SS2		MSS2-71 1/15/2003 MSS2-71-T02N-SOL SS2		MSS2-72 1/16/2003 MSS2-72-T02N-SOLRE SS2		MSS2-72 1/16/2003 MSS2-72-T02N-SOL SS2		MSS2-73 1/16/2003 MSS2-73-T02N-SOL SS2	
General Chemistry																
Ammonia	mg/kg-dry	T			14.9	:	83.9	:	27.2	:	-		23.4	:	13.5	:
Chloride	mg/kg-dry	T			2.3	:	3.4	:	8.9	:	-		<2.2	:	4.4	:
Fluoride	mg/kg-dry	T			3.3	J	0.66	J	2.1	J	-		1.3	J	1.4	J
Nitrate	mg/kg-dry	T			<2.2	J	<2.1	J	<2.2	J	-		<2.2	J	<2.1	J
Phosphorus	mg/kg-dry	T			1660.	:	1450.	:	1200.	:	-		1490.	:	1330.	:
Sulfate	mg/kg-dry	T			1020.	:	44.5	:	380.	:	-		939.	:	63.3	:
Total Kjeldahl Nitrogen	mg/kg-dry	T			165.	:	717.	:	154.	:	-		108.	:	157.	:
Total Organic Carbon	mg/kg-dry	T			5140.	:	22500.	J	5460.	J	-		12900.	J	432200.	J
Laboratory Parameters																
pH	SU	T			7.6	:	7.5	:	6.2	:	-		7.7	:	7.8	:
Solids, Percent	%	T			94.4	:	95.4	:	92.4	:	-		95.8	:	96.6	:
Solids, Percent - VOCs Only	%	T			-		-		-		-		94.3	:	96.3	:
Specific Conductance	umhos/cm	T			1670.	J	299.	J	1490.	J	-		1410.	J	1030.	J
Geotechnical																
Organic Soils	%	T			5.9	:	6.5	:	3.3	:	-		2.5	:	5.1	:
Physical Properties																
Cation-Exchange Capacity	meq/100g	T			15.7	:	15.9	:	16.9	:	-		10.1	:	13.1	:
Sodium Absorption Ratio	ratio	T			0.1	:	0.06	:	0.5	:	-		0.11	:	0.35	:
Metals																
Aluminum	mg/kg-dry	T			14900.	:	11800.	:	12000.	:	-		12000.	:	12600.	:
Antimony	mg/kg-dry	T			<0.3	J	<0.29	J	<0.28	J	-		<0.3	J	<0.26	J
Arsenic	mg/kg-dry	T			2.8	J	2.6	J	2.6	J	-		1.9	J	2.6	J
Barium	mg/kg-dry	T			217.	:	151.	:	148.	:	-		163.	:	159.	:
Beryllium	mg/kg-dry	T			1.	:	0.83	:	0.82	:	-		0.71	:	0.69	:
Boron	mg/kg-dry	T			7.	:	6.9	:	<2.2	:	-		<0.5	:	7.2	:
Cadmium	mg/kg-dry	T			<0.036	J	<0.041	J	0.13	:	-		<0.035	J	0.069	J
Calcium	mg/kg-dry	T			9420.	:	6360.	:	11700.	:	-		6220.	:	10700.	:
Chromium	mg/kg-dry	T			37.8	J	30.6	J	34.7	J	-		37.4	J	32.9	J
Cobalt	mg/kg-dry	T			11.4	:	8.9	:	9.4	:	-		11.	:	8.1	:
Copper	mg/kg-dry	T			77.5	J	56.	J	78.9	J	-		54.7	J	48.1	J
Iron	mg/kg-dry	T			31300.	:	24300.	:	24200.	:	-		26900.	:	26600.	:
Lead	mg/kg-dry	T			59.3	:	35.	:	32.2	:	-		27.2	:	28.6	:
Magnesium	mg/kg-dry	T			8090.	:	6000.	:	7340.	:	-		8130.	:	7290.	:

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T = Total Fraction

Appendix A-7e
Soil - Biased 0-24 inches
Validated Analytical Results

Parameter	Units	Exposure Area Fraction	Site ID	Sample Date	Sample ID	Exposure Area
			MSS2-69	1/16/2003	MSS2-69-T02N-SOL	SS2
			MSS2-70	1/17/2003	MSS2-70-T02N-SOL	SS2
			MSS2-71	1/15/2003	MSS2-71-T02N-SOL	SS2
			MSS2-72	1/16/2003	MSS2-72-T02N-SOLRE	SS2
			MSS2-72	1/16/2003	MSS2-72-T02N-SOL	SS2
			MSS2-73	1/16/2003	MSS2-73-T02N-SOL	SS2
Manganese	mg/kg-dry	T	572. :	393. :	490. :	-	429. :	428. :
Mercury	mg/kg-dry	T	<0.017 :	<0.018 :	<0.018 :	-	<0.017 :	<0.017 :
Molybdenum	mg/kg-dry	T	91.1 :	29.2 :	53.5 :	-	21.4 :	91.9 :
Nickel	mg/kg-dry	T	29.8 :	22.9 :	25.7 :	-	29.8 :	22.2 :
Potassium	mg/kg-dry	T	3890. J	2630. J	2780. J	-	2690. J	3040. J
Selenium	mg/kg-dry	T	1.5 J	0.98 J	0.79 J	-	1. J	1.1 J
Silver	mg/kg-dry	T	0.36 :	<0.16 :	0.29 J	-	0.18 J	0.15 J
Sodium	mg/kg-dry	T	<151. :	<125. :	<199. :	-	236. :	166. :
Thallium	mg/kg-dry	T	0.39 :	0.19 :	0.27 :	-	0.24 :	0.26 :
Vanadium	mg/kg-dry	T	41.2 :	32.9 :	33.6 :	-	32.7 :	38.6 :
Zinc	mg/kg-dry	T	136. :	86. :	86.3 :	-	71. :	126. :
Volatile Organics								
1,1,1-Trichloroethane	mg/kg-dry	T	<0.01 :	<0.006 :	<0.55 :	<0.006 :	-	<0.005 :
1,1,2,2-Tetrachloroethane	mg/kg-dry	T	<0.01 :	<0.006 J	<0.55 :	<0.006 J	-	<0.005 J
1,1,2-Trichloro-1,2,2-trifluoroethane	mg/kg-dry	T	<0.01 :	<0.006 :	<0.55 :	<0.006 :	-	<0.005 :
1,1,2-Trichloroethane	mg/kg-dry	T	<0.01 :	<0.006 :	<0.55 :	<0.006 :	-	<0.005 :
1,1-Dichloroethane	mg/kg-dry	T	<0.01 :	<0.006 :	<0.55 :	<0.006 :	-	<0.005 :
1,1-Dichloroethene	mg/kg-dry	T	<0.01 :	<0.006 :	<0.55 :	<0.006 :	-	<0.005 :
1,2,4-Trichlorobenzene	mg/kg-dry	T	<0.01 :	<0.006 J	<0.55 :	<0.006 J	-	<0.005 J
1,2-Dibromo-3-chloropropane	mg/kg-dry	T	<0.01 :	<0.006 J	<0.55 :	<0.006 J	-	<0.005 J
1,2-Dichlorobenzene	mg/kg-dry	T	<0.01 :	<0.006 J	<0.55 :	<0.006 J	-	<0.005 J
1,2-Dichloroethane	mg/kg-dry	T	<0.01 :	<0.006 :	<0.55 :	<0.006 :	-	<0.005 :
1,2-Dichloroethene (total)	mg/kg-dry	T	<0.01 :	<0.006 :	<0.55 :	<0.006 :	-	<0.005 :
1,2-Dichloropropane	mg/kg-dry	T	<0.01 :	<0.006 :	<0.55 :	<0.006 :	-	<0.005 :
1,3-Dichlorobenzene	mg/kg-dry	T	<0.01 :	<0.006 J	<0.55 :	<0.006 J	-	<0.005 J
1,4-Dichlorobenzene	mg/kg-dry	T	<0.01 :	<0.006 J	<0.55 :	<0.006 J	-	<0.005 J
2-Butanone	mg/kg-dry	T	0.003 J	<0.006 :	<0.55 :	0.003 J	-	0.33 J
2-Hexanone	mg/kg-dry	T	<0.01 :	<0.006 J	<0.55 :	<0.006 J	-	<0.005 J
4-Methyl-2-pentanone	mg/kg-dry	T	<0.01 :	<0.006 J	<0.55 :	<0.006 J	-	<0.005 J
Acetone	mg/kg-dry	T	0.027 :	<0.006 :	<0.55 :	<0.006 :	-	0.012 :
Benzene	mg/kg-dry	T	<0.01 :	<0.006 :	<0.55 :	<0.006 :	-	<0.005 :
Bromodichloromethane	mg/kg-dry	T	<0.01 :	<0.006 :	<0.55 :	<0.006 :	-	<0.005 :
Bromoform	mg/kg-dry	T	<0.01 :	<0.006 :	<0.55 :	<0.006 :	-	<0.005 :
Bromomethane	mg/kg-dry	T	<0.01 :	<0.006 :	<0.55 :	<0.006 :	-	<0.005 :

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T = Total Fraction

Appendix A-7e
Soil - Biased 0-24 inches
Validated Analytical Results

Parameter	Units	Exposure Area Fraction	Site ID / Sample Date / Sample ID		MSS2-69 1/16/2003 MSS2-69-T02N-SOL SS2		MSS2-70 1/17/2003 MSS2-70-T02N-SOL SS2		MSS2-71 1/15/2003 MSS2-71-T02N-SOL SS2		MSS2-72 1/16/2003 MSS2-72-T02N-SOLRE SS2		MSS2-72 1/16/2003 MSS2-72-T02N-SOL SS2		MSS2-73 1/16/2003 MSS2-73-T02N-SOL SS2	
Carbon disulfide	mg/kg-dry	T		<0.01	:	<0.006	:	<0.55	:	<0.006	:	-		0.001	J
Carbon tetrachloride	mg/kg-dry	T		<0.01	:	<0.006	:	<0.55	:	<0.006	:	-		<0.005	:
Chlorobenzene	mg/kg-dry	T		<0.01	:	<0.006	J	<0.55	:	<0.006	J	-		<0.005	J
Chloroethane	mg/kg-dry	T		<0.01	:	<0.006	:	<0.55	:	<0.006	:	-		<0.005	:
Chloroform	mg/kg-dry	T		<0.01	:	<0.006	:	<0.55	:	<0.006	:	-		<0.005	:
Chloromethane	mg/kg-dry	T		<0.01	:	<0.006	:	<0.55	:	<0.006	:	-		<0.005	:
cis-1,2-Dichloroethene	mg/kg-dry	T		<0.01	:	<0.006	:	<0.55	:	<0.006	:	-		<0.005	:
cis-1,3-Dichloropropene	mg/kg-dry	T		<0.01	:	<0.006	:	<0.55	:	<0.006	:	-		<0.005	:
Dibromochloromethane	mg/kg-dry	T		<0.01	:	<0.006	:	<0.55	:	<0.006	:	-		<0.005	:
Dichlorodifluoromethane	mg/kg-dry	T		<0.01	:	<0.006	:	<0.55	:	<0.006	:	-		<0.005	:
Ethylbenzene	mg/kg-dry	T		<0.01	:	<0.006	J	<0.55	:	<0.006	J	-		<0.005	J
Methylene chloride	mg/kg-dry	T		<0.01	:	<0.006	:	<0.55	:	<0.006	:	-		<0.005	:
Styrene	mg/kg-dry	T		<0.01	:	<0.006	J	<0.55	:	<0.006	J	-		<0.005	J
Tetrachloroethene	mg/kg-dry	T		<0.01	:	<0.006	J	<0.55	:	<0.006	J	-		<0.005	J
Toluene	mg/kg-dry	T		<0.01	:	<0.006	J	<0.55	:	<0.006	J	-		<0.005	J
Total Xylene	mg/kg-dry	T		0.012	:	0.001	J	<0.55	:	<0.006	J	-		0.0007	J
trans-1,2-Dichloroethene	mg/kg-dry	T		<0.01	:	<0.006	:	<0.55	:	<0.006	:	-		<0.005	:
trans-1,3-Dichloropropene	mg/kg-dry	T		<0.01	:	<0.006	:	<0.55	:	<0.006	:	-		<0.005	:
Trichloroethene	mg/kg-dry	T		<0.01	:	<0.006	:	<0.55	:	<0.006	:	-		<0.005	:
Trichlorofluoromethane	mg/kg-dry	T		<0.01	:	0.006	J	<0.55	:	<0.006	:	-		<0.005	:
Vinyl chloride	mg/kg-dry	T		<0.01	:	<0.006	:	<0.55	:	<0.006	:	-		<0.005	:
Semi-Volatile Organics																
1,1`-Biphenyl	mg/kg-dry	T		<3.5	:	<0.69	:	2.	J	-		<0.35	:	<1.7	:
2,4,5-Trichlorophenol	mg/kg-dry	T		<8.8	:	<1.7	:	<9.	:	-		<0.88	:	<4.3	:
2,4,6-Trichlorophenol	mg/kg-dry	T		<3.5	:	<0.69	:	<3.6	:	-		<0.35	:	<1.7	:
2,4-Dichlorophenol	mg/kg-dry	T		<3.5	:	<0.69	:	<3.6	:	-		<0.35	:	<1.7	:
2,4-Dimethylphenol	mg/kg-dry	T		<3.5	:	<0.69	:	<3.6	:	-		<0.35	:	<1.7	:
2,4-Dinitrophenol	mg/kg-dry	T		<8.8	J	<1.7	:	<9.	:	-		<0.88	J	<4.3	J
2,4-Dinitrotoluene	mg/kg-dry	T		<3.5	:	<0.69	:	<3.6	:	-		<0.35	:	<1.7	:
2,6-Dinitrotoluene	mg/kg-dry	T		<3.5	:	<0.69	:	<3.6	:	-		<0.35	:	<1.7	:
2-Chloronaphthalene	mg/kg-dry	T		<3.5	:	<0.69	:	<3.6	:	-		<0.35	:	<1.7	:
2-Chlorophenol	mg/kg-dry	T		<3.5	:	<0.69	:	<3.6	:	-		<0.35	:	<1.7	:
2-Methylnaphthalene	mg/kg-dry	T		1.2	J	<0.69	:	<3.6	:	-		<0.35	:	<1.7	:
2-Methylphenol	mg/kg-dry	T		<3.5	:	<0.69	:	<3.6	:	-		<0.35	:	<1.7	:

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T = Total Fraction

Appendix A-7e
Soil - Biased 0-24 inches
Validated Analytical Results

Parameter	Units	Exposure Area Fraction	Site ID / Sample Date / Sample ID		MSS2-69 1/16/2003 MSS2-69-T02N-SOL SS2		MSS2-70 1/17/2003 MSS2-70-T02N-SOL SS2		MSS2-71 1/15/2003 MSS2-71-T02N-SOL SS2		MSS2-72 1/16/2003 MSS2-72-T02N-SOLRE SS2		MSS2-72 1/16/2003 MSS2-72-T02N-SOL SS2		MSS2-73 1/16/2003 MSS2-73-T02N-SOL SS2	
2-Nitroaniline	mg/kg-dry	T		<8.8	:	<1.7	:	<9.	:	-		<0.88	:	<4.3	:
2-Nitrophenol	mg/kg-dry	T		<3.5	:	<0.69	:	<3.6	:	-		<0.35	:	<1.7	:
3,3-Dichlorobenzidine	mg/kg-dry	T		<3.5	:	<0.69	J	<3.6	:	-		<0.35	:	<1.7	:
3-Nitroaniline	mg/kg-dry	T		<8.8	J	<1.7	J	<9.	:	-		<0.88	:	<4.3	:
4,6-Dinitro-2-methylphenol	mg/kg-dry	T		<8.8	J	<1.7	:	<9.	:	-		<0.88	J	<4.3	J
4-Bromophenyl phenyl ether	mg/kg-dry	T		<3.5	:	<0.69	:	<3.6	:	-		<0.35	:	<1.7	:
4-Chloro-3-methylphenol	mg/kg-dry	T		<3.5	:	<0.69	:	<3.6	:	-		<0.35	:	<1.7	:
4-Chloroaniline	mg/kg-dry	T		<3.5	J	<0.69	:	<3.6	:	-		<0.35	:	<1.7	:
4-Chlorophenyl phenyl ether	mg/kg-dry	T		<3.5	:	<0.69	:	<3.6	:	-		<0.35	:	<1.7	:
4-Methylphenol	mg/kg-dry	T		<3.5	:	<0.69	:	<3.6	:	-		<0.35	:	<1.7	:
4-Nitroaniline	mg/kg-dry	T		<8.8	J	<1.7	J	<9.	:	-		<0.88	:	<4.3	:
4-Nitrophenol	mg/kg-dry	T		<8.8	:	<1.7	:	<9.	:	-		<0.88	:	<4.3	:
Acenaphthene	mg/kg-dry	T		<3.5	:	<0.69	:	<3.6	:	-		<0.35	:	<1.7	:
Acenaphthylene	mg/kg-dry	T		<3.5	:	<0.69	:	<3.6	:	-		<0.35	:	<1.7	:
Anthracene	mg/kg-dry	T		<3.5	:	<0.69	:	<3.6	:	-		<0.35	:	<1.7	:
Benzaldehyde	mg/kg-dry	T		<3.5	:	<0.69	:	<3.6	:	-		0.021	J	<1.7	:
Benzo(a)anthracene	mg/kg-dry	T		<3.5	:	<0.69	:	<3.6	:	-		0.021	J	<1.7	:
Benzo(a)pyrene	mg/kg-dry	T		<3.5	:	<0.69	:	<3.6	:	-		<0.35	:	<1.7	:
Benzo(b)fluoranthene	mg/kg-dry	T		<3.5	:	<0.69	:	<3.6	:	-		<0.35	:	<1.7	:
Benzo(g,h,i)perylene	mg/kg-dry	T		<3.5	:	<0.69	:	<3.6	:	-		<0.35	:	<1.7	:
Benzo(k)fluoranthene	mg/kg-dry	T		<3.5	:	<0.69	:	<3.6	J	-		<0.35	:	<1.7	:
Bis(2-chloroethoxy)methane	mg/kg-dry	T		<3.5	:	<0.69	:	<3.6	:	-		<0.35	:	<1.7	:
Bis(2-chloroethyl)ether	mg/kg-dry	T		<3.5	:	<0.69	:	<3.6	:	-		<0.35	:	<1.7	:
Bis(2-ethylhexyl)phthalate	mg/kg-dry	T		1.8	J	1.7	:	0.46	J	-		0.32	J	<1.7	:
Butyl benzyl phthalate	mg/kg-dry	T		<3.5	:	<0.69	:	<3.6	:	-		<0.35	:	<1.7	:
Carbazole	mg/kg-dry	T		<3.5	:	<0.69	:	<3.6	:	-		<0.35	:	<1.7	:
Chrysene	mg/kg-dry	T		<3.5	:	<0.69	:	<3.6	:	-		0.029	J	<1.7	:
Dibenz(a,h)anthracene	mg/kg-dry	T		<3.5	:	<0.69	J	<3.6	:	-		<0.35	:	<1.7	:
Dibenzofuran	mg/kg-dry	T		<3.5	:	<0.69	:	0.93	J	-		<0.35	:	<1.7	:
Dichlorodiisopropyl ether	mg/kg-dry	T		<3.5	:	<0.69	:	<3.6	:	-		<0.35	:	<1.7	:
Diethylphthalate	mg/kg-dry	T		<3.5	:	<0.69	:	<3.6	:	-		<0.35	:	<1.7	:
Dimethylphthalate	mg/kg-dry	T		<3.5	:	<0.69	:	<3.6	:	-		<0.35	:	<1.7	:
Di-n-Butyl phthalate	mg/kg-dry	T		<3.5	:	<0.69	:	<3.6	:	-		<0.35	:	0.12	J
Di-n-Octyl phthalate	mg/kg-dry	T		<3.5	J	<0.69	:	<3.6	J	-		<0.35	:	<1.7	:

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Appendix A-7e
Soil - Biased 0-24 inches
Validated Analytical Results

Parameter	Units	Site ID / Sample Date / Sample ID / Exposure Area / Fraction	MSS2-69 1/16/2003 MSS2-69-T02N-SOL SS2 T		MSS2-70 1/17/2003 MSS2-70-T02N-SOL SS2 T		MSS2-71 1/15/2003 MSS2-71-T02N-SOL SS2 T		MSS2-72 1/16/2003 MSS2-72-T02N-SOLRE SS2 T		MSS2-72 1/16/2003 MSS2-72-T02N-SOL SS2 T		MSS2-73 1/16/2003 MSS2-73-T02N-SOL SS2 T	
Fluoranthene	mg/kg-dry	T	<3.5	:	<0.69	:	<3.6	:	-		0.04	J	<1.7	:
Fluorene	mg/kg-dry	T	<3.5	:	<0.69	:	<3.6	:	-		<0.35	:	<1.7	:
Hexachlorobenzene	mg/kg-dry	T	<3.5	:	<0.69	:	<3.6	:	-		<0.35	:	<1.7	:
Hexachlorobutadiene	mg/kg-dry	T	<3.5	:	<0.69	:	<3.6	:	-		<0.35	:	<1.7	:
Hexachlorocyclopentadiene	mg/kg-dry	T	<3.5	:	<0.69	:	<3.6	:	-		<0.35	:	<1.7	:
Hexachloroethane	mg/kg-dry	T	<3.5	:	<0.69	:	<3.6	:	-		<0.35	:	<1.7	:
Indeno(1,2,3-cd)pyrene	mg/kg-dry	T	<3.5	:	<0.69	:	<3.6	:	-		<0.35	:	<1.7	:
Isophorone	mg/kg-dry	T	<3.5	:	<0.69	:	<3.6	:	-		<0.35	:	<1.7	:
Naphthalene	mg/kg-dry	T	0.36	J	<0.69	:	<3.6	:	-		<0.35	:	<1.7	:
Nitrobenzene	mg/kg-dry	T	<3.5	:	<0.69	:	<3.6	:	-		<0.35	:	<1.7	:
N-Nitrosodi-n-propylamine	mg/kg-dry	T	<3.5	:	<0.69	:	<3.6	:	-		<0.35	:	<1.7	:
N-Nitrosodiphenylamine	mg/kg-dry	T	<3.5	:	<0.69	:	<3.6	:	-		<0.35	:	0.37	J
Pentachlorophenol	mg/kg-dry	T	<8.8	J	<1.7	:	<9.	:	-		<0.88	:	<4.3	:
Phenanthrene	mg/kg-dry	T	<3.5	:	<0.69	:	2.3	J	-		<0.35	:	<1.7	:
Phenol	mg/kg-dry	T	<3.5	:	<0.69	:	<3.6	:	-		<0.35	:	<1.7	:
Pyrene	mg/kg-dry	T	<3.5	:	<0.69	:	0.42	J	-		0.066	J	<1.7	:

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T = Total Fraction

Appendix A-7e
Soil - Biased 0-24 inches
Validated Analytical Results

Parameter	Units	Exposure Area Fraction	Site ID		Sample Date		Sample ID		Exposure Area															
			MSS2-74		1/16/2003		MSS2-74-T02N-SOL		SS2		MSS2-75		1/17/2003		MSS2-75-T02N-SOL		SS2		MSS2-76		1/17/2003		MSS2-76-T02N-SOL		SS2
General Chemistry																									
Ammonia	mg/kg-dry	T	13.4	:							17.5	:							16.	:					
Chloride	mg/kg-dry	T	2.6	:							4.6	:							11.9	:					
Fluoride	mg/kg-dry	T	1.7	J							1.6	J							0.88	J					
Nitrate	mg/kg-dry	T	<2.2	J							<2.2	J							<2.1	J					
Phosphorus	mg/kg-dry	T	1290.	:							2150.	:							1490.	:					
Sulfate	mg/kg-dry	T	834.	:							68.1	:							122.	J					
Total Kjeldahl Nitrogen	mg/kg-dry	T	109.	:							201.	:							235.	:					
Total Organic Carbon	mg/kg-dry	T	14900.	J							47400.	J							24200.	J					
Laboratory Parameters																									
pH	SU	T	7.8	:							7.	:							7.	:					
Solids, Percent	%	T	94.1	:							94.7	:							95.5	:					
Solids, Percent - VOCs Only	%	T	94.6	:							-								-						
Specific Conductance	umhos/cm	T	1420.	J							390.	J							675.	J					
Geotechnical																									
Organic Soils	%	T	2.9	:							9.4	:							5.7	:					
Physical Properties																									
Cation-Exchange Capacity	meq/100g	T	11.6	:							15.4	:							13.6	:					
Sodium Absorption Ratio	ratio	T	0.18	:							0.17	:							0.78	:					
Metals																									
Aluminum	mg/kg-dry	T	9830.	:							16600.	:							14000.	:					
Antimony	mg/kg-dry	T	<0.3	J							<0.27	J							<0.29	J					
Arsenic	mg/kg-dry	T	1.9	J							2.7	J							2.7	J					
Barium	mg/kg-dry	T	121.	:							246.	:							224.	:					
Beryllium	mg/kg-dry	T	0.58	:							0.65	:							0.73	:					
Boron	mg/kg-dry	T	<1.6	:							7.8	:							<0.25	J					
Cadmium	mg/kg-dry	T	<0.032	J							<0.035	J							<0.037	J					
Calcium	mg/kg-dry	T	5750.	:							9880.	:							5870.	:					
Chromium	mg/kg-dry	T	32.4	J							51.2	J							39.3	J					
Cobalt	mg/kg-dry	T	8.1	:							6.2	:							7.7	:					
Copper	mg/kg-dry	T	38.2	J							65.5	J							58.4	J					
Iron	mg/kg-dry	T	20600.	:							31100.	:							29700.	:					
Lead	mg/kg-dry	T	22.8	:							42.	:							36.4	:					
Magnesium	mg/kg-dry	T	5720.	:							8940.	:							7440.	:					

Parameter	Units	Exposure Area Fraction	Site ID		Sample Date		Sample ID		Exposure Area															
			MSS2-77		1/15/2003		MSS2-77-T02N-SOL		SS2		MSS2-78		1/15/2003		MSS2-78-T02N-SOL		SS2		MSS2-79		1/16/2003		MSS2-79-T02N-SOL		SS2
General Chemistry																									
Ammonia	mg/kg-dry	T	12.4	:							17.3	:							11.1	:					
Chloride	mg/kg-dry	T	5.8	:							2.8	:							<2.1	:					
Fluoride	mg/kg-dry	T	1.8	J							0.78	J							1.2	J					
Nitrate	mg/kg-dry	T	10.7	J							4.9	J							<2.1	J					
Phosphorus	mg/kg-dry	T	1070.	:							704.	:							990.	:					
Sulfate	mg/kg-dry	T	1590.	:							842.	:							7.2	:					
Total Kjeldahl Nitrogen	mg/kg-dry	T	126.	:							218.	:							77.2	:					
Total Organic Carbon	mg/kg-dry	T	<104.	J							533.	J							417.	J					
Laboratory Parameters																									
pH	SU	T	6.4	:							6.7	:							8.2	:					
Solids, Percent	%	T	96.4	:							93.2	:							95.5	:					
Solids, Percent - VOCs Only	%	T	-								-								95.9	:					
Specific Conductance	umhos/cm	T	1850.	J							1240.	J							146.	J					
Geotechnical																									
Organic Soils	%	T	1.9	:							1.6	:							2.	:					
Physical Properties																									
Cation-Exchange Capacity	meq/100g	T	16.3	:							12.4	:							11.8	:					
Sodium Absorption Ratio	ratio	T	0.14	:							0.04	:							0.1	:					
Metals																									
Aluminum	mg/kg-dry	T	10900.	:							8580.	:							10600.	:					
Antimony	mg/kg-dry	T	<0.29	J							<0.3	J							<0.3	J					
Arsenic	mg/kg-dry	T	3.	J							5.	J							2.3	J					
Barium	mg/kg-dry	T	135.	:							92.6	:							153.	:					
Beryllium	mg/kg-dry	T	0.84	:							0.77	:							0.91	:					
Boron	mg/kg-dry	T	<0.22	J							<0.22	J							<0.81	:					
Cadmium	mg/kg-dry	T	0.22	:							0.32	:							0.2	J					
Calcium	mg/kg-dry	T	7260.	:							7330.	:							2670.	:					
Chromium	mg/kg-dry	T	29.6	J							23.9	J							30.1	J					
Cobalt	mg/kg-dry	T	8.9	:							6.2	:							8.1	:					
Copper	mg/kg-dry	T	64.9	J							81.	J							135.	J					
Iron	mg/kg-dry	T	21900.	:							22400.	:							20700.	:					
Lead	mg/kg-dry	T	36.4	:							50.8	:							51.9	:					
Magnesium	mg/kg-dry	T	6160.	:							4050.	:							6050.	:					

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Appendix A-7e
Soil - Biased 0-24 inches
Validated Analytical Results

Parameter	Units	Exposure Area Fraction	Site ID	MSS2-74		MSS2-75		MSS2-76		MSS2-77		MSS2-78		MSS2-79	
			Sample Date	1/16/2003		1/17/2003		1/17/2003		1/15/2003		1/15/2003		1/16/2003	
			Sample ID	MSS2-74-T02N-SOL		MSS2-75-T02N-SOL		MSS2-76-T02N-SOL		MSS2-77-T02N-SOL		MSS2-78-T02N-SOL		MSS2-79-T02N-SOL	
			Exposure Area	SS2		SS2		SS2		SS2		SS2		SS2	
Manganese	mg/kg-dry	T		385.	:	409.	:	399.	:	549.	:	538.	:	547.	:
Mercury	mg/kg-dry	T		<0.018	:	<0.018	:	<0.017	:	<0.017	:	<0.018	:	<0.017	:
Molybdenum	mg/kg-dry	T		57.9	:	85.8	:	41.9	:	84.2	:	82.6	:	3.	:
Nickel	mg/kg-dry	T		26.8	:	24.7	:	23.8	J	23.9	:	16.1	:	29.6	:
Potassium	mg/kg-dry	T		1910.	J	5150.	J	4020.	J	2320.	J	1790.	J	1900.	J
Selenium	mg/kg-dry	T		0.8	J	1.3	J	<0.77	J	<0.78	J	<0.81	J	<0.79	J
Silver	mg/kg-dry	T		<0.13	J	<0.14	:	0.21	:	0.4	:	0.47	:	0.52	J
Sodium	mg/kg-dry	T		<107.	:	467.	:	<223.	:	<75.2	:	<83.9	:	<82.6	:
Thallium	mg/kg-dry	T		0.19	:	0.39	:	0.3	:	0.24	:	0.17	:	0.2	:
Vanadium	mg/kg-dry	T		27.4	:	52.6	:	41.8	:	29.	:	20.6	:	22.1	:
Zinc	mg/kg-dry	T		76.3	:	256.	:	101.	:	84.1	:	99.8	:	119.	:
Volatile Organics															
1,1,1-Trichloroethane	mg/kg-dry	T		<0.006	:	<0.008	:	<0.007	:	<0.009	:	<0.008	:	<0.006	:
1,1,2,2-Tetrachloroethane	mg/kg-dry	T		<0.006	:	<0.008	:	<0.007	:	<0.009	J	<0.008	:	<0.006	:
1,1,2-Trichloro-1,2,2-trifluoroethane	mg/kg-dry	T		<0.006	:	<0.008	:	<0.007	:	<0.009	:	<0.008	:	<0.006	:
1,1,2-Trichloroethane	mg/kg-dry	T		<0.006	:	<0.008	:	<0.007	:	<0.009	:	<0.008	:	<0.006	:
1,1-Dichloroethane	mg/kg-dry	T		<0.006	:	<0.008	:	<0.007	:	<0.009	:	<0.008	:	<0.006	:
1,1-Dichloroethene	mg/kg-dry	T		<0.006	:	<0.008	:	<0.007	:	<0.009	:	<0.008	:	<0.006	:
1,2,4-Trichlorobenzene	mg/kg-dry	T		<0.006	:	<0.008	:	<0.007	:	<0.009	J	<0.008	:	<0.006	:
1,2-Dibromo-3-chloropropane	mg/kg-dry	T		<0.006	:	<0.008	:	<0.007	:	<0.009	J	<0.008	:	<0.006	:
1,2-Dichlorobenzene	mg/kg-dry	T		<0.006	:	<0.008	:	<0.007	:	<0.009	J	<0.008	:	<0.006	:
1,2-Dichloroethane	mg/kg-dry	T		<0.006	:	<0.008	:	<0.007	:	<0.009	:	<0.008	:	<0.006	:
1,2-Dichloroethene (total)	mg/kg-dry	T		<0.006	:	<0.008	:	<0.007	:	<0.009	:	<0.008	:	<0.006	:
1,2-Dichloropropane	mg/kg-dry	T		<0.006	:	<0.008	:	<0.007	:	<0.009	:	<0.008	:	<0.006	:
1,3-Dichlorobenzene	mg/kg-dry	T		<0.006	:	<0.008	:	<0.007	:	<0.009	J	<0.008	:	<0.006	:
1,4-Dichlorobenzene	mg/kg-dry	T		<0.006	:	<0.008	:	<0.007	:	<0.009	J	<0.008	:	<0.006	:
2-Butanone	mg/kg-dry	T		<0.006	:	<0.008	:	0.003	J	<0.009	:	<0.008	:	<0.006	:
2-Hexanone	mg/kg-dry	T		<0.006	:	<0.008	:	<0.007	:	<0.009	J	<0.008	:	<0.006	:
4-Methyl-2-pentanone	mg/kg-dry	T		<0.006	:	<0.008	:	<0.007	:	<0.009	J	<0.008	:	<0.006	:
Acetone	mg/kg-dry	T		<0.006	:	0.028	:	0.006	J	<0.009	:	<0.008	:	<0.006	:
Benzene	mg/kg-dry	T		<0.006	:	<0.008	:	<0.007	:	<0.009	:	<0.008	:	<0.006	:
Bromodichloromethane	mg/kg-dry	T		<0.006	:	<0.008	:	<0.007	:	<0.009	:	<0.008	:	<0.006	:
Bromoform	mg/kg-dry	T		<0.006	:	<0.008	:	<0.007	:	<0.009	:	<0.008	:	<0.006	:
Bromomethane	mg/kg-dry	T		<0.006	:	<0.008	:	<0.007	:	<0.009	:	<0.008	:	<0.006	:

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Appendix A-7e
Soil - Biased 0-24 inches
Validated Analytical Results

Parameter	Units	Exposure Area Fraction	Site ID / Sample Date / Sample ID		MSS2-74 1/16/2003 MSS2-74-T02N-SOL SS2		MSS2-75 1/17/2003 MSS2-75-T02N-SOL SS2		MSS2-76 1/17/2003 MSS2-76-T02N-SOL SS2		MSS2-77 1/15/2003 MSS2-77-T02N-SOL SS2		MSS2-78 1/15/2003 MSS2-78-T02N-SOL SS2		MSS2-79 1/16/2003 MSS2-79-T02N-SOL SS2	
Carbon disulfide	mg/kg-dry	T			<0.006	:	<0.008	:	<0.007	:	<0.009	:	<0.008	:	<0.006	:
Carbon tetrachloride	mg/kg-dry	T			<0.006	:	<0.008	:	<0.007	:	<0.009	:	<0.008	:	<0.006	:
Chlorobenzene	mg/kg-dry	T			<0.006	:	<0.008	:	<0.007	:	<0.009	J	<0.008	:	<0.006	:
Chloroethane	mg/kg-dry	T			<0.006	:	<0.008	:	<0.007	:	<0.009	:	<0.008	:	<0.006	:
Chloroform	mg/kg-dry	T			<0.006	:	<0.008	:	<0.007	:	<0.009	:	<0.008	:	<0.006	:
Chloromethane	mg/kg-dry	T			<0.006	:	<0.008	:	<0.007	:	<0.009	:	<0.008	:	<0.006	:
cis-1,2-Dichloroethene	mg/kg-dry	T			<0.006	:	<0.008	:	<0.007	:	<0.009	:	<0.008	:	<0.006	:
cis-1,3-Dichloropropene	mg/kg-dry	T			<0.006	:	<0.008	:	<0.007	:	<0.009	:	<0.008	:	<0.006	:
Dibromochloromethane	mg/kg-dry	T			<0.006	:	<0.008	:	<0.007	:	<0.009	:	<0.008	:	<0.006	:
Dichlorodifluoromethane	mg/kg-dry	T			<0.006	:	<0.008	:	<0.007	:	<0.009	:	<0.008	:	<0.006	:
Ethylbenzene	mg/kg-dry	T			<0.006	:	<0.008	:	<0.007	:	0.012	:	<0.008	:	<0.006	:
Methylene chloride	mg/kg-dry	T			<0.006	:	<0.008	:	<0.007	:	<0.009	:	0.0008	J	<0.006	:
Styrene	mg/kg-dry	T			<0.006	:	<0.008	:	<0.007	:	<0.009	J	<0.008	:	<0.006	:
Tetrachloroethene	mg/kg-dry	T			<0.006	:	<0.008	:	<0.007	:	<0.009	J	<0.008	:	<0.006	:
Toluene	mg/kg-dry	T			<0.006	:	<0.008	:	<0.007	:	0.001	J	<0.008	:	<0.006	:
Total Xylene	mg/kg-dry	T			<0.006	:	0.003	J	<0.007	:	0.09	J	0.001	J	0.002	J
trans-1,2-Dichloroethene	mg/kg-dry	T			<0.006	:	<0.008	:	<0.007	:	<0.009	:	<0.008	:	<0.006	:
trans-1,3-Dichloropropene	mg/kg-dry	T			<0.006	:	<0.008	:	<0.007	:	<0.009	:	<0.008	:	<0.006	:
Trichloroethene	mg/kg-dry	T			<0.006	:	<0.008	:	<0.007	:	<0.009	:	<0.008	:	<0.006	:
Trichlorofluoromethane	mg/kg-dry	T			<0.006	:	<0.008	:	<0.007	:	<0.009	:	<0.008	:	<0.006	:
Vinyl chloride	mg/kg-dry	T			<0.006	:	<0.008	:	<0.007	:	<0.009	:	<0.008	:	<0.006	:
Semi-Volatile Organics																
1,1`-Biphenyl	mg/kg-dry	T			<1.7	:	<3.5	:	<3.4	:	<0.34	:	<0.35	:	<0.34	:
2,4,5-Trichlorophenol	mg/kg-dry	T			<4.4	:	<8.7	:	<8.6	:	<0.86	:	<0.89	:	<0.86	:
2,4,6-Trichlorophenol	mg/kg-dry	T			<1.7	:	<3.5	:	<3.4	:	<0.34	:	<0.35	:	<0.34	:
2,4-Dichlorophenol	mg/kg-dry	T			<1.7	:	<3.5	:	<3.4	:	<0.34	:	<0.35	:	<0.34	:
2,4-Dimethylphenol	mg/kg-dry	T			<1.7	:	<3.5	:	<3.4	:	<0.34	:	<0.35	:	<0.34	:
2,4-Dinitrophenol	mg/kg-dry	T			<4.4	J	<8.7	:	<8.6	:	<0.86	J	<0.89	J	<0.86	J
2,4-Dinitrotoluene	mg/kg-dry	T			<1.7	:	<3.5	:	<3.4	:	<0.34	:	<0.35	:	<0.34	:
2,6-Dinitrotoluene	mg/kg-dry	T			<1.7	:	<3.5	:	<3.4	:	<0.34	:	<0.35	:	<0.34	:
2-Chloronaphthalene	mg/kg-dry	T			<1.7	:	<3.5	:	<3.4	:	<0.34	:	<0.35	:	<0.34	:
2-Chlorophenol	mg/kg-dry	T			<1.7	:	<3.5	:	<3.4	:	<0.34	:	<0.35	:	<0.34	:
2-Methylnaphthalene	mg/kg-dry	T			<1.7	:	<3.5	:	<3.4	:	<0.34	:	<0.35	:	<0.34	:
2-Methylphenol	mg/kg-dry	T			<1.7	:	<3.5	:	<3.4	:	<0.34	:	<0.35	:	<0.34	:

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Appendix A-7e
Soil - Biased 0-24 inches
Validated Analytical Results

Parameter	Units	Exposure Area Fraction	Site ID / Sample Date / Sample ID		MSS2-74 1/16/2003 MSS2-74-T02N-SOL SS2		MSS2-75 1/17/2003 MSS2-75-T02N-SOL SS2		MSS2-76 1/17/2003 MSS2-76-T02N-SOL SS2		MSS2-77 1/15/2003 MSS2-77-T02N-SOL SS2		MSS2-78 1/15/2003 MSS2-78-T02N-SOL SS2		MSS2-79 1/16/2003 MSS2-79-T02N-SOL SS2	
2-Nitroaniline	mg/kg-dry	T		<4.4	:	<8.7	:	<8.6	:	<0.86	:	<0.89	:	<0.86	:
2-Nitrophenol	mg/kg-dry	T		<1.7	:	<3.5	:	<3.4	:	<0.34	:	<0.35	:	<0.34	:
3,3-Dichlorobenzidine	mg/kg-dry	T		<1.7	:	<3.5	J	<3.4	:	<0.34	J	<0.35	J	<0.34	:
3-Nitroaniline	mg/kg-dry	T		<4.4	:	<8.7	J	<8.6	J	<0.86	:	<0.89	:	<0.86	:
4,6-Dinitro-2-methylphenol	mg/kg-dry	T		<4.4	J	<8.7	:	<8.6	:	<0.86	J	<0.89	J	<0.86	J
4-Bromophenyl phenyl ether	mg/kg-dry	T		<1.7	:	<3.5	:	<3.4	:	<0.34	:	<0.35	:	<0.34	:
4-Chloro-3-methylphenol	mg/kg-dry	T		<1.7	:	<3.5	:	<3.4	:	<0.34	:	<0.35	:	<0.34	:
4-Chloroaniline	mg/kg-dry	T		<1.7	:	<3.5	:	<3.4	:	<0.34	:	<0.35	:	<0.34	:
4-Chlorophenyl phenyl ether	mg/kg-dry	T		<1.7	:	<3.5	:	<3.4	:	<0.34	:	<0.35	:	<0.34	:
4-Methylphenol	mg/kg-dry	T		<1.7	:	<3.5	:	<3.4	:	<0.34	:	<0.35	:	<0.34	:
4-Nitroaniline	mg/kg-dry	T		<4.4	:	<8.7	J	<8.6	:	<0.86	:	<0.89	:	<0.86	:
4-Nitrophenol	mg/kg-dry	T		<4.4	:	<8.7	:	<8.6	:	<0.86	J	<0.89	J	<0.86	:
Acenaphthene	mg/kg-dry	T		<1.7	:	<3.5	:	<3.4	J	<0.34	:	<0.35	:	<0.34	:
Acenaphthylene	mg/kg-dry	T		<1.7	:	<3.5	:	<3.4	:	<0.34	:	<0.35	:	<0.34	:
Anthracene	mg/kg-dry	T		<1.7	:	<3.5	:	<3.4	:	<0.34	:	<0.35	:	<0.34	:
Benzaldehyde	mg/kg-dry	T		<1.7	:	<3.5	:	<3.4	:	<0.34	J	<0.35	J	<0.34	:
Benzo(a)anthracene	mg/kg-dry	T		<1.7	:	<3.5	:	<3.4	:	<0.34	:	<0.35	:	<0.34	:
Benzo(a)pyrene	mg/kg-dry	T		<1.7	:	<3.5	:	<3.4	:	<0.34	:	<0.35	:	<0.34	:
Benzo(b)fluoranthene	mg/kg-dry	T		<1.7	:	<3.5	:	<3.4	J	<0.34	:	<0.35	:	<0.34	:
Benzo(g,h,i)perylene	mg/kg-dry	T		<1.7	:	<3.5	:	<3.4	:	<0.34	:	<0.35	:	<0.34	:
Benzo(k)fluoranthene	mg/kg-dry	T		<1.7	:	<3.5	:	<3.4	:	<0.34	:	<0.35	:	<0.34	:
Bis(2-chloroethoxy)methane	mg/kg-dry	T		<1.7	:	<3.5	:	<3.4	:	<0.34	:	<0.35	:	<0.34	:
Bis(2-chloroethyl)ether	mg/kg-dry	T		<1.7	:	<3.5	:	<3.4	:	<0.34	:	<0.35	:	<0.34	:
Bis(2-ethylhexyl)phthalate	mg/kg-dry	T		0.32	J	0.5	J	<3.4	:	<0.34	:	<0.35	:	0.23	J
Butyl benzyl phthalate	mg/kg-dry	T		<1.7	:	<3.5	:	<3.4	:	<0.34	:	<0.35	:	<0.34	:
Carbazole	mg/kg-dry	T		<1.7	:	<3.5	:	<3.4	:	<0.34	:	<0.35	:	<0.34	:
Chrysene	mg/kg-dry	T		<1.7	:	<3.5	:	<3.4	:	<0.34	:	<0.35	:	<0.34	:
Dibenz(a,h)anthracene	mg/kg-dry	T		<1.7	:	<3.5	J	<3.4	:	<0.34	:	<0.35	:	<0.34	:
Dibenzofuran	mg/kg-dry	T		<1.7	:	<3.5	:	<3.4	:	<0.34	:	<0.35	:	<0.34	:
Dichlorodiisopropyl ether	mg/kg-dry	T		<1.7	:	<3.5	:	<3.4	:	<0.34	:	<0.35	:	<0.34	:
Diethylphthalate	mg/kg-dry	T		<1.7	:	<3.5	:	<3.4	:	<0.34	:	<0.35	:	<0.34	:
Dimethylphthalate	mg/kg-dry	T		<1.7	:	<3.5	:	<3.4	:	<0.34	:	<0.35	:	<0.34	:
Di-n-Butyl phthalate	mg/kg-dry	T		0.092	J	<3.5	:	<3.4	:	<0.34	:	<0.35	:	<0.34	:
Di-n-Octyl phthalate	mg/kg-dry	T		<1.7	:	<3.5	:	<3.4	J	<0.34	:	<0.35	:	<0.34	:

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Appendix A-7e
Soil - Biased 0-24 inches
Validated Analytical Results

		Site ID	MSS2-74		MSS2-75		MSS2-76		MSS2-77		MSS2-78		MSS2-79	
		Sample Date	1/16/2003		1/17/2003		1/17/2003		1/15/2003		1/15/2003		1/16/2003	
		Sample ID	MSS2-74-T02N-SOL		MSS2-75-T02N-SOL		MSS2-76-T02N-SOL		MSS2-77-T02N-SOL		MSS2-78-T02N-SOL		MSS2-79-T02N-SOL	
		Exposure Area	SS2		SS2		SS2		SS2		SS2		SS2	
Parameter	Units	Fraction												
Fluoranthene	mg/kg-dry	T	<1.7	:	<3.5	:	<3.4	:	<0.34	:	<0.35	:	<0.34	:
Fluorene	mg/kg-dry	T	<1.7	:	<3.5	:	<3.4	:	<0.34	:	<0.35	:	<0.34	:
Hexachlorobenzene	mg/kg-dry	T	<1.7	:	<3.5	:	<3.4	:	<0.34	:	<0.35	:	<0.34	:
Hexachlorobutadiene	mg/kg-dry	T	<1.7	:	<3.5	:	<3.4	:	<0.34	:	<0.35	:	<0.34	:
Hexachlorocyclopentadiene	mg/kg-dry	T	<1.7	:	<3.5	:	<3.4	:	<0.34	J	<0.35	J	<0.34	:
Hexachloroethane	mg/kg-dry	T	<1.7	:	<3.5	:	<3.4	:	<0.34	:	<0.35	:	<0.34	:
Indeno(1,2,3-cd)pyrene	mg/kg-dry	T	<1.7	:	<3.5	:	<3.4	:	<0.34	:	<0.35	:	<0.34	:
Isophorone	mg/kg-dry	T	<1.7	:	<3.5	:	<3.4	:	<0.34	:	<0.35	:	<0.34	:
Naphthalene	mg/kg-dry	T	<1.7	:	<3.5	:	<3.4	:	<0.34	:	<0.35	:	<0.34	:
Nitrobenzene	mg/kg-dry	T	<1.7	:	<3.5	:	<3.4	:	<0.34	:	<0.35	:	<0.34	:
N-Nitrosodi-n-propylamine	mg/kg-dry	T	<1.7	:	<3.5	:	<3.4	:	<0.34	:	<0.35	:	<0.34	:
N-Nitrosodiphenylamine	mg/kg-dry	T	<1.7	:	<3.5	:	<3.4	:	<0.34	:	<0.35	:	<0.34	:
Pentachlorophenol	mg/kg-dry	T	<4.4	:	<8.7	:	<8.6	:	<0.86	J	<0.89	J	<0.86	:
Phenanthrene	mg/kg-dry	T	<1.7	:	<3.5	:	<3.4	:	<0.34	:	<0.35	:	<0.34	:
Phenol	mg/kg-dry	T	<1.7	:	<3.5	:	<3.4	:	<0.34	:	<0.35	:	<0.34	:
Pyrene	mg/kg-dry	T	<1.7	:	<3.5	:	<3.4	J	<0.34	:	<0.35	:	<0.34	:

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R:\Projects\22236252_Database_Management\Task_01\7.0_Project_Working_files\TechMemoAppendix\ZZZ-TechMemoII-\F_Section 7 Soils\appendix a-7e.rpt

Appendix A-7e
Soil - Biased 0-24 inches
Validated Analytical Results

Parameter	Units	Exposure Area Fraction	Site ID: MSS2-80 Sample Date: 1/16/2003 Sample ID: MSS2-80-T02N-SOL SS2		Site ID: MSS2-81 Sample Date: 1/15/2003 Sample ID: MSS8-81-T02N-SOL SS2		Site ID: MSS3-11 Sample Date: 10/10/2002 Sample ID: MSS3-11-T02N-SOL SS3		Site ID: MSS3-12 Sample Date: 10/10/2002 Sample ID: MSS3-12-T02N-SOL SS3		Site ID: MSS4A1-11 Sample Date: 10/10/2002 Sample ID: MSS4A1-11-T02N-SOL SS4A1		Site ID: MSS4A1-12 Sample Date: 10/10/2002 Sample ID: MSS4A1-12-T02N-SOL SS4A1	
General Chemistry														
Ammonia	mg/kg-dry	T	13.4	:	15.6	:	61.7	:	64.2	:	166.	:	47.1	:
Chloride	mg/kg-dry	T	<2.2	:	6050.	:	3.	J	<2.2	J	<2.3	J	<2.3	J
Fluoride	mg/kg-dry	T	4.1	J	2.2	J	0.22	J	0.57	J	0.23	J	1.	J
Nitrate	mg/kg-dry	T	2.1	J	8.6	J	1.2	J	<2.2	J	<2.3	J	<2.3	J
Phosphorus	mg/kg-dry	T	1290.	:	1160.	:	1340.	J	625.	J	935.	J	1040.	J
Sulfate	mg/kg-dry	T	1120.	J	1300.	:	114.	J	18.8	J	50.1	J	511.	J
Total Kjeldahl Nitrogen	mg/kg-dry	T	74.2	:	98.1	:	538.	:	82.8	:	421.	:	237.	:
Total Organic Carbon	mg/kg-dry	T	<106.	J	<108.	J	19800.	J	2380.	J	12900.	J	12900.	J
Laboratory Parameters														
pH	SU	T	5.8	:	5.9	:	3.9	:	4.4	:	6.2	:	3.8	:
Solids, Percent	%	T	96.6	:	93.2	:	95.2	:	92.	:	90.5	:	90.	:
Solids, Percent - VOCs Only	%	T	94.9	:	-		-		-		-		-	
Specific Conductance	umhos/cm	T	1600.	J	14100.	J	161.	:	44.2	:	75.3	:	482.	:
Geotechnical														
Organic Soils	%	T	3.1	:	1.4	:	5.14	:	2.73	:	3.53	:	3.32	:
Physical Properties														
Cation-Exchange Capacity	meq/100g	T	8.8	:	7.8	:	16.	:	8.2	:	22.3	:	15.6	:
Sodium Absorption Ratio	ratio	T	0.04	:	9.56	:	0.29	:	0.27	:	0.1	:	0.03	:
Metals														
Aluminum	mg/kg-dry	T	6560.	:	9300.	:	6580.	:	3370.	:	12300.	:	9090.	:
Antimony	mg/kg-dry	T	<0.28	J	<0.47	J	<0.12	J	<0.15	J	<0.18	J	<0.18	J
Arsenic	mg/kg-dry	T	5.8	J	2.5	J	11.4	:	4.4	:	5.3	:	6.1	:
Barium	mg/kg-dry	T	351.	J	98.4	:	96.2	:	131.	:	154.	:	107.	:
Beryllium	mg/kg-dry	T	0.35	:	0.63	:	0.63	:	0.2	:	1.3	:	0.6	:
Boron	mg/kg-dry	T	<0.95	J	<0.57	J	<0.39	J	<8.6	J	12.4	J	13.4	J
Cadmium	mg/kg-dry	T	<0.033	:	0.15	:	<0.024	J	<0.026	J	<0.026	J	<0.025	J
Calcium	mg/kg-dry	T	2620.	:	5180.	:	447.	:	315.	:	3310.	:	1310.	:
Chromium	mg/kg-dry	T	22.9	J	25.	J	16.6	:	7.5	:	23.2	:	21.9	:
Cobalt	mg/kg-dry	T	8.1	:	8.2	:	3.8	:	0.91	:	8.5	:	4.9	:
Copper	mg/kg-dry	T	68.5	J	44.9	J	54.7	:	26.6	:	32.2	:	44.1	:
Iron	mg/kg-dry	T	24400.	:	18100.	:	36700.	:	18000.	:	23600.	:	26700.	:
Lead	mg/kg-dry	T	35.2	J	22.5	:	113.	:	68.1	:	38.3	:	121.	:
Magnesium	mg/kg-dry	T	3610.	J	5370.	:	2710.	:	1340.	:	5600.	:	4290.	:

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Appendix A-7e
Soil - Biased 0-24 inches
Validated Analytical Results

Site ID / Sample Date / Sample ID / Exposure Area			MSS2-80		MSS2-81		MSS3-11		MSS3-12		MSS4A1-11		MSS4A1-12	
Sample Date			1/16/2003		1/15/2003		10/10/2002		10/10/2002		10/10/2002		10/10/2002	
Sample ID			MSS2-80-T02N-SOL		MSS8-81-T02N-SOL		MSS3-11-T02N-SOL		MSS3-12-T02N-SOL		MSS4A1-11-T02N-SO L		MSS4A1-12-T02N-SO L	
Exposure Area			SS2		SS2		SS3		SS3		SS4A1		SS4A1	
Parameter	**Units**	**Fraction**												
Manganese	mg/kg-dry	T	302.	:	365.	:	397.	J	114.	J	540.	J	459.	J
Mercury	mg/kg-dry	T	<0.017	:	<0.018	:	<0.018	:	<0.018	:	<0.018	:	<0.017	:
Molybdenum	mg/kg-dry	T	39.9	J	48.2	:	7.6	:	18.7	:	<4.1	:	10.1	:
Nickel	mg/kg-dry	T	10.8	:	20.9	:	8.9	J	3.8	J	20.6	J	15.7	J
Potassium	mg/kg-dry	T	2380.	J	4220.	J	2710.	J	2250.	J	2130.	J	2480.	J
Selenium	mg/kg-dry	T	2.	J	<0.78	J	1.2	J	0.94	J	0.72	J	1.2	J
Silver	mg/kg-dry	T	0.24	J	<0.14	:	0.73	:	0.43	:	0.24	:	0.9	:
Sodium	mg/kg-dry	T	232.	:	1770.	:	229.	:	175.	:	72.7	:	115.	:
Thallium	mg/kg-dry	T	0.21	:	0.21	:	0.23	:	0.2	:	0.16	:	0.2	:
Vanadium	mg/kg-dry	T	21.1	:	28.	:	18.5	:	9.2	:	24.	:	20.6	:
Zinc	mg/kg-dry	T	185.	J	73.3	:	77.8	J	24.1	J	73.	J	75.6	J
Volatile Organics														
1,1,1-Trichloroethane	mg/kg-dry	T	<0.005	:	<0.004	:	-		-		-		-	
1,1,2,2-Tetrachloroethane	mg/kg-dry	T	<0.005	:	<0.004	:	-		-		-		-	
1,1,2-Trichloro-1,2,2-trifluoroethane	mg/kg-dry	T	<0.005	:	<0.004	:	-		-		-		-	
1,1,2-Trichloroethane	mg/kg-dry	T	<0.005	:	<0.004	:	-		-		-		-	
1,1-Dichloroethane	mg/kg-dry	T	<0.005	:	<0.004	:	-		-		-		-	
1,1-Dichloroethene	mg/kg-dry	T	<0.005	:	<0.004	:	-		-		-		-	
1,2,4-Trichlorobenzene	mg/kg-dry	T	<0.005	:	<0.004	:	-		-		-		-	
1,2-Dibromo-3-chloropropane	mg/kg-dry	T	<0.005	:	<0.004	:	-		-		-		-	
1,2-Dichlorobenzene	mg/kg-dry	T	<0.005	:	<0.004	:	-		-		-		-	
1,2-Dichloroethane	mg/kg-dry	T	<0.005	:	<0.004	:	-		-		-		-	
1,2-Dichloroethene (total)	mg/kg-dry	T	<0.005	:	<0.004	:	-		-		-		-	
1,2-Dichloropropane	mg/kg-dry	T	<0.005	:	<0.004	:	-		-		-		-	
1,3-Dichlorobenzene	mg/kg-dry	T	<0.005	:	<0.004	:	-		-		-		-	
1,4-Dichlorobenzene	mg/kg-dry	T	<0.005	:	<0.004	:	-		-		-		-	
2-Butanone	mg/kg-dry	T	<0.005	:	<0.004	:	-		-		-		-	
2-Hexanone	mg/kg-dry	T	<0.005	:	<0.004	:	-		-		-		-	
4-Methyl-2-pentanone	mg/kg-dry	T	<0.005	:	<0.004	:	-		-		-		-	
Acetone	mg/kg-dry	T	0.001	J	0.001	J	-		-		-		-	
Benzene	mg/kg-dry	T	<0.005	:	<0.004	:	-		-		-		-	
Bromodichloromethane	mg/kg-dry	T	<0.005	:	<0.004	:	-		-		-		-	
Bromoform	mg/kg-dry	T	<0.005	:	<0.004	:	-		-		-		-	
Bromomethane	mg/kg-dry	T	<0.005	:	<0.004	:	-		-		-		-	

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Appendix A-7e
Soil - Biased 0-24 inches
Validated Analytical Results

Parameter	Units	Fraction	Site ID		MSS2-80		MSS2-81		MSS3-11	MSS3-12	MSS4A1-11	MSS4A1-12
			Sample Date		1/16/2003		1/15/2003		10/10/2002	10/10/2002	10/10/2002	10/10/2002
			Sample ID		MSS2-80-T02N-SOL		MSS8-81-T02N-SOL		MSS3-11-T02N-SOL	MSS3-12-T02N-SOL	MSS4A1-11-T02N-SOL	MSS4A1-12-T02N-SOL
			Exposure Area		SS2		SS2		SS3	SS3	SS4A1	SS4A1
Carbon disulfide	mg/kg-dry	T		:	<0.005	:	<0.004	:	-	-	-	-
Carbon tetrachloride	mg/kg-dry	T		:	<0.005	:	<0.004	:	-	-	-	-
Chlorobenzene	mg/kg-dry	T		:	<0.005	:	<0.004	:	-	-	-	-
Chloroethane	mg/kg-dry	T		:	<0.005	:	<0.004	:	-	-	-	-
Chloroform	mg/kg-dry	T		:	<0.005	:	<0.004	:	-	-	-	-
Chloromethane	mg/kg-dry	T		:	<0.005	:	<0.004	:	-	-	-	-
cis-1,2-Dichloroethene	mg/kg-dry	T		:	<0.005	:	<0.004	:	-	-	-	-
cis-1,3-Dichloropropene	mg/kg-dry	T		:	<0.005	:	<0.004	:	-	-	-	-
Dibromochloromethane	mg/kg-dry	T		:	<0.005	:	<0.004	:	-	-	-	-
Dichlorodifluoromethane	mg/kg-dry	T		:	<0.005	:	<0.004	:	-	-	-	-
Ethylbenzene	mg/kg-dry	T		:	<0.005	:	<0.004	:	-	-	-	-
Methylene chloride	mg/kg-dry	T		:	<0.005	:	<0.004	:	-	-	-	-
Styrene	mg/kg-dry	T		:	<0.005	:	<0.004	:	-	-	-	-
Tetrachloroethene	mg/kg-dry	T		:	<0.005	:	<0.004	:	-	-	-	-
Toluene	mg/kg-dry	T		:	<0.005	:	<0.004	:	-	-	-	-
Total Xylene	mg/kg-dry	T		J	0.0007	J	0.0006	J	-	-	-	-
trans-1,2-Dichloroethene	mg/kg-dry	T		:	<0.005	:	<0.004	:	-	-	-	-
trans-1,3-Dichloropropene	mg/kg-dry	T		:	<0.005	:	<0.004	:	-	-	-	-
Trichloroethene	mg/kg-dry	T		:	<0.005	:	<0.004	:	-	-	-	-
Trichlorofluoromethane	mg/kg-dry	T		:	<0.005	:	<0.004	:	-	-	-	-
Vinyl chloride	mg/kg-dry	T		:	<0.005	:	<0.004	:	-	-	-	-
Semi-Volatile Organics												
1,1`-Biphenyl	mg/kg-dry	T		:	<0.35	:	<0.35	:	-	-	-	-
2,4,5-Trichlorophenol	mg/kg-dry	T		:	<0.87	:	<0.89	:	-	-	-	-
2,4,6-Trichlorophenol	mg/kg-dry	T		:	<0.35	:	<0.35	:	-	-	-	-
2,4-Dichlorophenol	mg/kg-dry	T		:	<0.35	:	<0.35	:	-	-	-	-
2,4-Dimethylphenol	mg/kg-dry	T		:	<0.35	:	<0.35	:	-	-	-	-
2,4-Dinitrophenol	mg/kg-dry	T		J	<0.87	J	<0.89	J	-	-	-	-
2,4-Dinitrotoluene	mg/kg-dry	T		:	<0.35	:	<0.35	:	-	-	-	-
2,6-Dinitrotoluene	mg/kg-dry	T		:	<0.35	:	<0.35	:	-	-	-	-
2-Chloronaphthalene	mg/kg-dry	T		:	<0.35	:	<0.35	:	-	-	-	-
2-Chlorophenol	mg/kg-dry	T		:	<0.35	:	<0.35	:	-	-	-	-
2-Methylnaphthalene	mg/kg-dry	T		:	<0.35	:	<0.35	:	-	-	-	-
2-Methylphenol	mg/kg-dry	T		:	<0.35	:	<0.35	:	-	-	-	-

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Appendix A-7e
Soil - Biased 0-24 inches
Validated Analytical Results

Parameter	Units	Fraction	Site ID	MSS2-80		MSS2-81		MSS3-11	MSS3-12	MSS4A1-11	MSS4A1-12
			Sample Date	1/16/2003		1/15/2003		10/10/2002	10/10/2002	10/10/2002	10/10/2002
			Sample ID	MSS2-80-T02N-SOL		MSS8-81-T02N-SOL		MSS3-11-T02N-SOL	MSS3-12-T02N-SOL	MSS4A1-11-T02N-SOL	MSS4A1-12-T02N-SOL
			Exposure Area	SS2		SS2		SS3	SS3	SS4A1	SS4A1
2-Nitroaniline	mg/kg-dry	T		<0.87	:	<0.89	:	-	-	-	-
2-Nitrophenol	mg/kg-dry	T		<0.35	:	<0.35	:	-	-	-	-
3,3-Dichlorobenzidine	mg/kg-dry	T		<0.35	:	<0.35	J	-	-	-	-
3-Nitroaniline	mg/kg-dry	T		<0.87	:	<0.89	:	-	-	-	-
4,6-Dinitro-2-methylphenol	mg/kg-dry	T		<0.87	:	<0.89	J	-	-	-	-
4-Bromophenyl phenyl ether	mg/kg-dry	T		<0.35	:	<0.35	:	-	-	-	-
4-Chloro-3-methylphenol	mg/kg-dry	T		<0.35	:	<0.35	:	-	-	-	-
4-Chloroaniline	mg/kg-dry	T		<0.35	:	<0.35	:	-	-	-	-
4-Chlorophenyl phenyl ether	mg/kg-dry	T		<0.35	:	<0.35	:	-	-	-	-
4-Methylphenol	mg/kg-dry	T		<0.35	:	<0.35	:	-	-	-	-
4-Nitroaniline	mg/kg-dry	T		<0.87	:	<0.89	:	-	-	-	-
4-Nitrophenol	mg/kg-dry	T		<0.87	:	<0.89	J	-	-	-	-
Acenaphthene	mg/kg-dry	T		<0.35	:	<0.35	:	-	-	-	-
Acenaphthylene	mg/kg-dry	T		<0.35	:	<0.35	:	-	-	-	-
Anthracene	mg/kg-dry	T		<0.35	:	<0.35	:	-	-	-	-
Benzaldehyde	mg/kg-dry	T		0.024	J	0.2	J	-	-	-	-
Benzo(a)anthracene	mg/kg-dry	T		<0.35	:	<0.35	:	-	-	-	-
Benzo(a)pyrene	mg/kg-dry	T		<0.35	:	<0.35	:	-	-	-	-
Benzo(b)fluoranthene	mg/kg-dry	T		<0.35	:	<0.35	:	-	-	-	-
Benzo(g,h,i)perylene	mg/kg-dry	T		<0.35	:	<0.35	:	-	-	-	-
Benzo(k)fluoranthene	mg/kg-dry	T		<0.35	:	<0.35	:	-	-	-	-
Bis(2-chloroethoxy)methane	mg/kg-dry	T		<0.35	:	<0.35	:	-	-	-	-
Bis(2-chloroethyl)ether	mg/kg-dry	T		<0.35	:	<0.35	:	-	-	-	-
Bis(2-ethylhexyl)phthalate	mg/kg-dry	T		0.44	:	0.13	J	-	-	-	-
Butyl benzyl phthalate	mg/kg-dry	T		<0.35	:	0.058	J	-	-	-	-
Carbazole	mg/kg-dry	T		<0.35	:	<0.35	:	-	-	-	-
Chrysene	mg/kg-dry	T		<0.35	:	<0.35	:	-	-	-	-
Dibenz(a,h)anthracene	mg/kg-dry	T		<0.35	:	<0.35	:	-	-	-	-
Dibenzofuran	mg/kg-dry	T		<0.35	:	<0.35	:	-	-	-	-
Dichlorodiisopropyl ether	mg/kg-dry	T		<0.35	:	<0.35	:	-	-	-	-
Diethylphthalate	mg/kg-dry	T		<0.35	:	<0.35	:	-	-	-	-
Dimethylphthalate	mg/kg-dry	T		<0.35	:	<0.35	:	-	-	-	-
Di-n-Butyl phthalate	mg/kg-dry	T		<0.35	:	<0.35	:	-	-	-	-
Di-n-Octyl phthalate	mg/kg-dry	T		<0.35	:	<0.35	:	-	-	-	-

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Appendix A-7e
Soil - Biased 0-24 inches
Validated Analytical Results

Parameter	Units	Exposure Area Fraction	Site ID / Sample Date / Sample ID											
			MSS2-80 1/16/2003 MSS2-80-T02N-SOL SS2		MSS2-81 1/15/2003 MSS8-81-T02N-SOL SS2		MSS3-11 10/10/2002 MSS3-11-T02N-SOL SS3		MSS3-12 10/10/2002 MSS3-12-T02N-SOL SS3		MSS4A1-11 10/10/2002 MSS4A1-11-T02N-SOL SS4A1		MSS4A1-12 10/10/2002 MSS4A1-12-T02N-SOL SS4A1	
Fluoranthene	mg/kg-dry	T	<0.35	:	<0.35	:	-		-		-		-	
Fluorene	mg/kg-dry	T	<0.35	:	<0.35	:	-		-		-		-	
Hexachlorobenzene	mg/kg-dry	T	<0.35	:	<0.35	:	-		-		-		-	
Hexachlorobutadiene	mg/kg-dry	T	<0.35	:	<0.35	:	-		-		-		-	
Hexachlorocyclopentadiene	mg/kg-dry	T	<0.35	:	<0.35	J	-		-		-		-	
Hexachloroethane	mg/kg-dry	T	<0.35	:	<0.35	:	-		-		-		-	
Indeno(1,2,3-cd)pyrene	mg/kg-dry	T	<0.35	:	<0.35	:	-		-		-		-	
Isophorone	mg/kg-dry	T	<0.35	:	<0.35	:	-		-		-		-	
Naphthalene	mg/kg-dry	T	<0.35	:	<0.35	:	-		-		-		-	
Nitrobenzene	mg/kg-dry	T	<0.35	:	<0.35	:	-		-		-		-	
N-Nitrosodi-n-propylamine	mg/kg-dry	T	<0.35	:	<0.35	:	-		-		-		-	
N-Nitrosodiphenylamine	mg/kg-dry	T	<0.35	:	<0.35	:	-		-		-		-	
Pentachlorophenol	mg/kg-dry	T	<0.87	:	<0.89	J	-		-		-		-	
Phenanthrene	mg/kg-dry	T	<0.35	:	<0.35	:	-		-		-		-	
Phenol	mg/kg-dry	T	<0.35	:	0.19	J	-		-		-		-	
Pyrene	mg/kg-dry	T	<0.35	:	<0.35	:	-		-		-		-	

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T = Total Fraction

Appendix A-7e
Soil - Biased 0-24 inches
Validated Analytical Results

Parameter	Units	Exposure Area Fraction	Site ID / Sample Date / Sample ID / Exposure Area											
			MSS4A1-13 10/11/2002 MSS4A1-13-T02N-SOL SS4A1		MSS4A1-14 10/23/2002 MSS4A1-14-T02N-SOL SS4A1		MSS4A1-15 10/23/2002 MSS4A1-15-T02N-SOL SS4A1		MSS4A1-16 10/23/2002 MSS4A1-16-T02N-SOL SS4A1		MSS4A1-17 10/24/2002 MSS4A1-17-T02N-SOL SS4A1		MSS4A1-18 10/24/2002 MSS4A1-18-T02N-SOL SS4A1	
General Chemistry														
Ammonia	mg/kg-dry	T	106.	J	8.6	:	61.9	:	36.4	:	23.3	:	17.6	:
Chloride	mg/kg-dry	T	2.5	J	<27.	:	<27.6	:	<27.4	:	2.5	J	4.2	J
Fluoride	mg/kg-dry	T	2.3	J	1.2	J	0.32	J	0.15	J	0.64	J	0.53	J
Nitrate	mg/kg-dry	T	<2.2	J	2.8	:	<2.2	:	<2.2	:	2.4	J	<2.3	J
Phosphorus	mg/kg-dry	T	736.	:	1190.	J	656.	J	444.	J	331.	J	1010.	J
Sulfate	mg/kg-dry	T	30.1	J	1430.	:	7370.	:	<110.	:	214.	J	811.	J
Total Kjeldahl Nitrogen	mg/kg-dry	T	53.5	J	28.7	J	122.	J	259.	J	153.	:	90.5	:
Total Organic Carbon	mg/kg-dry	T	<108.	J	<109.	J	1720.	J	3430.	J	888.	J	740.	J
Laboratory Parameters														
pH	SU	T	6.3	:	3.9	:	3.3	:	5.8	:	4.2	:	3.5	:
Solids, Percent	%	T	93.2	:	92.5	:	90.7	:	91.3	:	89.	:	90.	:
Specific Conductance	umhos/cm	T	17.1	:	683.	:	3130.	:	94.6	:	262.	:	423.	:
Geotechnical														
Organic Soils	%	T	2.96	J	2.63	J	4.77	J	2.61	J	3.05	J	3.38	J
Physical Properties														
Cation-Exchange Capacity	meq/100g	T	14.	:	15.7	:	12.7	:	18.7	:	19.8	:	16.7	:
Sodium Absorption Ratio	ratio	T	<0.06	:	0.04	:	0.02	:	0.05	:	0.08	:	0.07	:
Metals														
Aluminum	mg/kg-dry	T	7040.	:	9670.	:	3560.	:	11200.	:	12300.	:	12000.	:
Antimony	mg/kg-dry	T	<0.17	J	<0.26	J	<0.26	J	<0.26	J	<0.31	J	<0.32	J
Arsenic	mg/kg-dry	T	5.1	:	4.4	:	2.7	:	4.9	:	6.4	:	9.1	:
Barium	mg/kg-dry	T	278.	:	103.	:	432.	:	131.	:	82.5	:	110.	:
Beryllium	mg/kg-dry	T	1.	:	0.93	:	0.37	:	1.1	:	0.9	:	0.69	:
Boron	mg/kg-dry	T	3.3	J	4.5	J	5.2	J	5.	J	<1.2	J	<0.91	J
Cadmium	mg/kg-dry	T	<0.024	:	0.39	J	0.13	J	0.085	J	0.11	J	<0.035	J
Calcium	mg/kg-dry	T	1570.	:	1770.	:	1040.	:	2260.	:	1570.	:	1410.	:
Chromium	mg/kg-dry	T	8.9	:	16.	:	5.	:	19.9	:	22.4	:	21.2	:
Cobalt	mg/kg-dry	T	6.7	:	11.1	:	2.3	:	7.1	:	8.6	:	7.7	:
Copper	mg/kg-dry	T	34.7	:	47.9	:	14.9	:	21.	:	62.	:	51.1	:
Iron	mg/kg-dry	T	23700.	:	23600.	:	33300.	:	21200.	:	27600.	:	33100.	:
Lead	mg/kg-dry	T	46.7	:	148.	:	30.4	:	32.6	:	265.	:	236.	:
Magnesium	mg/kg-dry	T	2830.	:	3140.	:	1310.	:	4090.	:	4110.	:	4820.	:
Manganese	mg/kg-dry	T	360.	J	1100.	J	270.	J	259.	J	1560.	J	1440.	J

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Appendix A-7e
Soil - Biased 0-24 inches
Validated Analytical Results

Parameter	Units	Exposure Area Fraction	Site ID / Sample Date / Sample ID / Exposure Area											
			MSS4A1-13		MSS4A1-14		MSS4A1-15		MSS4A1-16		MSS4A1-17		MSS4A1-18	
			10/11/2002		10/23/2002		10/23/2002		10/23/2002		10/24/2002		10/24/2002	
			MSS4A1-13-T02N-SOL		MSS4A1-14-T02N-SOL		MSS4A1-15-T02N-SOL		MSS4A1-16-T02N-SOL		MSS4A1-17-T02N-SOL		MSS4A1-18-T02N-SOL	
			SS4A1		SS4A1		SS4A1		SS4A1		SS4A1		SS4A1	
Mercury	mg/kg-dry	T	<0.016	:	<0.016	:	<0.017	:	0.02	:	<0.018	:	<0.018	:
Molybdenum	mg/kg-dry	T	2.7	:	3.9	:	4.1	:	2.7	:	8.1	:	10.7	:
Nickel	mg/kg-dry	T	7.4	J	15.8	J	5.	J	16.1	J	15.7	J	15.5	J
Potassium	mg/kg-dry	T	2600.	J	2090.	J	3130.	J	2470.	J	2220.	J	3070.	J
Selenium	mg/kg-dry	T	1.7	J	1.4	J	1.	J	1.1	J	1.1	J	<0.85	J
Silver	mg/kg-dry	T	0.22	:	0.48	:	0.17	:	<0.14	:	0.97	:	1.3	:
Sodium	mg/kg-dry	T	141.	:	<123.	:	550.	:	<79.6	:	<132.	:	<149.	:
Thallium	mg/kg-dry	T	0.11	:	0.19	:	0.11	:	0.16	:	0.22	:	0.26	:
Vanadium	mg/kg-dry	T	9.	:	15.6	:	12.3	:	27.2	:	21.2	:	21.6	:
Zinc	mg/kg-dry	T	67.9	J	192.	J	61.3	J	85.5	J	234.	J	177.	J

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Appendix A-7e
Soil - Biased 0-24 inches
Validated Analytical Results

Parameter	Units	Exposure Area Fraction	Site ID / Sample Date / Sample ID / Exposure Area		MSS4A2-11A 10/18/2002 MSS4A2-11-T02N-SOL SS4A2		MSS4A2-12 10/11/2002 MSS4A2-12-T02N-SOL SS4A2		MSS4A2-12A 10/18/2002 MSS4A2-12-T02N-SOL SS4A2		MSS4A2-13 10/18/2002 MSS4A2-13-T02N-SOL SS4A2		MSS4A2-14 10/18/2002 MSS4A2-14-T02N-SOL SS4A2	
General Chemistry														
Ammonia	mg/kg-dry	T	22.8	J	16.7	:	<17.5	:	13.6	:	11.1	J	24.3	:
Chloride	mg/kg-dry	T	12.3	J	225.	J	15.8	J	2.8	J	2.4	J	<2.2	J
Fluoride	mg/kg-dry	T	0.48	J	0.89	J	0.43	J	0.66	J	1.8	J	3.1	J
Nitrate	mg/kg-dry	T	<2.3	J	3.1	J	<2.3	J	<2.3	J	<2.2	J	2.4	J
Phosphorus	mg/kg-dry	T	999.	J	549.	J	1050.	J	523.	J	475.	J	97.7	J
Sulfate	mg/kg-dry	T	5790.	J	1070.	J	7750.	J	2360.	J	1300.	J	2080.	J
Total Kjeldahl Nitrogen	mg/kg-dry	T	47.	:	80.6	:	46.9	J	84.3	:	106.	:	31.7	:
Total Organic Carbon	mg/kg-dry	T	<111.	J	1510.	J	<114.	J	1760.	J	2450.	J	<110.	J
Laboratory Parameters														
pH	SU	T	3.5	:	6.9	:	3.	:	7.4	:	7.8	:	7.4	:
Solids, Percent	%	T	90.5	:	92.8	:	88.	:	90.7	:	91.2	:	91.4	:
Specific Conductance	umhos/cm	T	1180.	J	902.	:	1900.	J	1060.	:	1160.	:	1250.	:
Geotechnical														
Organic Soils	%	T	3.2	J	1.49	J	3.07	J	1.36	J	1.74	J	1.55	J
Physical Properties														
Cation-Exchange Capacity	meq/100g	T	12.6	:	6.9	:	15.9	:	8.6	:	11.4	:	12.3	:
Sodium Absorption Ratio	ratio	T	0.03	:	0.03	:	0.02	:	0.05	:	0.09	:	0.06	:
Metals														
Aluminum	mg/kg-dry	T	9760.	:	11000.	:	10200.	:	8940.	:	8480.	J	14900.	:
Antimony	mg/kg-dry	T	<0.17	J	<0.25	J	<0.19	J	<0.25	J	<0.25	J	<0.27	J
Arsenic	mg/kg-dry	T	1.7	J	1.8	:	2.3	:	3.6	:	4.	:	2.3	:
Barium	mg/kg-dry	T	128.	:	91.9	:	75.9	:	51.2	:	102.	J	130.	:
Beryllium	mg/kg-dry	T	0.47	:	1.1	:	0.52	:	1.5	:	2.5	J	1.4	:
Boron	mg/kg-dry	T	<0.42	J	<0.86	:	<0.4	J	<0.2	:	<1.5	:	<0.22	J
Cadmium	mg/kg-dry	T	<0.026	J	0.55	J	<0.025	J	1.1	:	1.6	J	0.34	J
Calcium	mg/kg-dry	T	8840.	:	14800.	:	12600.	:	21200.	:	34100.	J	18900.	:
Chromium	mg/kg-dry	T	29.8	:	31.8	:	30.8	:	28.6	:	16.9	:	51.2	:
Cobalt	mg/kg-dry	T	4.7	:	7.6	:	8.	:	5.7	:	5.8	:	14.1	:
Copper	mg/kg-dry	T	138.	:	97.	:	238.	:	133.	:	79.5	J	166.	:
Iron	mg/kg-dry	T	31700.	:	16000.	:	37700.	:	16700.	:	13900.	:	24000.	:
Lead	mg/kg-dry	T	73.6	:	52.4	:	80.	:	361.	:	101.	J	49.7	:
Magnesium	mg/kg-dry	T	7330.	:	7220.	:	7790.	:	6010.	:	5030.	J	13900.	:
Manganese	mg/kg-dry	T	330.	J	1010.	J	431.	J	735.	J	731.	J	808.	J

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Appendix A-7e
Soil - Biased 0-24 inches
Validated Analytical Results

Parameter	Units	Exposure Area Fraction	Site ID / Sample Date / Sample ID / Exposure Area											
			MSS4A2-11	10/11/2002	MSS4A2-11-T02N-SOL	SS4A2	MSS4A2-11A	10/18/2002	MSS4A2-11-T02N-SOL	SS4A2	MSS4A2-12	10/11/2002	MSS4A2-12-T02N-SOL	SS4A2
Mercury	mg/kg-dry	T	<0.017	:	<0.016	:	<0.017	:						
Molybdenum	mg/kg-dry	T	9.6	:	421.	:	11.6	:						
Nickel	mg/kg-dry	T	18.4	J	18.	J	22.2	J						
Potassium	mg/kg-dry	T	4310.	J	3590.	J	4230.	J						
Selenium	mg/kg-dry	T	1.4	J	<0.67	J	<0.8	J						
Silver	mg/kg-dry	T	0.68	:	0.39	:	0.69	:						
Sodium	mg/kg-dry	T	<115.	:	<71.6	:	<44.4	:						
Thallium	mg/kg-dry	T	0.57	:	0.28	:	0.64	:						
Vanadium	mg/kg-dry	T	35.2	:	33.2	:	35.1	:						
Zinc	mg/kg-dry	T	55.7	J	124.	J	65.4	J						

Parameter	Units	Exposure Area Fraction	Site ID / Sample Date / Sample ID / Exposure Area											
			MSS4A2-12A	10/18/2002	MSS4A2-12-T02N-SOL	SS4A2	MSS4A2-13	10/18/2002	MSS4A2-13-T02N-SOL	SS4A2	MSS4A2-14	10/18/2002	MSS4A2-14-T02N-SOL	SS4A2
Mercury	mg/kg-dry	T	<0.017	J	<0.016	J	<0.017	J						
Molybdenum	mg/kg-dry	T	3370.	:	326.	:	470.	:						
Nickel	mg/kg-dry	T	19.9	J	16.2	J	41.6	J						
Potassium	mg/kg-dry	T	2530.	J	1910.	J	5740.	J						
Selenium	mg/kg-dry	T	1.	J	1.4	J	1.1	J						
Silver	mg/kg-dry	T	2.3	:	0.94	:	0.6	:						
Sodium	mg/kg-dry	T	<44.7	:	<111.	:	<26.5	:						
Thallium	mg/kg-dry	T	0.35	:	<0.42	:	0.53	:						
Vanadium	mg/kg-dry	T	47.9	:	22.5	J	58.1	:						
Zinc	mg/kg-dry	T	169.	J	285.	J	101.	J						

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Appendix A-7e
Soil - Biased 0-24 inches
Validated Analytical Results

Parameter	Units	Fraction	MSS4A2-15		MSS4A2-16		MSS4A2-17		MSS4A2-18		MSS4A2-19		MSS4A2-20	
Sample Date			10/18/2002		10/18/2002		10/18/2002		10/20/2002		10/20/2002		10/20/2002	
Sample ID			MSS4A2-15-T02N-SOL		MSS4A2-16-T02N-SOL		MSS4A2-17-T02N-SOL		MSS4A2-18-T02N-SOL		MSS4A2-19-T02N-SOL		MSS4A2-20-T02N-SOL	
Exposure Area			SS4A2		SS4A2		SS4A2		SS4A2		SS4A2		SS4A2	
General Chemistry														
Ammonia	mg/kg-dry	T	22.2	:	13.3	:	43.3	:	16.	:	<8.3	:	<9.	:
Chloride	mg/kg-dry	T	<2.2	J	<2.2	J	3.	J	3.5	J	2.3	J	2.6	J
Fluoride	mg/kg-dry	T	45.3	J	6.7	J	1.4	J	3.3	J	2.5	J	2.7	J
Nitrate	mg/kg-dry	T	<2.2	J	2.2	J	<2.2	J	<2.3	J	<2.2	J	<2.3	J
Phosphorus	mg/kg-dry	T	1020.	J	1290.	J	117.	J	803.	J	422.	J	927.	J
Sulfate	mg/kg-dry	T	4200.	J	1530.	J	518.	J	2110.	J	2450.	J	5330.	J
Total Kjeldahl Nitrogen	mg/kg-dry	T	52.7	:	31.3	:	53.6	J	30.4	:	28.3	:	60.8	:
Total Organic Carbon	mg/kg-dry	T	887.	J	<108.	J	2700.	J	<111.	J	<108.	J	519.	J
Laboratory Parameters														
pH	SU	T	4.6	:	7.2	:	6.5	:	7.1	:	7.1	:	7.1	:
Solids, Percent	%	T	91.	:	93.	:	93.1	:	90.5	:	92.7	:	89.4	:
Specific Conductance	umhos/cm	T	1640.	:	1410.	:	1040.	:	1360.	:	1230.	:	1420.	:
Geotechnical														
Organic Soils	%	T	1.99	J	1.95	J	1.63	J	1.1	J	1.13	J	1.4	J
Physical Properties														
Cation-Exchange Capacity	meq/100g	T	12.3	:	9.1	:	7.8	:	7.1	:	6.3	:	11.	:
Sodium Absorption Ratio	ratio	T	0.05	:	0.02	:	0.04	:	0.03	:	0.02	:	0.02	:
Metals														
Aluminum	mg/kg-dry	T	15100.	:	13700.	:	11900.	:	14700.	:	9180.	:	22200.	:
Antimony	mg/kg-dry	T	<0.26	J	<0.26	J	<0.24	J	<0.25	J	<0.22	J	<0.27	J
Arsenic	mg/kg-dry	T	1.7	J	1.8	J	2.6	:	2.6	:	2.5	:	12.8	:
Barium	mg/kg-dry	T	152.	:	103.	:	79.7	:	119.	:	59.4	:	170.	:
Beryllium	mg/kg-dry	T	1.	:	1.3	:	1.3	:	1.2	:	1.	:	3.1	:
Boron	mg/kg-dry	T	<0.22	J	<0.22	J	<0.21	J	<0.26	:	<0.37	:	<0.38	:
Cadmium	mg/kg-dry	T	<0.033	J	<0.26	J	0.66	J	0.95	:	1.1	:	2.7	:
Calcium	mg/kg-dry	T	16700.	:	17400.	:	13900.	:	20400.	:	15700.	:	27200.	:
Chromium	mg/kg-dry	T	52.5	:	40.8	:	39.	:	47.1	:	25.3	:	61.8	:
Cobalt	mg/kg-dry	T	16.4	:	15.9	:	11.1	:	10.3	:	7.7	:	15.4	:
Copper	mg/kg-dry	T	172.	:	211.	:	160.	:	142.	:	95.1	:	219.	:
Iron	mg/kg-dry	T	33100.	:	27200.	:	20100.	:	20500.	:	16200.	:	31900.	:
Lead	mg/kg-dry	T	52.1	:	43.8	:	68.8	:	84.2	:	77.7	:	117.	:
Magnesium	mg/kg-dry	T	12200.	:	11200.	:	9810.	:	10400.	:	6050.	:	11800.	:
Manganese	mg/kg-dry	T	578.	J	636.	J	716.	J	1110.	J	990.	J	2240.	J

J = Qualified as estimated during data validation
R = Qualified as rejected value from data validation and results are considered unusable for any purpose
T = Total Fraction

Appendix A-7e
Soil - Biased 0-24 inches
Validated Analytical Results

Parameter	Units	Exposure Area Fraction	Site ID Sample Date Sample ID											
			MSS4A2-15 10/18/2002 MSS4A2-15-T02N-SOL SS4A2		MSS4A2-16 10/18/2002 MSS4A2-16-T02N-SOL SS4A2		MSS4A2-17 10/18/2002 MSS4A2-17-T02N-SOL SS4A2		MSS4A2-18 10/20/2002 MSS4A2-18-T02N-SOL SS4A2		MSS4A2-19 10/20/2002 MSS4A2-19-T02N-SOL SS4A2		MSS4A2-20 10/20/2002 MSS4A2-20-T02N-SOL SS4A2	
Mercury	mg/kg-dry	T	<0.017	J	<0.016	J	<0.017	J	<0.017	:	<0.017	:	<0.017	:
Molybdenum	mg/kg-dry	T	271.	:	235.	:	676.	:	444.	:	284.	:	902.	:
Nickel	mg/kg-dry	T	39.9	J	37.2	J	30.6	J	30.3	J	19.	J	40.7	J
Potassium	mg/kg-dry	T	5970.	J	5300.	J	4020.	J	5070.	J	3180.	J	5930.	J
Selenium	mg/kg-dry	T	1.2	J	0.97	J	0.72	J	0.8	J	<0.6	J	0.81	J
Silver	mg/kg-dry	T	0.6	:	0.68	:	0.98	:	0.72	:	0.75	:	2.7	:
Sodium	mg/kg-dry	T	<60.4	:	<41.2	:	<25.1	:	<149.	:	<68.5	:	977.	:
Thallium	mg/kg-dry	T	0.66	:	0.55	:	0.42	:	0.35	:	0.28	:	0.43	:
Vanadium	mg/kg-dry	T	55.1	:	47.	:	43.8	:	48.3	:	26.	:	63.1	:
Zinc	mg/kg-dry	T	74.2	J	92.7	J	133.	J	205.	J	196.	J	416.	J

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T = Total Fraction

Appendix A-7e
Soil - Biased 0-24 inches
Validated Analytical Results

Parameter	Units	Exposure Area Fraction	Site ID / Sample Date / Sample ID / Exposure Area		MSS4A2-21 10/21/2002 MSS4A2-21-T02N-SOL SS4A2		MSS4A2-22 10/21/2002 MSS4A2-22-T02N-SOL SS4A2		MSS4A2-23 10/21/2002 MSS4A2-23-T02N-SOL SS4A2		MSS4A2-24 10/22/2002 MSS4A2-24-T02N-SOL SS4A2		MSS4A3-11 10/16/2002 MSS4A3-11-T02N-SOL SS4A3		MSS4A3-13 10/16/2002 MSS4A3-13-T02N-SOL SS4A3	
General Chemistry																
Ammonia	mg/kg-dry	T			19.1	:	21.	:	25.	:	17.5	:	<12.2	:	<10.6	:
Chloride	mg/kg-dry	T			<28.4	:	<27.8	:	<26.6	:	<27.7	:	4.7	J	5.1	J
Fluoride	mg/kg-dry	T			7.5	J	3.1	J	1.3	J	0.37	J	3.1	J	0.64	J
Nitrate	mg/kg-dry	T			<2.3	:	<2.2	:	<2.1	:	<2.2	J	<2.9	J	3.7	J
Phosphorus	mg/kg-dry	T			151.	J	1700.	J	476.	J	738.	J	172.	J	690.	J
Sulfate	mg/kg-dry	T			15800.	:	15800.	:	1540.	:	19000.	J	264.	J	10.7	J
Total Kjeldahl Nitrogen	mg/kg-dry	T			55.9	:	32.2	:	45.4	:	78.4	J	90.1	:	45.6	:
Total Organic Carbon	mg/kg-dry	T			<114.	J	<112.	J	<107.	J	302.	J	4040.	J	<107.	J
Laboratory Parameters																
pH	SU	T			6.7	:	7.	:	7.2	:	3.4	:	7.5	:	7.9	:
Solids, Percent	%	T			88.	:	90.	:	94.1	:	90.4	:	71.1	:	94.2	:
Specific Conductance	umhos/cm	T			1540.	:	1440.	:	862.	:	1670.	:	168.	:	48.1	:
Geotechnical																
Organic Soils	%	T			1.78	J	1.83	J	1.52	J	3.86	J	1.66	J	1.47	J
Physical Properties																
Cation-Exchange Capacity	meq/100g	T			7.1	:	14.9	:	12.8	:	2.	:	12.2	:	9.6	:
Sodium Absorption Ratio	ratio	T			0.04	:	0.05	:	0.03	:	0.03	:	0.12	:	<0.03	:
Metals																
Aluminum	mg/kg-dry	T			15900.	:	22200.	:	16100.	:	12100.	:	24300.	:	13200.	:
Antimony	mg/kg-dry	T			<0.28	J	<0.23	J	<0.25	J	<0.27	J	<0.33	J	<0.38	J
Arsenic	mg/kg-dry	T			3.1	:	3.8	:	3.6	:	3.3	:	5.6	:	3.1	:
Barium	mg/kg-dry	T			188.	:	198.	:	90.9	:	258.	:	203.	:	65.3	:
Beryllium	mg/kg-dry	T			1.3	:	1.4	:	1.2	:	0.84	:	2.4	:	2.4	:
Boron	mg/kg-dry	T			<2.5	:	<2.2	:	<2.2	:	<1.2	:	<0.3	J	<0.57	:
Cadmium	mg/kg-dry	T			0.71	:	0.42	:	0.63	:	0.32	:	1.5	:	2.1	:
Calcium	mg/kg-dry	T			26300.	:	27500.	:	17800.	:	10400.	:	19100.	:	12000.	:
Chromium	mg/kg-dry	T			45.5	:	69.5	:	41.7	:	28.6	:	74.8	:	27.4	:
Cobalt	mg/kg-dry	T			14.2	:	18.	:	11.1	:	9.1	:	21.3	:	9.4	:
Copper	mg/kg-dry	T			125.	:	187.	:	184.	:	150.	:	238.	:	227.	:
Iron	mg/kg-dry	T			28700.	:	30400.	:	22400.	:	37600.	:	35900.	:	13700.	:
Lead	mg/kg-dry	T			72.9	:	48.9	:	50.7	:	86.8	:	116.	:	1360.	:
Magnesium	mg/kg-dry	T			10500.	:	14200.	:	10100.	:	7190.	:	13700.	:	5520.	:
Manganese	mg/kg-dry	T			897.	J	980.	J	964.	J	418.	J	1450.	J	1590.	J

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R = Qualified as rejected value from data validation and results are considered unusable for any purpose

T = Total Fraction

Appendix A-7e
Soil - Biased 0-24 inches
Validated Analytical Results

Parameter	Units	Exposure Area / Fraction	Site ID / Sample Date / Sample ID											
			MSS4A2-21 10/21/2002 MSS4A2-21-T02N-SOL SS4A2		MSS4A2-22 10/21/2002 MSS4A2-22-T02N-SOL SS4A2		MSS4A2-23 10/21/2002 MSS4A2-23-T02N-SOL SS4A2		MSS4A2-24 10/22/2002 MSS4A2-24-T02N-SOL SS4A2		MSS4A3-11 10/16/2002 MSS4A3-11-T02N-SOL SS4A3		MSS4A3-13 10/16/2002 MSS4A3-13-T02N-SOL SS4A3	
Mercury	mg/kg-dry	T	<0.017	J	<0.017	J	<0.016	:	<0.018	:	<0.023	:	<0.018	:
Molybdenum	mg/kg-dry	T	771.	:	644.	:	405.	:	9.1	:	731.	:	711.	:
Nickel	mg/kg-dry	T	34.4	J	48.5	J	31.7	J	22.7	J	49.5	J	21.3	J
Potassium	mg/kg-dry	T	6410.	J	6430.	J	4490.	J	4400.	J	7270.	J	3590.	J
Selenium	mg/kg-dry	T	0.98	J	1.1	J	<0.67	J	1.4	J	1.3	J	0.96	J
Silver	mg/kg-dry	T	0.77	:	0.79	:	0.67	:	0.97	:	1.2	:	3.	:
Sodium	mg/kg-dry	T	<33.2	J	209.	:	<30.1	J	340.	:	1080.	:	<51.3	:
Thallium	mg/kg-dry	T	0.46	:	0.59	:	0.42	:	0.57	:	0.69	:	1.	:
Vanadium	mg/kg-dry	T	51.9	:	64.4	:	42.5	:	35.	:	75.9	:	34.4	:
Zinc	mg/kg-dry	T	123.	J	99.8	J	113.	J	102.	J	258.	J	525.	J

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Appendix A-7e
Soil - Biased 0-24 inches
Validated Analytical Results

Parameter	Units	Exposure Area Fraction	Site ID	Sample Date	Sample ID	Exposure Area
			MSS4A3-15	10/16/2002	MSS4A3-15-T02N-SOL	SS4A3
			MSS5-11	10/15/2002	MSS5-11-T02N-SOL	SS5
			MSS5-12	10/15/2002	MSS5-12-T02N-SOL	SS5
			MSS5-13	10/15/2002	MSS5-13-T02N-SOL	SS5
			MSS5-14	10/15/2002	MSS5-14-T02N-SOL	SS5
			MSS5-16	10/24/2002	MSS5-16-T02N-SOL	SS5
General Chemistry						
Ammonia	mg/kg-dry	T	10.1 :	12.9 :	13. :	<8.2 :	9.9 :	<9. :
Chloride	mg/kg-dry	T	<2.1 J	<2.2 J	<2.2 J	<2.2 J	2.6 J	2.3 J
Fluoride	mg/kg-dry	T	0.76 J	2. J	0.72 J	2.3 J	0.83 J	2. J
Nitrate	mg/kg-dry	T	<2.1 J	2.5 J	<2.2 J	<2.2 J	2.4 J	<2.3 J
Phosphorus	mg/kg-dry	T	241. J	771. J	168. J	904. :	296. J	436. J
Sulfate	mg/kg-dry	T	26.2 J	1030. J	90.4 J	1340. J	792. J	112. J
Total Kjeldahl Nitrogen	mg/kg-dry	T	41.7 :	32.5 :	<23.6 :	26.6 :	<25.4 :	105. J
Total Organic Carbon	mg/kg-dry	T	<103. J	<107. J	<106. J	<107. :	422. J	1440. J
Laboratory Parameters						
pH	SU	T	8. :	7. :	7.7 :	7.1 :	7.4 :	4.3 :
Solids, Percent	%	T	97.9 :	93.9 :	95. :	94.3 :	94.6 :	89.1 :
Specific Conductance	umhos/cm	T	36.7 :	505. :	83.9 :	671. :	373. :	136. :
Geotechnical						
Organic Soils	%	T	1.15 J	1.12 J	0.99 J	1.42 J	1.5 J	2.56 J
Physical Properties						
Cation-Exchange Capacity	meq/100g	T	3.8 :	10.9 :	8.7 :	8.9 :	14.9 :	10.3 :
Sodium Absorption Ratio	ratio	T	<0.03 :	0.02 :	0.04 :	0.04 :	0.03 :	0.26 :
Metals						
Aluminum	mg/kg-dry	T	7780. :	9630. :	4070. :	9040. :	13100. :	8590. :
Antimony	mg/kg-dry	T	<0.17 J	<0.27 J	<0.26 J	<0.15 :	<0.26 J	<0.31 J
Arsenic	mg/kg-dry	T	1.7 :	3.4 :	3.3 :	3.2 :	3.9 :	2.3 :
Barium	mg/kg-dry	T	15.9 :	53.7 :	6.5 :	55.7 :	104. :	415. :
Beryllium	mg/kg-dry	T	1.4 :	2.1 :	2.4 :	3.1 :	1.2 :	0.37 :
Boron	mg/kg-dry	T	<0.39 :	2. J	0.84 :	<1.6 :	1.6 J	<2.9 :
Cadmium	mg/kg-dry	T	0.3 :	1. :	3.3 :	3.1 :	0.37 :	<0.1 :
Calcium	mg/kg-dry	T	14900. :	9850. :	9580. :	18900. :	19000. :	1010. :
Chromium	mg/kg-dry	T	4.4 :	25.1 :	2.2 :	20.4 :	53.2 :	24.6 :
Cobalt	mg/kg-dry	T	3.7 :	7.8 :	4. :	5.1 :	10.9 :	3.1 :
Copper	mg/kg-dry	T	70.1 :	169. :	175. :	155. :	176. :	45. :
Iron	mg/kg-dry	T	7920. :	17900. :	8470. :	9630. :	19900. :	23100. :
Lead	mg/kg-dry	T	46.2 :	166. :	451. :	164. :	41.4 :	72.9 :
Magnesium	mg/kg-dry	T	1620. :	5480. :	1350. :	3890. :	11400. :	4240. :
Manganese	mg/kg-dry	T	1070. J	2440. J	1250. J	1440. :	914. J	204. J

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T = Total Fraction

Appendix A-7e
Soil - Biased 0-24 inches
Validated Analytical Results

Parameter	Units	Fraction	Site ID	Sample Date	Sample ID	Exposure Area
			MSS4A3-15	10/16/2002	MSS4A3-15-T02N-SOL	SS4A3
			MSS5-11	10/15/2002	MSS5-11-T02N-SOL	SS5
			MSS5-12	10/15/2002	MSS5-12-T02N-SOL	SS5
			MSS5-13	10/15/2002	MSS5-13-T02N-SOL	SS5
			MSS5-14	10/15/2002	MSS5-14-T02N-SOL	SS5
			MSS5-16	10/24/2002	MSS5-16-T02N-SOL	SS5
Mercury	mg/kg-dry	T	<0.034 :	<0.018 :	<0.017 :	<0.017 J	<0.018 :	<0.018 J
Molybdenum	mg/kg-dry	T	265. :	500. :	734. :	1580. :	879. :	70.7 :
Nickel	mg/kg-dry	T	4.8 J	19. J	6.5 J	15.8 :	34.5 J	11.8 J
Potassium	mg/kg-dry	T	1460. J	3340. J	958. J	2240. :	4460. J	3590. J
Selenium	mg/kg-dry	T	0.55 J	<0.71 J	<0.7 J	0.95 :	1.1 J	1.3 J
Silver	mg/kg-dry	T	0.45 :	1.6 :	3.4 :	2.3 :	0.53 :	0.41 :
Sodium	mg/kg-dry	T	<101. :	<47.4 :	<76.7 :	<44.3 :	<42.5 :	<334. :
Thallium	mg/kg-dry	T	0.26 :	0.37 :	0.2 :	0.33 :	0.44 :	0.36 :
Vanadium	mg/kg-dry	T	9.7 :	32.4 :	9.8 :	28. :	55.1 :	30.2 :
Zinc	mg/kg-dry	T	69.8 J	145. J	500. J	428. :	94. J	36.3 J

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Appendix A-7e
Soil - Biased 0-24 inches
Validated Analytical Results

Parameter	Units	Exposure Area Fraction	Site ID / Sample Date / Sample ID		MSS5-17 10/24/2002 MSS5-17-T02N-SOL SS5		MSS5-18 10/24/2002 MSS5-18-T02N-SOL SS5		MSS5-19 10/24/2002 MSS5-19-T02N-SOL SS5		MSS8-1 10/9/2002 MSS8-1-T02N-SOL SS8A		MSS8-10 10/27/2002 MSS8-10-T02N-SOL SS8A		MSS8-11 10/27/2002 MSS8-11-T02N-SOL SS8A	
General Chemistry																
Ammonia	mg/kg-dry	T			17.	:	30.6	:	13.	:	47.1	:	<8.9	J	23.2	:
Chloride	mg/kg-dry	T			2.2	J	3.	J	3.1	J	<2.3	J	470.	J	<34.	:
Fluoride	mg/kg-dry	T			0.47	J	0.95	J	0.95	J	0.2	J	2.2	J	1.8	J
Nitrate	mg/kg-dry	T			<2.2	J	<2.3	J	2.5	J	<2.3	J	30.	J	2.	J
Phosphorus	mg/kg-dry	T			701.	J	1730.	J	1220.	J	1510.	J	1540.	J	1380.	J
Sulfate	mg/kg-dry	T			8.4	J	314.	J	66.3	J	830.	J	12000.	J	4900.	:
Total Kjeldahl Nitrogen	mg/kg-dry	T			67.2	J	109.	J	68.2	J	783.	:	99.5	J	45.4	J
Total Organic Carbon	mg/kg-dry	T			173.	J	2620.	J	4180.	J	3450.	J	1730.	J	415.	J
Laboratory Parameters																
pH	SU	T			5.3	:	4.	:	4.6	:	3.5	:	6.7	:	7.2	:
Solids, Percent	%	T			91.8	:	90.1	:	89.3	:	87.5	:	90.1	:	88.2	:
Specific Conductance	umhos/cm	T			13.9	:	291.	:	98.3	:	456.	:	1990.	J	1500.	J
Geotechnical																
Organic Soils	%	T			2.23	J	3.76	J	3.23	J	-		1.85	J	1.76	J
Physical Properties																
Cation-Exchange Capacity	meq/100g	T			5.6	:	22.1	:	17.8	:	16.4	:	15.9	:	10.8	:
Sodium Absorption Ratio	ratio	T			<0.14	:	0.19	:	0.09	:	0.04	:	2.77	:	0.06	:
Metals																
Aluminum	mg/kg-dry	T			2610.	:	22400.	:	23300.	:	-		-		-	
Antimony	mg/kg-dry	T			<0.29	J	<0.3	J	<0.29	J	-		-		-	
Arsenic	mg/kg-dry	T			2.7	:	1.4	:	1.6	:	-		-		-	
Barium	mg/kg-dry	T			352.	:	249.	:	219.	:	-		-		-	
Beryllium	mg/kg-dry	T			0.14	:	1.1	:	1.	:	-		-		-	
Boron	mg/kg-dry	T			<0.74	J	<2.8	:	<0.79	J	-		-		-	
Cadmium	mg/kg-dry	T			<0.036	:	0.2	:	<0.034	J	-		-		-	
Calcium	mg/kg-dry	T			229.	:	2240.	:	2120.	:	-		-		-	
Chromium	mg/kg-dry	T			2.5	:	72.2	:	61.4	:	-		-		-	
Cobalt	mg/kg-dry	T			0.4	:	14.5	:	14.9	:	-		-		-	
Copper	mg/kg-dry	T			5.1	:	153.	:	127.	:	-		-		-	
Iron	mg/kg-dry	T			8390.	:	44600.	:	39600.	:	-		-		-	
Lead	mg/kg-dry	T			131.	:	35.3	:	16.6	:	-		-		-	
Magnesium	mg/kg-dry	T			474.	:	10700.	:	11000.	:	-		-		-	
Manganese	mg/kg-dry	T			44.8	J	662.	J	674.	J	-		-		-	

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Appendix A-7e
Soil - Biased 0-24 inches
Validated Analytical Results

Parameter	Units	Exposure Area Fraction	Site ID / Sample Date / Sample ID		MSS5-17 10/24/2002 MSS5-17-T02N-SOL SS5		MSS5-18 10/24/2002 MSS5-18-T02N-SOL SS5		MSS5-19 10/24/2002 MSS5-19-T02N-SOL SS5		MSS8-1 10/9/2002 MSS8-1-T02N-SOL SS8A		MSS8-10 10/27/2002 MSS8-10-T02N-SOL SS8A		MSS8-11 10/27/2002 MSS8-11-T02N-SOL SS8A	
Mercury	mg/kg-dry	T		<0.018	:	<0.018	J	<0.018	:	-		-		-	
Molybdenum	mg/kg-dry	T		51.4	:	37.1	:	30.2	:	-		-		-	
Nickel	mg/kg-dry	T		1.2	J	42.2	J	40.8	J	-		-		-	
Potassium	mg/kg-dry	T		1610.	J	7010.	J	6960.	J	-		-		-	
Selenium	mg/kg-dry	T		<0.77	J	1.4	J	1.	J	-		-		-	
Silver	mg/kg-dry	T		0.49	:	1.1	:	0.52	:	-		-		-	
Sodium	mg/kg-dry	T		<224.	:	<107.	:	<49.3	:	-		-		-	
Thallium	mg/kg-dry	T		0.19	:	1.	:	1.2	:	-		-		-	
Vanadium	mg/kg-dry	T		5.8	:	63.8	:	59.2	:	-		-		-	
Zinc	mg/kg-dry	T		5.1	J	97.4	J	89.	J	-		-		-	
Semi-Volatile Organics															
1,1`-Biphenyl	mg/kg-dry	T		-		-		-		<0.37	:	<0.37	:	<0.38	:
2,4,5-Trichlorophenol	mg/kg-dry	T		-		-		-		<0.94	:	<0.92	:	<0.94	:
2,4,6-Trichlorophenol	mg/kg-dry	T		-		-		-		<0.37	:	<0.37	:	<0.38	:
2,4-Dichlorophenol	mg/kg-dry	T		-		-		-		<0.37	:	<0.37	:	<0.38	:
2,4-Dimethylphenol	mg/kg-dry	T		-		-		-		<0.37	:	<0.37	:	<0.38	:
2,4-Dinitrophenol	mg/kg-dry	T		-		-		-		<0.94	J	<0.92	J	<0.94	J
2,4-Dinitrotoluene	mg/kg-dry	T		-		-		-		<0.37	:	<0.37	:	<0.38	:
2,6-Dinitrotoluene	mg/kg-dry	T		-		-		-		<0.37	:	<0.37	:	<0.38	:
2-Chloronaphthalene	mg/kg-dry	T		-		-		-		<0.37	:	<0.37	:	<0.38	:
2-Chlorophenol	mg/kg-dry	T		-		-		-		<0.37	:	<0.37	:	<0.38	:
2-Methylnaphthalene	mg/kg-dry	T		-		-		-		<0.37	:	<0.37	:	<0.38	:
2-Methylphenol	mg/kg-dry	T		-		-		-		<0.37	:	<0.37	:	<0.38	:
2-Nitroaniline	mg/kg-dry	T		-		-		-		<0.94	:	<0.92	:	<0.94	:
2-Nitrophenol	mg/kg-dry	T		-		-		-		<0.37	:	<0.37	:	<0.38	:
3,3-Dichlorobenzidine	mg/kg-dry	T		-		-		-		<0.37	:	<0.37	:	<0.38	:
3-Nitroaniline	mg/kg-dry	T		-		-		-		<0.94	:	<0.92	:	<0.94	:
4,6-Dinitro-2-methylphenol	mg/kg-dry	T		-		-		-		<0.94	:	<0.92	:	<0.94	:
4-Bromophenyl phenyl ether	mg/kg-dry	T		-		-		-		<0.37	:	<0.37	:	<0.38	:
4-Chloro-3-methylphenol	mg/kg-dry	T		-		-		-		<0.37	:	<0.37	:	<0.38	:
4-Chloroaniline	mg/kg-dry	T		-		-		-		<0.37	:	<0.37	:	<0.38	:
4-Chlorophenyl phenyl ether	mg/kg-dry	T		-		-		-		<0.37	:	<0.37	:	<0.38	:
4-Methylphenol	mg/kg-dry	T		-		-		-		<0.37	:	<0.37	:	<0.38	:
4-Nitroaniline	mg/kg-dry	T		-		-		-		<0.94	:	<0.92	:	<0.94	:

J = Qualified as estimated during data validation
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T = Total Fraction

Appendix A-7e
Soil - Biased 0-24 inches
Validated Analytical Results

Parameter	Units	Exposure Area Fraction	Site ID / Sample Date / Sample ID	MSS5-17 10/24/2002 MSS5-17-T02N-SOL SS5	MSS5-18 10/24/2002 MSS5-18-T02N-SOL SS5	MSS5-19 10/24/2002 MSS5-19-T02N-SOL SS5	MSS8-1 10/9/2002 MSS8-1-T02N-SOL SS8A	MSS8-10 10/27/2002 MSS8-10-T02N-SOL SS8A	MSS8-11 10/27/2002 MSS8-11-T02N-SOL SS8A
4-Nitrophenol	mg/kg-dry	T		-	-	-	<0.94 J	<0.92 J	<0.94 J
Acenaphthene	mg/kg-dry	T		-	-	-	<0.37 :	<0.37 :	<0.38 :
Acenaphthylene	mg/kg-dry	T		-	-	-	<0.37 :	<0.37 :	<0.38 :
Anthracene	mg/kg-dry	T		-	-	-	<0.37 :	<0.37 :	<0.38 :
Benzaldehyde	mg/kg-dry	T		-	-	-	<0.37 J	<0.37 :	<0.38 :
Benzo(a)anthracene	mg/kg-dry	T		-	-	-	<0.37 :	<0.37 :	<0.38 :
Benzo(a)pyrene	mg/kg-dry	T		-	-	-	<0.37 :	<0.37 :	<0.38 :
Benzo(b)fluoranthene	mg/kg-dry	T		-	-	-	<0.37 :	<0.37 :	<0.38 :
Benzo(g,h,i)perylene	mg/kg-dry	T		-	-	-	<0.37 :	<0.37 :	<0.38 :
Benzo(k)fluoranthene	mg/kg-dry	T		-	-	-	<0.37 J	<0.37 :	<0.38 :
Bis(2-chloroethoxy)methane	mg/kg-dry	T		-	-	-	<0.37 :	<0.37 :	<0.38 :
Bis(2-chloroethyl)ether	mg/kg-dry	T		-	-	-	<0.37 :	<0.37 :	<0.38 :
Bis(2-ethylhexyl)phthalate	mg/kg-dry	T		-	-	-	<0.37 :	<0.37 :	<0.38 :
Butyl benzyl phthalate	mg/kg-dry	T		-	-	-	<0.37 :	<0.37 :	<0.38 :
Carbazole	mg/kg-dry	T		-	-	-	<0.37 :	<0.37 :	<0.38 :
Chrysene	mg/kg-dry	T		-	-	-	<0.37 :	<0.37 :	<0.38 :
Dibenz(a,h)anthracene	mg/kg-dry	T		-	-	-	<0.37 :	<0.37 :	<0.38 :
Dibenzofuran	mg/kg-dry	T		-	-	-	<0.37 :	<0.37 :	<0.38 :
Dichlorodiisopropyl ether	mg/kg-dry	T		-	-	-	<0.37 :	<0.37 :	<0.38 :
Diethylphthalate	mg/kg-dry	T		-	-	-	<0.37 :	<0.37 :	<0.38 :
Dimethylphthalate	mg/kg-dry	T		-	-	-	<0.37 :	<0.37 :	<0.38 :
Di-n-Butyl phthalate	mg/kg-dry	T		-	-	-	<0.37 :	<0.37 :	<0.38 :
Di-n-Octyl phthalate	mg/kg-dry	T		-	-	-	<0.37 :	<0.37 :	<0.38 :
Fluoranthene	mg/kg-dry	T		-	-	-	<0.37 :	<0.37 :	<0.38 :
Fluorene	mg/kg-dry	T		-	-	-	<0.37 :	<0.37 :	<0.38 :
Hexachlorobenzene	mg/kg-dry	T		-	-	-	<0.37 :	<0.37 :	<0.38 :
Hexachlorobutadiene	mg/kg-dry	T		-	-	-	<0.37 :	<0.37 :	<0.38 :
Hexachlorocyclopentadiene	mg/kg-dry	T		-	-	-	<0.37 :	<0.37 J	<0.38 J
Hexachloroethane	mg/kg-dry	T		-	-	-	<0.37 :	<0.37 :	<0.38 :
Indeno(1,2,3-cd)pyrene	mg/kg-dry	T		-	-	-	<0.37 :	<0.37 :	<0.38 :
Isophorone	mg/kg-dry	T		-	-	-	<0.37 :	<0.37 :	<0.38 :
Naphthalene	mg/kg-dry	T		-	-	-	<0.37 :	<0.37 :	<0.38 :
Nitrobenzene	mg/kg-dry	T		-	-	-	<0.37 :	<0.37 :	<0.38 :
N-Nitrosodi-n-propylamine	mg/kg-dry	T		-	-	-	<0.37 :	<0.37 :	<0.38 :

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Appendix A-7e
Soil - Biased 0-24 inches
Validated Analytical Results

Parameter	Units	Exposure Area Fraction	Site ID / Sample Date / Sample ID					
			MSS5-17 10/24/2002 MSS5-17-T02N-SOL	MSS5-18 10/24/2002 MSS5-18-T02N-SOL	MSS5-19 10/24/2002 MSS5-19-T02N-SOL	MSS8-1 10/9/2002 MSS8-1-T02N-SOL	MSS8-10 10/27/2002 MSS8-10-T02N-SOL	MSS8-11 10/27/2002 MSS8-11-T02N-SOL
			SS5	SS5	SS5	SS8A	SS8A	SS8A
N-Nitrosodiphenylamine	mg/kg-dry	T	-	-	-	<0.37 :	<0.37 :	<0.38 :
Pentachlorophenol	mg/kg-dry	T	-	-	-	<0.94 J	<0.92 :	<0.94 :
Phenanthrene	mg/kg-dry	T	-	-	-	<0.37 :	<0.37 :	<0.38 :
Phenol	mg/kg-dry	T	-	-	-	<0.37 :	<0.37 :	<0.38 :
Pyrene	mg/kg-dry	T	-	-	-	<0.37 :	<0.37 :	<0.38 :
Explosives								
2,4,6-Trinitrotoluene	mg/kg-dry	T	-	-	-	<0.12 :	<0.12 :	<0.12 :
2,6-Pyridinediamine,	mg/kg-dry	T	-	-	-	<0.12 :	<0.12 :	<0.12 :
Cyclotetramethylenetetranitramine	mg/kg-dry	T	-	-	-	<0.12 :	<0.12 :	<0.12 :
Cyclotrimethylenetrinitramine	mg/kg-dry	T	-	-	-	<0.12 :	<0.12 :	<0.12 :
Pentaerythritol tetranitrate	mg/kg-dry	T	-	-	-	<5. :	<5. :	<5. :

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Appendix A-7e
Soil - Biased 0-24 inches
Validated Analytical Results

Parameter	Units	Exposure Area Fraction	Site ID / Sample Date / Sample ID		MSS8-12 10/27/2002 MSS8-12-T02N-SOL SS8A		MSS8-13 10/16/2002 MSS8-13-T02N-SOL SS8B		MSS8-14 10/16/2002 MSS8-14-T02N-SOL SS8B		MSS8-15 10/16/2002 MSS8-15-T02N-SOL SS8B		MSS8-16 10/10/2002 MSS8-16-T02N-SOL SS8C		MSS8-17 10/10/2002 MSS8-17-T02N-SOL SS8C	
General Chemistry																
Ammonia	mg/kg-dry	T			15.7	:	-		-		-		28.3	:	19.3	:
Chloride	mg/kg-dry	T			<34.	J	-		-		-		6.8	J	<2.2	J
Fluoride	mg/kg-dry	T			0.94	J	-		-		-		23.5	J	5.8	J
Nitrate	mg/kg-dry	T			1.7	J	-		-		-		<2.2	J	<2.2	J
Phosphorus	mg/kg-dry	T			869.	J	-		-		-		1250.	J	506.	J
Sulfate	mg/kg-dry	T			1100.	J	-		-		-		2150.	J	1480.	J
Total Kjeldahl Nitrogen	mg/kg-dry	T			76.	J	-		-		-		57.2	:	75.2	:
Total Organic Carbon	mg/kg-dry	T			1790.	J	-		-		-		<107.	J	42700.	J
Laboratory Parameters																
pH	SU	T			7.2	:	-		-		-		4.2	:	5.3	:
Solids, Percent	%	T			89.1	:	92.5	:	95.2	:	89.4	:	94.	:	92.6	:
Specific Conductance	umhos/cm	T			955.	J	-		-		-		885.	:	216.	:
Geotechnical																
Organic Soils	%	T			1.68	J	-		-		-		2.78	:	7.66	:
Physical Properties																
Cation-Exchange Capacity	meq/100g	T			18.1	:	-		-		-		10.4	:	4.2	:
Sodium Absorption Ratio	ratio	T			0.05	:	-		-		-		0.03	:	<0.02	:
Metals																
Aluminum	mg/kg-dry	T			-		-		-		-		8190.	:	5870.	:
Antimony	mg/kg-dry	T			-		-		-		-		<0.13	J	2.9	J
Arsenic	mg/kg-dry	T			-		-		-		-		3.4	:	186.	:
Barium	mg/kg-dry	T			-		-		-		-		65.9	:	31.1	:
Beryllium	mg/kg-dry	T			-		-		-		-		0.87	:	0.55	:
Boron	mg/kg-dry	T			-		-		-		-		<0.41	J	<43.9	J
Cadmium	mg/kg-dry	T			-		-		-		-		0.26	J	3.3	:
Calcium	mg/kg-dry	T			-		-		-		-		6840.	:	7180.	:
Chromium	mg/kg-dry	T			-		-		-		-		15.3	:	28.6	:
Cobalt	mg/kg-dry	T			-		-		-		-		10.5	:	<19.3	:
Copper	mg/kg-dry	T			-		-		-		-		283.	:	509.	:
Iron	mg/kg-dry	T			-		-		-		-		28700.	:	16100.	:
Lead	mg/kg-dry	T			-		-		-		-		367.	:	1520.	:
Magnesium	mg/kg-dry	T			-		-		-		-		4660.	:	3260.	:
Manganese	mg/kg-dry	T			-		-		-		-		605.	J	313.	J

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Appendix A-7e
Soil - Biased 0-24 inches
Validated Analytical Results

Parameter	Units	Exposure Area Fraction	Site ID	MSS8-12	MSS8-13	MSS8-14	MSS8-15	MSS8-16	MSS8-17
			Sample Date	10/27/2002	10/16/2002	10/16/2002	10/16/2002	10/10/2002	10/10/2002
			Sample ID	MSS8-12-T02N-SOL	MSS8-13-T02N-SOL	MSS8-14-T02N-SOL	MSS8-15-T02N-SOL	MSS8-16-T02N-SOL	MSS8-17-T02N-SOL
			Exposure Area	SS8A	SS8B	SS8B	SS8B	SS8C	SS8C
Mercury	mg/kg-dry	T		-	-	-	-	<0.017 :	0.17 :
Molybdenum	mg/kg-dry	T		-	-	-	-	1190. :	189000. :
Nickel	mg/kg-dry	T		-	-	-	-	22.3 J	15.9 J
Potassium	mg/kg-dry	T		-	-	-	-	3520. J	1650. J
Selenium	mg/kg-dry	T		-	-	-	-	1.5 J	22.1 J
Silver	mg/kg-dry	T		-	-	-	-	1.3 :	<16.7 :
Sodium	mg/kg-dry	T		-	-	-	-	76.3 :	<47.3 :
Thallium	mg/kg-dry	T		-	-	-	-	0.39 :	4. :
Vanadium	mg/kg-dry	T		-	-	-	-	38. :	2580. :
Zinc	mg/kg-dry	T		-	-	-	-	114. J	370. J
Volatile Organics									
1,1,1-Trichloroethane	mg/kg-dry	T		-	-	-	-	<0.005 :	<0.005 :
1,1,2,2-Tetrachloroethane	mg/kg-dry	T		-	-	-	-	<0.005 :	<0.005 :
1,1,2-Trichloro-1,2,2-trifluoroethane	mg/kg-dry	T		-	-	-	-	<0.005 :	<0.005 :
1,1,2-Trichloroethane	mg/kg-dry	T		-	-	-	-	<0.005 :	<0.005 :
1,1-Dichloroethane	mg/kg-dry	T		-	-	-	-	<0.005 :	<0.005 :
1,1-Dichloroethene	mg/kg-dry	T		-	-	-	-	<0.005 :	<0.005 :
1,2,4-Trichlorobenzene	mg/kg-dry	T		-	-	-	-	<0.005 :	<0.005 :
1,2-Dibromo-3-chloropropane	mg/kg-dry	T		-	-	-	-	<0.005 :	<0.005 :
1,2-Dichlorobenzene	mg/kg-dry	T		-	-	-	-	<0.005 :	<0.005 :
1,2-Dichloroethane	mg/kg-dry	T		-	-	-	-	<0.005 :	<0.005 :
1,2-Dichloroethene (total)	mg/kg-dry	T		-	-	-	-	<0.005 :	<0.005 :
1,2-Dichloropropane	mg/kg-dry	T		-	-	-	-	<0.005 :	<0.005 :
1,3-Dichlorobenzene	mg/kg-dry	T		-	-	-	-	<0.005 :	<0.005 :
1,4-Dichlorobenzene	mg/kg-dry	T		-	-	-	-	<0.005 :	<0.005 :
2-Butanone	mg/kg-dry	T		-	-	-	-	<0.005 :	0.005 J
2-Hexanone	mg/kg-dry	T		-	-	-	-	<0.005 :	<0.005 J
4-Methyl-2-pentanone	mg/kg-dry	T		-	-	-	-	<0.005 :	<0.005 J
Acetone	mg/kg-dry	T		-	-	-	-	<0.005 :	0.025 :
Benzene	mg/kg-dry	T		-	-	-	-	<0.005 :	<0.005 :
Bromodichloromethane	mg/kg-dry	T		-	-	-	-	<0.005 :	<0.005 :
Bromoform	mg/kg-dry	T		-	-	-	-	<0.005 :	<0.005 :
Bromomethane	mg/kg-dry	T		-	-	-	-	<0.005 :	<0.005 :
Carbon disulfide	mg/kg-dry	T		-	-	-	-	<0.005 :	0.0004 J

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Appendix A-7e
Soil - Biased 0-24 inches
Validated Analytical Results

Parameter	Units	Exposure Area Fraction	Site ID	Sample Date	Sample ID	MSS8-12 10/27/2002 MSS8-12-T02N-SOL SS8A	MSS8-13 10/16/2002 MSS8-13-T02N-SOL SS8B	MSS8-14 10/16/2002 MSS8-14-T02N-SOL SS8B	MSS8-15 10/16/2002 MSS8-15-T02N-SOL SS8B	MSS8-16 10/10/2002 MSS8-16-T02N-SOL SS8C	MSS8-17 10/10/2002 MSS8-17-T02N-SOL SS8C
Carbon tetrachloride	mg/kg-dry	T				-	-	-	-	<0.005 :	<0.005 :
Chlorobenzene	mg/kg-dry	T				-	-	-	-	<0.005 :	<0.005 :
Chloroethane	mg/kg-dry	T				-	-	-	-	<0.005 :	<0.005 :
Chloroform	mg/kg-dry	T				-	-	-	-	<0.005 :	<0.005 :
Chloromethane	mg/kg-dry	T				-	-	-	-	<0.005 :	<0.005 :
cis-1,2-Dichloroethene	mg/kg-dry	T				-	-	-	-	<0.005 :	<0.005 :
cis-1,3-Dichloropropene	mg/kg-dry	T				-	-	-	-	<0.005 :	<0.005 :
Dibromochloromethane	mg/kg-dry	T				-	-	-	-	<0.005 :	<0.005 :
Dichlorodifluoromethane	mg/kg-dry	T				-	-	-	-	<0.005 :	<0.005 J
Ethylbenzene	mg/kg-dry	T				-	-	-	-	<0.005 :	<0.005 :
Methylene chloride	mg/kg-dry	T				-	-	-	-	<0.005 :	<0.005 :
Styrene	mg/kg-dry	T				-	-	-	-	<0.005 :	<0.005 :
Tetrachloroethene	mg/kg-dry	T				-	-	-	-	<0.005 :	<0.005 :
Toluene	mg/kg-dry	T				-	-	-	-	<0.005 :	<0.005 :
Total Xylene	mg/kg-dry	T				-	-	-	-	<0.005 :	<0.005 :
trans-1,2-Dichloroethene	mg/kg-dry	T				-	-	-	-	<0.005 :	<0.005 :
trans-1,3-Dichloropropene	mg/kg-dry	T				-	-	-	-	<0.005 :	<0.005 :
Trichloroethene	mg/kg-dry	T				-	-	-	-	<0.005 :	<0.005 :
Trichlorofluoromethane	mg/kg-dry	T				-	-	-	-	<0.005 :	<0.005 J
Vinyl chloride	mg/kg-dry	T				-	-	-	-	<0.005 :	<0.005 J
Semi-Volatile Organics											
1,1`-Biphenyl	mg/kg-dry	T				<0.37 :	<0.36 :	1.4 J	<0.74 :	<0.35 :	<1.8 :
2,4,5-Trichlorophenol	mg/kg-dry	T				<0.93 :	<0.9 :	<4.4 :	<1.9 :	<0.88 :	<4.4 :
2,4,6-Trichlorophenol	mg/kg-dry	T				<0.37 :	<0.36 :	<1.7 :	<0.74 :	<0.35 :	<1.8 :
2,4-Dichlorophenol	mg/kg-dry	T				<0.37 :	<0.36 :	<1.7 :	<0.74 :	<0.35 :	<1.8 :
2,4-Dimethylphenol	mg/kg-dry	T				<0.37 :	<0.36 :	<1.7 :	<0.74 :	<0.35 :	<1.8 :
2,4-Dinitrophenol	mg/kg-dry	T				<0.93 J	<0.9 J	<4.4 :	<1.9 :	<0.88 J	<4.4 J
2,4-Dinitrotoluene	mg/kg-dry	T				<0.37 :	<0.36 :	<1.7 :	<0.74 :	<0.35 :	<1.8 :
2,6-Dinitrotoluene	mg/kg-dry	T				<0.37 :	<0.36 :	<1.7 :	<0.74 :	<0.35 :	<1.8 :
2-Chloronaphthalene	mg/kg-dry	T				<0.37 :	<0.36 :	<1.7 :	<0.74 :	<0.35 :	<1.8 :
2-Chlorophenol	mg/kg-dry	T				<0.37 :	<0.36 :	<1.7 :	<0.74 :	<0.35 :	<1.8 :
2-Methylnaphthalene	mg/kg-dry	T				<0.37 :	<0.36 :	12. :	<0.74 :	<0.35 :	<1.8 :
2-Methylphenol	mg/kg-dry	T				<0.37 :	<0.36 :	<1.7 :	<0.74 :	<0.35 :	<1.8 :
2-Nitroaniline	mg/kg-dry	T				<0.93 :	<0.9 :	<4.4 :	<1.9 :	<0.88 :	<4.4 :

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Appendix A-7e
Soil - Biased 0-24 inches
Validated Analytical Results

Parameter	Units	Fraction	Site ID	MSS8-12	MSS8-13	MSS8-14	MSS8-15	MSS8-16	MSS8-17
			Sample Date	10/27/2002	10/16/2002	10/16/2002	10/16/2002	10/10/2002	10/10/2002
			Sample ID	MSS8-12-T02N-SOL	MSS8-13-T02N-SOL	MSS8-14-T02N-SOL	MSS8-15-T02N-SOL	MSS8-16-T02N-SOL	MSS8-17-T02N-SOL
			Exposure Area	SS8A	SS8B	SS8B	SS8B	SS8C	SS8C
2-Nitrophenol	mg/kg-dry	T		<0.37 :	<0.36 :	<1.7 :	<0.74 :	<0.35 :	<1.8 :
3,3-Dichlorobenzidine	mg/kg-dry	T		<0.37 :	<0.36 :	<1.7 :	<0.74 :	<0.35 :	<1.8 :
3-Nitroaniline	mg/kg-dry	T		<0.93 :	<0.9 :	<4.4 :	<1.9 :	<0.88 :	<4.4 :
4,6-Dinitro-2-methylphenol	mg/kg-dry	T		<0.93 :	<0.9 :	<4.4 :	<1.9 :	<0.88 :	<4.4 J
4-Bromophenyl phenyl ether	mg/kg-dry	T		<0.37 :	<0.36 :	<1.7 :	<0.74 :	<0.35 :	<1.8 J
4-Chloro-3-methylphenol	mg/kg-dry	T		<0.37 :	<0.36 :	<1.7 :	<0.74 :	<0.35 :	<1.8 :
4-Chloroaniline	mg/kg-dry	T		<0.37 :	<0.36 :	<1.7 :	<0.74 :	<0.35 :	<1.8 :
4-Chlorophenyl phenyl ether	mg/kg-dry	T		<0.37 :	<0.36 :	<1.7 :	<0.74 :	<0.35 :	<1.8 :
4-Methylphenol	mg/kg-dry	T		<0.37 :	<0.36 :	<1.7 :	<0.74 :	<0.35 :	<1.8 :
4-Nitroaniline	mg/kg-dry	T		<0.93 :	<0.9 :	<4.4 :	<1.9 :	<0.88 :	<4.4 :
4-Nitrophenol	mg/kg-dry	T		<0.93 J	<0.9 :	<4.4 :	<1.9 :	<0.88 J	<4.4 :
Acenaphthene	mg/kg-dry	T		<0.37 :	<0.36 :	1.6 J	<0.74 :	<0.35 :	<1.8 :
Acenaphthylene	mg/kg-dry	T		<0.37 :	<0.36 :	<1.7 :	<0.74 :	<0.35 :	<1.8 :
Anthracene	mg/kg-dry	T		<0.37 :	<0.36 J	<1.7 J	<0.74 J	<0.35 :	<1.8 J
Benzaldehyde	mg/kg-dry	T		<0.37 :	<0.36 J	<1.7 J	<0.74 J	<0.35 :	<1.8 J
Benzo(a)anthracene	mg/kg-dry	T		<0.37 :	<0.36 :	<1.7 :	<0.74 :	<0.35 :	<1.8 :
Benzo(a)pyrene	mg/kg-dry	T		<0.37 :	<0.36 :	<1.7 :	<0.74 :	<0.35 :	<1.8 :
Benzo(b)fluoranthene	mg/kg-dry	T		<0.37 :	<0.36 :	<1.7 :	<0.74 :	<0.35 :	<1.8 :
Benzo(g,h,i)perylene	mg/kg-dry	T		<0.37 :	<0.36 :	<1.7 :	<0.74 :	<0.35 :	<1.8 :
Benzo(k)fluoranthene	mg/kg-dry	T		<0.37 :	<0.36 :	<1.7 J	<0.74 J	<0.35 J	<1.8 :
Bis(2-chloroethoxy)methane	mg/kg-dry	T		<0.37 :	<0.36 :	<1.7 :	<0.74 :	<0.35 :	<1.8 :
Bis(2-chloroethyl)ether	mg/kg-dry	T		<0.37 :	<0.36 :	<1.7 :	<0.74 :	<0.35 :	<1.8 :
Bis(2-ethylhexyl)phthalate	mg/kg-dry	T		0.018 J	<0.36 :	0.26 J	<0.74 :	<0.35 :	0.57 J
Butyl benzyl phthalate	mg/kg-dry	T		<0.37 :	<0.36 :	<1.7 :	<0.74 :	<0.35 :	<1.8 :
Carbazole	mg/kg-dry	T		<0.37 :	<0.36 :	<1.7 :	<0.74 :	<0.35 :	<1.8 J
Chrysene	mg/kg-dry	T		<0.37 :	<0.36 :	0.35 J	<0.74 :	<0.35 :	<1.8 :
Dibenz(a,h)anthracene	mg/kg-dry	T		<0.37 :	<0.36 :	<1.7 :	<0.74 :	<0.35 :	<1.8 :
Dibenzofuran	mg/kg-dry	T		<0.37 :	<0.36 :	1.1 J	<0.74 :	<0.35 :	<1.8 :
Dichlorodiisopropyl ether	mg/kg-dry	T		<0.37 :	<0.36 :	<1.7 :	<0.74 :	<0.35 :	<1.8 :
Diethylphthalate	mg/kg-dry	T		<0.37 :	<0.36 :	<1.7 :	<0.74 :	<0.35 :	<1.8 :
Dimethylphthalate	mg/kg-dry	T		<0.37 :	<0.36 :	<1.7 :	<0.74 :	<0.35 :	<1.8 :
Di-n-Butyl phthalate	mg/kg-dry	T		<0.37 :	<0.36 :	<1.7 :	<0.74 :	<0.35 :	<1.8 J
Di-n-Octyl phthalate	mg/kg-dry	T		<0.37 :	<0.36 :	<1.7 :	<0.74 :	<0.35 :	<1.8 :
Fluoranthene	mg/kg-dry	T		<0.37 :	<0.36 :	0.22 J	<0.74 :	<0.35 :	<1.8 J

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T = Total Fraction

Appendix A-7e
Soil - Biased 0-24 inches
Validated Analytical Results

Parameter	Units	Fraction	Site ID	Sample Date	Sample ID	Exposure Area
			MSS8-12	10/27/2002	MSS8-12-T02N-SOL	SS8A
			MSS8-13	10/16/2002	MSS8-13-T02N-SOL	SS8B
			MSS8-14	10/16/2002	MSS8-14-T02N-SOL	SS8B
			MSS8-15	10/16/2002	MSS8-15-T02N-SOL	SS8B
			MSS8-16	10/10/2002	MSS8-16-T02N-SOL	SS8C
			MSS8-17	10/10/2002	MSS8-17-T02N-SOL	SS8C
Fluorene	mg/kg-dry	T	<0.37 :	<0.36 :	3.2 :	<0.74 :	<0.35 :	<1.8 :
Hexachlorobenzene	mg/kg-dry	T	<0.37 :	<0.36 :	<1.7 :	<0.74 :	<0.35 :	<1.8 J
Hexachlorobutadiene	mg/kg-dry	T	<0.37 :	<0.36 :	<1.7 :	<0.74 :	<0.35 :	<1.8 :
Hexachlorocyclopentadiene	mg/kg-dry	T	<0.37 J	<0.36 :	<1.7 :	<0.74 :	<0.35 :	<1.8 :
Hexachloroethane	mg/kg-dry	T	<0.37 :	<0.36 :	<1.7 :	<0.74 :	<0.35 :	<1.8 :
Indeno(1,2,3-cd)pyrene	mg/kg-dry	T	<0.37 :	<0.36 :	<1.7 :	<0.74 :	<0.35 :	<1.8 :
Isophorone	mg/kg-dry	T	<0.37 :	<0.36 :	<1.7 :	<0.74 :	<0.35 :	<1.8 :
Naphthalene	mg/kg-dry	T	<0.37 :	<0.36 :	2.8 :	<0.74 :	<0.35 :	<1.8 :
Nitrobenzene	mg/kg-dry	T	<0.37 :	<0.36 :	<1.7 :	<0.74 :	<0.35 :	<1.8 :
N-Nitrosodi-n-propylamine	mg/kg-dry	T	<0.37 :	<0.36 :	<1.7 :	<0.74 :	<0.35 :	<1.8 :
N-Nitrosodiphenylamine	mg/kg-dry	T	<0.37 :	<0.36 :	<1.7 :	<0.74 :	<0.35 :	<1.8 J
Pentachlorophenol	mg/kg-dry	T	<0.93 :	<0.9 J	<4.4 J	<1.9 J	<0.88 J	<4.4 J
Phenanthrene	mg/kg-dry	T	<0.37 :	<0.36 :	7.6 :	<0.74 :	<0.35 :	<1.8 J
Phenol	mg/kg-dry	T	<0.37 :	<0.36 :	<1.7 :	<0.74 :	<0.35 :	<1.8 :
Pyrene	mg/kg-dry	T	<0.37 :	<0.36 :	1.1 J	<0.74 :	<0.35 :	0.39 J
Explosives								
2,4,6-Trinitrotoluene	mg/kg-dry	T	<0.12 :	-	-	-	-	-
2,6-Pyridinediamine,	mg/kg-dry	T	<0.12 :	-	-	-	-	-
Cyclotetramethylenetetranitramine	mg/kg-dry	T	<0.12 :	-	-	-	-	-
Cyclotrimethylenetrinitramine	mg/kg-dry	T	<0.12 :	-	-	-	-	-
Pentaerythritol tetranitrate	mg/kg-dry	T	<5. :	-	-	-	-	-

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Appendix A-7e
Soil - Biased 0-24 inches
Validated Analytical Results

Parameter	Units	Exposure Area Fraction	Site ID / Sample Date / Sample ID		MSS8-18 10/15/2002 MSS8-18-T02N-SOL SS8C		MSS8-19 10/15/2002 MSS8-19-T02N-SOL SS8C		MSS8-2 10/9/2002 MSS8-2-T02N-SOL SS8A		MSS8-20 10/15/2002 MSS8-20-T02N-SOL SS8C		MSS8-21 10/15/2002 MSS8-21-T02N-SOL SS8C		MSS8-28 10/17/2002 MSS8-28-T02N-SOL SS8D	
General Chemistry																
Ammonia	mg/kg-dry	T			23.4	:	33.1	:	<15.3	:	22.6	:	20.3	:	27.2	:
Chloride	mg/kg-dry	T			6.6	J	5.7	J	<2.2	J	3.6	J	4.8	J	4.	J
Fluoride	mg/kg-dry	T			0.94	J	2.	J	0.17	J	0.41	J	1.4	J	3.1	J
Nitrate	mg/kg-dry	T			<2.2	J	7.6	J	<2.2	J	<2.3	J	2.7	J	<2.1	J
Phosphorus	mg/kg-dry	T			2560.	:	1930.	:	1420.	J	971.	J	804.	J	86.5	J
Sulfate	mg/kg-dry	T			1860.	J	2720.	J	3.3	J	30.	J	132.	J	1870.	J
Total Kjeldahl Nitrogen	mg/kg-dry	T			88.9	:	87.8	:	208.	:	61.4	:	491.	:	85.7	:
Total Organic Carbon	mg/kg-dry	T			1430.	:	1350.	:	1900.	J	5300.	J	13900.	J	5420.	J
Laboratory Parameters																
pH	SU	T			6.9	:	7.1	:	6.3	:	7.5	:	6.7	:	5.3	:
Solids, Percent	%	T			91.9	:	92.9	:	93.4	:	90.7	:	80.5	:	96.9	:
Specific Conductance	umhos/cm	T			756.	:	685.	:	17.4	:	33.1	:	252.	:	411.	:
Geotechnical																
Organic Soils	%	T			3.01	J	2.71	J	-		3.04	J	3.54	J	2.9	J
Physical Properties																
Cation-Exchange Capacity	meq/100g	T			14.8	:	15.2	:	15.	:	11.	:	16.9	:	24.	:
Sodium Absorption Ratio	ratio	T			0.1	:	0.31	:	<0.12	:	0.04	:	0.07	:	0.06	:
Metals																
Aluminum	mg/kg-dry	T			9600.	:	8220.	:	-		19400.	:	20000.	:	15900.	:
Antimony	mg/kg-dry	T			<0.17	:	<0.15	:	-		<0.26	J	<0.3	J	<0.79	J
Arsenic	mg/kg-dry	T			2.9	:	2.4	:	-		1.7	:	4.5	:	4.1	:
Barium	mg/kg-dry	T			121.	:	69.7	:	-		208.	:	135.	:	257.	:
Beryllium	mg/kg-dry	T			0.89	:	1.3	:	-		1.1	:	1.2	:	1.1	:
Boron	mg/kg-dry	T			7.	J	5.5	J	-		2.4	J	4.9	J	<0.4	J
Cadmium	mg/kg-dry	T			0.96	J	0.7	J	-		0.03	:	<0.03	:	0.088	J
Calcium	mg/kg-dry	T			8690.	:	8540.	:	-		17300.	:	3340.	:	17300.	:
Chromium	mg/kg-dry	T			26.6	:	21.	:	-		92.1	:	47.2	:	62.9	:
Cobalt	mg/kg-dry	T			4.9	:	2.6	:	-		19.1	:	13.1	:	20.5	:
Copper	mg/kg-dry	T			81.9	:	64.	:	-		306.	:	42.8	:	157.	:
Iron	mg/kg-dry	T			42300.	:	30000.	:	-		34500.	:	27200.	:	45900.	:
Lead	mg/kg-dry	T			112.	:	92.6	:	-		34.	:	63.9	:	2860.	:
Magnesium	mg/kg-dry	T			4920.	:	3700.	:	-		18600.	:	7220.	:	11600.	:
Manganese	mg/kg-dry	T			552.	:	442.	:	-		593.	J	641.	J	739.	J

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Appendix A-7e
Soil - Biased 0-24 inches
Validated Analytical Results

Parameter	Units	Exposure Area Fraction	Site ID / Sample Date / Sample ID		MSS8-18 10/15/2002 MSS8-18-T02N-SOL SS8C		MSS8-19 10/15/2002 MSS8-19-T02N-SOL SS8C		MSS8-2 10/9/2002 MSS8-2-T02N-SOL SS8A		MSS8-20 10/15/2002 MSS8-20-T02N-SOL SS8C		MSS8-21 10/15/2002 MSS8-21-T02N-SOL SS8C		MSS8-28 10/17/2002 MSS8-28-T02N-SOL SS8D	
Mercury	mg/kg-dry	T		<0.017	J	<0.017	J	-		<0.018	:	<0.021	:	<0.017	:
Molybdenum	mg/kg-dry	T		340.	:	379.	:	-		442.	:	25.1	:	92.1	:
Nickel	mg/kg-dry	T		15.6	:	11.2	:	-		44.3	J	29.8	J	45.	J
Potassium	mg/kg-dry	T		3340.	:	3120.	:	-		8640.	J	5520.	J	4700.	J
Selenium	mg/kg-dry	T		1.3	:	0.9	J	-		1.8	J	<0.8	J	1.2	:
Silver	mg/kg-dry	T		1.7	:	1.2	:	-		0.42	:	0.24	:	0.89	:
Sodium	mg/kg-dry	T		649.	:	611.	:	-		<48.7	:	<53.1	:	153.	:
Thallium	mg/kg-dry	T		0.37	:	0.36	:	-		1.6	:	0.27	:	0.6	:
Vanadium	mg/kg-dry	T		32.1	:	24.9	:	-		72.2	:	48.5	:	46.3	:
Zinc	mg/kg-dry	T		82.5	:	73.2	:	-		59.6	J	94.1	J	130.	:
Volatile Organics															
1,1,1-Trichloroethane	mg/kg-dry	T		<0.007	:	<0.013	:	-		<0.007	:	<0.01	:	-	
1,1,2,2-Tetrachloroethane	mg/kg-dry	T		<0.007	:	<0.013	:	-		<0.007	:	<0.01	:	-	
1,1,2-Trichloro-1,2,2-trifluoroethane	mg/kg-dry	T		<0.007	:	<0.013	:	-		<0.007	:	<0.01	:	-	
1,1,2-Trichloroethane	mg/kg-dry	T		<0.007	:	<0.013	:	-		<0.007	:	<0.01	:	-	
1,1-Dichloroethane	mg/kg-dry	T		<0.007	:	<0.013	:	-		<0.007	:	<0.01	:	-	
1,1-Dichloroethene	mg/kg-dry	T		<0.007	:	<0.013	:	-		<0.007	:	<0.01	:	-	
1,2,4-Trichlorobenzene	mg/kg-dry	T		<0.007	:	<0.013	:	-		<0.007	:	<0.01	:	-	
1,2-Dibromo-3-chloropropane	mg/kg-dry	T		<0.007	:	<0.013	:	-		<0.007	:	<0.01	:	-	
1,2-Dichlorobenzene	mg/kg-dry	T		<0.007	:	<0.013	:	-		<0.007	:	<0.01	:	-	
1,2-Dichloroethane	mg/kg-dry	T		<0.007	:	<0.013	:	-		<0.007	:	<0.01	:	-	
1,2-Dichloroethene (total)	mg/kg-dry	T		<0.007	:	<0.013	:	-		<0.007	:	<0.01	:	-	
1,2-Dichloropropane	mg/kg-dry	T		<0.007	:	<0.013	:	-		<0.007	:	<0.01	:	-	
1,3-Dichlorobenzene	mg/kg-dry	T		<0.007	:	<0.013	:	-		<0.007	:	<0.01	:	-	
1,4-Dichlorobenzene	mg/kg-dry	T		<0.007	:	<0.013	:	-		<0.007	:	<0.01	:	-	
2-Butanone	mg/kg-dry	T		<0.007	:	<0.013	:	-		<0.007	:	0.003	J	-	
2-Hexanone	mg/kg-dry	T		<0.007	J	<0.013	J	-		<0.007	:	<0.01	J	-	
4-Methyl-2-pentanone	mg/kg-dry	T		<0.007	:	<0.013	:	-		<0.007	:	<0.01	:	-	
Acetone	mg/kg-dry	T		0.001	J	0.004	J	-		<0.007	:	0.028	:	-	
Benzene	mg/kg-dry	T		<0.007	:	<0.013	:	-		<0.007	:	<0.01	:	-	
Bromodichloromethane	mg/kg-dry	T		<0.007	:	<0.013	:	-		<0.007	:	<0.01	:	-	
Bromoform	mg/kg-dry	T		<0.007	:	<0.013	:	-		<0.007	:	<0.01	:	-	
Bromomethane	mg/kg-dry	T		<0.007	:	<0.013	:	-		<0.007	:	<0.01	:	-	
Carbon disulfide	mg/kg-dry	T		<0.007	:	<0.013	:	-		<0.007	:	<0.01	:	-	

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Appendix A-7e
Soil - Biased 0-24 inches
Validated Analytical Results

Parameter	Units	Fraction	Site ID	MSS8-18		MSS8-19		MSS8-2		MSS8-20		MSS8-21		MSS8-28	
			Sample Date	10/15/2002		10/15/2002		10/9/2002		10/15/2002		10/15/2002		10/17/2002	
			Sample ID	MSS8-18-T02N-SOL		MSS8-19-T02N-SOL		MSS8-2-T02N-SOL		MSS8-20-T02N-SOL		MSS8-21-T02N-SOL		MSS8-28-T02N-SOL	
			Exposure Area	SS8C		SS8C		SS8A		SS8C		SS8C		SS8D	
Carbon tetrachloride	mg/kg-dry	T		0.0008	J	0.002	J	-		<0.007	:	<0.01	:	-	
Chlorobenzene	mg/kg-dry	T		<0.007	:	<0.013	:	-		<0.007	:	<0.01	:	-	
Chloroethane	mg/kg-dry	T		<0.007	:	<0.013	:	-		<0.007	:	<0.01	:	-	
Chloroform	mg/kg-dry	T		<0.007	:	<0.013	:	-		<0.007	:	<0.01	:	-	
Chloromethane	mg/kg-dry	T		<0.007	:	<0.013	:	-		<0.007	:	<0.01	:	-	
cis-1,2-Dichloroethene	mg/kg-dry	T		<0.007	:	<0.013	:	-		<0.007	:	<0.01	:	-	
cis-1,3-Dichloropropene	mg/kg-dry	T		<0.007	:	<0.013	:	-		<0.007	:	<0.01	:	-	
Dibromochloromethane	mg/kg-dry	T		<0.007	:	<0.013	:	-		<0.007	:	<0.01	:	-	
Dichlorodifluoromethane	mg/kg-dry	T		<0.007	:	<0.013	:	-		<0.007	:	<0.01	:	-	
Ethylbenzene	mg/kg-dry	T		<0.007	:	<0.013	:	-		<0.007	:	<0.01	:	-	
Methylene chloride	mg/kg-dry	T		<0.007	:	<0.013	:	-		<0.007	:	<0.01	:	-	
Styrene	mg/kg-dry	T		<0.007	:	<0.013	:	-		<0.007	:	<0.01	:	-	
Tetrachloroethene	mg/kg-dry	T		<0.007	:	<0.013	:	-		<0.007	:	<0.01	:	-	
Toluene	mg/kg-dry	T		<0.007	:	<0.013	J	-		<0.007	:	<0.01	:	-	
Total Xylene	mg/kg-dry	T		<0.007	:	<0.013	:	-		<0.007	:	<0.01	:	-	
trans-1,2-Dichloroethene	mg/kg-dry	T		<0.007	:	<0.013	:	-		<0.007	:	<0.01	:	-	
trans-1,3-Dichloropropene	mg/kg-dry	T		<0.007	:	<0.013	:	-		<0.007	:	<0.01	:	-	
Trichloroethene	mg/kg-dry	T		<0.007	:	<0.013	:	-		<0.007	:	<0.01	:	-	
Trichlorofluoromethane	mg/kg-dry	T		0.002	J	0.008	J	-		<0.007	:	<0.01	:	-	
Vinyl chloride	mg/kg-dry	T		<0.007	:	<0.013	:	-		<0.007	:	<0.01	:	-	
Semi-Volatile Organics															
1,1`-Biphenyl	mg/kg-dry	T		<0.36	:	<0.35	:	<0.35	:	<0.72	:	<0.41	:	<0.68	:
2,4,5-Trichlorophenol	mg/kg-dry	T		<0.9	:	<0.89	:	<0.89	:	<1.8	:	<1.	:	<1.7	:
2,4,6-Trichlorophenol	mg/kg-dry	T		<0.36	:	<0.35	:	<0.35	:	<0.72	:	<0.41	:	<0.68	:
2,4-Dichlorophenol	mg/kg-dry	T		<0.36	:	<0.35	:	<0.35	:	<0.72	:	<0.41	:	<0.68	:
2,4-Dimethylphenol	mg/kg-dry	T		<0.36	:	<0.35	:	<0.35	:	<0.72	:	<0.41	:	<0.68	:
2,4-Dinitrophenol	mg/kg-dry	T		<0.9	:	<0.89	:	<0.89	J	<1.8	:	<1.	:	<1.7	:
2,4-Dinitrotoluene	mg/kg-dry	T		<0.36	:	<0.35	:	<0.35	:	<0.72	:	<0.41	:	<0.68	:
2,6-Dinitrotoluene	mg/kg-dry	T		<0.36	:	<0.35	:	<0.35	:	<0.72	:	<0.41	:	<0.68	:
2-Chloronaphthalene	mg/kg-dry	T		<0.36	:	<0.35	:	<0.35	:	<0.72	:	<0.41	:	<0.68	:
2-Chlorophenol	mg/kg-dry	T		<0.36	:	<0.35	:	<0.35	:	<0.72	:	<0.41	:	<0.68	:
2-Methylnaphthalene	mg/kg-dry	T		<0.36	:	<0.35	:	<0.35	:	<0.72	:	<0.41	:	<0.68	:
2-Methylphenol	mg/kg-dry	T		<0.36	:	<0.35	:	<0.35	:	<0.72	:	<0.41	:	<0.68	:
2-Nitroaniline	mg/kg-dry	T		<0.9	:	<0.89	:	<0.89	:	<1.8	:	<1.	:	<1.7	:

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T = Total Fraction

Appendix A-7e
Soil - Biased 0-24 inches
Validated Analytical Results

Parameter	Units	Exposure Area Fraction	Site ID / Sample Date / Sample ID		MSS8-18 10/15/2002 MSS8-18-T02N-SOL SS8C		MSS8-19 10/15/2002 MSS8-19-T02N-SOL SS8C		MSS8-2 10/9/2002 MSS8-2-T02N-SOL SS8A		MSS8-20 10/15/2002 MSS8-20-T02N-SOL SS8C		MSS8-21 10/15/2002 MSS8-21-T02N-SOL SS8C		MSS8-28 10/17/2002 MSS8-28-T02N-SOL SS8D	
2-Nitrophenol	mg/kg-dry	T			<0.36	:	<0.35	:	<0.35	:	<0.72	:	<0.41	:	<0.68	:
3,3-Dichlorobenzidine	mg/kg-dry	T			<0.36	:	<0.35	:	<0.35	:	<0.72	:	<0.41	:	<0.68	:
3-Nitroaniline	mg/kg-dry	T			<0.9	:	<0.89	:	<0.89	:	<1.8	:	<1.	:	<1.7	:
4,6-Dinitro-2-methylphenol	mg/kg-dry	T			<0.9	:	<0.89	:	<0.89	:	<1.8	J	<1.	:	<1.7	:
4-Bromophenyl phenyl ether	mg/kg-dry	T			<0.36	:	<0.35	:	<0.35	:	<0.72	:	<0.41	:	<0.68	:
4-Chloro-3-methylphenol	mg/kg-dry	T			<0.36	:	<0.35	:	<0.35	:	<0.72	:	<0.41	:	<0.68	:
4-Chloroaniline	mg/kg-dry	T			<0.36	:	<0.35	:	<0.35	:	<0.72	:	<0.41	:	<0.68	:
4-Chlorophenyl phenyl ether	mg/kg-dry	T			<0.36	:	<0.35	:	<0.35	:	<0.72	:	<0.41	:	<0.68	:
4-Methylphenol	mg/kg-dry	T			<0.36	:	<0.35	:	<0.35	:	<0.72	:	<0.41	:	<0.68	:
4-Nitroaniline	mg/kg-dry	T			<0.9	:	<0.89	:	<0.89	:	<1.8	:	<1.	:	<1.7	:
4-Nitrophenol	mg/kg-dry	T			<0.9	:	<0.89	:	<0.89	:	<1.8	:	<1.	J	<1.7	:
Acenaphthene	mg/kg-dry	T			<0.36	:	<0.35	:	<0.35	:	<0.72	:	<0.41	:	<0.68	:
Acenaphthylene	mg/kg-dry	T			<0.36	:	<0.35	:	<0.35	:	<0.72	:	<0.41	:	<0.68	:
Anthracene	mg/kg-dry	T			<0.36	J	<0.35	J	<0.35	J	<0.72	J	<0.41	J	<0.68	:
Benzaldehyde	mg/kg-dry	T			<0.36	J	<0.35	J	<0.35	J	<0.72	J	<0.41	J	<0.68	:
Benzo(a)anthracene	mg/kg-dry	T			<0.36	:	<0.35	:	<0.35	:	<0.72	:	<0.41	:	<0.68	:
Benzo(a)pyrene	mg/kg-dry	T			<0.36	:	<0.35	:	<0.35	:	<0.72	:	<0.41	:	<0.68	:
Benzo(b)fluoranthene	mg/kg-dry	T			<0.36	:	<0.35	:	<0.35	:	<0.72	:	<0.41	:	<0.68	:
Benzo(g,h,i)perylene	mg/kg-dry	T			<0.36	:	<0.35	:	<0.35	:	<0.72	:	<0.41	:	<0.68	:
Benzo(k)fluoranthene	mg/kg-dry	T			<0.36	:	<0.35	:	<0.35	:	<0.72	J	<0.41	:	<0.68	:
Bis(2-chloroethoxy)methane	mg/kg-dry	T			<0.36	:	<0.35	:	<0.35	:	<0.72	:	<0.41	:	<0.68	:
Bis(2-chloroethyl)ether	mg/kg-dry	T			<0.36	:	<0.35	:	<0.35	:	<0.72	:	<0.41	:	<0.68	:
Bis(2-ethylhexyl)phthalate	mg/kg-dry	T			<0.36	:	<0.35	:	<0.35	:	<0.72	:	0.11	J	<0.68	:
Butyl benzyl phthalate	mg/kg-dry	T			<0.36	:	<0.35	:	<0.35	:	<0.72	:	<0.41	:	<0.68	:
Carbazole	mg/kg-dry	T			<0.36	:	<0.35	:	<0.35	:	<0.72	:	<0.41	:	<0.68	:
Chrysene	mg/kg-dry	T			<0.36	:	<0.35	:	<0.35	:	<0.72	:	0.06	J	0.053	J
Dibenz(a,h)anthracene	mg/kg-dry	T			<0.36	:	<0.35	:	<0.35	:	<0.72	J	<0.41	:	<0.68	:
Dibenzofuran	mg/kg-dry	T			<0.36	:	<0.35	:	<0.35	:	<0.72	:	<0.41	:	<0.68	:
Dichlorodiisopropyl ether	mg/kg-dry	T			<0.36	:	<0.35	:	<0.35	:	<0.72	:	<0.41	:	<0.68	:
Diethylphthalate	mg/kg-dry	T			<0.36	:	<0.35	:	<0.35	:	<0.72	:	<0.41	:	<0.68	:
Dimethylphthalate	mg/kg-dry	T			<0.36	:	<0.35	:	<0.35	:	<0.72	:	<0.41	:	<0.68	:
Di-n-Butyl phthalate	mg/kg-dry	T			<0.36	:	<0.35	:	<0.35	:	<0.72	:	<0.41	:	<0.68	:
Di-n-Octyl phthalate	mg/kg-dry	T			<0.36	:	<0.35	:	<0.35	:	<0.72	:	<0.41	:	<0.68	:
Fluoranthene	mg/kg-dry	T			<0.36	:	<0.35	:	<0.35	:	<0.72	:	<0.41	:	0.084	J

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Appendix A-7e
Soil - Biased 0-24 inches
Validated Analytical Results

Parameter	Units	Exposure Area Fraction	Site ID / Sample Date / Sample ID													
			MSS8-18	10/15/2002	MSS8-18-T02N-SOL	MSS8-19	10/15/2002	MSS8-19-T02N-SOL	MSS8-2	10/9/2002	MSS8-2-T02N-SOL	MSS8-20	10/15/2002	MSS8-20-T02N-SOL	MSS8-21	10/15/2002	MSS8-21-T02N-SOL	MSS8-28	10/17/2002	MSS8-28-T02N-SOL
			SS8C			SS8C			SS8A			SS8C			SS8C			SS8D		
Fluorene	mg/kg-dry	T	<0.36	:		<0.35	:		<0.35	:		<0.72	:		<0.41	:		<0.68	:	
Hexachlorobenzene	mg/kg-dry	T	<0.36	:		<0.35	:		<0.35	:		<0.72	:		<0.41	:		<0.68	:	
Hexachlorobutadiene	mg/kg-dry	T	<0.36	:		<0.35	:		<0.35	:		<0.72	:		<0.41	:		<0.68	:	
Hexachlorocyclopentadiene	mg/kg-dry	T	<0.36	:		<0.35	:		<0.35	:		<0.72	:		<0.41	:		<0.68	:	
Hexachloroethane	mg/kg-dry	T	<0.36	:		<0.35	:		<0.35	:		<0.72	:		<0.41	:		<0.68	:	
Indeno(1,2,3-cd)pyrene	mg/kg-dry	T	<0.36	:		<0.35	:		<0.35	:		<0.72	:		<0.41	:		<0.68	:	
Isophorone	mg/kg-dry	T	<0.36	:		<0.35	:		<0.35	:		<0.72	:		<0.41	:		<0.68	:	
Naphthalene	mg/kg-dry	T	<0.36	:		<0.35	:		<0.35	:		<0.72	:		<0.41	:		<0.68	:	
Nitrobenzene	mg/kg-dry	T	<0.36	:		<0.35	:		<0.35	:		<0.72	:		<0.41	:		<0.68	:	
N-Nitrosodi-n-propylamine	mg/kg-dry	T	<0.36	:		<0.35	:		<0.35	:		<0.72	:		<0.41	:		<0.68	:	
N-Nitrosodiphenylamine	mg/kg-dry	T	<0.36	:		<0.35	:		<0.35	:		<0.72	:		<0.41	:		<0.68	:	
Pentachlorophenol	mg/kg-dry	T	<0.9	J		<0.89	J		<0.89	J		<1.8	J		<1.	:		<1.7	:	
Phenanthrene	mg/kg-dry	T	<0.36	:		<0.35	:		<0.35	:		<0.72	:		<0.41	:		0.048	J	
Phenol	mg/kg-dry	T	<0.36	:		<0.35	:		<0.35	:		<0.72	:		<0.41	:		<0.68	:	
Pyrene	mg/kg-dry	T	<0.36	:		<0.35	:		<0.35	:		<0.72	:		0.17	J		0.05	J	
Explosives																				
2,4,6-Trinitrotoluene	mg/kg-dry	T	-			-			<0.12	:		-			-			-		
2,6-Pyridinediamine,	mg/kg-dry	T	-			-			<0.12	:		-			-			-		
Cyclotetramethylenetetranitramine	mg/kg-dry	T	-			-			<0.12	:		-			-			-		
Cyclotrimethylenetrinitramine	mg/kg-dry	T	-			-			<0.12	:		-			-			-		
Pentaerythritol tetranitrate	mg/kg-dry	T	-			-			<5.	:		-			-			-		

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Appendix A-7e
Soil - Biased 0-24 inches
Validated Analytical Results

Parameter	Units	Exposure Area Fraction	Site ID / Sample Date / Sample ID					
			MSS8-28 10/23/2002 MSS8-28-T02N-SOL	MSS8-29 10/17/2002 MSS8-29-T02N-SOL RE	MSS8-29 10/17/2002 MSS8-29-T02N-SOL	MSS8-29 10/23/2002 MSS8-29-T02N-SOL	MSS8-3 10/9/2002 MSS8-3-T02N-SOL	MSS8-30 10/23/2002 MSS8-30-T02N-SOL
			SS8D	SS8D	SS8D	SS8D	SS8A	SS8D
General Chemistry								
Ammonia	mg/kg-dry	T	-	-	18.5 J	-	<18.1 :	21.7 :
Chloride	mg/kg-dry	T	-	-	6.1 J	-	<2.2 J	<27.5 :
Fluoride	mg/kg-dry	T	-	-	1.5 J	-	0.82 J	0.34 J
Nitrate	mg/kg-dry	T	-	-	<2.3 J	-	<2.2 J	<2.2 :
Phosphorus	mg/kg-dry	T	-	-	104. J	-	1230. J	2290. J
Sulfate	mg/kg-dry	T	-	-	6680. J	-	366. J	<110. :
Total Kjeldahl Nitrogen	mg/kg-dry	T	-	-	75.2 :	-	<22.4 :	87.6 J
Total Organic Carbon	mg/kg-dry	T	-	-	758. J	-	299. J	2940. J
Laboratory Parameters								
pH	SU	T	-	-	4.1 :	-	3.5 :	6.6 :
Solids, Percent	%	T	96.1 :	-	89.9 :	92.8 :	92.2 :	90.9 :
Specific Conductance	umhos/cm	T	-	-	1150. :	-	215. :	63.8 :
Geotechnical								
Organic Soils	%	T	-	-	3.04 J	-	-	4.07 J
Physical Properties								
Cation-Exchange Capacity	meq/100g	T	-	-	22.3 :	-	14.5 :	18.9 :
Sodium Absorption Ratio	ratio	T	-	-	0.04 :	-	0.21 :	0.15 :
Metals								
Aluminum	mg/kg-dry	T	-	-	17400. :	-	-	27100. :
Antimony	mg/kg-dry	T	-	-	<0.27 J	-	-	<0.25 J
Arsenic	mg/kg-dry	T	-	-	2.5 :	-	-	1.6 :
Barium	mg/kg-dry	T	-	-	162. :	-	-	187. :
Beryllium	mg/kg-dry	T	-	-	0.97 :	-	-	1.1 :
Boron	mg/kg-dry	T	-	-	<0.42 J	-	-	7.6 :
Cadmium	mg/kg-dry	T	-	-	<0.026 J	-	-	0.38 J
Calcium	mg/kg-dry	T	-	-	12900. :	-	-	4350. :
Chromium	mg/kg-dry	T	-	-	80.8 :	-	-	103. :
Cobalt	mg/kg-dry	T	-	-	11.4 :	-	-	7.8 :
Copper	mg/kg-dry	T	-	-	123. :	-	-	273. :
Iron	mg/kg-dry	T	-	-	43700. :	-	-	60600. :
Lead	mg/kg-dry	T	-	-	83.6 :	-	-	19.7 :
Magnesium	mg/kg-dry	T	-	-	13800. :	-	-	15200. :
Manganese	mg/kg-dry	T	-	-	694. J	-	-	536. J

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Appendix A-7e
Soil - Biased 0-24 inches
Validated Analytical Results

Parameter	Units	Exposure Area Fraction	Site ID / Sample Date / Sample ID					
			MSS8-28 10/23/2002 MSS8-28-T02N-SOL SS8D	MSS8-29 10/17/2002 MSS8-29-T02N-SOL RE SS8D	MSS8-29 10/17/2002 MSS8-29-T02N-SOL SS8D	MSS8-29 10/23/2002 MSS8-29-T02N-SOL SS8D	MSS8-3 10/9/2002 MSS8-3-T02N-SOL SS8A	MSS8-30 10/23/2002 MSS8-30-T02N-SOL SS8D
Mercury	mg/kg-dry	T	- :	-	<0.018 :	-	-	<0.017 :
Molybdenum	mg/kg-dry	T	- :	-	36.4 :	-	-	18.4 :
Nickel	mg/kg-dry	T	- :	-	39.8 J	-	-	40.9 J
Potassium	mg/kg-dry	T	- :	-	8370. J	-	-	13600. J
Selenium	mg/kg-dry	T	- :	-	1.2 :	-	-	0.96 J
Silver	mg/kg-dry	T	- :	-	<0.58 :	-	-	0.31 :
Sodium	mg/kg-dry	T	- :	-	301. :	-	-	781. :
Thallium	mg/kg-dry	T	- :	-	1.1 :	-	-	1.8 :
Vanadium	mg/kg-dry	T	- :	-	58.5 :	-	-	91. :
Zinc	mg/kg-dry	T	- :	-	82.3 :	-	-	59.1 J
Volatile Organics								
1,1,1-Trichloroethane	mg/kg-dry	T	<0.005 :	-	-	<0.006 :	-	<0.005 :
1,1,2,2-Tetrachloroethane	mg/kg-dry	T	<0.005 J	-	-	<0.006 :	-	<0.005 :
1,1,2-Trichloro-1,2,2-trifluoroethane	mg/kg-dry	T	<0.005 :	-	-	<0.006 :	-	<0.005 :
1,1,2-Trichloroethane	mg/kg-dry	T	<0.005 :	-	-	<0.006 :	-	<0.005 :
1,1-Dichloroethane	mg/kg-dry	T	<0.005 :	-	-	<0.006 :	-	<0.005 :
1,1-Dichloroethene	mg/kg-dry	T	<0.005 :	-	-	<0.006 :	-	<0.005 :
1,2,4-Trichlorobenzene	mg/kg-dry	T	<0.005 J	-	-	<0.006 :	-	<0.005 :
1,2-Dibromo-3-chloropropane	mg/kg-dry	T	<0.005 J	-	-	<0.006 :	-	<0.005 :
1,2-Dichlorobenzene	mg/kg-dry	T	<0.005 J	-	-	<0.006 :	-	<0.005 :
1,2-Dichloroethane	mg/kg-dry	T	<0.005 :	-	-	<0.006 :	-	<0.005 :
1,2-Dichloroethene (total)	mg/kg-dry	T	<0.005 :	-	-	<0.006 :	-	<0.005 :
1,2-Dichloropropane	mg/kg-dry	T	<0.005 :	-	-	<0.006 :	-	<0.005 :
1,3-Dichlorobenzene	mg/kg-dry	T	<0.005 J	-	-	<0.006 :	-	<0.005 :
1,4-Dichlorobenzene	mg/kg-dry	T	<0.005 J	-	-	<0.006 :	-	<0.005 :
2-Butanone	mg/kg-dry	T	<0.005 :	-	-	<0.006 :	-	<0.005 :
2-Hexanone	mg/kg-dry	T	<0.005 J	-	-	<0.006 :	-	<0.005 :
4-Methyl-2-pentanone	mg/kg-dry	T	<0.005 J	-	-	<0.006 :	-	<0.005 :
Acetone	mg/kg-dry	T	<0.005 :	-	-	<0.006 :	-	0.004 J
Benzene	mg/kg-dry	T	<0.005 :	-	-	<0.006 :	-	<0.005 :
Bromodichloromethane	mg/kg-dry	T	<0.005 :	-	-	<0.006 :	-	<0.005 :
Bromoform	mg/kg-dry	T	<0.005 :	-	-	<0.006 :	-	<0.005 :
Bromomethane	mg/kg-dry	T	<0.005 :	-	-	<0.006 :	-	<0.005 :
Carbon disulfide	mg/kg-dry	T	<0.005 :	-	-	0.0008 J	-	<0.005 :

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Appendix A-7e
Soil - Biased 0-24 inches
Validated Analytical Results

Parameter	Units	Exposure Area Fraction	Site ID / Sample Date / Sample ID					
			MSS8-28 10/23/2002 MSS8-28-T02N-SOL	MSS8-29 10/17/2002 MSS8-29-T02N-SOL RE	MSS8-29 10/17/2002 MSS8-29-T02N-SOL	MSS8-29 10/23/2002 MSS8-29-T02N-SOL	MSS8-3 10/9/2002 MSS8-3-T02N-SOL	MSS8-30 10/23/2002 MSS8-30-T02N-SOL
			SS8D	SS8D	SS8D	SS8D	SS8A	SS8D
Carbon tetrachloride	mg/kg-dry	T	<0.005 :	-	-	<0.006 :	-	<0.005 :
Chlorobenzene	mg/kg-dry	T	<0.005 J	-	-	<0.006 :	-	<0.005 :
Chloroethane	mg/kg-dry	T	<0.005 :	-	-	<0.006 :	-	<0.005 :
Chloroform	mg/kg-dry	T	<0.005 :	-	-	<0.006 :	-	<0.005 :
Chloromethane	mg/kg-dry	T	<0.005 :	-	-	<0.006 :	-	<0.005 :
cis-1,2-Dichloroethene	mg/kg-dry	T	<0.005 :	-	-	<0.006 :	-	<0.005 :
cis-1,3-Dichloropropene	mg/kg-dry	T	<0.005 :	-	-	<0.006 :	-	<0.005 :
Dibromochloromethane	mg/kg-dry	T	<0.005 :	-	-	<0.006 :	-	<0.005 :
Dichlorodifluoromethane	mg/kg-dry	T	<0.005 :	-	-	<0.006 :	-	<0.005 :
Ethylbenzene	mg/kg-dry	T	<0.005 J	-	-	<0.006 :	-	<0.005 :
Methylene chloride	mg/kg-dry	T	<0.005 :	-	-	<0.006 :	-	<0.005 :
Styrene	mg/kg-dry	T	<0.005 J	-	-	<0.006 :	-	<0.005 :
Tetrachloroethene	mg/kg-dry	T	<0.005 J	-	-	<0.006 :	-	<0.005 :
Toluene	mg/kg-dry	T	<0.005 J	-	-	<0.006 :	-	<0.005 :
Total Xylene	mg/kg-dry	T	<0.005 J	-	-	<0.006 :	-	<0.005 :
trans-1,2-Dichloroethene	mg/kg-dry	T	<0.005 :	-	-	<0.006 :	-	<0.005 :
trans-1,3-Dichloropropene	mg/kg-dry	T	<0.005 :	-	-	<0.006 :	-	<0.005 :
Trichloroethene	mg/kg-dry	T	<0.005 :	-	-	<0.006 :	-	<0.005 :
Trichlorofluoromethane	mg/kg-dry	T	<0.005 :	-	-	<0.006 :	-	<0.005 :
Vinyl chloride	mg/kg-dry	T	<0.005 :	-	-	<0.006 :	-	<0.005 :
Semi-Volatile Organics								
1,1`-Biphenyl	mg/kg-dry	T	-	<0.37 :	-	-	<0.36 :	<0.36 :
2,4,5-Trichlorophenol	mg/kg-dry	T	-	<0.92 :	-	-	<0.9 :	<0.91 :
2,4,6-Trichlorophenol	mg/kg-dry	T	-	<0.37 :	-	-	<0.36 :	<0.36 :
2,4-Dichlorophenol	mg/kg-dry	T	-	<0.37 :	-	-	<0.36 :	<0.36 :
2,4-Dimethylphenol	mg/kg-dry	T	-	<0.37 :	-	-	<0.36 :	<0.36 :
2,4-Dinitrophenol	mg/kg-dry	T	-	<0.92 :	-	-	<0.9 :	<0.91 :
2,4-Dinitrotoluene	mg/kg-dry	T	-	<0.37 :	-	-	<0.36 :	<0.36 :
2,6-Dinitrotoluene	mg/kg-dry	T	-	<0.37 :	-	-	<0.36 :	<0.36 :
2-Chloronaphthalene	mg/kg-dry	T	-	<0.37 :	-	-	<0.36 :	<0.36 :
2-Chlorophenol	mg/kg-dry	T	-	<0.37 J	-	-	<0.36 :	<0.36 :
2-Methylnaphthalene	mg/kg-dry	T	-	<0.37 :	-	-	<0.36 :	<0.36 :
2-Methylphenol	mg/kg-dry	T	-	<0.37 J	-	-	<0.36 :	<0.36 :
2-Nitroaniline	mg/kg-dry	T	-	<0.92 :	-	-	<0.9 :	<0.91 :

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T = Total Fraction

Appendix A-7e
Soil - Biased 0-24 inches
Validated Analytical Results

Parameter	Units	Exposure Area Fraction	Site ID	MSS8-28	MSS8-29	MSS8-29	MSS8-29	MSS8-3	MSS8-30
			Sample Date	10/23/2002	10/17/2002	10/17/2002	10/23/2002	10/9/2002	10/23/2002
			Sample ID	MSS8-28-T02N-SOL	MSS8-29-T02N-SOL RE	MSS8-29-T02N-SOL	MSS8-29-T02N-SOL	MSS8-3-T02N-SOL	MSS8-30-T02N-SOL
			Exposure Area	SS8D	SS8D	SS8D	SS8D	SS8A	SS8D
2-Nitrophenol	mg/kg-dry	T		-	<0.37 :	-	-	<0.36 :	<0.36 :
3,3-Dichlorobenzidine	mg/kg-dry	T		-	<0.37 :	-	-	<0.36 :	<0.36 :
3-Nitroaniline	mg/kg-dry	T		-	<0.92 :	-	-	<0.9 :	<0.91 :
4,6-Dinitro-2-methylphenol	mg/kg-dry	T		-	<0.92 :	-	-	<0.9 :	<0.91 :
4-Bromophenyl phenyl ether	mg/kg-dry	T		-	<0.37 :	-	-	<0.36 :	<0.36 :
4-Chloro-3-methylphenol	mg/kg-dry	T		-	<0.37 :	-	-	<0.36 :	<0.36 :
4-Chloroaniline	mg/kg-dry	T		-	<0.37 :	-	-	<0.36 :	<0.36 :
4-Chlorophenyl phenyl ether	mg/kg-dry	T		-	<0.37 :	-	-	<0.36 :	<0.36 :
4-Methylphenol	mg/kg-dry	T		-	<0.37 J	-	-	<0.36 :	<0.36 :
4-Nitroaniline	mg/kg-dry	T		-	<0.92 :	-	-	<0.9 :	<0.91 :
4-Nitrophenol	mg/kg-dry	T		-	<0.92 :	-	-	<0.9 :	<0.91 :
Acenaphthene	mg/kg-dry	T		-	<0.37 :	-	-	<0.36 :	<0.36 :
Acenaphthylene	mg/kg-dry	T		-	<0.37 :	-	-	<0.36 :	<0.36 :
Anthracene	mg/kg-dry	T		-	<0.37 :	-	-	<0.36 J	<0.36 :
Benzaldehyde	mg/kg-dry	T		-	<0.64 J	-	-	<0.36 J	<0.36 :
Benzo(a)anthracene	mg/kg-dry	T		-	<0.37 :	-	-	<0.36 :	<0.36 :
Benzo(a)pyrene	mg/kg-dry	T		-	<0.37 :	-	-	<0.36 :	<0.36 :
Benzo(b)fluoranthene	mg/kg-dry	T		-	<0.37 :	-	-	<0.36 :	<0.36 :
Benzo(g,h,i)perylene	mg/kg-dry	T		-	<0.37 :	-	-	<0.36 :	<0.36 :
Benzo(k)fluoranthene	mg/kg-dry	T		-	<0.37 :	-	-	<0.36 J	<0.36 :
Bis(2-chloroethoxy)methane	mg/kg-dry	T		-	<0.37 :	-	-	<0.36 :	<0.36 :
Bis(2-chloroethyl)ether	mg/kg-dry	T		-	<0.37 J	-	-	<0.36 :	<0.36 :
Bis(2-ethylhexyl)phthalate	mg/kg-dry	T		-	<0.37 :	-	-	<0.36 :	0.034 J
Butyl benzyl phthalate	mg/kg-dry	T		-	<0.37 :	-	-	<0.36 :	<0.36 :
Carbazole	mg/kg-dry	T		-	<0.37 :	-	-	<0.36 :	<0.36 :
Chrysene	mg/kg-dry	T		-	<0.37 :	-	-	<0.36 :	<0.36 :
Dibenz(a,h)anthracene	mg/kg-dry	T		-	<0.37 :	-	-	<0.36 :	<0.36 :
Dibenzofuran	mg/kg-dry	T		-	<0.37 :	-	-	<0.36 :	<0.36 :
Dichlorodiisopropyl ether	mg/kg-dry	T		-	<0.37 J	-	-	<0.36 :	<0.36 :
Diethylphthalate	mg/kg-dry	T		-	<0.37 :	-	-	<0.36 :	<0.36 :
Dimethylphthalate	mg/kg-dry	T		-	<0.37 :	-	-	<0.36 :	<0.36 :
Di-n-Butyl phthalate	mg/kg-dry	T		-	<0.37 :	-	-	<0.36 :	<0.36 :
Di-n-Octyl phthalate	mg/kg-dry	T		-	<0.37 :	-	-	<0.36 :	<0.36 :
Fluoranthene	mg/kg-dry	T		-	<0.37 :	-	-	<0.36 :	<0.36 :

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Appendix A-7e
Soil - Biased 0-24 inches
Validated Analytical Results

Parameter	Units	Exposure Area Fraction	Site ID / Sample Date / Sample ID					
			MSS8-28 10/23/2002 MSS8-28-T02N-SOL	MSS8-29 10/17/2002 MSS8-29-T02N-SOL RE	MSS8-29 10/17/2002 MSS8-29-T02N-SOL	MSS8-29 10/23/2002 MSS8-29-T02N-SOL	MSS8-3 10/9/2002 MSS8-3-T02N-SOL	MSS8-30 10/23/2002 MSS8-30-T02N-SOL
			SS8D	SS8D	SS8D	SS8D	SS8A	SS8D
Fluorene	mg/kg-dry	T	-	<0.37 :	-	-	<0.36 :	<0.36 :
Hexachlorobenzene	mg/kg-dry	T	-	<0.37 :	-	-	<0.36 :	<0.36 :
Hexachlorobutadiene	mg/kg-dry	T	-	<0.37 :	-	-	<0.36 :	<0.36 :
Hexachlorocyclopentadiene	mg/kg-dry	T	-	<0.37 :	-	-	<0.36 :	<0.36 :
Hexachloroethane	mg/kg-dry	T	-	<0.37 J	-	-	<0.36 :	<0.36 :
Indeno(1,2,3-cd)pyrene	mg/kg-dry	T	-	<0.37 :	-	-	<0.36 :	<0.36 :
Isophorone	mg/kg-dry	T	-	<0.37 :	-	-	<0.36 :	<0.36 :
Naphthalene	mg/kg-dry	T	-	<0.37 :	-	-	<0.36 :	<0.36 :
Nitrobenzene	mg/kg-dry	T	-	<0.37 :	-	-	<0.36 :	<0.36 :
N-Nitrosodi-n-propylamine	mg/kg-dry	T	-	<0.37 J	-	-	<0.36 :	<0.36 :
N-Nitrosodiphenylamine	mg/kg-dry	T	-	<0.37 :	-	-	<0.36 :	<0.36 :
Pentachlorophenol	mg/kg-dry	T	-	<0.92 :	-	-	<0.9 J	<0.91 :
Phenanthrene	mg/kg-dry	T	-	<0.37 :	-	-	<0.36 :	<0.36 :
Phenol	mg/kg-dry	T	-	<0.37 J	-	-	<0.36 :	<0.36 :
Pyrene	mg/kg-dry	T	-	<0.37 :	-	-	<0.36 :	<0.36 :
Explosives								
2,4,6-Trinitrotoluene	mg/kg-dry	T	-	-	-	-	<0.12 :	-
2,6-Pyridinediamine,	mg/kg-dry	T	-	-	-	-	<0.12 :	-
Cyclotetramethylenetetranitramine	mg/kg-dry	T	-	-	-	-	<0.12 :	-
Cyclotrimethylenetrinitramine	mg/kg-dry	T	-	-	-	-	<0.12 :	-
Pentaerythritol tetranitrate	mg/kg-dry	T	-	-	-	-	<5. :	-
Pesticides-PCBs								
Aroclor 1016	mg/kg-dry	T	-	-	-	-	-	<0.036 J
Aroclor 1221	mg/kg-dry	T	-	-	-	-	-	<0.074 J
Aroclor 1232	mg/kg-dry	T	-	-	-	-	-	<0.036 J
Aroclor 1242	mg/kg-dry	T	-	-	-	-	-	<0.036 J
Aroclor 1248	mg/kg-dry	T	-	-	-	-	-	<0.036 J
Aroclor 1254	mg/kg-dry	T	-	-	-	-	-	<0.036 J
Aroclor 1260	mg/kg-dry	T	-	-	-	-	-	<0.036 J

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Appendix A-7e
Soil - Biased 0-24 inches
Validated Analytical Results

Parameter	Units	Exposure Area Fraction	Site ID	MSS8-31	MSS8-32	MSS8-33	MSS8-34	MSS8-34	MSS8-35
			Sample Date	10/23/2002	10/23/2002	1/13/2003	1/13/2003	1/13/2003	1/13/2003
			Sample ID	MSS8-31-T02N-SOL	MSS8-32-T02N-SOL	MSS8-33-T02N-SOL	MSS8-34-T02N-SOLRE	MSS8-34-T02N-SOL	MSS8-35-T02N-SOL
			Exposure Area	SS8D	SS8D	SS8D	SS8D	SS8D	SS8D
General Chemistry									
Ammonia	mg/kg-dry	T		18.5 :	14.4 :	20.2 :	-	25.4 J	17.5 :
Chloride	mg/kg-dry	T		<27.2 :	<26.6 :	20.8 :	-	2.8 :	<2.3 :
Fluoride	mg/kg-dry	T		0.71 J	2.7 J	0.42 J	-	0.7 J	1.7 J
Nitrate	mg/kg-dry	T		<2.2 :	<2.1 :	<2.3 J	-	<2.2 J	<2.3 J
Phosphorus	mg/kg-dry	T		812. J	1190. J	1110. :	-	480. :	1630. :
Sulfate	mg/kg-dry	T		4110. :	320. :	1500. :	-	39.9 :	392. :
Total Kjeldahl Nitrogen	mg/kg-dry	T		152. J	95.4 J	168. :	-	147. :	179. :
Total Organic Carbon	mg/kg-dry	T		4010. J	335. J	781. J	-	4170. J	8320. J
Laboratory Parameters									
pH	SU	T		2.9 :	5.5 :	3.6 :	-	7. :	4.4 :
Solids, Percent	%	T		92. :	94.1 :	89.7 :	-	91.2 :	90.7 :
Specific Conductance	umhos/cm	T		2020. :	239. :	1560. :	-	164. :	618. :
Geotechnical									
Organic Soils	%	T		6.89 J	2.33 J	2.7 :	-	1.5 :	2.7 :
Physical Properties									
Cation-Exchange Capacity	meq/100g	T		15.2 :	19.5 :	17.5 :	-	21.6 :	16.5 :
Sodium Absorption Ratio	ratio	T		<0.02 :	0.41 :	0.2 :	-	1.16 :	5.1 :
Metals									
Aluminum	mg/kg-dry	T		6440. :	16200. :	16700. :	-	8540. J	20200. :
Antimony	mg/kg-dry	T		<0.25 J	<0.26 J	<0.27 J	-	<0.26 J	<0.25 J
Arsenic	mg/kg-dry	T		3.5 :	3.2 :	3.2 J	-	<2.1 J	1.9 J
Barium	mg/kg-dry	T		167. :	130. :	497. :	-	154. J	321. :
Beryllium	mg/kg-dry	T		0.26 :	1.5 :	0.83 :	-	0.5 :	0.56 :
Boron	mg/kg-dry	T		7.7 :	4.3 J	1. J	-	<0.87 :	<0.25 J
Cadmium	mg/kg-dry	T		0.07 J	0.49 J	<0.037 J	-	0.21 :	<0.037 J
Calcium	mg/kg-dry	T		1010. :	5270. :	997. :	-	1340. J	3290. :
Chromium	mg/kg-dry	T		166. :	30.4 :	31.9 J	-	10.9 J	64.2 J
Cobalt	mg/kg-dry	T		2.6 :	17. :	9.3 :	-	3.7 :	15. :
Copper	mg/kg-dry	T		67.4 :	157. :	65.4 J	-	18.1 J	197. J
Iron	mg/kg-dry	T		60900. :	30100. :	32700. :	-	14000. J	37900. :
Lead	mg/kg-dry	T		54.7 :	85.7 :	44.4 :	-	12.4 J	150. :
Magnesium	mg/kg-dry	T		2270. :	6400. :	6490. :	-	2270. J	11500. :
Manganese	mg/kg-dry	T		94. J	1680. J	318. :	-	196. J	864. :

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Appendix A-7e
Soil - Biased 0-24 inches
Validated Analytical Results

Parameter	Units	Exposure Area Fraction	Site ID	MSS8-31		MSS8-32		MSS8-33		MSS8-34		MSS8-34		MSS8-35	
			Sample Date	10/23/2002		10/23/2002		1/13/2003		1/13/2003		1/13/2003		1/13/2003	
			Sample ID	MSS8-31-T02N-SOL		MSS8-32-T02N-SOL		MSS8-33-T02N-SOL		MSS8-34-T02N-SOLRE		MSS8-34-T02N-SOL		MSS8-35-T02N-SOL	
			Exposure Area	SS8D		SS8D		SS8D		SS8D		SS8D		SS8D	
Mercury	mg/kg-dry	T		0.017	:	<0.017	:	<0.018	:	-		<0.017	:	<0.018	:
Molybdenum	mg/kg-dry	T		97.6	:	90.2	:	40.5	:	-		2.4	:	81.5	:
Nickel	mg/kg-dry	T		53.8	J	37.8	J	21.1	:	-		7.5	:	34.5	:
Potassium	mg/kg-dry	T		5870.	J	3230.	J	4060.	J	-		1360.	J	5530.	J
Selenium	mg/kg-dry	T		2.1	J	0.87	J	1.9	J	-		<0.68	J	2.	J
Silver	mg/kg-dry	T		0.48	:	0.37	:	<0.15	:	-		<0.16	:	1.5	:
Sodium	mg/kg-dry	T		928.	:	<124.	:	<322.	:	-		298.	:	<315.	:
Thallium	mg/kg-dry	T		0.6	:	0.48	:	0.44	:	-		0.12	:	0.74	:
Vanadium	mg/kg-dry	T		33.8	:	30.9	:	42.4	:	-		20.4	J	68.4	:
Zinc	mg/kg-dry	T		18.7	J	126.	J	67.7	:	-		31.6	J	99.4	:
Volatile Organics															
1,1,1-Trichloroethane	mg/kg-dry	T		<0.01	:	<0.008	:	<0.009	:	-		<0.007	:	-	
1,1,2,2-Tetrachloroethane	mg/kg-dry	T		<0.01	:	<0.008	:	<0.009	:	-		<0.007	:	-	
1,1,2-Trichloro-1,2,2-trifluoroethane	mg/kg-dry	T		<0.01	:	<0.008	:	<0.009	:	-		<0.007	:	-	
1,1,2-Trichloroethane	mg/kg-dry	T		<0.01	:	<0.008	:	<0.009	:	-		<0.007	:	-	
1,1-Dichloroethane	mg/kg-dry	T		<0.01	:	<0.008	:	<0.009	:	-		<0.007	:	-	
1,1-Dichloroethene	mg/kg-dry	T		<0.01	:	<0.008	:	<0.009	:	-		<0.007	:	-	
1,2,4-Trichlorobenzene	mg/kg-dry	T		<0.01	:	<0.008	:	<0.009	:	-		<0.007	:	-	
1,2-Dibromo-3-chloropropane	mg/kg-dry	T		<0.01	:	<0.008	:	<0.009	:	-		<0.007	:	-	
1,2-Dichlorobenzene	mg/kg-dry	T		<0.01	:	<0.008	:	<0.009	:	-		<0.007	:	-	
1,2-Dichloroethane	mg/kg-dry	T		<0.01	:	<0.008	:	<0.009	:	-		<0.007	:	-	
1,2-Dichloroethene (total)	mg/kg-dry	T		<0.01	:	<0.008	:	<0.009	:	-		<0.007	:	-	
1,2-Dichloropropane	mg/kg-dry	T		<0.01	:	<0.008	:	<0.009	:	-		<0.007	:	-	
1,3-Dichlorobenzene	mg/kg-dry	T		<0.01	:	<0.008	:	<0.009	:	-		<0.007	:	-	
1,4-Dichlorobenzene	mg/kg-dry	T		<0.01	:	<0.008	:	<0.009	:	-		<0.007	:	-	
2-Butanone	mg/kg-dry	T		<0.01	:	<0.008	:	<0.009	:	-		<0.007	:	-	
2-Hexanone	mg/kg-dry	T		<0.01	:	<0.008	:	<0.009	:	-		<0.007	:	-	
4-Methyl-2-pentanone	mg/kg-dry	T		<0.01	:	<0.008	:	<0.009	:	-		<0.007	:	-	
Acetone	mg/kg-dry	T		0.009	J	0.003	J	<0.009	:	-		<0.01	:	-	
Benzene	mg/kg-dry	T		<0.01	:	<0.008	:	<0.009	:	-		<0.007	:	-	
Bromodichloromethane	mg/kg-dry	T		<0.01	:	<0.008	:	<0.009	:	-		<0.007	:	-	
Bromoform	mg/kg-dry	T		<0.01	:	<0.008	:	<0.009	:	-		<0.007	:	-	
Bromomethane	mg/kg-dry	T		<0.01	:	<0.008	:	<0.009	:	-		<0.007	:	-	
Carbon disulfide	mg/kg-dry	T		0.001	J	<0.008	:	<0.009	:	-		<0.007	:	-	

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Appendix A-7e
Soil - Biased 0-24 inches
Validated Analytical Results

Parameter	Units	Exposure Area Fraction	Site ID / Sample Date / Sample ID					
			MSS8-31 10/23/2002 MSS8-31-T02N-SOL	MSS8-32 10/23/2002 MSS8-32-T02N-SOL	MSS8-33 1/13/2003 MSS8-33-T02N-SOL	MSS8-34 1/13/2003 MSS8-34-T02N-SOLRE	MSS8-34 1/13/2003 MSS8-34-T02N-SOL	MSS8-35 1/13/2003 MSS8-35-T02N-SOL
			SS8D	SS8D	SS8D	SS8D	SS8D	SS8D
Carbon tetrachloride	mg/kg-dry	T	<0.01 :	<0.008 :	<0.009 :	-	<0.007 :	-
Chlorobenzene	mg/kg-dry	T	<0.01 :	<0.008 :	<0.009 :	-	<0.007 :	-
Chloroethane	mg/kg-dry	T	<0.01 :	<0.008 :	<0.009 :	-	<0.007 :	-
Chloroform	mg/kg-dry	T	<0.01 :	<0.008 :	<0.009 :	-	<0.007 :	-
Chloromethane	mg/kg-dry	T	<0.01 :	<0.008 :	<0.009 :	-	<0.007 :	-
cis-1,2-Dichloroethene	mg/kg-dry	T	<0.01 :	<0.008 :	<0.009 :	-	<0.007 :	-
cis-1,3-Dichloropropene	mg/kg-dry	T	<0.01 :	<0.008 :	<0.009 :	-	<0.007 :	-
Dibromochloromethane	mg/kg-dry	T	<0.01 :	<0.008 :	<0.009 :	-	<0.007 :	-
Dichlorodifluoromethane	mg/kg-dry	T	<0.01 :	<0.008 :	<0.009 :	-	<0.007 :	-
Ethylbenzene	mg/kg-dry	T	<0.01 :	<0.008 :	0.001 J	-	<0.007 :	-
Methylene chloride	mg/kg-dry	T	<0.01 :	<0.008 :	<0.009 :	-	<0.007 :	-
Styrene	mg/kg-dry	T	<0.01 :	<0.008 :	<0.009 :	-	<0.007 :	-
Tetrachloroethene	mg/kg-dry	T	<0.01 :	<0.008 :	<0.009 :	-	<0.007 :	-
Toluene	mg/kg-dry	T	<0.01 :	<0.008 :	<0.009 :	-	<0.007 :	-
Total Xylene	mg/kg-dry	T	<0.01 :	<0.008 :	0.004 J	-	0.009 :	-
trans-1,2-Dichloroethene	mg/kg-dry	T	<0.01 :	<0.008 :	<0.009 :	-	<0.007 :	-
trans-1,3-Dichloropropene	mg/kg-dry	T	<0.01 :	<0.008 :	<0.009 :	-	<0.007 :	-
Trichloroethene	mg/kg-dry	T	<0.01 :	<0.008 :	<0.009 :	-	<0.007 :	-
Trichlorofluoromethane	mg/kg-dry	T	<0.01 :	<0.008 :	<0.009 :	-	<0.007 :	-
Vinyl chloride	mg/kg-dry	T	<0.01 :	<0.008 :	<0.009 :	-	<0.007 :	-
Semi-Volatile Organics								
1,1`-Biphenyl	mg/kg-dry	T	<0.36 :	<0.35 :	<0.37 :	-	0.18 J	<0.72 :
2,4,5-Trichlorophenol	mg/kg-dry	T	<0.9 :	<0.88 :	<0.92 :	-	<1.8 :	<1.8 :
2,4,6-Trichlorophenol	mg/kg-dry	T	<0.36 :	<0.35 :	<0.37 :	-	<0.73 :	<0.72 :
2,4-Dichlorophenol	mg/kg-dry	T	<0.36 :	<0.35 :	<0.37 :	-	<0.73 :	<0.72 :
2,4-Dimethylphenol	mg/kg-dry	T	<0.36 :	<0.35 :	<0.37 :	-	<0.73 :	<0.72 :
2,4-Dinitrophenol	mg/kg-dry	T	<0.9 :	<0.88 :	<0.92 J	-	<1.8 J	<1.8 :
2,4-Dinitrotoluene	mg/kg-dry	T	<0.36 :	<0.35 :	<0.37 :	-	<0.73 :	<0.72 :
2,6-Dinitrotoluene	mg/kg-dry	T	<0.36 :	<0.35 :	<0.37 :	-	<0.73 :	<0.72 :
2-Chloronaphthalene	mg/kg-dry	T	<0.36 :	<0.35 :	<0.37 :	-	<0.73 :	<0.72 :
2-Chlorophenol	mg/kg-dry	T	<0.36 :	<0.35 :	<0.37 :	-	<0.73 :	<0.72 :
2-Methylnaphthalene	mg/kg-dry	T	<0.36 :	<0.35 :	<0.37 :	-	<0.73 :	<0.72 :
2-Methylphenol	mg/kg-dry	T	<0.36 :	<0.35 :	<0.37 :	-	<0.73 :	<0.72 :
2-Nitroaniline	mg/kg-dry	T	<0.9 :	<0.88 :	<0.92 :	-	<1.8 :	<1.8 :

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T = Total Fraction

Appendix A-7e
Soil - Biased 0-24 inches
Validated Analytical Results

Site ID			MSS8-31		MSS8-32		MSS8-33		MSS8-34		MSS8-34		MSS8-35	
Sample Date			10/23/2002		10/23/2002		1/13/2003		1/13/2003		1/13/2003		1/13/2003	
Sample ID			MSS8-31-T02N-SOL		MSS8-32-T02N-SOL		MSS8-33-T02N-SOL		MSS8-34-T02N-SOLRE		MSS8-34-T02N-SOL		MSS8-35-T02N-SOL	
Exposure Area			SS8D		SS8D		SS8D		SS8D		SS8D		SS8D	
Parameter	Units	Fraction												
2-Nitrophenol	mg/kg-dry	T	<0.36	:	<0.35	:	<0.37	:	-		<0.73	:	<0.72	:
3,3-Dichlorobenzidine	mg/kg-dry	T	<0.36	:	<0.35	:	<0.37	:	-		<0.73	:	<0.72	:
3-Nitroaniline	mg/kg-dry	T	<0.9	:	<0.88	:	<0.92	J	-		<1.8	:	<1.8	:
4,6-Dinitro-2-methylphenol	mg/kg-dry	T	<0.9	:	<0.88	:	<0.92	:	-		<1.8	J	<1.8	:
4-Bromophenyl phenyl ether	mg/kg-dry	T	<0.36	:	<0.35	:	<0.37	:	-		<0.73	:	<0.72	:
4-Chloro-3-methylphenol	mg/kg-dry	T	<0.36	:	<0.35	:	<0.37	:	-		<0.73	:	<0.72	:
4-Chloroaniline	mg/kg-dry	T	<0.36	:	<0.35	:	<0.37	:	-		<0.73	:	<0.72	:
4-Chlorophenyl phenyl ether	mg/kg-dry	T	<0.36	:	<0.35	:	<0.37	:	-		<0.73	:	<0.72	:
4-Methylphenol	mg/kg-dry	T	<0.36	:	<0.35	:	<0.37	:	-		<0.73	:	<0.72	:
4-Nitroaniline	mg/kg-dry	T	<0.9	:	<0.88	:	<0.92	:	-		<1.8	:	<1.8	:
4-Nitrophenol	mg/kg-dry	T	<0.9	:	<0.88	:	<0.92	J	-		<1.8	:	<1.8	:
Acenaphthene	mg/kg-dry	T	<0.36	:	<0.35	:	<0.37	:	-		0.34	J	<0.72	:
Acenaphthylene	mg/kg-dry	T	<0.36	:	<0.35	:	<0.37	:	-		<0.73	:	<0.72	:
Anthracene	mg/kg-dry	T	<0.36	:	<0.35	:	<0.37	:	-		0.099	J	<0.72	:
Benzaldehyde	mg/kg-dry	T	0.29	J	0.091	J	<0.37	:	-		<0.73	:	<0.72	:
Benzo(a)anthracene	mg/kg-dry	T	<0.36	:	<0.35	:	<0.37	:	-		<0.73	:	<0.72	:
Benzo(a)pyrene	mg/kg-dry	T	<0.36	:	<0.35	:	<0.37	:	-		<0.73	:	<0.72	:
Benzo(b)fluoranthene	mg/kg-dry	T	<0.36	:	<0.35	:	<0.37	:	-		<0.73	:	<0.72	:
Benzo(g,h,i)perylene	mg/kg-dry	T	<0.36	:	<0.35	:	<0.37	:	-		<0.73	:	<0.72	:
Benzo(k)fluoranthene	mg/kg-dry	T	<0.36	:	<0.35	:	<0.37	:	-		<0.73	:	<0.72	:
Bis(2-chloroethoxy)methane	mg/kg-dry	T	<0.36	:	<0.35	:	<0.37	:	-		<0.73	:	<0.72	:
Bis(2-chloroethyl)ether	mg/kg-dry	T	<0.36	:	<0.35	:	<0.37	:	-		<0.73	:	<0.72	:
Bis(2-ethylhexyl)phthalate	mg/kg-dry	T	0.12	J	<0.35	:	0.023	J	-		0.19	J	0.21	J
Butyl benzyl phthalate	mg/kg-dry	T	<0.36	:	<0.35	:	<0.37	:	-		<0.73	:	<0.72	:
Carbazole	mg/kg-dry	T	<0.36	:	<0.35	:	<0.37	:	-		<0.73	:	<0.72	:
Chrysene	mg/kg-dry	T	0.031	J	<0.35	:	<0.37	:	-		0.11	J	0.14	J
Dibenz(a,h)anthracene	mg/kg-dry	T	<0.36	:	<0.35	:	<0.37	J	-		<0.73	:	<0.72	J
Dibenzofuran	mg/kg-dry	T	<0.36	:	<0.35	:	<0.37	:	-		<0.73	:	<0.72	:
Dichlorodiisopropyl ether	mg/kg-dry	T	<0.36	:	<0.35	:	<0.37	:	-		<0.73	:	<0.72	:
Diethylphthalate	mg/kg-dry	T	<0.36	:	<0.35	:	<0.37	:	-		<0.73	:	<0.72	:
Dimethylphthalate	mg/kg-dry	T	<0.36	:	<0.35	:	<0.37	:	-		<0.73	:	<0.72	:
Di-n-Butyl phthalate	mg/kg-dry	T	<0.36	:	<0.35	:	<0.37	:	-		<0.73	:	<0.72	:
Di-n-Octyl phthalate	mg/kg-dry	T	<0.36	:	<0.35	:	<0.37	:	-		<0.73	:	<0.72	:
Fluoranthene	mg/kg-dry	T	0.035	J	<0.35	:	<0.37	J	-		0.058	J	<0.72	:

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Appendix A-7e
Soil - Biased 0-24 inches
Validated Analytical Results

Parameter	Units	Exposure Area Fraction	Site ID / Sample Date / Sample ID		MSS8-31 10/23/2002 MSS8-31-T02N-SOL SS8D		MSS8-32 10/23/2002 MSS8-32-T02N-SOL SS8D		MSS8-33 1/13/2003 MSS8-33-T02N-SOL SS8D		MSS8-34 1/13/2003 MSS8-34-T02N-SOLRE SS8D		MSS8-34 1/13/2003 MSS8-34-T02N-SOL SS8D		MSS8-35 1/13/2003 MSS8-35-T02N-SOL SS8D	
Fluorene	mg/kg-dry	T			<0.36	:	<0.35	:	<0.37	:	-		0.51	J	<0.72	:
Hexachlorobenzene	mg/kg-dry	T			<0.36	:	<0.35	:	<0.37	:	-		<0.73	:	<0.72	:
Hexachlorobutadiene	mg/kg-dry	T			<0.36	:	<0.35	:	<0.37	:	-		<0.73	:	<0.72	:
Hexachlorocyclopentadiene	mg/kg-dry	T			<0.36	:	<0.35	:	<0.37	:	-		<0.73	:	<0.72	J
Hexachloroethane	mg/kg-dry	T			<0.36	:	<0.35	:	<0.37	:	-		<0.73	:	<0.72	:
Indeno(1,2,3-cd)pyrene	mg/kg-dry	T			<0.36	:	<0.35	:	<0.37	:	-		<0.73	:	<0.72	J
Isophorone	mg/kg-dry	T			<0.36	:	<0.35	:	<0.37	:	-		<0.73	:	<0.72	:
Naphthalene	mg/kg-dry	T			<0.36	:	<0.35	:	<0.37	:	-		<0.73	:	<0.72	:
Nitrobenzene	mg/kg-dry	T			<0.36	:	<0.35	:	<0.37	:	-		<0.73	:	<0.72	:
N-Nitrosodi-n-propylamine	mg/kg-dry	T			<0.36	:	<0.35	:	<0.37	:	-		<0.73	:	<0.72	:
N-Nitrosodiphenylamine	mg/kg-dry	T			<0.36	:	<0.35	:	<0.37	:	-		<0.73	:	<0.72	:
Pentachlorophenol	mg/kg-dry	T			<0.9	:	<0.88	:	<0.92	:	-		<1.8	:	<1.8	J
Phenanthrene	mg/kg-dry	T			0.044	J	<0.35	:	<0.37	:	-		1.8	:	0.14	J
Phenol	mg/kg-dry	T			<0.36	:	<0.35	:	<0.37	:	-		<0.73	:	<0.72	:
Pyrene	mg/kg-dry	T			0.019	J	<0.35	:	<0.37	:	-		0.38	J	0.14	J
Pesticides-PCBs																
Aroclor 1016	mg/kg-dry	T			<0.036	J	<0.035	J	<0.037	:	<0.036	J	-		-	
Aroclor 1221	mg/kg-dry	T			<0.073	J	<0.071	J	<0.075	:	<0.074	J	-		-	
Aroclor 1232	mg/kg-dry	T			<0.036	J	<0.035	J	<0.037	:	<0.036	J	-		-	
Aroclor 1242	mg/kg-dry	T			<0.036	J	<0.035	J	<0.037	:	<0.036	J	-		-	
Aroclor 1248	mg/kg-dry	T			0.061	J	<0.035	J	<0.037	:	<0.036	J	-		-	
Aroclor 1254	mg/kg-dry	T			<0.036	J	<0.035	J	<0.037	:	<0.036	J	-		-	
Aroclor 1260	mg/kg-dry	T			<0.036	J	<0.035	J	<0.037	:	<0.036	J	-		-	

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Appendix A-7e
Soil - Biased 0-24 inches
Validated Analytical Results

Parameter	Units	Fraction						
Site ID			MSS8-35	MSS8-36	MSS8-36	MSS8-37	MSS8-37	MSS8-38
Sample Date			1/15/2003	1/13/2003	1/15/2003	1/13/2003	1/15/2003	1/13/2003
Sample ID			MSS8-35-T02N-SOL	MSS8-36-T02N-SOL	MSS8-36-T02N-SOL	MSS8-37-T02N-SOL	MSS8-37-T02N-SOL	MSS8-38-T02N-SOL
Exposure Area			SS8D	SS8D	SS8D	SS8D	SS8D	SS8D
General Chemistry								
Ammonia	mg/kg-dry	T	-	34.6 :	-	10.3 :	-	7.8 :
Chloride	mg/kg-dry	T	-	18.9 J	-	<2.2 :	-	<2.2 :
Fluoride	mg/kg-dry	T	-	0.36 J	-	1.5 J	-	0.76 J
Nitrate	mg/kg-dry	T	-	<2.2 J	-	<2.2 J	-	<2.2 J
Phosphorus	mg/kg-dry	T	-	1450. :	-	820. :	-	1200. :
Sulfate	mg/kg-dry	T	-	2870. :	-	27.6 :	-	77.5 :
Total Kjeldahl Nitrogen	mg/kg-dry	T	-	145. :	-	69.3 :	-	121. :
Total Organic Carbon	mg/kg-dry	T	-	3800. J	-	1680. J	-	3530. J
Laboratory Parameters								
pH	SU	T	-	3.7 :	-	6.7 :	-	6.5 :
Solids, Percent	%	T	88.2 :	95.1 :	95. :	91.1 :	91.6 :	91.1 :
Specific Conductance	umhos/cm	T	-	2840. :	-	82.2 :	-	231. :
Geotechnical								
Organic Soils	%	T	-	3.8 :	-	1.8 :	-	1.8 :
Physical Properties								
Cation-Exchange Capacity	meq/100g	T	-	19.5 :	-	17.5 :	-	13.8 :
Sodium Absorption Ratio	ratio	T	-	0.04 :	-	<0.06 :	-	0.33 :
Metals								
Aluminum	mg/kg-dry	T	-	13400. :	-	6330. :	-	11100. :
Antimony	mg/kg-dry	T	-	<0.25 J	-	<0.27 J	-	<0.27 J
Arsenic	mg/kg-dry	T	-	3.4 J	-	2.7 J	-	5.2 J
Barium	mg/kg-dry	T	-	357. :	-	630. :	-	388. :
Beryllium	mg/kg-dry	T	-	0.65 :	-	0.41 :	-	0.64 :
Boron	mg/kg-dry	T	-	<0.24 J	-	<0.29 :	-	<0.26 J
Cadmium	mg/kg-dry	T	-	<0.036 J	-	<0.043 :	-	<0.039 J
Calcium	mg/kg-dry	T	-	3480. :	-	1060. :	-	1920. :
Chromium	mg/kg-dry	T	-	53.9 J	-	7.6 J	-	18.4 J
Cobalt	mg/kg-dry	T	-	8.8 :	-	1.4 :	-	5.2 :
Copper	mg/kg-dry	T	-	114. J	-	19.2 J	-	50.2 J
Iron	mg/kg-dry	T	-	36100. :	-	12600. :	-	22700. :
Lead	mg/kg-dry	T	-	123. :	-	29.2 :	-	43.9 :
Magnesium	mg/kg-dry	T	-	8080. :	-	1860. :	-	4620. :
Manganese	mg/kg-dry	T	-	300. :	-	93.9 :	-	260. :

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Appendix A-7e
Soil - Biased 0-24 inches
Validated Analytical Results

Parameter	Units	Exposure Area Fraction	Site ID / Sample Date / Sample ID		Site ID / Sample Date / Sample ID		Site ID / Sample Date / Sample ID		Site ID / Sample Date / Sample ID		Site ID / Sample Date / Sample ID	
			MSS8-35 1/15/2003 MSS8-35-T02N-SOL		MSS8-36 1/13/2003 MSS8-36-T02N-SOL		MSS8-36 1/15/2003 MSS8-36-T02N-SOL		MSS8-37 1/13/2003 MSS8-37-T02N-SOL		MSS8-37 1/15/2003 MSS8-37-T02N-SOL		MSS8-38 1/13/2003 MSS8-38-T02N-SOL	
			SS8D		SS8D		SS8D		SS8D		SS8D		SS8D	
Mercury	mg/kg-dry	T	-		0.019	:	-		<0.017	:	-		<0.017	:
Molybdenum	mg/kg-dry	T	-		196.	:	-		8.9	:	-		29.8	:
Nickel	mg/kg-dry	T	-		26.	:	-		3.9	:	-		12.7	:
Potassium	mg/kg-dry	T	-		4960.	J	-		1740.	J	-		3060.	J
Selenium	mg/kg-dry	T	-		2.3	J	-		<0.73	J	-		<0.71	J
Silver	mg/kg-dry	T	-		0.34	:	-		0.23	:	-		0.4	:
Sodium	mg/kg-dry	T	-		<249.	:	-		177.	:	-		202.	:
Thallium	mg/kg-dry	T	-		0.57	:	-		0.14	:	-		0.33	:
Vanadium	mg/kg-dry	T	-		42.4	:	-		12.8	:	-		27.4	:
Zinc	mg/kg-dry	T	-		95.3	:	-		16.2	:	-		42.3	:
Volatile Organics														
1,1,1-Trichloroethane	mg/kg-dry	T	<0.011	:	-		<0.004	:	-		<0.008	:	-	
1,1,2,2-Tetrachloroethane	mg/kg-dry	T	<0.011	:	-		<0.004	:	-		<0.008	:	-	
1,1,2-Trichloro-1,2,2-trifluoroethane	mg/kg-dry	T	<0.011	:	-		<0.004	:	-		<0.008	:	-	
1,1,2-Trichloroethane	mg/kg-dry	T	<0.011	:	-		<0.004	:	-		<0.008	:	-	
1,1-Dichloroethane	mg/kg-dry	T	<0.011	:	-		<0.004	:	-		<0.008	:	-	
1,1-Dichloroethene	mg/kg-dry	T	<0.011	:	-		<0.004	:	-		<0.008	:	-	
1,2,4-Trichlorobenzene	mg/kg-dry	T	<0.011	:	-		<0.004	:	-		<0.008	:	-	
1,2-Dibromo-3-chloropropane	mg/kg-dry	T	<0.011	:	-		<0.004	:	-		<0.008	:	-	
1,2-Dichlorobenzene	mg/kg-dry	T	<0.011	:	-		<0.004	:	-		<0.008	:	-	
1,2-Dichloroethane	mg/kg-dry	T	<0.011	:	-		<0.004	:	-		<0.008	:	-	
1,2-Dichloroethene (total)	mg/kg-dry	T	<0.011	:	-		<0.004	:	-		<0.008	:	-	
1,2-Dichloropropane	mg/kg-dry	T	<0.011	:	-		<0.004	:	-		<0.008	:	-	
1,3-Dichlorobenzene	mg/kg-dry	T	<0.011	:	-		<0.004	:	-		<0.008	:	-	
1,4-Dichlorobenzene	mg/kg-dry	T	<0.011	:	-		<0.004	:	-		<0.008	:	-	
2-Butanone	mg/kg-dry	T	0.002	J	-		<0.004	:	-		<0.008	:	-	
2-Hexanone	mg/kg-dry	T	<0.011	:	-		<0.004	:	-		<0.008	:	-	
4-Methyl-2-pentanone	mg/kg-dry	T	<0.011	:	-		<0.004	:	-		<0.008	:	-	
Acetone	mg/kg-dry	T	0.014	:	-		0.018	:	-		<0.008	:	-	
Benzene	mg/kg-dry	T	<0.011	:	-		<0.004	:	-		<0.008	:	-	
Bromodichloromethane	mg/kg-dry	T	<0.011	:	-		<0.004	:	-		<0.008	:	-	
Bromoform	mg/kg-dry	T	<0.011	:	-		<0.004	:	-		<0.008	:	-	
Bromomethane	mg/kg-dry	T	<0.011	:	-		<0.004	:	-		<0.008	:	-	
Carbon disulfide	mg/kg-dry	T	0.005	J	-		0.002	J	-		<0.008	:	-	

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Appendix A-7e
Soil - Biased 0-24 inches
Validated Analytical Results

Parameter	Units	Exposure Area Fraction	Site ID / Sample Date / Sample ID					
			MSS8-35 1/15/2003 MSS8-35-T02N-SOL	MSS8-36 1/13/2003 MSS8-36-T02N-SOL	MSS8-36 1/15/2003 MSS8-36-T02N-SOL	MSS8-37 1/13/2003 MSS8-37-T02N-SOL	MSS8-37 1/15/2003 MSS8-37-T02N-SOL	MSS8-38 1/13/2003 MSS8-38-T02N-SOL
			SS8D	SS8D	SS8D	SS8D	SS8D	SS8D
Carbon tetrachloride	mg/kg-dry	T	<0.011 :	-	<0.004 :	-	<0.008 :	-
Chlorobenzene	mg/kg-dry	T	<0.011 :	-	<0.004 :	-	<0.008 :	-
Chloroethane	mg/kg-dry	T	<0.011 :	-	<0.004 :	-	<0.008 :	-
Chloroform	mg/kg-dry	T	<0.011 :	-	<0.004 :	-	<0.008 :	-
Chloromethane	mg/kg-dry	T	<0.011 :	-	<0.004 :	-	<0.008 :	-
cis-1,2-Dichloroethene	mg/kg-dry	T	<0.011 :	-	<0.004 :	-	<0.008 :	-
cis-1,3-Dichloropropene	mg/kg-dry	T	<0.011 :	-	<0.004 :	-	<0.008 :	-
Dibromochloromethane	mg/kg-dry	T	<0.011 :	-	<0.004 :	-	<0.008 :	-
Dichlorodifluoromethane	mg/kg-dry	T	<0.011 :	-	<0.004 :	-	<0.008 :	-
Ethylbenzene	mg/kg-dry	T	0.002 J	-	0.001 J	-	<0.008 :	-
Methylene chloride	mg/kg-dry	T	<0.011 :	-	<0.004 :	-	<0.008 :	-
Styrene	mg/kg-dry	T	<0.011 :	-	<0.004 :	-	<0.008 :	-
Tetrachloroethene	mg/kg-dry	T	<0.011 :	-	<0.004 :	-	<0.008 :	-
Toluene	mg/kg-dry	T	<0.011 :	-	0.008 :	-	<0.008 :	-
Total Xylene	mg/kg-dry	T	0.01 J	-	0.012 :	-	<0.008 :	-
trans-1,2-Dichloroethene	mg/kg-dry	T	<0.011 :	-	<0.004 :	-	<0.008 :	-
trans-1,3-Dichloropropene	mg/kg-dry	T	<0.011 :	-	<0.004 :	-	<0.008 :	-
Trichloroethene	mg/kg-dry	T	<0.011 :	-	<0.004 :	-	<0.008 :	-
Trichlorofluoromethane	mg/kg-dry	T	<0.011 :	-	<0.004 :	-	<0.008 :	-
Vinyl chloride	mg/kg-dry	T	<0.011 :	-	<0.004 :	-	<0.008 :	-
Semi-Volatile Organics								
1,1`-Biphenyl	mg/kg-dry	T	-	<0.35 :	-	<0.36 :	-	<0.36 :
2,4,5-Trichlorophenol	mg/kg-dry	T	-	<0.87 :	-	<0.91 :	-	<0.91 :
2,4,6-Trichlorophenol	mg/kg-dry	T	-	<0.35 :	-	<0.36 :	-	<0.36 :
2,4-Dichlorophenol	mg/kg-dry	T	-	<0.35 :	-	<0.36 :	-	<0.36 :
2,4-Dimethylphenol	mg/kg-dry	T	-	<0.35 :	-	<0.36 :	-	<0.36 :
2,4-Dinitrophenol	mg/kg-dry	T	-	<0.87 J	-	<0.91 :	-	<0.91 :
2,4-Dinitrotoluene	mg/kg-dry	T	-	<0.35 :	-	<0.36 :	-	<0.36 :
2,6-Dinitrotoluene	mg/kg-dry	T	-	<0.35 :	-	<0.36 :	-	<0.36 :
2-Chloronaphthalene	mg/kg-dry	T	-	<0.35 :	-	<0.36 :	-	<0.36 :
2-Chlorophenol	mg/kg-dry	T	-	<0.35 :	-	<0.36 :	-	<0.36 :
2-Methylnaphthalene	mg/kg-dry	T	-	<0.35 :	-	<0.36 :	-	<0.36 :
2-Methylphenol	mg/kg-dry	T	-	<0.35 :	-	<0.36 :	-	<0.36 :
2-Nitroaniline	mg/kg-dry	T	-	<0.87 :	-	<0.91 :	-	<0.91 :

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Appendix A-7e
Soil - Biased 0-24 inches
Validated Analytical Results

Parameter	Units	Exposure Area Fraction	Site ID / Sample Date / Sample ID					
			MSS8-35 1/15/2003 MSS8-35-T02N-SOL	MSS8-36 1/13/2003 MSS8-36-T02N-SOL	MSS8-36 1/15/2003 MSS8-36-T02N-SOL	MSS8-37 1/13/2003 MSS8-37-T02N-SOL	MSS8-37 1/15/2003 MSS8-37-T02N-SOL	MSS8-38 1/13/2003 MSS8-38-T02N-SOL
			SS8D	SS8D	SS8D	SS8D	SS8D	SS8D
2-Nitrophenol	mg/kg-dry	T	-	<0.35 :	-	<0.36 :	-	<0.36 :
3,3-Dichlorobenzidine	mg/kg-dry	T	-	<0.35 :	-	<0.36 :	-	<0.36 :
3-Nitroaniline	mg/kg-dry	T	-	<0.87 J	-	<0.91 :	-	<0.91 :
4,6-Dinitro-2-methylphenol	mg/kg-dry	T	-	<0.87 :	-	<0.91 :	-	<0.91 :
4-Bromophenyl phenyl ether	mg/kg-dry	T	-	<0.35 :	-	<0.36 :	-	<0.36 :
4-Chloro-3-methylphenol	mg/kg-dry	T	-	<0.35 :	-	<0.36 :	-	<0.36 :
4-Chloroaniline	mg/kg-dry	T	-	<0.35 :	-	<0.36 :	-	<0.36 :
4-Chlorophenyl phenyl ether	mg/kg-dry	T	-	<0.35 :	-	<0.36 :	-	<0.36 :
4-Methylphenol	mg/kg-dry	T	-	<0.35 :	-	<0.36 :	-	<0.36 :
4-Nitroaniline	mg/kg-dry	T	-	<0.87 :	-	<0.91 :	-	<0.91 :
4-Nitrophenol	mg/kg-dry	T	-	<0.87 J	-	<0.91 :	-	<0.91 :
Acenaphthene	mg/kg-dry	T	-	<0.35 :	-	<0.36 :	-	<0.36 :
Acenaphthylene	mg/kg-dry	T	-	<0.35 :	-	<0.36 :	-	<0.36 :
Anthracene	mg/kg-dry	T	-	<0.35 :	-	<0.36 :	-	<0.36 :
Benzaldehyde	mg/kg-dry	T	-	<0.35 :	-	<0.36 J	-	<0.36 J
Benzo(a)anthracene	mg/kg-dry	T	-	<0.35 :	-	<0.36 :	-	<0.36 :
Benzo(a)pyrene	mg/kg-dry	T	-	<0.35 :	-	<0.36 :	-	<0.36 :
Benzo(b)fluoranthene	mg/kg-dry	T	-	<0.35 :	-	<0.36 :	-	<0.36 :
Benzo(g,h,i)perylene	mg/kg-dry	T	-	<0.35 :	-	<0.36 :	-	<0.36 :
Benzo(k)fluoranthene	mg/kg-dry	T	-	<0.35 :	-	<0.36 :	-	<0.36 :
Bis(2-chloroethoxy)methane	mg/kg-dry	T	-	<0.35 :	-	<0.36 :	-	<0.36 :
Bis(2-chloroethyl)ether	mg/kg-dry	T	-	<0.35 :	-	<0.36 :	-	<0.36 :
Bis(2-ethylhexyl)phthalate	mg/kg-dry	T	-	0.06 J	-	<0.36 :	-	0.021 J
Butyl benzyl phthalate	mg/kg-dry	T	-	<0.35 :	-	<0.36 :	-	<0.36 :
Carbazole	mg/kg-dry	T	-	<0.35 :	-	<0.36 :	-	<0.36 :
Chrysene	mg/kg-dry	T	-	<0.35 :	-	<0.36 :	-	<0.36 :
Dibenz(a,h)anthracene	mg/kg-dry	T	-	<0.35 J	-	<0.36 :	-	<0.36 :
Dibenzofuran	mg/kg-dry	T	-	<0.35 :	-	<0.36 :	-	<0.36 :
Dichlorodiisopropyl ether	mg/kg-dry	T	-	<0.35 :	-	<0.36 :	-	<0.36 :
Diethylphthalate	mg/kg-dry	T	-	<0.35 :	-	<0.36 :	-	<0.36 :
Dimethylphthalate	mg/kg-dry	T	-	<0.35 :	-	<0.36 :	-	<0.36 :
Di-n-Butyl phthalate	mg/kg-dry	T	-	0.018 J	-	<0.36 :	-	<0.36 :
Di-n-Octyl phthalate	mg/kg-dry	T	-	<0.35 :	-	<0.36 :	-	<0.36 :
Fluoranthene	mg/kg-dry	T	-	<0.35 J	-	<0.36 :	-	<0.36 :

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Appendix A-7e
Soil - Biased 0-24 inches
Validated Analytical Results

Parameter	Units	Exposure Area Fraction	Site ID	Sample Date	Sample ID		Site ID	Sample Date	Sample ID		Site ID	Sample Date	Sample ID		Site ID	Sample Date	Sample ID		Site ID	Sample Date	Sample ID	
			MSS8-35	1/15/2003	MSS8-35-T02N-SOL		MSS8-36	1/13/2003	MSS8-36-T02N-SOL		MSS8-36	1/15/2003	MSS8-36-T02N-SOL		MSS8-37	1/13/2003	MSS8-37-T02N-SOL		MSS8-37	1/15/2003	MSS8-37-T02N-SOL		MSS8-38	1/13/2003	MSS8-38-T02N-SOL	
			SS8D				SS8D				SS8D				SS8D				SS8D				SS8D			
Fluorene	mg/kg-dry	T	-				<0.35			:	-				<0.36			:	-				<0.36			:
Hexachlorobenzene	mg/kg-dry	T	-				<0.35			:	-				<0.36			:	-				<0.36			:
Hexachlorobutadiene	mg/kg-dry	T	-				<0.35			:	-				<0.36			:	-				<0.36			:
Hexachlorocyclopentadiene	mg/kg-dry	T	-				<0.35			:	-				<0.36			:	-				<0.36			:
Hexachloroethane	mg/kg-dry	T	-				<0.35			:	-				<0.36			:	-				<0.36			:
Indeno(1,2,3-cd)pyrene	mg/kg-dry	T	-				<0.35			:	-				<0.36			:	-				<0.36			:
Isophorone	mg/kg-dry	T	-				<0.35			:	-				<0.36			:	-				<0.36			:
Naphthalene	mg/kg-dry	T	-				<0.35			:	-				<0.36			:	-				<0.36			:
Nitrobenzene	mg/kg-dry	T	-				<0.35			:	-				<0.36			:	-				<0.36			:
N-Nitrosodi-n-propylamine	mg/kg-dry	T	-				<0.35			:	-				<0.36			:	-				<0.36			:
N-Nitrosodiphenylamine	mg/kg-dry	T	-				<0.35			:	-				<0.36			:	-				<0.36			:
Pentachlorophenol	mg/kg-dry	T	-				<0.87			:	-				<0.91			:	-				<0.91			:
Phenanthrene	mg/kg-dry	T	-				<0.35			:	-				<0.36			:	-				<0.36			:
Phenol	mg/kg-dry	T	-				<0.35			:	-				<0.36			:	-				<0.36			:
Pyrene	mg/kg-dry	T	-				<0.35			:	-				<0.36			:	-				<0.36			:

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Appendix A-7e
Soil - Biased 0-24 inches
Validated Analytical Results

Site ID			MSS8-38	MSS8-39	MSS8-39	MSS8-4	MSS8-40	MSS8-40
Sample Date			1/15/2003	1/13/2003	1/15/2003	10/10/2002	1/13/2003	1/15/2003
Sample ID			MSS8-38-T02N-SOL	MSS8-39-T02N-SOL	MSS8-39-T02N-SOL	MSS8-4-T02N-SOL	MSS8-40-T02N-SOL	MSS8-40-T02N-SOL
Exposure Area			SS8D	SS8D	SS8D	SS8A	SS8D	SS8D
Parameter	**Units**	**Fraction**						
General Chemistry								
Ammonia	mg/kg-dry	T	-	16.9 :	-	57.9 :	33.1 :	-
Chloride	mg/kg-dry	T	-	<2.2 :	-	<2.1 J	29.5 :	-
Fluoride	mg/kg-dry	T	-	15.4 J	-	0.82 J	173. J	-
Nitrate	mg/kg-dry	T	-	<2.2 J	-	<2.1 J	<2.2 J	-
Phosphorus	mg/kg-dry	T	-	1560. :	-	396. J	1200. :	-
Sulfate	mg/kg-dry	T	-	599. :	-	647. J	3130. :	-
Total Kjeldahl Nitrogen	mg/kg-dry	T	-	92.4 :	-	80. J	251. :	-
Total Organic Carbon	mg/kg-dry	T	-	1460. J	-	51800. J	4880. J	-
Laboratory Parameters								
pH	SU	T	-	5.2 :	-	7.2 :	4.4 :	-
Solids, Percent	%	T	91.4 :	91.5 :	90.5 :	95.3 :	93.6 :	92.8 :
Specific Conductance	umhos/cm	T	-	1230. :	-	830. :	2930. :	-
Geotechnical								
Organic Soils	%	T	-	2.1 :	-	6.2 J	2.7 :	-
Physical Properties								
Cation-Exchange Capacity	meq/100g	T	-	16.9 :	-	9.3 :	18.3 :	-
Sodium Absorption Ratio	ratio	T	-	0.12 :	-	0.37 :	0.11 :	-
Metals								
Aluminum	mg/kg-dry	T	-	9340. :	-	-	19200. :	-
Antimony	mg/kg-dry	T	-	<0.25 J	-	-	<0.26 J	-
Arsenic	mg/kg-dry	T	-	41.9 J	-	-	2.3 J	-
Barium	mg/kg-dry	T	-	360. :	-	-	229. :	-
Beryllium	mg/kg-dry	T	-	0.4 :	-	-	0.96 :	-
Boron	mg/kg-dry	T	-	3.3 J	-	-	<0.24 J	-
Cadmium	mg/kg-dry	T	-	<0.041 J	-	-	0.28 J	-
Calcium	mg/kg-dry	T	-	2280. :	-	-	3460. :	-
Chromium	mg/kg-dry	T	-	24.3 J	-	-	36.6 J	-
Cobalt	mg/kg-dry	T	-	4.4 :	-	-	23.6 :	-
Copper	mg/kg-dry	T	-	43.8 J	-	-	135. J	-
Iron	mg/kg-dry	T	-	22300. :	-	-	36200. :	-
Lead	mg/kg-dry	T	-	58.2 :	-	-	44.7 :	-
Magnesium	mg/kg-dry	T	-	4780. :	-	-	11200. :	-
Manganese	mg/kg-dry	T	-	201. :	-	-	618. :	-

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Appendix A-7e
Soil - Biased 0-24 inches
Validated Analytical Results

Parameter	Units	Exposure Area Fraction	Site ID / Sample Date / Sample ID					
			MSS8-38 1/15/2003 MSS8-38-T02N-SOL	MSS8-39 1/13/2003 MSS8-39-T02N-SOL	MSS8-39 1/15/2003 MSS8-39-T02N-SOL	MSS8-4 10/10/2002 MSS8-4-T02N-SOL	MSS8-40 1/13/2003 MSS8-40-T02N-SOL	MSS8-40 1/15/2003 MSS8-40-T02N-SOL
			SS8D	SS8D	SS8D	SS8A	SS8D	SS8D
Mercury	mg/kg-dry	T	-	<0.018 :	-	-	<0.018 :	-
Molybdenum	mg/kg-dry	T	-	70.5 :	-	-	109. :	-
Nickel	mg/kg-dry	T	-	14.2 :	-	-	51.5 :	-
Potassium	mg/kg-dry	T	-	3630. J	-	-	6130. J	-
Selenium	mg/kg-dry	T	-	1.3 J	-	-	<0.71 J	-
Silver	mg/kg-dry	T	-	0.18 :	-	-	0.2 :	-
Sodium	mg/kg-dry	T	-	246. :	-	-	<29.4 :	-
Thallium	mg/kg-dry	T	-	0.32 :	-	-	0.49 :	-
Vanadium	mg/kg-dry	T	-	30. :	-	-	60. :	-
Zinc	mg/kg-dry	T	-	39.5 :	-	-	133. :	-
Volatile Organics								
1,1,1-Trichloroethane	mg/kg-dry	T	<0.005 :	-	<0.014 :	-	-	<0.005 :
1,1,2,2-Tetrachloroethane	mg/kg-dry	T	<0.005 :	-	<0.014 :	-	-	<0.005 :
1,1,2-Trichloro-1,2,2-trifluoroethane	mg/kg-dry	T	<0.005 :	-	<0.014 :	-	-	<0.005 :
1,1,2-Trichloroethane	mg/kg-dry	T	<0.005 :	-	<0.014 :	-	-	<0.005 :
1,1-Dichloroethane	mg/kg-dry	T	<0.005 :	-	<0.014 :	-	-	<0.005 :
1,1-Dichloroethene	mg/kg-dry	T	<0.005 :	-	<0.014 :	-	-	<0.005 :
1,2,4-Trichlorobenzene	mg/kg-dry	T	<0.005 :	-	<0.014 :	-	-	<0.005 :
1,2-Dibromo-3-chloropropane	mg/kg-dry	T	<0.005 :	-	<0.014 :	-	-	<0.005 :
1,2-Dichlorobenzene	mg/kg-dry	T	<0.005 :	-	<0.014 :	-	-	<0.005 :
1,2-Dichloroethane	mg/kg-dry	T	<0.005 :	-	<0.014 :	-	-	<0.005 :
1,2-Dichloroethene (total)	mg/kg-dry	T	<0.005 :	-	<0.014 :	-	-	<0.005 :
1,2-Dichloropropane	mg/kg-dry	T	<0.005 :	-	<0.014 :	-	-	<0.005 :
1,3-Dichlorobenzene	mg/kg-dry	T	<0.005 :	-	<0.014 :	-	-	<0.005 :
1,4-Dichlorobenzene	mg/kg-dry	T	<0.005 :	-	<0.014 :	-	-	<0.005 :
2-Butanone	mg/kg-dry	T	<0.005 :	-	0.002 J	-	-	<0.005 :
2-Hexanone	mg/kg-dry	T	<0.005 :	-	<0.014 :	-	-	<0.005 :
4-Methyl-2-pentanone	mg/kg-dry	T	<0.005 :	-	<0.014 :	-	-	<0.005 :
Acetone	mg/kg-dry	T	<0.005 :	-	0.007 J	-	-	0.002 J
Benzene	mg/kg-dry	T	<0.005 :	-	<0.014 :	-	-	<0.005 :
Bromodichloromethane	mg/kg-dry	T	<0.005 :	-	<0.014 :	-	-	<0.005 :
Bromoform	mg/kg-dry	T	<0.005 :	-	<0.014 :	-	-	<0.005 :
Bromomethane	mg/kg-dry	T	<0.005 :	-	<0.014 :	-	-	<0.005 :
Carbon disulfide	mg/kg-dry	T	<0.005 :	-	<0.014 :	-	-	<0.005 :

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Appendix A-7e
Soil - Biased 0-24 inches
Validated Analytical Results

Parameter	Units	Fraction	Site ID / Sample Date / Sample ID / Exposure Area											
			MSS8-38	1/15/2003	MSS8-38-T02N-SOL	SS8D	MSS8-39	1/13/2003	MSS8-39-T02N-SOL	SS8D	MSS8-39	1/15/2003	MSS8-39-T02N-SOL	SS8D
Carbon tetrachloride	mg/kg-dry	T	<0.005	:			-				<0.014	:		
Chlorobenzene	mg/kg-dry	T	<0.005	:			-				<0.014	:		
Chloroethane	mg/kg-dry	T	<0.005	:			-				<0.014	:		
Chloroform	mg/kg-dry	T	<0.005	:			-				<0.014	:		
Chloromethane	mg/kg-dry	T	<0.005	:			-				<0.014	:		
cis-1,2-Dichloroethene	mg/kg-dry	T	<0.005	:			-				<0.014	:		
cis-1,3-Dichloropropene	mg/kg-dry	T	<0.005	:			-				<0.014	:		
Dibromochloromethane	mg/kg-dry	T	<0.005	:			-				<0.014	:		
Dichlorodifluoromethane	mg/kg-dry	T	<0.005	:			-				<0.014	:		
Ethylbenzene	mg/kg-dry	T	<0.005	:			-				<0.014	:		
Methylene chloride	mg/kg-dry	T	<0.005	:			-				<0.014	:		
Styrene	mg/kg-dry	T	<0.005	:			-				<0.014	:		
Tetrachloroethene	mg/kg-dry	T	<0.005	:			-				<0.014	:		
Toluene	mg/kg-dry	T	<0.005	:			-				<0.014	:		
Total Xylene	mg/kg-dry	T	0.0007	J			-				0.002	J		
trans-1,2-Dichloroethene	mg/kg-dry	T	<0.005	:			-				<0.014	:		
trans-1,3-Dichloropropene	mg/kg-dry	T	<0.005	:			-				<0.014	:		
Trichloroethene	mg/kg-dry	T	<0.005	:			-				<0.014	:		
Trichlorofluoromethane	mg/kg-dry	T	<0.005	:			-				<0.014	:		
Vinyl chloride	mg/kg-dry	T	<0.005	:			-				<0.014	:		
Semi-Volatile Organics														
1,1`-Biphenyl	mg/kg-dry	T	-				<0.36	:			-			
2,4,5-Trichlorophenol	mg/kg-dry	T	-				<0.9	:			-			
2,4,6-Trichlorophenol	mg/kg-dry	T	-				<0.36	:			-			
2,4-Dichlorophenol	mg/kg-dry	T	-				<0.36	:			-			
2,4-Dimethylphenol	mg/kg-dry	T	-				<0.36	:			-			
2,4-Dinitrophenol	mg/kg-dry	T	-				<0.9	:			-			
2,4-Dinitrotoluene	mg/kg-dry	T	-				<0.36	:			-			
2,6-Dinitrotoluene	mg/kg-dry	T	-				<0.36	:			-			
2-Chloronaphthalene	mg/kg-dry	T	-				<0.36	:			-			
2-Chlorophenol	mg/kg-dry	T	-				<0.36	:			-			
2-Methylnaphthalene	mg/kg-dry	T	-				<0.36	:			-			
2-Methylphenol	mg/kg-dry	T	-				<0.36	:			-			
2-Nitroaniline	mg/kg-dry	T	-				<0.9	:			-			

Parameter	Units	Fraction	Site ID / Sample Date / Sample ID / Exposure Area											
			MSS8-4	10/10/2002	MSS8-4-T02N-SOL	SS8A	MSS8-40	1/13/2003	MSS8-40-T02N-SOL	SS8D	MSS8-40	1/15/2003	MSS8-40-T02N-SOL	SS8D
Carbon tetrachloride	mg/kg-dry	T	-				-				<0.005	:		
Chlorobenzene	mg/kg-dry	T	-				-				<0.005	:		
Chloroethane	mg/kg-dry	T	-				-				<0.005	:		
Chloroform	mg/kg-dry	T	-				-				<0.005	:		
Chloromethane	mg/kg-dry	T	-				-				<0.005	:		
cis-1,2-Dichloroethene	mg/kg-dry	T	-				-				<0.005	:		
cis-1,3-Dichloropropene	mg/kg-dry	T	-				-				<0.005	:		
Dibromochloromethane	mg/kg-dry	T	-				-				<0.005	:		
Dichlorodifluoromethane	mg/kg-dry	T	-				-				<0.005	:		
Ethylbenzene	mg/kg-dry	T	-				-				<0.005	:		
Methylene chloride	mg/kg-dry	T	-				-				<0.005	:		
Styrene	mg/kg-dry	T	-				-				<0.005	:		
Tetrachloroethene	mg/kg-dry	T	-				-				<0.005	:		
Toluene	mg/kg-dry	T	-				-				<0.005	:		
Total Xylene	mg/kg-dry	T	-				-				0.004	J		
trans-1,2-Dichloroethene	mg/kg-dry	T	-				-				<0.005	:		
trans-1,3-Dichloropropene	mg/kg-dry	T	-				-				<0.005	:		
Trichloroethene	mg/kg-dry	T	-				-				<0.005	:		
Trichlorofluoromethane	mg/kg-dry	T	-				-				<0.005	:		
Vinyl chloride	mg/kg-dry	T	-				-				<0.005	:		
Semi-Volatile Organics														
1,1`-Biphenyl	mg/kg-dry	T	<3.5	:			<0.35	:			-			
2,4,5-Trichlorophenol	mg/kg-dry	T	<8.7	:			<0.88	:			-			
2,4,6-Trichlorophenol	mg/kg-dry	T	<3.5	:			<0.35	:			-			
2,4-Dichlorophenol	mg/kg-dry	T	<3.5	:			<0.35	:			-			
2,4-Dimethylphenol	mg/kg-dry	T	<3.5	:			<0.35	:			-			
2,4-Dinitrophenol	mg/kg-dry	T	<8.7	J			<0.88	J			-			
2,4-Dinitrotoluene	mg/kg-dry	T	<3.5	:			<0.35	:			-			
2,6-Dinitrotoluene	mg/kg-dry	T	<3.5	:			<0.35	:			-			
2-Chloronaphthalene	mg/kg-dry	T	<3.5	:			<0.35	:			-			
2-Chlorophenol	mg/kg-dry	T	<3.5	:			<0.35	:			-			
2-Methylnaphthalene	mg/kg-dry	T	<3.5	:			<0.35	:			-			
2-Methylphenol	mg/kg-dry	T	<3.5	:			<0.35	:			-			
2-Nitroaniline	mg/kg-dry	T	<8.7	:			<0.88	:			-			

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T = Total Fraction

Appendix A-7e
Soil - Biased 0-24 inches
Validated Analytical Results

Parameter	Units	Exposure Area Fraction	Site ID / Sample Date / Sample ID					
			MSS8-38 1/15/2003 MSS8-38-T02N-SOL	MSS8-39 1/13/2003 MSS8-39-T02N-SOL	MSS8-39 1/15/2003 MSS8-39-T02N-SOL	MSS8-4 10/10/2002 MSS8-4-T02N-SOL	MSS8-40 1/13/2003 MSS8-40-T02N-SOL	MSS8-40 1/15/2003 MSS8-40-T02N-SOL
			SS8D	SS8D	SS8D	SS8A	SS8D	SS8D
2-Nitrophenol	mg/kg-dry	T	-	<0.36 :	-	<3.5 :	<0.35 :	-
3,3-Dichlorobenzidine	mg/kg-dry	T	-	<0.36 :	-	<3.5 :	<0.35 :	-
3-Nitroaniline	mg/kg-dry	T	-	<0.9 :	-	<8.7 :	<0.88 :	-
4,6-Dinitro-2-methylphenol	mg/kg-dry	T	-	<0.9 :	-	<8.7 :	<0.88 J	-
4-Bromophenyl phenyl ether	mg/kg-dry	T	-	<0.36 :	-	<3.5 :	<0.35 :	-
4-Chloro-3-methylphenol	mg/kg-dry	T	-	<0.36 :	-	<3.5 :	<0.35 :	-
4-Chloroaniline	mg/kg-dry	T	-	<0.36 :	-	<3.5 :	<0.35 :	-
4-Chlorophenyl phenyl ether	mg/kg-dry	T	-	<0.36 :	-	<3.5 :	<0.35 :	-
4-Methylphenol	mg/kg-dry	T	-	<0.36 :	-	<3.5 :	<0.35 :	-
4-Nitroaniline	mg/kg-dry	T	-	<0.9 :	-	<8.7 :	<0.88 :	-
4-Nitrophenol	mg/kg-dry	T	-	<0.9 :	-	<8.7 J	<0.88 :	-
Acenaphthene	mg/kg-dry	T	-	<0.36 :	-	<3.5 :	<0.35 :	-
Acenaphthylene	mg/kg-dry	T	-	<0.36 :	-	<3.5 :	<0.35 :	-
Anthracene	mg/kg-dry	T	-	<0.36 :	-	<3.5 :	<0.35 :	-
Benzaldehyde	mg/kg-dry	T	-	<0.36 J	-	<3.5 J	<0.35 :	-
Benzo(a)anthracene	mg/kg-dry	T	-	<0.36 :	-	<3.5 :	<0.35 :	-
Benzo(a)pyrene	mg/kg-dry	T	-	<0.36 :	-	<3.5 :	<0.35 :	-
Benzo(b)fluoranthene	mg/kg-dry	T	-	<0.36 :	-	<3.5 :	<0.35 :	-
Benzo(g,h,i)perylene	mg/kg-dry	T	-	<0.36 :	-	<3.5 :	<0.35 :	-
Benzo(k)fluoranthene	mg/kg-dry	T	-	<0.36 :	-	<3.5 J	<0.35 :	-
Bis(2-chloroethoxy)methane	mg/kg-dry	T	-	<0.36 :	-	<3.5 :	<0.35 :	-
Bis(2-chloroethyl)ether	mg/kg-dry	T	-	<0.36 :	-	<3.5 :	<0.35 :	-
Bis(2-ethylhexyl)phthalate	mg/kg-dry	T	-	0.029 J	-	<3.5 :	0.065 J	-
Butyl benzyl phthalate	mg/kg-dry	T	-	<0.36 :	-	<3.5 :	<0.35 :	-
Carbazole	mg/kg-dry	T	-	<0.36 :	-	<3.5 :	<0.35 :	-
Chrysene	mg/kg-dry	T	-	<0.36 :	-	<3.5 :	<0.35 :	-
Dibenz(a,h)anthracene	mg/kg-dry	T	-	<0.36 :	-	<3.5 :	<0.35 :	-
Dibenzofuran	mg/kg-dry	T	-	<0.36 :	-	<3.5 :	<0.35 :	-
Dichlorodiisopropyl ether	mg/kg-dry	T	-	<0.36 :	-	<3.5 :	<0.35 :	-
Diethylphthalate	mg/kg-dry	T	-	<0.36 :	-	<3.5 :	<0.35 :	-
Dimethylphthalate	mg/kg-dry	T	-	<0.36 :	-	<3.5 :	<0.35 :	-
Di-n-Butyl phthalate	mg/kg-dry	T	-	0.027 J	-	<3.5 :	0.017 J	-
Di-n-Octyl phthalate	mg/kg-dry	T	-	<0.36 :	-	<3.5 :	0.07 J	-
Fluoranthene	mg/kg-dry	T	-	<0.36 :	-	<3.5 :	<0.35 :	-

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Appendix A-7e
Soil - Biased 0-24 inches
Validated Analytical Results

Parameter	Units	Exposure Area Fraction	Site ID / Sample Date / Sample ID					
			MSS8-38 1/15/2003 MSS8-38-T02N-SOL	MSS8-39 1/13/2003 MSS8-39-T02N-SOL	MSS8-39 1/15/2003 MSS8-39-T02N-SOL	MSS8-4 10/10/2002 MSS8-4-T02N-SOL	MSS8-40 1/13/2003 MSS8-40-T02N-SOL	MSS8-40 1/15/2003 MSS8-40-T02N-SOL
			SS8D	SS8D	SS8D	SS8A	SS8D	SS8D
Fluorene	mg/kg-dry	T	-	<0.36 :	-	<3.5 :	<0.35 :	-
Hexachlorobenzene	mg/kg-dry	T	-	<0.36 :	-	<3.5 :	<0.35 :	-
Hexachlorobutadiene	mg/kg-dry	T	-	<0.36 :	-	<3.5 :	<0.35 :	-
Hexachlorocyclopentadiene	mg/kg-dry	T	-	<0.36 :	-	<3.5 :	<0.35 :	-
Hexachloroethane	mg/kg-dry	T	-	<0.36 :	-	<3.5 :	<0.35 :	-
Indeno(1,2,3-cd)pyrene	mg/kg-dry	T	-	<0.36 :	-	<3.5 :	<0.35 :	-
Isophorone	mg/kg-dry	T	-	<0.36 :	-	<3.5 :	<0.35 :	-
Naphthalene	mg/kg-dry	T	-	<0.36 :	-	<3.5 :	<0.35 :	-
Nitrobenzene	mg/kg-dry	T	-	<0.36 :	-	<3.5 :	<0.35 :	-
N-Nitrosodi-n-propylamine	mg/kg-dry	T	-	<0.36 :	-	<3.5 :	<0.35 :	-
N-Nitrosodiphenylamine	mg/kg-dry	T	-	<0.36 :	-	<3.5 :	<0.35 :	-
Pentachlorophenol	mg/kg-dry	T	-	<0.9 :	-	<8.7 J	<0.88 :	-
Phenanthrene	mg/kg-dry	T	-	<0.36 :	-	<3.5 :	<0.35 :	-
Phenol	mg/kg-dry	T	-	<0.36 :	-	<3.5 :	<0.35 :	-
Pyrene	mg/kg-dry	T	-	<0.36 :	-	<3.5 :	<0.35 :	-
Explosives								
2,4,6-Trinitrotoluene	mg/kg-dry	T	-	-	-	<0.12 :	-	-
2,6-Pyridinediamine,	mg/kg-dry	T	-	-	-	<0.12 :	-	-
Cyclotetramethylenetetranitramine	mg/kg-dry	T	-	-	-	<0.12 :	-	-
Cyclotrimethylenetrinitramine	mg/kg-dry	T	-	-	-	<0.12 :	-	-
Pentaerythritol tetranitrate	mg/kg-dry	T	-	-	-	<5. :	-	-

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Appendix A-7e
Soil - Biased 0-24 inches
Validated Analytical Results

Parameter	Units	Fraction	MSS8-41		MSS8-42		MSS8-43		MSS8-44		MSS8-45		MSS8-46	
Sample Date			1/13/2003		1/13/2003		1/15/2003		1/13/2003		1/13/2003		1/13/2003	
Sample ID			MSS8-41-T02N-SOL		MSS8-42-T02N-SOL		MSS8-43-T02N-SOL		MSS8-44-T02N-SOL		MSS8-45-T02N-SOL		MSS8-46-T02N-SOL	
Exposure Area			SS8D		SS8D		SS8D		SS8D		SS8D		SS8D	
General Chemistry														
Ammonia	mg/kg-dry	T	15.3	:	16.8	:	22.4	:	11.8	:	16.3	:	25.	:
Chloride	mg/kg-dry	T	86.5	:	3.4	:	2.8	:	22.4	J	9.1	J	7.1	:
Fluoride	mg/kg-dry	T	1.2	J	6.4	J	3.2	J	2.4	J	0.33	J	4.4	J
Nitrate	mg/kg-dry	T	<2.2	J	<2.3	J	<2.2	J	<2.3	J	<2.3	J	<2.1	J
Phosphorus	mg/kg-dry	T	1440.	:	1240.	:	2210.	:	1680.	J	1470.	:	1960.	:
Sulfate	mg/kg-dry	T	824.	:	3020.	J	541.	:	8170.	:	8330.	:	1060.	:
Total Kjeldahl Nitrogen	mg/kg-dry	T	163.	:	107.	:	158.	:	71.3	:	55.7	:	187.	:
Total Organic Carbon	mg/kg-dry	T	4180.	J	4920.	J	10000.	J	2750.	J	<115.	J	1050.	J
Laboratory Parameters														
pH	SU	T	6.8	:	5.6	:	6.5	:	4.1	:	3.8	:	4.8	:
Solids, Percent	%	T	91.8	:	87.2	:	94.9	:	90.1	:	87.2	:	95.6	:
Specific Conductance	umhos/cm	T	1700.	:	1690.	:	1610.	J	2150.	:	1660.	:	1140.	:
Geotechnical														
Organic Soils	%	T	2.8	:	2.9	:	2.7	:	3.9	:	2.9	:	3.4	:
Physical Properties														
Cation-Exchange Capacity	meq/100g	T	12.7	:	13.2	:	15.2	:	15.2	:	17.3	:	19.9	:
Sodium Absorption Ratio	ratio	T	0.61	:	0.1	:	0.03	:	0.07	:	0.08	:	0.08	:
Metals														
Aluminum	mg/kg-dry	T	15900.	:	23000.	:	17300.	:	18400.	:	19200.	:	18800.	:
Antimony	mg/kg-dry	T	<0.26	J	<0.25	J	<0.31	J	<0.27	J	<0.26	J	<0.24	J
Arsenic	mg/kg-dry	T	5.8	J	1.5	J	5.9	J	2.	J	1.3	J	4.4	J
Barium	mg/kg-dry	T	332.	:	319.	:	274.	:	161.	:	155.	:	482.	:
Beryllium	mg/kg-dry	T	0.93	:	2.	:	1.6	:	1.3	:	0.72	:	1.4	:
Boron	mg/kg-dry	T	1.4	J	<0.29	J	<2.4	:	<0.27	J	<0.27	J	2.4	J
Cadmium	mg/kg-dry	T	<0.039	J	<0.043	J	0.7	:	<0.04	J	<0.04	J	0.19	J
Calcium	mg/kg-dry	T	8580.	:	4200.	:	16600.	:	14600.	:	17400.	:	11900.	:
Chromium	mg/kg-dry	T	38.3	J	78.4	J	60.9	J	65.8	J	86.7	J	71.	J
Cobalt	mg/kg-dry	T	13.7	:	8.7	:	29.1	:	24.8	J	6.2	:	24.	:
Copper	mg/kg-dry	T	112.	J	447.	J	289.	J	441.	J	102.	:	317.	J
Iron	mg/kg-dry	T	33200.	:	35200.	:	47900.	:	45100.	J	44300.	J	61900.	:
Lead	mg/kg-dry	T	74.7	:	45.2	:	164.	:	158.	J	136.	J	210.	:
Magnesium	mg/kg-dry	T	8370.	:	12200.	:	11400.	:	12500.	:	15200.	:	11100.	:
Manganese	mg/kg-dry	T	492.	:	482.	:	1240.	:	730.	J	776.	:	900.	:

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Appendix A-7e
Soil - Biased 0-24 inches
Validated Analytical Results

Parameter	Units	Fraction	MSS8-41		MSS8-42		MSS8-43		MSS8-44		MSS8-45		MSS8-46	
Sample Date			1/13/2003		1/13/2003		1/15/2003		1/13/2003		1/13/2003		1/13/2003	
Sample ID			MSS8-41-T02N-SOL		MSS8-42-T02N-SOL		MSS8-43-T02N-SOL		MSS8-44-T02N-SOL		MSS8-45-T02N-SOL		MSS8-46-T02N-SOL	
Exposure Area			SS8D		SS8D		SS8D		SS8D		SS8D		SS8D	
Mercury	mg/kg-dry	T	<0.017	:	<0.018	:	<0.016	:	<0.018	:	<0.018	:	0.044	:
Molybdenum	mg/kg-dry	T	76.1	:	136.	:	54.2	:	73.4	:	24.6	:	342.	:
Nickel	mg/kg-dry	T	28.1	:	41.8	:	42.3	:	50.1	J	35.5	:	41.6	:
Potassium	mg/kg-dry	T	4920.	J	7430.	J	4040.	J	6510.	J	7820.	J	6160.	J
Selenium	mg/kg-dry	T	2.	J	3.2	J	1.2	J	2.7	J	2.5	J	3.7	J
Silver	mg/kg-dry	T	0.48	:	0.37	:	0.85	:	1.2	:	1.1	:	2.	:
Sodium	mg/kg-dry	T	<304.	:	<73.2	:	<87.6	:	<144.	:	<206.	:	<180.	:
Thallium	mg/kg-dry	T	0.48	:	0.55	:	0.64	:	0.85	:	1.1	:	0.72	:
Vanadium	mg/kg-dry	T	41.1	:	58.7	:	46.4	:	51.6	:	65.8	:	62.	:
Zinc	mg/kg-dry	T	93.2	:	99.2	:	169.	:	194.	:	79.7	:	217.	:
Volatile Organics														
1,1,1-Trichloroethane	mg/kg-dry	T	<0.54	:	<0.013	:	<0.011	:	<0.013	:	<0.01	:	<0.01	:
1,1,2,2-Tetrachloroethane	mg/kg-dry	T	<0.54	:	<0.013	:	<0.011	J	<0.013	:	<0.01	:	<0.01	:
1,1,2-Trichloro-1,2,2-trifluoroethane	mg/kg-dry	T	<0.54	:	<0.013	:	<0.011	:	<0.013	:	<0.01	:	<0.01	:
1,1,2-Trichloroethane	mg/kg-dry	T	<0.54	:	<0.013	:	<0.011	:	<0.013	:	<0.01	:	<0.01	:
1,1-Dichloroethane	mg/kg-dry	T	<0.54	:	<0.013	:	<0.011	:	<0.013	:	<0.01	:	<0.01	:
1,1-Dichloroethene	mg/kg-dry	T	<0.54	:	<0.013	:	<0.011	:	<0.013	:	<0.01	:	<0.01	:
1,2,4-Trichlorobenzene	mg/kg-dry	T	<0.54	:	<0.013	:	<0.011	:	<0.013	:	<0.01	:	<0.01	:
1,2-Dibromo-3-chloropropane	mg/kg-dry	T	<0.54	:	<0.013	:	<0.011	J	<0.013	:	<0.01	:	<0.01	:
1,2-Dichlorobenzene	mg/kg-dry	T	<0.54	:	<0.013	:	<0.011	:	<0.013	:	<0.01	:	<0.01	:
1,2-Dichloroethane	mg/kg-dry	T	<0.54	:	<0.013	:	<0.011	:	<0.013	:	<0.01	:	<0.01	:
1,2-Dichloroethene (total)	mg/kg-dry	T	<0.54	:	<0.013	:	<0.011	:	<0.013	:	<0.01	:	<0.01	:
1,2-Dichloropropane	mg/kg-dry	T	<0.54	:	<0.013	:	<0.011	:	<0.013	:	<0.01	:	<0.01	:
1,3-Dichlorobenzene	mg/kg-dry	T	<0.54	:	<0.013	:	<0.011	:	<0.013	:	<0.01	:	<0.01	:
1,4-Dichlorobenzene	mg/kg-dry	T	<0.54	:	<0.013	:	<0.011	:	<0.013	:	<0.01	:	<0.01	:
2-Butanone	mg/kg-dry	T	<0.54	:	0.015	:	<0.011	J	0.002	J	<0.01	:	<0.01	:
2-Hexanone	mg/kg-dry	T	<0.54	:	<0.013	:	<0.011	J	<0.013	:	<0.01	:	<0.01	:
4-Methyl-2-pentanone	mg/kg-dry	T	<0.54	:	<0.013	:	<0.011	J	<0.013	:	<0.01	:	<0.01	:
Acetone	mg/kg-dry	T	<0.54	:	0.056	:	<0.011	J	<0.013	:	<0.01	:	<0.01	:
Benzene	mg/kg-dry	T	<0.54	:	<0.013	:	<0.011	:	<0.013	:	<0.01	:	<0.01	:
Bromodichloromethane	mg/kg-dry	T	<0.54	:	<0.013	:	<0.011	:	<0.013	:	<0.01	:	<0.01	:
Bromoform	mg/kg-dry	T	<0.54	:	<0.013	:	<0.011	:	<0.013	:	<0.01	:	<0.01	:
Bromomethane	mg/kg-dry	T	<0.54	:	<0.013	:	<0.011	:	<0.013	:	<0.01	:	<0.01	:
Carbon disulfide	mg/kg-dry	T	<0.54	:	0.004	J	<0.011	:	0.001	J	<0.01	:	<0.01	:

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Appendix A-7e
Soil - Biased 0-24 inches
Validated Analytical Results

Parameter	Units	Exposure Area Fraction	Site ID	Sample Date	Sample ID	Exposure Area
			MSS8-41	1/13/2003	MSS8-41-T02N-SOL	SS8D
			MSS8-42	1/13/2003	MSS8-42-T02N-SOL	SS8D
			MSS8-43	1/15/2003	MSS8-43-T02N-SOL	SS8D
			MSS8-44	1/13/2003	MSS8-44-T02N-SOL	SS8D
			MSS8-45	1/13/2003	MSS8-45-T02N-SOL	SS8D
			MSS8-46	1/13/2003	MSS8-46-T02N-SOL	SS8D
Carbon tetrachloride	mg/kg-dry	T	<0.54 :	<0.013 :	<0.011 :	<0.013 :	<0.01 :	<0.01 :
Chlorobenzene	mg/kg-dry	T	<0.54 :	<0.013 :	<0.011 :	<0.013 :	<0.01 :	<0.01 :
Chloroethane	mg/kg-dry	T	<0.54 :	<0.013 :	<0.011 :	<0.013 :	<0.01 :	<0.01 :
Chloroform	mg/kg-dry	T	<0.54 :	<0.013 :	<0.011 :	<0.013 :	<0.01 :	<0.01 :
Chloromethane	mg/kg-dry	T	<0.54 :	<0.013 :	<0.011 :	<0.013 :	<0.01 :	<0.01 :
cis-1,2-Dichloroethene	mg/kg-dry	T	<0.54 :	<0.013 :	<0.011 :	<0.013 :	<0.01 :	<0.01 :
cis-1,3-Dichloropropene	mg/kg-dry	T	<0.54 :	<0.013 :	<0.011 :	<0.013 :	<0.01 :	<0.01 :
Dibromochloromethane	mg/kg-dry	T	<0.54 :	<0.013 :	<0.011 :	<0.013 :	<0.01 :	<0.01 :
Dichlorodifluoromethane	mg/kg-dry	T	<0.54 :	<0.013 :	<0.011 :	<0.013 :	<0.01 :	<0.01 :
Ethylbenzene	mg/kg-dry	T	0.43 J	<0.013 :	<0.011 :	<0.013 :	0.001 J	0.001 J
Methylene chloride	mg/kg-dry	T	<0.54 :	<0.013 :	0.002 J	<0.013 :	<0.01 :	<0.01 :
Styrene	mg/kg-dry	T	<0.54 :	<0.013 :	<0.011 :	<0.013 :	<0.01 :	<0.01 :
Tetrachloroethene	mg/kg-dry	T	<0.54 :	<0.013 :	<0.011 :	<0.013 :	<0.01 :	<0.01 :
Toluene	mg/kg-dry	T	<0.54 :	<0.013 :	<0.011 :	<0.013 :	<0.01 :	<0.01 :
Total Xylene	mg/kg-dry	T	0.34 J	<0.013 :	0.002 J	0.002 J	0.005 J	0.006 J
trans-1,2-Dichloroethene	mg/kg-dry	T	<0.54 :	<0.013 :	<0.011 :	<0.013 :	<0.01 :	<0.01 :
trans-1,3-Dichloropropene	mg/kg-dry	T	<0.54 :	<0.013 :	<0.011 :	<0.013 :	<0.01 :	<0.01 :
Trichloroethene	mg/kg-dry	T	<0.54 :	<0.013 :	<0.011 :	<0.013 :	<0.01 :	<0.01 :
Trichlorofluoromethane	mg/kg-dry	T	<0.54 :	<0.013 :	<0.011 :	<0.013 :	<0.01 :	<0.01 :
Vinyl chloride	mg/kg-dry	T	<0.54 :	<0.013 :	<0.011 :	<0.013 :	<0.01 :	<0.01 :
Semi-Volatile Organics								
1,1`-Biphenyl	mg/kg-dry	T	1.4 J	<0.38 :	<0.35 :	<0.37 :	<0.38 :	<0.34 :
2,4,5-Trichlorophenol	mg/kg-dry	T	<9. :	<0.95 :	<0.87 :	<0.92 :	<0.95 :	<0.86 :
2,4,6-Trichlorophenol	mg/kg-dry	T	<3.6 :	<0.38 :	<0.35 :	<0.37 :	<0.38 :	<0.34 :
2,4-Dichlorophenol	mg/kg-dry	T	<3.6 :	<0.38 :	<0.35 :	<0.37 :	<0.38 :	<0.34 :
2,4-Dimethylphenol	mg/kg-dry	T	<3.6 :	<0.38 :	<0.35 :	<0.37 :	<0.38 :	<0.34 :
2,4-Dinitrophenol	mg/kg-dry	T	<9. J	<0.95 J	<0.87 :	<0.92 J	<0.95 :	<0.86 J
2,4-Dinitrotoluene	mg/kg-dry	T	<3.6 :	<0.38 :	<0.35 :	<0.37 :	<0.38 :	<0.34 :
2,6-Dinitrotoluene	mg/kg-dry	T	<3.6 :	<0.38 :	<0.35 :	<0.37 :	<0.38 :	<0.34 :
2-Chloronaphthalene	mg/kg-dry	T	<3.6 :	<0.38 :	<0.35 :	<0.37 :	<0.38 :	<0.34 :
2-Chlorophenol	mg/kg-dry	T	<3.6 :	<0.38 :	<0.35 :	<0.37 :	<0.38 :	<0.34 :
2-Methylnaphthalene	mg/kg-dry	T	17. :	<0.38 :	<0.35 :	<0.37 :	<0.38 :	<0.34 :
2-Methylphenol	mg/kg-dry	T	<3.6 :	<0.38 :	<0.35 :	<0.37 :	<0.38 :	<0.34 :
2-Nitroaniline	mg/kg-dry	T	<9. :	<0.95 :	<0.87 :	<0.92 :	<0.95 :	<0.86 :

J = Qualified as estimated during data validation
R = Qualified as rejected value from data validation and results are considered unusable for any purpose
T = Total Fraction

Appendix A-7e
Soil - Biased 0-24 inches
Validated Analytical Results

Parameter	Units	Exposure Area Fraction	Site ID / Sample Date / Sample ID		MSS8-41 1/13/2003 MSS8-41-T02N-SOL SS8D		MSS8-42 1/13/2003 MSS8-42-T02N-SOL SS8D		MSS8-43 1/15/2003 MSS8-43-T02N-SOL SS8D		MSS8-44 1/13/2003 MSS8-44-T02N-SOL SS8D		MSS8-45 1/13/2003 MSS8-45-T02N-SOL SS8D		MSS8-46 1/13/2003 MSS8-46-T02N-SOL SS8D	
2-Nitrophenol	mg/kg-dry	T		<3.6	:	<0.38	:	<0.35	:	<0.37	:	<0.38	:	<0.34	:
3,3-Dichlorobenzidine	mg/kg-dry	T		<3.6	:	<0.38	:	<0.35	J	<0.37	:	<0.38	:	<0.34	:
3-Nitroaniline	mg/kg-dry	T		<9.	J	<0.95	:	<0.87	J	<0.92	:	<0.95	:	<0.86	:
4,6-Dinitro-2-methylphenol	mg/kg-dry	T		<9.	:	<0.95	J	<0.87	:	<0.92	J	<0.95	:	<0.86	:
4-Bromophenyl phenyl ether	mg/kg-dry	T		<3.6	:	<0.38	:	<0.35	:	<0.37	:	<0.38	:	<0.34	:
4-Chloro-3-methylphenol	mg/kg-dry	T		<3.6	:	<0.38	:	<0.35	:	<0.37	:	<0.38	:	<0.34	J
4-Chloroaniline	mg/kg-dry	T		<3.6	:	<0.38	J	<0.35	J	<0.37	J	<0.38	:	<0.34	J
4-Chlorophenyl phenyl ether	mg/kg-dry	T		<3.6	:	<0.38	:	<0.35	:	<0.37	:	<0.38	:	<0.34	:
4-Methylphenol	mg/kg-dry	T		<3.6	:	<0.38	:	<0.35	:	<0.37	:	<0.38	:	<0.34	:
4-Nitroaniline	mg/kg-dry	T		<9.	:	<0.95	:	<0.87	J	<0.92	:	<0.95	:	<0.86	:
4-Nitrophenol	mg/kg-dry	T		<9.	J	<0.95	:	<0.87	:	<0.92	:	<0.95	:	<0.86	:
Acenaphthene	mg/kg-dry	T		0.64	J	<0.38	:	<0.35	:	<0.37	:	<0.38	:	<0.34	:
Acenaphthylene	mg/kg-dry	T		<3.6	:	<0.38	:	<0.35	:	<0.37	:	<0.38	:	<0.34	:
Anthracene	mg/kg-dry	T		<3.6	:	<0.38	:	<0.35	:	<0.37	:	<0.38	:	<0.34	:
Benzaldehyde	mg/kg-dry	T		<3.6	:	<0.38	:	<0.35	:	<0.37	:	<0.38	:	<0.34	:
Benzo(a)anthracene	mg/kg-dry	T		<3.6	:	<0.38	:	<0.35	J	<0.37	:	<0.38	:	<0.34	:
Benzo(a)pyrene	mg/kg-dry	T		<3.6	:	<0.38	:	<0.35	J	<0.37	:	<0.38	:	<0.34	:
Benzo(b)fluoranthene	mg/kg-dry	T		<3.6	:	<0.38	:	<0.35	J	<0.37	:	<0.38	:	<0.34	:
Benzo(g,h,i)perylene	mg/kg-dry	T		<3.6	:	<0.38	:	<0.35	J	<0.37	:	<0.38	:	<0.34	:
Benzo(k)fluoranthene	mg/kg-dry	T		<3.6	:	<0.38	:	<0.35	J	<0.37	:	<0.38	:	<0.34	:
Bis(2-chloroethoxy)methane	mg/kg-dry	T		<3.6	:	<0.38	:	<0.35	:	<0.37	:	<0.38	:	<0.34	:
Bis(2-chloroethyl)ether	mg/kg-dry	T		<3.6	:	<0.38	:	<0.35	:	<0.37	:	<0.38	:	<0.34	:
Bis(2-ethylhexyl)phthalate	mg/kg-dry	T		0.19	J	0.066	J	0.24	J	0.055	J	<0.38	:	0.083	J
Butyl benzyl phthalate	mg/kg-dry	T		<3.6	:	<0.38	:	<0.35	J	<0.37	:	<0.38	:	<0.34	:
Carbazole	mg/kg-dry	T		<3.6	:	<0.38	:	<0.35	:	<0.37	:	<0.38	:	<0.34	:
Chrysene	mg/kg-dry	T		<3.6	:	0.045	J	<0.35	J	<0.37	:	<0.38	:	<0.34	:
Dibenz(a,h)anthracene	mg/kg-dry	T		<3.6	J	<0.38	J	<0.35	J	<0.37	J	<0.38	J	<0.34	J
Dibenzofuran	mg/kg-dry	T		1.3	J	<0.38	:	<0.35	:	<0.37	:	<0.38	:	<0.34	:
Dichlorodiisopropyl ether	mg/kg-dry	T		<3.6	:	<0.38	:	<0.35	:	<0.37	:	<0.38	:	<0.34	:
Diethylphthalate	mg/kg-dry	T		<3.6	:	<0.38	:	<0.35	:	<0.37	:	<0.38	:	<0.34	:
Dimethylphthalate	mg/kg-dry	T		<3.6	:	<0.38	:	<0.35	:	<0.37	:	<0.38	:	<0.34	:
Di-n-Butyl phthalate	mg/kg-dry	T		<3.6	:	<0.38	:	<0.35	:	0.022	J	<0.38	:	<0.34	:
Di-n-Octyl phthalate	mg/kg-dry	T		<3.6	:	<0.38	:	<0.35	J	<0.37	:	<0.38	:	<0.34	:
Fluoranthene	mg/kg-dry	T		<3.6	J	<0.38	:	<0.35	:	<0.37	:	<0.38	:	0.024	J

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Appendix A-7e
Soil - Biased 0-24 inches
Validated Analytical Results

Parameter	Units	Exposure Area Fraction	Site ID / Sample Date / Sample ID		MSS8-41 1/13/2003 MSS8-41-T02N-SOL SS8D		MSS8-42 1/13/2003 MSS8-42-T02N-SOL SS8D		MSS8-43 1/15/2003 MSS8-43-T02N-SOL SS8D		MSS8-44 1/13/2003 MSS8-44-T02N-SOL SS8D		MSS8-45 1/13/2003 MSS8-45-T02N-SOL SS8D		MSS8-46 1/13/2003 MSS8-46-T02N-SOL SS8D	
Fluorene	mg/kg-dry	T		2.	J	<0.38	:	<0.35	:	<0.37	:	<0.38	:	<0.34	:
Hexachlorobenzene	mg/kg-dry	T		<3.6	:	<0.38	:	<0.35	:	<0.37	:	<0.38	:	<0.34	:
Hexachlorobutadiene	mg/kg-dry	T		<3.6	:	<0.38	:	<0.35	:	<0.37	:	<0.38	:	<0.34	:
Hexachlorocyclopentadiene	mg/kg-dry	T		<3.6	:	<0.38	:	<0.35	:	<0.37	:	<0.38	J	<0.34	:
Hexachloroethane	mg/kg-dry	T		<3.6	:	<0.38	:	<0.35	:	<0.37	:	<0.38	:	<0.34	:
Indeno(1,2,3-cd)pyrene	mg/kg-dry	T		<3.6	:	<0.38	J	<0.35	J	<0.37	J	<0.38	J	<0.34	J
Isophorone	mg/kg-dry	T		<3.6	:	<0.38	:	<0.35	:	<0.37	:	<0.38	:	<0.34	:
Naphthalene	mg/kg-dry	T		4.1	:	<0.38	:	<0.35	:	<0.37	:	<0.38	:	<0.34	:
Nitrobenzene	mg/kg-dry	T		<3.6	:	<0.38	:	<0.35	:	<0.37	:	<0.38	:	<0.34	:
N-Nitrosodi-n-propylamine	mg/kg-dry	T		<3.6	:	<0.38	:	<0.35	:	<0.37	:	<0.38	:	<0.34	:
N-Nitrosodiphenylamine	mg/kg-dry	T		<3.6	:	<0.38	:	<0.35	:	<0.37	:	<0.38	:	<0.34	:
Pentachlorophenol	mg/kg-dry	T		<9.	:	<0.95	J	<0.87	:	<0.92	J	<0.95	J	<0.86	J
Phenanthrene	mg/kg-dry	T		3.5	J	<0.38	:	<0.35	:	<0.37	:	<0.38	:	0.018	J
Phenol	mg/kg-dry	T		<3.6	:	<0.38	:	<0.35	:	<0.37	:	<0.38	:	<0.34	:
Pyrene	mg/kg-dry	T		<3.6	:	0.17	J	<0.35	J	<0.37	:	<0.38	:	0.016	J
Pesticides-PCBs																
Aroclor 1016	mg/kg-dry	T		<0.036	:	<0.038	:	-		-		-		-	
Aroclor 1221	mg/kg-dry	T		<0.073	:	<0.077	:	-		-		-		-	
Aroclor 1232	mg/kg-dry	T		<0.036	:	<0.038	:	-		-		-		-	
Aroclor 1242	mg/kg-dry	T		<0.036	:	<0.038	:	-		-		-		-	
Aroclor 1248	mg/kg-dry	T		<0.036	:	<0.038	:	-		-		-		-	
Aroclor 1254	mg/kg-dry	T		<0.036	:	<0.038	:	-		-		-		-	
Aroclor 1260	mg/kg-dry	T		0.18	:	<0.038	:	-		-		-		-	

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Appendix A-7e
Soil - Biased 0-24 inches
Validated Analytical Results

Parameter	Units	Exposure Area Fraction	Site ID / Sample Date / Sample ID		MSS8-47 1/15/2003 MSS8-47-T02N-SOL SS8D		MSS8-48 1/15/2003 MSS8-48-T02N-SOL SS8D		MSS8-49 1/13/2003 MSS8-49-T02N-SOL SS8D		MSS8-49 1/15/2003 MSS8-49-T02N-SOL SS8D		MSS8-5 10/10/2002 MSS8-5-T02N-SOL SS8A		MSS8-50 1/15/2003 MSS8-50-T02N-SOL SS8D	
General Chemistry																
Ammonia	mg/kg-dry	T			132.	:	12.6	:	11.7	:	-		59.2	:	12.6	:
Chloride	mg/kg-dry	T			3.1	:	3.1	:	<2.3	:	-		<2.1	J	2.9	:
Fluoride	mg/kg-dry	T			0.42	J	2.	J	0.82	J	-		0.74	J	0.27	J
Nitrate	mg/kg-dry	T			3.9	J	<2.2	J	<2.3	J	-		<2.1	J	<2.2	J
Phosphorus	mg/kg-dry	T			2190.	:	1670.	:	3020.	:	-		407.	J	2290.	:
Sulfate	mg/kg-dry	T			108.	:	208.	:	470.	:	-		819.	J	17.8	:
Total Kjeldahl Nitrogen	mg/kg-dry	T			249.	:	146.	:	49.4	:	-		128.	J	171.	:
Total Organic Carbon	mg/kg-dry	T			2470.	J	1760.	J	2080.	J	-		60800.	J	3140.	J
Laboratory Parameters																
pH	SU	T			4.4	:	5.2	:	6.4	:	-		7.3	:	6.7	:
Solids, Percent	%	T			91.	:	92.2	:	89.7	:	88.6	:	97.	:	92.5	:
Specific Conductance	umhos/cm	T			189.	J	525.	J	745.	:	-		977.	:	133.	J
Geotechnical																
Organic Soils	%	T			3.6	:	2.6	:	3.	:	-		7.23	J	3.	:
Physical Properties																
Cation-Exchange Capacity	meq/100g	T			18.9	:	18.5	:	22.	:	-		6.9	:	19.4	:
Sodium Absorption Ratio	ratio	T			0.4	:	0.19	:	0.25	:	-		0.12	:	0.14	:
Metals																
Aluminum	mg/kg-dry	T			23100.	:	16400.	:	21600.	:	-		-		24700.	J
Antimony	mg/kg-dry	T			<0.28	J	<0.28	J	<0.28	J	-		-		<0.29	J
Arsenic	mg/kg-dry	T			2.5	J	3.4	J	0.73	J	-		-		9.9	J
Barium	mg/kg-dry	T			253.	:	272.	:	264.	:	-		-		204.	:
Beryllium	mg/kg-dry	T			0.74	:	1.	:	2.1	:	-		-		0.83	:
Boron	mg/kg-dry	T			<0.37	J	<0.24	J	<0.27	J	-		-		<2.4	:
Cadmium	mg/kg-dry	T			<0.035	:	0.38	:	<0.04	J	-		-		0.13	:
Calcium	mg/kg-dry	T			1610.	:	3140.	:	2990.	:	-		-		3840.	J
Chromium	mg/kg-dry	T			63.1	J	54.2	J	73.4	J	-		-		94.4	J
Cobalt	mg/kg-dry	T			6.6	:	8.7	:	7.1	:	-		-		8.4	J
Copper	mg/kg-dry	T			147.	J	205.	J	539.	J	-		-		602.	J
Iron	mg/kg-dry	T			39600.	:	35300.	:	69900.	:	-		-		55700.	J
Lead	mg/kg-dry	T			31.3	:	70.7	:	27.9	:	-		-		47.4	J
Magnesium	mg/kg-dry	T			11700.	:	7440.	:	11000.	:	-		-		13300.	J
Manganese	mg/kg-dry	T			465.	:	573.	:	467.	:	-		-		506.	J

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Appendix A-7e
Soil - Biased 0-24 inches
Validated Analytical Results

Parameter	Units	Fraction	MSS8-47	MSS8-48	MSS8-49	MSS8-49	MSS8-5	MSS8-50
		Sample Date	1/15/2003	1/15/2003	1/13/2003	1/15/2003	10/10/2002	1/15/2003
		Sample ID	MSS8-47-T02N-SOL	MSS8-48-T02N-SOL	MSS8-49-T02N-SOL	MSS8-49-T02N-SOL	MSS8-5-T02N-SOL	MSS8-50-T02N-SOL
		Exposure Area	SS8D	SS8D	SS8D	SS8D	SS8A	SS8D
Mercury	mg/kg-dry	T	<0.018 :	<0.017 :	<0.018 :	-	-	<0.017 :
Molybdenum	mg/kg-dry	T	41.2 :	410. :	73.8 :	-	-	57. J
Nickel	mg/kg-dry	T	33.8 :	39.9 :	38.6 :	-	-	38.3 J
Potassium	mg/kg-dry	T	7250. J	4080. J	6710. J	-	-	13900. J
Selenium	mg/kg-dry	T	<0.74 J	<0.75 J	2.9 J	-	-	0.82 J
Silver	mg/kg-dry	T	0.66 :	0.59 :	0.58 :	-	-	0.6 J
Sodium	mg/kg-dry	T	<147. :	<79.5 :	<35. :	-	-	<29.3 :
Thallium	mg/kg-dry	T	1.2 :	0.65 :	0.96 :	-	-	1.6 :
Vanadium	mg/kg-dry	T	54.2 :	37.6 :	52.2 :	-	-	79.4 J
Zinc	mg/kg-dry	T	57.2 :	176. :	90.8 :	-	-	95.2 J
Volatile Organics								
1,1,1-Trichloroethane	mg/kg-dry	T	<0.009 :	<0.008 :	0.009 J	-	-	<0.009 :
1,1,2,2-Tetrachloroethane	mg/kg-dry	T	<0.009 :	<0.008 :	<0.01 :	-	-	<0.009 J
1,1,2-Trichloro-1,2,2-trifluoroethane	mg/kg-dry	T	<0.009 :	<0.008 :	<0.01 :	-	-	<0.009 :
1,1,2-Trichloroethane	mg/kg-dry	T	<0.009 :	<0.008 :	<0.01 :	-	-	<0.009 :
1,1-Dichloroethane	mg/kg-dry	T	<0.009 :	<0.008 :	<0.01 :	-	-	<0.009 :
1,1-Dichloroethene	mg/kg-dry	T	<0.009 :	<0.008 :	<0.01 :	-	-	<0.009 :
1,2,4-Trichlorobenzene	mg/kg-dry	T	<0.009 :	<0.008 :	<0.01 :	-	-	<0.009 :
1,2-Dibromo-3-chloropropane	mg/kg-dry	T	<0.009 :	<0.008 :	<0.01 :	-	-	<0.009 J
1,2-Dichlorobenzene	mg/kg-dry	T	<0.009 :	<0.008 :	<0.01 :	-	-	<0.009 :
1,2-Dichloroethane	mg/kg-dry	T	<0.009 :	<0.008 :	<0.01 :	-	-	<0.009 :
1,2-Dichloroethene (total)	mg/kg-dry	T	<0.009 :	<0.008 :	<0.01 :	-	-	<0.009 :
1,2-Dichloropropane	mg/kg-dry	T	<0.009 :	<0.008 :	<0.01 :	-	-	<0.009 :
1,3-Dichlorobenzene	mg/kg-dry	T	<0.009 :	<0.008 :	<0.01 :	-	-	<0.009 :
1,4-Dichlorobenzene	mg/kg-dry	T	<0.009 :	<0.008 :	<0.01 :	-	-	<0.009 :
2-Butanone	mg/kg-dry	T	<0.009 :	0.009 :	0.002 J	-	-	<0.009 J
2-Hexanone	mg/kg-dry	T	<0.009 :	<0.008 :	<0.01 :	-	-	<0.009 J
4-Methyl-2-pentanone	mg/kg-dry	T	<0.009 :	<0.008 :	<0.01 :	-	-	<0.009 J
Acetone	mg/kg-dry	T	0.002 J	0.028 :	<0.01 :	-	-	<0.009 J
Benzene	mg/kg-dry	T	<0.009 :	<0.008 :	<0.01 :	-	-	<0.009 :
Bromodichloromethane	mg/kg-dry	T	<0.009 :	<0.008 :	<0.01 :	-	-	<0.009 :
Bromoform	mg/kg-dry	T	<0.009 :	<0.008 :	<0.01 :	-	-	<0.009 :
Bromomethane	mg/kg-dry	T	<0.009 :	<0.008 :	<0.01 :	-	-	<0.009 :
Carbon disulfide	mg/kg-dry	T	<0.009 :	0.002 J	<0.01 :	-	-	<0.009 :

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R = Qualified as rejected value from data validation and results are considered unusable for any purpose
T = Total Fraction

Appendix A-7e
Soil - Biased 0-24 inches
Validated Analytical Results

Parameter	Units	Exposure Area Fraction	Site ID / Sample Date / Sample ID		MSS8-47 1/15/2003 MSS8-47-T02N-SOL SS8D		MSS8-48 1/15/2003 MSS8-48-T02N-SOL SS8D		MSS8-49 1/13/2003 MSS8-49-T02N-SOL SS8D		MSS8-49 1/15/2003 MSS8-49-T02N-SOL SS8D		MSS8-5 10/10/2002 MSS8-5-T02N-SOL SS8A		MSS8-50 1/15/2003 MSS8-50-T02N-SOL SS8D	
Carbon tetrachloride	mg/kg-dry	T		<0.009	:	<0.008	:	<0.01	:	-		-		<0.009	:
Chlorobenzene	mg/kg-dry	T		<0.009	:	<0.008	:	<0.01	:	-		-		<0.009	:
Chloroethane	mg/kg-dry	T		<0.009	:	<0.008	:	<0.01	:	-		-		<0.009	:
Chloroform	mg/kg-dry	T		<0.009	:	<0.008	:	<0.01	:	-		-		<0.009	:
Chloromethane	mg/kg-dry	T		<0.009	:	<0.008	:	<0.01	:	-		-		<0.009	:
cis-1,2-Dichloroethene	mg/kg-dry	T		<0.009	:	<0.008	:	<0.01	:	-		-		<0.009	:
cis-1,3-Dichloropropene	mg/kg-dry	T		<0.009	:	<0.008	:	<0.01	:	-		-		<0.009	:
Dibromochloromethane	mg/kg-dry	T		<0.009	:	<0.008	:	<0.01	:	-		-		<0.009	:
Dichlorodifluoromethane	mg/kg-dry	T		<0.009	:	<0.008	:	<0.01	:	-		-		<0.009	:
Ethylbenzene	mg/kg-dry	T		0.002	J	<0.008	:	<0.01	:	-		-		<0.009	:
Methylene chloride	mg/kg-dry	T		<0.009	:	<0.008	:	<0.01	:	-		-		0.001	J
Styrene	mg/kg-dry	T		<0.009	:	<0.008	:	<0.01	:	-		-		<0.009	:
Tetrachloroethene	mg/kg-dry	T		<0.009	:	<0.008	:	<0.01	:	-		-		<0.009	:
Toluene	mg/kg-dry	T		<0.009	:	<0.008	:	<0.01	:	-		-		<0.009	:
Total Xylene	mg/kg-dry	T		0.013	:	0.004	J	0.002	J	-		-		0.006	J
trans-1,2-Dichloroethene	mg/kg-dry	T		<0.009	:	<0.008	:	<0.01	:	-		-		<0.009	:
trans-1,3-Dichloropropene	mg/kg-dry	T		<0.009	:	<0.008	:	<0.01	:	-		-		<0.009	:
Trichloroethene	mg/kg-dry	T		<0.009	:	<0.008	:	0.002	J	-		-		<0.009	:
Trichlorofluoromethane	mg/kg-dry	T		<0.009	:	<0.008	:	<0.01	:	-		-		<0.009	:
Vinyl chloride	mg/kg-dry	T		<0.009	:	<0.008	:	<0.01	:	-		-		<0.009	:
Semi-Volatile Organics																
1,1`-Biphenyl	mg/kg-dry	T		<0.36	:	<0.72	:	<0.37	:	-		<3.4	:	<0.36	:
2,4,5-Trichlorophenol	mg/kg-dry	T		<0.91	:	<1.8	:	<0.92	:	-		<8.5	:	<0.9	:
2,4,6-Trichlorophenol	mg/kg-dry	T		<0.36	:	<0.72	:	<0.37	:	-		<3.4	:	<0.36	:
2,4-Dichlorophenol	mg/kg-dry	T		<0.36	:	<0.72	:	<0.37	:	-		<3.4	:	<0.36	:
2,4-Dimethylphenol	mg/kg-dry	T		<0.36	:	<0.72	:	<0.37	:	-		<3.4	:	<0.36	:
2,4-Dinitrophenol	mg/kg-dry	T		<0.91	J	<1.8	:	<0.92	J	-		<8.5	J	<0.9	:
2,4-Dinitrotoluene	mg/kg-dry	T		<0.36	:	<0.72	:	<0.37	:	-		<3.4	:	<0.36	:
2,6-Dinitrotoluene	mg/kg-dry	T		<0.36	:	<0.72	:	<0.37	:	-		<3.4	:	<0.36	:
2-Chloronaphthalene	mg/kg-dry	T		<0.36	:	<0.72	:	<0.37	:	-		<3.4	:	<0.36	:
2-Chlorophenol	mg/kg-dry	T		<0.36	:	<0.72	:	<0.37	:	-		<3.4	:	<0.36	:
2-Methylnaphthalene	mg/kg-dry	T		<0.36	:	<0.72	:	0.031	J	-		<3.4	:	<0.36	:
2-Methylphenol	mg/kg-dry	T		<0.36	:	<0.72	:	<0.37	:	-		<3.4	:	<0.36	:
2-Nitroaniline	mg/kg-dry	T		<0.91	:	<1.8	:	<0.92	:	-		<8.5	:	<0.9	:

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T = Total Fraction

Appendix A-7e
Soil - Biased 0-24 inches
Validated Analytical Results

Parameter	Units	Exposure Area Fraction	Site ID / Sample Date / Sample ID		MSS8-47 1/15/2003 MSS8-47-T02N-SOL SS8D		MSS8-48 1/15/2003 MSS8-48-T02N-SOL SS8D		MSS8-49 1/13/2003 MSS8-49-T02N-SOL SS8D		MSS8-49 1/15/2003 MSS8-49-T02N-SOL SS8D		MSS8-5 10/10/2002 MSS8-5-T02N-SOL SS8A		MSS8-50 1/15/2003 MSS8-50-T02N-SOL SS8D	
2-Nitrophenol	mg/kg-dry	T		<0.36	:	<0.72	:	<0.37	:	-		<3.4	:	<0.36	:
3,3-Dichlorobenzidine	mg/kg-dry	T		<0.36	J	<0.72	:	<0.37	:	-		<3.4	:	<0.36	:
3-Nitroaniline	mg/kg-dry	T		<0.91	:	<1.8	:	<0.92	:	-		<8.5	:	<0.9	:
4,6-Dinitro-2-methylphenol	mg/kg-dry	T		<0.91	J	<1.8	:	<0.92	J	-		<8.5	:	<0.9	:
4-Bromophenyl phenyl ether	mg/kg-dry	T		<0.36	:	<0.72	:	<0.37	:	-		<3.4	:	<0.36	:
4-Chloro-3-methylphenol	mg/kg-dry	T		<0.36	:	<0.72	:	<0.37	:	-		<3.4	:	<0.36	:
4-Chloroaniline	mg/kg-dry	T		<0.36	:	<0.72	:	<0.37	J	-		<3.4	:	<0.36	:
4-Chlorophenyl phenyl ether	mg/kg-dry	T		<0.36	:	<0.72	:	<0.37	:	-		<3.4	:	<0.36	:
4-Methylphenol	mg/kg-dry	T		<0.36	:	<0.72	:	<0.37	:	-		<3.4	:	<0.36	:
4-Nitroaniline	mg/kg-dry	T		<0.91	:	<1.8	:	<0.92	:	-		<8.5	:	<0.9	:
4-Nitrophenol	mg/kg-dry	T		<0.91	J	<1.8	:	<0.92	:	-		<8.5	J	<0.9	:
Acenaphthene	mg/kg-dry	T		<0.36	:	<0.72	:	<0.37	:	-		<3.4	:	<0.36	:
Acenaphthylene	mg/kg-dry	T		<0.36	:	<0.72	:	<0.37	:	-		<3.4	:	<0.36	:
Anthracene	mg/kg-dry	T		<0.36	:	<0.72	:	<0.37	:	-		<3.4	:	<0.36	:
Benzaldehyde	mg/kg-dry	T		<0.36	J	<0.72	J	<0.37	:	-		<3.4	J	<0.36	:
Benzo(a)anthracene	mg/kg-dry	T		<0.36	:	<0.72	:	<0.37	:	-		<3.4	:	<0.36	:
Benzo(a)pyrene	mg/kg-dry	T		<0.36	:	<0.72	:	<0.37	:	-		<3.4	:	<0.36	:
Benzo(b)fluoranthene	mg/kg-dry	T		<0.36	:	<0.72	:	<0.37	:	-		<3.4	:	<0.36	J
Benzo(g,h,i)perylene	mg/kg-dry	T		<0.36	:	<0.72	:	<0.37	:	-		<3.4	:	<0.36	:
Benzo(k)fluoranthene	mg/kg-dry	T		<0.36	:	<0.72	:	<0.37	:	-		<3.4	J	<0.36	:
Bis(2-chloroethoxy)methane	mg/kg-dry	T		<0.36	:	<0.72	:	<0.37	:	-		<3.4	:	<0.36	:
Bis(2-chloroethyl)ether	mg/kg-dry	T		<0.36	:	<0.72	:	<0.37	:	-		<3.4	:	<0.36	:
Bis(2-ethylhexyl)phthalate	mg/kg-dry	T		0.12	J	<0.72	:	0.038	J	-		<3.4	:	0.028	J
Butyl benzyl phthalate	mg/kg-dry	T		<0.36	:	<0.72	:	<0.37	:	-		<3.4	:	<0.36	:
Carbazole	mg/kg-dry	T		<0.36	:	<0.72	:	<0.37	:	-		<3.4	:	<0.36	:
Chrysene	mg/kg-dry	T		<0.36	:	<0.72	:	<0.37	:	-		<3.4	:	<0.36	:
Dibenz(a,h)anthracene	mg/kg-dry	T		<0.36	:	<0.72	:	<0.37	J	-		<3.4	:	<0.36	:
Dibenzofuran	mg/kg-dry	T		<0.36	:	<0.72	:	<0.37	:	-		<3.4	:	<0.36	:
Dichlorodiisopropyl ether	mg/kg-dry	T		<0.36	:	<0.72	:	<0.37	:	-		<3.4	:	<0.36	:
Diethylphthalate	mg/kg-dry	T		<0.36	:	<0.72	:	<0.37	:	-		<3.4	:	<0.36	:
Dimethylphthalate	mg/kg-dry	T		<0.36	:	<0.72	:	<0.37	:	-		<3.4	:	<0.36	:
Di-n-Butyl phthalate	mg/kg-dry	T		<0.36	:	<0.72	:	0.019	J	-		<3.4	:	<0.36	:
Di-n-Octyl phthalate	mg/kg-dry	T		<0.36	:	<0.72	:	<0.37	:	-		<3.4	:	<0.36	J
Fluoranthene	mg/kg-dry	T		0.023	J	<0.72	:	<0.37	:	-		<3.4	:	<0.36	:

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Appendix A-7e
Soil - Biased 0-24 inches
Validated Analytical Results

Parameter	Units	Site ID / Sample Date / Sample ID / Exposure Area / Fraction	MSS8-47 1/15/2003 MSS8-47-T02N-SOL SS8D	MSS8-48 1/15/2003 MSS8-48-T02N-SOL SS8D	MSS8-49 1/13/2003 MSS8-49-T02N-SOL SS8D	MSS8-49 1/15/2003 MSS8-49-T02N-SOL SS8D	MSS8-5 10/10/2002 MSS8-5-T02N-SOL SS8A	MSS8-50 1/15/2003 MSS8-50-T02N-SOL SS8D
Fluorene	mg/kg-dry	T	<0.36 :	<0.72 :	<0.37 :	-	<3.4 :	<0.36 :
Hexachlorobenzene	mg/kg-dry	T	<0.36 :	<0.72 :	<0.37 :	-	<3.4 :	<0.36 :
Hexachlorobutadiene	mg/kg-dry	T	<0.36 :	<0.72 :	<0.37 :	-	<3.4 :	<0.36 :
Hexachlorocyclopentadiene	mg/kg-dry	T	<0.36 J	<0.72 :	<0.37 :	-	<3.4 :	<0.36 :
Hexachloroethane	mg/kg-dry	T	<0.36 :	<0.72 :	<0.37 :	-	<3.4 :	<0.36 :
Indeno(1,2,3-cd)pyrene	mg/kg-dry	T	<0.36 :	<0.72 :	<0.37 J	-	<3.4 :	<0.36 :
Isophorone	mg/kg-dry	T	<0.36 :	<0.72 :	<0.37 :	-	<3.4 :	<0.36 :
Naphthalene	mg/kg-dry	T	<0.36 :	<0.72 :	<0.37 :	-	<3.4 :	<0.36 :
Nitrobenzene	mg/kg-dry	T	<0.36 :	<0.72 :	<0.37 :	-	<3.4 :	<0.36 :
N-Nitrosodi-n-propylamine	mg/kg-dry	T	<0.36 :	<0.72 :	<0.37 :	-	<3.4 :	<0.36 :
N-Nitrosodiphenylamine	mg/kg-dry	T	<0.36 :	<0.72 :	<0.37 :	-	<3.4 :	<0.36 :
Pentachlorophenol	mg/kg-dry	T	<0.91 J	<1.8 :	<0.92 J	-	<8.5 J	<0.9 :
Phenanthrene	mg/kg-dry	T	<0.36 :	<0.72 :	0.051 J	-	<3.4 :	<0.36 :
Phenol	mg/kg-dry	T	<0.36 :	<0.72 :	<0.37 :	-	<3.4 :	<0.36 :
Pyrene	mg/kg-dry	T	0.022 J	<0.72 :	<0.37 :	-	<3.4 :	<0.36 :
Explosives								
2,4,6-Trinitrotoluene	mg/kg-dry	T	-	-	-	-	<0.12 :	-
2,6-Pyridinediamine,	mg/kg-dry	T	-	-	-	-	<0.12 :	-
Cyclotetramethylenetetranitramine	mg/kg-dry	T	-	-	-	-	<0.12 :	-
Cyclotrimethylenetrinitramine	mg/kg-dry	T	-	-	-	-	<0.12 :	-
Pentaerythritol tetranitrate	mg/kg-dry	T	-	-	-	-	<5. :	-

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Appendix A-7e
Soil - Biased 0-24 inches
Validated Analytical Results

Parameter	Units	Exposure Area Fraction	Site ID	Sample Date	Sample ID	Exposure Area		Site ID	Sample Date	Sample ID	Exposure Area		Site ID	Sample Date	Sample ID	Exposure Area		Site ID	Sample Date	Sample ID	Exposure Area		Site ID	Sample Date	Sample ID	Exposure Area	
			MSS8-51	1/15/2003	MSS8-51-T02N-SOL	SS8D		MSS8-52	1/15/2003	MSS8-52-T02N-SOL	SS8D		MSS8-53	1/13/2003	MSS8-53-T02N-SOL	SS8D		MSS8-53	1/15/2003	MSS8-53-T02N-SOL	SS8D		MSS8-54	1/15/2003	MSS8-54-T02N-SOL	SS8D	
			MSS8-55	1/15/2003	MSS8-55-T02N-SOL	SS8D																					
General Chemistry																											
Ammonia	mg/kg-dry	T	17.1	:				12.2	:				21.1	:				-					57.3	:			
			139.	:																							
Chloride	mg/kg-dry	T	2.8	:				4.2	:				4.	:				-					32.	:			
			11.3	:																							
Fluoride	mg/kg-dry	T	1.4	J				1.6	J				1.7	J				-					0.63	J			
			0.57	J																							
Nitrate	mg/kg-dry	T	2.3	J				<2.2	J				<2.4	J				-					<2.2	J			
			<2.2	J																							
Phosphorus	mg/kg-dry	T	2710.	:				3170.	:				1120.	:				-					3430.	:			
			3110.	:																							
Sulfate	mg/kg-dry	T	84.1	:				1600.	:				4360.	:				-					17600.	J			
			6200.	:																							
Total Kjeldahl Nitrogen	mg/kg-dry	T	257.	:				100.	:				80.6	:				-					337.	:			
			369.	:																							
Total Organic Carbon	mg/kg-dry	T	382.	J				321.	J				451.	J				-					4920.	J			
			363.	J																							
Laboratory Parameters																											
pH	SU	T	5.8	:				4.	:				4.1	:				-					3.3	:			
			3.5	:																							
Solids, Percent	%	T	91.9	:				94.7	:				85.9	:				92.1	:				93.8	:			
			92.7	:																							
Specific Conductance	umhos/cm	T	292.	J				1890.	J				1590.	:				-					5500.	J			
			2310.	J																							
Geotechnical																											
Organic Soils	%	T	3.2	:				3.	:				3.2	:				-					5.9	:			
			4.9	:																							
Physical Properties																											
Cation-Exchange Capacity	meq/100g	T	21.8	:				17.9	:				10.	:				-					17.8	:			
			16.9	:																							
Sodium Absorption Ratio	ratio	T	0.28	:				0.16	:				0.04	:				-					0.02	:			
			<0.02	:																							
Metals																											
Aluminum	mg/kg-dry	T	29200.	:				16700.	:				9010.	:				-					12400.	:			
			11600.	:																							
Antimony	mg/kg-dry	T	<0.31	J				<0.27	J				<0.25	J				-					<0.28	J			
			<0.27	J																							
Arsenic	mg/kg-dry	T	14.5	J				4.5	J				4.2	J				-					4.6	J			
			5.6	J																							
Barium	mg/kg-dry	T	408.	:				163.	:				86.2	:				-					209.	:			
			267.	:																							
Beryllium	mg/kg-dry	T	0.93	:				0.81	:				0.4	:				-					0.68	:			
			0.55	:																							
Boron	mg/kg-dry	T	<2.2	:				<2.4	:				<0.29	J				-					<2.3	:			
			<2.3	:																							
Cadmium	mg/kg-dry	T	0.47	:				<0.035	:				<0.043	J				-					0.41	:			
			0.11	:																							
Calcium	mg/kg-dry	T	3270.	:				5300.	:				6840.	:				-					9650.	:			
			13700.	:																							
Chromium	mg/kg-dry	T	91.1	J				65.4	J				26.4	J				-					42.5	J			
			50.	J																							
Cobalt	mg/kg-dry	T	9.6	:				14.7	:				5.1	:				-					12.8	:			
			7.5	:																							
Copper	mg/kg-dry	T	634.	J				145.	J				46.8	J				-					138.	J			
			110.	J																							
Iron	mg/kg-dry	T	47800.	:				42900.	:				29600.	:				-					35900.	:			
			47600.	:																							
Lead	mg/kg-dry	T	130.	:				75.3	:				150.	:				-					99.1	:			
			153.	:																							
Magnesium	mg/kg-dry	T	15900.	:				10500.	:				5830.	:				-					7190.	:			
			6560.	:																							
Manganese	mg/kg-dry	T	537.	:				492.	:				273.	:				-					428.	:			
			336.	:																							

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Appendix A-7e
Soil - Biased 0-24 inches
Validated Analytical Results

		Site ID	MSS8-51	MSS8-52	MSS8-53	MSS8-53	MSS8-54	MSS8-55
		Sample Date	1/15/2003	1/15/2003	1/13/2003	1/15/2003	1/15/2003	1/15/2003
		Sample ID	MSS8-51-T02N-SOL	MSS8-52-T02N-SOL	MSS8-53-T02N-SOL	MSS8-53-T02N-SOL	MSS8-54-T02N-SOL	MSS8-55-T02N-SOL
		Exposure Area	SS8D	SS8D	SS8D	SS8D	SS8D	SS8D
Parameter	**Units**	**Fraction**						
Mercury	mg/kg-dry	T	<0.017 :	<0.016 :	<0.019 :	-	<0.018 :	<0.017 :
Molybdenum	mg/kg-dry	T	93.4 :	60.6 :	28.8 :	-	407. :	552. :
Nickel	mg/kg-dry	T	45.5 :	40.1 :	16.3 :	-	31.8 :	24.8 :
Potassium	mg/kg-dry	T	19500. J	5550. J	4110. J	-	3870. J	4740. J
Selenium	mg/kg-dry	T	1. J	0.79 J	2.2 J	-	1.2 J	1.3 J
Silver	mg/kg-dry	T	0.47 J	0.35 J	1. :	-	0.68 J	0.93 :
Sodium	mg/kg-dry	T	<143. :	<150. :	<191. :	-	<202. :	627. :
Thallium	mg/kg-dry	T	1.9 :	0.83 :	0.52 :	-	0.59 :	0.59 :
Vanadium	mg/kg-dry	T	82.8 :	53.5 :	20.1 :	-	37.5 :	44. :
Zinc	mg/kg-dry	T	162. :	80.9 :	63.8 :	-	108. :	97.8 J
Volatile Organics								
1,1,1-Trichloroethane	mg/kg-dry	T	<0.007 :	<0.007 :	-	<0.005 :	<0.006 :	<0.006 :
1,1,2,2-Tetrachloroethane	mg/kg-dry	T	<0.007 :	<0.007 J	-	<0.005 :	<0.006 J	<0.006 J
1,1,2-Trichloro-1,2,2-trifluoroethane	mg/kg-dry	T	<0.007 :	<0.007 :	-	<0.005 :	<0.006 :	<0.006 :
1,1,2-Trichloroethane	mg/kg-dry	T	<0.007 :	<0.007 :	-	<0.005 :	<0.006 :	<0.006 :
1,1-Dichloroethane	mg/kg-dry	T	<0.007 :	<0.007 :	-	<0.005 :	<0.006 :	<0.006 :
1,1-Dichloroethene	mg/kg-dry	T	<0.007 :	<0.007 :	-	<0.005 :	<0.006 :	<0.006 :
1,2,4-Trichlorobenzene	mg/kg-dry	T	<0.007 :	<0.007 :	-	<0.005 :	<0.006 :	<0.006 :
1,2-Dibromo-3-chloropropane	mg/kg-dry	T	<0.007 :	<0.007 J	-	<0.005 :	<0.006 J	<0.006 J
1,2-Dichlorobenzene	mg/kg-dry	T	<0.007 :	<0.007 :	-	<0.005 :	<0.006 :	<0.006 :
1,2-Dichloroethane	mg/kg-dry	T	<0.007 :	<0.007 :	-	<0.005 :	<0.006 :	<0.006 :
1,2-Dichloroethene (total)	mg/kg-dry	T	<0.007 :	<0.007 :	-	<0.005 :	<0.006 :	<0.006 :
1,2-Dichloropropane	mg/kg-dry	T	<0.007 :	<0.007 :	-	<0.005 :	<0.006 :	<0.006 :
1,3-Dichlorobenzene	mg/kg-dry	T	<0.007 :	<0.007 :	-	<0.005 :	<0.006 :	<0.006 :
1,4-Dichlorobenzene	mg/kg-dry	T	<0.007 :	<0.007 :	-	<0.005 :	<0.006 :	<0.006 :
2-Butanone	mg/kg-dry	T	<0.007 :	<0.007 J	-	<0.005 :	<0.006 J	<0.006 J
2-Hexanone	mg/kg-dry	T	<0.007 :	<0.007 J	-	<0.005 :	0.002 J	<0.006 J
4-Methyl-2-pentanone	mg/kg-dry	T	<0.007 :	<0.007 J	-	<0.005 :	<0.006 J	<0.006 J
Acetone	mg/kg-dry	T	0.002 J	<0.019 J	-	0.01 :	<0.012 J	<0.006 J
Benzene	mg/kg-dry	T	<0.007 :	<0.007 :	-	<0.005 :	<0.006 :	<0.006 :
Bromodichloromethane	mg/kg-dry	T	<0.007 :	<0.007 :	-	<0.005 :	<0.006 :	<0.006 :
Bromoform	mg/kg-dry	T	<0.007 :	<0.007 :	-	<0.005 :	<0.006 :	<0.006 :
Bromomethane	mg/kg-dry	T	<0.007 :	<0.007 :	-	<0.005 :	<0.006 :	<0.006 :
Carbon disulfide	mg/kg-dry	T	<0.007 :	<0.007 :	-	0.003 J	<0.006 :	<0.006 :

J = Qualified as estimated during data validation

R = Qualified as rejected value from data validation and results are considered unusable for any purpose

T = Total Fraction

Appendix A-7e
Soil - Biased 0-24 inches
Validated Analytical Results

Parameter	Units	Exposure Area Fraction	Site ID / Sample Date / Sample ID					
			MSS8-51 1/15/2003 MSS8-51-T02N-SOL SS8D	MSS8-52 1/15/2003 MSS8-52-T02N-SOL SS8D	MSS8-53 1/13/2003 MSS8-53-T02N-SOL SS8D	MSS8-53 1/15/2003 MSS8-53-T02N-SOL SS8D	MSS8-54 1/15/2003 MSS8-54-T02N-SOL SS8D	MSS8-55 1/15/2003 MSS8-55-T02N-SOL SS8D
Carbon tetrachloride	mg/kg-dry	T	<0.007 :	<0.007 :	-	<0.005 :	<0.006 :	<0.006 :
Chlorobenzene	mg/kg-dry	T	<0.007 :	<0.007 :	-	<0.005 :	<0.006 :	<0.006 :
Chloroethane	mg/kg-dry	T	<0.007 :	<0.007 :	-	<0.005 :	<0.006 :	<0.006 :
Chloroform	mg/kg-dry	T	<0.007 :	<0.007 :	-	<0.005 :	<0.006 :	<0.006 :
Chloromethane	mg/kg-dry	T	<0.007 :	<0.007 :	-	<0.005 :	<0.006 :	<0.006 :
cis-1,2-Dichloroethene	mg/kg-dry	T	<0.007 :	<0.007 :	-	<0.005 :	<0.006 :	<0.006 :
cis-1,3-Dichloropropene	mg/kg-dry	T	<0.007 :	<0.007 :	-	<0.005 :	<0.006 :	<0.006 :
Dibromochloromethane	mg/kg-dry	T	<0.007 :	<0.007 :	-	<0.005 :	<0.006 :	<0.006 :
Dichlorodifluoromethane	mg/kg-dry	T	0.0006 J	<0.007 :	-	<0.005 :	<0.006 :	<0.006 :
Ethylbenzene	mg/kg-dry	T	<0.007 :	<0.007 :	-	0.002 J	<0.006 :	<0.006 :
Methylene chloride	mg/kg-dry	T	<0.007 :	0.001 J	-	<0.005 :	0.0008 J	0.0007 J
Styrene	mg/kg-dry	T	<0.007 :	<0.007 :	-	<0.005 :	<0.006 :	<0.006 :
Tetrachloroethene	mg/kg-dry	T	<0.007 :	<0.007 :	-	<0.005 :	<0.006 :	<0.006 :
Toluene	mg/kg-dry	T	<0.007 :	<0.007 :	-	<0.005 :	<0.006 :	<0.006 :
Total Xylene	mg/kg-dry	T	0.002 J	0.001 J	-	0.012 :	0.0008 J	0.0006 J
trans-1,2-Dichloroethene	mg/kg-dry	T	<0.007 :	<0.007 :	-	<0.005 :	<0.006 :	<0.006 :
trans-1,3-Dichloropropene	mg/kg-dry	T	<0.007 :	<0.007 :	-	<0.005 :	<0.006 :	<0.006 :
Trichloroethene	mg/kg-dry	T	<0.007 :	<0.007 :	-	<0.005 :	<0.006 :	<0.006 :
Trichlorofluoromethane	mg/kg-dry	T	<0.007 :	<0.007 :	-	<0.005 :	<0.006 :	<0.006 :
Vinyl chloride	mg/kg-dry	T	<0.007 :	<0.007 :	-	<0.005 :	<0.006 :	<0.006 :
Semi-Volatile Organics								
1,1`-Biphenyl	mg/kg-dry	T	<0.36 :	<0.35 :	<0.38 :	-	<1.8 :	<1.8 :
2,4,5-Trichlorophenol	mg/kg-dry	T	<0.9 :	<0.87 :	<0.96 :	-	<4.4 :	<4.4 :
2,4,6-Trichlorophenol	mg/kg-dry	T	<0.36 :	<0.35 :	<0.38 :	-	<1.8 :	<1.8 :
2,4-Dichlorophenol	mg/kg-dry	T	<0.36 :	<0.35 :	<0.38 :	-	<1.8 :	<1.8 :
2,4-Dimethylphenol	mg/kg-dry	T	<0.36 :	<0.35 :	<0.38 :	-	<1.8 :	<1.8 :
2,4-Dinitrophenol	mg/kg-dry	T	<0.9 :	<0.87 :	<0.96 J	-	<4.4 :	<4.4 :
2,4-Dinitrotoluene	mg/kg-dry	T	<0.36 :	<0.35 :	<0.38 :	-	<1.8 :	<1.8 :
2,6-Dinitrotoluene	mg/kg-dry	T	<0.36 :	<0.35 :	<0.38 :	-	<1.8 :	<1.8 :
2-Chloronaphthalene	mg/kg-dry	T	<0.36 :	<0.35 :	<0.38 :	-	<1.8 :	<1.8 :
2-Chlorophenol	mg/kg-dry	T	<0.36 :	<0.35 :	<0.38 :	-	<1.8 :	<1.8 :
2-Methylnaphthalene	mg/kg-dry	T	<0.36 :	<0.35 :	<0.38 :	-	<1.8 :	<1.8 :
2-Methylphenol	mg/kg-dry	T	<0.36 :	<0.35 :	<0.38 :	-	<1.8 :	<1.8 :
2-Nitroaniline	mg/kg-dry	T	<0.9 :	<0.87 :	<0.96 :	-	<4.4 :	<4.4 :

J = Qualified as estimated during data validation
R = Qualified as rejected value from data validation and results are considered unusable for any purpose
T = Total Fraction

Appendix A-7e
Soil - Biased 0-24 inches
Validated Analytical Results

Parameter	Units	Exposure Area Fraction	Site ID / Sample Date / Sample ID		Site ID / Sample Date / Sample ID		Site ID / Sample Date / Sample ID		Site ID / Sample Date / Sample ID		Site ID / Sample Date / Sample ID	
			MSS8-51 1/15/2003 MSS8-51-T02N-SOL		MSS8-52 1/15/2003 MSS8-52-T02N-SOL		MSS8-53 1/13/2003 MSS8-53-T02N-SOL		MSS8-53 1/15/2003 MSS8-53-T02N-SOL		MSS8-54 1/15/2003 MSS8-54-T02N-SOL		MSS8-55 1/15/2003 MSS8-55-T02N-SOL	
			SS8D		SS8D		SS8D		SS8D		SS8D		SS8D	
2-Nitrophenol	mg/kg-dry	T	<0.36	:	<0.35	:	<0.38	:	-		<1.8	:	<1.8	:
3,3-Dichlorobenzidine	mg/kg-dry	T	<0.36	:	<0.35	:	<0.38	:	-		<1.8	:	<1.8	:
3-Nitroaniline	mg/kg-dry	T	<0.9	:	<0.87	J	<0.96	:	-		<4.4	:	<4.4	:
4,6-Dinitro-2-methylphenol	mg/kg-dry	T	<0.9	:	<0.87	:	<0.96	J	-		<4.4	:	<4.4	:
4-Bromophenyl phenyl ether	mg/kg-dry	T	<0.36	:	<0.35	:	<0.38	:	-		<1.8	:	<1.8	:
4-Chloro-3-methylphenol	mg/kg-dry	T	<0.36	:	<0.35	:	<0.38	:	-		<1.8	:	<1.8	:
4-Chloroaniline	mg/kg-dry	T	<0.36	:	<0.35	J	<0.38	J	-		<1.8	:	<1.8	:
4-Chlorophenyl phenyl ether	mg/kg-dry	T	<0.36	:	<0.35	:	<0.38	:	-		<1.8	:	<1.8	:
4-Methylphenol	mg/kg-dry	T	<0.36	:	<0.35	:	<0.38	:	-		<1.8	:	<1.8	:
4-Nitroaniline	mg/kg-dry	T	<0.9	:	<0.87	:	<0.96	:	-		<4.4	:	<4.4	:
4-Nitrophenol	mg/kg-dry	T	<0.9	:	<0.87	J	<0.96	:	-		<4.4	:	<4.4	:
Acenaphthene	mg/kg-dry	T	<0.36	:	<0.35	:	<0.38	:	-		<1.8	:	<1.8	:
Acenaphthylene	mg/kg-dry	T	<0.36	:	<0.35	:	<0.38	:	-		<1.8	:	<1.8	:
Anthracene	mg/kg-dry	T	<0.36	:	<0.35	:	<0.38	:	-		<1.8	:	<1.8	:
Benzaldehyde	mg/kg-dry	T	<0.36	:	<0.35	:	<0.38	:	-		<1.8	:	<1.8	:
Benzo(a)anthracene	mg/kg-dry	T	<0.36	:	<0.35	:	<0.38	:	-		<1.8	:	<1.8	:
Benzo(a)pyrene	mg/kg-dry	T	<0.36	:	<0.35	:	<0.38	:	-		<1.8	:	<1.8	:
Benzo(b)fluoranthene	mg/kg-dry	T	<0.36	:	<0.35	:	<0.38	:	-		<1.8	J	<1.8	J
Benzo(g,h,i)perylene	mg/kg-dry	T	<0.36	:	<0.35	:	<0.38	:	-		<1.8	:	<1.8	:
Benzo(k)fluoranthene	mg/kg-dry	T	<0.36	J	<0.35	:	<0.38	:	-		<1.8	:	<1.8	:
Bis(2-chloroethoxy)methane	mg/kg-dry	T	<0.36	:	<0.35	:	<0.38	:	-		<1.8	:	<1.8	:
Bis(2-chloroethyl)ether	mg/kg-dry	T	<0.36	:	<0.35	:	<0.38	:	-		<1.8	:	<1.8	:
Bis(2-ethylhexyl)phthalate	mg/kg-dry	T	0.12	J	0.071	J	<0.38	:	-		0.66	J	0.74	J
Butyl benzyl phthalate	mg/kg-dry	T	<0.36	:	<0.35	:	<0.38	:	-		<1.8	:	<1.8	:
Carbazole	mg/kg-dry	T	<0.36	:	<0.35	:	<0.38	:	-		<1.8	:	<1.8	:
Chrysene	mg/kg-dry	T	<0.36	:	0.029	J	<0.38	:	-		<1.8	:	<1.8	:
Dibenz(a,h)anthracene	mg/kg-dry	T	<0.36	:	<0.35	:	<0.38	J	-		<1.8	:	<1.8	:
Dibenzofuran	mg/kg-dry	T	<0.36	:	<0.35	:	<0.38	:	-		<1.8	:	<1.8	:
Dichlorodiisopropyl ether	mg/kg-dry	T	<0.36	:	<0.35	:	<0.38	:	-		<1.8	:	<1.8	:
Diethylphthalate	mg/kg-dry	T	<0.36	:	<0.35	:	<0.38	:	-		<1.8	:	<1.8	:
Dimethylphthalate	mg/kg-dry	T	<0.36	:	<0.35	:	<0.38	:	-		<1.8	:	<1.8	:
Di-n-Butyl phthalate	mg/kg-dry	T	<0.36	:	0.041	J	<0.38	:	-		<1.8	:	<1.8	:
Di-n-Octyl phthalate	mg/kg-dry	T	<0.36	J	<0.35	:	<0.38	:	-		<1.8	J	<1.8	J
Fluoranthene	mg/kg-dry	T	<0.36	:	<0.35	:	<0.38	:	-		<1.8	:	<1.8	:

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T = Total Fraction

Appendix A-7e
Soil - Biased 0-24 inches
Validated Analytical Results

Parameter	Units	Exposure Area Fraction	Site ID / Sample Date / Sample ID											
			MSS8-51 1/15/2003 MSS8-51-T02N-SOL		MSS8-52 1/15/2003 MSS8-52-T02N-SOL		MSS8-53 1/13/2003 MSS8-53-T02N-SOL		MSS8-53 1/15/2003 MSS8-53-T02N-SOL		MSS8-54 1/15/2003 MSS8-54-T02N-SOL		MSS8-55 1/15/2003 MSS8-55-T02N-SOL	
			SS8D		SS8D		SS8D		SS8D		SS8D		SS8D	
Fluorene	mg/kg-dry	T	<0.36	:	<0.35	:	<0.38	:	-		<1.8	:	<1.8	:
Hexachlorobenzene	mg/kg-dry	T	<0.36	:	<0.35	:	<0.38	:	-		<1.8	:	<1.8	:
Hexachlorobutadiene	mg/kg-dry	T	<0.36	:	<0.35	:	<0.38	:	-		<1.8	:	<1.8	:
Hexachlorocyclopentadiene	mg/kg-dry	T	<0.36	:	<0.35	:	<0.38	:	-		<1.8	:	<1.8	:
Hexachloroethane	mg/kg-dry	T	<0.36	:	<0.35	:	<0.38	:	-		<1.8	:	<1.8	:
Indeno(1,2,3-cd)pyrene	mg/kg-dry	T	<0.36	:	<0.35	:	<0.38	J	-		<1.8	:	<1.8	:
Isophorone	mg/kg-dry	T	<0.36	:	<0.35	:	<0.38	:	-		<1.8	:	<1.8	:
Naphthalene	mg/kg-dry	T	<0.36	:	<0.35	:	<0.38	:	-		<1.8	:	<1.8	:
Nitrobenzene	mg/kg-dry	T	<0.36	:	<0.35	:	<0.38	:	-		<1.8	:	<1.8	:
N-Nitrosodi-n-propylamine	mg/kg-dry	T	<0.36	:	<0.35	:	<0.38	:	-		<1.8	:	<1.8	:
N-Nitrosodiphenylamine	mg/kg-dry	T	<0.36	:	<0.35	:	<0.38	:	-		<1.8	:	<1.8	:
Pentachlorophenol	mg/kg-dry	T	<0.9	:	<0.87	:	<0.96	J	-		<4.4	:	<4.4	:
Phenanthrene	mg/kg-dry	T	<0.36	:	<0.35	:	<0.38	:	-		<1.8	:	<1.8	:
Phenol	mg/kg-dry	T	<0.36	:	<0.35	:	<0.38	:	-		<1.8	:	<1.8	:
Pyrene	mg/kg-dry	T	<0.36	:	<0.35	:	<0.38	:	-		<1.8	:	<1.8	:

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T = Total Fraction

Appendix A-7e
Soil - Biased 0-24 inches
Validated Analytical Results

Parameter	Units	Exposure Area Fraction	Site ID / Sample Date / Sample ID		MSS8-56 7/20/2003 MSS8-56R2-T02N-SOL SS8F		MSS8-57 1/15/2003 MSS8-57-T02N-SOL SS8D		MSS8-58 1/15/2003 MSS8-58-T02N-SOL SS8D		MSS8-59 1/14/2003 MSS8-59-T02N-SOL SS8F		MSS8-6 10/10/2002 MSS8-6-T02N-SOL SS8A		MSS8-60 1/14/2003 MSS8-60-T02N-SOL SS8F	
General Chemistry																
Ammonia	mg/kg-dry	T			50.8	:	164.	:	16.7	:	49.8	:	68.2	:	81.6	:
Chloride	mg/kg-dry	T			277.	:	13.8	:	14.7	:	2.3	:	<2.2	J	23.3	:
Fluoride	mg/kg-dry	T			2.5	:	0.51	J	0.45	J	0.17	J	0.66	J	48.4	J
Nitrate	mg/kg-dry	T			11.1	J	<2.2	J	2.4	J	<2.3	J	<2.2	J	3.9	J
Phosphorus	mg/kg-dry	T			1780.	:	1970.	:	1580.	:	878.	:	681.	J	809.	J
Sulfate	mg/kg-dry	T			1830.	:	12700.	:	3980.	:	4.3	:	1560.	J	1300.	:
Total Kjeldahl Nitrogen	mg/kg-dry	T			429.	:	348.	:	261.	:	335.	:	114.	J	381.	J
Total Organic Carbon	mg/kg-dry	T			3090.	:	<110.	J	4410.	J	3270.	J	23700.	J	1570.	J
Laboratory Parameters																
pH	SU	T			6.4	J	2.9	:	3.2	:	7.7	:	6.9	:	4.8	:
Solids, Percent	%	T			91.	:	91.4	:	93.8	:	88.4	:	92.4	:	95.3	:
Specific Conductance	umhos/cm	T			3550.	J	3010.	J	2110.	J	176.	J	884.	:	1780.	J
Geotechnical																
Organic Soils	%	T			3.2	J	4.	:	4.9	:	3.	:	3.36	J	3.4	:
Physical Properties																
Cation-Exchange Capacity	meq/100g	T			18.6	:	12.6	:	18.2	:	16.6	:	8.5	:	15.6	:
Sodium Absorption Ratio	ratio	T			2.66	:	<0.02	:	0.02	:	0.17	:	0.01	:	0.06	:
Metals																
Aluminum	mg/kg-dry	T			15100.	:	7660.	:	8800.	:	11300.	:	-		9570.	J
Antimony	mg/kg-dry	T			<0.51	J	<0.3	J	<1.4	J	<0.29	J	-		<0.29	J
Arsenic	mg/kg-dry	T			3.9	:	3.2	J	5.2	J	2.9	J	-		7.	J
Barium	mg/kg-dry	T			245.	:	332.	:	304.	:	171.	:	-		360.	J
Beryllium	mg/kg-dry	T			1.2	:	0.36	:	0.39	:	0.84	:	-		1.	J
Boron	mg/kg-dry	T			3.2	J	<0.24	J	<1.1	J	<2.1	:	-		3.5	:
Cadmium	mg/kg-dry	T			<0.03	:	<0.036	:	0.62	:	0.092	:	-		1.3	J
Calcium	mg/kg-dry	T			11700.	:	20200.	:	3670.	:	4050.	:	-		5110.	J
Chromium	mg/kg-dry	T			46.6	:	25.6	J	33.9	J	42.3	J	-		32.	J
Cobalt	mg/kg-dry	T			14.7	:	2.2	:	5.8	:	11.1	:	-		11.	J
Copper	mg/kg-dry	T			56.4	:	51.3	J	116.	J	38.	J	-		115.	J
Iron	mg/kg-dry	T			35200.	:	38100.	:	40500.	:	25800.	:	-		32700.	J
Lead	mg/kg-dry	T			68.9	:	94.3	:	1830.	:	43.6	:	-		300.	J
Magnesium	mg/kg-dry	T			9110.	:	4340.	:	3770.	:	7410.	:	-		5010.	J
Manganese	mg/kg-dry	T			705.	:	201.	:	231.	:	629.	:	-		805.	:

J = Qualified as estimated during data validation

R = Qualified as rejected value from data validation and results are considered unusable for any purpose

T = Total Fraction

Appendix A-7e
Soil - Biased 0-24 inches
Validated Analytical Results

Parameter	Units	Fraction	Site ID	Sample Date	Sample ID	Exposure Area
			MSS8-56	7/20/2003	MSS8-56R2-T02N-SOL	SS8F
			MSS8-57	1/15/2003	MSS8-57-T02N-SOL	SS8D
			MSS8-58	1/15/2003	MSS8-58-T02N-SOL	SS8D
			MSS8-59	1/14/2003	MSS8-59-T02N-SOL	SS8F
			MSS8-6	10/10/2002	MSS8-6-T02N-SOL	SS8A
			MSS8-60	1/14/2003	MSS8-60-T02N-SOL	SS8F
Mercury	mg/kg-dry	T	0.058 :	<0.017 :	0.021 :	0.025 :	-	0.024 :
Molybdenum	mg/kg-dry	T	42.9 :	272. :	357. :	16.3 :	-	448. J
Nickel	mg/kg-dry	T	38.3 :	11.7 :	15.7 :	33. :	-	24.5 J
Potassium	mg/kg-dry	T	3050. :	5010. J	4420. J	2360. J	-	2990. J
Selenium	mg/kg-dry	T	0.5 :	1. J	0.89 J	<0.77 J	-	1.3 J
Silver	mg/kg-dry	T	0.5 J	1.2 :	1.1 :	0.31 :	-	1.4 :
Sodium	mg/kg-dry	T	699. :	651. :	641. :	<95.3 :	-	<126. :
Thallium	mg/kg-dry	T	0.2 :	0.66 :	0.45 :	0.22 :	-	0.3 :
Vanadium	mg/kg-dry	T	39. :	38. :	32.4 :	31.2 :	-	29.2 J
Zinc	mg/kg-dry	T	101. :	19.7 :	67. :	127. :	-	317. J
Volatile Organics								
1,1,1-Trichloroethane	mg/kg-dry	T	<0.006 :	<0.009 :	<0.005 :	-	-	-
1,1,2,2-Tetrachloroethane	mg/kg-dry	T	<0.006 :	<0.009 :	<0.005 :	-	-	-
1,1,2-Trichloro-1,2,2-trifluoroethane	mg/kg-dry	T	<0.006 :	<0.009 :	<0.005 :	-	-	-
1,1,2-Trichloroethane	mg/kg-dry	T	<0.006 :	<0.009 :	<0.005 :	-	-	-
1,1-Dichloroethane	mg/kg-dry	T	<0.006 :	<0.009 :	<0.005 :	-	-	-
1,1-Dichloroethene	mg/kg-dry	T	<0.006 :	<0.009 :	<0.005 :	-	-	-
1,2,4-Trichlorobenzene	mg/kg-dry	T	<0.006 :	<0.009 :	<0.005 :	-	-	-
1,2-Dibromo-3-chloropropane	mg/kg-dry	T	<0.006 :	<0.009 :	<0.005 :	-	-	-
1,2-Dichlorobenzene	mg/kg-dry	T	<0.006 :	<0.009 :	<0.005 :	-	-	-
1,2-Dichloroethane	mg/kg-dry	T	<0.006 :	<0.009 :	<0.005 :	-	-	-
1,2-Dichloroethene (total)	mg/kg-dry	T	<0.006 :	<0.009 :	<0.005 :	-	-	-
1,2-Dichloropropane	mg/kg-dry	T	<0.006 :	<0.009 :	<0.005 :	-	-	-
1,3-Dichlorobenzene	mg/kg-dry	T	<0.006 :	<0.009 :	<0.005 :	-	-	-
1,4-Dichlorobenzene	mg/kg-dry	T	<0.006 :	<0.009 :	<0.005 :	-	-	-
2-Butanone	mg/kg-dry	T	<0.006 :	<0.009 :	0.002 J	-	-	-
2-Hexanone	mg/kg-dry	T	<0.006 :	<0.009 :	0.0005 J	-	-	-
4-Methyl-2-pentanone	mg/kg-dry	T	<0.006 :	<0.009 :	<0.005 :	-	-	-
Acetone	mg/kg-dry	T	<0.006 :	<0.009 :	<0.005 :	-	-	-
Benzene	mg/kg-dry	T	<0.006 :	<0.009 :	<0.005 :	-	-	-
Bromodichloromethane	mg/kg-dry	T	<0.006 :	<0.009 :	<0.005 :	-	-	-
Bromoform	mg/kg-dry	T	<0.006 :	<0.009 :	<0.005 :	-	-	-
Bromomethane	mg/kg-dry	T	<0.006 :	<0.009 :	<0.005 :	-	-	-
Carbon disulfide	mg/kg-dry	T	<0.006 :	0.003 J	0.001 J	-	-	-

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Appendix A-7e
Soil - Biased 0-24 inches
Validated Analytical Results

Parameter	Units	Exposure Area Fraction	Site ID / Sample Date / Sample ID					
			MSS8-56 7/20/2003 MSS8-56R2-T02N-SOL SS8F	MSS8-57 1/15/2003 MSS8-57-T02N-SOL SS8D	MSS8-58 1/15/2003 MSS8-58-T02N-SOL SS8D	MSS8-59 1/14/2003 MSS8-59-T02N-SOL SS8F	MSS8-6 10/10/2002 MSS8-6-T02N-SOL SS8A	MSS8-60 1/14/2003 MSS8-60-T02N-SOL SS8F
Carbon tetrachloride	mg/kg-dry	T	<0.006 :	<0.009 :	<0.005 :	-	-	-
Chlorobenzene	mg/kg-dry	T	<0.006 :	<0.009 :	<0.005 :	-	-	-
Chloroethane	mg/kg-dry	T	<0.006 :	<0.009 :	<0.005 :	-	-	-
Chloroform	mg/kg-dry	T	<0.006 :	<0.009 :	<0.005 :	-	-	-
Chloromethane	mg/kg-dry	T	<0.006 :	<0.009 :	<0.005 :	-	-	-
cis-1,2-Dichloroethene	mg/kg-dry	T	<0.006 :	<0.009 :	<0.005 :	-	-	-
cis-1,3-Dichloropropene	mg/kg-dry	T	<0.006 :	<0.009 :	<0.005 :	-	-	-
Dibromochloromethane	mg/kg-dry	T	<0.006 :	<0.009 :	<0.005 :	-	-	-
Dichlorodifluoromethane	mg/kg-dry	T	<0.006 :	<0.009 :	<0.005 :	-	-	-
Ethylbenzene	mg/kg-dry	T	<0.006 :	<0.009 :	<0.005 :	-	-	-
Methylene chloride	mg/kg-dry	T	<0.006 :	0.0009 J	0.0004 J	-	-	-
Styrene	mg/kg-dry	T	<0.006 :	<0.009 :	<0.005 :	-	-	-
Tetrachloroethene	mg/kg-dry	T	<0.006 :	<0.009 :	<0.005 :	-	-	-
Toluene	mg/kg-dry	T	<0.006 :	<0.009 :	<0.005 :	-	-	-
Total Xylene	mg/kg-dry	T	<0.006 :	0.004 J	<0.005 :	-	-	-
trans-1,2-Dichloroethene	mg/kg-dry	T	<0.006 :	<0.009 :	<0.005 :	-	-	-
trans-1,3-Dichloropropene	mg/kg-dry	T	<0.006 :	<0.009 :	<0.005 :	-	-	-
Trichloroethene	mg/kg-dry	T	<0.006 :	<0.009 :	<0.005 :	-	-	-
Trichlorofluoromethane	mg/kg-dry	T	<0.006 :	<0.009 :	<0.005 :	-	-	-
Vinyl chloride	mg/kg-dry	T	<0.006 :	<0.009 :	<0.005 :	-	-	-
Semi-Volatile Organics								
1,1`-Biphenyl	mg/kg-dry	T	-	<0.36 :	<0.35 J	-	<0.36 :	-
2,4,5-Trichlorophenol	mg/kg-dry	T	-	<0.91 :	<0.88 J	-	<0.9 :	-
2,4,6-Trichlorophenol	mg/kg-dry	T	-	<0.36 :	<0.35 J	-	<0.36 :	-
2,4-Dichlorophenol	mg/kg-dry	T	-	<0.36 :	<0.35 J	-	<0.36 :	-
2,4-Dimethylphenol	mg/kg-dry	T	-	<0.36 :	<0.35 J	-	<0.36 :	-
2,4-Dinitrophenol	mg/kg-dry	T	-	<0.91 J	<0.88 J	-	<0.9 J	-
2,4-Dinitrotoluene	mg/kg-dry	T	-	<0.36 :	<0.35 J	-	<0.36 J	-
2,6-Dinitrotoluene	mg/kg-dry	T	-	<0.36 :	<0.35 J	-	<0.36 :	-
2-Chloronaphthalene	mg/kg-dry	T	-	<0.36 :	<0.35 J	-	<0.36 :	-
2-Chlorophenol	mg/kg-dry	T	-	<0.36 :	<0.35 J	-	<0.36 :	-
2-Methylnaphthalene	mg/kg-dry	T	-	<0.36 :	<0.35 J	-	<0.36 :	-
2-Methylphenol	mg/kg-dry	T	-	<0.36 :	<0.35 J	-	<0.36 :	-
2-Nitroaniline	mg/kg-dry	T	-	<0.91 :	<0.88 J	-	<0.9 :	-

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Appendix A-7e
Soil - Biased 0-24 inches
Validated Analytical Results

Parameter	Units	Exposure Area Fraction	Site ID		Sample Date		Sample ID		Exposure Area		Site ID		Sample Date		Sample ID		Exposure Area		Site ID		Sample Date		Sample ID		Exposure Area		Site ID		Sample Date		Sample ID		Exposure Area	
			MSS8-56		7/20/2003		MSS8-56R2-T02N-SOL		SS8F		MSS8-57		1/15/2003		MSS8-57-T02N-SOL		SS8D		MSS8-58		1/15/2003		MSS8-58-T02N-SOL		SS8D		MSS8-59		1/14/2003		MSS8-59-T02N-SOL		SS8F	
2-Nitrophenol	mg/kg-dry	T	-								<0.36	:							<0.35	J							-					
3,3-Dichlorobenzidine	mg/kg-dry	T	-								<0.36	:							<0.35	:							-					
3-Nitroaniline	mg/kg-dry	T	-								<0.91	:							<0.88	J							-					
4,6-Dinitro-2-methylphenol	mg/kg-dry	T	-								<0.91	J							<0.88	:							-					
4-Bromophenyl phenyl ether	mg/kg-dry	T	-								<0.36	:							<0.35	:							-					
4-Chloro-3-methylphenol	mg/kg-dry	T	-								<0.36	:							<0.35	J							-					
4-Chloroaniline	mg/kg-dry	T	-								<0.36	:							<0.35	J							-					
4-Chlorophenyl phenyl ether	mg/kg-dry	T	-								<0.36	:							<0.35	J							-					
4-Methylphenol	mg/kg-dry	T	-								<0.36	:							<0.35	J							-					
4-Nitroaniline	mg/kg-dry	T	-								<0.91	:							<0.88	J							-					
4-Nitrophenol	mg/kg-dry	T	-								<0.91	J							<0.88	J							-					
Acenaphthene	mg/kg-dry	T	-								<0.36	:							<0.35	J							-					
Acenaphthylene	mg/kg-dry	T	-								<0.36	:							<0.35	J							-					
Anthracene	mg/kg-dry	T	-								<0.36	:							<0.35	:							-					
Benzaldehyde	mg/kg-dry	T	-								<0.36	J							<0.35	J							-					
Benzo(a)anthracene	mg/kg-dry	T	-								<0.36	:							<0.35	:							-					
Benzo(a)pyrene	mg/kg-dry	T	-								<0.36	:							<0.35	:							-					
Benzo(b)fluoranthene	mg/kg-dry	T	-								<0.36	:							<0.35	:							-					
Benzo(g,h,i)perylene	mg/kg-dry	T	-								<0.36	:							<0.35	:							-					
Benzo(k)fluoranthene	mg/kg-dry	T	-								<0.36	:							<0.35	:							-					
Bis(2-chloroethoxy)methane	mg/kg-dry	T	-								<0.36	:							<0.35	J							-					
Bis(2-chloroethyl)ether	mg/kg-dry	T	-								<0.36	:							<0.35	J							-					
Bis(2-ethylhexyl)phthalate	mg/kg-dry	T	-								0.039	J							1.6	:							-					
Butyl benzyl phthalate	mg/kg-dry	T	-								<0.36	:							<0.35	:							-					
Carbazole	mg/kg-dry	T	-								<0.36	:							<0.35	:							-					
Chrysene	mg/kg-dry	T	-								<0.36	J							<0.35	:							-					
Dibenz(a,h)anthracene	mg/kg-dry	T	-								<0.36	:							<0.35	:							-					
Dibenzofuran	mg/kg-dry	T	-								<0.36	:							<0.35	J							-					
Dichlorodiisopropyl ether	mg/kg-dry	T	-								<0.36	:							<0.35	J							-					
Diethylphthalate	mg/kg-dry	T	-								<0.36	:							<0.35	J							-					
Dimethylphthalate	mg/kg-dry	T	-								<0.36	:							<0.35	J							-					
Di-n-Butyl phthalate	mg/kg-dry	T	-								<0.36	:							<0.35	:							-					
Di-n-Octyl phthalate	mg/kg-dry	T	-								<0.36	:							<0.35	:							-					
Fluoranthene	mg/kg-dry	T	-								<0.36	:							<0.35	:							-					

Parameter	Units	Exposure Area Fraction	Site ID		Sample Date		Sample ID		Exposure Area		Site ID		Sample Date		Sample ID		Exposure Area	
			MSS8-6		10/10/2002		MSS8-6-T02N-SOL		SS8A		MSS8-60		1/14/2003		MSS8-60-T02N-SOL		SS8F	
2-Nitrophenol	mg/kg-dry	T	<0.36	:							-							
3,3-Dichlorobenzidine	mg/kg-dry	T	<0.36	J							-							
3-Nitroaniline	mg/kg-dry	T	<0.9	:							-							
4,6-Dinitro-2-methylphenol	mg/kg-dry	T	<0.9	:							-							
4-Bromophenyl phenyl ether	mg/kg-dry	T	<0.36	:							-							
4-Chloro-3-methylphenol	mg/kg-dry	T	<0.36	:							-							
4-Chloroaniline	mg/kg-dry	T	<0.36	:							-							
4-Chlorophenyl phenyl ether	mg/kg-dry	T	<0.36	J							-							
4-Methylphenol	mg/kg-dry	T	<0.36	:							-							
4-Nitroaniline	mg/kg-dry	T	<0.9	J							-							
4-Nitrophenol	mg/kg-dry	T	<0.9	J							-							
Acenaphthene	mg/kg-dry	T	<0.36	:							-							
Acenaphthylene	mg/kg-dry	T	<0.36	:							-							
Anthracene	mg/kg-dry	T	<0.36	:							-							
Benzaldehyde	mg/kg-dry	T	0.026	J							-							
Benzo(a)anthracene	mg/kg-dry	T	<0.36	J							-							
Benzo(a)pyrene	mg/kg-dry	T	<0.36	J							-							
Benzo(b)fluoranthene	mg/kg-dry	T	<0.36	J							-							
Benzo(g,h,i)perylene	mg/kg-dry	T	<0.36	J							-							
Benzo(k)fluoranthene	mg/kg-dry	T	<0.36	J							-							
Bis(2-chloroethoxy)methane	mg/kg-dry	T	<0.36	:							-							
Bis(2-chloroethyl)ether	mg/kg-dry	T	<0.36	:							-							
Bis(2-ethylhexyl)phthalate	mg/kg-dry	T	<0.36	J							-							
Butyl benzyl phthalate	mg/kg-dry	T	<0.36	J							-							
Carbazole	mg/kg-dry	T	<0.36	:							-							
Chrysene	mg/kg-dry	T	<0.36	J							-							
Dibenz(a,h)anthracene	mg/kg-dry	T	<0.36	J							-							
Dibenzofuran	mg/kg-dry	T	<0.36	J							-							
Dichlorodiisopropyl ether	mg/kg-dry	T	<0.36	:							-							
Diethylphthalate	mg/kg-dry	T	<0.36	J							-							
Dimethylphthalate	mg/kg-dry	T	<0.36	:							-							
Di-n-Butyl phthalate	mg/kg-dry	T	0.053	J							-							
Di-n-Octyl phthalate	mg/kg-dry	T	<0.36	J							-							
Fluoranthene	mg/kg-dry	T	<0.36	:							-							

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Appendix A-7e
Soil - Biased 0-24 inches
Validated Analytical Results

Parameter	Units	Site ID / Sample Date / Sample ID / Exposure Area / Fraction	MSS8-56 7/20/2003 MSS8-56R2-T02N-SOL SS8F T	MSS8-57 1/15/2003 MSS8-57-T02N-SOL SS8D T	MSS8-58 1/15/2003 MSS8-58-T02N-SOL SS8D T	MSS8-59 1/14/2003 MSS8-59-T02N-SOL SS8F T	MSS8-6 10/10/2002 MSS8-6-T02N-SOL SS8A T	MSS8-60 1/14/2003 MSS8-60-T02N-SOL SS8F T
Fluorene	mg/kg-dry	T	-	<0.36 :	<0.35 J	-	<0.36 J	-
Hexachlorobenzene	mg/kg-dry	T	-	<0.36 :	<0.35 :	-	<0.36 :	-
Hexachlorobutadiene	mg/kg-dry	T	-	<0.36 :	<0.35 J	-	<0.36 :	-
Hexachlorocyclopentadiene	mg/kg-dry	T	-	<0.36 J	<0.35 J	-	<0.36 J	-
Hexachloroethane	mg/kg-dry	T	-	<0.36 :	<0.35 J	-	<0.36 :	-
Indeno(1,2,3-cd)pyrene	mg/kg-dry	T	-	<0.36 :	<0.35 :	-	<0.36 J	-
Isophorone	mg/kg-dry	T	-	<0.36 :	<0.35 J	-	<0.36 :	-
Naphthalene	mg/kg-dry	T	-	<0.36 :	<0.35 J	-	<0.36 :	-
Nitrobenzene	mg/kg-dry	T	-	<0.36 :	<0.35 J	-	<0.36 :	-
N-Nitrosodi-n-propylamine	mg/kg-dry	T	-	<0.36 :	<0.35 J	-	<0.36 :	-
N-Nitrosodiphenylamine	mg/kg-dry	T	-	<0.36 :	<0.35 :	-	<0.36 :	-
Pentachlorophenol	mg/kg-dry	T	-	<0.91 J	<0.88 :	-	<0.9 J	-
Phenanthrene	mg/kg-dry	T	-	<0.36 :	0.066 J	-	<0.36 :	-
Phenol	mg/kg-dry	T	-	<0.36 :	<0.35 J	-	<0.36 :	-
Pyrene	mg/kg-dry	T	-	<0.36 :	<0.35 :	-	<0.36 J	-
Explosives								
2,4,6-Trinitrotoluene	mg/kg-dry	T	-	-	-	-	<0.12 :	-
2,6-Pyridinediamine,	mg/kg-dry	T	-	-	-	-	<0.12 :	-
Cyclotetramethylenetetranitramine	mg/kg-dry	T	-	-	-	-	<0.12 :	-
Cyclotrimethylenetrinitramine	mg/kg-dry	T	-	-	-	-	<0.12 :	-
Pentaerythritol tetranitrate	mg/kg-dry	T	-	-	-	-	<5. :	-

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Appendix A-7e
Soil - Biased 0-24 inches
Validated Analytical Results

Parameter	Units	Exposure Area Fraction	Site ID / Sample Date / Sample ID		MSS8-61 1/14/2003 MSS8-61-T02N-SOL SS8F		MSS8-62 1/14/2003 MSS8-62-T02N-SOL SS8F		MSS8-63 1/14/2003 MSS8-63-T02N-SOL SS8F		MSS8-64 1/14/2003 MSS8-64-T02N-SOL SS8F		MSS8-65 1/14/2003 MSS8-65-T02N-SOL SS8F		MSS8-66 1/14/2003 MSS8-66-T02N-SOL SS8F	
General Chemistry																
Ammonia	mg/kg-dry	T			45.4	:	38.2	:	12.4	:	15.9	:	41.5	:	33.2	:
Chloride	mg/kg-dry	T			7.6	:	2.3	:	3.1	:	19.	:	11.5	:	4.6	:
Fluoride	mg/kg-dry	T			0.35	J	1.6	J	3.8	J	1.5	J	1.1	J	1.2	J
Nitrate	mg/kg-dry	T			3.	J	2.3	J	<2.2	J	<2.2	J	3.2	J	4.5	J
Phosphorus	mg/kg-dry	T			928.	:	1540.	:	1050.	:	928.	:	1540.	:	924.	:
Sulfate	mg/kg-dry	T			559.	:	109.	:	231.	J	2710.	J	20.7	:	712.	:
Total Kjeldahl Nitrogen	mg/kg-dry	T			512.	:	555.	:	145.	:	121.	:	515.	:	491.	:
Total Organic Carbon	mg/kg-dry	T			13400.	J	2670.	J	2190.	J	191.	J	7910.	J	6710.	J
Laboratory Parameters																
pH	SU	T			7.4	:	7.1	:	7.1	:	7.1	:	7.3	:	7.3	:
Solids, Percent	%	T			89.4	:	91.8	:	93.5	:	92.8	:	87.4	:	86.4	:
Specific Conductance	umhos/cm	T			795.	J	376.	:	548.	:	1500.	:	201.	:	487.	J
Geotechnical																
Organic Soils	%	T			3.3	:	3.6	:	1.5	:	1.3	:	3.8	:	2.9	:
Physical Properties																
Cation-Exchange Capacity	meq/100g	T			18.6	:	14.5	:	12.6	:	11.2	:	16.1	:	13.7	:
Sodium Absorption Ratio	ratio	T			0.11	:	0.1	:	0.13	:	0.05	:	0.27	:	0.26	:
Metals																
Aluminum	mg/kg-dry	T			11200.	:	13600.	:	11700.	:	10200.	:	14600.	:	11400.	:
Antimony	mg/kg-dry	T			<0.3	J	<0.32	J	<0.28	J	<0.27	J	<0.34	J	<0.32	J
Arsenic	mg/kg-dry	T			2.9	J	3.	J	3.	J	2.5	J	2.8	J	7.2	J
Barium	mg/kg-dry	T			130.	:	208.	:	88.6	:	93.6	:	215.	:	147.	:
Beryllium	mg/kg-dry	T			1.	:	0.94	:	1.1	:	1.2	:	0.89	:	0.92	:
Boron	mg/kg-dry	T			2.9	J	2.2	J	<0.28	J	<0.29	:	<0.67	J	2.9	:
Cadmium	mg/kg-dry	T			0.55	:	0.38	:	2.1	:	1.3	:	<0.042	:	0.94	:
Calcium	mg/kg-dry	T			6160.	:	7180.	:	9240.	:	13800.	:	4810.	:	6570.	:
Chromium	mg/kg-dry	T			28.9	J	47.2	J	40.9	J	33.	J	67.1	J	50.	J
Cobalt	mg/kg-dry	T			9.2	:	14.	:	9.	:	6.9	:	13.5	:	9.8	:
Copper	mg/kg-dry	T			39.3	J	55.	J	132.	J	146.	J	41.9	J	151.	J
Iron	mg/kg-dry	T			26300.	:	31100.	:	20600.	:	19000.	:	33300.	:	26000.	:
Lead	mg/kg-dry	T			62.9	:	87.8	:	150.	:	134.	:	49.7	:	85.4	:
Magnesium	mg/kg-dry	T			5840.	:	7200.	:	6980.	:	6200.	:	8650.	:	6200.	:
Manganese	mg/kg-dry	T			843.	:	652.	:	756.	:	743.	:	677.	:	624.	:

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T = Total Fraction

Appendix A-7e
Soil - Biased 0-24 inches
Validated Analytical Results

Parameter	Units	Exposure Area Fraction	Site ID / Sample Date / Sample ID		MSS8-61 1/14/2003 MSS8-61-T02N-SOL SS8F		MSS8-62 1/14/2003 MSS8-62-T02N-SOL SS8F		MSS8-63 1/14/2003 MSS8-63-T02N-SOL SS8F		MSS8-64 1/14/2003 MSS8-64-T02N-SOL SS8F		MSS8-65 1/14/2003 MSS8-65-T02N-SOL SS8F		MSS8-66 1/14/2003 MSS8-66-T02N-SOL SS8F	
Mercury	mg/kg-dry	T			<0.019	:	0.16	:	0.33	:	0.025	:	<0.019	:	0.5	:
Molybdenum	mg/kg-dry	T			60.9	:	179.	:	1810.	:	1720.	:	24.4	:	309.	:
Nickel	mg/kg-dry	T			23.7	:	35.2	:	32.	:	21.9	:	35.4	:	29.2	:
Potassium	mg/kg-dry	T			2680.	J	3200.	J	3690.	J	3470.	J	3210.	J	2310.	J
Selenium	mg/kg-dry	T			<0.8	J	<0.85	J	0.74	J	0.93	J	<0.9	J	<0.84	J
Silver	mg/kg-dry	T			0.58	:	0.48	:	1.8	:	1.1	:	0.42	:	0.71	:
Sodium	mg/kg-dry	T			<72.8	:	<137.	:	<42.2	:	<34.6	:	<119.	:	<78.	:
Thallium	mg/kg-dry	T			0.21	:	0.2	:	0.38	:	0.32	:	0.21	:	0.18	:
Vanadium	mg/kg-dry	T			26.	:	38.5	:	40.3	:	39.	:	38.4	:	31.	:
Zinc	mg/kg-dry	T			132.	:	160.	:	376.	:	206.	:	92.6	:	151.	:
Volatile Organics																
1,1,1-Trichloroethane	mg/kg-dry	T			-		<0.009	:	<0.006	:	<0.01	:	-		-	
1,1,2,2-Tetrachloroethane	mg/kg-dry	T			-		<0.009	:	<0.006	:	<0.01	:	-		-	
1,1,2-Trichloro-1,2,2-trifluoroethane	mg/kg-dry	T			-		<0.009	:	<0.006	:	<0.01	:	-		-	
1,1,2-Trichloroethane	mg/kg-dry	T			-		<0.009	:	<0.006	:	<0.01	:	-		-	
1,1-Dichloroethane	mg/kg-dry	T			-		<0.009	:	<0.006	:	<0.01	:	-		-	
1,1-Dichloroethene	mg/kg-dry	T			-		<0.009	:	<0.006	:	<0.01	:	-		-	
1,2,4-Trichlorobenzene	mg/kg-dry	T			-		<0.009	:	<0.006	:	<0.01	:	-		-	
1,2-Dibromo-3-chloropropane	mg/kg-dry	T			-		<0.009	:	<0.006	:	<0.01	:	-		-	
1,2-Dichlorobenzene	mg/kg-dry	T			-		<0.009	:	<0.006	:	<0.01	:	-		-	
1,2-Dichloroethane	mg/kg-dry	T			-		<0.009	:	<0.006	:	<0.01	:	-		-	
1,2-Dichloroethene (total)	mg/kg-dry	T			-		<0.009	:	<0.006	:	<0.01	:	-		-	
1,2-Dichloropropane	mg/kg-dry	T			-		<0.009	:	<0.006	:	<0.01	:	-		-	
1,3-Dichlorobenzene	mg/kg-dry	T			-		<0.009	:	<0.006	:	<0.01	:	-		-	
1,4-Dichlorobenzene	mg/kg-dry	T			-		<0.009	:	<0.006	:	<0.01	:	-		-	
2-Butanone	mg/kg-dry	T			-		<0.009	:	0.002	J	0.005	J	-		-	
2-Hexanone	mg/kg-dry	T			-		<0.009	:	<0.006	:	<0.01	:	-		-	
4-Methyl-2-pentanone	mg/kg-dry	T			-		<0.009	:	<0.006	:	<0.01	:	-		-	
Acetone	mg/kg-dry	T			-		<0.009	:	<0.006	:	<0.011	:	-		-	
Benzene	mg/kg-dry	T			-		<0.009	:	<0.006	:	<0.01	:	-		-	
Bromodichloromethane	mg/kg-dry	T			-		<0.009	:	<0.006	:	<0.01	:	-		-	
Bromoform	mg/kg-dry	T			-		<0.009	:	<0.006	:	<0.01	:	-		-	
Bromomethane	mg/kg-dry	T			-		<0.009	:	<0.006	:	<0.01	:	-		-	
Carbon disulfide	mg/kg-dry	T			-		<0.009	:	<0.006	:	<0.01	:	-		-	

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Appendix A-7e
Soil - Biased 0-24 inches
Validated Analytical Results

Parameter	Units	Exposure Area Fraction	Site ID / Sample Date / Sample ID					
			MSS8-61 1/14/2003 MSS8-61-T02N-SOL SS8F	MSS8-62 1/14/2003 MSS8-62-T02N-SOL SS8F	MSS8-63 1/14/2003 MSS8-63-T02N-SOL SS8F	MSS8-64 1/14/2003 MSS8-64-T02N-SOL SS8F	MSS8-65 1/14/2003 MSS8-65-T02N-SOL SS8F	MSS8-66 1/14/2003 MSS8-66-T02N-SOL SS8F
Carbon tetrachloride	mg/kg-dry	T	-	<0.009 :	<0.006 :	<0.01 :	-	-
Chlorobenzene	mg/kg-dry	T	-	<0.009 :	<0.006 :	<0.01 :	-	-
Chloroethane	mg/kg-dry	T	-	<0.009 :	<0.006 :	<0.01 :	-	-
Chloroform	mg/kg-dry	T	-	<0.009 :	<0.006 :	<0.01 :	-	-
Chloromethane	mg/kg-dry	T	-	<0.009 :	<0.006 :	<0.01 :	-	-
cis-1,2-Dichloroethene	mg/kg-dry	T	-	<0.009 :	<0.006 :	<0.01 :	-	-
cis-1,3-Dichloropropene	mg/kg-dry	T	-	<0.009 :	<0.006 :	<0.01 :	-	-
Dibromochloromethane	mg/kg-dry	T	-	<0.009 :	<0.006 :	<0.01 :	-	-
Dichlorodifluoromethane	mg/kg-dry	T	-	<0.009 :	<0.006 :	<0.01 :	-	-
Ethylbenzene	mg/kg-dry	T	-	<0.009 :	<0.006 :	<0.01 :	-	-
Methylene chloride	mg/kg-dry	T	-	<0.009 :	<0.006 :	<0.01 :	-	-
Styrene	mg/kg-dry	T	-	<0.009 :	<0.006 :	<0.01 :	-	-
Tetrachloroethene	mg/kg-dry	T	-	<0.009 :	<0.006 :	<0.01 :	-	-
Toluene	mg/kg-dry	T	-	<0.009 :	<0.006 :	0.001 J	-	-
Total Xylene	mg/kg-dry	T	-	<0.009 :	0.001 J	0.001 J	-	-
trans-1,2-Dichloroethene	mg/kg-dry	T	-	<0.009 :	<0.006 :	<0.01 :	-	-
trans-1,3-Dichloropropene	mg/kg-dry	T	-	<0.009 :	<0.006 :	<0.01 :	-	-
Trichloroethene	mg/kg-dry	T	-	<0.009 :	<0.006 :	<0.01 :	-	-
Trichlorofluoromethane	mg/kg-dry	T	-	<0.009 :	<0.006 :	<0.01 :	-	-
Vinyl chloride	mg/kg-dry	T	-	<0.009 :	<0.006 :	<0.01 :	-	-
Semi-Volatile Organics								
1,1`-Biphenyl	mg/kg-dry	T	-	<0.36 :	<0.35 :	<0.36 :	-	-
2,4,5-Trichlorophenol	mg/kg-dry	T	-	<0.9 :	<0.88 :	<0.89 :	-	-
2,4,6-Trichlorophenol	mg/kg-dry	T	-	<0.36 :	<0.35 :	<0.36 :	-	-
2,4-Dichlorophenol	mg/kg-dry	T	-	<0.36 :	<0.35 :	<0.36 :	-	-
2,4-Dimethylphenol	mg/kg-dry	T	-	<0.36 :	<0.35 :	<0.36 :	-	-
2,4-Dinitrophenol	mg/kg-dry	T	-	<0.9 :	<0.88 :	<0.89 :	-	-
2,4-Dinitrotoluene	mg/kg-dry	T	-	<0.36 :	<0.35 :	<0.36 :	-	-
2,6-Dinitrotoluene	mg/kg-dry	T	-	<0.36 :	<0.35 :	<0.36 :	-	-
2-Chloronaphthalene	mg/kg-dry	T	-	<0.36 :	<0.35 :	<0.36 :	-	-
2-Chlorophenol	mg/kg-dry	T	-	<0.36 :	<0.35 :	<0.36 :	-	-
2-Methylnaphthalene	mg/kg-dry	T	-	<0.36 :	<0.35 :	<0.36 :	-	-
2-Methylphenol	mg/kg-dry	T	-	<0.36 :	<0.35 :	<0.36 :	-	-
2-Nitroaniline	mg/kg-dry	T	-	<0.9 :	<0.88 :	<0.89 :	-	-

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Appendix A-7e
Soil - Biased 0-24 inches
Validated Analytical Results

Parameter	Units	Exposure Area Fraction	Site ID / Sample Date / Sample ID		MSS8-61 1/14/2003 MSS8-61-T02N-SOL SS8F	MSS8-62 1/14/2003 MSS8-62-T02N-SOL SS8F	MSS8-63 1/14/2003 MSS8-63-T02N-SOL SS8F	MSS8-64 1/14/2003 MSS8-64-T02N-SOL SS8F	MSS8-65 1/14/2003 MSS8-65-T02N-SOL SS8F	MSS8-66 1/14/2003 MSS8-66-T02N-SOL SS8F
2-Nitrophenol	mg/kg-dry	T			-	<0.36 :	<0.35 :	<0.36 :	-	-
3,3-Dichlorobenzidine	mg/kg-dry	T			-	<0.36 :	<0.35 :	<0.36 :	-	-
3-Nitroaniline	mg/kg-dry	T			-	<0.9 :	<0.88 :	<0.89 :	-	-
4,6-Dinitro-2-methylphenol	mg/kg-dry	T			-	<0.9 :	<0.88 :	<0.89 :	-	-
4-Bromophenyl phenyl ether	mg/kg-dry	T			-	<0.36 :	<0.35 :	<0.36 :	-	-
4-Chloro-3-methylphenol	mg/kg-dry	T			-	<0.36 :	<0.35 :	<0.36 :	-	-
4-Chloroaniline	mg/kg-dry	T			-	<0.36 :	<0.35 :	<0.36 :	-	-
4-Chlorophenyl phenyl ether	mg/kg-dry	T			-	<0.36 :	<0.35 :	<0.36 :	-	-
4-Methylphenol	mg/kg-dry	T			-	<0.36 :	<0.35 :	<0.36 :	-	-
4-Nitroaniline	mg/kg-dry	T			-	<0.9 :	<0.88 :	<0.89 :	-	-
4-Nitrophenol	mg/kg-dry	T			-	<0.9 :	<0.88 :	<0.89 :	-	-
Acenaphthene	mg/kg-dry	T			-	<0.36 :	<0.35 :	<0.36 :	-	-
Acenaphthylene	mg/kg-dry	T			-	<0.36 :	<0.35 :	<0.36 :	-	-
Anthracene	mg/kg-dry	T			-	<0.36 :	<0.35 :	<0.36 :	-	-
Benzaldehyde	mg/kg-dry	T			-	<0.36 J	<0.35 J	<0.36 J	-	-
Benzo(a)anthracene	mg/kg-dry	T			-	<0.36 :	<0.35 :	<0.36 :	-	-
Benzo(a)pyrene	mg/kg-dry	T			-	<0.36 :	<0.35 :	<0.36 J	-	-
Benzo(b)fluoranthene	mg/kg-dry	T			-	<0.36 :	<0.35 :	<0.36 J	-	-
Benzo(g,h,i)perylene	mg/kg-dry	T			-	<0.36 :	<0.35 :	<0.36 :	-	-
Benzo(k)fluoranthene	mg/kg-dry	T			-	<0.36 :	<0.35 :	<0.36 J	-	-
Bis(2-chloroethoxy)methane	mg/kg-dry	T			-	<0.36 :	<0.35 :	<0.36 :	-	-
Bis(2-chloroethyl)ether	mg/kg-dry	T			-	<0.36 :	<0.35 :	<0.36 :	-	-
Bis(2-ethylhexyl)phthalate	mg/kg-dry	T			-	0.12 J	0.08 J	<0.36 :	-	-
Butyl benzyl phthalate	mg/kg-dry	T			-	<0.36 :	0.052 J	<0.36 :	-	-
Carbazole	mg/kg-dry	T			-	<0.36 :	<0.35 :	<0.36 :	-	-
Chrysene	mg/kg-dry	T			-	<0.36 :	<0.35 :	0.036 J	-	-
Dibenz(a,h)anthracene	mg/kg-dry	T			-	<0.36 :	<0.35 :	<0.36 J	-	-
Dibenzofuran	mg/kg-dry	T			-	<0.36 :	<0.35 :	<0.36 :	-	-
Dichlorodiisopropyl ether	mg/kg-dry	T			-	<0.36 :	<0.35 :	<0.36 :	-	-
Diethylphthalate	mg/kg-dry	T			-	<0.36 :	<0.35 :	<0.36 :	-	-
Dimethylphthalate	mg/kg-dry	T			-	<0.36 :	<0.35 :	<0.36 :	-	-
Di-n-Butyl phthalate	mg/kg-dry	T			-	<0.36 :	<0.35 :	<0.36 :	-	-
Di-n-Octyl phthalate	mg/kg-dry	T			-	<0.36 :	<0.35 :	<0.36 J	-	-
Fluoranthene	mg/kg-dry	T			-	<0.36 :	<0.35 :	<0.36 :	-	-

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Appendix A-7e
Soil - Biased 0-24 inches
Validated Analytical Results

Parameter	Units	Exposure Area Fraction	Site ID / Sample Date / Sample ID					
			MSS8-61 1/14/2003 MSS8-61-T02N-SOL	MSS8-62 1/14/2003 MSS8-62-T02N-SOL	MSS8-63 1/14/2003 MSS8-63-T02N-SOL	MSS8-64 1/14/2003 MSS8-64-T02N-SOL	MSS8-65 1/14/2003 MSS8-65-T02N-SOL	MSS8-66 1/14/2003 MSS8-66-T02N-SOL
			SS8F	SS8F	SS8F	SS8F	SS8F	SS8F
Fluorene	mg/kg-dry	T	-	<0.36 :	<0.35 :	<0.36 :	-	-
Hexachlorobenzene	mg/kg-dry	T	-	<0.36 :	<0.35 :	<0.36 :	-	-
Hexachlorobutadiene	mg/kg-dry	T	-	<0.36 :	<0.35 :	<0.36 :	-	-
Hexachlorocyclopentadiene	mg/kg-dry	T	-	<0.36 :	<0.35 :	<0.36 :	-	-
Hexachloroethane	mg/kg-dry	T	-	<0.36 :	<0.35 :	<0.36 :	-	-
Indeno(1,2,3-cd)pyrene	mg/kg-dry	T	-	<0.36 :	<0.35 :	<0.36 J	-	-
Isophorone	mg/kg-dry	T	-	<0.36 :	<0.35 :	<0.36 :	-	-
Naphthalene	mg/kg-dry	T	-	<0.36 :	<0.35 :	<0.36 :	-	-
Nitrobenzene	mg/kg-dry	T	-	<0.36 :	<0.35 :	<0.36 :	-	-
N-Nitrosodi-n-propylamine	mg/kg-dry	T	-	<0.36 :	<0.35 :	<0.36 :	-	-
N-Nitrosodiphenylamine	mg/kg-dry	T	-	<0.36 :	<0.35 :	<0.36 :	-	-
Pentachlorophenol	mg/kg-dry	T	-	<0.9 :	<0.88 :	<0.89 :	-	-
Phenanthrene	mg/kg-dry	T	-	<0.36 :	<0.35 :	<0.36 :	-	-
Phenol	mg/kg-dry	T	-	<0.36 :	<0.35 :	<0.36 :	-	-
Pyrene	mg/kg-dry	T	-	<0.36 :	<0.35 :	<0.36 :	-	-

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Appendix A-7e
Soil - Biased 0-24 inches
Validated Analytical Results

Parameter	Units	Exposure Area Fraction	Site ID / Sample Date / Sample ID		MSS8-67 1/14/2003 MSS8-67-T02N-SOL SS8F		MSS8-68 1/14/2003 MSS8-68-T02N-SOL SS8F		MSS8-69 1/14/2003 MSS8-69-T02N-SOL SS8F		MSS8-7 10/23/2002 MSS8-7-T02N-SOL SS8A		MSS8-70 1/14/2003 MSS8-70-T02N-SOL SS8F		MSS8-71 1/14/2003 MSS8-71-T02N-SOL SS8F	
General Chemistry																
Ammonia	mg/kg-dry	T			52.3	:	31.	:	114.	:	16.8	:	55.1	:	10.5	:
Chloride	mg/kg-dry	T			6.8	:	<2.3	:	5.4	:	4.9	J	5.6	:	3.3	:
Fluoride	mg/kg-dry	T			0.57	J	2.7	J	0.72	J	0.41	J	0.9	J	2.4	J
Nitrate	mg/kg-dry	T			<2.3	J	<2.3	J	<2.3	J	<2.2	J	<2.3	J	<2.2	J
Phosphorus	mg/kg-dry	T			994.	:	897.	:	1610.	:	685.	J	1490.	:	493.	:
Sulfate	mg/kg-dry	T			32.2	:	2570.	:	38.6	:	33.3	J	28.3	:	163.	:
Total Kjeldahl Nitrogen	mg/kg-dry	T			370.	:	315.	:	840.	:	60.7	J	358.	:	200.	:
Total Organic Carbon	mg/kg-dry	T			16900.	J	2440.	J	4780.	J	1840.	J	11300.	J	1360.	J
Laboratory Parameters																
pH	SU	T			7.8	:	6.3	:	7.2	:	5.	:	7.9	:	7.	:
Solids, Percent	%	T			89.8	:	89.5	:	89.	:	94.9	:	87.	:	93.8	:
Specific Conductance	umhos/cm	T			285.	J	1710.	J	117.	:	94.8	:	341.	:	361.	:
Geotechnical																
Organic Soils	%	T			3.3	:	3.	:	4.9	:	2.74	J	2.6	:	1.6	:
Physical Properties																
Cation-Exchange Capacity	meq/100g	T			16.7	:	18.2	:	22.	:	8.7	:	13.8	:	7.5	:
Sodium Absorption Ratio	ratio	T			0.3	:	0.02	:	0.07	:	0.28	:	7.55	:	0.05	:
Metals																
Aluminum	mg/kg-dry	T			11500.	:	14500.	:	14700.	:	-		14300.	:	12300.	:
Antimony	mg/kg-dry	T			<0.29	J	<0.32	J	<0.31	J	-		<0.33	J	<0.29	J
Arsenic	mg/kg-dry	T			5.	J	4.8	J	11.	J	-		2.1	J	4.4	J
Barium	mg/kg-dry	T			144.	:	159.	:	230.	:	-		186.	:	94.4	:
Beryllium	mg/kg-dry	T			0.98	:	1.4	:	1.1	:	-		0.79	:	2.	:
Boron	mg/kg-dry	T			3.	:	<2.2	:	<1.1	J	-		<0.71	J	<0.24	J
Cadmium	mg/kg-dry	T			0.52	:	1.3	:	19.9	:	-		<0.039	:	4.2	:
Calcium	mg/kg-dry	T			8110.	:	11200.	:	4590.	:	-		5100.	:	10700.	:
Chromium	mg/kg-dry	T			45.3	J	33.5	J	48.6	J	-		60.8	J	27.2	J
Cobalt	mg/kg-dry	T			10.5	:	12.3	:	15.3	:	-		15.	:	4.2	:
Copper	mg/kg-dry	T			60.4	J	109.	J	72.6	J	-		34.9	J	118.	J
Iron	mg/kg-dry	T			27600.	:	31900.	:	35300.	:	-		30600.	:	17800.	:
Lead	mg/kg-dry	T			91.2	:	93.3	:	183.	:	-		35.	:	168.	:
Magnesium	mg/kg-dry	T			7000.	:	7680.	:	7980.	:	-		10400.	:	5980.	:
Manganese	mg/kg-dry	T			649.	:	1380.	:	692.	:	-		726.	:	1420.	:

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Appendix A-7e
Soil - Biased 0-24 inches
Validated Analytical Results

Parameter	Units	Exposure Area Fraction	Site ID / Sample Date / Sample ID		MSS8-67 1/14/2003 MSS8-67-T02N-SOL SS8F		MSS8-68 1/14/2003 MSS8-68-T02N-SOL SS8F		MSS8-69 1/14/2003 MSS8-69-T02N-SOL SS8F		MSS8-7 10/23/2002 MSS8-7-T02N-SOL SS8A		MSS8-70 1/14/2003 MSS8-70-T02N-SOL SS8F		MSS8-71 1/14/2003 MSS8-71-T02N-SOL SS8F	
Mercury	mg/kg-dry	T			0.087	:	0.14	:	0.039	:	-		<0.018	:	0.022	:
Molybdenum	mg/kg-dry	T			320.	:	1220.	:	1280.	:	-		35.7	:	1940.	:
Nickel	mg/kg-dry	T			27.9	:	26.1	:	32.5	:	-		39.5	:	14.3	:
Potassium	mg/kg-dry	T			2620.	J	2970.	J	3490.	J	-		3070.	J	2570.	J
Selenium	mg/kg-dry	T			<0.77	J	1.1	J	0.88	J	-		<0.89	J	<0.76	J
Silver	mg/kg-dry	T			0.58	:	1.7	:	0.58	:	-		0.18	:	2.1	:
Sodium	mg/kg-dry	T			<106.	:	<93.1	:	<131.	:	-		747.	:	<95.1	:
Thallium	mg/kg-dry	T			0.21	:	0.33	:	0.24	:	-		0.23	:	0.24	:
Vanadium	mg/kg-dry	T			33.	:	38.9	:	46.6	:	-		42.8	:	33.4	:
Zinc	mg/kg-dry	T			201.	:	223.	:	153.	:	-		109.	:	639.	:
Semi-Volatile Organics																
1,1`-Biphenyl	mg/kg-dry	T			-		-		-		0.045	J	-		-	
2,4,5-Trichlorophenol	mg/kg-dry	T			-		-		-		<0.87	:	-		-	
2,4,6-Trichlorophenol	mg/kg-dry	T			-		-		-		<0.35	:	-		-	
2,4-Dichlorophenol	mg/kg-dry	T			-		-		-		<0.35	:	-		-	
2,4-Dimethylphenol	mg/kg-dry	T			-		-		-		<0.35	:	-		-	
2,4-Dinitrophenol	mg/kg-dry	T			-		-		-		<0.87	:	-		-	
2,4-Dinitrotoluene	mg/kg-dry	T			-		-		-		<0.35	:	-		-	
2,6-Dinitrotoluene	mg/kg-dry	T			-		-		-		<0.35	:	-		-	
2-Chloronaphthalene	mg/kg-dry	T			-		-		-		<0.35	:	-		-	
2-Chlorophenol	mg/kg-dry	T			-		-		-		<0.35	:	-		-	
2-Methylnaphthalene	mg/kg-dry	T			-		-		-		<0.35	:	-		-	
2-Methylphenol	mg/kg-dry	T			-		-		-		<0.35	:	-		-	
2-Nitroaniline	mg/kg-dry	T			-		-		-		<0.87	:	-		-	
2-Nitrophenol	mg/kg-dry	T			-		-		-		<0.35	:	-		-	
3,3-Dichlorobenzidine	mg/kg-dry	T			-		-		-		<0.35	:	-		-	
3-Nitroaniline	mg/kg-dry	T			-		-		-		<0.87	:	-		-	
4,6-Dinitro-2-methylphenol	mg/kg-dry	T			-		-		-		<0.87	:	-		-	
4-Bromophenyl phenyl ether	mg/kg-dry	T			-		-		-		<0.35	:	-		-	
4-Chloro-3-methylphenol	mg/kg-dry	T			-		-		-		<0.35	:	-		-	
4-Chloroaniline	mg/kg-dry	T			-		-		-		<0.35	:	-		-	
4-Chlorophenyl phenyl ether	mg/kg-dry	T			-		-		-		<0.35	:	-		-	
4-Methylphenol	mg/kg-dry	T			-		-		-		<0.35	:	-		-	
4-Nitroaniline	mg/kg-dry	T			-		-		-		<0.87	:	-		-	

J = Qualified as estimated during data validation
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T = Total Fraction

Appendix A-7e
Soil - Biased 0-24 inches
Validated Analytical Results

Parameter	Units	Exposure Area Fraction	Site ID	MSS8-67	MSS8-68	MSS8-69	MSS8-7	MSS8-70	MSS8-71
			Sample Date	1/14/2003	1/14/2003	1/14/2003	10/23/2002	1/14/2003	1/14/2003
			Sample ID	MSS8-67-T02N-SOL	MSS8-68-T02N-SOL	MSS8-69-T02N-SOL	MSS8-7-T02N-SOL	MSS8-70-T02N-SOL	MSS8-71-T02N-SOL
			Exposure Area	SS8F	SS8F	SS8F	SS8A	SS8F	SS8F
4-Nitrophenol	mg/kg-dry	T		-	-	-	<0.87 :	-	-
Acenaphthene	mg/kg-dry	T		-	-	-	<0.35 :	-	-
Acenaphthylene	mg/kg-dry	T		-	-	-	<0.35 :	-	-
Anthracene	mg/kg-dry	T		-	-	-	<0.35 :	-	-
Benzaldehyde	mg/kg-dry	T		-	-	-	<0.35 :	-	-
Benzo(a)anthracene	mg/kg-dry	T		-	-	-	<0.35 :	-	-
Benzo(a)pyrene	mg/kg-dry	T		-	-	-	<0.35 :	-	-
Benzo(b)fluoranthene	mg/kg-dry	T		-	-	-	<0.35 :	-	-
Benzo(g,h,i)perylene	mg/kg-dry	T		-	-	-	<0.35 :	-	-
Benzo(k)fluoranthene	mg/kg-dry	T		-	-	-	<0.35 :	-	-
Bis(2-chloroethoxy)methane	mg/kg-dry	T		-	-	-	<0.35 :	-	-
Bis(2-chloroethyl)ether	mg/kg-dry	T		-	-	-	<0.35 :	-	-
Bis(2-ethylhexyl)phthalate	mg/kg-dry	T		-	-	-	<0.35 :	-	-
Butyl benzyl phthalate	mg/kg-dry	T		-	-	-	0.021 J	-	-
Carbazole	mg/kg-dry	T		-	-	-	<0.35 :	-	-
Chrysene	mg/kg-dry	T		-	-	-	<0.35 :	-	-
Dibenz(a,h)anthracene	mg/kg-dry	T		-	-	-	<0.35 :	-	-
Dibenzofuran	mg/kg-dry	T		-	-	-	<0.35 :	-	-
Dichlorodiisopropyl ether	mg/kg-dry	T		-	-	-	<0.35 :	-	-
Diethylphthalate	mg/kg-dry	T		-	-	-	<0.35 :	-	-
Dimethylphthalate	mg/kg-dry	T		-	-	-	<0.35 :	-	-
Di-n-Butyl phthalate	mg/kg-dry	T		-	-	-	<0.35 :	-	-
Di-n-Octyl phthalate	mg/kg-dry	T		-	-	-	<0.35 :	-	-
Fluoranthene	mg/kg-dry	T		-	-	-	0.022 J	-	-
Fluorene	mg/kg-dry	T		-	-	-	0.072 J	-	-
Hexachlorobenzene	mg/kg-dry	T		-	-	-	<0.35 :	-	-
Hexachlorobutadiene	mg/kg-dry	T		-	-	-	<0.35 :	-	-
Hexachlorocyclopentadiene	mg/kg-dry	T		-	-	-	<0.35 :	-	-
Hexachloroethane	mg/kg-dry	T		-	-	-	<0.35 :	-	-
Indeno(1,2,3-cd)pyrene	mg/kg-dry	T		-	-	-	<0.35 :	-	-
Isophorone	mg/kg-dry	T		-	-	-	<0.35 :	-	-
Naphthalene	mg/kg-dry	T		-	-	-	<0.35 :	-	-
Nitrobenzene	mg/kg-dry	T		-	-	-	<0.35 :	-	-
N-Nitrosodi-n-propylamine	mg/kg-dry	T		-	-	-	<0.35 :	-	-

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Appendix A-7e
Soil - Biased 0-24 inches
Validated Analytical Results

Parameter	Units	Exposure Area Fraction	Site ID	MSS8-67	MSS8-68	MSS8-69	MSS8-7	MSS8-70	MSS8-71
			Sample Date	1/14/2003	1/14/2003	1/14/2003	10/23/2002	1/14/2003	1/14/2003
			Sample ID	MSS8-67-T02N-SOL	MSS8-68-T02N-SOL	MSS8-69-T02N-SOL	MSS8-7-T02N-SOL	MSS8-70-T02N-SOL	MSS8-71-T02N-SOL
			Exposure Area	SS8F	SS8F	SS8F	SS8A	SS8F	SS8F
N-Nitrosodiphenylamine	mg/kg-dry	T		-	-	-	<0.35 :	-	-
Pentachlorophenol	mg/kg-dry	T		-	-	-	<0.87 :	-	-
Phenanthrene	mg/kg-dry	T		-	-	-	0.2 J	-	-
Phenol	mg/kg-dry	T		-	-	-	<0.35 :	-	-
Pyrene	mg/kg-dry	T		-	-	-	0.068 J	-	-
Explosives									
2,4,6-Trinitrotoluene	mg/kg-dry	T		-	-	-	<0.12 :	-	-
2,6-Pyridinediamine,	mg/kg-dry	T		-	-	-	<0.12 :	-	-
Cyclotetramethylenetetranitramine	mg/kg-dry	T		-	-	-	<0.12 :	-	-
Cyclotrimethylenetrinitramine	mg/kg-dry	T		-	-	-	<0.12 :	-	-
Pentaerythritol tetranitrate	mg/kg-dry	T		-	-	-	6.1 J	-	-

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Appendix A-7e
Soil - Biased 0-24 inches
Validated Analytical Results

Parameter	Units	Exposure Area Fraction	Site ID / Sample Date / Sample ID		MSS8-72 1/14/2003 MSS8-72-T02N-SOL SS8F		MSS8-73 1/14/2003 MSS8-73-T02N-SOL SS8F		MSS8-74 1/14/2003 MSS8-74-T02N-SOL SS8F		MSS8-75 1/17/2003 MSS8-75-T02N-SOL SS8A		MSS8-76 1/17/2003 MSS8-76-T02N-SOL SS8A		MSS8-8 10/23/2002 MSS8-8-T02N-SOL SS8A	
General Chemistry																
Ammonia	mg/kg-dry	T			9.3	:	27.6	:	50.9	:	12.2	:	17.8	:	29.	:
Chloride	mg/kg-dry	T			2.8	:	3.3	:	3.8	:	2.3	:	2.6	:	4.	J
Fluoride	mg/kg-dry	T			2.8	J	1.3	J	1.1	J	0.53	J	0.78	J	1.6	J
Nitrate	mg/kg-dry	T			<2.2	J	<2.2	J	<2.2	J	<2.2	J	<2.1	J	3.4	J
Phosphorus	mg/kg-dry	T			442.	:	529.	:	1330.	:	1120.	:	541.	:	870.	J
Sulfate	mg/kg-dry	T			13.2	:	8.7	:	322.	:	703.	:	64.2	:	805.	J
Total Kjeldahl Nitrogen	mg/kg-dry	T			54.6	:	223.	:	339.	:	48.9	:	103.	:	123.	J
Total Organic Carbon	mg/kg-dry	T			1550.	J	2400.	J	3890.	J	5770.	J	3060.	J	2130.	J
Laboratory Parameters																
pH	SU	T			7.5	:	7.6	:	7.	:	7.3	:	7.7	:	4.1	:
Solids, Percent	%	T			92.1	:	93.6	:	92.4	:	94.5	:	96.3	:	91.2	:
Specific Conductance	umhos/cm	T			133.	J	141.	:	1420.	:	473.	J	326.	J	585.	:
Geotechnical																
Organic Soils	%	T			0.9	:	2.2	:	3.8	:	0.9	:	0.9	:	3.04	J
Physical Properties																
Cation-Exchange Capacity	meq/100g	T			10.7	:	11.9	:	10.8	:	16.5	:	10.8	:	11.9	:
Sodium Absorption Ratio	ratio	T			0.19	:	0.19	:	0.14	:	0.08	:	0.32	:	0.04	:
Metals																
Aluminum	mg/kg-dry	T			8130.	:	6960.	:	15500.	:	-		-		-	
Antimony	mg/kg-dry	T			<0.28	J	<0.27	J	<0.32	J	-		-		-	
Arsenic	mg/kg-dry	T			2.6	J	3.5	J	4.3	J	-		-		-	
Barium	mg/kg-dry	T			21.5	:	107.	:	246.	:	-		-		-	
Beryllium	mg/kg-dry	T			1.1	:	0.92	:	0.8	:	-		-		-	
Boron	mg/kg-dry	T			<0.84	:	<0.27	:	<0.59	:	-		-		-	
Cadmium	mg/kg-dry	T			3.6	:	2.8	:	<0.038	:	-		-		-	
Calcium	mg/kg-dry	T			8280.	:	9090.	:	6430.	:	-		-		-	
Chromium	mg/kg-dry	T			16.9	J	12.3	J	62.1	J	-		-		-	
Cobalt	mg/kg-dry	T			1.9	:	3.	:	13.4	:	-		-		-	
Copper	mg/kg-dry	T			128.	J	87.3	J	38.9	J	-		-		-	
Iron	mg/kg-dry	T			15500.	:	16000.	:	31700.	:	-		-		-	
Lead	mg/kg-dry	T			125.	:	371.	:	30.1	:	-		-		-	
Magnesium	mg/kg-dry	T			3390.	:	2270.	:	9070.	:	-		-		-	
Manganese	mg/kg-dry	T			665.	:	661.	:	613.	:	-		-		-	

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Appendix A-7e
Soil - Biased 0-24 inches
Validated Analytical Results

Parameter	Units	Exposure Area Fraction	Site ID		MSS8-72		MSS8-73		MSS8-74		MSS8-75		MSS8-76		MSS8-8	
			Sample Date		1/14/2003		1/14/2003		1/14/2003		1/17/2003		1/17/2003		10/23/2002	
			Sample ID		MSS8-72-T02N-SOL		MSS8-73-T02N-SOL		MSS8-74-T02N-SOL		MSS8-75-T02N-SOL		MSS8-76-T02N-SOL		MSS8-8-T02N-SOL	
			Exposure Area		SS8F		SS8F		SS8F		SS8A		SS8A		SS8A	
Mercury	mg/kg-dry	T		0.036	:	1.6	:	<0.017	:	-		-		-	
Molybdenum	mg/kg-dry	T		1650.	:	164.	:	29.2	:	-		-		-	
Nickel	mg/kg-dry	T		9.	:	9.4	:	36.1	:	-		-		-	
Potassium	mg/kg-dry	T		1780.	J	1540.	J	3620.	J	-		-		-	
Selenium	mg/kg-dry	T		<0.75	J	0.72	J	<0.85	J	-		-		-	
Silver	mg/kg-dry	T		2.1	:	1.6	:	0.25	:	-		-		-	
Sodium	mg/kg-dry	T		<82.8	:	<103.	:	<158.	:	-		-		-	
Thallium	mg/kg-dry	T		0.28	:	0.13	:	0.21	:	-		-		-	
Vanadium	mg/kg-dry	T		22.3	:	8.9	:	41.3	:	-		-		-	
Zinc	mg/kg-dry	T		540.	:	708.	:	77.3	:	-		-		-	
Semi-Volatile Organics																
1,1`-Biphenyl	mg/kg-dry	T		-		-		-		<0.35	:	<0.34	:	<0.36	:
2,4,5-Trichlorophenol	mg/kg-dry	T		-		-		-		<0.88	:	<0.86	:	<0.91	:
2,4,6-Trichlorophenol	mg/kg-dry	T		-		-		-		<0.35	:	<0.34	:	<0.36	:
2,4-Dichlorophenol	mg/kg-dry	T		-		-		-		<0.35	:	<0.34	:	<0.36	:
2,4-Dimethylphenol	mg/kg-dry	T		-		-		-		<0.35	:	<0.34	:	<0.36	:
2,4-Dinitrophenol	mg/kg-dry	T		-		-		-		<0.88	:	<0.86	:	<0.91	:
2,4-Dinitrotoluene	mg/kg-dry	T		-		-		-		<0.35	:	<0.34	:	<0.36	:
2,6-Dinitrotoluene	mg/kg-dry	T		-		-		-		<0.35	:	<0.34	:	<0.36	:
2-Chloronaphthalene	mg/kg-dry	T		-		-		-		<0.35	:	<0.34	:	<0.36	:
2-Chlorophenol	mg/kg-dry	T		-		-		-		<0.35	:	<0.34	:	<0.36	:
2-Methylnaphthalene	mg/kg-dry	T		-		-		-		<0.35	:	<0.34	:	<0.36	:
2-Methylphenol	mg/kg-dry	T		-		-		-		<0.35	:	<0.34	:	<0.36	:
2-Nitroaniline	mg/kg-dry	T		-		-		-		<0.88	:	<0.86	:	<0.91	:
2-Nitrophenol	mg/kg-dry	T		-		-		-		<0.35	:	<0.34	:	<0.36	:
3,3-Dichlorobenzidine	mg/kg-dry	T		-		-		-		<0.35	:	<0.34	:	<0.36	:
3-Nitroaniline	mg/kg-dry	T		-		-		-		<0.88	:	<0.86	:	<0.91	:
4,6-Dinitro-2-methylphenol	mg/kg-dry	T		-		-		-		<0.88	:	<0.86	:	<0.91	:
4-Bromophenyl phenyl ether	mg/kg-dry	T		-		-		-		<0.35	:	<0.34	:	<0.36	:
4-Chloro-3-methylphenol	mg/kg-dry	T		-		-		-		<0.35	:	<0.34	:	<0.36	:
4-Chloroaniline	mg/kg-dry	T		-		-		-		<0.35	:	<0.34	:	<0.36	:
4-Chlorophenyl phenyl ether	mg/kg-dry	T		-		-		-		<0.35	:	<0.34	:	<0.36	:
4-Methylphenol	mg/kg-dry	T		-		-		-		<0.35	:	<0.34	:	<0.36	:
4-Nitroaniline	mg/kg-dry	T		-		-		-		<0.88	:	<0.86	:	<0.91	:

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Appendix A-7e
Soil - Biased 0-24 inches
Validated Analytical Results

Parameter	Units	Exposure Area Fraction	Site ID / Sample Date / Sample ID					
			MSS8-72 1/14/2003 MSS8-72-T02N-SOL	MSS8-73 1/14/2003 MSS8-73-T02N-SOL	MSS8-74 1/14/2003 MSS8-74-T02N-SOL	MSS8-75 1/17/2003 MSS8-75-T02N-SOL	MSS8-76 1/17/2003 MSS8-76-T02N-SOL	MSS8-8 10/23/2002 MSS8-8-T02N-SOL
			SS8F	SS8F	SS8F	SS8A	SS8A	SS8A
4-Nitrophenol	mg/kg-dry	T	-	-	-	<0.88 :	<0.86 :	<0.91 :
Acenaphthene	mg/kg-dry	T	-	-	-	<0.35 :	<0.34 :	<0.36 :
Acenaphthylene	mg/kg-dry	T	-	-	-	<0.35 :	<0.34 :	<0.36 :
Anthracene	mg/kg-dry	T	-	-	-	<0.35 :	<0.34 :	<0.36 :
Benzaldehyde	mg/kg-dry	T	-	-	-	<0.35 J	<0.34 J	<0.39 :
Benzo(a)anthracene	mg/kg-dry	T	-	-	-	<0.35 :	<0.34 :	<0.36 :
Benzo(a)pyrene	mg/kg-dry	T	-	-	-	<0.35 :	<0.34 :	<0.36 :
Benzo(b)fluoranthene	mg/kg-dry	T	-	-	-	<0.35 :	<0.34 :	<0.36 :
Benzo(g,h,i)perylene	mg/kg-dry	T	-	-	-	<0.35 :	<0.34 :	<0.36 :
Benzo(k)fluoranthene	mg/kg-dry	T	-	-	-	<0.35 :	<0.34 :	<0.36 :
Bis(2-chloroethoxy)methane	mg/kg-dry	T	-	-	-	<0.35 :	<0.34 :	<0.36 :
Bis(2-chloroethyl)ether	mg/kg-dry	T	-	-	-	<0.35 :	<0.34 :	<0.36 :
Bis(2-ethylhexyl)phthalate	mg/kg-dry	T	-	-	-	0.041 J	0.026 J	<0.36 :
Butyl benzyl phthalate	mg/kg-dry	T	-	-	-	<0.35 :	<0.34 :	<0.36 :
Carbazole	mg/kg-dry	T	-	-	-	<0.35 :	<0.34 :	<0.36 :
Chrysene	mg/kg-dry	T	-	-	-	<0.35 :	<0.34 :	<0.36 :
Dibenz(a,h)anthracene	mg/kg-dry	T	-	-	-	<0.35 :	<0.34 :	<0.36 :
Dibenzofuran	mg/kg-dry	T	-	-	-	<0.35 :	<0.34 :	<0.36 :
Dichlorodiisopropyl ether	mg/kg-dry	T	-	-	-	<0.35 :	<0.34 :	<0.36 :
Diethylphthalate	mg/kg-dry	T	-	-	-	<0.35 :	<0.34 :	<0.36 :
Dimethylphthalate	mg/kg-dry	T	-	-	-	<0.35 :	<0.34 :	<0.36 :
Di-n-Butyl phthalate	mg/kg-dry	T	-	-	-	<0.35 :	<0.34 :	<0.36 :
Di-n-Octyl phthalate	mg/kg-dry	T	-	-	-	<0.35 :	0.022 J	<0.36 :
Fluoranthene	mg/kg-dry	T	-	-	-	<0.35 :	<0.34 :	<0.36 :
Fluorene	mg/kg-dry	T	-	-	-	<0.35 :	<0.34 :	<0.36 :
Hexachlorobenzene	mg/kg-dry	T	-	-	-	<0.35 :	<0.34 :	<0.36 :
Hexachlorobutadiene	mg/kg-dry	T	-	-	-	<0.35 :	<0.34 :	<0.36 :
Hexachlorocyclopentadiene	mg/kg-dry	T	-	-	-	<0.35 :	<0.34 :	<0.36 :
Hexachloroethane	mg/kg-dry	T	-	-	-	<0.35 :	<0.34 :	<0.36 :
Indeno(1,2,3-cd)pyrene	mg/kg-dry	T	-	-	-	<0.35 :	<0.34 :	<0.36 :
Isophorone	mg/kg-dry	T	-	-	-	<0.35 :	<0.34 :	<0.36 :
Naphthalene	mg/kg-dry	T	-	-	-	<0.35 :	<0.34 :	<0.36 :
Nitrobenzene	mg/kg-dry	T	-	-	-	<0.35 :	<0.34 :	<0.36 :
N-Nitrosodi-n-propylamine	mg/kg-dry	T	-	-	-	<0.35 :	<0.34 :	<0.36 :

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T = Total Fraction

Appendix A-7e
Soil - Biased 0-24 inches
Validated Analytical Results

Parameter	Units	Exposure Area Fraction	Site ID / Sample Date / Sample ID					
			MSS8-72 1/14/2003 MSS8-72-T02N-SOL	MSS8-73 1/14/2003 MSS8-73-T02N-SOL	MSS8-74 1/14/2003 MSS8-74-T02N-SOL	MSS8-75 1/17/2003 MSS8-75-T02N-SOL	MSS8-76 1/17/2003 MSS8-76-T02N-SOL	MSS8-8 10/23/2002 MSS8-8-T02N-SOL
			SS8F	SS8F	SS8F	SS8A	SS8A	SS8A
N-Nitrosodiphenylamine	mg/kg-dry	T	-	-	-	<0.35 :	<0.34 :	<0.36 :
Pentachlorophenol	mg/kg-dry	T	-	-	-	<0.88 :	<0.86 :	<0.91 :
Phenanthrene	mg/kg-dry	T	-	-	-	<0.35 :	<0.34 :	<0.36 :
Phenol	mg/kg-dry	T	-	-	-	<0.35 :	<0.34 :	<0.36 :
Pyrene	mg/kg-dry	T	-	-	-	<0.35 :	<0.34 :	<0.36 :
Explosives								
2,4,6-Trinitrotoluene	mg/kg-dry	T	-	-	-	-	-	<0.12 :
2,6-Pyridinediamine,	mg/kg-dry	T	-	-	-	-	-	<0.12 :
Cyclotetramethylenetetranitramine	mg/kg-dry	T	-	-	-	-	-	<0.12 :
Cyclotrimethylenetrinitramine	mg/kg-dry	T	-	-	-	-	-	<0.12 :
Pentaerythritol tetranitrate	mg/kg-dry	T	-	-	-	-	-	<5. :
Pesticides-PCBs								
Aroclor 1016	mg/kg-dry	T	-	-	-	<0.035 :	<0.034 :	-
Aroclor 1221	mg/kg-dry	T	-	-	-	<0.071 :	<0.07 :	-
Aroclor 1232	mg/kg-dry	T	-	-	-	<0.035 :	<0.034 :	-
Aroclor 1242	mg/kg-dry	T	-	-	-	<0.035 :	<0.034 :	-
Aroclor 1248	mg/kg-dry	T	-	-	-	<0.035 :	<0.034 :	-
Aroclor 1254	mg/kg-dry	T	-	-	-	<0.035 :	<0.034 :	-
Aroclor 1260	mg/kg-dry	T	-	-	-	<0.035 :	<0.034 :	-

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Appendix A-7e
Soil - Biased 0-24 inches
Validated Analytical Results

Parameter	Units	Exposure Area Fraction	Site ID / Sample Date / Sample ID		MSS8-9 10/23/2002 MSS8-9-T02N-SOL SS8A		MSS8-TF1 10/16/2002 MSS8-TF1-T02N-SOL SS8E		MSS8-TF2 10/16/2002 MSS8-TF2-T02N-SOL SS8E		MSS8-TF20 1/19/2003 MSS8-TF20-T02N-SOL SS8E		MSS8-TF3 10/17/2002 MSS8-TF3-T02N-SOL SS8E		MSS8-TF4 10/17/2002 MSS8-TF4-T02N-SOL SS8E	
General Chemistry																
Ammonia	mg/kg-dry	T			24.1	:	-		-		-		-		-	
Chloride	mg/kg-dry	T			3.7	J	-		-		-		-		-	
Fluoride	mg/kg-dry	T			3.5	J	-		-		-		-		-	
Nitrate	mg/kg-dry	T			2.2	J	-		-		-		-		-	
Phosphorus	mg/kg-dry	T			1040.	J	-		-		-		-		-	
Sulfate	mg/kg-dry	T			946.	J	-		-		-		-		-	
Total Kjeldahl Nitrogen	mg/kg-dry	T			70.3	J	-		-		-		-		-	
Total Organic Carbon	mg/kg-dry	T			940.	J	-		-		-		-		-	
Laboratory Parameters																
pH	SU	T			4.1	:	-		-		-		-		-	
Solids, Percent	%	T			92.3	:	95.	:	93.8	:	87.6	:	90.9	:	96.4	:
Specific Conductance	umhos/cm	T			860.	:	-		-		-		-		-	
Geotechnical																
Organic Soils	%	T			3.06	J	-		-		-		-		-	
Physical Properties																
Cation-Exchange Capacity	meq/100g	T			16.	:	-		-		-		-		-	
Sodium Absorption Ratio	ratio	T			0.07	:	-		-		-		-		-	
Semi-Volatile Organics																
1,1`-Biphenyl	mg/kg-dry	T			<0.36	:	-		-		-		-		-	
2,4,5-Trichlorophenol	mg/kg-dry	T			<0.9	:	-		-		-		-		-	
2,4,6-Trichlorophenol	mg/kg-dry	T			<0.36	:	-		-		-		-		-	
2,4-Dichlorophenol	mg/kg-dry	T			<0.36	:	-		-		-		-		-	
2,4-Dimethylphenol	mg/kg-dry	T			<0.36	:	-		-		-		-		-	
2,4-Dinitrophenol	mg/kg-dry	T			<0.9	:	-		-		-		-		-	
2,4-Dinitrotoluene	mg/kg-dry	T			<0.36	:	-		-		-		-		-	
2,6-Dinitrotoluene	mg/kg-dry	T			<0.36	:	-		-		-		-		-	
2-Chloronaphthalene	mg/kg-dry	T			<0.36	:	-		-		-		-		-	
2-Chlorophenol	mg/kg-dry	T			<0.36	:	-		-		-		-		-	
2-Methylnaphthalene	mg/kg-dry	T			<0.36	:	-		-		-		-		-	
2-Methylphenol	mg/kg-dry	T			<0.36	:	-		-		-		-		-	
2-Nitroaniline	mg/kg-dry	T			<0.9	:	-		-		-		-		-	
2-Nitrophenol	mg/kg-dry	T			<0.36	:	-		-		-		-		-	
3,3-Dichlorobenzidine	mg/kg-dry	T			<0.36	:	-		-		-		-		-	

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Appendix A-7e
Soil - Biased 0-24 inches
Validated Analytical Results

Parameter	Units	Fraction	Site ID	MSS8-9	MSS8-TF1	MSS8-TF2	MSS8-TF20	MSS8-TF3	MSS8-TF4
			Sample Date	10/23/2002	10/16/2002	10/16/2002	1/19/2003	10/17/2002	10/17/2002
			Sample ID	MSS8-9-T02N-SOL	MSS8-TF1-T02N-SOL	MSS8-TF2-T02N-SOL	MSS8-TF20-T02N-SOL	MSS8-TF3-T02N-SOL	MSS8-TF4-T02N-SOL
			Exposure Area	SS8A	SS8E	SS8E	SS8E	SS8E	SS8E
3-Nitroaniline	mg/kg-dry	T		<0.9 :	-	-	-	-	-
4,6-Dinitro-2-methylphenol	mg/kg-dry	T		<0.9 :	-	-	-	-	-
4-Bromophenyl phenyl ether	mg/kg-dry	T		<0.36 :	-	-	-	-	-
4-Chloro-3-methylphenol	mg/kg-dry	T		<0.36 :	-	-	-	-	-
4-Chloroaniline	mg/kg-dry	T		<0.36 :	-	-	-	-	-
4-Chlorophenyl phenyl ether	mg/kg-dry	T		<0.36 :	-	-	-	-	-
4-Methylphenol	mg/kg-dry	T		<0.36 :	-	-	-	-	-
4-Nitroaniline	mg/kg-dry	T		<0.9 :	-	-	-	-	-
4-Nitrophenol	mg/kg-dry	T		<0.9 :	-	-	-	-	-
Acenaphthene	mg/kg-dry	T		<0.36 :	-	-	-	-	-
Acenaphthylene	mg/kg-dry	T		<0.36 :	-	-	-	-	-
Anthracene	mg/kg-dry	T		<0.36 :	-	-	-	-	-
Benzaldehyde	mg/kg-dry	T		<0.36 :	-	-	-	-	-
Benzo(a)anthracene	mg/kg-dry	T		<0.36 :	-	-	-	-	-
Benzo(a)pyrene	mg/kg-dry	T		<0.36 :	-	-	-	-	-
Benzo(b)fluoranthene	mg/kg-dry	T		<0.36 :	-	-	-	-	-
Benzo(g,h,i)perylene	mg/kg-dry	T		<0.36 :	-	-	-	-	-
Benzo(k)fluoranthene	mg/kg-dry	T		<0.36 :	-	-	-	-	-
Bis(2-chloroethoxy)methane	mg/kg-dry	T		<0.36 :	-	-	-	-	-
Bis(2-chloroethyl)ether	mg/kg-dry	T		<0.36 :	-	-	-	-	-
Bis(2-ethylhexyl)phthalate	mg/kg-dry	T		<0.36 :	-	-	-	-	-
Butyl benzyl phthalate	mg/kg-dry	T		<0.36 :	-	-	-	-	-
Carbazole	mg/kg-dry	T		<0.36 :	-	-	-	-	-
Chrysene	mg/kg-dry	T		<0.36 :	-	-	-	-	-
Dibenz(a,h)anthracene	mg/kg-dry	T		<0.36 :	-	-	-	-	-
Dibenzofuran	mg/kg-dry	T		<0.36 :	-	-	-	-	-
Dichlorodiisopropyl ether	mg/kg-dry	T		<0.36 :	-	-	-	-	-
Diethylphthalate	mg/kg-dry	T		<0.36 :	-	-	-	-	-
Dimethylphthalate	mg/kg-dry	T		<0.36 :	-	-	-	-	-
Di-n-Butyl phthalate	mg/kg-dry	T		<0.36 :	-	-	-	-	-
Di-n-Octyl phthalate	mg/kg-dry	T		<0.36 :	-	-	-	-	-
Fluoranthene	mg/kg-dry	T		<0.36 :	-	-	-	-	-
Fluorene	mg/kg-dry	T		<0.36 :	-	-	-	-	-
Hexachlorobenzene	mg/kg-dry	T		<0.36 :	-	-	-	-	-

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Appendix A-7e
Soil - Biased 0-24 inches
Validated Analytical Results

Parameter	Units	Exposure Area Fraction	Site ID / Sample Date / Sample ID					
			MSS8-9 10/23/2002 MSS8-9-T02N-SOL SS8A	MSS8-TF1 10/16/2002 MSS8-TF1-T02N-SOL SS8E	MSS8-TF2 10/16/2002 MSS8-TF2-T02N-SOL SS8E	MSS8-TF20 1/19/2003 MSS8-TF20-T02N-SOL SS8E	MSS8-TF3 10/17/2002 MSS8-TF3-T02N-SOL SS8E	MSS8-TF4 10/17/2002 MSS8-TF4-T02N-SOL SS8E
Hexachlorobutadiene	mg/kg-dry	T	<0.36 :	-	-	-	-	-
Hexachlorocyclopentadiene	mg/kg-dry	T	<0.36 :	-	-	-	-	-
Hexachloroethane	mg/kg-dry	T	<0.36 :	-	-	-	-	-
Indeno(1,2,3-cd)pyrene	mg/kg-dry	T	<0.36 :	-	-	-	-	-
Isophorone	mg/kg-dry	T	<0.36 :	-	-	-	-	-
Naphthalene	mg/kg-dry	T	<0.36 :	-	-	-	-	-
Nitrobenzene	mg/kg-dry	T	<0.36 :	-	-	-	-	-
N-Nitrosodi-n-propylamine	mg/kg-dry	T	<0.36 :	-	-	-	-	-
N-Nitrosodiphenylamine	mg/kg-dry	T	<0.36 :	-	-	-	-	-
Pentachlorophenol	mg/kg-dry	T	<0.9 :	-	-	-	-	-
Phenanthrene	mg/kg-dry	T	<0.36 :	-	-	-	-	-
Phenol	mg/kg-dry	T	<0.36 :	-	-	-	-	-
Pyrene	mg/kg-dry	T	<0.36 :	-	-	-	-	-
Explosives								
2,4,6-Trinitrotoluene	mg/kg-dry	T	<0.12 :	-	-	-	-	-
2,6-Pyridinediamine,	mg/kg-dry	T	<0.12 :	-	-	-	-	-
Cyclotetramethylenetetranitramine	mg/kg-dry	T	<0.12 :	-	-	-	-	-
Cyclotrimethylenetrinitramine	mg/kg-dry	T	<0.12 :	-	-	-	-	-
Pentaerythritol tetranitrate	mg/kg-dry	T	<5. :	-	-	-	-	-
Pesticides-PCBs								
Aroclor 1016	mg/kg-dry	T	-	<0.035 :	<0.035 :	<0.037 :	<0.036 :	<0.034 :
Aroclor 1221	mg/kg-dry	T	-	<0.07 :	<0.071 :	<0.076 :	<0.074 :	<0.07 :
Aroclor 1232	mg/kg-dry	T	-	<0.035 :	<0.035 :	<0.037 :	<0.036 :	<0.034 :
Aroclor 1242	mg/kg-dry	T	-	<0.035 :	<0.035 :	<0.037 :	<0.036 :	<0.034 :
Aroclor 1248	mg/kg-dry	T	-	<0.035 :	<0.035 :	<0.037 :	<0.036 :	0.068 J
Aroclor 1254	mg/kg-dry	T	-	<0.035 :	<0.035 :	<0.037 :	<0.036 :	0.048 J
Aroclor 1260	mg/kg-dry	T	-	<0.035 :	<0.035 :	<0.037 :	<0.036 :	<0.034 :

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Appendix A-7e
Soil - Biased 0-24 inches
Validated Analytical Results

Parameter	Units	Fraction	MSS8-TF5		RS-13A		TSS11-1		TSS11-2		TSS11-3		TSS11-4	
Sample Date			10/17/2002		9/9/2003		10/28/2002		10/28/2002		10/28/2002		10/28/2002	
Sample ID			MSS8-TF5-T02N-SOL		RS-13A-T02N-SOL		TSS11-1-T02N-SOL		TSS11-2-T02N-SOL		TSS11-3-T02N-SOL		TSS11-4-T02N-SOL	
Exposure Area			SS8E		SS16		SS11		SS11		SS11		SS11	
General Chemistry														
Ammonia	mg/kg-dry	T	-		49.2	:	29.7	:	13.8	:	35.3	:	21.4	:
Chloride	mg/kg-dry	T	-		13.5	:	<36.	:	<34.	:	<36.	:	130.	:
Fluoride	mg/kg-dry	T	-		2.3	:	2.6	J	7.6	J	2.8	J	0.98	J
Nitrate	mg/kg-dry	T	-		11.	J	6.4	:	2.7	J	8.3	:	6.2	:
Phosphorus	mg/kg-dry	T	-		1010.	J	750.	J	758.	J	698.	J	657.	J
Sulfate	mg/kg-dry	T	-		388.	J	<62.	:	<57.	:	79.	:	470.	:
Total Kjeldahl Nitrogen	mg/kg-dry	T	-		602.	:	441.	:	92.1	:	706.	:	227.	:
Total Organic Carbon	mg/kg-dry	T	-		7900.	:	5510.	J	1770.	J	8450.	J	4400.	J
Laboratory Parameters														
pH	SU	T	-		5.	J	7.9	:	8.5	:	8.3	:	8.2	:
Solids, Percent	%	T	93.3	:	92.8	:	83.	:	89.1	:	84.4	:	90.4	:
Specific Conductance	umhos/cm	T	-		775.	J	357.	:	106.	:	343.	:	893.	:
Geotechnical														
Organic Soils	%	T	-		2.8	:	5.59	J	3.18	J	7.48	J	2.78	J
Physical Properties														
Cation-Exchange Capacity	meq/100g	T	-		9.5	J	24.2	:	12.9	:	29.4	:	15.1	:
Sodium Absorption Ratio	ratio	T	-		0.45	:	1.8	:	0.06	:	0.36	:	3.25	:
Metals														
Aluminum	mg/kg-dry	T	-		6490.	:	20800.	:	12000.	:	17400.	:	10800.	:
Antimony	mg/kg-dry	T	-		<0.52	J	<0.24	J	<0.26	J	<0.2	J	<0.22	J
Arsenic	mg/kg-dry	T	-		3.5	:	4.3	:	4.3	:	4.9	:	8.3	:
Barium	mg/kg-dry	T	-		235.	:	253.	:	88.8	:	269.	:	97.2	:
Beryllium	mg/kg-dry	T	-		0.56	:	0.93	:	0.76	:	0.79	:	0.88	:
Boron	mg/kg-dry	T	-		4.5	:	10.3	:	7.1	:	10.2	:	8.7	:
Cadmium	mg/kg-dry	T	-		0.084	:	0.25	J	0.19	J	0.28	J	1.3	:
Calcium	mg/kg-dry	T	-		1980.	:	32100.	:	14400.	:	50800.	:	11400.	:
Chromium	mg/kg-dry	T	-		15.2	:	20.1	:	22.8	:	17.9	:	25.5	:
Cobalt	mg/kg-dry	T	-		6.4	:	9.3	:	8.7	:	8.6	:	7.1	:
Copper	mg/kg-dry	T	-		38.6	:	22.9	:	31.1	:	21.5	:	74.3	:
Iron	mg/kg-dry	T	-		16900.	:	21300.	:	18800.	:	18100.	:	20700.	:
Lead	mg/kg-dry	T	-		37.2	:	20.3	:	17.8	:	17.3	:	218.	:
Magnesium	mg/kg-dry	T	-		3400.	:	5700.	:	6660.	:	6670.	:	4770.	:
Manganese	mg/kg-dry	T	-		295.	:	457.	J	439.	J	380.	J	676.	J

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Appendix A-7e
Soil - Biased 0-24 inches
Validated Analytical Results

Parameter	Units	Exposure Area Fraction	Site ID / Sample Date / Sample ID		MSS8-TF5 10/17/2002 MSS8-TF5-T02N-SOL SS8E		RS-13A 9/9/2003 RS-13A-T02N-SOL SS16		TSS11-1 10/28/2002 TSS11-1-T02N-SOL SS11		TSS11-2 10/28/2002 TSS11-2-T02N-SOL SS11		TSS11-3 10/28/2002 TSS11-3-T02N-SOL SS11		TSS11-4 10/28/2002 TSS11-4-T02N-SOL SS11	
Mercury	mg/kg-dry	T		-	<0.016	J		<0.018	:	<0.018	:	<0.018	:	<0.016	:
Molybdenum	mg/kg-dry	T		-	27.7	:		7.5	:	2.6	:	12.3	:	1150.	:
Nickel	mg/kg-dry	T		-	13.2	:		15.3	J	20.	J	14.6	J	17.6	J
Potassium	mg/kg-dry	T		-	1770.	J		2860.	J	1820.	J	2660.	J	2530.	J
Selenium	mg/kg-dry	T		-	0.55	J		1.1	J	1.	J	0.98	J	0.74	J
Silver	mg/kg-dry	T		-	0.18	:		<0.15	:	<0.14	:	<0.14	:	0.4	:
Sodium	mg/kg-dry	T		-	<108.	:		<257.	:	<60.2	:	<124.	:	357.	:
Thallium	mg/kg-dry	T		-	0.11	:		0.26	:	0.13	:	0.2	:	0.22	:
Vanadium	mg/kg-dry	T		-	17.3	:		43.2	:	42.7	:	41.2	:	34.7	:
Zinc	mg/kg-dry	T		-	73.9	:		65.3	J	69.3	J	58.8	J	185.	J
Volatile Organics															
1,1,1-Trichloroethane	mg/kg-dry	T		-		-		<0.005	:	<0.008	:	<0.012	:	<0.006	:
1,1,2,2-Tetrachloroethane	mg/kg-dry	T		-		-		<0.005	:	<0.008	:	<0.012	:	<0.006	:
1,1,2-Trichloro-1,2,2-trifluoroethane	mg/kg-dry	T		-		-		<0.005	:	<0.008	:	<0.012	:	<0.006	:
1,1,2-Trichloroethane	mg/kg-dry	T		-		-		<0.005	:	<0.008	:	<0.012	:	<0.006	:
1,1-Dichloroethane	mg/kg-dry	T		-		-		<0.005	:	<0.008	:	<0.012	:	<0.006	:
1,1-Dichloroethene	mg/kg-dry	T		-		-		<0.005	:	<0.008	:	<0.012	:	<0.006	:
1,2,4-Trichlorobenzene	mg/kg-dry	T		-		-		<0.005	:	<0.008	:	<0.012	:	<0.006	:
1,2-Dibromo-3-chloropropane	mg/kg-dry	T		-		-		<0.005	:	<0.008	:	<0.012	:	<0.006	:
1,2-Dichlorobenzene	mg/kg-dry	T		-		-		<0.005	:	<0.008	:	<0.012	:	<0.006	:
1,2-Dichloroethane	mg/kg-dry	T		-		-		<0.005	:	<0.008	:	<0.012	:	<0.006	:
1,2-Dichloroethene (total)	mg/kg-dry	T		-		-		<0.005	:	<0.008	:	<0.012	:	<0.006	:
1,2-Dichloropropane	mg/kg-dry	T		-		-		<0.005	:	<0.008	:	<0.012	:	<0.006	:
1,3-Dichlorobenzene	mg/kg-dry	T		-		-		<0.005	:	<0.008	:	<0.012	:	<0.006	:
1,4-Dichlorobenzene	mg/kg-dry	T		-		-		<0.005	:	<0.008	:	<0.012	:	<0.006	:
2-Butanone	mg/kg-dry	T		-		-		<0.005	:	<0.008	:	<0.012	:	<0.006	:
2-Hexanone	mg/kg-dry	T		-		-		<0.005	:	<0.008	:	<0.012	:	<0.006	:
4-Methyl-2-pentanone	mg/kg-dry	T		-		-		<0.005	:	<0.008	:	<0.012	:	<0.006	:
Acetone	mg/kg-dry	T		-		-		0.002	J	0.002	J	0.005	J	0.002	J
Benzene	mg/kg-dry	T		-		-		<0.005	:	<0.008	:	<0.012	:	<0.006	:
Bromodichloromethane	mg/kg-dry	T		-		-		<0.005	:	<0.008	:	<0.012	:	<0.006	:
Bromoform	mg/kg-dry	T		-		-		<0.005	:	<0.008	:	<0.012	:	<0.006	:
Bromomethane	mg/kg-dry	T		-		-		<0.005	:	<0.008	:	<0.012	:	<0.006	:
Carbon disulfide	mg/kg-dry	T		-		-		<0.005	:	<0.008	:	<0.012	:	<0.006	:

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Appendix A-7e
Soil - Biased 0-24 inches
Validated Analytical Results

Parameter	Units	Fraction	Site ID	MSS8-TF5	RS-13A	TSS11-1	TSS11-2	TSS11-3	TSS11-4
			Sample Date	10/17/2002	9/9/2003	10/28/2002	10/28/2002	10/28/2002	10/28/2002
			Sample ID	MSS8-TF5-T02N-SOL	RS-13A-T02N-SOL	TSS11-1-T02N-SOL	TSS11-2-T02N-SOL	TSS11-3-T02N-SOL	TSS11-4-T02N-SOL
			Exposure Area	SS8E	SS16	SS11	SS11	SS11	SS11
Carbon tetrachloride	mg/kg-dry	T		-	-	<0.005 :	<0.008 :	<0.012 :	<0.006 :
Chlorobenzene	mg/kg-dry	T		-	-	<0.005 :	<0.008 :	<0.012 :	<0.006 :
Chloroethane	mg/kg-dry	T		-	-	<0.005 :	<0.008 :	<0.012 :	<0.006 :
Chloroform	mg/kg-dry	T		-	-	<0.005 :	<0.008 :	<0.012 :	<0.006 :
Chloromethane	mg/kg-dry	T		-	-	<0.005 :	<0.008 :	<0.012 :	<0.006 :
cis-1,2-Dichloroethene	mg/kg-dry	T		-	-	<0.005 :	<0.008 :	<0.012 :	<0.006 :
cis-1,3-Dichloropropene	mg/kg-dry	T		-	-	<0.005 :	<0.008 :	<0.012 :	<0.006 :
Dibromochloromethane	mg/kg-dry	T		-	-	<0.005 :	<0.008 :	<0.012 :	<0.006 :
Dichlorodifluoromethane	mg/kg-dry	T		-	-	<0.005 :	<0.008 :	<0.012 :	<0.006 :
Ethylbenzene	mg/kg-dry	T		-	-	<0.005 :	<0.008 :	<0.012 :	<0.006 :
Methylene chloride	mg/kg-dry	T		-	-	<0.005 :	<0.008 :	<0.012 :	<0.006 :
Styrene	mg/kg-dry	T		-	-	<0.005 :	<0.008 :	<0.012 :	<0.006 :
Tetrachloroethene	mg/kg-dry	T		-	-	<0.005 :	<0.008 :	<0.012 :	<0.006 :
Toluene	mg/kg-dry	T		-	-	<0.005 :	<0.008 :	<0.012 :	<0.006 :
Total Xylene	mg/kg-dry	T		-	-	<0.005 :	<0.008 :	<0.012 :	<0.006 :
trans-1,2-Dichloroethene	mg/kg-dry	T		-	-	<0.005 :	<0.008 :	<0.012 :	<0.006 :
trans-1,3-Dichloropropene	mg/kg-dry	T		-	-	<0.005 :	<0.008 :	<0.012 :	<0.006 :
Trichloroethene	mg/kg-dry	T		-	-	<0.005 :	<0.008 :	<0.012 :	<0.006 :
Trichlorofluoromethane	mg/kg-dry	T		-	-	<0.005 :	<0.008 :	<0.012 :	<0.006 :
Vinyl chloride	mg/kg-dry	T		-	-	<0.005 :	<0.008 :	<0.012 :	<0.006 :
Semi-Volatile Organics									
1,1`-Biphenyl	mg/kg-dry	T		-	-	<0.4 :	<0.37 :	<0.39 :	<0.37 :
2,4,5-Trichlorophenol	mg/kg-dry	T		-	-	<1. :	<0.93 :	<0.99 :	<0.92 :
2,4,6-Trichlorophenol	mg/kg-dry	T		-	-	<0.4 :	<0.37 :	<0.39 :	<0.37 :
2,4-Dichlorophenol	mg/kg-dry	T		-	-	<0.4 :	<0.37 :	<0.39 :	<0.37 :
2,4-Dimethylphenol	mg/kg-dry	T		-	-	<0.4 :	<0.37 :	<0.39 :	<0.37 :
2,4-Dinitrophenol	mg/kg-dry	T		-	-	<1. J	<0.93 J	<0.99 J	<0.92 :
2,4-Dinitrotoluene	mg/kg-dry	T		-	-	<0.4 :	<0.37 :	<0.39 :	<0.37 :
2,6-Dinitrotoluene	mg/kg-dry	T		-	-	<0.4 :	<0.37 :	<0.39 :	<0.37 :
2-Chloronaphthalene	mg/kg-dry	T		-	-	<0.4 :	<0.37 :	<0.39 :	<0.37 :
2-Chlorophenol	mg/kg-dry	T		-	-	<0.4 :	<0.37 :	<0.39 :	<0.37 :
2-Methylnaphthalene	mg/kg-dry	T		-	-	<0.4 :	<0.37 :	<0.39 :	<0.37 :
2-Methylphenol	mg/kg-dry	T		-	-	<0.4 :	<0.37 :	<0.39 :	<0.37 :
2-Nitroaniline	mg/kg-dry	T		-	-	<1. :	<0.93 :	<0.99 :	<0.92 :

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Appendix A-7e
Soil - Biased 0-24 inches
Validated Analytical Results

Parameter	Units	Fraction	Site ID	MSS8-TF5	RS-13A	TSS11-1	TSS11-2	TSS11-3	TSS11-4
			Sample Date	10/17/2002	9/9/2003	10/28/2002	10/28/2002	10/28/2002	10/28/2002
			Sample ID	MSS8-TF5-T02N-SOL	RS-13A-T02N-SOL	TSS11-1-T02N-SOL	TSS11-2-T02N-SOL	TSS11-3-T02N-SOL	TSS11-4-T02N-SOL
			Exposure Area	SS8E	SS16	SS11	SS11	SS11	SS11
2-Nitrophenol	mg/kg-dry	T		-	-	<0.4 :	<0.37 :	<0.39 :	<0.37 :
3,3-Dichlorobenzidine	mg/kg-dry	T		-	-	<0.4 :	<0.37 :	<0.39 :	<0.37 :
3-Nitroaniline	mg/kg-dry	T		-	-	<1. :	<0.93 :	<0.99 :	<0.92 :
4,6-Dinitro-2-methylphenol	mg/kg-dry	T		-	-	<1. :	<0.93 :	<0.99 :	<0.92 :
4-Bromophenyl phenyl ether	mg/kg-dry	T		-	-	<0.4 :	<0.37 :	<0.39 :	<0.37 :
4-Chloro-3-methylphenol	mg/kg-dry	T		-	-	<0.4 :	<0.37 :	<0.39 :	<0.37 :
4-Chloroaniline	mg/kg-dry	T		-	-	<0.4 J	<0.37 J	<0.39 J	<0.37 :
4-Chlorophenyl phenyl ether	mg/kg-dry	T		-	-	<0.4 :	<0.37 :	<0.39 :	<0.37 :
4-Methylphenol	mg/kg-dry	T		-	-	<0.4 :	<0.37 :	<0.39 :	<0.37 :
4-Nitroaniline	mg/kg-dry	T		-	-	<1. :	<0.93 :	<0.99 :	<0.92 :
4-Nitrophenol	mg/kg-dry	T		-	-	<1. :	<0.93 :	<0.99 :	<0.92 J
Acenaphthene	mg/kg-dry	T		-	-	<0.4 :	<0.37 :	<0.39 :	<0.37 :
Acenaphthylene	mg/kg-dry	T		-	-	<0.4 :	<0.37 :	<0.39 :	<0.37 :
Anthracene	mg/kg-dry	T		-	-	<0.4 :	<0.37 :	<0.39 :	0.017 J
Benzaldehyde	mg/kg-dry	T		-	-	<0.4 :	<0.37 :	<0.39 :	<0.37 J
Benzo(a)anthracene	mg/kg-dry	T		-	-	<0.4 :	<0.37 :	<0.39 :	0.067 J
Benzo(a)pyrene	mg/kg-dry	T		-	-	<0.4 :	<0.37 :	<0.39 :	0.053 J
Benzo(b)fluoranthene	mg/kg-dry	T		-	-	<0.4 :	<0.37 :	<0.39 :	0.076 J
Benzo(g,h,i)perylene	mg/kg-dry	T		-	-	<0.4 J	<0.37 J	<0.39 J	0.031 J
Benzo(k)fluoranthene	mg/kg-dry	T		-	-	<0.4 :	<0.37 :	<0.39 :	0.081 J
Bis(2-chloroethoxy)methane	mg/kg-dry	T		-	-	<0.4 :	<0.37 :	<0.39 :	<0.37 :
Bis(2-chloroethyl)ether	mg/kg-dry	T		-	-	<0.4 :	<0.37 :	<0.39 :	<0.37 :
Bis(2-ethylhexyl)phthalate	mg/kg-dry	T		-	-	<0.4 :	<0.37 :	0.025 J	0.4 :
Butyl benzyl phthalate	mg/kg-dry	T		-	-	<0.4 :	<0.37 :	<0.39 :	<0.37 :
Carbazole	mg/kg-dry	T		-	-	<0.4 :	<0.37 :	<0.39 :	<0.37 :
Chrysene	mg/kg-dry	T		-	-	<0.4 :	<0.37 :	<0.39 :	0.078 J
Dibenz(a,h)anthracene	mg/kg-dry	T		-	-	<0.4 :	<0.37 :	<0.39 :	<0.37 :
Dibenzofuran	mg/kg-dry	T		-	-	<0.4 :	<0.37 :	<0.39 :	<0.37 :
Dichlorodiisopropyl ether	mg/kg-dry	T		-	-	<0.4 J	<0.37 J	<0.39 J	<0.37 J
Diethylphthalate	mg/kg-dry	T		-	-	<0.4 :	<0.37 :	<0.39 :	<0.37 :
Dimethylphthalate	mg/kg-dry	T		-	-	<0.4 :	<0.37 :	<0.39 :	<0.37 :
Di-n-Butyl phthalate	mg/kg-dry	T		-	-	<0.4 :	<0.37 :	<0.39 :	<0.37 :
Di-n-Octyl phthalate	mg/kg-dry	T		-	-	<0.4 :	<0.37 :	<0.39 :	<0.37 :
Fluoranthene	mg/kg-dry	T		-	-	<0.4 :	<0.37 :	<0.39 :	0.12 J

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Appendix A-7e
Soil - Biased 0-24 inches
Validated Analytical Results

Parameter	Units	Fraction	Site ID / Sample Date / Sample ID / Exposure Area		MSS8-TF5 10/17/2002 MSS8-TF5-T02N-SOL SS8E		RS-13A 9/9/2003 RS-13A-T02N-SOL SS16		TSS11-1 10/28/2002 TSS11-1-T02N-SOL SS11		TSS11-2 10/28/2002 TSS11-2-T02N-SOL SS11		TSS11-3 10/28/2002 TSS11-3-T02N-SOL SS11		TSS11-4 10/28/2002 TSS11-4-T02N-SOL SS11	
Fluorene	mg/kg-dry	T		-		-		<0.4	:	<0.37	:	<0.39	:	<0.37	:
Hexachlorobenzene	mg/kg-dry	T		-		-		<0.4	:	<0.37	:	<0.39	:	<0.37	:
Hexachlorobutadiene	mg/kg-dry	T		-		-		<0.4	:	<0.37	:	<0.39	:	<0.37	:
Hexachlorocyclopentadiene	mg/kg-dry	T		-		-		<0.4	:	<0.37	:	<0.39	:	<0.37	:
Hexachloroethane	mg/kg-dry	T		-		-		<0.4	:	<0.37	:	<0.39	:	<0.37	:
Indeno(1,2,3-cd)pyrene	mg/kg-dry	T		-		-		<0.4	:	<0.37	:	<0.39	:	0.032	J
Isophorone	mg/kg-dry	T		-		-		<0.4	:	<0.37	:	<0.39	:	<0.37	:
Naphthalene	mg/kg-dry	T		-		-		<0.4	:	<0.37	:	<0.39	:	<0.37	:
Nitrobenzene	mg/kg-dry	T		-		-		<0.4	:	<0.37	:	<0.39	:	<0.37	:
N-Nitrosodi-n-propylamine	mg/kg-dry	T		-		-		<0.4	J	<0.37	J	<0.39	J	<0.37	:
N-Nitrosodiphenylamine	mg/kg-dry	T		-		-		<0.4	:	<0.37	:	<0.39	:	<0.37	:
Pentachlorophenol	mg/kg-dry	T		-		-		<1.	:	<0.93	:	<0.99	:	<0.92	:
Phenanthrene	mg/kg-dry	T		-		-		<0.4	:	<0.37	:	<0.39	:	0.067	J
Phenol	mg/kg-dry	T		-		-		<0.4	:	<0.37	:	<0.39	:	<0.37	J
Pyrene	mg/kg-dry	T		-		-		<0.4	:	<0.37	:	<0.39	:	0.11	J
Pesticides-PCBs																
Aroclor 1016	mg/kg-dry	T		<0.035	:	-		-		-		-		-	
Aroclor 1221	mg/kg-dry	T		<0.072	:	-		-		-		-		-	
Aroclor 1232	mg/kg-dry	T		<0.035	:	-		-		-		-		-	
Aroclor 1242	mg/kg-dry	T		<0.035	:	-		-		-		-		-	
Aroclor 1248	mg/kg-dry	T		<0.035	:	-		-		-		-		-	
Aroclor 1254	mg/kg-dry	T		<0.035	:	-		-		-		-		-	
Aroclor 1260	mg/kg-dry	T		<0.035	:	-		-		-		-		-	

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Appendix A-7e
Soil - Biased 0-24 inches
Validated Analytical Results

Parameter	Units	Fraction	TSS11-5	TSS12-1	TSS12-2	TSS12-3	TSS12-4	TSS13-1
		Sample Date	10/28/2002	10/10/2002	10/11/2002	10/11/2002	10/11/2002	10/11/2002
		Sample ID	TSS11-5-T02N-SOL	TSS12-1-T02N-SOL	TSS12-2-T02N-SOL	TSS12-3-T02N-SOL	TSS12-4-T02N-SOL	TSS13-1-T02N-SOL
		Exposure Area	SS11	SS12	SS12	SS12	SS12	SS13
General Chemistry								
Ammonia	mg/kg-dry	T	52.7 :	60.5 :	32.4 :	36.4 :	105. :	21.5 :
Chloride	mg/kg-dry	T	<36. :	<2.3 J	5.4 J	10.4 J	19.9 J	3.6 J
Fluoride	mg/kg-dry	T	0.49 J	2.3 J	1.1 J	1.4 J	1.2 J	1.3 J
Nitrate	mg/kg-dry	T	2.5 J	10. J	11.5 J	4.2 J	26.9 J	9.6 J
Phosphorus	mg/kg-dry	T	471. J	471. J	464. J	324. J	521. J	641. J
Sulfate	mg/kg-dry	T	<60. :	6.9 J	19.3 J	10.4 J	1360. J	123. J
Total Kjeldahl Nitrogen	mg/kg-dry	T	596. :	291. :	723. J	178. J	1280. J	658. J
Total Organic Carbon	mg/kg-dry	T	8560. J	5740. J	16300. J	4340. J	20900. J	8690. J
Laboratory Parameters								
pH	SU	T	8.3 :	8. :	8.7 :	9. :	8. :	8.1 :
Solids, Percent	%	T	82.9 :	90.4 :	89.8 :	94.2 :	83.6 :	86.1 :
Specific Conductance	umhos/cm	T	233. :	116. :	169. J	80.5 J	976. J	305. J
Geotechnical								
Organic Soils	%	T	5.44 J	2.58 :	5.87 J	2.55 J	6.63 J	4.83 J
Physical Properties								
Cation-Exchange Capacity	meq/100g	T	28.4 :	14. :	19.6 :	14.4 :	24.8 :	32.1 :
Sodium Absorption Ratio	ratio	T	0.2 :	0.86 :	2.51 :	2.7 :	2.26 :	0.23 :
Metals								
Aluminum	mg/kg-dry	T	20400. :	9460. :	14500. :	10900. :	16200. :	25200. :
Antimony	mg/kg-dry	T	<0.49 J	<0.18 :	<0.16 J	<0.17 J	<0.19 J	<0.18 J
Arsenic	mg/kg-dry	T	5.4 :	2.8 :	3.9 :	3.1 :	4.2 :	2.7 :
Barium	mg/kg-dry	T	192. :	129. :	334. :	91.1 :	206. :	288. :
Beryllium	mg/kg-dry	T	0.96 :	0.52 :	0.71 :	0.69 :	0.81 :	1.2 :
Boron	mg/kg-dry	T	10.1 :	8.2 :	6. :	<3.3 :	5.7 :	6.9 :
Cadmium	mg/kg-dry	T	0.22 J	0.041 :	0.21 :	0.23 :	0.31 :	<0.027 :
Calcium	mg/kg-dry	T	15100. :	16200. :	31100. :	10500. :	31400. :	11800. :
Chromium	mg/kg-dry	T	19.7 :	13. :	19. :	16. :	27. :	23.8 :
Cobalt	mg/kg-dry	T	10.1 :	5.2 :	7.9 :	6. :	9.4 :	11.3 :
Copper	mg/kg-dry	T	25.7 :	14.9 :	26.4 :	17.2 :	39. :	62.2 :
Iron	mg/kg-dry	T	20700. :	11900. :	16600. :	14200. :	19900. :	22800. :
Lead	mg/kg-dry	T	21.8 :	12.6 :	24. :	14.5 :	33.9 :	17.4 :
Magnesium	mg/kg-dry	T	6300. :	3910. :	6420. :	4000. :	6550. :	7140. :
Manganese	mg/kg-dry	T	481. J	294. :	363. J	297. J	609. J	249. J

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Appendix A-7e
Soil - Biased 0-24 inches
Validated Analytical Results

Parameter	Units	Fraction	Site ID	Sample Date	Sample ID	Exposure Area
			TSS11-5	10/28/2002	TSS11-5-T02N-SOL	SS11
			TSS12-1	10/10/2002	TSS12-1-T02N-SOL	SS12
			TSS12-2	10/11/2002	TSS12-2-T02N-SOL	SS12
			TSS12-3	10/11/2002	TSS12-3-T02N-SOL	SS12
			TSS12-4	10/11/2002	TSS12-4-T02N-SOL	SS12
			TSS13-1	10/11/2002	TSS13-1-T02N-SOL	SS13
Mercury	mg/kg-dry	T	<0.019 :	<0.018 :	<0.017 :	<0.015 :	0.083 :	0.033 :
Molybdenum	mg/kg-dry	T	5.5 :	3.2 :	43.7 :	4.5 :	9.7 :	22. :
Nickel	mg/kg-dry	T	21.6 J	11. :	15.8 J	14.3 J	17.8 J	35. J
Potassium	mg/kg-dry	T	2660. J	1310. :	2430. J	1450. J	2140. J	4070. J
Selenium	mg/kg-dry	T	1. J	<0.34 :	0.55 J	0.26 J	0.9 J	0.78 J
Silver	mg/kg-dry	T	<0.15 :	<0.12 :	<0.12 :	<0.11 :	0.16 :	<0.12 :
Sodium	mg/kg-dry	T	<83.7 :	84. :	240. :	137. :	375. :	<47.8 :
Thallium	mg/kg-dry	T	0.25 :	0.12 :	0.15 :	0.1 :	0.19 :	0.3 :
Vanadium	mg/kg-dry	T	42. :	21.8 :	32.4 :	24. :	38.4 :	38.9 :
Zinc	mg/kg-dry	T	142. J	45.2 :	62.6 J	64.3 J	89.6 J	70.6 J
Volatile Organics								
1,1,1-Trichloroethane	mg/kg-dry	T	<0.01 :	-	-	-	-	-
1,1,2,2-Tetrachloroethane	mg/kg-dry	T	<0.01 :	-	-	-	-	-
1,1,2-Trichloro-1,2,2-trifluoroethane	mg/kg-dry	T	<0.01 :	-	-	-	-	-
1,1,2-Trichloroethane	mg/kg-dry	T	<0.01 :	-	-	-	-	-
1,1-Dichloroethane	mg/kg-dry	T	<0.01 :	-	-	-	-	-
1,1-Dichloroethene	mg/kg-dry	T	<0.01 :	-	-	-	-	-
1,2,4-Trichlorobenzene	mg/kg-dry	T	<0.01 :	-	-	-	-	-
1,2-Dibromo-3-chloropropane	mg/kg-dry	T	<0.01 :	-	-	-	-	-
1,2-Dichlorobenzene	mg/kg-dry	T	<0.01 :	-	-	-	-	-
1,2-Dichloroethane	mg/kg-dry	T	<0.01 :	-	-	-	-	-
1,2-Dichloroethene (total)	mg/kg-dry	T	<0.01 :	-	-	-	-	-
1,2-Dichloropropane	mg/kg-dry	T	<0.01 :	-	-	-	-	-
1,3-Dichlorobenzene	mg/kg-dry	T	<0.01 :	-	-	-	-	-
1,4-Dichlorobenzene	mg/kg-dry	T	<0.01 :	-	-	-	-	-
2-Butanone	mg/kg-dry	T	<0.01 :	-	-	-	-	-
2-Hexanone	mg/kg-dry	T	<0.01 :	-	-	-	-	-
4-Methyl-2-pentanone	mg/kg-dry	T	<0.01 :	-	-	-	-	-
Acetone	mg/kg-dry	T	0.031 :	-	-	-	-	-
Benzene	mg/kg-dry	T	<0.01 :	-	-	-	-	-
Bromodichloromethane	mg/kg-dry	T	<0.01 :	-	-	-	-	-
Bromoform	mg/kg-dry	T	<0.01 :	-	-	-	-	-
Bromomethane	mg/kg-dry	T	<0.01 :	-	-	-	-	-
Carbon disulfide	mg/kg-dry	T	<0.01 :	-	-	-	-	-

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T = Total Fraction

Appendix A-7e
Soil - Biased 0-24 inches
Validated Analytical Results

Parameter	Units	Exposure Area Fraction	Site ID / Sample Date / Sample ID		TSS11-5 10/28/2002 TSS11-5-T02N-SOL SS11		TSS12-1 10/10/2002 TSS12-1-T02N-SOL SS12	TSS12-2 10/11/2002 TSS12-2-T02N-SOL SS12	TSS12-3 10/11/2002 TSS12-3-T02N-SOL SS12	TSS12-4 10/11/2002 TSS12-4-T02N-SOL SS12	TSS13-1 10/11/2002 TSS13-1-T02N-SOL SS13
Carbon tetrachloride	mg/kg-dry	T		<0.01	:	-	-	-	-	-
Chlorobenzene	mg/kg-dry	T		<0.01	:	-	-	-	-	-
Chloroethane	mg/kg-dry	T		<0.01	:	-	-	-	-	-
Chloroform	mg/kg-dry	T		<0.01	:	-	-	-	-	-
Chloromethane	mg/kg-dry	T		<0.01	:	-	-	-	-	-
cis-1,2-Dichloroethene	mg/kg-dry	T		<0.01	:	-	-	-	-	-
cis-1,3-Dichloropropene	mg/kg-dry	T		<0.01	:	-	-	-	-	-
Dibromochloromethane	mg/kg-dry	T		<0.01	:	-	-	-	-	-
Dichlorodifluoromethane	mg/kg-dry	T		<0.01	:	-	-	-	-	-
Ethylbenzene	mg/kg-dry	T		<0.01	:	-	-	-	-	-
Methylene chloride	mg/kg-dry	T		<0.01	:	-	-	-	-	-
Styrene	mg/kg-dry	T		<0.01	:	-	-	-	-	-
Tetrachloroethene	mg/kg-dry	T		0.001	J	-	-	-	-	-
Toluene	mg/kg-dry	T		<0.01	:	-	-	-	-	-
Total Xylene	mg/kg-dry	T		<0.01	:	-	-	-	-	-
trans-1,2-Dichloroethene	mg/kg-dry	T		<0.01	:	-	-	-	-	-
trans-1,3-Dichloropropene	mg/kg-dry	T		<0.01	:	-	-	-	-	-
Trichloroethene	mg/kg-dry	T		<0.01	:	-	-	-	-	-
Trichlorofluoromethane	mg/kg-dry	T		<0.01	:	-	-	-	-	-
Vinyl chloride	mg/kg-dry	T		<0.01	:	-	-	-	-	-
Semi-Volatile Organics										
1,1`-Biphenyl	mg/kg-dry	T		<0.4	:	-	-	-	-	-
2,4,5-Trichlorophenol	mg/kg-dry	T		<1.	:	-	-	-	-	-
2,4,6-Trichlorophenol	mg/kg-dry	T		<0.4	:	-	-	-	-	-
2,4-Dichlorophenol	mg/kg-dry	T		<0.4	:	-	-	-	-	-
2,4-Dimethylphenol	mg/kg-dry	T		<0.4	:	-	-	-	-	-
2,4-Dinitrophenol	mg/kg-dry	T		<1.	:	-	-	-	-	-
2,4-Dinitrotoluene	mg/kg-dry	T		<0.4	:	-	-	-	-	-
2,6-Dinitrotoluene	mg/kg-dry	T		<0.4	:	-	-	-	-	-
2-Chloronaphthalene	mg/kg-dry	T		<0.4	:	-	-	-	-	-
2-Chlorophenol	mg/kg-dry	T		<0.4	:	-	-	-	-	-
2-Methylnaphthalene	mg/kg-dry	T		<0.4	:	-	-	-	-	-
2-Methylphenol	mg/kg-dry	T		<0.4	:	-	-	-	-	-
2-Nitroaniline	mg/kg-dry	T		<1.	:	-	-	-	-	-

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Appendix A-7e
Soil - Biased 0-24 inches
Validated Analytical Results

Parameter	Units	Exposure Area Fraction	Site ID	Sample Date	Sample ID		TSS11-5		TSS12-1	TSS12-2	TSS12-3	TSS12-4	TSS13-1
				10/28/2002	TSS11-5-T02N-SOL			10/10/2002	TSS12-1-T02N-SOL	10/11/2002	TSS12-2-T02N-SOL	10/11/2002	TSS12-3-T02N-SOL	10/11/2002	TSS12-4-T02N-SOL	10/11/2002	TSS13-1-T02N-SOL
						SS11			SS12		SS12		SS12		SS12		SS13
2-Nitrophenol	mg/kg-dry	T				<0.4	:		-		-		-		-		-
3,3-Dichlorobenzidine	mg/kg-dry	T				<0.4	:		-		-		-		-		-
3-Nitroaniline	mg/kg-dry	T				<1.	:		-		-		-		-		-
4,6-Dinitro-2-methylphenol	mg/kg-dry	T				<1.	:		-		-		-		-		-
4-Bromophenyl phenyl ether	mg/kg-dry	T				<0.4	:		-		-		-		-		-
4-Chloro-3-methylphenol	mg/kg-dry	T				<0.4	:		-		-		-		-		-
4-Chloroaniline	mg/kg-dry	T				<0.4	:		-		-		-		-		-
4-Chlorophenyl phenyl ether	mg/kg-dry	T				<0.4	:		-		-		-		-		-
4-Methylphenol	mg/kg-dry	T				<0.4	:		-		-		-		-		-
4-Nitroaniline	mg/kg-dry	T				<1.	:		-		-		-		-		-
4-Nitrophenol	mg/kg-dry	T				<1.	J		-		-		-		-		-
Acenaphthene	mg/kg-dry	T				<0.4	:		-		-		-		-		-
Acenaphthylene	mg/kg-dry	T				<0.4	:		-		-		-		-		-
Anthracene	mg/kg-dry	T				<0.4	:		-		-		-		-		-
Benzaldehyde	mg/kg-dry	T				<0.4	J		-		-		-		-		-
Benzo(a)anthracene	mg/kg-dry	T				<0.4	:		-		-		-		-		-
Benzo(a)pyrene	mg/kg-dry	T				<0.4	:		-		-		-		-		-
Benzo(b)fluoranthene	mg/kg-dry	T				<0.4	:		-		-		-		-		-
Benzo(g,h,i)perylene	mg/kg-dry	T				<0.4	:		-		-		-		-		-
Benzo(k)fluoranthene	mg/kg-dry	T				<0.4	:		-		-		-		-		-
Bis(2-chloroethoxy)methane	mg/kg-dry	T				<0.4	:		-		-		-		-		-
Bis(2-chloroethyl)ether	mg/kg-dry	T				<0.4	:		-		-		-		-		-
Bis(2-ethylhexyl)phthalate	mg/kg-dry	T				<0.4	:		-		-		-		-		-
Butyl benzyl phthalate	mg/kg-dry	T				<0.4	:		-		-		-		-		-
Carbazole	mg/kg-dry	T				<0.4	:		-		-		-		-		-
Chrysene	mg/kg-dry	T				<0.4	:		-		-		-		-		-
Dibenz(a,h)anthracene	mg/kg-dry	T				<0.4	:		-		-		-		-		-
Dibenzofuran	mg/kg-dry	T				<0.4	:		-		-		-		-		-
Dichlorodiisopropyl ether	mg/kg-dry	T				<0.4	J		-		-		-		-		-
Diethylphthalate	mg/kg-dry	T				<0.4	:		-		-		-		-		-
Dimethylphthalate	mg/kg-dry	T				<0.4	:		-		-		-		-		-
Di-n-Butyl phthalate	mg/kg-dry	T				<0.4	:		-		-		-		-		-
Di-n-Octyl phthalate	mg/kg-dry	T				<0.4	:		-		-		-		-		-
Fluoranthene	mg/kg-dry	T				<0.4	:		-		-		-		-		-

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T = Total Fraction

Appendix A-7e
Soil - Biased 0-24 inches
Validated Analytical Results

Parameter	Units	Site ID / Sample Date / Sample ID / Exposure Area / Fraction	TSS11-5 10/28/2002 TSS11-5-T02N-SOL SS11		TSS12-1 10/10/2002 TSS12-1-T02N-SOL SS12	TSS12-2 10/11/2002 TSS12-2-T02N-SOL SS12	TSS12-3 10/11/2002 TSS12-3-T02N-SOL SS12	TSS12-4 10/11/2002 TSS12-4-T02N-SOL SS12	TSS13-1 10/11/2002 TSS13-1-T02N-SOL SS13
Fluorene	mg/kg-dry	T	<0.4	:	-	-	-	-	-
Hexachlorobenzene	mg/kg-dry	T	<0.4	:	-	-	-	-	-
Hexachlorobutadiene	mg/kg-dry	T	<0.4	:	-	-	-	-	-
Hexachlorocyclopentadiene	mg/kg-dry	T	<0.4	:	-	-	-	-	-
Hexachloroethane	mg/kg-dry	T	<0.4	:	-	-	-	-	-
Indeno(1,2,3-cd)pyrene	mg/kg-dry	T	<0.4	:	-	-	-	-	-
Isophorone	mg/kg-dry	T	<0.4	:	-	-	-	-	-
Naphthalene	mg/kg-dry	T	<0.4	:	-	-	-	-	-
Nitrobenzene	mg/kg-dry	T	<0.4	:	-	-	-	-	-
N-Nitrosodi-n-propylamine	mg/kg-dry	T	<0.4	:	-	-	-	-	-
N-Nitrosodiphenylamine	mg/kg-dry	T	<0.4	:	-	-	-	-	-
Pentachlorophenol	mg/kg-dry	T	<1.	:	-	-	-	-	-
Phenanthrene	mg/kg-dry	T	<0.4	:	-	-	-	-	-
Phenol	mg/kg-dry	T	<0.4	J	-	-	-	-	-
Pyrene	mg/kg-dry	T	<0.4	:	-	-	-	-	-

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T = Total Fraction

Appendix A-7f
Soil - Non-Random 0-24 inches
Validated Analytical Results

Parameter	Units	Exposure Area Fraction	Site ID / Sample Date / Sample ID		RIP-1 8/9/2003 RIP-1-T02N-SOL SS9		RIP-10 8/9/2003 RIP-10-T02N-SOL SS9		RIP-11 8/26/2003 RIP-11-T02N-SOL RefMineR		RIP-12 8/26/2003 RIP-12-T02N-SOL RefMineR		RIP-2 8/8/2003 RIP-2-T02N-SOL RefMineR		RIP-3 8/13/2003 RIP-3-T02N-SOL SS16	
General Chemistry																
Ammonia	mg/kg-dry	T			18.	:	34.	:	24.3	:	54.6	:	33.4	:	89.6	:
Chloride	mg/kg-dry	T			<2.2	:	<2.2	:	2.6	:	<2.2	:	4.5	:	14.	:
Fluoride	mg/kg-dry	T			0.48	:	1.5	:	0.26	:	0.23	:	<0.23	:	2.5	:
Nitrate	mg/kg-dry	T			2.7	J	3.4	J	<2.2	J	3.2	J	4.3	J	-	
Phosphorus	mg/kg-dry	T			1960.	J	613.	J	472.	J	904.	J	1170.	J	16.	J
Sulfate	mg/kg-dry	T			59.1	:	11.6	:	2.7	:	3.8	:	23.2	:	197.	:
Total Kjeldahl Nitrogen	mg/kg-dry	T			471.	:	678.	:	337.	:	836.	:	138.	:	595.	:
Total Organic Carbon	mg/kg-dry	T			10500.	:	18200.	:	6830.	:	14700.	:	12300.	:	15700.	:
Laboratory Parameters																
pH	SU	T			5.5	:	7.6	:	8.	J	7.7	J	7.4	:	7.7	J
Solids, Percent	%	T			95.2	:	94.3	:	94.8	:	91.3	:	89.9	:	54.1	:
Specific Conductance	umhos/cm	T			191.	:	92.5	:	38.1	J	45.7	J	74.3	:	658.	J
Geotechnical																
Organic Soils	%	T			3.7	:	4.	:	1.9	:	3.7	:	5.1	:	5.1	:
Physical Properties																
Cation-Exchange Capacity	meq/100g	T			19.6	:	18.4	:	17.2	:	28.	:	23.	:	6.4	:
Sodium Absorption Ratio	ratio	T			0.1	:	0.03	:	0.06	:	0.04	:	0.11	:	0.6	:
Metals																
Aluminum	mg/kg-dry	T			13700.	:	7670.	:	7650.	:	10700.	:	9170.	:	5670.	:
Antimony	mg/kg-dry	T			<0.42	J	<0.41	J	<0.53	J	<0.55	J	<0.41	J	<0.82	J
Arsenic	mg/kg-dry	T			5.1	:	5.8	:	<1.9	:	3.1	:	5.1	:	2.9	:
Barium	mg/kg-dry	T			233.	:	269.	:	34.5	:	59.6	:	363.	:	182.	:
Beryllium	mg/kg-dry	T			1.1	:	0.78	:	0.5	:	0.75	:	0.62	:	0.52	:
Boron	mg/kg-dry	T			3.5	J	2.6	J	2.1	:	2.9	:	2.4	J	2.2	:
Cadmium	mg/kg-dry	T			<0.063	:	<0.068	:	<0.03	:	0.054	:	<0.07	:	<0.056	:
Calcium	mg/kg-dry	T			2960.	:	2930.	:	2220.	:	3210.	:	2690.	:	2640.	:
Chromium	mg/kg-dry	T			29.8	:	17.5	:	13.4	:	16.6	:	18.7	:	13.3	:
Cobalt	mg/kg-dry	T			12.7	:	8.1	:	6.	:	9.	:	8.6	:	4.4	:
Copper	mg/kg-dry	T			135.	:	48.5	:	11.9	:	20.7	:	71.	:	27.2	:
Iron	mg/kg-dry	T			39200.	:	20000.	:	15100.	:	17600.	:	23100.	:	14000.	:
Lead	mg/kg-dry	T			108.	:	50.6	:	17.5	:	31.2	:	76.7	:	24.6	:
Magnesium	mg/kg-dry	T			6160.	:	3860.	:	4600.	:	4880.	:	4310.	:	3330.	:
Manganese	mg/kg-dry	T			738.	:	353.	:	316.	:	512.	:	409.	:	216.	:

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Appendix A-7f
Soil - Non-Random 0-24 inches
Validated Analytical Results

Parameter	Units	Exposure Area / Fraction	Site ID / Sample Date / Sample ID											
			RIP-1 8/9/2003 RIP-1-T02N-SOL		RIP-10 8/9/2003 RIP-10-T02N-SOL		RIP-11 8/26/2003 RIP-11-T02N-SOL		RIP-12 8/26/2003 RIP-12-T02N-SOL		RIP-2 8/8/2003 RIP-2-T02N-SOL		RIP-3 8/13/2003 RIP-3-T02N-SOL	
		Exposure Area	SS9		SS9		RefMineR		RefMineR		RefMineR		SS16	
Mercury	mg/kg-dry	T	<0.016	:	<0.017	:	<0.016	:	<0.017	:	0.019	:	0.04	:
Molybdenum	mg/kg-dry	T	62.5	:	<35.5	:	<0.95	:	1.8	:	15.9	:	22.4	:
Nickel	mg/kg-dry	T	23.	:	16.	:	10.7	:	16.	J	18.6	:	12.2	:
Potassium	mg/kg-dry	T	3740.	J	2210.	J	1550.	J	2340.	:	2220.	J	2040.	:
Selenium	mg/kg-dry	T	0.7	:	0.71	:	<0.32	:	<0.33	:	0.97	:	0.56	:
Silver	mg/kg-dry	T	0.94	:	0.4	:	<0.09	J	0.14	J	0.55	:	<0.17	:
Sodium	mg/kg-dry	T	364.	:	181.	:	<221.	:	330.	:	150.	:	302.	:
Thallium	mg/kg-dry	T	0.27	:	0.14	:	<0.11	:	0.13	:	0.15	:	<0.16	:
Vanadium	mg/kg-dry	T	33.	:	19.6	:	17.5	:	24.5	:	22.	:	16.5	:
Zinc	mg/kg-dry	T	106.	:	88.3	:	49.2	:	64.8	:	105.	:	65.7	:

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T = Total Fraction

Appendix A-7f
Soil - Non-Random 0-24 inches
Validated Analytical Results

Parameter	Units	Exposure Area Fraction	Site ID / Sample Date / Sample ID	RIP-4 8/13/2003 RIP-4-T02N-SOL SS16	RIP-5 8/13/2003 RIP-5-T02N-SOL SS16	RIP-6 8/13/2003 RIP-6-T02N-SOL SS16	RIP-7 8/13/2003 RIP-7-T02N-SOL SS16	RIP-8 8/9/2003 RIP-8-T02N-SOL SS9	RIP-9 8/9/2003 RIP-9-T02N-SOL SS9
General Chemistry									
Ammonia	mg/kg-dry	T		248. :	55.9 :	104. :	62.4 :	102. :	96.5 :
Chloride	mg/kg-dry	T		12.8 :	<2.2 :	<2.3 :	<2.1 :	13.8 :	<2.3 :
Fluoride	mg/kg-dry	T		1.5 :	0.52 :	0.92 :	0.38 :	0.66 :	<0.23 :
Nitrate	mg/kg-dry	T		-	-	-	-	2.5 J	2.3 J
Phosphorus	mg/kg-dry	T		32.7 J	44. J	31.2 J	27.9 J	984. J	1380. J
Sulfate	mg/kg-dry	T		697. :	7.1 :	5.8 :	4. :	6.4 :	4.2 :
Total Kjeldahl Nitrogen	mg/kg-dry	T		1920. :	813. :	2190. :	536. :	1070. :	1900. :
Total Organic Carbon	mg/kg-dry	T		58200. :	11400. :	45700. :	7570. :	20200. :	79500. :
Laboratory Parameters									
pH	SU	T		8.5 J	8.8 J	8.2 J	8.9 J	7.6 :	7.9 :
Solids, Percent	%	T		55.8 :	92.5 :	89.6 :	95.8 :	92.7 :	89.4 :
Specific Conductance	umhos/cm	T		2010. J	155. J	337. J	82.5 J	82. :	98.9 :
Geotechnical									
Organic Soils	%	T		10.6 :	4.8 :	7.9 :	2.6 :	5.2 :	9.3 :
Physical Properties									
Cation-Exchange Capacity	meq/100g	T		44.6 :	40.8 :	38.3 :	11.9 :	24.4 :	29.5 :
Sodium Absorption Ratio	ratio	T		0.52 :	0.1 :	0.04 :	0.44 :	1.44 :	0.03 :
Metals									
Aluminum	mg/kg-dry	T		13500. :	27600. :	13400. :	13000. :	7780. :	8060. :
Antimony	mg/kg-dry	T		<0.79 J	<0.54 J	<0.51 J	<0.48 J	<0.45 J	<0.47 J
Arsenic	mg/kg-dry	T		2.6 :	2.2 :	2.2 :	2.7 :	3.7 :	4. :
Barium	mg/kg-dry	T		213. :	262. :	162. :	128. :	218. :	356. :
Beryllium	mg/kg-dry	T		1. :	1.5 :	0.9 :	0.89 :	0.66 :	0.69 :
Boron	mg/kg-dry	T		7.4 :	11.4 :	10.9 :	4.9 :	4.2 J	8.7 :
Cadmium	mg/kg-dry	T		<0.054 :	<0.032 :	<0.033 :	<0.029 :	<0.066 :	0.072 :
Calcium	mg/kg-dry	T		10500. :	9700. :	7760. :	3820. :	4780. :	9160. :
Chromium	mg/kg-dry	T		23.1 :	24.9 :	18.4 :	17.8 :	18.9 :	29.8 :
Cobalt	mg/kg-dry	T		11.7 :	17.7 :	10.3 :	9.4 :	7.7 :	8.2 :
Copper	mg/kg-dry	T		39.2 :	36. :	30.4 :	37.2 :	38.3 :	44.7 :
Iron	mg/kg-dry	T		21000. :	29900. :	20400. :	19000. :	19000. :	19500. :
Lead	mg/kg-dry	T		36.9 :	18.9 :	29.9 :	24.2 :	38.9 :	43.2 :
Magnesium	mg/kg-dry	T		5840. :	8860. :	5170. :	4830. :	4350. :	4750. :
Manganese	mg/kg-dry	T		243. :	780. :	530. :	459. :	342. :	402. :

J = Qualified as estimated during data validation

R = Qualified as rejected value from data validation and results are considered unusable for any purpose

T = Total Fraction

Appendix A-7f
Soil - Non-Random 0-24 inches
Validated Analytical Results

Parameter	Units	Exposure Area Fraction	Site ID / Sample Date / Sample ID		RIP-4 8/13/2003 RIP-4-T02N-SOL SS16		RIP-5 8/13/2003 RIP-5-T02N-SOL SS16		RIP-6 8/13/2003 RIP-6-T02N-SOL SS16		RIP-7 8/13/2003 RIP-7-T02N-SOL SS16		RIP-8 8/9/2003 RIP-8-T02N-SOL SS9		RIP-9 8/9/2003 RIP-9-T02N-SOL SS9	
Mercury	mg/kg-dry	T		0.13	:	0.03	:	0.048	:	<0.017	:	<0.017	:	0.041	:
Molybdenum	mg/kg-dry	T		89.8	:	0.99	:	3.6	:	4.1	:	20.5	:	33.	:
Nickel	mg/kg-dry	T		24.6	:	32.6	:	20.1	:	18.1	:	15.	:	16.7	:
Potassium	mg/kg-dry	T		2330.	:	6230.	:	3170.	J	3210.	J	2260.	J	2540.	J
Selenium	mg/kg-dry	T		1.1	:	<0.32	:	0.43	:	0.32	:	0.66	:	0.78	:
Silver	mg/kg-dry	T		0.34	:	0.43	:	0.14	:	0.15	:	0.28	J	0.39	J
Sodium	mg/kg-dry	T		650.	:	884.	:	419.	:	316.	:	262.	:	199.	:
Thallium	mg/kg-dry	T		<0.16	:	0.26	:	0.15	:	0.14	:	0.12	:	0.14	:
Vanadium	mg/kg-dry	T		41.7	:	46.	:	31.1	:	23.8	:	20.6	:	23.2	:
Zinc	mg/kg-dry	T		92.5	:	93.4	:	79.1	:	64.4	:	144.	:	152.	:

J = Qualified as estimated during data validation
R = Qualified as rejected value from data validation and results are considered unusable for any purpose
T = Total Fraction

Appendix A-7g
Soil - Random 0-24 inches
Validated Analytical Results

Parameter	Units	Exposure Area Fraction	Site ID / Sample Date / Sample ID		CR-10 6/9/2003 CR-10-T02N-SOL RCR		CR-11 6/9/2003 CR-11-T02N-SOL RCR		CR-13 6/10/2003 CR-13-T02N-SOL RCR		CR-14 6/11/2003 CR-14-T02N-SOL RCR		CR-2 6/10/2003 CR-2-T02N-SOL RCR		CR-4 6/10/2003 CR-4-T02N-SOL RCR	
General Chemistry																
Ammonia	mg/kg-dry	T			47.8	:	53.6	:	59.5	:	78.5	:	98.6	:	87.7	:
Chloride	mg/kg-dry	T			3.9	:	3.5	:	4.7	:	2.4	:	15.6	:	8.2	:
Fluoride	mg/kg-dry	T			0.44	:	0.17	:	0.22	:	0.28	:	1.5	:	1.5	:
Nitrate	mg/kg-dry	T			3.9	J	2.3	J	5.3	J	11.4	J	46.4	J	8.1	J
Phosphorus	mg/kg-dry	T			1640.	:	891.	:	888.	:	645.	:	1170.	:	2000.	:
Sulfate	mg/kg-dry	T			13.9	:	5.9	:	5.	:	5.6	:	125.	:	12.3	:
Total Kjeldahl Nitrogen	mg/kg-dry	T			-		-		-		302.	J	-		-	
Total Organic Carbon	mg/kg-dry	T			6970.	:	9040.	:	4760.	:	7530.	:	39800.	:	24700.	:
Laboratory Parameters																
pH	SU	T			7.4	J	6.9	J	7.6	J	8.2	J	7.9	J	8.3	J
Solids, Percent	%	T			93.3	:	96.7	:	96.1	:	99.2	:	89.7	:	93.8	:
Specific Conductance	umhos/cm	T			202.	J	103.	J	83.8	J	296.	J	513.	J	234.	J
Geotechnical																
Organic Soils	%	T			3.1	:	2.9	:	2.7	:	2.7	:	13.6	:	8.6	:
Physical Properties																
Cation-Exchange Capacity	meq/100g	T			17.8	:	14.5	:	16.9	:	13.	:	42.2	:	28.3	:
Sodium Absorption Ratio	ratio	T			0.24	:	0.12	:	0.09	:	0.1	:	0.6	:	2.01	:
Metals																
Aluminum	mg/kg-dry	T			13200.	:	12200.	:	12000.	:	9050.	:	12000.	:	12600.	:
Antimony	mg/kg-dry	T			<0.51	J	<0.5	J	<0.48	J	<0.49	J	<0.5	J	<0.48	J
Arsenic	mg/kg-dry	T			2.3	:	2.4	:	1.8	:	1.3	:	2.1	:	1.6	:
Barium	mg/kg-dry	T			101.	:	112.	:	82.1	:	67.7	:	209.	:	148.	:
Beryllium	mg/kg-dry	T			0.94	:	0.9	:	0.83	:	0.58	:	0.74	:	0.78	:
Boron	mg/kg-dry	T			<4.7	:	<4.	:	<3.5	:	3.9	:	13.8	:	15.1	:
Cadmium	mg/kg-dry	T			<0.032	:	<0.03	:	<0.03	:	<0.025	:	<0.032	:	<0.032	J
Calcium	mg/kg-dry	T			8160.	:	4080.	:	4410.	:	4900.	:	79600.	:	52500.	:
Chromium	mg/kg-dry	T			23.4	:	19.8	:	18.7	:	14.1	:	16.5	:	20.5	:
Cobalt	mg/kg-dry	T			9.8	:	10.1	:	8.9	:	6.9	:	8.3	:	8.	:
Copper	mg/kg-dry	T			17.5	:	16.5	:	14.4	:	13.5	:	22.3	:	18.1	:
Iron	mg/kg-dry	T			17700.	:	16100.	:	16200.	:	12900.	:	17500.	:	15800.	:
Lead	mg/kg-dry	T			9.	:	10.2	:	7.8	:	5.7	:	6.6	:	7.3	:
Magnesium	mg/kg-dry	T			5880.	:	4360.	:	4630.	:	3950.	:	19100.	:	19600.	:
Manganese	mg/kg-dry	T			387.	:	462.	:	332.	:	278.	:	680.	:	446.	:

J = Qualified as estimated during data validation

R = Qualified as rejected value from data validation and results are considered unusable for any purpose

T = Total Fraction

Appendix A-7g
Soil - Random 0-24 inches
Validated Analytical Results

Parameter	Units	Exposure Area Fraction	Site ID / Sample Date / Sample ID											
			CR-10 6/9/2003 CR-10-T02N-SOL		CR-11 6/9/2003 CR-11-T02N-SOL		CR-13 6/10/2003 CR-13-T02N-SOL		CR-14 6/11/2003 CR-14-T02N-SOL		CR-2 6/10/2003 CR-2-T02N-SOL		CR-4 6/10/2003 CR-4-T02N-SOL	
			RCR		RCR		RCR		RCR		RCR		RCR	
Mercury	mg/kg-dry	T	0.024	:	<0.015	:	<0.017	:	<0.017	:	<0.019	:	<0.017	:
Molybdenum	mg/kg-dry	T	0.23	:	0.51	:	<0.16	:	0.22	:	0.64	:	<0.17	J
Nickel	mg/kg-dry	T	16.8	:	14.8	:	14.2	:	9.8	:	17.7	:	13.5	:
Potassium	mg/kg-dry	T	1990.	J	2200.	J	1780.	J	2750.	J	3890.	J	4650.	J
Selenium	mg/kg-dry	T	<0.82	:	<0.8	:	<0.76	:	<0.78	:	<0.8	:	<0.78	:
Silver	mg/kg-dry	T	0.1	:	0.11	:	<0.09	:	<0.19	:	0.12	J	0.15	J
Sodium	mg/kg-dry	T	580.	:	506.	:	447.	:	475.	:	653.	:	1110.	:
Thallium	mg/kg-dry	T	0.12	:	0.13	:	0.11	:	<0.098	:	<0.1	:	<0.097	:
Vanadium	mg/kg-dry	T	32.5	:	28.3	:	25.3	:	24.1	:	28.2	:	31.8	:
Zinc	mg/kg-dry	T	51.6	:	53.3	:	48.9	:	36.7	:	51.	:	52.9	:

J = Qualified as estimated during data validation
R = Qualified as rejected value from data validation and results are considered unusable for any purpose
T = Total Fraction

Appendix A-7g
Soil - Random 0-24 inches
Validated Analytical Results

Parameter	Units	Exposure Area Fraction	Site ID Sample Date Sample ID CR-5 6/11/2003 CR-5-T02N-SOL RCR		Site ID Sample Date Sample ID CR-6 6/10/2003 CR-6-T02N-SOL RCR		Site ID Sample Date Sample ID CR-7 6/9/2003 CR-7-T02N-SOL RCR		Site ID Sample Date Sample ID CR-8 6/9/2003 CR-8-T02N-SOL RCR		Site ID Sample Date Sample ID MRSS-1 10/6/2002 MRSS-1-T02N-SOL RefMine		Site ID Sample Date Sample ID MRSS-10 10/6/2002 MRSS-10-T02N-SOL RSCAR	
General Chemistry														
Ammonia	mg/kg-dry	T	76.2	:	41.2	:	43.7	:	58.1	:	103.	:	82.1	:
Chloride	mg/kg-dry	T	4.9	:	4.8	:	3.1	:	3.8	:	<2.4	:	<2.2	J
Fluoride	mg/kg-dry	T	0.81	:	1.	:	4.5	:	0.85	:	0.26	J	-	
Nitrate	mg/kg-dry	T	25.6	J	2.6	J	3.1	J	5.9	J	2.4	J	<2.2	J
Phosphorus	mg/kg-dry	T	1920.	:	1290.	:	1020.	:	1710.	:	834.	J	729.	J
Sulfate	mg/kg-dry	T	16.9	:	5.5	:	8.3	:	7.1	:	10.1	:	<26.6	J
Total Kjeldahl Nitrogen	mg/kg-dry	T	2570.	J	-		-		-		546.	:	208.	:
Total Organic Carbon	mg/kg-dry	T	22800.	:	9060.	:	22700.	:	7320.	:	12000.	J	8540.	J
Laboratory Parameters														
pH	SU	T	8.	J	8.1	J	8.4	J	8.1	J	6.9	:	5.2	:
Solids, Percent	%	T	95.5	:	93.6	:	94.	:	92.7	:	84.2	:	92.4	:
Specific Conductance	umhos/cm	T	288.	J	152.	J	192.	J	146.	J	58.4	:	101.	:
Geotechnical														
Organic Soils	%	T	6.1	:	6.9	:	4.8	:	3.	:	5.55	:	4.85	:
Physical Properties														
Cation-Exchange Capacity	meq/100g	T	30.9	:	28.6	:	17.2	:	18.3	:	19.3	:	15.8	:
Sodium Absorption Ratio	ratio	T	0.11	:	0.1	:	1.87	:	0.3	:	0.26	:	0.22	:
Metals														
Aluminum	mg/kg-dry	T	14900.	:	14200.	:	12300.	:	12600.	:	10900.	:	6670.	:
Antimony	mg/kg-dry	T	<0.5	J	<0.52	J	<0.51	J	<0.49	J	<0.19	J	<0.18	J
Arsenic	mg/kg-dry	T	1.8	:	3.2	:	3.1	:	2.	:	11.5	:	6.9	:
Barium	mg/kg-dry	T	118.	:	188.	:	179.	:	91.8	:	781.	:	286.	:
Beryllium	mg/kg-dry	T	0.94	:	0.9	:	0.82	:	0.91	:	0.41	:	0.56	:
Boron	mg/kg-dry	T	6.1	:	7.8	:	7.	:	<4.4	:	13.7	J	10.8	J
Cadmium	mg/kg-dry	T	<0.024	:	<0.031	J	<0.029	:	<0.032	:	<0.029	J	<0.027	J
Calcium	mg/kg-dry	T	13600.	:	54200.	:	42200.	:	6830.	:	2740.	:	1500.	:
Chromium	mg/kg-dry	T	22.2	:	21.	:	15.8	:	22.6	:	14.	:	7.7	:
Cobalt	mg/kg-dry	T	8.9	:	9.3	:	8.8	:	9.3	:	3.4	:	3.5	:
Copper	mg/kg-dry	T	24.	:	18.6	:	19.1	:	17.3	:	22.5	:	23.9	:
Iron	mg/kg-dry	T	18200.	:	19700.	:	16200.	:	18000.	:	29300.	:	27600.	:
Lead	mg/kg-dry	T	8.2	:	7.8	:	8.5	:	8.8	:	150.	:	37.9	:
Magnesium	mg/kg-dry	T	6190.	:	12600.	:	8390.	:	5570.	:	3380.	:	1620.	:
Manganese	mg/kg-dry	T	320.	:	411.	:	360.	:	289.	:	217.	J	275.	J

J = Qualified as estimated during data validation

R = Qualified as rejected value from data validation and results are considered unusable for any purpose

T = Total Fraction

Appendix A-7g
Soil - Random 0-24 inches
Validated Analytical Results

Parameter	Units	Exposure Area Fraction	Site ID / Sample Date / Sample ID		CR-5 6/11/2003 CR-5-T02N-SOL RCR		CR-6 6/10/2003 CR-6-T02N-SOL RCR		CR-7 6/9/2003 CR-7-T02N-SOL RCR		CR-8 6/9/2003 CR-8-T02N-SOL RCR		MRSS-1 10/6/2002 MRSS-1-T02N-SOL RefMine		MRSS-10 10/6/2002 MRSS-10-T02N-SOL RSCAR	
Mercury	mg/kg-dry	T		<0.017	:	<0.018	:	0.018	:	<0.016	:	0.021	:	0.024	:
Molybdenum	mg/kg-dry	T		<0.13	J	<0.17	J	0.24	:	<0.17	:	15.	:	7.9	:
Nickel	mg/kg-dry	T		15.1	:	15.3	:	13.1	:	15.7	:	10.	J	7.1	J
Potassium	mg/kg-dry	T		3410.	J	3320.	J	2450.	J	1790.	J	4360.	J	3650.	J
Selenium	mg/kg-dry	T		<0.8	:	<0.84	:	<0.81	:	<0.78	:	1.4	J	1.2	J
Silver	mg/kg-dry	T		0.24	J	0.2	J	0.16	:	0.14	J	0.62	:	<0.13	:
Sodium	mg/kg-dry	T		644.	:	981.	:	726.	:	553.	:	472.	:	126.	:
Thallium	mg/kg-dry	T		0.11	:	0.11	:	0.14	:	0.1	:	0.19	:	0.18	:
Vanadium	mg/kg-dry	T		34.2	:	40.9	:	41.9	:	33.	:	17.7	:	11.	:
Zinc	mg/kg-dry	T		53.9	:	46.2	:	45.1	:	49.4	:	29.	J	37.8	:
Pesticides-PCBs															
a-Chlordane	mg/kg-dry	T		-		-		-		-		<0.002	:	-	
Aldrin	mg/kg-dry	T		-		-		-		-		<0.002	:	-	
alpha-Hexachlorocyclohexane	mg/kg-dry	T		-		-		-		-		<0.002	:	-	
beta-Hexachlorocyclohexane	mg/kg-dry	T		-		-		-		-		<0.002	:	-	
delta-Hexachlorocyclohexane	mg/kg-dry	T		-		-		-		-		<0.002	:	-	
Dichlorodiphenyldichloroethane	mg/kg-dry	T		-		-		-		-		<0.0039	:	-	
Dichlorodiphenyldichloroethylene	mg/kg-dry	T		-		-		-		-		<0.0039	:	-	
Dichlorodiphenyltrichloroethane	mg/kg-dry	T		-		-		-		-		<0.0039	J	-	
Dieldrin	mg/kg-dry	T		-		-		-		-		<0.0039	:	-	
Endosulfan I	mg/kg-dry	T		-		-		-		-		<0.002	:	-	
Endosulfan II	mg/kg-dry	T		-		-		-		-		<0.0039	:	-	
Endosulfan sulfate	mg/kg-dry	T		-		-		-		-		<0.0039	:	-	
Endrin	mg/kg-dry	T		-		-		-		-		<0.0039	:	-	
Endrin aldehyde	mg/kg-dry	T		-		-		-		-		<0.0039	:	-	
Endrin ketone	mg/kg-dry	T		-		-		-		-		<0.0039	:	-	
g-Chlordane	mg/kg-dry	T		-		-		-		-		<0.002	:	-	
Heptachlor	mg/kg-dry	T		-		-		-		-		<0.002	:	-	
Heptachlor epoxide	mg/kg-dry	T		-		-		-		-		<0.002	:	-	
Lindane	mg/kg-dry	T		-		-		-		-		<0.002	:	-	
Methoxychlor	mg/kg-dry	T		-		-		-		-		<0.02	:	-	
Toxaphene	mg/kg-dry	T		-		-		-		-		<0.2	:	-	
Dibenzodioxins-Dibenzofurans															
1,2,3,4,6,7,8,9-Octachlorodibenzofur	pg/g	T		-		-		-		-		<0.62	:	-	

J = Qualified as estimated during data validation
R = Qualified as rejected value from data validation and results are considered unusable for any purpose
T = Total Fraction

Appendix A-7g
Soil - Random 0-24 inches
Validated Analytical Results

Parameter	Units	Site ID / Sample Date / Sample ID / Exposure Area / Fraction	CR-5 6/11/2003 CR-5-T02N-SOL RCR	CR-6 6/10/2003 CR-6-T02N-SOL RCR	CR-7 6/9/2003 CR-7-T02N-SOL RCR	CR-8 6/9/2003 CR-8-T02N-SOL RCR	MRSS-1 10/6/2002 MRSS-1-T02N-SOL RefMine	MRSS-10 10/6/2002 MRSS-10-T02N-SOL RSCAR
1,2,3,4,6,7,8,9-Octachlorodibenzo-p	pg/g	T	-	-	-	-	<2.3 :	-
1,2,3,4,6,7,8-Heptachlorodibenzofur	pg/g	T	-	-	-	-	<0.19 J	-
1,2,3,4,6,7,8-Heptachlorodibenzo-p-	pg/g	T	-	-	-	-	<0.38 J	-
1,2,3,4,7,8,9-Heptachlorodibenzofur	pg/g	T	-	-	-	-	<0.25 :	-
1,2,3,4,7,8-Hexachlorodibenzofuran	pg/g	T	-	-	-	-	<0.068 :	-
1,2,3,4,7,8-hexachlorodibenzo-p-dio	pg/g	T	-	-	-	-	<0.11 :	-
1,2,3,6,7,8-Hexachlorodibenzofuran	pg/g	T	-	-	-	-	<0.063 :	-
1,2,3,6,7,8-Hexachlorodibenzo-p-dio	pg/g	T	-	-	-	-	<0.11 :	-
1,2,3,7,8,9-Hexachlorodibenzofuran	pg/g	T	-	-	-	-	<0.08 :	-
1,2,3,7,8,9-Hexachlorodibenzo-p-dio	pg/g	T	-	-	-	-	<0.11 :	-
1,2,3,7,8-Pentachlorodibenzofuran	pg/g	T	-	-	-	-	<0.094 :	-
1,2,3,7,8-Pentachlorodibenzo-p-diox	pg/g	T	-	-	-	-	<0.12 :	-
2,3,4,6,7,8-Hexachlorodibenzofuran	pg/g	T	-	-	-	-	0.11 J	-
2,3,4,7,8-Pentachlorodibenzofuran	pg/g	T	-	-	-	-	<0.089 :	-
2,3,7,8-Tetrachlorodibenzofuran	pg/g	T	-	-	-	-	<0.2 :	-
2,3,7,8-Tetrachlorodibenzo-p-dioxin	pg/g	T	-	-	-	-	<0.28 :	-

J = Qualified as estimated during data validation
R = Qualified as rejected value from data validation and results are considered unusable for any purpose
T = Total Fraction

Appendix A-7g
Soil - Random 0-24 inches
Validated Analytical Results

Parameter	Units	Exposure Area Fraction	Site ID	MRSS-11	MRSS-12	MRSS-13	MRSS-14	MRSS-15	MRSS-16
			Sample Date	10/6/2002	10/8/2002	10/8/2002	10/8/2002	10/7/2002	10/8/2002
			Sample ID	MRSS-11-T02N-SOL	MRSS-12-T02N-SOL	MRSS-13-T02N-SOL	MRSS-14-T02N-SOL	MRSS-15-T02N-SOL	MRSS-16-T02N-SOL
			Exposure Area	RSCAR	RSCAR	RSCAR	RSCAR	RSCAR	RefMine
General Chemistry									
Ammonia	mg/kg-dry	T		24.3 :	27. :	57.3 :	68.4 :	18.2 J	28.6 :
Chloride	mg/kg-dry	T		3.8 :	<2.2 J	<2.3 J	<2.3 J	<2.3 J	<2.2 J
Fluoride	mg/kg-dry	T		0.11 J	0.12 J	-	-	-	-
Nitrate	mg/kg-dry	T		<2.3 J	<2.2 J	<2.3 J	<2.3 J	<2.3 J	<2.2 J
Phosphorus	mg/kg-dry	T		834. J	492. J	1550. J	1510. J	1280. J	409. J
Sulfate	mg/kg-dry	T		2220. :	883. J	2210. J	641. J	6.4 J	2.4 J
Total Kjeldahl Nitrogen	mg/kg-dry	T		54.3 :	26.9 :	131. :	74. :	244. :	200. :
Total Organic Carbon	mg/kg-dry	T		1140. J	<110. J	135. J	<113. J	2410. J	4330. J
Laboratory Parameters									
pH	SU	T		4.2 :	3.2 :	3.5 :	3.6 :	4.8 :	4.9 :
Solids, Percent	%	T		89.2 :	91.4 :	87.7 :	88.9 :	88.2 :	92.1 :
Specific Conductance	umhos/cm	T		2130. :	847. :	1160. :	1020. :	9.2 :	7.3 :
Geotechnical									
Organic Soils	%	T		3.73 :	2.21 :	3.8 :	3.92 :	-	-
Physical Properties									
Cation-Exchange Capacity	meq/100g	T		14.5 :	7.3 :	12.2 :	17.4 :	10.4 :	10.1 :
Sodium Absorption Ratio	ratio	T		0.03 :	<0.03 :	0.01 :	0.02 :	0.94 :	0.71 :
Metals									
Aluminum	mg/kg-dry	T		6470. :	3540. :	5250. :	9180. :	8950. :	4830. :
Antimony	mg/kg-dry	T		<0.17 J	<0.18 J	<0.16 J	<0.16 J	0.13 J	<0.15 J
Arsenic	mg/kg-dry	T		8.4 :	4.2 :	17.4 :	10.1 :	6.9 :	2.3 :
Barium	mg/kg-dry	T		182. :	231. :	502. :	200. :	526. :	61.6 :
Beryllium	mg/kg-dry	T		0.78 :	0.2 :	0.19 :	0.25 :	0.34 :	0.35 :
Boron	mg/kg-dry	T		8.9 J	<0.42 :	<0.45 J	<0.46 J	9.2 J	6. :
Cadmium	mg/kg-dry	T		<0.026 J	<0.059 :	<0.062 J	<0.064 J	<0.023 J	<0.022 :
Calcium	mg/kg-dry	T		8870. :	1740. :	4140. :	3050. :	276. :	472. :
Chromium	mg/kg-dry	T		7.7 :	7.9 :	11.1 :	21.5 :	12.5 :	3.6 :
Cobalt	mg/kg-dry	T		5.5 :	2.2 :	1.7 J	4. :	1.3 :	1. :
Copper	mg/kg-dry	T		20.1 :	18.2 :	12.2 :	34.6 :	21.5 :	3.8 :
Iron	mg/kg-dry	T		23900. :	16300. :	26500. :	41000. :	21600. :	12200. :
Lead	mg/kg-dry	T		29.8 :	66.2 :	284. :	264. :	44.1 :	17.6 :
Magnesium	mg/kg-dry	T		1450. :	2310. :	4840. :	8090. :	1770. :	654. :
Manganese	mg/kg-dry	T		217. J	111. J	231. J	414. J	41.2 J	41.2 J

J = Qualified as estimated during data validation

R = Qualified as rejected value from data validation and results are considered unusable for any purpose

T = Total Fraction

Appendix A-7g
Soil - Random 0-24 inches
Validated Analytical Results

Parameter	Units	Exposure Area Fraction	Site ID / Sample Date / Sample ID											
			MRSS-11 10/6/2002 MRSS-11-T02N-SOL		MRSS-12 10/8/2002 MRSS-12-T02N-SOL		MRSS-13 10/8/2002 MRSS-13-T02N-SOL		MRSS-14 10/8/2002 MRSS-14-T02N-SOL		MRSS-15 10/7/2002 MRSS-15-T02N-SOL		MRSS-16 10/8/2002 MRSS-16-T02N-SOL	
			RSCAR		RSCAR		RSCAR		RSCAR		RSCAR		RefMine	
Mercury	mg/kg-dry	T	<0.018	:	<0.017	:	<0.017	:	<0.016	:	<0.018	J	<0.017	J
Molybdenum	mg/kg-dry	T	2.9	:	6.3	:	15.8	:	7.2	:	2.9	:	1.8	:
Nickel	mg/kg-dry	T	11.9	J	5.3	J	2.6	J	8.	J	5.	J	1.8	J
Potassium	mg/kg-dry	T	2940.	J	1530.	J	1830.	J	2560.	J	3170.	J	1550.	J
Selenium	mg/kg-dry	T	1.4	J	0.98	J	6.3	J	2.3	J	0.78	J	<0.22	J
Silver	mg/kg-dry	T	<0.12	:	<0.93	:	2.8	:	1.5	:	<0.11	:	<0.1	:
Sodium	mg/kg-dry	T	91.4	:	<50.2	:	459.	:	478.	:	<87.8	:	<53.6	:
Thallium	mg/kg-dry	T	0.12	:	0.11	:	0.22	:	0.17	:	0.34	:	0.098	:
Vanadium	mg/kg-dry	T	8.6	:	7.4	:	14.	:	20.1	:	13.5	:	8.	:
Zinc	mg/kg-dry	T	59.1	J	26.	J	15.2	J	65.7	J	17.1	J	23.2	J

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T = Total Fraction

Appendix A-7g
Soil - Random 0-24 inches
Validated Analytical Results

Parameter	Units	Fraction	MRSS-17		MRSS-18		MRSS-19		MRSS-2		MRSS-20		MRSS-3	
Sample Date			10/8/2002		10/8/2002		10/8/2002		10/7/2002		10/9/2002		10/6/2002	
Sample ID			MRSS-17-T02N-SOL		MRSS-18-T02N-SOL		MRSS-19-T02N-SOL		MRSS-2-T02N-SOL		MRSS-20-T02N-SOL		MRSS-3-T02N-SOL	
Exposure Area			RefMine		RefMine		RefMine		RefMine		RefMine		RefMine	
General Chemistry														
Ammonia	mg/kg-dry	T	135.	:	101.	:	24.3	:	41.1	J	75.3	:	50.9	:
Chloride	mg/kg-dry	T	<2.3	J	<3.	J	<2.3	J	<2.4	J	<2.4	J	<2.3	:
Fluoride	mg/kg-dry	T	0.15	J	-		-		0.13	J	0.14	J	-	
Nitrate	mg/kg-dry	T	<2.3	J	<3.	J	<2.3	J	<2.4	J	<2.4	J	<2.3	J
Phosphorus	mg/kg-dry	T	334.	J	315.	J	310.	J	1370.	J	732.	J	950.	J
Sulfate	mg/kg-dry	T	<2.3	J	10.6	J	2.5	J	3.	J	<2.4	J	20.9	J
Total Kjeldahl Nitrogen	mg/kg-dry	T	603.	:	2420.	:	302.	:	892.	:	632.	:	192.	:
Total Organic Carbon	mg/kg-dry	T	22100.	J	64100.	J	8470.	J	26000.	J	49400.	J	4590.	J
Laboratory Parameters														
pH	SU	T	6.9	:	6.6	:	6.2	:	6.5	:	5.6	:	4.5	:
Solids, Percent	%	T	88.2	:	66.8	:	90.8	:	85.1	:	83.6	:	89.2	:
Specific Conductance	umhos/cm	T	22.2	:	96.9	:	11.8	:	31.9	:	16.8	:	83.8	:
Geotechnical														
Organic Soils	%	T	4.87	:	-		-		-		-		3.83	:
Physical Properties														
Cation-Exchange Capacity	meq/100g	T	15.7	:	30.9	:	8.5	:	23.1	:	16.5	:	13.3	:
Sodium Absorption Ratio	ratio	T	<0.12	:	<0.05	:	0.38	:	0.22	:	0.07	:	0.45	:
Metals														
Aluminum	mg/kg-dry	T	4150.	:	9090.	:	3220.	:	17100.	:	6490.	:	7110.	:
Antimony	mg/kg-dry	T	<0.16	J	<0.22	J	<0.14	J	<0.15	J	<0.18	J	<0.17	J
Arsenic	mg/kg-dry	T	2.8	:	3.4	:	2.4	:	7.8	:	1.6	:	5.9	:
Barium	mg/kg-dry	T	82.1	:	168.	:	28.3	:	286.	:	168.	:	304.	:
Beryllium	mg/kg-dry	T	0.3	:	0.42	:	0.14	:	0.9	:	0.23	:	0.38	:
Boron	mg/kg-dry	T	<0.74	:	11.2	:	3.1	:	17.	J	5.2	:	<0.41	J
Cadmium	mg/kg-dry	T	<0.058	:	0.33	:	<0.019	:	<0.026	J	<0.029	:	0.099	J
Calcium	mg/kg-dry	T	2020.	:	7380.	:	826.	:	3280.	:	1700.	:	533.	:
Chromium	mg/kg-dry	T	3.5	:	7.	:	2.	:	53.1	:	5.5	:	13.	:
Cobalt	mg/kg-dry	T	1.7	:	3.6	:	0.65	:	11.8	:	1.7	:	4.7	:
Copper	mg/kg-dry	T	4.6	:	9.2	:	2.4	:	46.8	:	5.8	:	23.8	:
Iron	mg/kg-dry	T	9560.	:	10600.	:	4640.	:	37900.	:	9680.	:	29700.	:
Lead	mg/kg-dry	T	21.4	:	26.1	:	11.5	:	77.6	:	23.6	:	58.	:
Magnesium	mg/kg-dry	T	797.	:	1770.	:	379.	:	8550.	:	1220.	:	3400.	:
Manganese	mg/kg-dry	T	142.	J	442.	J	18.5	J	802.	J	63.	J	270.	J

J = Qualified as estimated during data validation
R = Qualified as rejected value from data validation and results are considered unusable for any purpose
T = Total Fraction

Appendix A-7g
Soil - Random 0-24 inches
Validated Analytical Results

Parameter	Units	Exposure Area Fraction	Site ID / Sample Date / Sample ID	MRSS-17 10/8/2002 MRSS-17-T02N-SOL RefMine	MRSS-18 10/8/2002 MRSS-18-T02N-SOL RefMine	MRSS-19 10/8/2002 MRSS-19-T02N-SOL RefMine	MRSS-2 10/7/2002 MRSS-2-T02N-SOL RefMine	MRSS-20 10/9/2002 MRSS-20-T02N-SOL RefMine	MRSS-3 10/6/2002 MRSS-3-T02N-SOL RefMine
Mercury	mg/kg-dry	T		<0.019 :	0.042 :	<0.017 J	<0.019 J	<0.018 :	<0.017 :
Molybdenum	mg/kg-dry	T		2.2 :	3. :	1.9 :	3.4 :	1.2 :	5.1 :
Nickel	mg/kg-dry	T		2.8 J	4.2 J	<0.84 J	36. J	2.1 J	12.2 J
Potassium	mg/kg-dry	T		1540. J	2140. J	816. J	3370. J	1440. J	2250. J
Selenium	mg/kg-dry	T		<0.72 J	0.65 J	<0.31 J	0.74 :	0.21 J	1.4 J
Silver	mg/kg-dry	T		<0.27 :	<0.17 :	<0.087 :	0.57 :	<0.14 :	<0.49 :
Sodium	mg/kg-dry	T		<50.1 :	<65.6 :	<33.5 :	198. :	<52.4 :	<135. :
Thallium	mg/kg-dry	T		0.088 :	<0.11 :	0.074 :	0.19 :	0.11 :	0.12 :
Vanadium	mg/kg-dry	T		6.4 :	14.2 :	5.4 :	43.1 :	13.7 :	15.3 :
Zinc	mg/kg-dry	T		30.2 J	50.9 j	7.5 J	101. J	12.2 J	53.8 J
Pesticides-PCBs									
a-Chlordane	mg/kg-dry	T		-	-	-	<0.002 :	-	-
Aldrin	mg/kg-dry	T		-	-	-	<0.002 :	-	-
alpha-Hexachlorocyclohexane	mg/kg-dry	T		-	-	-	<0.002 :	-	-
beta-Hexachlorocyclohexane	mg/kg-dry	T		-	-	-	<0.002 :	-	-
delta-Hexachlorocyclohexane	mg/kg-dry	T		-	-	-	<0.002 :	-	-
Dichlorodiphenyldichloroethane	mg/kg-dry	T		-	-	-	<0.0039 :	-	-
Dichlorodiphenyldichloroethylene	mg/kg-dry	T		-	-	-	<0.0039 :	-	-
Dichlorodiphenyltrichloroethane	mg/kg-dry	T		-	-	-	<0.0039 J	-	-
Dieldrin	mg/kg-dry	T		-	-	-	<0.0039 :	-	-
Endosulfan I	mg/kg-dry	T		-	-	-	<0.002 :	-	-
Endosulfan II	mg/kg-dry	T		-	-	-	<0.0039 :	-	-
Endosulfan sulfate	mg/kg-dry	T		-	-	-	<0.0039 :	-	-
Endrin	mg/kg-dry	T		-	-	-	<0.0039 :	-	-
Endrin aldehyde	mg/kg-dry	T		-	-	-	<0.0039 :	-	-
Endrin ketone	mg/kg-dry	T		-	-	-	<0.0039 :	-	-
g-Chlordane	mg/kg-dry	T		-	-	-	<0.002 :	-	-
Heptachlor	mg/kg-dry	T		-	-	-	<0.002 :	-	-
Heptachlor epoxide	mg/kg-dry	T		-	-	-	<0.002 :	-	-
Lindane	mg/kg-dry	T		-	-	-	<0.002 :	-	-
Methoxychlor	mg/kg-dry	T		-	-	-	<0.02 :	-	-
Toxaphene	mg/kg-dry	T		-	-	-	<0.2 :	-	-
Dibenzodioxins-Dibenzofurans									
1,2,3,4,6,7,8,9-Octachlorodibenzofur	pg/g	T		-	-	-	<0.46 :	-	-

J = Qualified as estimated during data validation
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T = Total Fraction

Appendix A-7g
Soil - Random 0-24 inches
Validated Analytical Results

Parameter	Units	Exposure Area Fraction	Site ID Sample Date Sample ID MRSS-17 10/8/2002 MRSS-17-T02N-SOL RefMine	MRSS-18 10/8/2002 MRSS-18-T02N-SOL RefMine	MRSS-19 10/8/2002 MRSS-19-T02N-SOL RefMine	MRSS-2 10/7/2002 MRSS-2-T02N-SOL RefMine	MRSS-20 10/9/2002 MRSS-20-T02N-SOL RefMine	MRSS-3 10/6/2002 MRSS-3-T02N-SOL RefMine
1,2,3,4,6,7,8,9-Octachlorodibenzo-p	pg/g	T	-	-	-	<3.3 :	-	-
1,2,3,4,6,7,8-Heptachlorodibenzofur	pg/g	T	-	-	-	<0.14 :	-	-
1,2,3,4,6,7,8-Heptachlorodibenzo-p-	pg/g	T	-	-	-	<0.65 J	-	-
1,2,3,4,7,8,9-Heptachlorodibenzofur	pg/g	T	-	-	-	<0.18 :	-	-
1,2,3,4,7,8-Hexachlorodibenzofuran	pg/g	T	-	-	-	<0.082 :	-	-
1,2,3,4,7,8-hexachlorodibenzo-p-dio	pg/g	T	-	-	-	<0.14 :	-	-
1,2,3,6,7,8-Hexachlorodibenzofuran	pg/g	T	-	-	-	<0.076 :	-	-
1,2,3,6,7,8-Hexachlorodibenzo-p-dio	pg/g	T	-	-	-	<0.13 :	-	-
1,2,3,7,8,9-Hexachlorodibenzofuran	pg/g	T	-	-	-	<0.096 :	-	-
1,2,3,7,8,9-Hexachlorodibenzo-p-dio	pg/g	T	-	-	-	<0.14 :	-	-
1,2,3,7,8-Pentachlorodibenzofuran	pg/g	T	-	-	-	<0.11 :	-	-
1,2,3,7,8-Pentachlorodibenzo-p-diox	pg/g	T	-	-	-	<0.14 :	-	-
2,3,4,6,7,8-Hexachlorodibenzofuran	pg/g	T	-	-	-	<0.087 :	-	-
2,3,4,7,8-Pentachlorodibenzofuran	pg/g	T	-	-	-	<0.1 :	-	-
2,3,7,8-Tetrachlorodibenzofuran	pg/g	T	-	-	-	<0.23 :	-	-
2,3,7,8-Tetrachlorodibenzo-p-dioxin	pg/g	T	-	-	-	<0.36 :	-	-

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Appendix A-7g
Soil - Random 0-24 inches
Validated Analytical Results

Parameter	Units	Exposure Area Fraction	Site ID	MRSS-4		MRSS-5		MRSS-6		MRSS-7		MRSS-8		MRSS-9	
			Sample Date	10/6/2002		10/7/2002		10/7/2002		10/7/2002		10/7/2002		10/6/2002	
			Sample ID	MRSS-4-T02N-SOL		MRSS-5-T02N-SOL		MRSS-6-T02N-SOL		MRSS-7-T02N-SOL		MRSS-8-T02N-SOL		MRSS-9-T02N-SOL	
			Exposure Area	RefMine		RefMine		RSCAR		RSCAR		RSCAR		RSCAR	
General Chemistry															
Ammonia	mg/kg-dry	T		48.1	:	46.1	J	18.	:	20.1	:	21.	:	39.8	:
Chloride	mg/kg-dry	T		2.4	:	<2.4	J	<2.1	:	<2.2	:	<2.3	:	19.4	:
Fluoride	mg/kg-dry	T		0.11	J	0.19	J	0.17	J	0.15	J	0.13	J	0.21	J
Nitrate	mg/kg-dry	T		8.9	J	<2.4	J	<2.1	:	<2.2	:	<2.3	:	<2.2	J
Phosphorus	mg/kg-dry	T		1440.	J	340.	J	175.	J	392.	J	165.	J	1160.	J
Sulfate	mg/kg-dry	T		84.5	J	208.	J	585.	:	558.	:	353.	:	2390.	J
Total Kjeldahl Nitrogen	mg/kg-dry	T		121.	:	780.	J	48.9	:	106.	:	99.4	:	55.2	:
Total Organic Carbon	mg/kg-dry	T		2110.	J	25400.	J	<105.	J	<110.	J	675.	J	<110.	J
Laboratory Parameters															
pH	SU	T		4.8	:	6.	:	3.3	:	3.5	:	3.5	:	2.9	:
Solids, Percent	%	T		95.5	:	85.1	:	95.3	:	91.2	:	89.3	:	91.5	:
Specific Conductance	umhos/cm	T		133.	:	658.	:	2400.	:	2100.	:	2630.	:	3870.	:
Geotechnical															
Organic Soils	%	T		5.23	:	-		3.27	:	4.28	:	4.9	:	4.72	:
Physical Properties															
Cation-Exchange Capacity	meq/100g	T		24.1	:	22.4	:	12.7	:	11.3	:	13.2	:	9.7	:
Sodium Absorption Ratio	ratio	T		0.21	:	0.05	:	<0.02	:	0.02	:	0.05	:	<0.02	:
Metals															
Aluminum	mg/kg-dry	T		11000.	:	9910.	:	7270.	:	4920.	:	5770.	:	3400.	:
Antimony	mg/kg-dry	T		<0.16	J	<0.14	J	<0.16	J	<0.17	J	<0.17	J	<0.17	J
Arsenic	mg/kg-dry	T		6.2	:	6.3	:	10.4	:	3.7	:	4.8	:	6.7	:
Barium	mg/kg-dry	T		472.	:	463.	:	204.	:	654.	:	443.	:	183.	:
Beryllium	mg/kg-dry	T		1.9	:	0.85	:	0.18	:	0.15	:	0.15	:	0.16	:
Boron	mg/kg-dry	T		18.4	J	13.2	J	<0.37	J	<0.45	J	<0.46	J	<0.41	J
Cadmium	mg/kg-dry	T		<0.026	J	<0.024	J	0.18	J	0.14	J	0.24	J	0.12	J
Calcium	mg/kg-dry	T		728.	:	5750.	:	9740.	:	13500.	:	27000.	:	3470.	:
Chromium	mg/kg-dry	T		12.1	:	11.3	:	21.5	:	15.4	:	35.1	:	4.4	:
Cobalt	mg/kg-dry	T		14.2	:	12.2	:	3.	:	0.28	:	0.41	:	1.	:
Copper	mg/kg-dry	T		52.9	:	28.8	:	18.3	:	7.9	:	12.9	:	6.4	:
Iron	mg/kg-dry	T		55000.	:	28400.	:	32100.	:	35000.	:	41700.	:	27100.	:
Lead	mg/kg-dry	T		155.	:	32.1	:	74.1	:	48.3	:	62.5	:	80.7	:
Magnesium	mg/kg-dry	T		8560.	:	2680.	:	6630.	:	4260.	:	5790.	:	2230.	:
Manganese	mg/kg-dry	T		575.	J	729.	J	253.	J	156.	J	144.	J	110.	J

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T = Total Fraction

Appendix A-7g
Soil - Random 0-24 inches
Validated Analytical Results

Parameter	Units	Exposure Area Fraction	Site ID / Sample Date / Sample ID											
			MRSS-4 10/6/2002 MRSS-4-T02N-SOL		MRSS-5 10/7/2002 MRSS-5-T02N-SOL		MRSS-6 10/7/2002 MRSS-6-T02N-SOL		MRSS-7 10/7/2002 MRSS-7-T02N-SOL		MRSS-8 10/7/2002 MRSS-8-T02N-SOL		MRSS-9 10/6/2002 MRSS-9-T02N-SOL	
			RefMine		RefMine		RSCAR		RSCAR		RSCAR		RSCAR	
Mercury	mg/kg-dry	T	<0.016	:	0.024	J	<0.016	:	<0.017	:	<0.018	:	<0.017	:
Molybdenum	mg/kg-dry	T	13.	:	7.6	:	5.3	:	6.1	:	7.6	:	63.	:
Nickel	mg/kg-dry	T	47.4	J	26.	J	8.6	J	2.2	J	3.7	J	2.8	J
Potassium	mg/kg-dry	T	2440.	J	2570.	J	1860.	J	3610.	J	3310.	J	3260.	J
Selenium	mg/kg-dry	T	3.3	J	0.41	J	<1.4	J	<2.9	J	<2.4	J	<1.2	J
Silver	mg/kg-dry	T	1.6	:	<0.11	:	<0.44	:	<0.53	:	<0.54	:	1.3	:
Sodium	mg/kg-dry	T	196.	:	<73.2	:	<357.	:	850.	:	994.	:	<253.	:
Thallium	mg/kg-dry	T	0.12	:	0.15	:	0.095	:	0.13	:	0.18	:	0.38	:
Vanadium	mg/kg-dry	T	16.3	:	18.6	:	22.4	:	23.7	:	26.8	:	16.4	:
Zinc	mg/kg-dry	T	332.	J	67.3	J	33.7	J	16.5	J	17.6	J	19.4	J

J = Qualified as estimated during data validation
R = Qualified as rejected value from data validation and results are considered unusable for any purpose
T = Total Fraction

Appendix A-7g
Soil - Random 0-24 inches
Validated Analytical Results

Parameter	Units	Exposure Area Fraction	Site ID	MSS1-1	MSS1-10	MSS1-2	MSS1-3	MSS1-4	MSS1-4
			Sample Date	10/13/2002	10/14/2002	10/13/2002	10/13/2002	10/14/2002	10/14/2002
			Sample ID	MSS1-1-T02N-SOL	MSS1-10-T02N-SOL	MSS1-2-T02N-SOL	MSS1-3-T02N-SOL	MSS1-4-T02N-SOLDL	MSS1-4-T02N-SOL
			Exposure Area	SS1	SS1	SS1	SS1	SS1	SS1
General Chemistry									
Ammonia	mg/kg-dry	T		13.5 J	9.8 J	15.1 J	15. J	-	19.8 J
Chloride	mg/kg-dry	T		4.3 J	89.3 J	12.1 J	4. J	-	2.2 J
Fluoride	mg/kg-dry	T		1.1 J	1.2 J	1.6 J	1.5 J	-	1.5 J
Nitrate	mg/kg-dry	T		5.4 J	<2.2 J	<2.1 J	<2.2 J	-	<2.2 J
Phosphorus	mg/kg-dry	T		523. J	922. :	1000. J	901. J	-	479. :
Sulfate	mg/kg-dry	T		287. J	2160. J	902. J	24.4 J	-	1300. J
Total Kjeldahl Nitrogen	mg/kg-dry	T		55.6 J	90.9 :	1340. J	770. J	-	85.3 :
Total Organic Carbon	mg/kg-dry	T		577. J	1460. J	283. J	2300. J	-	1480. :
Laboratory Parameters									
pH	SU	T		6.9 :	6.9 :	7.2 :	8.3 :	-	7.1 :
Solids, Percent	%	T		93.9 :	91.7 :	95.8 :	92.5 :	-	94.1 :
Specific Conductance	umhos/cm	T		243. :	900. :	368. :	43.6 :	-	601. :
Geotechnical									
Organic Soils	%	T		1.15 J	1.48 J	1.5 J	1.6 J	-	1.17 J
Physical Properties									
Cation-Exchange Capacity	meq/100g	T		8.2 :	10.2 :	6.8 :	10.5 :	-	12.5 :
Sodium Absorption Ratio	ratio	T		0.17 :	0.59 :	0.36 :	0.07 :	-	0.03 :
Metals									
Aluminum	mg/kg-dry	T		6620. :	11800. :	9450. :	12600. :	-	9360. :
Antimony	mg/kg-dry	T		<0.15 J	<0.16 :	<0.16 J	<0.17 J	-	<0.14 :
Arsenic	mg/kg-dry	T		2.7 :	2.8 :	2.2 :	3.5 :	-	3.6 :
Barium	mg/kg-dry	T		27.2 :	77. :	75.6 :	40. :	-	56.8 :
Beryllium	mg/kg-dry	T		1.5 :	1.5 :	1. :	1.2 :	-	1.6 :
Boron	mg/kg-dry	T		<2.1 :	<2.6 J	<1.3 :	<2.3 :	-	2.9 :
Cadmium	mg/kg-dry	T		5.2 :	1.1 J	0.57 :	0.89 :	-	10.1 :
Calcium	mg/kg-dry	T		5820. :	16300. :	16100. :	15900. :	-	9220. :
Chromium	mg/kg-dry	T		14. :	42.9 :	39.2 :	45.4 :	-	28.1 :
Cobalt	mg/kg-dry	T		4.6 :	7.8 :	11.8 :	14.4 :	-	6.4 :
Copper	mg/kg-dry	T		119. :	147. :	162. :	109. :	-	169. :
Iron	mg/kg-dry	T		13400. :	18000. :	19800. :	24300. :	-	15800. :
Lead	mg/kg-dry	T		297. :	60.1 :	66.1 :	138. :	-	544. :
Magnesium	mg/kg-dry	T		2920. :	8620. :	7630. :	10500. :	-	5880. :
Manganese	mg/kg-dry	T		2270. J	702. :	393. J	1130. J	-	1020. :

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T = Total Fraction

Appendix A-7g
Soil - Random 0-24 inches
Validated Analytical Results

Parameter	Units	Exposure Area Fraction	Site ID: MSS1-1 Sample Date: 10/13/2002 Sample ID: MSS1-1-T02N-SOL SS1	Site ID: MSS1-10 Sample Date: 10/14/2002 Sample ID: MSS1-10-T02N-SOL SS1	Site ID: MSS1-2 Sample Date: 10/13/2002 Sample ID: MSS1-2-T02N-SOL SS1	Site ID: MSS1-3 Sample Date: 10/13/2002 Sample ID: MSS1-3-T02N-SOL SS1	Site ID: MSS1-4 Sample Date: 10/14/2002 Sample ID: MSS1-4-T02N-SOLDL SS1	Site ID: MSS1-4 Sample Date: 10/14/2002 Sample ID: MSS1-4-T02N-SOL SS1
Mercury	mg/kg-dry	T	<0.017 :	<0.017 :	<0.017 :	<0.018 :	-	0.022 :
Molybdenum	mg/kg-dry	T	508. :	1840. :	2180. :	117. :	-	1350. :
Nickel	mg/kg-dry	T	8.9 J	27.5 :	35.3 J	32.7 J	-	19.2 :
Potassium	mg/kg-dry	T	1880. J	4250. :	4680. J	2380. J	-	3020. :
Selenium	mg/kg-dry	T	1.1 J	0.85 :	0.97 J	0.61 J	-	0.7 :
Silver	mg/kg-dry	T	1.6 :	0.8 :	0.85 :	1.7 :	-	1.6 :
Sodium	mg/kg-dry	T	86.6 :	<41.4 :	<40.8 :	<45.2 :	-	86.7 :
Thallium	mg/kg-dry	T	0.19 :	0.35 :	0.48 :	0.22 :	-	0.22 :
Vanadium	mg/kg-dry	T	19.4 :	49. :	48.9 :	48. :	-	32.7 :
Zinc	mg/kg-dry	T	740. J	117. :	115. J	148. J	-	1580. :
Volatile Organics								
1,1,1-Trichloroethane	mg/kg-dry	T	<0.006 :	<0.007 :	<0.006 :	<0.009 :	-	<0.007 :
1,1,2,2-Tetrachloroethane	mg/kg-dry	T	<0.006 :	<0.007 :	<0.006 :	<0.009 :	-	<0.007 :
1,1,2-Trichloro-1,2,2-trifluoroethane	mg/kg-dry	T	<0.006 :	<0.007 :	<0.006 :	<0.009 :	-	<0.007 :
1,1,2-Trichloroethane	mg/kg-dry	T	<0.006 :	<0.007 :	<0.006 :	<0.009 :	-	<0.007 :
1,1-Dichloroethane	mg/kg-dry	T	<0.006 :	<0.007 :	<0.006 :	<0.009 :	-	<0.007 :
1,1-Dichloroethene	mg/kg-dry	T	<0.006 :	<0.007 :	<0.006 :	<0.009 :	-	<0.007 :
1,2,4-Trichlorobenzene	mg/kg-dry	T	<0.006 :	<0.007 :	<0.006 :	<0.009 :	-	<0.007 :
1,2-Dibromo-3-chloropropane	mg/kg-dry	T	<0.006 :	<0.007 :	<0.006 :	<0.009 :	-	<0.007 :
1,2-Dichlorobenzene	mg/kg-dry	T	<0.006 :	<0.007 :	<0.006 :	<0.009 :	-	<0.007 :
1,2-Dichloroethane	mg/kg-dry	T	<0.006 :	<0.007 :	<0.006 :	<0.009 :	-	<0.007 :
1,2-Dichloroethene (total)	mg/kg-dry	T	<0.006 :	<0.007 :	<0.006 :	<0.009 :	-	<0.007 :
1,2-Dichloropropane	mg/kg-dry	T	<0.006 :	<0.007 :	<0.006 :	<0.009 :	-	<0.007 :
1,3-Dichlorobenzene	mg/kg-dry	T	<0.006 :	<0.007 :	<0.006 :	<0.009 :	-	<0.007 :
1,4-Dichlorobenzene	mg/kg-dry	T	<0.006 :	<0.007 :	<0.006 :	<0.009 :	-	<0.007 :
2-Butanone	mg/kg-dry	T	<0.006 J	<0.007 :	<0.006 J	<0.009 J	-	<0.007 :
2-Hexanone	mg/kg-dry	T	<0.006 J	<0.007 :	<0.006 J	<0.009 J	-	<0.007 :
4-Methyl-2-pentanone	mg/kg-dry	T	<0.006 J	<0.007 :	<0.006 J	<0.009 J	-	<0.007 :
Acetone	mg/kg-dry	T	<0.006 :	<0.007 :	<0.006 :	<0.009 :	-	<0.007 :
Benzene	mg/kg-dry	T	<0.006 :	<0.007 :	<0.006 :	<0.009 :	-	<0.007 :
Bromodichloromethane	mg/kg-dry	T	<0.006 :	<0.007 :	<0.006 :	<0.009 :	-	<0.007 :
Bromoform	mg/kg-dry	T	<0.006 :	<0.007 :	<0.006 :	<0.009 :	-	<0.007 :
Bromomethane	mg/kg-dry	T	<0.006 :	<0.007 :	<0.006 :	<0.009 :	-	<0.007 :
Carbon disulfide	mg/kg-dry	T	<0.006 :	<0.007 :	<0.006 :	<0.009 :	-	<0.007 :

J = Qualified as estimated during data validation
R = Qualified as rejected value from data validation and results are considered unusable for any purpose
T = Total Fraction

Appendix A-7g
Soil - Random 0-24 inches
Validated Analytical Results

Site ID			MSS1-1		MSS1-10		MSS1-2		MSS1-3		MSS1-4		MSS1-4	
Sample Date			10/13/2002		10/14/2002		10/13/2002		10/13/2002		10/14/2002		10/14/2002	
Sample ID			MSS1-1-T02N-SOL		MSS1-10-T02N-SOL		MSS1-2-T02N-SOL		MSS1-3-T02N-SOL		MSS1-4-T02N-SOLDL		MSS1-4-T02N-SOL	
Exposure Area			SS1		SS1		SS1		SS1		SS1		SS1	
Parameter	Units	Fraction												
Carbon tetrachloride	mg/kg-dry	T	<0.006	:	<0.007	:	<0.006	:	<0.009	:	-		<0.007	:
Chlorobenzene	mg/kg-dry	T	<0.006	:	<0.007	:	<0.006	:	<0.009	:	-		<0.007	:
Chloroethane	mg/kg-dry	T	<0.006	:	<0.007	:	<0.006	:	<0.009	:	-		<0.007	:
Chloroform	mg/kg-dry	T	<0.006	:	<0.007	:	<0.006	:	<0.009	:	-		<0.007	:
Chloromethane	mg/kg-dry	T	<0.006	:	<0.007	:	<0.006	:	<0.009	:	-		<0.007	:
cis-1,2-Dichloroethene	mg/kg-dry	T	<0.006	:	<0.007	:	<0.006	:	<0.009	:	-		<0.007	:
cis-1,3-Dichloropropene	mg/kg-dry	T	<0.006	:	<0.007	:	<0.006	:	<0.009	:	-		<0.007	:
Dibromochloromethane	mg/kg-dry	T	<0.006	:	<0.007	:	<0.006	:	<0.009	:	-		<0.007	:
Dichlorodifluoromethane	mg/kg-dry	T	<0.006	J	<0.007	:	<0.006	J	<0.009	J	-		<0.007	:
Ethylbenzene	mg/kg-dry	T	<0.006	:	<0.007	:	<0.006	:	<0.009	:	-		<0.007	:
Methylene chloride	mg/kg-dry	T	<0.006	:	<0.007	:	<0.006	:	<0.009	:	-		<0.007	:
Styrene	mg/kg-dry	T	<0.006	:	<0.007	:	<0.006	:	<0.009	:	-		<0.007	:
Tetrachloroethene	mg/kg-dry	T	<0.006	:	<0.007	:	<0.006	:	<0.009	:	-		<0.007	:
Toluene	mg/kg-dry	T	<0.006	:	<0.007	:	<0.006	:	<0.009	:	-		<0.007	:
Total Xylene	mg/kg-dry	T	<0.006	:	<0.007	:	<0.006	:	<0.009	:	-		<0.007	:
trans-1,2-Dichloroethene	mg/kg-dry	T	<0.006	:	<0.007	J	<0.006	:	<0.009	:	-		<0.007	J
trans-1,3-Dichloropropene	mg/kg-dry	T	<0.006	:	<0.007	:	<0.006	:	<0.009	:	-		<0.007	:
Trichloroethene	mg/kg-dry	T	<0.006	:	<0.007	:	<0.006	:	<0.009	:	-		<0.007	:
Trichlorofluoromethane	mg/kg-dry	T	<0.006	J	<0.007	:	<0.006	J	<0.009	J	-		<0.007	:
Vinyl chloride	mg/kg-dry	T	<0.006	J	<0.007	:	<0.006	J	<0.009	J	-		<0.007	:
Semi-Volatile Organics														
1,1`-Biphenyl	mg/kg-dry	T	<0.35	:	<0.36	:	<0.34	:	<0.36	:	-		<0.35	:
2,4,5-Trichlorophenol	mg/kg-dry	T	<0.88	:	<0.9	:	<0.86	:	<0.9	:	-		<0.88	:
2,4,6-Trichlorophenol	mg/kg-dry	T	<0.35	:	<0.36	:	<0.34	:	<0.36	:	-		<0.35	:
2,4-Dichlorophenol	mg/kg-dry	T	<0.35	:	<0.36	:	<0.34	:	<0.36	:	-		<0.35	:
2,4-Dimethylphenol	mg/kg-dry	T	<0.35	:	<0.36	:	<0.34	:	<0.36	:	-		<0.35	:
2,4-Dinitrophenol	mg/kg-dry	T	<0.88	:	<0.9	:	<0.86	:	<0.9	:	-		<0.88	:
2,4-Dinitrotoluene	mg/kg-dry	T	<0.35	:	<0.36	:	<0.34	:	<0.36	:	-		<0.35	:
2,6-Dinitrotoluene	mg/kg-dry	T	<0.35	:	<0.36	:	<0.34	:	<0.36	:	-		<0.35	:
2-Chloronaphthalene	mg/kg-dry	T	<0.35	:	<0.36	:	<0.34	:	<0.36	:	-		<0.35	:
2-Chlorophenol	mg/kg-dry	T	<0.35	:	<0.36	:	<0.34	:	<0.36	:	-		<0.35	:
2-Methylnaphthalene	mg/kg-dry	T	<0.35	:	<0.36	:	<0.34	:	<0.36	:	-		<0.35	:
2-Methylphenol	mg/kg-dry	T	<0.35	:	<0.36	:	<0.34	:	<0.36	:	-		<0.35	:
2-Nitroaniline	mg/kg-dry	T	<0.88	:	<0.9	:	<0.86	:	<0.9	:	-		<0.88	:

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T = Total Fraction

Appendix A-7g
Soil - Random 0-24 inches
Validated Analytical Results

Parameter	Units	Exposure Area Fraction	Site ID	MSS1-1	MSS1-10	MSS1-2	MSS1-3	MSS1-4	MSS1-4
			Sample Date	10/13/2002	10/14/2002	10/13/2002	10/13/2002	10/14/2002	10/14/2002
			Sample ID	MSS1-1-T02N-SOL	MSS1-10-T02N-SOL	MSS1-2-T02N-SOL	MSS1-3-T02N-SOL	MSS1-4-T02N-SOLDL	MSS1-4-T02N-SOL
			Exposure Area	SS1	SS1	SS1	SS1	SS1	SS1
2-Nitrophenol	mg/kg-dry	T		<0.35 :	<0.36 :	<0.34 :	<0.36 :	-	<0.35 :
3,3-Dichlorobenzidine	mg/kg-dry	T		<0.35 :	<0.36 :	<0.34 :	<0.36 :	-	<0.35 :
3-Nitroaniline	mg/kg-dry	T		<0.88 :	<0.9 :	<0.86 :	<0.9 :	-	<0.88 :
4,6-Dinitro-2-methylphenol	mg/kg-dry	T		<0.88 :	<0.9 :	<0.86 :	<0.9 :	-	<0.88 :
4-Bromophenyl phenyl ether	mg/kg-dry	T		<0.35 :	<0.36 :	<0.34 :	<0.36 :	-	<0.35 :
4-Chloro-3-methylphenol	mg/kg-dry	T		<0.35 :	<0.36 :	<0.34 :	<0.36 :	-	<0.35 :
4-Chloroaniline	mg/kg-dry	T		<0.35 :	<0.36 :	<0.34 :	<0.36 :	-	<0.35 :
4-Chlorophenyl phenyl ether	mg/kg-dry	T		<0.35 :	<0.36 :	<0.34 :	<0.36 :	-	<0.35 :
4-Methylphenol	mg/kg-dry	T		<0.35 :	<0.36 :	<0.34 :	<0.36 :	-	<0.35 :
4-Nitroaniline	mg/kg-dry	T		<0.88 :	<0.9 :	<0.86 :	<0.9 :	-	<0.88 :
4-Nitrophenol	mg/kg-dry	T		<0.88 :	<0.9 J	<0.86 :	<0.9 :	-	<0.88 J
Acenaphthene	mg/kg-dry	T		<0.35 :	<0.36 :	<0.34 :	<0.36 :	-	<0.35 :
Acenaphthylene	mg/kg-dry	T		<0.35 :	<0.36 :	<0.34 :	<0.36 :	-	<0.35 :
Anthracene	mg/kg-dry	T		<0.35 :	<0.36 J	<0.34 :	<0.36 :	-	<0.35 J
Benzaldehyde	mg/kg-dry	T		<0.35 J	<0.36 J	<0.34 J	<0.36 J	-	<0.35 J
Benzo(a)anthracene	mg/kg-dry	T		<0.35 :	<0.36 :	<0.34 :	<0.36 :	-	<0.35 :
Benzo(a)pyrene	mg/kg-dry	T		<0.35 :	<0.36 :	<0.34 :	<0.36 :	-	<0.35 :
Benzo(b)fluoranthene	mg/kg-dry	T		<0.35 :	<0.36 :	<0.34 :	<0.36 :	-	<0.35 :
Benzo(g,h,i)perylene	mg/kg-dry	T		<0.35 :	<0.36 :	<0.34 :	<0.36 :	-	<0.35 :
Benzo(k)fluoranthene	mg/kg-dry	T		<0.35 :	<0.36 :	<0.34 :	<0.36 :	-	<0.35 :
Bis(2-chloroethoxy)methane	mg/kg-dry	T		<0.35 :	<0.36 :	<0.34 :	<0.36 :	-	<0.35 :
Bis(2-chloroethyl)ether	mg/kg-dry	T		<0.35 :	<0.36 :	<0.34 :	<0.36 :	-	<0.35 :
Bis(2-ethylhexyl)phthalate	mg/kg-dry	T		<0.35 :	<0.36 :	0.091 J	<0.36 :	-	<0.35 :
Butyl benzyl phthalate	mg/kg-dry	T		<0.35 :	<0.36 :	<0.34 :	<0.36 :	-	<0.35 :
Carbazole	mg/kg-dry	T		<0.35 :	<0.36 :	<0.34 :	<0.36 :	-	<0.35 :
Chrysene	mg/kg-dry	T		<0.35 :	<0.36 :	<0.34 :	<0.36 :	-	<0.35 :
Dibenz(a,h)anthracene	mg/kg-dry	T		<0.35 J	<0.36 :	<0.34 J	<0.36 J	-	<0.35 :
Dibenzofuran	mg/kg-dry	T		<0.35 :	<0.36 :	<0.34 :	<0.36 :	-	<0.35 :
Dichlorodiisopropyl ether	mg/kg-dry	T		<0.35 :	<0.36 :	<0.34 :	<0.36 :	-	<0.35 :
Diethylphthalate	mg/kg-dry	T		<0.35 :	<0.36 :	<0.34 :	<0.36 :	-	<0.35 :
Dimethylphthalate	mg/kg-dry	T		<0.35 :	<0.36 :	<0.34 :	<0.36 :	-	<0.35 :
Di-n-Butyl phthalate	mg/kg-dry	T		<0.35 :	<0.36 :	<0.34 :	<0.36 :	-	<0.35 :
Di-n-Octyl phthalate	mg/kg-dry	T		<0.35 :	<0.36 :	<0.34 :	<0.36 :	-	<0.35 :
Fluoranthene	mg/kg-dry	T		<0.35 :	<0.36 :	<0.34 :	<0.36 :	-	<0.35 :

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T = Total Fraction

Appendix A-7g
Soil - Random 0-24 inches
Validated Analytical Results

Parameter	Units	Exposure Area Fraction	Site ID / Sample Date / Sample ID / Exposure Area											
			MSS1-1 10/13/2002 MSS1-1-T02N-SOL SS1		MSS1-10 10/14/2002 MSS1-10-T02N-SOL SS1		MSS1-2 10/13/2002 MSS1-2-T02N-SOL SS1		MSS1-3 10/13/2002 MSS1-3-T02N-SOL SS1		MSS1-4 10/14/2002 MSS1-4-T02N-SOLDL SS1		MSS1-4 10/14/2002 MSS1-4-T02N-SOL SS1	
Fluorene	mg/kg-dry	T	<0.35	:	<0.36	:	<0.34	:	<0.36	:	-		<0.35	:
Hexachlorobenzene	mg/kg-dry	T	<0.35	:	<0.36	:	<0.34	:	<0.36	:	-		<0.35	:
Hexachlorobutadiene	mg/kg-dry	T	<0.35	:	<0.36	:	<0.34	:	<0.36	:	-		<0.35	:
Hexachlorocyclopentadiene	mg/kg-dry	T	<0.35	J	<0.36	:	<0.34	J	<0.36	J	-		<0.35	:
Hexachloroethane	mg/kg-dry	T	<0.35	:	<0.36	:	<0.34	:	<0.36	:	-		<0.35	:
Indeno(1,2,3-cd)pyrene	mg/kg-dry	T	<0.35	:	<0.36	:	<0.34	:	<0.36	:	-		<0.35	:
Isophorone	mg/kg-dry	T	<0.35	:	<0.36	:	<0.34	:	<0.36	:	-		<0.35	:
Naphthalene	mg/kg-dry	T	<0.35	:	<0.36	:	<0.34	:	<0.36	:	-		<0.35	:
Nitrobenzene	mg/kg-dry	T	<0.35	:	<0.36	:	<0.34	:	<0.36	:	-		<0.35	:
N-Nitrosodi-n-propylamine	mg/kg-dry	T	<0.35	:	<0.36	:	<0.34	:	<0.36	:	-		<0.35	:
N-Nitrosodiphenylamine	mg/kg-dry	T	<0.35	:	<0.36	:	<0.34	:	<0.36	:	-		<0.35	:
Pentachlorophenol	mg/kg-dry	T	<0.88	J	<0.9	:	<0.86	J	<0.9	J	-		<0.88	:
Phenanthrene	mg/kg-dry	T	<0.35	:	<0.36	:	<0.34	:	<0.36	:	-		<0.35	:
Phenol	mg/kg-dry	T	<0.35	:	<0.36	:	<0.34	:	<0.36	:	-		<0.35	:
Pyrene	mg/kg-dry	T	<0.35	:	<0.36	:	<0.34	:	<0.36	:	-		<0.35	:
Pesticides-PCBs														
Aroclor 1016	mg/kg-dry	T	<0.035	:	<0.036	:	<0.034	:	<0.036	:	-		<0.035	:
Aroclor 1221	mg/kg-dry	T	<0.071	:	<0.073	:	<0.07	:	<0.073	:	-		<0.071	:
Aroclor 1232	mg/kg-dry	T	<0.035	:	<0.036	:	<0.034	:	<0.036	:	-		<0.035	:
Aroclor 1242	mg/kg-dry	T	<0.035	:	<0.036	:	<0.034	:	<0.036	:	-		<0.035	:
Aroclor 1248	mg/kg-dry	T	<0.035	:	<0.036	:	<0.034	:	<0.036	:	-		<0.035	:
Aroclor 1254	mg/kg-dry	T	0.076	J	0.24	:	<0.034	:	<0.036	:	3.3	:	-	
Aroclor 1260	mg/kg-dry	T	<0.035	:	<0.036	:	<0.034	:	<0.036	:	-		<0.035	:

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T = Total Fraction

Appendix A-7g
Soil - Random 0-24 inches
Validated Analytical Results

Parameter	Units	Exposure Area Fraction	Site ID	MSS1-5		MSS1-6		MSS1-7		MSS1-8		MSS1-9		MSS2-1	
			Sample Date	10/14/2002		10/15/2002		10/14/2002		10/13/2002		10/14/2002		10/13/2002	
			Sample ID	MSS1-5-T02N-SOL		MSS1-6-T02N-SOL		MSS1-7-T02N-SOL		MSS1-8-T02N-SOL		MSS1-9-T02N-SOL		MSS2-1-T02N-SOL	
			Exposure Area	SS1		SS1		SS1		SS1		SS1		SS2	
General Chemistry															
Ammonia	mg/kg-dry	T		24.5	:	16.4	:	23.9	:	<17.2	:	38.3	:	102.	:
Chloride	mg/kg-dry	T		64.	J	3.3	J	2.9	J	3.9	J	3.2	J	4.6	J
Fluoride	mg/kg-dry	T		2.1	J	1.2	J	0.82	J	0.95	J	1.4	J	3.6	J
Nitrate	mg/kg-dry	T		7.2	J	3.5	J	<2.1	J	4.	J	3.1	J	<2.2	J
Phosphorus	mg/kg-dry	T		709.	J	1100.	:	718.	J	1210.	J	745.	J	896.	J
Sulfate	mg/kg-dry	T		1640.	J	125.	J	54.7	J	57.2	J	107.	J	731.	J
Total Kjeldahl Nitrogen	mg/kg-dry	T		128.	:	5.6	:	245.	:	407.	:	542.	:	181.	:
Total Organic Carbon	mg/kg-dry	T		3700.	J	4900.	:	6410.	J	15000.	J	16200.	J	3660.	J
Laboratory Parameters															
pH	SU	T		7.4	:	7.9	:	8.1	:	8.2	:	7.9	:	3.9	:
Solids, Percent	%	T		92.6	:	94.7	:	95.6	:	89.3	:	92.4	:	94.7	:
Specific Conductance	umhos/cm	T		558.	:	283.	:	88.1	:	82.2	J	118.	:	558.	:
Geotechnical															
Organic Soils	%	T		1.69	J	2.91	J	1.96	J	4.09	J	3.04	J	3.72	:
Physical Properties															
Cation-Exchange Capacity	meq/100g	T		12.2	:	17.7	:	10.7	:	22.	:	19.6	:	10.	:
Sodium Absorption Ratio	ratio	T		0.6	:	0.16	:	0.18	:	0.2	:	0.09	:	0.06	:
Metals															
Aluminum	mg/kg-dry	T		10500.	:	15900.	:	7700.	:	21700.	:	11000.	:	3600.	:
Antimony	mg/kg-dry	T		<0.24	J	<0.14	:	<0.26	J	<0.17	J	<0.26	J	<0.16	J
Arsenic	mg/kg-dry	T		4.2	:	3.6	:	2.8	:	3.5	:	4.4	:	6.2	:
Barium	mg/kg-dry	T		69.	:	67.	:	75.	:	144.	:	84.5	:	176.	:
Beryllium	mg/kg-dry	T		1.1	:	1.1	:	0.6	:	1.3	:	0.94	:	0.19	:
Boron	mg/kg-dry	T		3.1	:	4.5	J	2.3	:	<0.44	J	3.1	:	<0.38	J
Cadmium	mg/kg-dry	T		0.77	:	0.8	J	0.38	:	0.048	:	1.3	:	<0.024	J
Calcium	mg/kg-dry	T		8480.	:	17200.	:	8810.	:	25600.	:	7540.	:	838.	:
Chromium	mg/kg-dry	T		39.2	:	63.8	:	28.5	:	74.9	:	34.4	:	8.5	:
Cobalt	mg/kg-dry	T		8.8	:	21.	:	6.6	:	22.3	:	10.3	:	0.71	:
Copper	mg/kg-dry	T		79.3	:	79.4	:	45.1	:	83.6	:	72.4	:	43.1	:
Iron	mg/kg-dry	T		20400.	:	27900.	:	14700.	:	33900.	:	22800.	:	24400.	:
Lead	mg/kg-dry	T		65.2	:	73.8	:	45.3	:	31.3	:	160.	:	131.	:
Magnesium	mg/kg-dry	T		6810.	:	14100.	:	5520.	:	18500.	:	6820.	:	1340.	:
Manganese	mg/kg-dry	T		625.	J	961.	:	514.	J	887.	J	783.	J	88.6	J

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Appendix A-7g
Soil - Random 0-24 inches
Validated Analytical Results

Parameter	Units	Exposure Area Fraction	Site ID	MSS1-5		MSS1-6		MSS1-7		MSS1-8		MSS1-9		MSS2-1	
			Sample Date	10/14/2002		10/15/2002		10/14/2002		10/13/2002		10/14/2002		10/13/2002	
			Sample ID	MSS1-5-T02N-SOL		MSS1-6-T02N-SOL		MSS1-7-T02N-SOL		MSS1-8-T02N-SOL		MSS1-9-T02N-SOL		MSS2-1-T02N-SOL	
			Exposure Area	SS1		SS1		SS1		SS1		SS1		SS2	
Mercury	mg/kg-dry	T		0.022	:	<0.015	J	0.025	:	<0.018	:	0.023	:	<0.018	:
Molybdenum	mg/kg-dry	T		1200.	:	66.9	:	441.	:	84.8	:	532.	:	41.2	:
Nickel	mg/kg-dry	T		24.8	J	47.4	:	18.1	J	57.5	J	25.6	J	3.5	J
Potassium	mg/kg-dry	T		2310.	J	3270.	:	1800.	J	5420.	J	2420.	J	3200.	J
Selenium	mg/kg-dry	T		<0.65	J	0.57	J	<0.69	J	0.56	J	<0.69	J	1.8	J
Silver	mg/kg-dry	T		0.79	:	0.32	J	0.48	:	0.38	:	0.84	:	1.	:
Sodium	mg/kg-dry	T		<81.4	:	<43.8	:	<79.3	:	<49.9	:	<71.8	:	210.	:
Thallium	mg/kg-dry	T		0.21	:	0.21	:	0.19	:	0.33	:	0.22	:	0.32	:
Vanadium	mg/kg-dry	T		36.5	:	63.3	:	29.2	:	70.6	:	33.5	:	11.	:
Zinc	mg/kg-dry	T		132.	J	93.4	:	97.	J	93.1	J	211.	J	21.1	J
Volatile Organics															
1,1,1-Trichloroethane	mg/kg-dry	T		<0.011	:	<0.008	:	<0.008	:	<0.008	:	<0.01	:	<0.01	:
1,1,2,2-Tetrachloroethane	mg/kg-dry	T		<0.011	:	<0.008	:	<0.008	:	<0.008	:	<0.01	:	<0.01	:
1,1,2-Trichloro-1,2,2-trifluoroethane	mg/kg-dry	T		<0.011	:	<0.008	:	<0.008	:	<0.008	:	<0.01	:	<0.01	:
1,1,2-Trichloroethane	mg/kg-dry	T		<0.011	:	<0.008	:	<0.008	:	<0.008	:	<0.01	:	<0.01	:
1,1-Dichloroethane	mg/kg-dry	T		<0.011	:	<0.008	:	<0.008	:	<0.008	:	<0.01	:	<0.01	:
1,1-Dichloroethene	mg/kg-dry	T		<0.011	:	<0.008	:	<0.008	:	<0.008	:	<0.01	:	<0.01	J
1,2,4-Trichlorobenzene	mg/kg-dry	T		<0.011	:	<0.008	:	<0.008	:	<0.008	:	<0.01	:	<0.01	:
1,2-Dibromo-3-chloropropane	mg/kg-dry	T		<0.011	:	<0.008	:	<0.008	:	<0.008	:	<0.01	:	<0.01	:
1,2-Dichlorobenzene	mg/kg-dry	T		<0.011	:	<0.008	:	<0.008	:	<0.008	:	<0.01	:	<0.01	:
1,2-Dichloroethane	mg/kg-dry	T		<0.011	:	<0.008	:	<0.008	:	<0.008	:	<0.01	:	<0.01	:
1,2-Dichloroethene (total)	mg/kg-dry	T		<0.011	:	<0.008	:	<0.008	:	<0.008	:	<0.01	:	<0.01	:
1,2-Dichloropropane	mg/kg-dry	T		<0.011	:	<0.008	:	<0.008	:	<0.008	:	<0.01	:	<0.01	:
1,3-Dichlorobenzene	mg/kg-dry	T		<0.011	:	<0.008	:	<0.008	:	<0.008	:	<0.01	:	<0.01	:
1,4-Dichlorobenzene	mg/kg-dry	T		<0.011	:	<0.008	:	<0.008	:	<0.008	:	<0.01	:	<0.01	:
2-Butanone	mg/kg-dry	T		<0.011	:	<0.008	:	<0.008	:	<0.008	:	<0.01	:	<0.01	:
2-Hexanone	mg/kg-dry	T		<0.011	:	<0.008	:	<0.008	:	<0.008	:	<0.01	J	<0.01	J
4-Methyl-2-pentanone	mg/kg-dry	T		<0.011	:	<0.008	:	<0.008	:	<0.008	:	<0.01	:	<0.01	J
Acetone	mg/kg-dry	T		<0.011	J	0.002	J	<0.008	:	<0.008	J	<0.01	:	<0.01	:
Benzene	mg/kg-dry	T		<0.011	:	<0.008	:	<0.008	:	<0.008	:	<0.01	:	<0.01	:
Bromodichloromethane	mg/kg-dry	T		<0.011	:	<0.008	:	<0.008	:	<0.008	:	<0.01	:	<0.01	:
Bromoform	mg/kg-dry	T		<0.011	:	<0.008	:	<0.008	:	<0.008	:	<0.01	:	<0.01	:
Bromomethane	mg/kg-dry	T		<0.011	:	<0.008	:	<0.008	:	<0.008	:	<0.01	:	<0.01	:
Carbon disulfide	mg/kg-dry	T		<0.011	:	<0.008	:	<0.008	:	<0.008	:	<0.01	:	<0.01	:

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T = Total Fraction

Appendix A-7g
Soil - Random 0-24 inches
Validated Analytical Results

Parameter	Units	Exposure Area Fraction	Site ID		Sample Date		Sample ID		Exposure Area	
			MSS1-5		10/14/2002		MSS1-5-T02N-SOL		SS1	
Carbon tetrachloride	mg/kg-dry	T	<0.011	:						
Chlorobenzene	mg/kg-dry	T	<0.011	:						
Chloroethane	mg/kg-dry	T	<0.011	:						
Chloroform	mg/kg-dry	T	<0.011	:						
Chloromethane	mg/kg-dry	T	<0.011	:						
cis-1,2-Dichloroethene	mg/kg-dry	T	<0.011	:						
cis-1,3-Dichloropropene	mg/kg-dry	T	<0.011	:						
Dibromochloromethane	mg/kg-dry	T	<0.011	:						
Dichlorodifluoromethane	mg/kg-dry	T	<0.011	:						
Ethylbenzene	mg/kg-dry	T	<0.011	:						
Methylene chloride	mg/kg-dry	T	<0.011	:						
Styrene	mg/kg-dry	T	<0.011	:						
Tetrachloroethene	mg/kg-dry	T	<0.011	:						
Toluene	mg/kg-dry	T	<0.011	:						
Total Xylene	mg/kg-dry	T	<0.011	:						
trans-1,2-Dichloroethene	mg/kg-dry	T	<0.011	J						
trans-1,3-Dichloropropene	mg/kg-dry	T	<0.011	:						
Trichloroethene	mg/kg-dry	T	<0.011	:						
Trichlorofluoromethane	mg/kg-dry	T	<0.011	:						
Vinyl chloride	mg/kg-dry	T	<0.011	:						
Semi-Volatile Organics										
1,1`-Biphenyl	mg/kg-dry	T	<0.35	J						
2,4,5-Trichlorophenol	mg/kg-dry	T	<0.89	:						
2,4,6-Trichlorophenol	mg/kg-dry	T	<0.35	:						
2,4-Dichlorophenol	mg/kg-dry	T	<0.35	:						
2,4-Dimethylphenol	mg/kg-dry	T	<0.35	:						
2,4-Dinitrophenol	mg/kg-dry	T	<0.89	:						
2,4-Dinitrotoluene	mg/kg-dry	T	<0.35	:						
2,6-Dinitrotoluene	mg/kg-dry	T	<0.35	:						
2-Chloronaphthalene	mg/kg-dry	T	<0.35	:						
2-Chlorophenol	mg/kg-dry	T	<0.35	:						
2-Methylnaphthalene	mg/kg-dry	T	<0.35	:						
2-Methylphenol	mg/kg-dry	T	<0.35	:						
2-Nitroaniline	mg/kg-dry	T	<0.89	:						

Parameter	Units	Exposure Area Fraction	Site ID		Sample Date		Sample ID		Exposure Area	
			MSS1-6		10/15/2002		MSS1-6-T02N-SOL		SS1	
Carbon tetrachloride	mg/kg-dry	T	<0.008	:						
Chlorobenzene	mg/kg-dry	T	<0.008	:						
Chloroethane	mg/kg-dry	T	<0.008	:						
Chloroform	mg/kg-dry	T	<0.008	:						
Chloromethane	mg/kg-dry	T	<0.008	:						
cis-1,2-Dichloroethene	mg/kg-dry	T	<0.008	:						
cis-1,3-Dichloropropene	mg/kg-dry	T	<0.008	:						
Dibromochloromethane	mg/kg-dry	T	<0.008	:						
Dichlorodifluoromethane	mg/kg-dry	T	<0.008	:						
Ethylbenzene	mg/kg-dry	T	<0.008	:						
Methylene chloride	mg/kg-dry	T	<0.008	:						
Styrene	mg/kg-dry	T	<0.008	:						
Tetrachloroethene	mg/kg-dry	T	<0.008	:						
Toluene	mg/kg-dry	T	<0.008	:						
Total Xylene	mg/kg-dry	T	<0.008	:						
trans-1,2-Dichloroethene	mg/kg-dry	T	<0.008	:						
trans-1,3-Dichloropropene	mg/kg-dry	T	<0.008	:						
Trichloroethene	mg/kg-dry	T	<0.008	:						
Trichlorofluoromethane	mg/kg-dry	T	0.002	J						
Vinyl chloride	mg/kg-dry	T	<0.008	:						
Semi-Volatile Organics										
1,1`-Biphenyl	mg/kg-dry	T	<0.35	:						
2,4,5-Trichlorophenol	mg/kg-dry	T	<0.87	:						
2,4,6-Trichlorophenol	mg/kg-dry	T	<0.35	:						
2,4-Dichlorophenol	mg/kg-dry	T	<0.35	:						
2,4-Dimethylphenol	mg/kg-dry	T	<0.35	:						
2,4-Dinitrophenol	mg/kg-dry	T	<0.87	:						
2,4-Dinitrotoluene	mg/kg-dry	T	<0.35	:						
2,6-Dinitrotoluene	mg/kg-dry	T	<0.35	:						
2-Chloronaphthalene	mg/kg-dry	T	<0.35	:						
2-Chlorophenol	mg/kg-dry	T	<0.35	:						
2-Methylnaphthalene	mg/kg-dry	T	<0.35	:						
2-Methylphenol	mg/kg-dry	T	<0.35	:						
2-Nitroaniline	mg/kg-dry	T	<0.87	:						

Parameter	Units	Exposure Area Fraction	Site ID		Sample Date		Sample ID		Exposure Area	
			MSS1-7		10/14/2002		MSS1-7-T02N-SOL		SS1	
Carbon tetrachloride	mg/kg-dry	T	<0.008	:						
Chlorobenzene	mg/kg-dry	T	<0.008	:						
Chloroethane	mg/kg-dry	T	<0.008	:						
Chloroform	mg/kg-dry	T	<0.008	:						
Chloromethane	mg/kg-dry	T	<0.008	:						
cis-1,2-Dichloroethene	mg/kg-dry	T	<0.008	:						
cis-1,3-Dichloropropene	mg/kg-dry	T	<0.008	:						
Dibromochloromethane	mg/kg-dry	T	<0.008	:						
Dichlorodifluoromethane	mg/kg-dry	T	<0.008	:						
Ethylbenzene	mg/kg-dry	T	<0.008	:						
Methylene chloride	mg/kg-dry	T	<0.008	:						
Styrene	mg/kg-dry	T	<0.008	:						
Tetrachloroethene	mg/kg-dry	T	<0.008	:						
Toluene	mg/kg-dry	T	<0.008	:						
Total Xylene	mg/kg-dry	T	<0.008	:						
trans-1,2-Dichloroethene	mg/kg-dry	T	<0.008	:						
trans-1,3-Dichloropropene	mg/kg-dry	T	<0.008	:						
Trichloroethene	mg/kg-dry	T	<0.008	:						
Trichlorofluoromethane	mg/kg-dry	T	<0.008	:						
Vinyl chloride	mg/kg-dry	T	<0.008	:						
Semi-Volatile Organics										
1,1`-Biphenyl	mg/kg-dry	T	<0.34	J						
2,4,5-Trichlorophenol	mg/kg-dry	T	<0.86	:						
2,4,6-Trichlorophenol	mg/kg-dry	T	<0.34	:						
2,4-Dichlorophenol	mg/kg-dry	T	<0.34	:						
2,4-Dimethylphenol	mg/kg-dry	T	<0.34	:						
2,4-Dinitrophenol	mg/kg-dry	T	<0.86	:						
2,4-Dinitrotoluene	mg/kg-dry	T	<0.34	:						
2,6-Dinitrotoluene	mg/kg-dry	T	<0.34	:						
2-Chloronaphthalene	mg/kg-dry	T	<0.34	:						
2-Chlorophenol	mg/kg-dry	T	<0.34	:						
2-Methylnaphthalene	mg/kg-dry	T	<0.34	:						
2-Methylphenol	mg/kg-dry	T	<0.34	:						
2-Nitroaniline	mg/kg-dry	T	<0.86	:						

Parameter	Units	Exposure Area Fraction	Site ID		Sample Date		Sample ID		Exposure Area	
			MSS1-8		10/13/2002		MSS1-8-T02N-SOL		SS1	
Carbon tetrachloride	mg/kg-dry	T	<0.008	:						
Chlorobenzene	mg/kg-dry	T	<0.008	:						
Chloroethane	mg/kg-dry	T	<0.008	:						
Chloroform	mg/kg-dry	T	<0.008	:						
Chloromethane	mg/kg-dry	T	<0.008	:						
cis-1,2-Dichloroethene	mg/kg-dry	T	<0.008	:						
cis-1,3-Dichloropropene	mg/kg-dry	T	<0.008	:						
Dibromochloromethane	mg/kg-dry	T	<0.008	:						
Dichlorodifluoromethane	mg/kg-dry	T	<0.008	:						
Ethylbenzene	mg/kg-dry	T	<0.008	:						
Methylene chloride	mg/kg-dry	T	<0.008	:						
Styrene	mg/kg-dry	T	<0.008	:						
Tetrachloroethene	mg/kg-dry	T	<0.008	:						
Toluene	mg/kg-dry	T	<0.008	:						
Total Xylene	mg/kg-dry	T	<0.008	:						
trans-1,2-Dichloroethene	mg/kg-dry	T	<0.008	J						
trans-1,3-Dichloropropene	mg/kg-dry	T	<0.008	:						
Trichloroethene	mg/kg-dry	T	<0.008	:						
Trichlorofluoromethane	mg/kg-dry	T	<0.008	:						
Vinyl chloride	mg/kg-dry	T	<0.008	:						
Semi-Volatile Organics										
1,1`-Biphenyl	mg/kg-dry	T	<0.37	:						
2,4,5-Trichlorophenol	mg/kg-dry	T	<0.93	:						
2,4,6-Trichlorophenol	mg/kg-dry	T	<0.37	:						
2,4-Dichlorophenol	mg/kg-dry	T	<0.37	:						
2,4-Dimethylphenol	mg/kg-dry	T	<0.37	:						
2,4-Dinitrophenol	mg/kg-dry	T	<0.93	:						
2,4-Dinitrotoluene	mg/kg-dry	T	<0.37	:						
2,6-Dinitrotoluene	mg/kg-dry	T	<0.37	:						
2-Chloronaphthalene	mg/kg-dry	T	<0.37	J						
2-Chlorophenol	mg/kg-dry	T	<0.37	:						
2-Methylnaphthalene	mg/kg-dry	T	<0.37	:						
2-Methylphenol	mg/kg-dry	T	<0.37	:						
2-Nitroaniline	mg/kg-dry	T	<0.93	:						

Parameter	Units	Exposure Area Fraction	Site ID		Sample Date		Sample ID		Exposure Area	
			MSS1-9		10/14/2002		MSS1-9-T02N-SOL		SS1	
Carbon tetrachloride	mg/kg-dry	T	<0.01	:						
Chlorobenzene	mg/kg-dry	T	<0.01	:						
Chloroethane	mg/kg-dry	T	<0.01	:						
Chloroform	mg/kg-dry	T	<0.01	:						
Chloromethane	mg/kg-dry	T	<0.01	:						
cis-1,2-Dichloroethene	mg/kg-dry	T	<0.01	:						
cis-1,3-Dichloropropene	mg/kg-dry	T	<0.01	:						
Dibromochloromethane	mg/kg-dry	T	<0.01	:						
Dichlorodifluoromethane	mg/kg-dry	T	<0.01	:						
Ethylbenzene	mg/kg-dry	T	<0.01	:						
Methylene chloride	mg/kg-dry	T	<0.01	:						
Styrene	mg/kg-dry	T	<0.01	:						
Tetrachloroethene	mg/kg-dry	T	<0.01	:						
Toluene	mg/kg-dry	T	<0.01	:						
Total Xylene	mg/kg-dry	T	<0.01	:						
trans-1,2-Dichloroethene	mg/kg-dry	T	<0.01	:						
trans-1,3-Dichloropropene	mg/kg-dry	T	<0.01	:						
Trichloroethene	mg/kg-dry	T	<0.01	:						
Trichlorofluoromethane	mg/kg-dry	T	<0.01	:						
Vinyl chloride	mg/kg-dry	T	<0.01	:						
Semi-Volatile Organics										
1,1`-Biphenyl	mg/kg-dry	T	<0.36	J						
2,4,5-Trichlorophenol	mg/kg-dry	T	<0.9	:						
2,4,6-Trichlorophenol	mg/kg-dry	T	<0.36	:						
2,4-Dichlorophenol	mg/kg-dry	T	<0.36	:						
2,4-Dimethylphenol	mg/kg-dry	T	<0.36	:						
2,4-Dinitrophenol	mg/kg-dry	T	<0.9	:						
2,4-Dinitrotoluene	mg/kg-dry	T	<0.36	:						
2,6-Dinitrotoluene	mg/kg-dry	T	<0.36	:						
2-Chloronaphthalene	mg/kg-dry	T	<0.36	:						
2-Chlorophenol	mg/kg-dry	T	<0.36	:						
2-Methylnaphthalene	mg/kg-dry	T	<0.36	:						
2-Methylphenol	mg/kg-dry	T	<0.36	:						
2-Nitroaniline	mg/kg-dry	T	<0.9	:						

Parameter	Units	Exposure Area Fraction	Site ID		Sample Date		Sample ID		Exposure Area	
			MSS2-1		10/13/2002		MSS2-1-T02N-SOL		SS2	
Carbon tetrachloride	mg/kg-dry	T	<0.01	:						
Chlorobenzene	mg/kg-dry	T	<0.01	:						
Chloroethane	mg/kg-dry	T	<0.01	:						
Chloroform	mg/kg-dry	T	<0.01	:						
Chloromethane	mg/kg-dry	T	<0.01	:						
cis-1,2-Dichloroethene	mg/kg-dry	T	<0.01	:						
cis-1,3-Dichloropropene	mg/kg-dry	T	<0.01	:						
Dibromochloromethane	mg/kg-dry	T	<0.01	:						
Dichlorodifluoromethane	mg/kg-dry	T	<0.01	J						
Ethylbenzene	mg/kg-dry	T	<0.01	:						
Methylene chloride	mg/kg-dry	T	<0.01	:						
Styrene	mg/kg-dry	T	<0.01	:						
Tetrachloroethene	mg/kg-dry	T	<0.01	:						
Toluene	mg/kg-dry	T	<0.01	:						
Total Xylene	mg/kg-dry	T	<0.01	:						
trans-1,2-Dichloroethene	mg/kg-dry	T	<0.01	:						
trans-1,3-Dichloropropene	mg/kg-dry	T	<0.01	:						
Trichloroethene	mg/kg-dry	T	<0.01	:						
Trichlorofluoromethane	mg/kg-dry	T	<0.01	J						
Vinyl chloride	mg/kg-dry	T	<0.01	J						
Semi-Volatile Organics										
1,1`-Biphenyl	mg/kg-dry	T	<0.35	:						
2,4,5-Trichlorophenol	mg/kg-dry	T	<0.87	:						
2,4,6-Trichlorophenol	mg/kg-dry	T	<0.35	:						
2,4-Dichlorophenol	mg/kg-dry	T	<0.35	:						
2,4-Dimethylphenol	mg/kg-dry	T	<0.35	:						
2,4-Dinitrophenol	mg/kg-dry	T	<0.87	:						
2,4-Dinitrotoluene	mg/kg-dry	T	<0.35	:						
2,6-Dinitrotoluene	mg/kg-dry	T	<0.35	:						
2-Chloronaphthalene	mg/kg-dry	T	<0.35	J						
2-Chlorophenol	mg/kg-dry	T	<0.35	:						
2-Methylnaphthalene	mg/kg-dry	T	<0.35	:						
2-Methylphenol	mg/kg-dry	T	<0.35	:						
2-Nitroaniline	mg/kg-dry	T	<0.87	:						

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R = Qualified as rejected value from data validation and results are considered unusable for any purpose
T = Total Fraction

Appendix A-7g
Soil - Random 0-24 inches
Validated Analytical Results

Parameter	Units	Exposure Area Fraction	Site ID	MSS1-5	MSS1-6	MSS1-7	MSS1-8	MSS1-9	MSS2-1
			Sample Date	10/14/2002	10/15/2002	10/14/2002	10/13/2002	10/14/2002	10/13/2002
			Sample ID	MSS1-5-T02N-SOL	MSS1-6-T02N-SOL	MSS1-7-T02N-SOL	MSS1-8-T02N-SOL	MSS1-9-T02N-SOL	MSS2-1-T02N-SOL
			Exposure Area	SS1	SS1	SS1	SS1	SS1	SS2
2-Nitrophenol	mg/kg-dry	T		<0.35 :	<0.35 :	<0.34 :	<0.37 :	<0.36 :	<0.35 :
3,3-Dichlorobenzidine	mg/kg-dry	T		<0.35 :	<0.35 :	<0.34 :	<0.37 :	<0.36 :	<0.35 :
3-Nitroaniline	mg/kg-dry	T		<0.89 :	<0.87 :	<0.86 :	<0.93 :	<0.9 :	<0.87 :
4,6-Dinitro-2-methylphenol	mg/kg-dry	T		<0.89 :	<0.87 :	<0.86 :	<0.93 :	<0.9 :	<0.87 :
4-Bromophenyl phenyl ether	mg/kg-dry	T		<0.35 :	<0.35 :	<0.34 :	<0.37 :	<0.36 :	<0.35 :
4-Chloro-3-methylphenol	mg/kg-dry	T		<0.35 :	<0.35 :	<0.34 :	<0.37 :	<0.36 :	<0.35 :
4-Chloroaniline	mg/kg-dry	T		<0.35 :	<0.35 :	<0.34 :	<0.37 :	<0.36 :	<0.35 :
4-Chlorophenyl phenyl ether	mg/kg-dry	T		<0.35 :	<0.35 :	<0.34 :	<0.37 :	<0.36 :	<0.35 :
4-Methylphenol	mg/kg-dry	T		<0.35 :	<0.35 :	<0.34 :	<0.37 :	<0.36 :	<0.35 :
4-Nitroaniline	mg/kg-dry	T		<0.89 :	<0.87 :	<0.86 :	<0.93 :	<0.9 :	<0.87 :
4-Nitrophenol	mg/kg-dry	T		<0.89 :	<0.87 :	<0.86 :	<0.93 :	<0.9 :	<0.87 :
Acenaphthene	mg/kg-dry	T		<0.35 :	<0.35 :	<0.34 :	<0.37 :	<0.36 :	<0.35 :
Acenaphthylene	mg/kg-dry	T		<0.35 :	<0.35 :	<0.34 :	<0.37 :	<0.36 :	<0.35 :
Anthracene	mg/kg-dry	T		<0.35 :	<0.35 J	<0.34 :	<0.37 :	<0.36 :	<0.35 :
Benzaldehyde	mg/kg-dry	T		<0.35 J	<0.35 J	<0.34 J	<0.37 J	<0.36 J	<0.35 J
Benzo(a)anthracene	mg/kg-dry	T		<0.35 :	<0.35 :	<0.34 :	<0.37 :	<0.36 :	<0.35 :
Benzo(a)pyrene	mg/kg-dry	T		<0.35 :	<0.35 :	<0.34 :	<0.37 :	<0.36 :	<0.35 :
Benzo(b)fluoranthene	mg/kg-dry	T		<0.35 :	<0.35 :	<0.34 :	<0.37 :	<0.36 :	<0.35 :
Benzo(g,h,i)perylene	mg/kg-dry	T		<0.35 :	<0.35 :	<0.34 :	<0.37 :	<0.36 :	<0.35 :
Benzo(k)fluoranthene	mg/kg-dry	T		<0.35 :	<0.35 :	<0.34 :	<0.37 :	<0.36 :	<0.35 :
Bis(2-chloroethoxy)methane	mg/kg-dry	T		<0.35 :	<0.35 :	<0.34 :	<0.37 :	<0.36 :	<0.35 :
Bis(2-chloroethyl)ether	mg/kg-dry	T		<0.35 :	<0.35 :	<0.34 :	<0.37 :	<0.36 :	<0.35 :
Bis(2-ethylhexyl)phthalate	mg/kg-dry	T		0.073 J	<0.35 :	<0.34 :	<0.37 :	<0.36 :	<0.35 :
Butyl benzyl phthalate	mg/kg-dry	T		<0.35 J	<0.35 :	<0.34 J	<0.37 :	<0.36 J	<0.35 :
Carbazole	mg/kg-dry	T		<0.35 :	<0.35 :	<0.34 :	<0.37 :	<0.36 :	<0.35 :
Chrysene	mg/kg-dry	T		<0.35 :	<0.35 :	<0.34 :	<0.37 :	0.018 J	<0.35 :
Dibenz(a,h)anthracene	mg/kg-dry	T		<0.35 :	<0.35 :	<0.34 :	<0.37 :	<0.36 :	<0.35 :
Dibenzofuran	mg/kg-dry	T		<0.35 :	<0.35 :	<0.34 :	<0.37 :	<0.36 :	<0.35 :
Dichlorodiisopropyl ether	mg/kg-dry	T		<0.35 :	<0.35 :	<0.34 :	<0.37 :	<0.36 :	<0.35 :
Diethylphthalate	mg/kg-dry	T		<0.35 :	<0.35 :	<0.34 :	<0.37 :	<0.36 :	<0.35 :
Dimethylphthalate	mg/kg-dry	T		<0.35 :	<0.35 :	<0.34 :	<0.37 :	<0.36 :	<0.35 :
Di-n-Butyl phthalate	mg/kg-dry	T		<0.35 :	<0.35 :	<0.34 :	<0.37 :	<0.36 :	<0.35 :
Di-n-Octyl phthalate	mg/kg-dry	T		<0.35 :	<0.35 :	<0.34 :	<0.37 :	<0.36 :	<0.35 :
Fluoranthene	mg/kg-dry	T		<0.35 :	<0.35 :	<0.34 :	<0.37 J	0.017 J	<0.35 J

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Appendix A-7g
Soil - Random 0-24 inches
Validated Analytical Results

Parameter	Units	Exposure Area Fraction	Site ID / Sample Date / Sample ID		MSS1-5 10/14/2002 MSS1-5-T02N-SOL SS1		MSS1-6 10/15/2002 MSS1-6-T02N-SOL SS1		MSS1-7 10/14/2002 MSS1-7-T02N-SOL SS1		MSS1-8 10/13/2002 MSS1-8-T02N-SOL SS1		MSS1-9 10/14/2002 MSS1-9-T02N-SOL SS1		MSS2-1 10/13/2002 MSS2-1-T02N-SOL SS2	
Fluorene	mg/kg-dry	T			<0.35	:	<0.35	:	<0.34	:	<0.37	:	<0.36	:	<0.35	:
Hexachlorobenzene	mg/kg-dry	T			<0.35	:	<0.35	:	<0.34	:	<0.37	:	<0.36	:	<0.35	:
Hexachlorobutadiene	mg/kg-dry	T			<0.35	:	<0.35	:	<0.34	:	<0.37	:	<0.36	:	<0.35	:
Hexachlorocyclopentadiene	mg/kg-dry	T			<0.35	:	<0.35	:	<0.34	:	<0.37	:	<0.36	:	<0.35	:
Hexachloroethane	mg/kg-dry	T			<0.35	:	<0.35	:	<0.34	:	<0.37	:	<0.36	:	<0.35	:
Indeno(1,2,3-cd)pyrene	mg/kg-dry	T			<0.35	:	<0.35	:	<0.34	:	<0.37	:	<0.36	:	<0.35	:
Isophorone	mg/kg-dry	T			<0.35	:	<0.35	:	<0.34	:	<0.37	:	<0.36	:	<0.35	:
Naphthalene	mg/kg-dry	T			<0.35	:	<0.35	:	<0.34	:	<0.37	:	<0.36	:	<0.35	:
Nitrobenzene	mg/kg-dry	T			<0.35	:	<0.35	:	<0.34	:	<0.37	:	<0.36	:	<0.35	:
N-Nitrosodi-n-propylamine	mg/kg-dry	T			<0.35	:	<0.35	:	<0.34	:	<0.37	:	<0.36	:	<0.35	:
N-Nitrosodiphenylamine	mg/kg-dry	T			<0.35	:	<0.35	:	<0.34	:	<0.37	:	<0.36	:	<0.35	:
Pentachlorophenol	mg/kg-dry	T			<0.89	J	<0.87	J	<0.86	J	<0.93	:	<0.9	J	<0.87	:
Phenanthrene	mg/kg-dry	T			<0.35	:	<0.35	:	<0.34	:	<0.37	:	<0.36	:	<0.35	:
Phenol	mg/kg-dry	T			<0.35	:	<0.35	:	<0.34	:	<0.37	:	<0.36	:	<0.35	:
Pyrene	mg/kg-dry	T			<0.35	J	<0.35	:	<0.34	J	<0.37	:	<0.36	J	<0.35	:
Pesticides-PCBs																
Aroclor 1016	mg/kg-dry	T			<0.035	:	<0.035	:	<0.034	:	<0.037	:	<0.036	:	-	
Aroclor 1221	mg/kg-dry	T			<0.072	:	<0.07	:	<0.07	:	<0.075	:	<0.073	:	-	
Aroclor 1232	mg/kg-dry	T			<0.035	:	<0.035	:	<0.034	:	<0.037	:	<0.036	:	-	
Aroclor 1242	mg/kg-dry	T			<0.035	:	<0.035	:	<0.034	:	<0.037	:	<0.036	:	-	
Aroclor 1248	mg/kg-dry	T			<0.035	:	<0.035	:	<0.034	:	<0.037	:	<0.036	:	-	
Aroclor 1254	mg/kg-dry	T			0.94	J	0.16	J	0.36	J	<0.037	:	0.4	J	-	
Aroclor 1260	mg/kg-dry	T			<0.035	:	<0.035	:	<0.034	:	<0.037	:	<0.036	:	-	

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Appendix A-7g
Soil - Random 0-24 inches
Validated Analytical Results

Parameter	Units	Exposure Area Fraction	Site ID	MSS2-10	MSS2-2	MSS2-3	MSS2-4	MSS2-5	MSS2-6
			Sample Date	10/13/2002	10/14/2002	10/14/2002	10/13/2002	10/14/2002	10/13/2002
			Sample ID	MSS2-10-T02N-SOL	MSS2-2-T02N-SOL	MSS2-3-T02N-SOL	MSS2-4-T02N-SOL	MSS2-5-T02N-SOL	MSS2-6-T02N-SOL
			Exposure Area	SS2	SS2	SS2	SS2	SS2	SS2
General Chemistry									
Ammonia	mg/kg-dry	T		45. :	35.6 :	49.9 J	97.6 :	30. :	40.8 :
Chloride	mg/kg-dry	T		10.2 J	4.1 J	4.7 J	3.2 J	3.2 J	8.1 J
Fluoride	mg/kg-dry	T		7.4 J	2. J	0.41 J	0.32 J	0.91 J	0.37 J
Nitrate	mg/kg-dry	T		3.6 J	<2.2 J	2.3 J	2.5 J	2.4 J	3.4 J
Phosphorus	mg/kg-dry	T		630. J	739. J	496. :	1600. J	1250. J	1400. J
Sulfate	mg/kg-dry	T		4490. J	757. J	18.9 J	4. J	496. J	2080. J
Total Kjeldahl Nitrogen	mg/kg-dry	T		50.5 J	148. :	627. :	255. :	117. :	105. :
Total Organic Carbon	mg/kg-dry	T		<107. J	4500. J	16000. :	3340. J	2770. J	1160. J
Laboratory Parameters									
pH	SU	T		6.3 :	3.8 :	6.5 :	7.2 :	7.1 :	3.3 :
Solids, Percent	%	T		94.2 :	92.3 :	93.3 :	91.5 :	93.1 :	94.1 :
Specific Conductance	umhos/cm	T		900. :	313. :	23. :	23.2 :	406. :	1010. :
Geotechnical									
Organic Soils	%	T		1.82 J	4.19 J	4.93 J	4.23 :	2.55 J	3.41 :
Physical Properties									
Cation-Exchange Capacity	meq/100g	T		15.4 :	12. :	17.5 :	24.2 :	16.6 :	12.2 :
Sodium Absorption Ratio	ratio	T		0.02 :	0.1 :	0.35 :	0.12 :	0.08 :	0.05 :
Metals									
Aluminum	mg/kg-dry	T		9470. :	5530. :	6050. :	19700. :	13200. :	5300. :
Antimony	mg/kg-dry	T		<0.21 J	<0.27 J	<0.18 :	<0.17 J	<0.26 J	<0.18 J
Arsenic	mg/kg-dry	T		2.7 :	7.1 :	4.4 :	6.9 :	7.1 :	1.1 :
Barium	mg/kg-dry	T		188. :	244. :	206. :	202. :	239. :	444. :
Beryllium	mg/kg-dry	T		3.8 :	0.3 :	0.36 :	2. :	1. :	0.2 :
Boron	mg/kg-dry	T		5.8 :	2.4 :	5. J	<0.42 J	2.6 :	<0.42 J
Cadmium	mg/kg-dry	T		1.6 :	<0.052 :	0.39 J	0.042 J	0.13 :	<0.026 J
Calcium	mg/kg-dry	T		16300. :	870. :	2250. :	5070. :	7700. :	2060. :
Chromium	mg/kg-dry	T		7.4 :	9.1 :	9.5 :	54.6 :	40.1 :	10.5 :
Cobalt	mg/kg-dry	T		9.8 :	0.78 :	2.8 :	31. :	11.6 :	2.1 :
Copper	mg/kg-dry	T		103. :	41.4 :	20.6 :	318. :	54.1 :	18.5 :
Iron	mg/kg-dry	T		14400. :	28200. :	18600. :	37700. :	30500. :	24900. :
Lead	mg/kg-dry	T		130. :	136. :	68.5 :	39.3 :	32. :	37.3 :
Magnesium	mg/kg-dry	T		2030. :	1590. :	1660. :	8800. :	6850. :	1760. :
Manganese	mg/kg-dry	T		742. J	117. J	342. :	1630. J	486. J	138. J

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T = Total Fraction

Appendix A-7g
Soil - Random 0-24 inches
Validated Analytical Results

Parameter	Units	Exposure Area Fraction	Site ID	MSS2-10		MSS2-2		MSS2-3		MSS2-4		MSS2-5		MSS2-6	
			Sample Date	10/13/2002		10/14/2002		10/14/2002		10/13/2002		10/14/2002		10/13/2002	
			Sample ID	MSS2-10-T02N-SOL		MSS2-2-T02N-SOL		MSS2-3-T02N-SOL		MSS2-4-T02N-SOL		MSS2-5-T02N-SOL		MSS2-6-T02N-SOL	
			Exposure Area	SS2		SS2		SS2		SS2		SS2		SS2	
Mercury	mg/kg-dry	T		<0.017	:	<0.018	:	0.019	:	<0.018	:	<0.018	:	<0.018	:
Molybdenum	mg/kg-dry	T		474.	:	25.	:	12.3	:	9.1	:	163.	:	4.6	:
Nickel	mg/kg-dry	T		16.2	J	4.	J	6.4	:	53.1	J	27.9	J	6.4	J
Potassium	mg/kg-dry	T		2090.	J	3900.	J	2720.	:	2080.	J	2930.	J	2390.	J
Selenium	mg/kg-dry	T		<0.85	J	1.	J	0.43	:	0.99	J	1.3	J	1.3	J
Silver	mg/kg-dry	T		1.1	:	1.1	:	0.59	J	0.85	:	<0.44	:	0.61	:
Sodium	mg/kg-dry	T		<194.	:	207.	:	135.	:	<46.8	:	149.	:	400.	:
Thallium	mg/kg-dry	T		<0.1	:	0.32	:	0.14	:	0.24	:	0.26	:	0.19	:
Vanadium	mg/kg-dry	T		13.6	:	14.2	:	13.7	:	50.9	:	41.	:	15.3	:
Zinc	mg/kg-dry	T		234.	J	30.3	J	32.	:	120.	J	70.9	J	22.8	J
Volatile Organics															
1,1,1-Trichloroethane	mg/kg-dry	T		<0.007	:	<0.007	:	<0.01	:	<0.009	:	<0.011	:	<0.012	:
1,1,2,2-Tetrachloroethane	mg/kg-dry	T		<0.007	:	<0.007	:	<0.01	:	<0.009	:	<0.011	:	<0.012	:
1,1,2-Trichloro-1,2,2-trifluoroethane	mg/kg-dry	T		<0.007	:	<0.007	:	<0.01	:	<0.009	:	<0.011	:	<0.012	:
1,1,2-Trichloroethane	mg/kg-dry	T		<0.007	:	<0.007	:	<0.01	:	<0.009	:	<0.011	:	<0.012	:
1,1-Dichloroethane	mg/kg-dry	T		<0.007	:	<0.007	:	<0.01	:	<0.009	:	<0.011	:	<0.012	:
1,1-Dichloroethene	mg/kg-dry	T		<0.007	:	<0.007	:	<0.01	:	<0.009	:	<0.011	:	<0.012	:
1,2,4-Trichlorobenzene	mg/kg-dry	T		<0.007	:	<0.007	:	<0.01	:	<0.009	:	<0.011	:	<0.012	:
1,2-Dibromo-3-chloropropane	mg/kg-dry	T		<0.007	:	<0.007	:	<0.01	:	<0.009	:	<0.011	:	<0.012	:
1,2-Dichlorobenzene	mg/kg-dry	T		<0.007	:	<0.007	:	<0.01	:	<0.009	:	<0.011	:	<0.012	:
1,2-Dichloroethane	mg/kg-dry	T		<0.007	:	<0.007	:	<0.01	:	<0.009	:	<0.011	:	<0.012	:
1,2-Dichloroethene (total)	mg/kg-dry	T		<0.007	:	<0.007	:	<0.01	:	<0.009	J	<0.011	:	<0.012	:
1,2-Dichloropropane	mg/kg-dry	T		<0.007	:	<0.007	:	<0.01	:	<0.009	:	<0.011	:	<0.012	:
1,3-Dichlorobenzene	mg/kg-dry	T		<0.007	:	<0.007	:	<0.01	:	<0.009	:	<0.011	:	<0.012	:
1,4-Dichlorobenzene	mg/kg-dry	T		<0.007	:	<0.007	:	<0.01	:	<0.009	:	<0.011	:	<0.012	:
2-Butanone	mg/kg-dry	T		<0.007	J	<0.007	:	<0.01	:	<0.009	:	<0.011	:	<0.012	:
2-Hexanone	mg/kg-dry	T		<0.007	J	<0.007	:	<0.01	:	<0.009	:	<0.011	:	<0.012	:
4-Methyl-2-pentanone	mg/kg-dry	T		<0.007	J	<0.007	:	<0.01	:	<0.009	:	<0.011	:	<0.012	:
Acetone	mg/kg-dry	T		<0.007	:	<0.007	J	0.01	:	<0.009	J	<0.011	J	<0.012	J
Benzene	mg/kg-dry	T		<0.007	:	<0.007	:	<0.01	:	<0.009	:	<0.011	:	<0.012	:
Bromodichloromethane	mg/kg-dry	T		<0.007	:	<0.007	:	<0.01	:	<0.009	:	<0.011	:	<0.012	:
Bromoform	mg/kg-dry	T		<0.007	:	<0.007	:	<0.01	:	<0.009	:	<0.011	:	<0.012	:
Bromomethane	mg/kg-dry	T		<0.007	:	<0.007	:	<0.01	:	<0.009	:	<0.011	:	<0.012	:
Carbon disulfide	mg/kg-dry	T		<0.007	:	<0.007	:	<0.01	:	<0.009	:	<0.011	:	<0.012	:

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T = Total Fraction

Appendix A-7g
Soil - Random 0-24 inches
Validated Analytical Results

Parameter	Units	Exposure Area Fraction	Site ID / Sample Date / Sample ID		MSS2-10 10/13/2002 MSS2-10-T02N-SOL SS2		MSS2-2 10/14/2002 MSS2-2-T02N-SOL SS2		MSS2-3 10/14/2002 MSS2-3-T02N-SOL SS2		MSS2-4 10/13/2002 MSS2-4-T02N-SOL SS2		MSS2-5 10/14/2002 MSS2-5-T02N-SOL SS2		MSS2-6 10/13/2002 MSS2-6-T02N-SOL SS2	
Carbon tetrachloride	mg/kg-dry	T		<0.007	:	<0.007	:	<0.01	:	<0.009	:	<0.011	:	<0.012	:
Chlorobenzene	mg/kg-dry	T		<0.007	:	<0.007	:	<0.01	J	<0.009	:	<0.011	:	<0.012	:
Chloroethane	mg/kg-dry	T		<0.007	:	<0.007	:	<0.01	:	<0.009	:	<0.011	:	<0.012	:
Chloroform	mg/kg-dry	T		<0.007	:	<0.007	:	<0.01	:	<0.009	:	<0.011	:	<0.012	:
Chloromethane	mg/kg-dry	T		<0.007	:	<0.007	:	<0.01	:	<0.009	:	<0.011	:	<0.012	:
cis-1,2-Dichloroethene	mg/kg-dry	T		<0.007	:	<0.007	:	<0.01	:	<0.009	:	<0.011	:	<0.012	:
cis-1,3-Dichloropropene	mg/kg-dry	T		<0.007	:	<0.007	:	<0.01	:	<0.009	:	<0.011	:	<0.012	:
Dibromochloromethane	mg/kg-dry	T		<0.007	:	<0.007	:	<0.01	:	<0.009	:	<0.011	:	<0.012	:
Dichlorodifluoromethane	mg/kg-dry	T		<0.007	J	<0.007	:	<0.01	:	<0.009	:	<0.011	:	<0.012	:
Ethylbenzene	mg/kg-dry	T		<0.007	:	<0.007	:	<0.01	:	<0.009	:	<0.011	:	<0.012	:
Methylene chloride	mg/kg-dry	T		<0.007	:	<0.007	:	<0.01	:	<0.009	:	<0.011	:	<0.012	:
Styrene	mg/kg-dry	T		<0.007	:	<0.007	:	<0.01	:	<0.009	:	<0.011	:	<0.012	:
Tetrachloroethene	mg/kg-dry	T		<0.007	:	<0.007	:	<0.01	:	<0.009	:	<0.011	:	<0.012	:
Toluene	mg/kg-dry	T		<0.007	:	<0.007	:	<0.01	J	<0.009	:	<0.011	:	<0.012	:
Total Xylene	mg/kg-dry	T		<0.007	:	<0.007	:	<0.01	:	<0.009	:	<0.011	:	<0.012	:
trans-1,2-Dichloroethene	mg/kg-dry	T		<0.007	:	<0.007	J	<0.01	J	<0.009	:	<0.011	J	<0.012	J
trans-1,3-Dichloropropene	mg/kg-dry	T		<0.007	:	<0.007	:	<0.01	:	<0.009	:	<0.011	:	<0.012	:
Trichloroethene	mg/kg-dry	T		<0.007	:	<0.007	:	<0.01	:	<0.009	:	<0.011	:	<0.012	:
Trichlorofluoromethane	mg/kg-dry	T		<0.007	J	<0.007	:	<0.01	:	<0.009	:	<0.011	:	<0.012	:
Vinyl chloride	mg/kg-dry	T		<0.007	J	<0.007	:	<0.01	:	<0.009	:	<0.011	:	<0.012	:
Semi-Volatile Organics																
1,1`-Biphenyl	mg/kg-dry	T		<0.35	J	<0.36	:	<0.35	:	<0.36	:	<0.35	:	<0.35	:
2,4,5-Trichlorophenol	mg/kg-dry	T		<0.88	:	<0.9	:	<0.89	:	<0.9	:	<0.89	:	<0.88	:
2,4,6-Trichlorophenol	mg/kg-dry	T		<0.35	:	<0.36	:	<0.35	:	<0.36	:	<0.35	:	<0.35	:
2,4-Dichlorophenol	mg/kg-dry	T		<0.35	:	<0.36	:	<0.35	:	<0.36	:	<0.35	:	<0.35	:
2,4-Dimethylphenol	mg/kg-dry	T		<0.35	:	<0.36	:	<0.35	:	<0.36	:	<0.35	:	<0.35	:
2,4-Dinitrophenol	mg/kg-dry	T		<0.88	:	<0.9	:	<0.89	:	<0.9	:	<0.89	:	<0.88	:
2,4-Dinitrotoluene	mg/kg-dry	T		<0.35	:	<0.36	:	<0.35	:	<0.36	:	<0.35	:	<0.35	:
2,6-Dinitrotoluene	mg/kg-dry	T		<0.35	:	<0.36	:	<0.35	:	<0.36	:	<0.35	:	<0.35	:
2-Chloronaphthalene	mg/kg-dry	T		<0.35	:	<0.36	:	<0.35	:	<0.36	J	<0.35	:	<0.35	J
2-Chlorophenol	mg/kg-dry	T		<0.35	:	<0.36	:	<0.35	:	<0.36	:	<0.35	:	<0.35	:
2-Methylnaphthalene	mg/kg-dry	T		<0.35	:	<0.36	:	<0.35	:	<0.36	:	<0.35	:	<0.35	:
2-Methylphenol	mg/kg-dry	T		<0.35	:	<0.36	:	<0.35	:	<0.36	:	<0.35	:	<0.35	:
2-Nitroaniline	mg/kg-dry	T		<0.88	:	<0.9	:	<0.89	:	<0.9	:	<0.89	:	<0.88	:

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T = Total Fraction

Appendix A-7g
Soil - Random 0-24 inches
Validated Analytical Results

Parameter	Units	Exposure Area Fraction	Site ID / Sample Date / Sample ID					
			MSS2-10 10/13/2002 MSS2-10-T02N-SOL SS2	MSS2-2 10/14/2002 MSS2-2-T02N-SOL SS2	MSS2-3 10/14/2002 MSS2-3-T02N-SOL SS2	MSS2-4 10/13/2002 MSS2-4-T02N-SOL SS2	MSS2-5 10/14/2002 MSS2-5-T02N-SOL SS2	MSS2-6 10/13/2002 MSS2-6-T02N-SOL SS2
2-Nitrophenol	mg/kg-dry	T	<0.35 :	<0.36 :	<0.35 :	<0.36 :	<0.35 :	<0.35 :
3,3-Dichlorobenzidine	mg/kg-dry	T	<0.35 :	<0.36 :	<0.35 :	<0.36 :	<0.35 :	<0.35 :
3-Nitroaniline	mg/kg-dry	T	<0.88 :	<0.9 :	<0.89 :	<0.9 :	<0.89 :	<0.88 :
4,6-Dinitro-2-methylphenol	mg/kg-dry	T	<0.88 :	<0.9 :	<0.89 :	<0.9 :	<0.89 :	<0.88 :
4-Bromophenyl phenyl ether	mg/kg-dry	T	<0.35 :	<0.36 :	<0.35 :	<0.36 :	<0.35 :	<0.35 :
4-Chloro-3-methylphenol	mg/kg-dry	T	<0.35 :	<0.36 :	<0.35 :	<0.36 :	<0.35 :	<0.35 :
4-Chloroaniline	mg/kg-dry	T	<0.35 :	<0.36 :	<0.35 :	<0.36 :	<0.35 :	<0.35 :
4-Chlorophenyl phenyl ether	mg/kg-dry	T	<0.35 :	<0.36 :	<0.35 :	<0.36 :	<0.35 :	<0.35 :
4-Methylphenol	mg/kg-dry	T	<0.35 :	<0.36 :	<0.35 :	<0.36 :	<0.35 :	<0.35 :
4-Nitroaniline	mg/kg-dry	T	<0.88 :	<0.9 :	<0.89 :	<0.9 :	<0.89 :	<0.88 :
4-Nitrophenol	mg/kg-dry	T	<0.88 :	<0.9 :	<0.89 J	<0.9 :	<0.89 :	<0.88 :
Acenaphthene	mg/kg-dry	T	<0.35 :	<0.36 :	<0.35 :	<0.36 :	<0.35 :	<0.35 :
Acenaphthylene	mg/kg-dry	T	<0.35 :	<0.36 :	<0.35 :	<0.36 :	<0.35 :	<0.35 :
Anthracene	mg/kg-dry	T	<0.35 :	<0.36 :	<0.35 J	<0.36 :	<0.35 :	<0.35 :
Benzaldehyde	mg/kg-dry	T	<0.35 J	<0.36 J	<2.4 :	<0.36 J	<0.35 J	<0.35 J
Benzo(a)anthracene	mg/kg-dry	T	<0.35 :	<0.36 :	<0.35 :	<0.36 :	<0.35 :	<0.35 :
Benzo(a)pyrene	mg/kg-dry	T	<0.35 :	<0.36 :	<0.35 :	<0.36 :	<0.35 :	<0.35 :
Benzo(b)fluoranthene	mg/kg-dry	T	<0.35 :	<0.36 :	<0.35 :	<0.36 :	<0.35 :	<0.35 :
Benzo(g,h,i)perylene	mg/kg-dry	T	<0.35 :	<0.36 :	<0.35 :	<0.36 :	<0.35 :	<0.35 :
Benzo(k)fluoranthene	mg/kg-dry	T	<0.35 :	<0.36 :	<0.35 :	<0.36 :	<0.35 :	<0.35 :
Bis(2-chloroethoxy)methane	mg/kg-dry	T	<0.35 :	<0.36 :	<0.35 :	<0.36 :	<0.35 :	<0.35 :
Bis(2-chloroethyl)ether	mg/kg-dry	T	<0.35 :	<0.36 :	<0.35 :	<0.36 :	<0.35 :	<0.35 :
Bis(2-ethylhexyl)phthalate	mg/kg-dry	T	<0.35 :	<0.36 :	<0.35 :	<0.36 :	<0.35 :	<0.35 :
Butyl benzyl phthalate	mg/kg-dry	T	<0.35 J	<0.36 :	<0.35 :	<0.36 :	<0.35 :	<0.35 :
Carbazole	mg/kg-dry	T	<0.35 :	<0.36 :	<0.35 :	<0.36 :	<0.35 :	<0.35 :
Chrysene	mg/kg-dry	T	<0.35 :	<0.36 :	<0.35 :	<0.36 :	<0.35 :	<0.35 :
Dibenz(a,h)anthracene	mg/kg-dry	T	<0.35 :	<0.36 J	<0.35 :	<0.36 :	<0.35 J	<0.35 :
Dibenzofuran	mg/kg-dry	T	<0.35 :	<0.36 :	<0.35 :	<0.36 :	<0.35 :	<0.35 :
Dichlorodiisopropyl ether	mg/kg-dry	T	<0.35 :	<0.36 :	<0.35 :	<0.36 :	<0.35 :	<0.35 :
Diethylphthalate	mg/kg-dry	T	<0.35 :	<0.36 :	<0.35 :	<0.36 :	<0.35 :	<0.35 :
Dimethylphthalate	mg/kg-dry	T	<0.35 :	<0.36 :	<0.35 :	<0.36 :	<0.35 :	<0.35 :
Di-n-Butyl phthalate	mg/kg-dry	T	<0.35 :	<0.36 :	<0.35 :	<0.36 :	<0.35 :	<0.35 :
Di-n-Octyl phthalate	mg/kg-dry	T	<0.35 :	<0.36 :	<0.35 :	<0.36 :	<0.35 :	<0.35 :
Fluoranthene	mg/kg-dry	T	<0.35 :	<0.36 :	<0.35 :	<0.36 J	<0.35 :	<0.35 J

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Appendix A-7g
Soil - Random 0-24 inches
Validated Analytical Results

Parameter	Units	Site ID / Sample Date / Sample ID / Exposure Area / Fraction	MSS2-10 10/13/2002 MSS2-10-T02N-SOL SS2 T		MSS2-2 10/14/2002 MSS2-2-T02N-SOL SS2 T		MSS2-3 10/14/2002 MSS2-3-T02N-SOL SS2 T		MSS2-4 10/13/2002 MSS2-4-T02N-SOL SS2 T		MSS2-5 10/14/2002 MSS2-5-T02N-SOL SS2 T		MSS2-6 10/13/2002 MSS2-6-T02N-SOL SS2 T	
Fluorene	mg/kg-dry	T	<0.35	:	<0.36	:	<0.35	:	<0.36	:	<0.35	:	<0.35	:
Hexachlorobenzene	mg/kg-dry	T	<0.35	:	<0.36	:	<0.35	:	<0.36	:	<0.35	:	<0.35	:
Hexachlorobutadiene	mg/kg-dry	T	<0.35	:	<0.36	:	<0.35	:	<0.36	:	<0.35	:	<0.35	:
Hexachlorocyclopentadiene	mg/kg-dry	T	<0.35	:	<0.36	J	<0.35	:	<0.36	:	<0.35	J	<0.35	:
Hexachloroethane	mg/kg-dry	T	<0.35	:	<0.36	:	<0.35	:	<0.36	:	<0.35	:	<0.35	:
Indeno(1,2,3-cd)pyrene	mg/kg-dry	T	<0.35	:	<0.36	:	<0.35	:	<0.36	:	<0.35	:	<0.35	:
Isophorone	mg/kg-dry	T	<0.35	:	<0.36	:	<0.35	:	<0.36	:	<0.35	:	<0.35	:
Naphthalene	mg/kg-dry	T	<0.35	:	<0.36	:	<0.35	:	<0.36	:	<0.35	:	<0.35	:
Nitrobenzene	mg/kg-dry	T	<0.35	:	<0.36	:	<0.35	:	<0.36	:	<0.35	:	<0.35	:
N-Nitrosodi-n-propylamine	mg/kg-dry	T	<0.35	:	<0.36	:	<0.35	:	<0.36	:	<0.35	:	<0.35	:
N-Nitrosodiphenylamine	mg/kg-dry	T	<0.35	:	<0.36	:	<0.35	:	<0.36	:	<0.35	:	<0.35	:
Pentachlorophenol	mg/kg-dry	T	<0.88	J	<0.9	J	<0.89	:	<0.9	:	<0.89	J	<0.88	:
Phenanthrene	mg/kg-dry	T	<0.35	:	<0.36	:	<0.35	:	<0.36	:	<0.35	:	<0.35	:
Phenol	mg/kg-dry	T	<0.35	:	<0.36	:	<0.35	:	<0.36	:	<0.35	:	<0.35	:
Pyrene	mg/kg-dry	T	<0.35	J	<0.36	:	<0.35	:	<0.36	:	<0.35	:	<0.35	:

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Appendix A-7g
Soil - Random 0-24 inches
Validated Analytical Results

Parameter	Units	Exposure Area Fraction	Site ID	MSS2-7		MSS2-8		MSS2-9		MSS3-1		MSS3-10		MSS3-2	
			Sample Date	10/13/2002		10/14/2002		10/13/2002		9/27/2002		10/1/2002		9/27/2002	
			Sample ID	MSS2-7-T02N-SOL		MSS2-8-T02N-SOL		MSS2-9-T02N-SOL		MSS3-1-T02N-SOL		MSS3-10-T02N-SOL		MSS3-2-T02N-SOL	
			Exposure Area	SS2		SS2		SS2		SS3		SS3		SS3	
General Chemistry															
Ammonia	mg/kg-dry	T		56.	:	36.5	:	59.7	:	133.	:	84.5	:	144.	:
Chloride	mg/kg-dry	T		10.1	J	13.7	J	2.8	J	1.1	:	<28.9	:	<5.6	:
Fluoride	mg/kg-dry	T		0.32	J	11.6	J	0.33	J	0.18	J	0.12	J	-	
Nitrate	mg/kg-dry	T		<2.3	J	<2.3	J	3.	J	<1.1	J	<1.2	J	4.2	J
Phosphorus	mg/kg-dry	T		1660.	J	219.	J	69.7	J	137.	J	512.	J	113.	J
Sulfate	mg/kg-dry	T		1200.	J	4310.	J	24.8	J	2.2	:	<116.	:	1.8	:
Total Kjeldahl Nitrogen	mg/kg-dry	T		43.3	J	192.	:	403.	J	817.	:	939.	:	1010.	:
Total Organic Carbon	mg/kg-dry	T		1250.	J	3670.	J	8310.	J	5760.	J	62400.	J	24700.	J
Laboratory Parameters															
pH	SU	T		3.6	:	4.2	:	6.5	:	4.2	:	6.2	:	7.2	:
Solids, Percent	%	T		87.4	:	90.1	:	90.5	:	91.4	:	86.8	:	90.2	:
Specific Conductance	umhos/cm	T		1110.	:	1380.	:	29.4	:	118.	:	72.9	:	34.7	:
Geotechnical															
Organic Soils	%	T		4.43	J	4.1	J	3.9	J	5.35	:	8.18	:	4.57	:
Physical Properties															
Cation-Exchange Capacity	meq/100g	T		27.8	:	22.6	:	24.1	:	23.2	:	17.6	:	19.9	:
Sodium Absorption Ratio	ratio	T		0.03	:	0.05	:	0.15	:	0.07	:	0.1	:	1.56	:
Metals															
Aluminum	mg/kg-dry	T		23800.	:	15100.	J	22700.	:	2140.	:	4350.	:	6900.	:
Antimony	mg/kg-dry	T		<0.23	J	<0.26	J	<0.22	J	<0.49	J	0.5	J	0.13	J
Arsenic	mg/kg-dry	T		3.1	:	2.8	:	3.4	:	9.6	:	1.4	:	4.9	:
Barium	mg/kg-dry	T		234.	:	213.	J	288.	:	5.6	:	292.	:	120.	:
Beryllium	mg/kg-dry	T		0.84	:	0.94	J	1.5	:	0.12	:	0.19	:	0.41	:
Boron	mg/kg-dry	T		12.	J	2.5	:	11.1	J	<0.55	:	<1.3	:	5.5	:
Cadmium	mg/kg-dry	T		<0.028	J	0.16	:	<0.026	J	0.11	:	<0.021	:	0.33	:
Calcium	mg/kg-dry	T		1760.	:	6570.	J	7190.	:	444.	:	1730.	:	3140.	:
Chromium	mg/kg-dry	T		91.3	:	53.5	J	64.8	:	<0.53	:	5.7	:	6.8	:
Cobalt	mg/kg-dry	T		7.9	:	12.5	J	28.6	:	0.41	:	1.9	:	3.2	:
Copper	mg/kg-dry	T		58.4	:	70.6	J	72.4	:	2.9	:	7.1	:	5.9	:
Iron	mg/kg-dry	T		42600.	:	35800.	J	41200.	:	3130.	:	12200.	:	14200.	:
Lead	mg/kg-dry	T		29.9	:	42.3	J	40.6	:	11.5	:	21.2	:	30.7	:
Magnesium	mg/kg-dry	T		11800.	:	9350.	J	13700.	:	181.	:	1030.	:	1450.	:
Manganese	mg/kg-dry	T		422.	J	522.	J	1070.	J	48.5	J	110.	J	536.	J

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Appendix A-7g
Soil - Random 0-24 inches
Validated Analytical Results

Parameter	Units	Exposure Area Fraction	Site ID	MSS2-7		MSS2-8		MSS2-9		MSS3-1		MSS3-10		MSS3-2	
			Sample Date	10/13/2002		10/14/2002		10/13/2002		9/27/2002		10/1/2002		9/27/2002	
			Sample ID	MSS2-7-T02N-SOL		MSS2-8-T02N-SOL		MSS2-9-T02N-SOL		MSS3-1-T02N-SOL		MSS3-10-T02N-SOL		MSS3-2-T02N-SOL	
			Exposure Area	SS2		SS2		SS2		SS3		SS3		SS3	
Mercury	mg/kg-dry	T		<0.019	:	<0.018	:	<0.018	:	0.037	:	<0.018	:	<0.018	:
Molybdenum	mg/kg-dry	T		1.9	:	357.	J	22.6	:	2.	:	7.6	:	10.1	:
Nickel	mg/kg-dry	T		47.	J	37.4	J	51.8	J	<0.21	J	3.2	J	4.1	J
Potassium	mg/kg-dry	T		7360.	J	4110.	J	5620.	J	345.	J	1770.	J	2340.	J
Selenium	mg/kg-dry	T		2.6	J	1.1	J	<1.3	J	<0.35	J	0.75	J	0.42	J
Silver	mg/kg-dry	T		<0.13	:	0.53	:	0.27	:	<0.43	:	<0.1	:	<0.49	:
Sodium	mg/kg-dry	T		<211.	:	<68.3	:	<47.6	:	<80.2	:	<130.	:	<91.6	:
Thallium	mg/kg-dry	T		0.61	:	0.33	:	0.29	:	0.27	:	0.29	:	0.2	:
Vanadium	mg/kg-dry	T		65.8	:	51.1	J	67.8	:	0.64	:	11.2	:	18.6	:
Zinc	mg/kg-dry	T		87.	J	85.4	J	109.	J	24.	J	13.3	J	55.3	J
Volatile Organics															
1,1,1-Trichloroethane	mg/kg-dry	T		<0.011	:	<0.011	:	<0.009	:	-		-		-	
1,1,2,2-Tetrachloroethane	mg/kg-dry	T		<0.011	:	<0.011	:	<0.009	:	-		-		-	
1,1,2-Trichloro-1,2,2-trifluoroethane	mg/kg-dry	T		<0.011	:	<0.011	:	<0.009	:	-		-		-	
1,1,2-Trichloroethane	mg/kg-dry	T		<0.011	:	<0.011	:	<0.009	:	-		-		-	
1,1-Dichloroethane	mg/kg-dry	T		<0.011	:	<0.011	:	<0.009	:	-		-		-	
1,1-Dichloroethene	mg/kg-dry	T		<0.011	:	<0.011	:	<0.009	:	-		-		-	
1,2,4-Trichlorobenzene	mg/kg-dry	T		<0.011	:	<0.011	:	<0.009	:	-		-		-	
1,2-Dibromo-3-chloropropane	mg/kg-dry	T		<0.011	:	<0.011	:	<0.009	:	-		-		-	
1,2-Dichlorobenzene	mg/kg-dry	T		<0.011	:	<0.011	:	<0.009	:	-		-		-	
1,2-Dichloroethane	mg/kg-dry	T		<0.011	:	<0.011	:	<0.009	:	-		-		-	
1,2-Dichloroethene (total)	mg/kg-dry	T		<0.011	:	<0.011	:	<0.009	:	-		-		-	
1,2-Dichloropropane	mg/kg-dry	T		<0.011	:	<0.011	:	<0.009	:	-		-		-	
1,3-Dichlorobenzene	mg/kg-dry	T		<0.011	:	<0.011	:	<0.009	:	-		-		-	
1,4-Dichlorobenzene	mg/kg-dry	T		<0.011	:	<0.011	:	<0.009	:	-		-		-	
2-Butanone	mg/kg-dry	T		<0.011	J	<0.011	:	<0.009	J	-		-		-	
2-Hexanone	mg/kg-dry	T		<0.011	J	<0.011	:	<0.009	J	-		-		-	
4-Methyl-2-pentanone	mg/kg-dry	T		<0.011	J	<0.011	:	<0.009	J	-		-		-	
Acetone	mg/kg-dry	T		<0.011	:	<0.011	J	0.002	J	-		-		-	
Benzene	mg/kg-dry	T		<0.011	:	<0.011	:	<0.009	:	-		-		-	
Bromodichloromethane	mg/kg-dry	T		<0.011	:	<0.011	:	<0.009	:	-		-		-	
Bromoform	mg/kg-dry	T		<0.011	:	<0.011	:	<0.009	:	-		-		-	
Bromomethane	mg/kg-dry	T		<0.011	:	<0.011	:	<0.009	:	-		-		-	
Carbon disulfide	mg/kg-dry	T		<0.011	:	<0.011	:	<0.009	:	-		-		-	

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Appendix A-7g
Soil - Random 0-24 inches
Validated Analytical Results

Parameter	Units	Exposure Area Fraction	Site ID / Sample Date / Sample ID		MSS2-7 10/13/2002 MSS2-7-T02N-SOL SS2		MSS2-8 10/14/2002 MSS2-8-T02N-SOL SS2		MSS2-9 10/13/2002 MSS2-9-T02N-SOL SS2		MSS3-1 9/27/2002 MSS3-1-T02N-SOL SS3	MSS3-10 10/1/2002 MSS3-10-T02N-SOL SS3	MSS3-2 9/27/2002 MSS3-2-T02N-SOL SS3
Carbon tetrachloride	mg/kg-dry	T		<0.011	:	<0.011	:	<0.009	:	-	-	-
Chlorobenzene	mg/kg-dry	T		<0.011	:	<0.011	:	<0.009	:	-	-	-
Chloroethane	mg/kg-dry	T		<0.011	:	<0.011	:	<0.009	:	-	-	-
Chloroform	mg/kg-dry	T		<0.011	:	<0.011	:	<0.009	:	-	-	-
Chloromethane	mg/kg-dry	T		<0.011	:	<0.011	:	<0.009	:	-	-	-
cis-1,2-Dichloroethene	mg/kg-dry	T		<0.011	:	<0.011	:	<0.009	:	-	-	-
cis-1,3-Dichloropropene	mg/kg-dry	T		<0.011	:	<0.011	:	<0.009	:	-	-	-
Dibromochloromethane	mg/kg-dry	T		<0.011	:	<0.011	:	<0.009	:	-	-	-
Dichlorodifluoromethane	mg/kg-dry	T		<0.011	J	<0.011	:	<0.009	J	-	-	-
Ethylbenzene	mg/kg-dry	T		<0.011	:	<0.011	:	<0.009	:	-	-	-
Methylene chloride	mg/kg-dry	T		<0.011	:	<0.011	:	<0.009	:	-	-	-
Styrene	mg/kg-dry	T		<0.011	:	<0.011	:	<0.009	:	-	-	-
Tetrachloroethene	mg/kg-dry	T		<0.011	:	<0.011	:	<0.009	:	-	-	-
Toluene	mg/kg-dry	T		<0.011	:	<0.011	:	<0.009	J	-	-	-
Total Xylene	mg/kg-dry	T		<0.011	:	<0.011	:	<0.009	:	-	-	-
trans-1,2-Dichloroethene	mg/kg-dry	T		<0.011	:	<0.011	J	<0.009	:	-	-	-
trans-1,3-Dichloropropene	mg/kg-dry	T		<0.011	:	<0.011	:	<0.009	:	-	-	-
Trichloroethene	mg/kg-dry	T		<0.011	:	<0.011	:	<0.009	:	-	-	-
Trichlorofluoromethane	mg/kg-dry	T		<0.011	J	<0.011	:	<0.009	J	-	-	-
Vinyl chloride	mg/kg-dry	T		<0.011	J	<0.011	:	<0.009	J	-	-	-
Semi-Volatile Organics												
1,1`-Biphenyl	mg/kg-dry	T		<0.38	J	<0.37	:	<0.37	J	-	-	-
2,4,5-Trichlorophenol	mg/kg-dry	T		<0.95	:	<0.92	:	<0.92	:	-	-	-
2,4,6-Trichlorophenol	mg/kg-dry	T		<0.38	:	<0.37	:	<0.37	:	-	-	-
2,4-Dichlorophenol	mg/kg-dry	T		<0.38	:	<0.37	:	<0.37	:	-	-	-
2,4-Dimethylphenol	mg/kg-dry	T		<0.38	:	<0.37	:	<0.37	:	-	-	-
2,4-Dinitrophenol	mg/kg-dry	T		<0.95	:	<0.92	:	<0.92	:	-	-	-
2,4-Dinitrotoluene	mg/kg-dry	T		<0.38	:	<0.37	:	<0.37	:	-	-	-
2,6-Dinitrotoluene	mg/kg-dry	T		<0.38	:	<0.37	:	<0.37	:	-	-	-
2-Chloronaphthalene	mg/kg-dry	T		<0.38	:	<0.37	:	<0.37	:	-	-	-
2-Chlorophenol	mg/kg-dry	T		<0.38	:	<0.37	:	<0.37	:	-	-	-
2-Methylnaphthalene	mg/kg-dry	T		<0.38	:	<0.37	:	<0.37	:	-	-	-
2-Methylphenol	mg/kg-dry	T		<0.38	:	<0.37	:	<0.37	:	-	-	-
2-Nitroaniline	mg/kg-dry	T		<0.95	:	<0.92	:	<0.92	:	-	-	-

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Appendix A-7g
Soil - Random 0-24 inches
Validated Analytical Results

Parameter	Units	Exposure Area Fraction	Site ID	MSS2-7		MSS2-8		MSS2-9		MSS3-1	MSS3-10	MSS3-2
			Sample Date	10/13/2002		10/14/2002		10/13/2002		9/27/2002	10/1/2002	9/27/2002
			Sample ID	MSS2-7-T02N-SOL		MSS2-8-T02N-SOL		MSS2-9-T02N-SOL		MSS3-1-T02N-SOL	MSS3-10-T02N-SOL	MSS3-2-T02N-SOL
			Exposure Area	SS2		SS2		SS2		SS3	SS3	SS3
2-Nitrophenol	mg/kg-dry	T		<0.38	:	<0.37	:	<0.37	:	-	-	-
3,3-Dichlorobenzidine	mg/kg-dry	T		<0.38	:	<0.37	:	<0.37	:	-	-	-
3-Nitroaniline	mg/kg-dry	T		<0.95	:	<0.92	:	<0.92	:	-	-	-
4,6-Dinitro-2-methylphenol	mg/kg-dry	T		<0.95	:	<0.92	:	<0.92	:	-	-	-
4-Bromophenyl phenyl ether	mg/kg-dry	T		<0.38	:	<0.37	:	<0.37	:	-	-	-
4-Chloro-3-methylphenol	mg/kg-dry	T		<0.38	:	<0.37	:	<0.37	:	-	-	-
4-Chloroaniline	mg/kg-dry	T		<0.38	:	<0.37	:	<0.37	:	-	-	-
4-Chlorophenyl phenyl ether	mg/kg-dry	T		<0.38	:	<0.37	:	<0.37	:	-	-	-
4-Methylphenol	mg/kg-dry	T		<0.38	:	<0.37	:	<0.37	:	-	-	-
4-Nitroaniline	mg/kg-dry	T		<0.95	:	<0.92	:	<0.92	:	-	-	-
4-Nitrophenol	mg/kg-dry	T		<0.95	:	<0.92	:	<0.92	:	-	-	-
Acenaphthene	mg/kg-dry	T		<0.38	:	<0.37	:	<0.37	:	-	-	-
Acenaphthylene	mg/kg-dry	T		<0.38	:	<0.37	:	<0.37	:	-	-	-
Anthracene	mg/kg-dry	T		<0.38	:	<0.37	:	<0.37	:	-	-	-
Benzaldehyde	mg/kg-dry	T		<0.45	J	<0.37	J	<0.37	J	-	-	-
Benzo(a)anthracene	mg/kg-dry	T		<0.38	:	<0.37	:	<0.37	:	-	-	-
Benzo(a)pyrene	mg/kg-dry	T		<0.38	:	<0.37	:	<0.37	:	-	-	-
Benzo(b)fluoranthene	mg/kg-dry	T		<0.38	:	<0.37	:	<0.37	:	-	-	-
Benzo(g,h,i)perylene	mg/kg-dry	T		<0.38	:	<0.37	:	<0.37	:	-	-	-
Benzo(k)fluoranthene	mg/kg-dry	T		<0.38	:	<0.37	:	<0.37	:	-	-	-
Bis(2-chloroethoxy)methane	mg/kg-dry	T		<0.38	:	<0.37	:	<0.37	:	-	-	-
Bis(2-chloroethyl)ether	mg/kg-dry	T		<0.38	:	<0.37	:	<0.37	:	-	-	-
Bis(2-ethylhexyl)phthalate	mg/kg-dry	T		<0.38	:	<0.37	:	<0.37	:	-	-	-
Butyl benzyl phthalate	mg/kg-dry	T		<0.38	J	<0.37	:	<0.37	J	-	-	-
Carbazole	mg/kg-dry	T		<0.38	:	<0.37	:	<0.37	:	-	-	-
Chrysene	mg/kg-dry	T		<0.38	:	<0.37	:	<0.37	:	-	-	-
Dibenz(a,h)anthracene	mg/kg-dry	T		<0.38	:	<0.37	J	<0.37	:	-	-	-
Dibenzofuran	mg/kg-dry	T		<0.38	:	<0.37	:	<0.37	:	-	-	-
Dichlorodiisopropyl ether	mg/kg-dry	T		<0.38	:	<0.37	:	<0.37	:	-	-	-
Diethylphthalate	mg/kg-dry	T		<0.38	:	<0.37	:	<0.37	:	-	-	-
Dimethylphthalate	mg/kg-dry	T		<0.38	:	<0.37	:	<0.37	:	-	-	-
Di-n-Butyl phthalate	mg/kg-dry	T		<0.38	:	<0.37	:	<0.37	:	-	-	-
Di-n-Octyl phthalate	mg/kg-dry	T		<0.38	:	<0.37	:	<0.37	:	-	-	-
Fluoranthene	mg/kg-dry	T		<0.38	:	0.021	J	<0.37	:	-	-	-

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Appendix A-7g
Soil - Random 0-24 inches
Validated Analytical Results

Parameter	Units	Exposure Area Fraction	Site ID / Sample Date / Sample ID		MSS2-7 10/13/2002 MSS2-7-T02N-SOL SS2		MSS2-8 10/14/2002 MSS2-8-T02N-SOL SS2		MSS2-9 10/13/2002 MSS2-9-T02N-SOL SS2		MSS3-1 9/27/2002 MSS3-1-T02N-SOL SS3	MSS3-10 10/1/2002 MSS3-10-T02N-SOL SS3	MSS3-2 9/27/2002 MSS3-2-T02N-SOL SS3
Fluorene	mg/kg-dry	T		<0.38	:	<0.37	:	<0.37	:	-	-	-
Hexachlorobenzene	mg/kg-dry	T		<0.38	:	<0.37	:	<0.37	:	-	-	-
Hexachlorobutadiene	mg/kg-dry	T		<0.38	:	<0.37	J	<0.37	:	-	-	-
Hexachlorocyclopentadiene	mg/kg-dry	T		<0.38	:	<0.37	:	<0.37	:	-	-	-
Hexachloroethane	mg/kg-dry	T		<0.38	:	<0.37	:	<0.37	:	-	-	-
Indeno(1,2,3-cd)pyrene	mg/kg-dry	T		<0.38	:	<0.37	:	<0.37	:	-	-	-
Isophorone	mg/kg-dry	T		<0.38	:	<0.37	:	<0.37	:	-	-	-
Naphthalene	mg/kg-dry	T		<0.38	:	<0.37	:	<0.37	:	-	-	-
Nitrobenzene	mg/kg-dry	T		<0.38	:	<0.37	:	<0.37	:	-	-	-
N-Nitrosodi-n-propylamine	mg/kg-dry	T		<0.38	:	<0.37	:	<0.37	:	-	-	-
N-Nitrosodiphenylamine	mg/kg-dry	T		<0.38	:	<0.37	:	<0.37	:	-	-	-
Pentachlorophenol	mg/kg-dry	T		<0.95	J	<0.92	J	<0.92	J	-	-	-
Phenanthrene	mg/kg-dry	T		<0.38	:	<0.37	:	<0.37	:	-	-	-
Phenol	mg/kg-dry	T		<0.38	:	<0.37	:	<0.37	:	-	-	-
Pyrene	mg/kg-dry	T		<0.38	J	0.022	J	<0.37	J	-	-	-

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Appendix A-7g
Soil - Random 0-24 inches
Validated Analytical Results

Parameter	Units	Fraction	MSS3-3	MSS3-4	MSS3-5	MSS3-6	MSS3-7	MSS3-8
Site ID			MSS3-3	MSS3-4	MSS3-5	MSS3-6	MSS3-7	MSS3-8
Sample Date			9/30/2002	9/30/2002	10/22/2002	10/3/2002	10/1/2002	10/9/2002
Sample ID			MSS3-3-T02N-SOL	MSS3-4-T02N-SOL	MSS3-5-T02N-SOL	MSS3-6-T02N-SOL	MSS3-7-T02N-SOL	MSS3-8-T02N-SOL
Exposure Area			SS3	SS3	SS3	SS3	SS3	SS3
General Chemistry								
Ammonia	mg/kg-dry	T	52.5 J	50.8 :	31.9 :	8.3 :	28.2 :	83.6 :
Chloride	mg/kg-dry	T	<29.7 :	<28. :	<26.1 :	<28. :	<28. :	4.2 J
Fluoride	mg/kg-dry	T	0.34 J	-	-	-	0.18 J	0.42 J
Nitrate	mg/kg-dry	T	<2.4 J	<17.2 J	<2.1 J	<2.3 J	<2.3 J	<2.3 J
Phosphorus	mg/kg-dry	T	669. J	89.9 J	429. J	277. J	434. J	1190. J
Sulfate	mg/kg-dry	T	2000. :	<112. :	<104. J	<28. :	22. :	1610. J
Total Kjeldahl Nitrogen	mg/kg-dry	T	1220. :	1820. :	355. J	106. :	358. :	766. :
Total Organic Carbon	mg/kg-dry	T	34600. J	18200. J	8670. J	2650. J	6960. J	17100. J
Laboratory Parameters								
pH	SU	T	5.4 :	7.2 :	6.7 :	6.3 :	7.8 :	7.3 :
Solids, Percent	%	T	84.2 :	89.5 :	95.7 :	89.5 :	89.4 :	89. :
Specific Conductance	umhos/cm	T	1578. :	128. :	20.6 J	8.9 :	88.7 :	40. :
Geotechnical								
Organic Soils	%	T	-	-	3.48 J	2.7 :	4.07 :	-
Physical Properties								
Cation-Exchange Capacity	meq/100g	T	24.2 :	21.5 :	1.5 :	7.9 :	15.6 :	25.2 :
Sodium Absorption Ratio	ratio	T	0.51 :	0.06 :	0.07 :	<0.11 :	0.09 :	0.11 :
Metals								
Aluminum	mg/kg-dry	T	16500. :	9050. :	5500. :	5350. :	7900. :	20100. :
Antimony	mg/kg-dry	T	0.04 J	<0.17 J	<0.23 J	<0.18 J	<0.17 J	<0.16 J
Arsenic	mg/kg-dry	T	3.2 :	10.2 :	12.9 :	9.8 :	6.5 :	2.4 :
Barium	mg/kg-dry	T	155. :	32.4 :	182. :	188. :	197. :	139. :
Beryllium	mg/kg-dry	T	2.1 :	0.5 :	0.49 :	0.36 :	0.45 :	0.95 :
Boron	mg/kg-dry	T	5.4 :	<2.2 :	2.3 :	<2.6 :	2.7 :	15.3 J
Cadmium	mg/kg-dry	T	0.22 J	0.029 :	<0.063 :	<0.025 :	<0.024 :	<0.026 J
Calcium	mg/kg-dry	T	5080. :	2160. :	1330. :	1010. :	2660. :	4170. :
Chromium	mg/kg-dry	T	26.8 :	5.8 :	4.5 :	5.6 :	9.6 :	71.4 :
Cobalt	mg/kg-dry	T	14.1 :	1.8 :	2.2 :	2.4 :	4.1 :	22.6 :
Copper	mg/kg-dry	T	35.9 :	9.7 :	35.6 :	26.6 :	53.4 :	44.8 :
Iron	mg/kg-dry	T	23300. :	13300. :	26100. :	22100. :	28600. :	35400. :
Lead	mg/kg-dry	T	37.5 :	36.3 :	191. :	109. :	200. :	34.7 :
Magnesium	mg/kg-dry	T	8070. :	1170. :	892. :	968. :	1550. :	8500. :
Manganese	mg/kg-dry	T	1060. J	247. J	81.9 J	58. J	179. J	943. J

J = Qualified as estimated during data validation
R = Qualified as rejected value from data validation and results are considered unusable for any purpose
T = Total Fraction

Appendix A-7g
Soil - Random 0-24 inches
Validated Analytical Results

Parameter	Units	Fraction	MSS3-3		MSS3-4		MSS3-5		MSS3-6		MSS3-7		MSS3-8	
Sample Date			9/30/2002		9/30/2002		10/22/2002		10/3/2002		10/1/2002		10/9/2002	
Sample ID			MSS3-3-T02N-SOL		MSS3-4-T02N-SOL		MSS3-5-T02N-SOL		MSS3-6-T02N-SOL		MSS3-7-T02N-SOL		MSS3-8-T02N-SOL	
Exposure Area			SS3		SS3		SS3		SS3		SS3		SS3	
Mercury	mg/kg-dry	T	<0.019	J	0.019	J	<0.016	:	<0.018	:	<0.018	:	0.017	:
Molybdenum	mg/kg-dry	T	0.52	J	11.7	:	12.7	:	12.	:	15.3	:	3.4	J
Nickel	mg/kg-dry	T	34.	J	3.2	J	3.	J	3.	J	5.7	J	63.1	J
Potassium	mg/kg-dry	T	3400.	J	1630.	J	3500.	J	3050.	J	3730.	J	4230.	J
Selenium	mg/kg-dry	T	0.88	J	1.8	J	<0.61	J	0.84	J	1.1	J	0.8	J
Silver	mg/kg-dry	T	<0.13	:	0.13	:	0.73	:	0.59	:	2.3	:	<0.12	:
Sodium	mg/kg-dry	T	134.	:	45.4	:	<95.4	:	102.	:	<154.	:	<46.2	:
Thallium	mg/kg-dry	T	0.15	:	0.2	:	0.32	:	0.24	:	0.43	:	0.23	:
Vanadium	mg/kg-dry	T	27.6	:	6.6	:	16.2	:	12.	:	18.	:	54.8	:
Zinc	mg/kg-dry	T	158.	J	83.7	J	32.3	J	19.1	J	35.5	J	124.	J

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T = Total Fraction

Appendix A-7g
Soil - Random 0-24 inches
Validated Analytical Results

Parameter	Units	Exposure Area Fraction	Site ID / Sample Date / Sample ID / Exposure Area		MSS3-9 10/9/2002 MSS3-9-T02N-SOL SS3		MSS4A1-1 9/29/2002 MSS4A1-1-T02N-SOL SS4A1		MSS4A1-10 10/8/2002 MSS4A1-10-T02N-SOL SS4A1		MSS4A1-2 10/4/2002 MSS4A1-2-T02N-SOL SS4A1		MSS4A1-3 9/27/2002 MSS4A1-3-T02N-SOL SS4A1		MSS4A1-4 9/29/2002 MSS4A1-4-T02N-SOL SS4A1	
General Chemistry																
Ammonia	mg/kg-dry	T			47.8	:	6.8	:	75.6	:	20.8	:	17.1	:	7.	:
Chloride	mg/kg-dry	T			<2.4	J	<27.7	:	6.6	J	<28.3	:	45.8	:	<27.1	:
Fluoride	mg/kg-dry	T			0.17	J	-		-		0.23	J	-		-	
Nitrate	mg/kg-dry	T			3.2	J	<2.3	J	<2.4	J	<1.2	J	<1.1	J	<2.2	J
Phosphorus	mg/kg-dry	T			1380.	J	1150.	J	1470.	J	16.4	J	408.	J	222.	J
Sulfate	mg/kg-dry	T			10.3	J	5160.	:	2000.	J	1530.	:	45.8	:	116.	:
Total Kjeldahl Nitrogen	mg/kg-dry	T			466.	:	<25.8	:	37.9	:	100.	:	32.5	:	27.	:
Total Organic Carbon	mg/kg-dry	T			7520.	J	<111.	J	<116.	J	943.	J	964.	J	<109.	J
Laboratory Parameters																
pH	SU	T			7.	:	3.1	:	3.1	:	3.6	:	4.	:	3.4	:
Solids, Percent	%	T			86.1	:	90.4	:	86.9	:	88.5	:	94.3	:	92.5	:
Specific Conductance	umhos/cm	T			19.5	:	1706.	:	868.	:	1220.	:	45.2	:	267.	:
Geotechnical																
Organic Soils	%	T			-		-		5.54	:	2.97	:	2.41	:	-	
Physical Properties																
Cation-Exchange Capacity	meq/100g	T			21.9	:	7.7	:	21.7	:	13.	:	14.	:	6.5	:
Sodium Absorption Ratio	ratio	T			0.09	:	<0.02	:	<0.03	:	0.03	:	0.27	:	<0.08	:
Metals																
Aluminum	mg/kg-dry	T			14400.	:	2140.	:	14700.	:	8630.	:	6670.	:	1620.	:
Antimony	mg/kg-dry	T			<0.18	J	<0.04	J	<0.17	J	<0.16	J	<0.04	J	<0.04	J
Arsenic	mg/kg-dry	T			2.9	:	3.	:	15.7	:	6.3	:	7.7	:	6.3	:
Barium	mg/kg-dry	T			199.	:	191.	:	198.	:	90.4	:	46.3	:	25.	:
Beryllium	mg/kg-dry	T			0.8	:	0.22	:	0.57	:	0.55	:	0.76	:	0.22	:
Boron	mg/kg-dry	T			12.5	J	0.59	:	<0.42	J	<0.47	J	<0.48	:	0.46	J
Cadmium	mg/kg-dry	T			0.24	J	<0.032	:	<0.059	J	<0.028	J	0.3	J	<0.029	J
Calcium	mg/kg-dry	T			2830.	:	5600.	:	1150.	:	2300.	:	182.	:	121.	:
Chromium	mg/kg-dry	T			16.8	:	4.5	:	20.9	:	29.8	:	7.9	:	8.1	:
Cobalt	mg/kg-dry	T			11.9	:	0.4	:	5.7	:	4.	:	4.1	:	0.39	:
Copper	mg/kg-dry	T			37.4	:	16.5	:	75.4	:	37.4	:	85.2	:	42.8	:
Iron	mg/kg-dry	T			30000.	:	15600.	:	47800.	:	28500.	:	36500.	:	21900.	:
Lead	mg/kg-dry	T			125.	:	128.	:	322.	:	118.	:	237.	:	165.	:
Magnesium	mg/kg-dry	T			6200.	:	428.	:	6080.	:	5520.	:	1410.	:	291.	:
Manganese	mg/kg-dry	T			800.	J	39.6	J	649.	J	373.	J	1140.	J	198.	J

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T = Total Fraction

Appendix A-7g
Soil - Random 0-24 inches
Validated Analytical Results

Parameter	Units	Fraction	Site ID	Sample Date	Sample ID	Exposure Area
			MSS3-9	10/9/2002	MSS3-9-T02N-SOL	SS3
Mercury	mg/kg-dry	T	<0.018 :			
Molybdenum	mg/kg-dry	T	8.1 :			
Nickel	mg/kg-dry	T	11.9 J			
Potassium	mg/kg-dry	T	2590. J			
Selenium	mg/kg-dry	T	1.1 J			
Silver	mg/kg-dry	T	0.4 :			
Sodium	mg/kg-dry	T	58.6 :			
Thallium	mg/kg-dry	T	0.19 :			
Vanadium	mg/kg-dry	T	33.7 :			
Zinc	mg/kg-dry	T	148. J			
			MSS4A1-1	9/29/2002	MSS4A1-1-T02N-SOL	SS4A1
Mercury	mg/kg-dry	T	<0.017 J			
Molybdenum	mg/kg-dry	T	17.7 :			
Nickel	mg/kg-dry	T	2.1 J			
Potassium	mg/kg-dry	T	3050. J			
Selenium	mg/kg-dry	T	1.3 J			
Silver	mg/kg-dry	T	2.9 :			
Sodium	mg/kg-dry	T	83. :			
Thallium	mg/kg-dry	T	0.23 :			
Vanadium	mg/kg-dry	T	5.4 :			
Zinc	mg/kg-dry	T	9.9 J			
			MSS4A1-10	10/8/2002	MSS4A1-10-T02N-SOL	SS4A1
Mercury	mg/kg-dry	T	<0.019 :			
Molybdenum	mg/kg-dry	T	13.1 :			
Nickel	mg/kg-dry	T	18.4 J			
Potassium	mg/kg-dry	T	5160. J			
Selenium	mg/kg-dry	T	<1.1 J			
Silver	mg/kg-dry	T	2.4 :			
Sodium	mg/kg-dry	T	<50.5 :			
Thallium	mg/kg-dry	T	0.38 :			
Vanadium	mg/kg-dry	T	21.8 :			
Zinc	mg/kg-dry	T	111. J			
			MSS4A1-2	10/4/2002	MSS4A1-2-T02N-SOL	SS4A1
Mercury	mg/kg-dry	T	<0.018 :			
Molybdenum	mg/kg-dry	T	14.8 :			
Nickel	mg/kg-dry	T	17.3 J			
Potassium	mg/kg-dry	T	2590. J			
Selenium	mg/kg-dry	T	0.64 J			
Silver	mg/kg-dry	T	0.79 :			
Sodium	mg/kg-dry	T	181. :			
Thallium	mg/kg-dry	T	0.14 :			
Vanadium	mg/kg-dry	T	22.5 :			
Zinc	mg/kg-dry	T	75. J			
			MSS4A1-3	9/27/2002	MSS4A1-3-T02N-SOL	SS4A1
Mercury	mg/kg-dry	T	<0.017 :			
Molybdenum	mg/kg-dry	T	16.3 :			
Nickel	mg/kg-dry	T	4.3 J			
Potassium	mg/kg-dry	T	2210. J			
Selenium	mg/kg-dry	T	0.85 J			
Silver	mg/kg-dry	T	1. :			
Sodium	mg/kg-dry	T	127. :			
Thallium	mg/kg-dry	T	0.16 :			
Vanadium	mg/kg-dry	T	9. :			
Zinc	mg/kg-dry	T	131. J			
			MSS4A1-4	9/29/2002	MSS4A1-4-T02N-SOL	SS4A1
Mercury	mg/kg-dry	T	<0.017 J			
Molybdenum	mg/kg-dry	T	14.2 :			
Nickel	mg/kg-dry	T	1.6 J			
Potassium	mg/kg-dry	T	1970. J			
Selenium	mg/kg-dry	T	0.51 J			
Silver	mg/kg-dry	T	1.8 :			
Sodium	mg/kg-dry	T	81.6 :			
Thallium	mg/kg-dry	T	0.12 :			
Vanadium	mg/kg-dry	T	2.5 :			
Zinc	mg/kg-dry	T	40.3 J			

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Appendix A-7g
Soil - Random 0-24 inches
Validated Analytical Results

Parameter	Units	Exposure Area Fraction	Site ID	MSS4A1-5		MSS4A1-6		MSS4A1-7		MSS4A1-8		MSS4A1-9		MSS4A2-1	
			Sample Date	9/29/2002		10/4/2002		10/4/2002		10/4/2002		9/30/2002		10/3/2002	
			Sample ID	MSS4A1-5-T02N-SOL		MSS4A1-6-T02N-SOL		MSS4A1-7-T02N-SOL		MSS4A1-8-T02N-SOL		MSS4A1-9-T02N-SOL		MSS4A2-1-T02N-SOL	
			Exposure Area	SS4A1		SS4A1		SS4A1		SS4A1		SS4A1		SS4A2	
General Chemistry															
Ammonia	mg/kg-dry	T		8.5	:	8.3	:	6.9	:	<4.3	:	6.3	:	45.2	:
Chloride	mg/kg-dry	T		<28.	:	<28.3	:	<27.1	:	<27.6	:	<27.7	:	<27.5	:
Fluoride	mg/kg-dry	T		-		0.33	J	0.15	J	0.22	J	-		0.12	J
Nitrate	mg/kg-dry	T		<2.3	J	<1.2	J	<1.1	J	<1.2	J	<2.3	J	<2.2	J
Phosphorus	mg/kg-dry	T		732.	J	390.	J	60.3	J	445.	J	71.	J	<54.8	J
Sulfate	mg/kg-dry	T		1020.	J	15.9	:	2400.	:	53.6	J	4950.	:	541.	J
Total Kjeldahl Nitrogen	mg/kg-dry	T		35.6	:	88.3	:	<25.7	:	43.7	:	47.6	:	40.9	:
Total Organic Carbon	mg/kg-dry	T		<112.	J	1220.	J	<109.	J	<111.	J	<111.	J	360.	J
Laboratory Parameters															
pH	SU	T		3.2	:	6.1	:	3.5	:	4.3	:	4.	:	3.2	:
Solids, Percent	%	T		89.6	:	88.5	:	92.4	:	90.9	:	90.4	:	91.2	:
Specific Conductance	umhos/cm	T		367.	:	43.8	:	2260.	:	353.	:	1254.	:	2330.	:
Geotechnical															
Organic Soils	%	T		-		2.82	:	1.95	:	1.74	:	-		3.08	:
Physical Properties															
Cation-Exchange Capacity	meq/100g	T		16.9	:	20.2	:	7.2	:	8.4	:	8.1	:	10.3	:
Sodium Absorption Ratio	ratio	T		<0.06	:	<0.14	:	<0.02	:	0.09	:	<0.02	:	<0.02	:
Metals															
Aluminum	mg/kg-dry	T		5030.	:	12700.	:	3720.	:	4450.	:	4310.	:	5510.	:
Antimony	mg/kg-dry	T		<0.04	J	<0.17	J	<0.15	J	<0.18	J	0.04	J	<0.17	J
Arsenic	mg/kg-dry	T		5.2	:	6.8	:	3.5	:	3.8	:	6.5	:	2.7	:
Barium	mg/kg-dry	T		74.6	:	63.9	:	68.3	:	29.2	:	35.3	:	52.9	:
Beryllium	mg/kg-dry	T		0.26	:	0.99	:	0.31	:	0.57	:	0.28	:	0.33	:
Boron	mg/kg-dry	T		0.58	J	<0.45	J	<0.41	:	<0.44	:	<0.37	J	<1.	:
Cadmium	mg/kg-dry	T		<0.032	J	1.4	:	<0.025	:	0.13	:	0.23	J	<0.024	:
Calcium	mg/kg-dry	T		464.	:	2140.	:	1840.	:	1640.	:	2500.	:	8620.	:
Chromium	mg/kg-dry	T		11.3	:	29.	:	9.6	:	10.5	:	2.9	:	12.9	:
Cobalt	mg/kg-dry	T		2.	:	13.3	:	1.8	:	3.6	:	0.57	:	2.5	:
Copper	mg/kg-dry	T		26.5	:	83.5	:	19.6	:	25.6	:	28.4	:	52.6	:
Iron	mg/kg-dry	T		23700.	:	25000.	:	13100.	:	17900.	:	18600.	:	21300.	:
Lead	mg/kg-dry	T		241.	:	129.	:	45.5	:	114.	:	189.	:	54.8	:
Magnesium	mg/kg-dry	T		1830.	:	5350.	:	1530.	:	1600.	:	913.	:	3490.	:
Manganese	mg/kg-dry	T		339.	J	2220.	J	246.	J	958.	J	213.	J	230.	J

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T = Total Fraction

Appendix A-7g
Soil - Random 0-24 inches
Validated Analytical Results

Parameter	Units	Fraction	Site ID	Sample Date	Sample ID	Exposure Area											
			MSS4A1-5	9/29/2002	MSS4A1-5-T02N-SOL	SS4A1	MSS4A1-6	10/4/2002	MSS4A1-6-T02N-SOL	SS4A1	MSS4A1-7	10/4/2002	MSS4A1-7-T02N-SOL	SS4A1	MSS4A1-8	10/4/2002	MSS4A1-8-T02N-SOL	SS4A1	MSS4A1-9	9/30/2002	MSS4A1-9-T02N-SOL	SS4A1	MSS4A2-1	10/3/2002	MSS4A2-1-T02N-SOL	SS4A2
Mercury	mg/kg-dry	T	<0.019	J			<0.017	:			<0.016	:			<0.018	:			<0.017	J			<0.018	:		
Molybdenum	mg/kg-dry	T	14.1	:			4.8	:			8.7	:			5.6	:			7.4	:			8.1	:		
Nickel	mg/kg-dry	T	6.5	J			25.5	J			5.9	J			7.6	J			2.4	J			9.1	J		
Potassium	mg/kg-dry	T	2860.	J			1120.	J			1700.	J			1420.	J			1980.	J			2460.	J		
Selenium	mg/kg-dry	T	0.88	J			1.2	J			0.24	J			0.29	J			0.95	J			0.44	J		
Silver	mg/kg-dry	T	1.3	:			0.55	:			0.5	:			0.48	:			1.2	:			0.63	:		
Sodium	mg/kg-dry	T	160.	:			66.	:			88.7	:			100.	:			106.	:			114.	:		
Thallium	mg/kg-dry	T	0.19	:			0.12	:			0.084	:			0.11	:			0.16	:			0.31	:		
Vanadium	mg/kg-dry	T	8.5	:			27.2	:			5.7	:			8.	:			3.5	:			15.7	:		
Zinc	mg/kg-dry	T	58.3	J			352.	J			36.1	J			131.	J			134.	J			30.6	J		

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R = Qualified as rejected value from data validation and results are considered unusable for any purpose
T = Total Fraction

Appendix A-7g
Soil - Random 0-24 inches
Validated Analytical Results

Parameter	Units	Exposure Area Fraction	Site ID		MSS4A2-10		MSS4A2-2		MSS4A2-3		MSS4A2-4		MSS4A2-5		MSS4A2-6	
			Sample Date		10/4/2002		10/4/2002		10/4/2002		10/11/2002		10/11/2002		10/11/2002	
			Sample ID		MSS4A2-10-T02N-SOL		MSS4A2-2-T02N-SOL		MSS4A2-3-T02N-SOL		MSS4A2-4-T02N-SOL		MSS4A2-5-T02N-SOL		MSS4A2-6-T02N-SOL	
			Exposure Area		SS4A2		SS4A2		SS4A2		SS4A2		SS4A2		SS4A2	
General Chemistry																
Ammonia	mg/kg-dry	T			24.9	:	<4.6	:	11.2	:	33.6	:	31.3	:	<22.4	:
Chloride	mg/kg-dry	T			11.6	:	<27.9	:	3.5	:	10.5	J	15.1	J	<2.5	J
Fluoride	mg/kg-dry	T			0.18	J	0.14	J	0.12	J	0.43	J	1.	J	7.4	J
Nitrate	mg/kg-dry	T			<2.4	J	<1.2	J	<2.2	J	<2.2	J	<2.3	J	<2.5	J
Phosphorus	mg/kg-dry	T			1380.	J	48.9	J	12.3	J	1580.	J	80.8	J	198.	J
Sulfate	mg/kg-dry	T			7470.	J	966.	J	74.6	J	12700.	J	11400.	J	7940.	J
Total Kjeldahl Nitrogen	mg/kg-dry	T			34.6	:	44.1	:	38.6	:	204.	J	48.3	J	43.3	J
Total Organic Carbon	mg/kg-dry	T			1020.	J	<112.	J	<109.	J	2460.	J	<113.	J	862.	J
Laboratory Parameters																
pH	SU	T			3.1	:	3.1	:	3.2	:	3.4	:	3.4	:	7.4	:
Solids, Percent	%	T			86.1	:	89.9	:	92.4	:	92.2	:	89.	:	81.2	:
Specific Conductance	umhos/cm	T			4800.	:	2400.	:	1240.	:	2000.	:	1690.	:	1000.	J
Geotechnical																
Organic Soils	%	T			4.76	:	3.05	:	2.71	:	4.49	J	5.67	J	2.25	J
Physical Properties																
Cation-Exchange Capacity	meq/100g	T			20.7	:	9.4	:	10.4	:	19.7	:	16.4	:	10.7	:
Sodium Absorption Ratio	ratio	T			<0.02	:	<0.02	:	<0.03	:	0.01	:	<0.01	:	0.04	:
Metals																
Aluminum	mg/kg-dry	T			15900.	:	3060.	:	5660.	:	15600.	:	13700.	:	13300.	:
Antimony	mg/kg-dry	T			<0.19	J	<0.18	J	<0.17	J	<0.18	J	<0.18	J	<0.2	J
Arsenic	mg/kg-dry	T			0.9	:	5.4	:	3.3	:	4.2	:	1.2	:	4.5	:
Barium	mg/kg-dry	T			166.	:	25.7	:	69.	:	148.	:	245.	:	118.	:
Beryllium	mg/kg-dry	T			0.49	:	0.23	:	0.33	:	0.79	:	0.54	:	1.6	:
Boron	mg/kg-dry	T			13.1	J	<0.45	:	<0.39	:	<0.41	J	<0.44	J	<0.49	J
Cadmium	mg/kg-dry	T			<0.025	J	<0.027	:	<0.023	:	<0.026	J	<0.028	J	0.95	:
Calcium	mg/kg-dry	T			13500.	:	9560.	:	1680.	:	6530.	:	9240.	:	24100.	:
Chromium	mg/kg-dry	T			75.1	:	5.8	:	14.9	:	50.	:	54.9	:	41.4	:
Cobalt	mg/kg-dry	T			8.8	:	0.38	:	1.8	:	11.	:	7.6	:	17.7	:
Copper	mg/kg-dry	T			85.6	:	17.8	:	33.6	:	135.	:	81.6	:	190.	:
Iron	mg/kg-dry	T			41700.	:	19800.	:	21100.	:	44100.	:	53600.	:	27000.	:
Lead	mg/kg-dry	T			8.9	:	1520.	:	80.9	:	201.	:	55.2	:	87.6	:
Magnesium	mg/kg-dry	T			13800.	:	1270.	:	3130.	:	10200.	:	10800.	:	9070.	:
Manganese	mg/kg-dry	T			180.	J	197.	J	378.	J	689.	J	436.	J	909.	J

J = Qualified as estimated during data validation

R = Qualified as rejected value from data validation and results are considered unusable for any purpose

T = Total Fraction

Appendix A-7g
Soil - Random 0-24 inches
Validated Analytical Results

Parameter	Units	Fraction	Site ID	Sample Date	Sample ID	Exposure Area
			MSS4A2-10	10/4/2002	MSS4A2-10-T02N-SOL	SS4A2
			MSS4A2-2	10/4/2002	MSS4A2-2-T02N-SOL	SS4A2
			MSS4A2-3	10/4/2002	MSS4A2-3-T02N-SOL	SS4A2
			MSS4A2-4	10/11/2002	MSS4A2-4-T02N-SOL	SS4A2
			MSS4A2-5	10/11/2002	MSS4A2-5-T02N-SOL	SS4A2
			MSS4A2-6	10/11/2002	MSS4A2-6-T02N-SOL	SS4A2
Mercury	mg/kg-dry	T	<0.018 :	<0.018 :	<0.017 :	<0.018 :	<0.019 :	<0.02 :
Molybdenum	mg/kg-dry	T	20.7 :	25. :	11.1 :	24.3 :	85.8 :	962. :
Nickel	mg/kg-dry	T	36.5 J	3.3 J	8.5 J	30.5 J	26.9 J	44.6 J
Potassium	mg/kg-dry	T	7890. :	2670. J	1980. J	5080. J	7360. J	4410. J
Selenium	mg/kg-dry	T	1.4 J	0.42 J	0.68 J	1.4 J	2.1 J	1.9 J
Silver	mg/kg-dry	T	<0.12 :	1.8 :	0.75 :	0.72 :	0.63 :	1.4 :
Sodium	mg/kg-dry	T	273. :	112. :	101. :	242. :	267. :	<54.9 :
Thallium	mg/kg-dry	T	1.3 J	0.16 :	0.16 :	0.85 :	1. :	0.64 :
Vanadium	mg/kg-dry	T	61.5 :	6.9 :	13.2 :	43.1 :	62.1 :	44.4 :
Zinc	mg/kg-dry	T	18.2 J	53.9 J	51.3 J	115. J	40.5 J	184. J

J = Qualified as estimated during data validation
R = Qualified as rejected value from data validation and results are considered unusable for any purpose
T = Total Fraction

Appendix A-7g
Soil - Random 0-24 inches
Validated Analytical Results

Parameter	Units	Exposure Area Fraction	Site ID	Sample Date	Sample ID	Exposure Area
			MSS4A2-7	10/3/2002	MSS4A2-7-T02N-SOL	SS4A2
			MSS4A2-8	10/11/2002	MSS4A2-8-T02N-SOL	SS4A2
			MSS4A2-9	10/11/2002	MSS4A2-9-T02N-SOL	SS4A2
			MSS4A3-1	9/30/2002	MSS4A3-1-T02N-SOL	SS4A3
			MSS4A3-10	9/26/2002	MSS4A3-30-T02N-SOL	SS4A3
			MSS4A3-2	9/30/2002	MSS4A3-2-T02N-SOL	SS4A3
General Chemistry						
Ammonia	mg/kg-dry	T	23.5 :	26.4 :	30.6 :	31.7 :	<2.6 :	37. :
Chloride	mg/kg-dry	T	<27.3 :	8.7 J	2.6 J	<27.6 :	0.68 :	<27.6 :
Fluoride	mg/kg-dry	T	0.24 J	1.5 J	0.5 J	0.3 J	5.4 J	0.19 J
Nitrate	mg/kg-dry	T	<2.2 J	<2.3 J	4.1 J	<2.3 J	2.7 J	<2.3 J
Phosphorus	mg/kg-dry	T	738. J	21.8 J	735. J	474. J	970. J	949. J
Sulfate	mg/kg-dry	T	9080. :	9490. J	1480. J	2900. :	1970. :	276. J
Total Kjeldahl Nitrogen	mg/kg-dry	T	29.3 :	48.8 J	152. J	73.5 J	28. :	133. :
Total Organic Carbon	mg/kg-dry	T	<109. J	<111. J	5110. J	<111. J	<110. J	2630. J
Laboratory Parameters								
pH	SU	T	3.3 :	3.5 :	7.4 :	3.6 :	5.6 :	3.1 :
Solids, Percent	%	T	91.9 :	90.7 :	94.1 :	90.6 :	91. :	90.9 :
Specific Conductance	umhos/cm	T	1590. :	1170. :	479. J	438. :	1259. :	1886. :
Geotechnical								
Organic Soils	%	T	2.78 :	4.3 J	1.75 J	-	-	-
Physical Properties								
Cation-Exchange Capacity	meq/100g	T	6.4 :	16.7 :	10.7 :	6.8 :	13.4 :	10.3 :
Sodium Absorption Ratio	ratio	T	<0.02 :	<0.02 :	0.04 :	<0.05 :	0.02 :	0.02 :
Metals								
Aluminum	mg/kg-dry	T	5710. :	11400. :	11400. :	3900. :	11700. :	7320. :
Antimony	mg/kg-dry	T	<0.17 J	<0.17 J	<0.18 J	0.04 J	0.05 J	<0.04 J
Arsenic	mg/kg-dry	T	0.96 :	0.78 :	1.6 J	4.2 :	2.6 :	3.5 :
Barium	mg/kg-dry	T	152. :	189. :	92.8 :	168. :	108. :	90.2 :
Beryllium	mg/kg-dry	T	0.23 :	0.47 :	0.98 :	0.2 :	1.4 :	0.3 :
Boron	mg/kg-dry	T	<1.1 :	<0.39 J	<0.41 J	0.86 J	<0.44 J	1. J
Cadmium	mg/kg-dry	T	<0.026 :	<0.025 J	0.44 :	<0.022 J	0.15 J	<0.019 J
Calcium	mg/kg-dry	T	6660. :	6160. :	14600. :	632. :	18100. :	2440. :
Chromium	mg/kg-dry	T	11. :	55.8 :	64.1 :	5.2 :	31.4 :	14.1 :
Cobalt	mg/kg-dry	T	1.2 :	5.1 :	11.6 :	0.45 :	20.6 :	1.4 :
Copper	mg/kg-dry	T	21.4 :	69. :	131. :	18.9 :	241. :	49.6 :
Iron	mg/kg-dry	T	22800. :	35800. :	17700. :	24300. :	32000. :	35500. :
Lead	mg/kg-dry	T	17.9 :	21.5 :	38.9 :	52.3 :	62.8 :	35.9 :
Magnesium	mg/kg-dry	T	4350. :	9900. :	9870. :	1240. :	7670. :	4070. :
Manganese	mg/kg-dry	T	192. J	282. J	794. J	61.1 J	632. J	125. J

J = Qualified as estimated during data validation

R = Qualified as rejected value from data validation and results are considered unusable for any purpose

T = Total Fraction

Appendix A-7g
Soil - Random 0-24 inches
Validated Analytical Results

Parameter	Units	Fraction	Site ID	Sample Date	Sample ID	Exposure Area
			MSS4A2-7	10/3/2002	MSS4A2-7-T02N-SOL	SS4A2
			MSS4A2-8	10/11/2002	MSS4A2-8-T02N-SOL	SS4A2
			MSS4A2-9	10/11/2002	MSS4A2-9-T02N-SOL	SS4A2
			MSS4A3-1	9/30/2002	MSS4A3-1-T02N-SOL	SS4A3
			MSS4A3-10	9/26/2002	MSS4A3-30-T02N-SOL	SS4A3
			MSS4A3-2	9/30/2002	MSS4A3-2-T02N-SOL	SS4A3
Mercury	mg/kg-dry	T	<0.017 :	<0.018 :	<0.017 :	<0.017 J	<0.017 J	<0.018 J
Molybdenum	mg/kg-dry	T	38.1 :	77.4 :	477. :	26.8 :	567. :	24.8 :
Nickel	mg/kg-dry	T	8.3 J	24.2 J	35.1 J	2.1 J	40.1 J	7.9 J
Potassium	mg/kg-dry	T	2710. J	5750. J	4470. J	3140. J	4470. :	3550. J
Selenium	mg/kg-dry	T	0.78 J	1.5 J	<0.86 J	1. J	1. J	1. J
Silver	mg/kg-dry	T	0.47 :	0.26 :	0.46 :	0.84 :	0.68 :	0.54 :
Sodium	mg/kg-dry	T	140. :	186. :	<45.8 :	395. :	<49.4 :	334. :
Thallium	mg/kg-dry	T	0.29 :	0.93 :	0.38 :	0.2 :	0.5 :	0.44 :
Vanadium	mg/kg-dry	T	25.8 :	50.2 :	50.9 :	8.2 :	36. :	22. :
Zinc	mg/kg-dry	T	11. J	26.7 J	84.6 J	10.6 J	88. J	19.7 J

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R = Qualified as rejected value from data validation and results are considered unusable for any purpose
T = Total Fraction

Appendix A-7g
Soil - Random 0-24 inches
Validated Analytical Results

Parameter	Units	Fraction	MSS4A3-3	MSS4A3-4	MSS4A3-5	MSS4A3-6	MSS4A3-7	MSS4A3-8
Sample Date			9/29/2002	9/30/2002	9/30/2002	9/29/2002	9/29/2002	9/29/2002
Sample ID			MSS4A3-3-T02N-SOL	MSS4A3-4-T02N-SOL	MSS4A3-5-T02N-SOL	MSS4A3-6-T02N-SOL	MSS4A3-7-T02N-SOL	MSS4A3-8-T02N-SOL
Exposure Area			SS4A3	SS4A3	SS4A3	SS4A3	SS4A3	SS4A3
General Chemistry								
Ammonia	mg/kg-dry	T	8.1 :	14.1 :	5.7 :	5.4 :	9.3 :	14.8 :
Chloride	mg/kg-dry	T	<28.1 :	<27.7 :	<27.3 :	<1.1 :	<28.9 J	<1.1 :
Fluoride	mg/kg-dry	T	0.75 J	2. J	1.4 J	1.8 J	2.8 J	2.2 J
Nitrate	mg/kg-dry	T	<1.2 J	<2.3 J	<2.2 J	<1.1 J	<1.2 J	<1.1 J
Phosphorus	mg/kg-dry	T	1150. J	700. J	1190. J	977. J	1390. J	1910. J
Sulfate	mg/kg-dry	T	6820. J	52. J	5.5 J	1820. :	2580. :	2180. :
Total Kjeldahl Nitrogen	mg/kg-dry	T	42.5 :	145. :	28.9 :	36.9 :	64.1 :	<24.8 :
Total Organic Carbon	mg/kg-dry	T	<113. J	7530. J	<110. J	<110. J	540. J	322. J
Laboratory Parameters								
pH	SU	T	4.2 :	7.2 :	7. :	6.6 :	4.5 :	6.4 :
Solids, Percent	%	T	89. :	90.4 :	91.7 :	91.7 :	86.8 :	91.2 :
Specific Conductance	umhos/cm	T	1350. :	322. :	295. :	510. :	2320. :	691. :
Geotechnical								
Organic Soils	%	T	3.94 :	-	-	1.67 :	2.64 :	1.58 :
Physical Properties								
Cation-Exchange Capacity	meq/100g	T	19.2 :	14.3 :	9.9 :	13.4 :	27.6 :	13.4 :
Sodium Absorption Ratio	ratio	T	<0.02 :	<0.03 :	<0.04 :	0.03 :	0.03 :	<0.02 :
Metals								
Aluminum	mg/kg-dry	T	12400. :	11700. :	16000. :	14500. :	22800. :	14100. :
Antimony	mg/kg-dry	T	<0.04 J	<0.03 J	<0.03 J	<0.04 J	<0.04 J	0.05 J
Arsenic	mg/kg-dry	T	2.3 :	2.6 :	3. :	1.7 :	3.9 :	3.2 :
Barium	mg/kg-dry	T	113. :	35.5 :	97.9 :	147. :	168. :	113. :
Beryllium	mg/kg-dry	T	0.45 :	2. :	1.1 :	0.96 :	1.3 :	1.5 :
Boron	mg/kg-dry	T	<0.51 :	<0.38 J	<0.32 J	<0.53 :	<0.56 :	<0.5 :
Cadmium	mg/kg-dry	T	0.28 J	1.7 :	<0.02 J	0.37 J	0.7 :	0.5 J
Calcium	mg/kg-dry	T	8270. :	11000. :	12300. :	20200. :	10500. :	14100. :
Chromium	mg/kg-dry	T	25. :	11.2 :	33.2 :	49.9 :	88.7 :	37.7 :
Cobalt	mg/kg-dry	T	6. :	11.3 :	18. :	15.5 :	22.3 :	17. :
Copper	mg/kg-dry	T	45.8 :	179. :	192. :	165. :	157. :	190. :
Iron	mg/kg-dry	T	32500. :	15800. :	32400. :	23200. :	42400. :	25200. :
Lead	mg/kg-dry	T	185. :	57.2 :	9.8 :	20.1 :	42.3 :	27.9 :
Magnesium	mg/kg-dry	T	8240. :	4680. :	12600. :	11200. :	15900. :	9920. :
Manganese	mg/kg-dry	T	257. J	761. J	1140. J	768. J	685. J	608. J

J = Qualified as estimated during data validation
R = Qualified as rejected value from data validation and results are considered unusable for any purpose
T = Total Fraction

Appendix A-7g
Soil - Random 0-24 inches
Validated Analytical Results

Parameter	Units	Site ID / Sample Date / Sample ID / Exposure Area / Fraction	MSS4A3-3 9/29/2002 MSS4A3-3-T02N-SOL SS4A3 T		MSS4A3-4 9/30/2002 MSS4A3-4-T02N-SOL SS4A3 T		MSS4A3-5 9/30/2002 MSS4A3-5-T02N-SOL SS4A3 T		MSS4A3-6 9/29/2002 MSS4A3-6-T02N-SOL SS4A3 T		MSS4A3-7 9/29/2002 MSS4A3-7-T02N-SOL SS4A3 T		MSS4A3-8 9/29/2002 MSS4A3-8-T02N-SOL SS4A3 T	
Mercury	mg/kg-dry	T	<0.018	:	<0.017	J	<0.018	J	<0.017	:	<0.017	:	0.11	:
Molybdenum	mg/kg-dry	T	133.	:	30.9	:	24.4	:	99.3	:	81.6	:	839.	:
Nickel	mg/kg-dry	T	12.	J	20.6	J	35.9	J	34.6	J	58.8	J	25.3	J
Potassium	mg/kg-dry	T	5680.	J	2450.	J	3510.	J	4170.	J	6140.	J	5520.	J
Selenium	mg/kg-dry	T	0.85	J	1.1	J	0.81	J	0.66	J	1.1	J	0.79	J
Silver	mg/kg-dry	T	<0.45	:	0.43	:	0.52	:	0.49	:	0.59	:	0.79	:
Sodium	mg/kg-dry	T	218.	:	46.7	:	<36.3	:	<76.9	:	<82.3	:	<77.3	:
Thallium	mg/kg-dry	T	0.71	:	0.26	:	0.37	:	0.39	:	0.87	:	0.53	:
Vanadium	mg/kg-dry	T	39.9	:	16.	:	58.2	:	49.4	:	70.5	:	47.2	:
Zinc	mg/kg-dry	T	43.2	J	142.	J	34.5	J	41.3	J	91.1	J	54.5	J

J = Qualified as estimated during data validation
R = Qualified as rejected value from data validation and results are considered unusable for any purpose
T = Total Fraction

Appendix A-7g
Soil - Random 0-24 inches
Validated Analytical Results

Parameter	Units	Exposure Area Fraction	Site ID		Sample Date		Sample ID		Exposure Area													
			MSS4A3-9		9/29/2002		MSS4A3-29-T02N-SOL		SS4A3		MSS5-1		10/2/2002		MSS5-1-T02N-SOL		SS5		MSS5-10		10/1/2002	
			MSS5-10-T02N-SOL		SS5		MSS5-2		10/1/2002		MSS5-2-T02N-SOL		SS5		MSS5-3		10/2/2002		MSS5-3-T02N-SOL		SS5	
			MSS5-4		10/2/2002		MSS5-4-T02N-SOL		SS5													
General Chemistry																						
Ammonia	mg/kg-dry	T	8.5	:	6.5	:	15.2	:	<16.5	:	63.8	:	52.3	:								
Chloride	mg/kg-dry	T	7.5	J	<28.2	:	<27.9	:	<26.9	:	<28.	:	<27.2	:								
Fluoride	mg/kg-dry	T	0.54	J	4.9	J	-		3.6	J	0.55	J	0.55	J								
Nitrate	mg/kg-dry	T	<1.1	J	<2.9	J	<2.3	J	<2.2	J	<2.3	J	<2.2	J								
Phosphorus	mg/kg-dry	T	886.	J	364.	J	977.	J	116.	J	263.	J	233.	J								
Sulfate	mg/kg-dry	T	2700.	:	736.	:	25.	:	368.	:	84.	:	52.1	:								
Total Kjeldahl Nitrogen	mg/kg-dry	T	48.6	:	55.6	:	82.	:	<25.8	:	45.6	:	<26.1	:								
Total Organic Carbon	mg/kg-dry	T	<109.	J	<113.	J	3190.	J	827.	J	<112.	J	<109.	J								
Laboratory Parameters																						
pH	SU	T	3.	:	4.4	:	4.1	:	4.	:	7.1	:	8.	:								
Solids, Percent	%	T	92.	:	88.8	:	89.7	:	93.2	:	89.5	:	92.1	:								
Specific Conductance	umhos/cm	T	1700.	:	559.	:	70.6	:	481.	:	312.	:	156.	:								
Geotechnical																						
Organic Soils	%	T	3.48	:	2.02	:	3.36	:	1.62	:	2.7	:	1.99	:								
Physical Properties																						
Cation-Exchange Capacity	meq/100g	T	18.5	:	14.4	:	24.7	:	15.5	:	16.9	:	14.3	:								
Sodium Absorption Ratio	ratio	T	<0.02	:	0.03	:	0.25	:	<0.02	:	<0.04	:	<0.05	:								
Metals																						
Aluminum	mg/kg-dry	T	9590.	:	13600.	:	7560.	:	9480.	:	23700.	:	17300.	:								
Antimony	mg/kg-dry	T	<0.04	J	<0.18	J	<0.18	J	<0.17	J	<0.18	J	<0.17	J								
Arsenic	mg/kg-dry	T	1.7	:	3.	:	3.	:	2.	:	0.85	:	3.3	:								
Barium	mg/kg-dry	T	83.4	:	148.	:	330.	:	35.9	:	295.	:	112.	:								
Beryllium	mg/kg-dry	T	0.45	:	0.55	:	0.28	:	1.1	:	1.	:	1.2	:								
Boron	mg/kg-dry	T	<0.54	:	7.9	J	<0.31	J	<0.36	J	9.2	J	5.8	J								
Cadmium	mg/kg-dry	T	0.23	J	<0.026	:	0.089	:	0.099	:	<0.028	:	<0.027	:								
Calcium	mg/kg-dry	T	11900.	:	4630.	:	714.	:	12100.	:	25300.	:	27700.	:								
Chromium	mg/kg-dry	T	29.8	J	48.9	:	29.6	:	6.4	:	74.8	:	56.	:								
Cobalt	mg/kg-dry	T	3.5	:	20.4	:	2.	:	14.4	:	35.9	:	17.5	:								
Copper	mg/kg-dry	T	82.6	:	136.	:	35.6	:	167.	:	282.	:	173.	:								
Iron	mg/kg-dry	T	27000.	:	27500.	:	29700.	:	14700.	:	50000.	:	30800.	:								
Lead	mg/kg-dry	T	36.6	:	129.	:	99.3	:	28.9	:	9.9	:	36.6	:								
Magnesium	mg/kg-dry	T	6220.	J	9870.	:	4130.	:	3890.	:	25400.	:	10900.	:								
Manganese	mg/kg-dry	T	175.	J	691.	J	200.	J	466.	J	649.	J	1160.	J								

J = Qualified as estimated during data validation

R = Qualified as rejected value from data validation and results are considered unusable for any purpose

T = Total Fraction

Appendix A-7g
Soil - Random 0-24 inches
Validated Analytical Results

Parameter	Units	Fraction	Site ID	Sample Date	Sample ID	Exposure Area
			MSS4A3-9	9/29/2002	MSS4A3-29-T02N-SOL	SS4A3
Mercury	mg/kg-dry	T	<0.018 :			
Molybdenum	mg/kg-dry	T	186. :			
Nickel	mg/kg-dry	T	14.9 J			
Potassium	mg/kg-dry	T	4500. J			
Selenium	mg/kg-dry	T	0.77 J			
Silver	mg/kg-dry	T	0.69 :			
Sodium	mg/kg-dry	T	<69.6 :			
Thallium	mg/kg-dry	T	0.49 :			
Vanadium	mg/kg-dry	T	30.4 :			
Zinc	mg/kg-dry	T	20.5 J			

Parameter	Units	Fraction	Site ID	Sample Date	Sample ID	Exposure Area
			MSS5-1	10/2/2002	MSS5-1-T02N-SOL	SS5
Mercury	mg/kg-dry	T	<0.017 :			
Molybdenum	mg/kg-dry	T	190. :			
Nickel	mg/kg-dry	T	27.2 J			
Potassium	mg/kg-dry	T	4610. J			
Selenium	mg/kg-dry	T	0.89 J			
Silver	mg/kg-dry	T	0.44 :			
Sodium	mg/kg-dry	T	<46.3 :			
Thallium	mg/kg-dry	T	0.41 :			
Vanadium	mg/kg-dry	T	43.7 :			
Zinc	mg/kg-dry	T	56.5 J			

Parameter	Units	Fraction	Site ID	Sample Date	Sample ID	Exposure Area
			MSS5-10	10/1/2002	MSS5-10-T02N-SOL	SS5
Mercury	mg/kg-dry	T	<0.017 :			
Molybdenum	mg/kg-dry	T	98.2 :			
Nickel	mg/kg-dry	T	10.3 J			
Potassium	mg/kg-dry	T	3490. J			
Selenium	mg/kg-dry	T	2.6 J			
Silver	mg/kg-dry	T	0.55 :			
Sodium	mg/kg-dry	T	572. :			
Thallium	mg/kg-dry	T	0.42 :			
Vanadium	mg/kg-dry	T	30.7 :			
Zinc	mg/kg-dry	T	81.1 J			

Parameter	Units	Fraction	Site ID	Sample Date	Sample ID	Exposure Area
			MSS5-2	10/1/2002	MSS5-2-T02N-SOL	SS5
Mercury	mg/kg-dry	T	<0.017 :			
Molybdenum	mg/kg-dry	T	555. :			
Nickel	mg/kg-dry	T	7. J			
Potassium	mg/kg-dry	T	2460. J			
Selenium	mg/kg-dry	T	0.52 J			
Silver	mg/kg-dry	T	0.55 :			
Sodium	mg/kg-dry	T	<43.7 :			
Thallium	mg/kg-dry	T	0.23 :			
Vanadium	mg/kg-dry	T	15.9 :			
Zinc	mg/kg-dry	T	34.1 J			

Parameter	Units	Fraction	Site ID	Sample Date	Sample ID	Exposure Area
			MSS5-3	10/2/2002	MSS5-3-T02N-SOL	SS5
Mercury	mg/kg-dry	T	<0.018 :			
Molybdenum	mg/kg-dry	T	59.6 :			
Nickel	mg/kg-dry	T	52.6 J			
Potassium	mg/kg-dry	T	8780. J			
Selenium	mg/kg-dry	T	1.3 J			
Silver	mg/kg-dry	T	0.2 :			
Sodium	mg/kg-dry	T	<49.8 :			
Thallium	mg/kg-dry	T	0.77 :			
Vanadium	mg/kg-dry	T	110. :			
Zinc	mg/kg-dry	T	47. J			

Parameter	Units	Fraction	Site ID	Sample Date	Sample ID	Exposure Area
			MSS5-4	10/2/2002	MSS5-4-T02N-SOL	SS5
Mercury	mg/kg-dry	T	<0.016 :			
Molybdenum	mg/kg-dry	T	231. :			
Nickel	mg/kg-dry	T	42.1 J			
Potassium	mg/kg-dry	T	4660. J			
Selenium	mg/kg-dry	T	0.85 J			
Silver	mg/kg-dry	T	0.42 :			
Sodium	mg/kg-dry	T	<48.4 :			
Thallium	mg/kg-dry	T	0.38 :			
Vanadium	mg/kg-dry	T	59.1 :			
Zinc	mg/kg-dry	T	34.9 J			

J = Qualified as estimated during data validation
R = Qualified as rejected value from data validation and results are considered unusable for any purpose
T = Total Fraction

Appendix A-7g
Soil - Random 0-24 inches
Validated Analytical Results

Parameter	Units	Exposure Area Fraction	Site ID / Sample Date / Sample ID / Exposure Area											
			MSS5-5 10/2/2002 MSS5-5-T02N-SOL SS5		MSS5-6 10/2/2002 MSS5-6-T02N-SOL SS5		MSS5-7 9/26/2002 MSS5-7-T02N-SOL SS5		MSS5-8 9/26/2002 MSS5-8-T02N-SOL SS5		MSS5-9 10/17/2002 MSS5-9-T02N-SOL SS5		MSS6-1 10/9/2002 MSS6-1-T02N-SOL SS6	
General Chemistry														
Ammonia	mg/kg-dry	T	72.9	:	<13.4	:	<2.6	:	19.1	:	28.4	:	35.7	:
Chloride	mg/kg-dry	T	<27.2	:	<26.8	:	0.24	:	64.3	:	<2.2	J	<2.2	J
Fluoride	mg/kg-dry	T	0.56	J	0.59	J	1.2	J	3.3	J	4.	J	1.2	J
Nitrate	mg/kg-dry	T	<2.2	J	<2.2	J	<0.22	J	7.6	J	<2.2	J	2.2	J
Phosphorus	mg/kg-dry	T	185.	J	349.	J	496.	J	38.1	J	271.	J	803.	J
Sulfate	mg/kg-dry	T	64.7	:	75.4	:	1870.	:	7440.	:	32.5	J	1710.	J
Total Kjeldahl Nitrogen	mg/kg-dry	T	23.7	:	<25.5	:	<24.6	:	410.	:	56.4	:	25.8	:
Total Organic Carbon	mg/kg-dry	T	<109.	J	<108.	J	<108.	J	5010.	J	290.	J	<109.	J
Laboratory Parameters														
pH	SU	T	7.7	:	8.	:	6.9	:	4.3	:	7.1	:	6.1	:
Solids, Percent	%	T	92.	:	93.3	:	93.1	:	92.9	:	93.8	:	92.2	:
Specific Conductance	umhos/cm	T	166.	:	157.	:	1154.	:	1651.	:	22.8	:	1210.	:
Geotechnical														
Organic Soils	%	T	1.06	:	1.4	:	-		-		0.87	J	2.08	J
Physical Properties														
Cation-Exchange Capacity	meq/100g	T	3.3	:	6.2	:	9.8	:	16.4	:	21.9	:	9.4	:
Sodium Absorption Ratio	ratio	T	<0.04	:	<0.05	:	0.04	:	0.03	:	0.05	:	<0.02	:
Metals														
Aluminum	mg/kg-dry	T	5650.	:	12100.	:	9960.	:	7520.	:	6890.	:	8750.	:
Antimony	mg/kg-dry	T	<0.16	J	<0.17	J	<0.04	:	0.1	J	<0.25	J	<0.14	J
Arsenic	mg/kg-dry	T	2.1	:	2.2	:	2.1	:	6.7	:	3.1	:	2.1	:
Barium	mg/kg-dry	T	8.	:	70.1	:	75.1	:	134.	:	11.	:	59.9	:
Beryllium	mg/kg-dry	T	0.9	:	1.	:	1.5	:	0.51	:	2.3	:	0.69	:
Boron	mg/kg-dry	T	1.8	:	3.8	J	<0.46	:	0.67	J	<0.37	:	<0.42	J
Cadmium	mg/kg-dry	T	0.29	:	<0.025	:	0.78	:	1.	:	1.3	:	<0.026	J
Calcium	mg/kg-dry	T	13900.	:	23100.	:	18400.	:	10800.	:	3800.	:	12900.	:
Chromium	mg/kg-dry	T	4.2	:	25.7	:	19.7	:	42.3	:	3.4	:	26.9	:
Cobalt	mg/kg-dry	T	2.3	:	9.5	:	8.3	:	10.	:	1.9	:	10.9	:
Copper	mg/kg-dry	T	137.	:	112.	:	137.	:	138.	:	85.	:	99.8	:
Iron	mg/kg-dry	T	6750.	:	18600.	:	15000.	:	33400.	:	9680.	:	27100.	:
Lead	mg/kg-dry	T	59.4	:	16.6	:	58.7	:	129.	:	245.	:	52.7	:
Magnesium	mg/kg-dry	T	1630.	:	6360.	:	5250.	:	6130.	:	817.	:	6820.	:
Manganese	mg/kg-dry	T	839.	J	984.	J	908.	J	426.	J	4240.	J	468.	J

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R = Qualified as rejected value from data validation and results are considered unusable for any purpose

T = Total Fraction

Appendix A-7g
Soil - Random 0-24 inches
Validated Analytical Results

Parameter	Units	Exposure Area Fraction	Site ID / Sample Date / Sample ID											
			MSS5-5 10/2/2002 MSS5-5-T02N-SOL SS5		MSS5-6 10/2/2002 MSS5-6-T02N-SOL SS5		MSS5-7 9/26/2002 MSS5-7-T02N-SOL SS5		MSS5-8 9/26/2002 MSS5-8-T02N-SOL SS5		MSS5-9 10/17/2002 MSS5-9-T02N-SOL SS5		MSS6-1 10/9/2002 MSS6-1-T02N-SOL SS6	
Mercury	mg/kg-dry	T	<0.018	:	<0.017	:	<0.018	J	<0.015	J	<0.018	:	<0.016	:
Molybdenum	mg/kg-dry	T	190.	:	146.	:	528.	:	424.	:	194.	:	29.6	:
Nickel	mg/kg-dry	T	3.3	J	18.9	J	20.6	J	25.8	J	2.	J	24.3	J
Potassium	mg/kg-dry	T	973.	J	2430.	J	2310.	J	4080.	J	2230.	J	2960.	J
Selenium	mg/kg-dry	T	0.5	J	0.76	J	0.51	J	1.	J	<0.66	:	<0.73	J
Silver	mg/kg-dry	T	0.34	:	0.37	:	0.5	:	1.7	:	2.3	:	0.57	:
Sodium	mg/kg-dry	T	75.	:	<45.1	:	<51.7	:	<54.2	:	56.1	:	<47.5	:
Thallium	mg/kg-dry	T	0.09	:	0.23	:	0.28	:	0.34	:	0.23	:	0.44	:
Vanadium	mg/kg-dry	T	8.8	:	32.1	:	30.1	:	44.2	:	6.9	:	25.8	:
Zinc	mg/kg-dry	T	60.9	J	28.8	J	129.	J	205.	J	183.	:	61.1	J

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Appendix A-7g
Soil - Random 0-24 inches
Validated Analytical Results

Parameter	Units	Fraction	MSS6-10		MSS6-2		MSS6-3		MSS6-4		MSS6-5		MSS6-6	
Sample Date			10/9/2002		10/10/2002		10/9/2002		10/10/2002		10/9/2002		10/9/2002	
Sample ID			MSS6-10-T02N-SOL		MSS6-2-T02N-SOL		MSS6-3-T02N-SOL		MSS6-4-T02N-SOL		MSS6-5-T02N-SOL		MSS6-6-T02N-SOL	
Exposure Area			SS6		SS6		SS6		SS6		SS6		SS6	
General Chemistry														
Ammonia	mg/kg-dry	T	<19.5	:	75.8	:	39.2	:	68.	:	46.9	:	<20.	:
Chloride	mg/kg-dry	T	<2.2	J	<2.2	J	<2.2	J	<2.2	J	2.6	J	3.5	J
Fluoride	mg/kg-dry	T	0.63	J	3.2	J	0.8	J	1.6	J	9.3	J	0.68	J
Nitrate	mg/kg-dry	T	<2.2	J	<2.2	J	<2.2	J	<2.2	J	<2.2	J	<2.2	J
Phosphorus	mg/kg-dry	T	1470.	J	1390.	J	202.	J	1170.	J	296.	J	1380.	J
Sulfate	mg/kg-dry	T	6.5	J	1960.	J	43.	J	716.	J	1620.	J	1440.	J
Total Kjeldahl Nitrogen	mg/kg-dry	T	57.1	:	<26.9	:	37.2	:	29.2	:	67.9	:	<24.	:
Total Organic Carbon	mg/kg-dry	T	536.	J	1800.	J	<107.	J	1980.	J	1730.	J	1410.	J
Laboratory Parameters														
pH	SU	T	7.1	:	7.1	:	7.3	:	7.4	:	5.4	:	7.	:
Solids, Percent	%	T	93.2	:	92.9	:	93.7	:	94.	:	93.8	:	91.	:
Specific Conductance	umhos/cm	T	32.4	:	885.	:	78.2	:	360.	:	877.	:	730.	:
Geotechnical														
Organic Soils	%	T	-		2.3	:	1.48	J	1.61	:	1.79	J	-	
Physical Properties														
Cation-Exchange Capacity	meq/100g	T	11.9	:	13.1	:	12.4	:	12.	:	8.7	:	9.4	:
Sodium Absorption Ratio	ratio	T	<0.07	:	0.02	:	<0.06	:	0.09	:	<0.02	:	0.12	:
Metals														
Aluminum	mg/kg-dry	T	14000.	:	16400.	:	14900.	:	13400.	:	11700.	:	12200.	:
Antimony	mg/kg-dry	T	<0.17	J	<0.17	J	<0.12	J	<0.18	J	<0.13	J	<0.16	:
Arsenic	mg/kg-dry	T	1.7	J	0.66	:	2.3	:	2.1	:	2.6	:	2.6	:
Barium	mg/kg-dry	T	21.7	:	128.	:	118.	:	89.3	:	101.	:	87.2	:
Beryllium	mg/kg-dry	T	0.79	:	1.1	:	1.1	:	1.2	:	1.2	:	2.1	:
Boron	mg/kg-dry	T	9.1	J	13.5	J	<0.4	J	10.2	J	<0.4	J	5.6	:
Cadmium	mg/kg-dry	T	0.88	:	0.52	J	<0.025	J	0.3	J	0.73	:	0.77	:
Calcium	mg/kg-dry	T	7240.	:	11400.	:	19100.	:	16100.	:	8640.	:	16800.	:
Chromium	mg/kg-dry	T	49.7	:	88.2	:	33.1	:	40.2	:	41.1	:	42.2	:
Cobalt	mg/kg-dry	T	17.5	:	18.2	:	14.7	:	11.7	:	15.5	:	5.7	:
Copper	mg/kg-dry	T	141.	:	206.	:	126.	:	186.	:	158.	:	200.	:
Iron	mg/kg-dry	T	26300.	:	30500.	:	23200.	:	22900.	:	26300.	:	15400.	:
Lead	mg/kg-dry	T	1520.	:	56.4	:	16.9	:	54.5	:	82.	:	102.	:
Magnesium	mg/kg-dry	T	12900.	:	15800.	:	8500.	:	9630.	:	7940.	:	8110.	:
Manganese	mg/kg-dry	T	2180.	J	672.	J	911.	J	787.	J	823.	J	702.	:

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T = Total Fraction

Appendix A-7g
Soil - Random 0-24 inches
Validated Analytical Results

Parameter	Units	Exposure Area Fraction	Site ID / Sample Date / Sample ID											
			MSS6-10 10/9/2002 MSS6-10-T02N-SOL	MSS6-2 10/10/2002 MSS6-2-T02N-SOL	MSS6-3 10/9/2002 MSS6-3-T02N-SOL	MSS6-4 10/10/2002 MSS6-4-T02N-SOL	MSS6-5 10/9/2002 MSS6-5-T02N-SOL	MSS6-6 10/9/2002 MSS6-6-T02N-SOL
			SS6	SS6	SS6	SS6	SS6	SS6
Mercury	mg/kg-dry	T	<0.017 :	<0.017 :	<0.016 :	<0.017 :	<0.018 :	<0.017 :
Molybdenum	mg/kg-dry	T	6.3 J	467. :	163. :	569. :	319. :	1800. :
Nickel	mg/kg-dry	T	38.5 J	55.7 J	30.6 J	26.9 J	32. J	24.3 :
Potassium	mg/kg-dry	T	320. J	7060. J	3310. J	4330. J	3710. J	4780. :
Selenium	mg/kg-dry	T	0.53 J	1.3 J	<0.79 J	0.83 J	1.1 J	0.78 :
Silver	mg/kg-dry	T	1.2 :	0.42 :	0.32 :	0.69 :	1.1 :	1.1 :
Sodium	mg/kg-dry	T	<41.6 :	<44. :	<44.6 :	<45.9 :	<45.2 :	<46.6 :
Thallium	mg/kg-dry	T	<0.084 :	1.1 :	0.36 :	0.59 :	0.44 :	0.44 :
Vanadium	mg/kg-dry	T	40.2 :	66.4 :	46.7 :	45.7 :	39. :	49.8 :
Zinc	mg/kg-dry	T	609. J	168. J	41.4 J	93.7 J	166. J	168. :

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Appendix A-7g
Soil - Random 0-24 inches
Validated Analytical Results

Parameter	Units	Exposure Area Fraction	Site ID / Sample Date / Sample ID / Exposure Area		MSS6-7 10/8/2002 MSS6-7-T02N-SOL SS6		MSS6-8 10/8/2002 MSS6-8-T02N-SOL SS6		MSS6-9 10/8/2002 MSS6-9-T02N-SOL SS6		MSS7-1 10/15/2002 MSS7-1-T02N-SOL SS7		MSS7-10 10/15/2002 MSS7-10-T02N-SOL SS7		MSS7-2 10/15/2002 MSS7-2-T02N-SOL SS7	
General Chemistry																
Ammonia	mg/kg-dry	T			31.6	:	21.8	:	60.3	:	42.	:	<8.9	:	18.8	:
Chloride	mg/kg-dry	T			4.2	J	2.3	J	<2.3	J	2.5	J	<2.1	J	2.2	J
Fluoride	mg/kg-dry	T			0.21	J	0.43	J	0.17	J	0.19	J	0.15	J	0.12	J
Nitrate	mg/kg-dry	T			<2.2	J	<2.2	J	<2.3	J	3.7	J	<2.1	J	6.8	J
Phosphorus	mg/kg-dry	T			470.	J	692.	J	1300.	J	284.	J	256.	:	202.	J
Sulfate	mg/kg-dry	T			3.9	J	856.	J	<2.3	J	9.2	J	3.8	J	7.7	J
Total Kjeldahl Nitrogen	mg/kg-dry	T			126.	:	115.	:	40.9	:	364.	:	106.	:	208.	:
Total Organic Carbon	mg/kg-dry	T			1970.	J	6020.	J	<112.	J	6820.	J	3080.	:	4510.	J
Laboratory Parameters																
pH	SU	T			5.5	:	4.3	:	7.7	:	5.6	:	6.1	:	5.2	:
Solids, Percent	%	T			94.	:	93.2	:	90.	:	97.1	:	97.4	:	93.5	:
Specific Conductance	umhos/cm	T			22.2	:	287.	:	52.1	:	21.1	:	4.1	:	18.4	:
Geotechnical																
Organic Soils	%	T			3.21	:	2.	:	2.39	:	3.82	J	2.26	J	2.97	J
Physical Properties																
Cation-Exchange Capacity	meq/100g	T			11.8	:	16.2	:	15.8	:	12.8	:	6.8	:	10.3	:
Sodium Absorption Ratio	ratio	T			<0.17	:	0.08	:	<0.09	:	0.1	:	<0.1	:	0.13	:
Metals																
Aluminum	mg/kg-dry	T			5540.	:	9400.	:	17600.	:	3880.	:	1480.	:	4910.	:
Antimony	mg/kg-dry	T			<0.18	J	<0.17	J	<0.17	J	<0.25	J	<0.15	:	<0.26	J
Arsenic	mg/kg-dry	T			10.9	:	5.5	:	3.6	:	4.3	:	4.2	:	17.7	:
Barium	mg/kg-dry	T			77.8	:	33.5	:	15.6	:	58.2	:	178.	:	171.	:
Beryllium	mg/kg-dry	T			0.36	:	1.3	:	2.1	:	0.16	:	0.078	J	0.23	:
Boron	mg/kg-dry	T			<0.39	J	<0.43	J	<0.42	J	2.7	J	2.7	:	4.	J
Cadmium	mg/kg-dry	T			<0.054	J	0.65	:	2.4	:	<0.025	:	0.18	:	<0.027	:
Calcium	mg/kg-dry	T			983.	:	1730.	:	14600.	:	822.	:	247.	:	758.	:
Chromium	mg/kg-dry	T			6.9	:	18.6	:	65.	:	2.	:	1.	:	3.5	:
Cobalt	mg/kg-dry	T			3.	:	9.8	:	19.5	:	0.54	:	0.44	:	1.6	:
Copper	mg/kg-dry	T			41.	:	78.5	:	82.7	:	15.	:	7.6	:	16.1	:
Iron	mg/kg-dry	T			35700.	:	20400.	:	29300.	:	17700.	:	11000.	:	21400.	:
Lead	mg/kg-dry	T			226.	:	82.3	:	770.	:	109.	:	74.3	:	324.	:
Magnesium	mg/kg-dry	T			990.	:	4090.	:	18000.	:	485.	:	198.	:	742.	:
Manganese	mg/kg-dry	T			159.	J	936.	J	3880.	J	39.8	J	13.	:	85.7	J

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T = Total Fraction

Appendix A-7g
Soil - Random 0-24 inches
Validated Analytical Results

Parameter	Units	Exposure Area Fraction	Site ID / Sample Date / Sample ID		Site ID / Sample Date / Sample ID		Site ID / Sample Date / Sample ID		Site ID / Sample Date / Sample ID		Site ID / Sample Date / Sample ID		Site ID / Sample Date / Sample ID	
			MSS6-7 10/8/2002 MSS6-7-T02N-SOL		MSS6-8 10/8/2002 MSS6-8-T02N-SOL		MSS6-9 10/8/2002 MSS6-9-T02N-SOL		MSS7-1 10/15/2002 MSS7-1-T02N-SOL		MSS7-10 10/15/2002 MSS7-10-T02N-SOL		MSS7-2 10/15/2002 MSS7-2-T02N-SOL	
		Exposure Area	SS6		SS6		SS6		SS7		SS7		SS7	
Mercury	mg/kg-dry	T	<0.017	:	<0.018	:	<0.017	:	<0.017	:	<0.016	J	<0.018	:
Molybdenum	mg/kg-dry	T	24.2	:	19.1	:	2.6	:	11.	:	6.3	:	15.	:
Nickel	mg/kg-dry	T	4.6	J	21.	J	59.3	J	<1.1	J	<1.1	:	1.9	J
Potassium	mg/kg-dry	T	3330.	J	1050.	J	341.	J	1880.	J	2110.	:	3120.	J
Selenium	mg/kg-dry	T	<1.6	J	<1.9	J	<0.72	J	1.2	J	0.85	:	0.9	J
Silver	mg/kg-dry	T	1.8	:	<0.48	J	<0.25	J	0.48	:	0.63	:	1.	:
Sodium	mg/kg-dry	T	168.	:	<51.2	:	<51.	:	<104.	:	84.5	:	<48.	:
Thallium	mg/kg-dry	T	0.26	:	0.18	:	<0.087	:	0.28	:	0.13	:	0.36	:
Vanadium	mg/kg-dry	T	6.3	:	16.8	:	48.2	:	4.7	:	3.4	:	11.9	:
Zinc	mg/kg-dry	T	45.9	J	283.	J	1120.	J	9.8	J	3.3	:	10.8	J

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Appendix A-7g
Soil - Random 0-24 inches
Validated Analytical Results

Parameter	Units	Fraction	MSS7-3	MSS7-4	MSS7-5	MSS7-6	MSS7-7	MSS7-8
Sample Date			10/3/2002	10/2/2002	10/1/2002	10/2/2002	10/4/2002	10/2/2002
Sample ID			MSS7-3-T02N-SOL	MSS7-4-T02N-SOL	MSS7-5-T02N-SOL	MSS7-6-T02N-SOL	MSS7-7-T02N-SOL	MSS7-8-T02N-SOL
Exposure Area			SS7	SS7	SS7	SS7	SS7	SS7
General Chemistry								
Ammonia	mg/kg-dry	T	55.3 :	43. :	16.5 :	14.1 :	5.2 :	17.4 :
Chloride	mg/kg-dry	T	<27.9 :	2.3 :	<27.5 :	<27.2 :	<28.8 :	<27.8 :
Fluoride	mg/kg-dry	T	-	0.13 J	-	0.28 J	0.37 J	0.36 J
Nitrate	mg/kg-dry	T	<2.8 J	<2.3 J	<1.1 J	<2.8 J	<1.2 J	<9.5 J
Phosphorus	mg/kg-dry	T	15.9 J	955. J	818. J	410. J	11.4 J	771. J
Sulfate	mg/kg-dry	T	<27.9 :	632. :	11300. :	7170. :	1450. :	2380. :
Total Kjeldahl Nitrogen	mg/kg-dry	T	340. :	88.2 :	48.2 :	29.7 :	49.3 :	148. :
Total Organic Carbon	mg/kg-dry	T	7300. J	<111. J	2060. J	<109. J	335. J	4370. J
Laboratory Parameters								
pH	SU	T	5.9 :	3.6 :	3.1 :	2.9 :	5.2 :	4.3 :
Solids, Percent	%	T	89.8 :	90.5 :	91.1 :	92. :	86.9 :	90.2 :
Specific Conductance	umhos/cm	T	13.8 :	605. :	1600. :	1230. :	1480. :	1170. :
Geotechnical								
Organic Soils	%	T	3.89 :	3.49 :	4.1 :	2.34 :	2.9 :	3.93 :
Physical Properties								
Cation-Exchange Capacity	meq/100g	T	9.1 :	14.4 :	11.9 :	5.5 :	8.9 :	15.9 :
Sodium Absorption Ratio	ratio	T	<0.11 :	<0.03 :	<0.02 :	<0.03 :	0.02 :	0.04 :
Metals								
Aluminum	mg/kg-dry	T	3710. :	2790. :	5350. :	914. :	8520. :	6010. :
Antimony	mg/kg-dry	T	<0.17 J	<0.18 J	<0.17 J	<0.18 J	<0.18 J	<0.18 J
Arsenic	mg/kg-dry	T	6.9 :	8.4 :	11.3 :	8.9 :	2.9 :	3.4 :
Barium	mg/kg-dry	T	143. :	180. :	163. :	83.8 :	215. :	261. :
Beryllium	mg/kg-dry	T	0.15 :	0.23 :	0.35 :	0.092 :	0.68 :	0.46 :
Boron	mg/kg-dry	T	<2.1 :	6.6 J	<0.36 J	5.3 :	<0.48 J	8.8 J
Cadmium	mg/kg-dry	T	<0.026 :	<0.026 :	<0.022 :	<0.027 :	<0.029 J	<0.025 :
Calcium	mg/kg-dry	T	1000. :	615. :	1810. :	1840. :	9970. :	4900. :
Chromium	mg/kg-dry	T	3.8 :	1.6 :	12.4 :	1.3 :	29.2 :	9.3 :
Cobalt	mg/kg-dry	T	0.91 :	1.1 :	0.86 :	<0.2 :	8.1 :	4.4 :
Copper	mg/kg-dry	T	25.9 :	48.5 :	64.1 :	23.5 :	45.8 :	27.3 :
Iron	mg/kg-dry	T	17500. :	22800. :	35700. :	17200. :	33700. :	28800. :
Lead	mg/kg-dry	T	232. :	129. :	167. :	219. :	35. :	46.5 :
Magnesium	mg/kg-dry	T	705. :	727. :	1380. :	128. :	6530. :	2370. :
Manganese	mg/kg-dry	T	44.2 J	78.4 J	200. J	19.7 J	520. J	281. J

J = Qualified as estimated during data validation
R = Qualified as rejected value from data validation and results are considered unusable for any purpose
T = Total Fraction

Appendix A-7g
Soil - Random 0-24 inches
Validated Analytical Results

Parameter	Units	Exposure Area Fraction	Site ID / Sample Date / Sample ID		MSS7-3 10/3/2002 MSS7-3-T02N-SOL SS7		MSS7-4 10/2/2002 MSS7-4-T02N-SOL SS7		MSS7-5 10/1/2002 MSS7-5-T02N-SOL SS7		MSS7-6 10/2/2002 MSS7-6-T02N-SOL SS7		MSS7-7 10/4/2002 MSS7-7-T02N-SOL SS7		MSS7-8 10/2/2002 MSS7-8-T02N-SOL SS7	
Mercury	mg/kg-dry	T			<0.017	:	<0.017	:	<0.017	:	<0.018	:	<0.018	:	<0.016	:
Molybdenum	mg/kg-dry	T			21.1	:	13.7	:	5.3	:	13.3	:	0.96	J	4.6	:
Nickel	mg/kg-dry	T			1.7	J	<1.2	J	3.8	J	<1.2	J	20.8	J	6.9	J
Potassium	mg/kg-dry	T			2780.	J	3610.	J	3290.	J	2820.	J	2640.	J	2980.	J
Selenium	mg/kg-dry	T			0.93	J	1.	J	1.3	J	0.64	J	0.95	J	1.6	J
Silver	mg/kg-dry	T			2.	:	1.3	:	1.4	:	1.7	:	0.37	:	0.28	:
Sodium	mg/kg-dry	T			79.1	:	161.	:	472.	:	93.9	:	295.	:	268.	:
Thallium	mg/kg-dry	T			0.27	:	0.26	:	0.3	:	0.28	:	<0.089	:	0.12	:
Vanadium	mg/kg-dry	T			7.9	:	4.4	:	13.2	:	3.1	:	24.9	:	9.8	:
Zinc	mg/kg-dry	T			11.2	J	20.	J	33.5	J	7.3	J	76.4	J	44.9	J

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T = Total Fraction

Appendix A-7g
Soil - Random 0-24 inches
Validated Analytical Results

Parameter	Units	Exposure Area Fraction	Site ID	MSS7-9	RRS-1	RRS-10	RRS-11	RRS-12	RRS-13
			Sample Date	10/9/2002	9/29/2002	10/15/2002	10/14/2002	10/14/2002	10/14/2002
			Sample ID	MSS7-9-T02N-SOL	RRS-1-T02N-SOL	RRS-10-T02N-SOL	RRS-11-T02N-SOL	RRS-12-T02N-SOL	RRS-13-T02N-SOL
			Exposure Area	SS7	RefMineR	RefMineR	RefMineR	RefMineR	RefMineR
General Chemistry									
Ammonia	mg/kg-dry	T		99.1 :	101. :	35.9 :	65.8 :	130. :	89.5 J
Chloride	mg/kg-dry	T		<2.3 J	17.8 :	8.4 J	4.3 J	12.4 J	7. J
Fluoride	mg/kg-dry	T		0.28 J	0.24 J	0.42 J	0.31 J	0.32 J	0.19 J
Nitrate	mg/kg-dry	T		<2.3 J	<1.3 J	<2.9 J	2.6 J	<2.7 J	<2.4 J
Phosphorus	mg/kg-dry	T		1080. J	990. J	704. J	428. J	656. J	436. J
Sulfate	mg/kg-dry	T		2.6 J	138. :	58.7 J	8.9 J	167. J	76.6 J
Total Kjeldahl Nitrogen	mg/kg-dry	T		227. :	1240. :	239. :	482. :	1550. :	1700. :
Total Organic Carbon	mg/kg-dry	T		2640. J	36200. J	1510. J	8730. J	18100. J	29000. J
Laboratory Parameters									
pH	SU	T		4.6 :	4.6 :	6.6 :	7.4 :	5.9 :	6.5 :
Solids, Percent	%	T		90.1 :	80.5 :	71. :	88. :	74.1 :	85.7 :
Specific Conductance	umhos/cm	T		68. :	93. :	25.9 :	23. :	134. :	64. :
Geotechnical									
Organic Soils	%	T		-	6.88 :	1.57 J	3.26 J	6.38 J	4.9 J
Physical Properties									
Cation-Exchange Capacity	meq/100g	T		13.9 :	28.5 :	7.4 :	16.9 :	18.3 :	21. :
Sodium Absorption Ratio	ratio	T		<0.08 :	0.73 :	0.18 :	0.14 :	0.31 :	0.19 :
Metals									
Aluminum	mg/kg-dry	T		4650. :	11300. :	6040. :	8040. :	8380. :	7070. :
Antimony	mg/kg-dry	T		<0.16 J	<0.05 J	<0.33 J	<0.26 J	<0.33 J	<0.29 J
Arsenic	mg/kg-dry	T		4.6 :	3.4 :	2.6 :	3.3 :	2.6 :	1.8 :
Barium	mg/kg-dry	T		309. :	120. :	63. :	73.3 :	77.6 :	72.7 :
Beryllium	mg/kg-dry	T		0.28 :	0.59 :	0.77 :	1.3 :	1. :	0.72 :
Boron	mg/kg-dry	T		5.7 :	<1.3 :	2.1 :	2. :	<2.3 :	<2.1 :
Cadmium	mg/kg-dry	T		<0.027 :	0.28 J	0.068 :	0.32 :	0.21 :	0.075 :
Calcium	mg/kg-dry	T		605. :	6490. :	2000. :	1870. :	3120. :	3100. :
Chromium	mg/kg-dry	T		3.1 :	25.1 :	15.9 :	11.5 :	17.1 :	14.8 :
Cobalt	mg/kg-dry	T		0.64 :	10. :	6.4 :	4.9 :	6.2 :	4.2 :
Copper	mg/kg-dry	T		7.2 :	20.5 :	11.5 :	10.7 :	11.1 :	9.2 :
Iron	mg/kg-dry	T		13500. :	26100. :	18300. :	14400. :	15300. :	13800. :
Lead	mg/kg-dry	T		73.8 :	11.7 :	24.7 :	18.9 :	20.5 :	20.8 :
Magnesium	mg/kg-dry	T		447. :	6450. :	3290. :	2600. :	3510. :	3220. :
Manganese	mg/kg-dry	T		65.4 J	656. J	296. J	529. J	421. J	227. J

J = Qualified as estimated during data validation

R = Qualified as rejected value from data validation and results are considered unusable for any purpose

T = Total Fraction

Appendix A-7g
Soil - Random 0-24 inches
Validated Analytical Results

Parameter	Units	Exposure Area Fraction	Site ID / Sample Date / Sample ID													
			MSS7-9 / 10/9/2002 / MSS7-9-T02N-SOL		RRS-1 / 9/29/2002 / RRS-1-T02N-SOL		RRS-10 / 10/15/2002 / RRS-10-T02N-SOL		RRS-11 / 10/14/2002 / RRS-11-T02N-SOL		RRS-12 / 10/14/2002 / RRS-12-T02N-SOL		RRS-13 / 10/14/2002 / RRS-13-T02N-SOL	
			SS7		RefMineR		RefMineR		RefMineR		RefMineR		RefMineR	
Mercury	mg/kg-dry	T	<0.017	:	0.034	:	<0.023	:	0.032	:	0.025	:	<0.018	:
Molybdenum	mg/kg-dry	T	4.4	:	0.54	J	<1.6	:	<1.6	J	2.	:	<0.54	J
Nickel	mg/kg-dry	T	1.2	J	16.	J	14.7	J	15.3	J	14.2	J	10.6	J
Potassium	mg/kg-dry	T	3580.	J	1900.	J	1070.	J	1260.	J	1290.	J	1100.	J
Selenium	mg/kg-dry	T	0.79	J	0.49	J	<0.87	J	<0.7	J	<0.89	J	<0.78	J
Silver	mg/kg-dry	T	0.33	:	<0.54	:	<0.16	:	<0.41	:	<0.56	:	<0.48	:
Sodium	mg/kg-dry	T	59.	:	<101.	:	<60.3	:	<76.3	:	<106.	:	<91.	:
Thallium	mg/kg-dry	T	0.1	:	0.08	:	<0.11	:	0.12	:	<0.11	:	<0.097	:
Vanadium	mg/kg-dry	T	5.4	:	51.2	:	22.	:	17.2	:	25.9	:	22.8	:
Zinc	mg/kg-dry	T	15.7	J	63.9	J	106.	J	164.	J	117.	J	79.1	J

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R = Qualified as rejected value from data validation and results are considered unusable for any purpose
T = Total Fraction

Appendix A-7g
Soil - Random 0-24 inches
Validated Analytical Results

Parameter	Units	Exposure Area Fraction	Site ID	RRS-14		RRS-15		RRS-16		RRS-17		RRS-18		RRS-19	
			Sample Date	10/14/2002		10/13/2002		10/13/2002		10/18/2002		10/18/2002		10/19/2002	
			Sample ID	RRS-14-T02N-SOL		RRS-15-T02N-SOL		RRS-16-T02N-SOL		RRS-17-T02N-SOL		RRS-18-T02N-SOL		RRS-19-T02N-SOL	
			Exposure Area	RefMineR		RefMineR		RefMineR		RLCCR		RLCCR		RLCCR	
General Chemistry															
Ammonia	mg/kg-dry	T		133.	J	98.	:	34.2	:	12.2	:	2.6	:	100.	:
Chloride	mg/kg-dry	T		8.1	J	6.7	J	4.8	J	5.4	J	2.5	J	4.5	J
Fluoride	mg/kg-dry	T		0.43	J	0.35	J	0.19	J	0.29	J	0.3	J	1.5	J
Nitrate	mg/kg-dry	T		<3.1	J	<2.3	J	4.	J	3.4	J	3.5	J	5.8	J
Phosphorus	mg/kg-dry	T		604.	J	861.	J	438.	J	404.	J	388.	J	344.	J
Sulfate	mg/kg-dry	T		115.	J	24.2	J	22.3	J	29.2	J	7.9	J	24.5	J
Total Kjeldahl Nitrogen	mg/kg-dry	T		415.	:	644.	J	263.	J	1260.	:	205.	:	708.	:
Total Organic Carbon	mg/kg-dry	T		11700.	J	14400.	J	6130.	J	29800.	J	3210.	J	11100.	J
Laboratory Parameters															
pH	SU	T		6.5	:	6.7	:	7.	:	7.	:	7.1	:	7.4	:
Solids, Percent	%	T		64.8	:	87.4	:	94.2	:	85.1	:	94.3	:	90.3	:
Specific Conductance	umhos/cm	T		38.4	:	24.8	:	24.5	:	47.6	:	18.4	:	87.1	:
Geotechnical															
Organic Soils	%	T		2.42	J	3.61	J	1.98	J	5.85	J	1.76	J	3.93	J
Physical Properties															
Cation-Exchange Capacity	meq/100g	T		12.9	:	15.	:	5.7	:	22.8	:	8.8	:	17.	:
Sodium Absorption Ratio	ratio	T		0.12	:	0.15	:	<0.07	:	0.06	:	0.05	:	0.15	:
Metals															
Aluminum	mg/kg-dry	T		8240.	:	9450.	:	6040.	:	10300.	:	5470.	:	4970.	:
Antimony	mg/kg-dry	T		<0.36	J	<0.19	J	<0.17	J	<0.29	J	<0.26	J	<0.27	J
Arsenic	mg/kg-dry	T		2.1	:	2.2	:	1.2	:	3.3	:	2.3	:	11.5	:
Barium	mg/kg-dry	T		53.5	:	62.9	:	39.5	:	64.9	:	36.1	:	25.2	:
Beryllium	mg/kg-dry	T		0.79	:	0.76	:	0.43	:	1.1	:	0.53	:	1.1	:
Boron	mg/kg-dry	T		<2.	:	<2.8	J	<2.1	:	<0.25	:	<0.22	:	<0.25	:
Cadmium	mg/kg-dry	T		0.26	:	0.096	:	0.037	:	0.26	:	0.13	:	0.18	:
Calcium	mg/kg-dry	T		2800.	:	3250.	:	1800.	:	4010.	:	1710.	:	1970.	:
Chromium	mg/kg-dry	T		20.5	:	20.7	:	14.	:	17.7	:	11.4	:	5.5	:
Cobalt	mg/kg-dry	T		6.	:	7.4	:	5.	:	5.7	:	4.3	:	1.9	:
Copper	mg/kg-dry	T		11.6	:	14.3	:	9.1	:	16.3	:	13.	:	<11.	:
Iron	mg/kg-dry	T		15400.	:	18700.	:	15300.	:	16800.	:	12400.	:	14200.	:
Lead	mg/kg-dry	T		24.	:	24.1	:	21.	:	25.6	:	15.	:	29.	:
Magnesium	mg/kg-dry	T		4370.	:	4590.	:	3730.	:	4430.	:	3000.	:	1200.	:
Manganese	mg/kg-dry	T		214.	J	404.	J	285.	J	356.	J	292.	J	335.	J

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T = Total Fraction

Appendix A-7g
Soil - Random 0-24 inches
Validated Analytical Results

Parameter	Units	Exposure Area Fraction	Site ID / Sample Date / Sample ID											
			RRS-14 10/14/2002 RRS-14-T02N-SOL		RRS-15 10/13/2002 RRS-15-T02N-SOL		RRS-16 10/13/2002 RRS-16-T02N-SOL		RRS-17 10/18/2002 RRS-17-T02N-SOL		RRS-18 10/18/2002 RRS-18-T02N-SOL		RRS-19 10/19/2002 RRS-19-T02N-SOL	
			RefMineR		RefMineR		RefMineR		RLCCR		RLCCR		RLCCR	
Mercury	mg/kg-dry	T	<0.024	:	<0.018	:	<0.016	:	<0.019	J	<0.015	J	<0.017	J
Molybdenum	mg/kg-dry	T	<1.1	:	1.3	:	<0.84	:	0.88	:	0.84	:	9.6	:
Nickel	mg/kg-dry	T	15.5	J	14.6	J	10.1	J	13.3	J	9.9	J	3.7	J
Potassium	mg/kg-dry	T	1460.	J	1510.	J	1430.	J	1940.	J	1340.	J	2070.	J
Selenium	mg/kg-dry	T	1.2	J	<0.76	J	<0.49	J	1.2	J	<0.7	J	1.5	:
Silver	mg/kg-dry	T	<0.56	:	<0.12	:	<0.12	:	0.5	:	0.13	:	<0.14	:
Sodium	mg/kg-dry	T	<106.	:	<47.1	:	<47.3	:	<34.1	:	<29.8	:	<33.2	:
Thallium	mg/kg-dry	T	<0.12	:	0.1	:	<0.084	:	0.13	:	<0.087	:	0.19	:
Vanadium	mg/kg-dry	T	27.	:	28.9	:	20.3	:	24.2	:	15.8	:	7.3	:
Zinc	mg/kg-dry	T	125.	J	96.5	J	57.2	J	92.	J	62.	J	103.	J

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T = Total Fraction

Appendix A-7g
Soil - Random 0-24 inches
Validated Analytical Results

Parameter	Units	Exposure Area Fraction	Site ID Sample Date Sample ID Exposure Area	RRS-2 9/29/2002 RRS-2-T02N-SOL RefMineR	RRS-20 10/18/2002 RRS-20-T02N-SOL RLCCR	RRS-21 10/18/2002 RRS-21-T02N-SOL RLCCR	RRS-22 10/13/2002 RRS-22-T02N-SOL RLCCR	RRS-23 10/13/2002 RRS-23-T02N-SOL RLCCR	RRS-24 10/13/2002 RRS-24-T02N-SOL RLCCR
General Chemistry									
Ammonia	mg/kg-dry	T		119. :	20.9 J	7.4 :	105. :	74.4 :	103. :
Chloride	mg/kg-dry	T		9.1 :	3.6 J	4.2 J	8. J	5.3 J	3. J
Fluoride	mg/kg-dry	T		0.17 J	0.38 J	0.62 J	0.22 J	0.38 J	0.64 J
Nitrate	mg/kg-dry	T		3.2 J	3.8 J	7. J	5.4 J	11.2 J	6.2 J
Phosphorus	mg/kg-dry	T		814. J	569. J	552. J	575. J	443. J	370. J
Sulfate	mg/kg-dry	T		9.1 :	13.1 J	12.1 J	15.6 J	46.3 J	16.5 J
Total Kjeldahl Nitrogen	mg/kg-dry	T		1390. :	520. :	707. :	1510. J	676. J	489. J
Total Organic Carbon	mg/kg-dry	T		27700. J	4720. J	13500. J	31800. J	12800. J	11700. J
Laboratory Parameters									
pH	SU	T		6.7 :	7.2 :	7.5 :	7.3 :	7.4 :	7. :
Solids, Percent	%	T		79.3 :	85.3 :	89.9 :	86.1 :	87.9 :	90.1 :
Specific Conductance	umhos/cm	T		21.8 :	29.3 :	51.3 :	122. :	74.6 :	41.7 :
Geotechnical									
Organic Soils	%	T		5.34 :	2.33 J	3.1 J	6.82 J	3.1 J	0.78 J
Physical Properties									
Cation-Exchange Capacity	meq/100g	T		30.3 :	7.8 :	12.2 :	21.1 :	12.1 :	11.1 :
Sodium Absorption Ratio	ratio	T		0.1 :	0.12 :	0.09 :	0.06 :	0.35 :	0.17 :
Metals									
Aluminum	mg/kg-dry	T		13000. :	5550. :	7330. :	6400. :	6770. :	5710. :
Antimony	mg/kg-dry	T		<0.05 J	<0.29 J	<0.28 J	<0.17 J	<0.17 J	<0.17 J
Arsenic	mg/kg-dry	T		2.8 :	3.2 :	3. :	3.2 :	2.1 :	2.2 :
Barium	mg/kg-dry	T		157. :	32.9 :	52.6 :	50.3 :	42.8 :	36.2 :
Beryllium	mg/kg-dry	T		0.72 :	0.49 :	0.65 :	0.69 :	0.64 :	0.61 :
Boron	mg/kg-dry	T		<1.7 :	<0.26 :	<0.22 J	5.4 :	<2.4 :	<2.2 :
Cadmium	mg/kg-dry	T		0.34 J	0.094 :	0.19 J	0.17 :	0.11 :	0.047 :
Calcium	mg/kg-dry	T		5780. :	2000. :	2740. :	4790. :	2450. :	2170. :
Chromium	mg/kg-dry	T		26.4 :	11.7 :	18.1 :	13.8 :	13.3 :	15. :
Cobalt	mg/kg-dry	T		9.8 :	4.3 :	5.8 :	4.7 :	4.8 :	4.4 :
Copper	mg/kg-dry	T		23. :	<11.3 :	13.4 :	11.3 :	9.6 :	10.1 :
Iron	mg/kg-dry	T		25400. :	12600. :	18100. :	14000. :	13400. :	15500. :
Lead	mg/kg-dry	T		19.9 :	11.5 :	20.5 :	18.8 :	14.8 :	12.9 :
Magnesium	mg/kg-dry	T		6290. :	3520. :	4140. :	3470. J	3530. :	3290. :
Manganese	mg/kg-dry	T		533. J	220. J	372. J	392. :	237. J	171. J

J = Qualified as estimated during data validation

R = Qualified as rejected value from data validation and results are considered unusable for any purpose

T = Total Fraction

Appendix A-7g
Soil - Random 0-24 inches
Validated Analytical Results

Parameter	Units	Exposure Area Fraction	Site ID	RRS-2		RRS-20		RRS-21		RRS-22		RRS-23		RRS-24	
			Sample Date	9/29/2002		10/18/2002		10/18/2002		10/13/2002		10/13/2002		10/13/2002	
			Sample ID	RRS-2-T02N-SOL		RRS-20-T02N-SOL		RRS-21-T02N-SOL		RRS-22-T02N-SOL		RRS-23-T02N-SOL		RRS-24-T02N-SOL	
			Exposure Area	RefMineR		RLCCR		RLCCR		RLCCR		RLCCR		RLCCR	
Mercury	mg/kg-dry	T		<0.021	:	<0.018	J	<0.018	J	<0.019	:	<0.018	:	<0.018	:
Molybdenum	mg/kg-dry	T		0.82	J	0.88	:	1.	J	2.5	:	1.2	:	<0.99	:
Nickel	mg/kg-dry	T		17.5	J	10.6	J	13.1	:	11.	J	10.7	J	11.3	J
Potassium	mg/kg-dry	T		2320.	J	1170.	J	1900.	J	1990.	J	1570.	J	1190.	J
Selenium	mg/kg-dry	T		0.54	J	<0.76	J	<0.74	J	<0.95	J	<0.8	J	<0.92	J
Silver	mg/kg-dry	T		<0.56	:	<0.15	:	<0.12	J	<0.12	:	<0.13	:	<0.12	:
Sodium	mg/kg-dry	T		<106.	:	<35.4	:	<29.5	J	<47.4	:	<50.3	:	<44.6	:
Thallium	mg/kg-dry	T		0.12	:	<0.095	:	0.1	:	0.088	:	0.1	:	<0.085	:
Vanadium	mg/kg-dry	T		48.5	:	18.3	:	26.5	:	17.9	:	18.	:	21.1	:
Zinc	mg/kg-dry	T		75.1	J	53.1	J	80.2	J	88.2	J	79.2	J	75.3	J

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R = Qualified as rejected value from data validation and results are considered unusable for any purpose
T = Total Fraction

Appendix A-7g
Soil - Random 0-24 inches
Validated Analytical Results

Parameter	Units	Exposure Area Fraction	Site ID / Sample Date / Sample ID / Exposure Area											
			RRS-25 10/13/2002 RRS-25-T02N-SOL RLCCR		RRS-26 10/13/2002 RRS-26-T02N-SOL RLCCR		RRS-27 10/11/2002 RRS-27-T02N-SOL RLCCR		RRS-28 10/11/2002 RRS-28-T02N-SOL RLCCR		RRS-29 10/11/2002 RRS-29-T02N-SOL RLCCR		RRS-3 10/9/2002 RRS-3-T02N-SOL RefMineR	
General Chemistry														
Ammonia	mg/kg-dry	T	127.	:	106.	:	86.4	:	50.	:	11.6	:	25.7	:
Chloride	mg/kg-dry	T	2.5	J	3.4	J	28.2	J	9.1	J	10.6	J	3.9	J
Fluoride	mg/kg-dry	T	0.42	J	0.38	J	0.63	J	0.85	J	0.5	J	0.17	J
Nitrate	mg/kg-dry	T	8.5	J	12.6	J	<2.5	J	4.	J	<2.8	J	<2.2	J
Phosphorus	mg/kg-dry	T	539.	J	479.	J	548.	J	465.	J	279.	J	748.	J
Sulfate	mg/kg-dry	T	16.9	J	15.5	J	514.	J	57.4	J	65.1	J	17.7	J
Total Kjeldahl Nitrogen	mg/kg-dry	T	773.	J	657.	J	1230.	J	572.	J	235.	J	145.	:
Total Organic Carbon	mg/kg-dry	T	17200.	J	12500.	J	34900.	J	10400.	J	4580.	J	1380.	J
Laboratory Parameters														
pH	SU	T	8.	:	7.6	:	5.8	:	7.1	:	7.	:	6.4	:
Solids, Percent	%	T	86.5	:	88.	:	82.2	:	90.7	:	72.	:	92.1	:
Specific Conductance	umhos/cm	T	34.6	:	58.5	:	515.	J	112.	J	127.	J	31.3	:
Geotechnical														
Organic Soils	%	T	3.86	J	3.72	J	5.92	J	3.2	J	2.11	J	1.3	J
Physical Properties														
Cation-Exchange Capacity	meq/100g	T	18.4	:	19.	:	24.1	:	16.2	:	10.4	:	7.1	:
Sodium Absorption Ratio	ratio	T	0.1	:	0.14	:	0.59	:	0.31	:	0.14	:	0.4	:
Metals														
Aluminum	mg/kg-dry	T	7190.	:	7970.	:	7740.	:	8010.	:	5030.	:	7270.	:
Antimony	mg/kg-dry	T	<0.23	J	<0.23	J	<0.2	J	<0.18	J	<0.23	J	<0.13	J
Arsenic	mg/kg-dry	T	2.4	:	2.7	:	1.9	:	2.8	:	1.7	:	3.3	:
Barium	mg/kg-dry	T	45.4	:	52.	:	58.2	:	50.8	:	46.5	:	87.7	:
Beryllium	mg/kg-dry	T	0.76	:	0.81	:	0.67	:	0.7	:	0.55	:	0.42	:
Boron	mg/kg-dry	T	6.2	:	6.3	:	<0.43	:	<0.4	:	<0.55	:	<0.43	J
Cadmium	mg/kg-dry	T	0.074	:	0.099	:	<0.027	:	<0.025	:	<0.034	:	<0.027	J
Calcium	mg/kg-dry	T	2760.	:	2790.	:	4430.	:	4110.	:	1850.	:	2700.	:
Chromium	mg/kg-dry	T	14.6	:	15.7	:	15.7	:	17.6	:	12.9	:	20.3	:
Cobalt	mg/kg-dry	T	5.1	:	6.	:	5.5	:	5.9	:	4.9	:	7.4	:
Copper	mg/kg-dry	T	10.8	:	11.7	:	13.4	:	17.9	:	13.3	:	16.6	:
Iron	mg/kg-dry	T	13300.	:	14500.	:	14100.	:	15800.	:	12000.	:	20100.	:
Lead	mg/kg-dry	T	15.2	:	18.4	:	16.3	:	19.8	:	15.8	:	33.1	:
Magnesium	mg/kg-dry	T	3480.	:	3930.	:	4390.	:	4410.	:	2960.	:	4780.	:
Manganese	mg/kg-dry	T	328.	J	320.	J	262.	J	284.	J	428.	J	439.	J

J = Qualified as estimated during data validation

R = Qualified as rejected value from data validation and results are considered unusable for any purpose

T = Total Fraction

Appendix A-7g
Soil - Random 0-24 inches
Validated Analytical Results

Parameter	Units	Exposure Area Fraction	Site ID / Sample Date / Sample ID / Exposure Area											
			RRS-25 10/13/2002 RRS-25-T02N-SOL RLCCR		RRS-26 10/13/2002 RRS-26-T02N-SOL RLCCR		RRS-27 10/11/2002 RRS-27-T02N-SOL RLCCR		RRS-28 10/11/2002 RRS-28-T02N-SOL RLCCR		RRS-29 10/11/2002 RRS-29-T02N-SOL RLCCR		RRS-3 10/9/2002 RRS-3-T02N-SOL RefMineR	
Mercury	mg/kg-dry	T	<0.019	:	<0.018	:	<0.018	:	<0.017	:	<0.02	:	<0.017	:
Molybdenum	mg/kg-dry	T	1.4	:	1.2	:	1.5	:	3.3	:	2.6	:	1.6	:
Nickel	mg/kg-dry	T	13.1	J	12.8	J	12.4	J	13.5	J	12.5	J	13.3	J
Potassium	mg/kg-dry	T	1490.	J	1690.	J	1350.	J	1630.	J	1110.	J	1190.	J
Selenium	mg/kg-dry	T	<0.83	J	<0.53	J	<0.69	J	<0.95	J	<0.49	J	<0.41	J
Silver	mg/kg-dry	T	<0.13	:	<0.11	:	<0.13	:	0.19	:	<0.16	:	<0.13	:
Sodium	mg/kg-dry	T	<50.7	:	<43.1	:	<66.7	:	<45.4	:	<61.4	:	<48.8	:
Thallium	mg/kg-dry	T	<0.11	:	0.11	:	<0.1	:	0.11	:	<0.11	:	0.069	:
Vanadium	mg/kg-dry	T	18.2	:	19.4	:	19.6	:	21.7	:	13.6	:	31.3	:
Zinc	mg/kg-dry	T	100.	J	106.	J	72.3	J	85.2	J	101.	J	76.8	J

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Appendix A-7g
Soil - Random 0-24 inches
Validated Analytical Results

Parameter	Units	Exposure Area Fraction	Site ID	RRS-30		RRS-31		RRS-32		RRS-4		RRS-5		RRS-6	
			Sample Date	10/11/2002		10/11/2002		10/19/2002		10/9/2002		10/9/2002		10/10/2002	
			Sample ID	RRS-30-T02N-SOL		RRS-31-T02N-SOL		RRS-32-T02N-SOL		RRS-4-T02N-SOL		RRS-5-T02N-SOL		RRS-6-T02N-SOL	
			Exposure Area	RLCCR		RLCCR		RLCCR		RefMineR		RefMineR		RefMineR	
General Chemistry															
Ammonia	mg/kg-dry	T		45.6	:	97.6	:	35.3	:	34.2	:	26.5	:	141.	:
Chloride	mg/kg-dry	T		6.2	J	39.4	J	29.1	J	4.8	J	<2.2	J	3.2	J
Fluoride	mg/kg-dry	T		0.25	J	1.	J	0.45	J	0.45	J	0.36	J	0.28	J
Nitrate	mg/kg-dry	T		<2.3	J	<2.8	J	11.	J	<2.6	J	<2.2	J	<2.4	J
Phosphorus	mg/kg-dry	T		436.	J	34.8	J	577.	J	841.	J	974.	J	1010.	J
Sulfate	mg/kg-dry	T		17.2	J	727.	J	34.1	J	74.8	J	7.2	J	31.2	J
Total Kjeldahl Nitrogen	mg/kg-dry	T		696.	J	1820.	J	728.	:	293.	:	247.	:	498.	:
Total Organic Carbon	mg/kg-dry	T		26100.	J	44900.	J	12800.	J	4670.	J	8780.	J	7500.	J
Laboratory Parameters															
pH	SU	T		7.4	:	7.1	:	6.7	:	6.1	:	6.4	:	7.6	:
Solids, Percent	%	T		90.2	:	73.4	:	92.9	:	78.8	:	92.2	:	85.1	:
Specific Conductance	umhos/cm	T		48.1	J	829.	J	123.	:	107.	:	20.2	:	35.9	:
Geotechnical															
Organic Soils	%	T		3.72	J	8.54	J	3.85	J	1.84	J	2.27	J	4.3	:
Physical Properties															
Cation-Exchange Capacity	meq/100g	T		19.	:	23.9	:	16.5	:	8.	:	9.1	:	13.5	:
Sodium Absorption Ratio	ratio	T		0.08	:	0.81	:	0.14	:	0.24	:	<0.12	:	0.21	:
Metals															
Aluminum	mg/kg-dry	T		7360.	:	6490.	:	9100.	:	6680.	:	5550.	:	7560.	:
Antimony	mg/kg-dry	T		<0.18	J	<0.23	J	<0.26	J	<0.14	J	<0.17	J	<0.19	J
Arsenic	mg/kg-dry	T		2.6	:	3.1	:	3.3	:	1.8	:	2.2	:	3.1	:
Barium	mg/kg-dry	T		59.4	:	71.5	:	84.6	:	97.2	:	101.	:	226.	:
Beryllium	mg/kg-dry	T		0.7	:	0.75	:	0.86	:	0.41	:	0.4	:	0.51	:
Boron	mg/kg-dry	T		<0.43	:	<0.5	:	<0.24	J	<0.48	J	<0.4	J	10.4	J
Cadmium	mg/kg-dry	T		0.077	:	0.067	:	0.34	J	<0.03	J	<0.025	J	0.08	J
Calcium	mg/kg-dry	T		3370.	:	4940.	:	3470.	:	2180.	:	1720.	:	2180.	:
Chromium	mg/kg-dry	T		17.	:	14.3	:	18.8	:	18.9	:	13.8	:	19.3	:
Cobalt	mg/kg-dry	T		6.3	:	6.6	:	7.	:	8.	:	6.1	:	8.7	:
Copper	mg/kg-dry	T		14.7	:	25.9	:	23.5	:	72.5	:	65.4	:	84.	:
Iron	mg/kg-dry	T		15400.	:	15900.	:	17700.	:	21000.	:	18000.	:	21700.	:
Lead	mg/kg-dry	T		20.3	:	24.6	:	29.9	:	34.1	:	47.	:	50.8	:
Magnesium	mg/kg-dry	T		4270.	:	3500.	:	4510.	:	3950.	:	3410.	:	4100.	:
Manganese	mg/kg-dry	T		387.	J	419.	J	531.	J	346.	J	333.	J	441.	J

J = Qualified as estimated during data validation

R = Qualified as rejected value from data validation and results are considered unusable for any purpose

T = Total Fraction

Appendix A-7g
Soil - Random 0-24 inches
Validated Analytical Results

Parameter	Units	Exposure Area Fraction	Site ID / Sample Date / Sample ID											
			RRS-30 10/11/2002 RRS-30-T02N-SOL	RLCCR	RRS-31 10/11/2002 RRS-31-T02N-SOL	RLCCR	RRS-32 10/19/2002 RRS-32-T02N-SOL	RLCCR	RRS-4 10/9/2002 RRS-4-T02N-SOL	RefMineR	RRS-5 10/9/2002 RRS-5-T02N-SOL	RefMineR	RRS-6 10/10/2002 RRS-6-T02N-SOL	RefMineR
Mercury	mg/kg-dry	T	<0.018	:	<0.02	:	<0.016	J	<0.021	:	<0.018	:	<0.019	:
Molybdenum	mg/kg-dry	T	3.4	:	9.9	:	8.5	:	5.3	:	11.3	:	8.1	:
Nickel	mg/kg-dry	T	13.6	J	14.7	J	16.1	J	12.5	J	13.2	J	15.8	J
Potassium	mg/kg-dry	T	1780.	J	1230.	J	2050.	J	1310.	J	1420.	J	1490.	J
Selenium	mg/kg-dry	T	<0.91	J	<0.72	J	0.75	J	<0.23	J	<0.63	J	1.2	J
Silver	mg/kg-dry	T	<0.13	:	<0.15	:	<0.13	:	<0.14	:	0.21	:	0.32	:
Sodium	mg/kg-dry	T	<48.2	:	<139.	:	<32.3	J	<53.9	:	65.2	:	66.5	:
Thallium	mg/kg-dry	T	0.092	:	<0.11	:	0.13	:	0.1	:	0.16	:	0.17	:
Vanadium	mg/kg-dry	T	19.8	:	17.5	:	25.6	:	31.6	:	19.1	:	26.6	:
Zinc	mg/kg-dry	T	95.3	J	100.	J	102.	J	87.7	J	76.	J	115.	J

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Appendix A-7g
Soil - Random 0-24 inches
Validated Analytical Results

Parameter	Units	Exposure Area Fraction	Site ID	RRS-7	RRS-8	RRS-9	RS-1	RS-1	RS-10
			Sample Date	10/10/2002	10/10/2002	10/14/2002	10/17/2002	10/22/2002	10/10/2002
			Sample ID	RRS-7-T02N-SOL	RRS-8-T02N-SOL	RS-9-T02N-SOL	RS-1-T02N-SOL	RS-1-T02N-SOL	RRS-10-T02N-SOL
			Exposure Area	RefMineR	RefMineR	RefMineR	SS9	SS9	SS9
General Chemistry									
Ammonia	mg/kg-dry	T		113. :	130. :	21. J	22.4 :	-	45.2 :
Chloride	mg/kg-dry	T		3.3 J	14.4 J	4.4 J	6.9 J	-	4.9 J
Fluoride	mg/kg-dry	T		0.28 J	0.27 J	0.22 J	0.31 J	-	0.64 J
Nitrate	mg/kg-dry	T		<2.5 J	<2.2 J	<2.4 J	<2.3 J	-	<2.3 J
Phosphorus	mg/kg-dry	T		1060. J	551. J	681. J	147. J	-	557. J
Sulfate	mg/kg-dry	T		595. J	47.2 J	7.1 J	215. J	-	93.3 J
Total Kjeldahl Nitrogen	mg/kg-dry	T		201. :	865. :	227. :	392. :	-	204. :
Total Organic Carbon	mg/kg-dry	T		3110. J	6200. J	3550. J	7530. J	-	5430. J
Laboratory Parameters									
pH	SU	T		5.1 :	6.1 :	6.8 :	6.6 :	-	6.5 :
Solids, Percent	%	T		88.3 :	95.2 :	83.4 :	90.5 :	91.2 :	88.4 :
Specific Conductance	umhos/cm	T		723. :	132. :	9.6 :	185. :	-	89.4 :
Geotechnical									
Organic Soils	%	T		2.87 :	2.59 :	1.99 J	3.6 J	-	2.19 :
Physical Properties									
Cation-Exchange Capacity	meq/100g	T		12.5 :	10.1 :	12.3 :	26.9 :	-	9.4 :
Sodium Absorption Ratio	ratio	T		0.07 :	0.38 :	0.18 :	0.16 :	-	0.16 :
Metals									
Aluminum	mg/kg-dry	T		7610. :	6080. :	8230. :	8860. :	-	6060. :
Antimony	mg/kg-dry	T		<0.17 J	<0.17 J	<0.27 J	<0.27 J	-	<0.18 J
Arsenic	mg/kg-dry	T		5.7 :	3.3 :	2. :	5.2 :	-	1.9 :
Barium	mg/kg-dry	T		266. :	126. :	54.7 :	395. :	-	106. :
Beryllium	mg/kg-dry	T		0.47 :	0.5 :	0.51 :	0.68 :	-	0.88 :
Boron	mg/kg-dry	T		12.9 J	8.5 J	3.1 :	<0.4 J	-	5.6 :
Cadmium	mg/kg-dry	T		<0.028 J	<0.026 J	0.055 :	<0.025 J	-	0.74 :
Calcium	mg/kg-dry	T		3600. :	1810. :	2380. :	2950. :	-	1480. :
Chromium	mg/kg-dry	T		21.5 :	14.1 :	20.6 :	21.7 :	-	9.8 :
Cobalt	mg/kg-dry	T		7.4 :	6.1 :	7.3 :	10. :	-	9.5 :
Copper	mg/kg-dry	T		70. :	39.4 :	11.8 :	75.9 :	-	46.1 :
Iron	mg/kg-dry	T		26900. :	17900. :	17600. :	26800. :	-	12300. :
Lead	mg/kg-dry	T		54.7 :	42. :	15.9 :	55.1 :	-	22.8 :
Magnesium	mg/kg-dry	T		4480. :	3610. :	4770. :	4460. :	-	2540. :
Manganese	mg/kg-dry	T		438. J	369. J	365. J	526. J	-	868. J

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T = Total Fraction

Appendix A-7g
Soil - Random 0-24 inches
Validated Analytical Results

Parameter	Units	Exposure Area Fraction	Site ID: RRS-7 Sample Date: 10/10/2002 Sample ID: RRS-7-T02N-SOL RefMineR	Site ID: RRS-8 Sample Date: 10/10/2002 Sample ID: RRS-8-T02N-SOL RefMineR	Site ID: RRS-9 Sample Date: 10/14/2002 Sample ID: RRS-9-T02N-SOL RefMineR	Site ID: RS-1 Sample Date: 10/17/2002 Sample ID: RS-1-T02N-SOL SS9	Site ID: RS-1 Sample Date: 10/22/2002 Sample ID: RS-1-T02N-SOL SS9	Site ID: RS-10 Sample Date: 10/10/2002 Sample ID: RRS-10-T02N-SOL SS9
Mercury	mg/kg-dry	T	<0.018 :	<0.017 :	<0.02 :	<0.018 :	-	<0.018 :
Molybdenum	mg/kg-dry	T	10.8 :	10.6 :	0.73 :	21.7 :	-	9.8 :
Nickel	mg/kg-dry	T	13.9 J	15.7 J	16.5 J	19.4 J	-	25.4 J
Potassium	mg/kg-dry	T	1960. J	1250. J	1050. J	1920. J	-	993. J
Selenium	mg/kg-dry	T	1.2 J	0.96 J	<0.72 J	1.3 :	-	0.66 J
Silver	mg/kg-dry	T	0.39 :	0.21 :	<0.12 :	<0.31 :	-	0.15 :
Sodium	mg/kg-dry	T	162. :	103. :	<47.9 :	120. :	-	114. :
Thallium	mg/kg-dry	T	0.18 :	0.12 :	0.093 :	0.16 :	-	0.11 :
Vanadium	mg/kg-dry	T	26.5 :	16.5 :	22.8 :	29.1 :	-	11.8 :
Zinc	mg/kg-dry	T	75.1 J	77.5 J	62. J	118. :	-	199. J
Volatile Organics								
1,1,1-Trichloroethane	mg/kg-dry	T	-	-	-	-	<0.008 :	-
1,1,2,2-Tetrachloroethane	mg/kg-dry	T	-	-	-	-	<0.008 :	-
1,1,2-Trichloro-1,2,2-trifluoroethane	mg/kg-dry	T	-	-	-	-	<0.008 :	-
1,1,2-Trichloroethane	mg/kg-dry	T	-	-	-	-	<0.008 :	-
1,1-Dichloroethane	mg/kg-dry	T	-	-	-	-	<0.008 :	-
1,1-Dichloroethene	mg/kg-dry	T	-	-	-	-	<0.008 :	-
1,2,4-Trichlorobenzene	mg/kg-dry	T	-	-	-	-	<0.008 :	-
1,2-Dibromo-3-chloropropane	mg/kg-dry	T	-	-	-	-	<0.008 :	-
1,2-Dichlorobenzene	mg/kg-dry	T	-	-	-	-	<0.008 :	-
1,2-Dichloroethane	mg/kg-dry	T	-	-	-	-	<0.008 :	-
1,2-Dichloroethene (total)	mg/kg-dry	T	-	-	-	-	<0.008 :	-
1,2-Dichloropropane	mg/kg-dry	T	-	-	-	-	<0.008 :	-
1,3-Dichlorobenzene	mg/kg-dry	T	-	-	-	-	<0.008 :	-
1,4-Dichlorobenzene	mg/kg-dry	T	-	-	-	-	<0.008 :	-
2-Butanone	mg/kg-dry	T	-	-	-	-	<0.008 :	-
2-Hexanone	mg/kg-dry	T	-	-	-	-	<0.008 :	-
4-Methyl-2-pentanone	mg/kg-dry	T	-	-	-	-	<0.008 :	-
Acetone	mg/kg-dry	T	-	-	-	-	0.003 J	-
Benzene	mg/kg-dry	T	-	-	-	-	<0.008 :	-
Bromodichloromethane	mg/kg-dry	T	-	-	-	-	<0.008 :	-
Bromoform	mg/kg-dry	T	-	-	-	-	<0.008 :	-
Bromomethane	mg/kg-dry	T	-	-	-	-	<0.008 :	-
Carbon disulfide	mg/kg-dry	T	-	-	-	-	<0.008 :	-

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T = Total Fraction

Appendix A-7g
Soil - Random 0-24 inches
Validated Analytical Results

Parameter	Units	Exposure Area Fraction	Site ID: RRS-7 Sample Date: 10/10/2002 Sample ID: RRS-7-T02N-SOL RefMineR	Site ID: RRS-8 Sample Date: 10/10/2002 Sample ID: RRS-8-T02N-SOL RefMineR	Site ID: RRS-9 Sample Date: 10/14/2002 Sample ID: RS-9-T02N-SOL RefMineR	Site ID: RS-1 Sample Date: 10/17/2002 Sample ID: RS-1-T02N-SOL SS9	Site ID: RS-1 Sample Date: 10/22/2002 Sample ID: RS-1-T02N-SOL SS9	Site ID: RS-10 Sample Date: 10/10/2002 Sample ID: RRS-10-T02N-SOL SS9
Carbon tetrachloride	mg/kg-dry	T	-	-	-	-	<0.008 :	-
Chlorobenzene	mg/kg-dry	T	-	-	-	-	<0.008 :	-
Chloroethane	mg/kg-dry	T	-	-	-	-	<0.008 :	-
Chloroform	mg/kg-dry	T	-	-	-	-	<0.008 :	-
Chloromethane	mg/kg-dry	T	-	-	-	-	<0.008 :	-
cis-1,2-Dichloroethene	mg/kg-dry	T	-	-	-	-	<0.008 :	-
cis-1,3-Dichloropropene	mg/kg-dry	T	-	-	-	-	<0.008 :	-
Dibromochloromethane	mg/kg-dry	T	-	-	-	-	<0.008 :	-
Dichlorodifluoromethane	mg/kg-dry	T	-	-	-	-	<0.008 :	-
Ethylbenzene	mg/kg-dry	T	-	-	-	-	<0.008 :	-
Methylene chloride	mg/kg-dry	T	-	-	-	-	<0.008 :	-
Styrene	mg/kg-dry	T	-	-	-	-	<0.008 :	-
Tetrachloroethene	mg/kg-dry	T	-	-	-	-	<0.008 :	-
Toluene	mg/kg-dry	T	-	-	-	-	<0.008 :	-
Total Xylene	mg/kg-dry	T	-	-	-	-	<0.008 :	-
trans-1,2-Dichloroethene	mg/kg-dry	T	-	-	-	-	<0.008 :	-
trans-1,3-Dichloropropene	mg/kg-dry	T	-	-	-	-	<0.008 :	-
Trichloroethene	mg/kg-dry	T	-	-	-	-	<0.008 :	-
Trichlorofluoromethane	mg/kg-dry	T	-	-	-	-	<0.008 :	-
Vinyl chloride	mg/kg-dry	T	-	-	-	-	<0.008 :	-
Semi-Volatile Organics								
1,1`-Biphenyl	mg/kg-dry	T	-	-	-	<0.37 :	-	-
2,4,5-Trichlorophenol	mg/kg-dry	T	-	-	-	<0.92 :	-	-
2,4,6-Trichlorophenol	mg/kg-dry	T	-	-	-	<0.37 :	-	-
2,4-Dichlorophenol	mg/kg-dry	T	-	-	-	<0.37 :	-	-
2,4-Dimethylphenol	mg/kg-dry	T	-	-	-	<0.37 :	-	-
2,4-Dinitrophenol	mg/kg-dry	T	-	-	-	<0.92 :	-	-
2,4-Dinitrotoluene	mg/kg-dry	T	-	-	-	<0.37 :	-	-
2,6-Dinitrotoluene	mg/kg-dry	T	-	-	-	<0.37 :	-	-
2-Chloronaphthalene	mg/kg-dry	T	-	-	-	<0.37 :	-	-
2-Chlorophenol	mg/kg-dry	T	-	-	-	<0.37 :	-	-
2-Methylnaphthalene	mg/kg-dry	T	-	-	-	<0.37 :	-	-
2-Methylphenol	mg/kg-dry	T	-	-	-	<0.37 :	-	-
2-Nitroaniline	mg/kg-dry	T	-	-	-	<0.92 :	-	-

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Appendix A-7g
Soil - Random 0-24 inches
Validated Analytical Results

Parameter	Units	Exposure Area Fraction	Site ID: RRS-7 Sample Date: 10/10/2002 Sample ID: RRS-7-T02N-SOL RefMineR	Site ID: RRS-8 Sample Date: 10/10/2002 Sample ID: RRS-8-T02N-SOL RefMineR	Site ID: RRS-9 Sample Date: 10/14/2002 Sample ID: RRS-9-T02N-SOL RefMineR	Site ID: RS-1 Sample Date: 10/17/2002 Sample ID: RS-1-T02N-SOL SS9	Site ID: RS-1 Sample Date: 10/22/2002 Sample ID: RS-1-T02N-SOL SS9	Site ID: RS-10 Sample Date: 10/10/2002 Sample ID: RRS-10-T02N-SOL SS9
2-Nitrophenol	mg/kg-dry	T	-	-	-	<0.37 :	-	-
3,3-Dichlorobenzidine	mg/kg-dry	T	-	-	-	<0.37 :	-	-
3-Nitroaniline	mg/kg-dry	T	-	-	-	<0.92 :	-	-
4,6-Dinitro-2-methylphenol	mg/kg-dry	T	-	-	-	<0.92 :	-	-
4-Bromophenyl phenyl ether	mg/kg-dry	T	-	-	-	<0.37 :	-	-
4-Chloro-3-methylphenol	mg/kg-dry	T	-	-	-	<0.37 :	-	-
4-Chloroaniline	mg/kg-dry	T	-	-	-	<0.37 :	-	-
4-Chlorophenyl phenyl ether	mg/kg-dry	T	-	-	-	<0.37 :	-	-
4-Methylphenol	mg/kg-dry	T	-	-	-	<0.37 :	-	-
4-Nitroaniline	mg/kg-dry	T	-	-	-	<0.92 :	-	-
4-Nitrophenol	mg/kg-dry	T	-	-	-	<0.92 :	-	-
Acenaphthene	mg/kg-dry	T	-	-	-	<0.37 :	-	-
Acenaphthylene	mg/kg-dry	T	-	-	-	<0.37 :	-	-
Anthracene	mg/kg-dry	T	-	-	-	<0.37 :	-	-
Benzaldehyde	mg/kg-dry	T	-	-	-	<0.37 :	-	-
Benzo(a)anthracene	mg/kg-dry	T	-	-	-	<0.37 :	-	-
Benzo(a)pyrene	mg/kg-dry	T	-	-	-	<0.37 :	-	-
Benzo(b)fluoranthene	mg/kg-dry	T	-	-	-	<0.37 :	-	-
Benzo(g,h,i)perylene	mg/kg-dry	T	-	-	-	<0.37 :	-	-
Benzo(k)fluoranthene	mg/kg-dry	T	-	-	-	<0.37 :	-	-
Bis(2-chloroethoxy)methane	mg/kg-dry	T	-	-	-	<0.37 :	-	-
Bis(2-chloroethyl)ether	mg/kg-dry	T	-	-	-	<0.37 :	-	-
Bis(2-ethylhexyl)phthalate	mg/kg-dry	T	-	-	-	<0.37 :	-	-
Butyl benzyl phthalate	mg/kg-dry	T	-	-	-	<0.37 :	-	-
Carbazole	mg/kg-dry	T	-	-	-	<0.37 :	-	-
Chrysene	mg/kg-dry	T	-	-	-	<0.37 :	-	-
Dibenz(a,h)anthracene	mg/kg-dry	T	-	-	-	<0.37 :	-	-
Dibenzofuran	mg/kg-dry	T	-	-	-	<0.37 :	-	-
Dichlorodiisopropyl ether	mg/kg-dry	T	-	-	-	<0.37 :	-	-
Diethylphthalate	mg/kg-dry	T	-	-	-	<0.37 :	-	-
Dimethylphthalate	mg/kg-dry	T	-	-	-	<0.37 :	-	-
Di-n-Butyl phthalate	mg/kg-dry	T	-	-	-	<0.37 :	-	-
Di-n-Octyl phthalate	mg/kg-dry	T	-	-	-	<0.37 :	-	-
Fluoranthene	mg/kg-dry	T	-	-	-	<0.37 :	-	-

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Appendix A-7g
Soil - Random 0-24 inches
Validated Analytical Results

Parameter	Units	Exposure Area Fraction	Site ID: RRS-7 Sample Date: 10/10/2002 Sample ID: RRS-7-T02N-SOL RefMineR	Site ID: RRS-8 Sample Date: 10/10/2002 Sample ID: RRS-8-T02N-SOL RefMineR	Site ID: RRS-9 Sample Date: 10/14/2002 Sample ID: RS-9-T02N-SOL RefMineR	Site ID: RS-1 Sample Date: 10/17/2002 Sample ID: RS-1-T02N-SOL SS9	Site ID: RS-1 Sample Date: 10/22/2002 Sample ID: RS-1-T02N-SOL SS9	Site ID: RS-10 Sample Date: 10/10/2002 Sample ID: RRS-10-T02N-SOL SS9
Fluorene	mg/kg-dry	T	-	-	-	<0.37 :	-	-
Hexachlorobenzene	mg/kg-dry	T	-	-	-	<0.37 :	-	-
Hexachlorobutadiene	mg/kg-dry	T	-	-	-	<0.37 :	-	-
Hexachlorocyclopentadiene	mg/kg-dry	T	-	-	-	<0.37 :	-	-
Hexachloroethane	mg/kg-dry	T	-	-	-	<0.37 :	-	-
Indeno(1,2,3-cd)pyrene	mg/kg-dry	T	-	-	-	<0.37 :	-	-
Isophorone	mg/kg-dry	T	-	-	-	<0.37 :	-	-
Naphthalene	mg/kg-dry	T	-	-	-	<0.37 :	-	-
Nitrobenzene	mg/kg-dry	T	-	-	-	<0.37 :	-	-
N-Nitrosodi-n-propylamine	mg/kg-dry	T	-	-	-	<0.37 :	-	-
N-Nitrosodiphenylamine	mg/kg-dry	T	-	-	-	<0.37 :	-	-
Pentachlorophenol	mg/kg-dry	T	-	-	-	<0.92 :	-	-
Phenanthrene	mg/kg-dry	T	-	-	-	<0.37 :	-	-
Phenol	mg/kg-dry	T	-	-	-	<0.37 :	-	-
Pyrene	mg/kg-dry	T	-	-	-	<0.37 :	-	-
Explosives								
2,4,6-Trinitrotoluene	mg/kg-dry	T	-	-	-	<0.12 :	-	-
2,6-Pyridinediamine,	mg/kg-dry	T	-	-	-	<0.12 :	-	-
Cyclotetramethylenetetranitramine	mg/kg-dry	T	-	-	-	<0.12 :	-	-
Cyclotrimethylenetrinitramine	mg/kg-dry	T	-	-	-	<0.12 :	-	-
Pentaerythritol tetranitrate	mg/kg-dry	T	-	-	-	<5. :	-	-
Pesticides-PCBs								
Aroclor 1016	mg/kg-dry	T	-	-	-	<0.037 J	-	-
Aroclor 1221	mg/kg-dry	T	-	-	-	<0.074 J	-	-
Aroclor 1232	mg/kg-dry	T	-	-	-	<0.037 J	-	-
Aroclor 1242	mg/kg-dry	T	-	-	-	<0.037 J	-	-
Aroclor 1248	mg/kg-dry	T	-	-	-	<0.037 J	-	-
Aroclor 1254	mg/kg-dry	T	-	-	-	<0.037 J	-	-
Aroclor 1260	mg/kg-dry	T	-	-	-	<0.037 J	-	-

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Appendix A-7g
Soil - Random 0-24 inches
Validated Analytical Results

Parameter	Units	Exposure Area Fraction	Site ID / Sample Date / Sample ID	RS-11 10/17/2002 RS-11-T02N-SOL SS16	RS-12 10/16/2002 RS-12-T02N-SOL SS16	RS-13 10/16/2002 RS-13-T02N-SOL SS16	RS-14 10/16/2002 RS-14-T02N-SOL SS16	RS-15 10/16/2002 RS-15-T02N-SOL SS16	RS-16 10/18/2002 RRS-16-T02N-SOL SS16
General Chemistry									
Ammonia	mg/kg-dry	T		9. :	35.7 :	50.1 :	26.8 :	52.6 :	4.9 :
Chloride	mg/kg-dry	T		14.1 J	2.5 J	9.3 J	7.3 J	4.5 J	9.6 J
Fluoride	mg/kg-dry	T		1.1 J	0.7 J	1.5 J	1.3 J	1.3 J	0.53 J
Nitrate	mg/kg-dry	T		<2.3 J	<2.2 J	<2.6 J	<2.7 J	<2.3 J	3.2 J
Phosphorus	mg/kg-dry	T		389. J	383. J	690. J	680. J	612. J	724. J
Sulfate	mg/kg-dry	T		45.4 J	21.8 J	413. J	150. J	253. J	400. J
Total Kjeldahl Nitrogen	mg/kg-dry	T		75.2 :	65. :	487. :	422. :	3580. :	542. :
Total Organic Carbon	mg/kg-dry	T		569. J	257. J	7010. J	7900. J	3730. J	6720. J
Laboratory Parameters									
pH	SU	T		7.9 :	7.1 :	6.8 :	6.4 :	5.5 :	6.4 :
Solids, Percent	%	T		90.4 :	94.9 :	79.3 :	75. :	90.7 :	82.3 :
Specific Conductance	umhos/cm	T		49.2 :	18.7 :	237. :	139. :	124. :	306. :
Geotechnical									
Organic Soils	%	T		1.46 J	1.37 J	2.92 J	3.35 J	2.76 J	3.2 J
Physical Properties									
Cation-Exchange Capacity	meq/100g	T		9.5 :	4.5 :	14.8 :	16.8 :	13.6 :	13.4 :
Sodium Absorption Ratio	ratio	T		0.26 :	0.19 :	0.53 :	0.48 :	0.27 :	0.71 :
Metals									
Aluminum	mg/kg-dry	T		4450. :	5050. :	8610. :	7910. :	7670. :	8370. :
Antimony	mg/kg-dry	T		<0.22 J	<0.23 J	<0.27 J	<0.29 J	<0.24 J	<0.28 J
Arsenic	mg/kg-dry	T		2.3 :	2.3 :	3.2 :	2.9 :	3.5 :	3. :
Barium	mg/kg-dry	T		94.5 :	80.8 :	241. :	248. :	198. :	217. :
Beryllium	mg/kg-dry	T		0.47 :	0.45 :	0.74 :	1. :	0.83 :	0.72 :
Boron	mg/kg-dry	T		<0.26 J	<0.22 :	2.3 J	<1.6 :	1.8 J	<0.24 :
Cadmium	mg/kg-dry	T		0.16 :	0.1 :	0.11 J	0.86 :	0.34 J	0.35 :
Calcium	mg/kg-dry	T		1190. :	1330. :	2590. :	1880. :	1770. :	2790. :
Chromium	mg/kg-dry	T		10.9 :	13. :	20.9 :	14.6 :	15.2 :	17. :
Cobalt	mg/kg-dry	T		8. :	5.5 :	10.1 :	12.7 :	10.1 :	7.6 :
Copper	mg/kg-dry	T		27.3 :	26.6 :	35. :	56.4 :	42.6 :	41.9 :
Iron	mg/kg-dry	T		14700. :	12600. :	19300. :	16500. :	16500. :	17400. :
Lead	mg/kg-dry	T		28.3 :	23.6 :	45.2 :	35.1 :	30.2 :	43.4 :
Magnesium	mg/kg-dry	T		2310. :	3050. :	3430. :	2850. :	2920. :	3530. :
Manganese	mg/kg-dry	T		567. J	333. J	383. J	1170. J	868. J	481. J

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Appendix A-7g
Soil - Random 0-24 inches
Validated Analytical Results

Parameter	Units	Exposure Area Fraction	Site ID	RS-11	RS-12	RS-13	RS-14	RS-15	RS-16
			Sample Date	10/17/2002	10/16/2002	10/16/2002	10/16/2002	10/16/2002	10/18/2002
			Sample ID	RS-11-T02N-SOL	RS-12-T02N-SOL	RS-13-T02N-SOL	RS-14-T02N-SOL	RS-15-T02N-SOL	RRS-16-T02N-SOL
			Exposure Area	SS16	SS16	SS16	SS16	SS16	SS16
Mercury	mg/kg-dry	T		<0.018 :	<0.016 :	<0.021 :	<0.021 :	<0.018 :	<0.02 J
Molybdenum	mg/kg-dry	T		11.3 :	9.6 :	10.9 :	17.1 :	22.7 :	20.9 :
Nickel	mg/kg-dry	T		15.2 J	14.6 J	21.8 J	33.1 J	22.6 J	18.3 J
Potassium	mg/kg-dry	T		1170. J	1340. J	1480. J	1450. J	1390. J	1600. J
Selenium	mg/kg-dry	T		<0.59 J	<0.61 J	<0.71 J	0.83 J	1. J	<0.74 J
Silver	mg/kg-dry	T		<0.11 J	<0.13 :	0.16 :	0.31 :	0.21 :	0.27 :
Sodium	mg/kg-dry	T		<112. :	<113. :	<75.9 :	<96.6 :	<57.6 :	61.7 :
Thallium	mg/kg-dry	T		0.12 :	0.088 :	0.14 :	0.15 :	0.15 :	0.12 :
Vanadium	mg/kg-dry	T		14.7 :	13.1 :	30. :	19.6 :	20.4 :	23.7 :
Zinc	mg/kg-dry	T		81.4 J	83.7 J	139. J	255. J	158. J	115. J
Volatile Organics									
1,1,1-Trichloroethane	mg/kg-dry	T		<0.007 :	<0.009 :	-	-	-	-
1,1,2,2-Tetrachloroethane	mg/kg-dry	T		<0.007 :	<0.009 :	-	-	-	-
1,1,2-Trichloro-1,2,2-trifluoroethane	mg/kg-dry	T		<0.007 :	<0.009 :	-	-	-	-
1,1,2-Trichloroethane	mg/kg-dry	T		<0.007 :	<0.009 :	-	-	-	-
1,1-Dichloroethane	mg/kg-dry	T		<0.007 :	<0.009 :	-	-	-	-
1,1-Dichloroethene	mg/kg-dry	T		<0.007 :	<0.009 :	-	-	-	-
1,2,4-Trichlorobenzene	mg/kg-dry	T		<0.007 :	<0.009 :	-	-	-	-
1,2-Dibromo-3-chloropropane	mg/kg-dry	T		<0.007 :	<0.009 :	-	-	-	-
1,2-Dichlorobenzene	mg/kg-dry	T		<0.007 :	<0.009 :	-	-	-	-
1,2-Dichloroethane	mg/kg-dry	T		<0.007 :	<0.009 :	-	-	-	-
1,2-Dichloroethene (total)	mg/kg-dry	T		<0.007 :	<0.009 :	-	-	-	-
1,2-Dichloropropane	mg/kg-dry	T		<0.007 :	<0.009 :	-	-	-	-
1,3-Dichlorobenzene	mg/kg-dry	T		<0.007 :	<0.009 :	-	-	-	-
1,4-Dichlorobenzene	mg/kg-dry	T		<0.007 :	<0.009 :	-	-	-	-
2-Butanone	mg/kg-dry	T		0.003 J	<0.009 :	-	-	-	-
2-Hexanone	mg/kg-dry	T		<0.007 :	<0.009 :	-	-	-	-
4-Methyl-2-pentanone	mg/kg-dry	T		<0.007 :	<0.009 :	-	-	-	-
Acetone	mg/kg-dry	T		0.036 :	0.002 J	-	-	-	-
Benzene	mg/kg-dry	T		<0.007 :	<0.009 :	-	-	-	-
Bromodichloromethane	mg/kg-dry	T		<0.007 :	<0.009 :	-	-	-	-
Bromoform	mg/kg-dry	T		<0.007 :	<0.009 :	-	-	-	-
Bromomethane	mg/kg-dry	T		<0.007 J	<0.009 :	-	-	-	-
Carbon disulfide	mg/kg-dry	T		<0.007 :	<0.009 :	-	-	-	-

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Appendix A-7g
Soil - Random 0-24 inches
Validated Analytical Results

Parameter	Units	Exposure Area Fraction	Site ID	RS-11	RS-12	RS-13	RS-14	RS-15	RS-16
			Sample Date	10/17/2002	10/16/2002	10/16/2002	10/16/2002	10/16/2002	10/18/2002
			Sample ID	RS-11-T02N-SOL	RS-12-T02N-SOL	RS-13-T02N-SOL	RS-14-T02N-SOL	RS-15-T02N-SOL	RRS-16-T02N-SOL
			Exposure Area	SS16	SS16	SS16	SS16	SS16	SS16
Carbon tetrachloride	mg/kg-dry	T		<0.007 :	<0.009 :	-	-	-	-
Chlorobenzene	mg/kg-dry	T		<0.007 :	<0.009 :	-	-	-	-
Chloroethane	mg/kg-dry	T		<0.007 :	<0.009 :	-	-	-	-
Chloroform	mg/kg-dry	T		<0.007 :	<0.009 :	-	-	-	-
Chloromethane	mg/kg-dry	T		<0.007 J	<0.009 :	-	-	-	-
cis-1,2-Dichloroethene	mg/kg-dry	T		<0.007 :	<0.009 :	-	-	-	-
cis-1,3-Dichloropropene	mg/kg-dry	T		<0.007 :	<0.009 :	-	-	-	-
Dibromochloromethane	mg/kg-dry	T		<0.007 :	<0.009 :	-	-	-	-
Dichlorodifluoromethane	mg/kg-dry	T		<0.007 J	<0.009 :	-	-	-	-
Ethylbenzene	mg/kg-dry	T		<0.007 :	<0.009 :	-	-	-	-
Methylene chloride	mg/kg-dry	T		<0.007 :	<0.009 :	-	-	-	-
Styrene	mg/kg-dry	T		<0.007 :	<0.009 :	-	-	-	-
Tetrachloroethene	mg/kg-dry	T		<0.007 :	<0.009 :	-	-	-	-
Toluene	mg/kg-dry	T		<0.007 :	<0.009 :	-	-	-	-
Total Xylene	mg/kg-dry	T		<0.007 :	<0.009 :	-	-	-	-
trans-1,2-Dichloroethene	mg/kg-dry	T		<0.007 :	<0.009 :	-	-	-	-
trans-1,3-Dichloropropene	mg/kg-dry	T		<0.007 :	<0.009 :	-	-	-	-
Trichloroethene	mg/kg-dry	T		<0.007 :	<0.009 :	-	-	-	-
Trichlorofluoromethane	mg/kg-dry	T		<0.007 :	<0.009 :	-	-	-	-
Vinyl chloride	mg/kg-dry	T		<0.007 J	<0.009 :	-	-	-	-
Semi-Volatile Organics									
1,1`-Biphenyl	mg/kg-dry	T		<0.37 J	<0.35 :	-	-	-	-
2,4,5-Trichlorophenol	mg/kg-dry	T		<0.92 :	<0.87 :	-	-	-	-
2,4,6-Trichlorophenol	mg/kg-dry	T		<0.37 :	<0.35 :	-	-	-	-
2,4-Dichlorophenol	mg/kg-dry	T		<0.37 :	<0.35 :	-	-	-	-
2,4-Dimethylphenol	mg/kg-dry	T		<0.37 :	<0.35 :	-	-	-	-
2,4-Dinitrophenol	mg/kg-dry	T		<0.92 :	<0.87 :	-	-	-	-
2,4-Dinitrotoluene	mg/kg-dry	T		<0.37 :	<0.35 :	-	-	-	-
2,6-Dinitrotoluene	mg/kg-dry	T		<0.37 :	<0.35 :	-	-	-	-
2-Chloronaphthalene	mg/kg-dry	T		<0.37 :	<0.35 :	-	-	-	-
2-Chlorophenol	mg/kg-dry	T		<0.37 :	<0.35 :	-	-	-	-
2-Methylnaphthalene	mg/kg-dry	T		<0.37 :	<0.35 :	-	-	-	-
2-Methylphenol	mg/kg-dry	T		<0.37 :	<0.35 :	-	-	-	-
2-Nitroaniline	mg/kg-dry	T		<0.92 :	<0.87 :	-	-	-	-

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Appendix A-7g
Soil - Random 0-24 inches
Validated Analytical Results

Parameter	Units	Exposure Area Fraction	Site ID	RS-11	RS-12	RS-13	RS-14	RS-15	RS-16
			Sample Date	10/17/2002	10/16/2002	10/16/2002	10/16/2002	10/16/2002	10/18/2002
			Sample ID	RS-11-T02N-SOL	RS-12-T02N-SOL	RS-13-T02N-SOL	RS-14-T02N-SOL	RS-15-T02N-SOL	RRS-16-T02N-SOL
			Exposure Area	SS16	SS16	SS16	SS16	SS16	SS16
2-Nitrophenol	mg/kg-dry	T		<0.37 :	<0.35 :	-	-	-	-
3,3-Dichlorobenzidine	mg/kg-dry	T		<0.37 :	<0.35 :	-	-	-	-
3-Nitroaniline	mg/kg-dry	T		<0.92 :	<0.87 :	-	-	-	-
4,6-Dinitro-2-methylphenol	mg/kg-dry	T		<0.92 :	<0.87 :	-	-	-	-
4-Bromophenyl phenyl ether	mg/kg-dry	T		<0.37 :	<0.35 :	-	-	-	-
4-Chloro-3-methylphenol	mg/kg-dry	T		<0.37 :	<0.35 :	-	-	-	-
4-Chloroaniline	mg/kg-dry	T		<0.37 :	<0.35 :	-	-	-	-
4-Chlorophenyl phenyl ether	mg/kg-dry	T		<0.37 :	<0.35 :	-	-	-	-
4-Methylphenol	mg/kg-dry	T		<0.37 :	<0.35 :	-	-	-	-
4-Nitroaniline	mg/kg-dry	T		<0.92 :	<0.87 :	-	-	-	-
4-Nitrophenol	mg/kg-dry	T		<0.92 :	<0.87 :	-	-	-	-
Acenaphthene	mg/kg-dry	T		<0.37 :	<0.35 :	-	-	-	-
Acenaphthylene	mg/kg-dry	T		<0.37 :	<0.35 :	-	-	-	-
Anthracene	mg/kg-dry	T		<0.37 J	<0.35 J	-	-	-	-
Benzaldehyde	mg/kg-dry	T		<0.37 J	<0.35 J	-	-	-	-
Benzo(a)anthracene	mg/kg-dry	T		<0.37 :	<0.35 :	-	-	-	-
Benzo(a)pyrene	mg/kg-dry	T		<0.37 :	<0.35 :	-	-	-	-
Benzo(b)fluoranthene	mg/kg-dry	T		<0.37 :	<0.35 :	-	-	-	-
Benzo(g,h,i)perylene	mg/kg-dry	T		<0.37 :	<0.35 :	-	-	-	-
Benzo(k)fluoranthene	mg/kg-dry	T		<0.37 :	<0.35 J	-	-	-	-
Bis(2-chloroethoxy)methane	mg/kg-dry	T		<0.37 :	<0.35 :	-	-	-	-
Bis(2-chloroethyl)ether	mg/kg-dry	T		<0.37 :	<0.35 :	-	-	-	-
Bis(2-ethylhexyl)phthalate	mg/kg-dry	T		<0.37 :	0.046 J	-	-	-	-
Butyl benzyl phthalate	mg/kg-dry	T		<0.37 :	<0.35 :	-	-	-	-
Carbazole	mg/kg-dry	T		<0.37 :	<0.35 :	-	-	-	-
Chrysene	mg/kg-dry	T		<0.37 :	<0.35 :	-	-	-	-
Dibenz(a,h)anthracene	mg/kg-dry	T		<0.37 J	<0.35 :	-	-	-	-
Dibenzofuran	mg/kg-dry	T		<0.37 :	<0.35 :	-	-	-	-
Dichlorodiisopropyl ether	mg/kg-dry	T		<0.37 :	<0.35 :	-	-	-	-
Diethylphthalate	mg/kg-dry	T		<0.37 :	<0.35 :	-	-	-	-
Dimethylphthalate	mg/kg-dry	T		<0.37 :	<0.35 :	-	-	-	-
Di-n-Butyl phthalate	mg/kg-dry	T		<0.37 :	<0.35 :	-	-	-	-
Di-n-Octyl phthalate	mg/kg-dry	T		<0.37 :	<0.35 :	-	-	-	-
Fluoranthene	mg/kg-dry	T		<0.37 :	<0.35 :	-	-	-	-

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Appendix A-7g
Soil - Random 0-24 inches
Validated Analytical Results

Parameter	Units	Exposure Area Fraction	Site ID / Sample Date / Sample ID		RS-11 10/17/2002 RS-11-T02N-SOL SS16		RS-12 10/16/2002 RS-12-T02N-SOL SS16		RS-13 10/16/2002 RS-13-T02N-SOL SS16	RS-14 10/16/2002 RS-14-T02N-SOL SS16	RS-15 10/16/2002 RS-15-T02N-SOL SS16	RS-16 10/18/2002 RRS-16-T02N-SOL SS16
Fluorene	mg/kg-dry	T		<0.37	:	<0.35	:	-	-	-	-
Hexachlorobenzene	mg/kg-dry	T		<0.37	:	<0.35	:	-	-	-	-
Hexachlorobutadiene	mg/kg-dry	T		<0.37	:	<0.35	:	-	-	-	-
Hexachlorocyclopentadiene	mg/kg-dry	T		<0.37	:	<0.35	:	-	-	-	-
Hexachloroethane	mg/kg-dry	T		<0.37	:	<0.35	:	-	-	-	-
Indeno(1,2,3-cd)pyrene	mg/kg-dry	T		<0.37	:	<0.35	:	-	-	-	-
Isophorone	mg/kg-dry	T		<0.37	:	<0.35	:	-	-	-	-
Naphthalene	mg/kg-dry	T		<0.37	:	<0.35	:	-	-	-	-
Nitrobenzene	mg/kg-dry	T		<0.37	:	<0.35	:	-	-	-	-
N-Nitrosodi-n-propylamine	mg/kg-dry	T		<0.37	:	<0.35	:	-	-	-	-
N-Nitrosodiphenylamine	mg/kg-dry	T		<0.37	:	<0.35	:	-	-	-	-
Pentachlorophenol	mg/kg-dry	T		<0.92	:	<0.87	:	-	-	-	-
Phenanthrene	mg/kg-dry	T		<0.37	:	<0.35	:	-	-	-	-
Phenol	mg/kg-dry	T		<0.37	:	<0.35	:	-	-	-	-
Pyrene	mg/kg-dry	T		<0.37	J	<0.35	:	-	-	-	-
Pesticides-PCBs											
Aroclor 1016	mg/kg-dry	T		-		<0.035	:	-	-	-	-
Aroclor 1221	mg/kg-dry	T		-		<0.07	:	-	-	-	-
Aroclor 1232	mg/kg-dry	T		-		<0.035	:	-	-	-	-
Aroclor 1242	mg/kg-dry	T		-		<0.035	:	-	-	-	-
Aroclor 1248	mg/kg-dry	T		-		<0.035	:	-	-	-	-
Aroclor 1254	mg/kg-dry	T		-		<0.035	:	-	-	-	-
Aroclor 1260	mg/kg-dry	T		-		<0.035	:	-	-	-	-

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Appendix A-7g
Soil - Random 0-24 inches
Validated Analytical Results

Parameter	Units	Exposure Area Fraction	Site ID / Sample Date / Sample ID		Site ID / Sample Date / Sample ID		Site ID / Sample Date / Sample ID		Site ID / Sample Date / Sample ID		Site ID / Sample Date / Sample ID		Site ID / Sample Date / Sample ID	
			RS-17 10/17/2002 RS-17-T02N-SOL		RS-18 10/17/2002 RS-18-T02N-SOL		RS-19 10/16/2002 RS-19-T02N-SOL		RS-2 10/17/2002 RS-2-T02N-SOL		RS-20 10/16/2002 RS-20-T02N-SOL		RS-3 10/14/2002 RS-3-T02N-SOL	
			SS16		SS16		SS16		SS9		SS16		SS9	
General Chemistry														
Ammonia	mg/kg-dry	T	74.6	J	143.	:	63.	:	42.1	:	<13.9	:	38.1	J
Chloride	mg/kg-dry	T	24.6	J	9.1	J	26.5	J	2.9	J	4.5	J	2.3	J
Fluoride	mg/kg-dry	T	2.3	J	0.94	J	3.	J	0.38	J	1.3	J	0.48	J
Nitrate	mg/kg-dry	T	4.8	J	<2.8	J	<2.6	J	<2.3	J	<2.4	J	<2.3	J
Phosphorus	mg/kg-dry	T	604.	J	759.	J	771.	J	523.	J	365.	J	613.	J
Sulfate	mg/kg-dry	T	336.	J	162.	J	125.	J	36.4	J	57.3	J	30.1	J
Total Kjeldahl Nitrogen	mg/kg-dry	T	582.	:	872.	:	680.	:	347.	:	136.	:	643.	:
Total Organic Carbon	mg/kg-dry	T	10400.	J	7900.	J	13000.	J	6280.	J	215.	J	10600.	J
Laboratory Parameters														
pH	SU	T	6.9	:	7.	:	6.9	:	6.5	:	6.6	:	7.4	:
Solids, Percent	%	T	80.8	:	72.6	:	78.8	:	89.8	:	84.9	:	90.7	:
Specific Conductance	umhos/cm	T	258.	:	98.5	:	107.	:	27.2	:	50.7	:	32.6	:
Geotechnical														
Organic Soils	%	T	3.35	J	4.81	J	3.53	J	3.15	J	1.67	J	3.7	J
Physical Properties														
Cation-Exchange Capacity	meq/100g	T	20.2	:	17.9	:	17.9	:	11.9	:	7.8	:	18.4	:
Sodium Absorption Ratio	ratio	T	1.68	:	1.23	:	1.97	:	0.12	:	0.4	:	0.1	:
Metals														
Aluminum	mg/kg-dry	T	10100.	:	9430.	:	11300.	:	8960.	:	4740.	:	7890.	:
Antimony	mg/kg-dry	T	<0.28	J	<0.32	J	<0.29	J	<0.25	J	<0.28	J	<0.27	J
Arsenic	mg/kg-dry	T	3.6	:	3.8	:	3.8	:	5.7	:	2.3	:	3.6	:
Barium	mg/kg-dry	T	291.	:	254.	:	358.	:	570.	:	112.	:	220.	:
Beryllium	mg/kg-dry	T	0.78	:	1.3	:	0.81	:	0.64	:	0.47	:	0.59	:
Boron	mg/kg-dry	T	<1.9	:	<1.	:	<0.24	J	<0.32	J	<0.88	:	4.1	J
Cadmium	mg/kg-dry	T	0.14	J	1.2	:	0.1	J	<0.031	J	<0.021	:	0.32	:
Calcium	mg/kg-dry	T	2990.	:	2460.	:	3420.	:	1860.	:	1230.	:	2640.	:
Chromium	mg/kg-dry	T	19.7	:	16.6	:	21.2	:	18.5	:	11.6	:	19.1	:
Cobalt	mg/kg-dry	T	9.3	:	17.1	:	9.6	:	8.3	:	5.2	:	8.4	:
Copper	mg/kg-dry	T	46.4	J	76.9	:	47.5	:	52.7	:	26.6	:	64.9	:
Iron	mg/kg-dry	T	20400.	:	19100.	:	23600.	:	26000.	:	12500.	:	21500.	:
Lead	mg/kg-dry	T	42.1	:	44.7	:	40.	:	58.7	:	21.4	:	51.5	:
Magnesium	mg/kg-dry	T	4210.	:	3250.	:	3880.	:	4130.	:	2630.	:	4090.	:
Manganese	mg/kg-dry	T	417.	J	862.	J	613.	J	403.	J	356.	J	491.	J

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Appendix A-7g
Soil - Random 0-24 inches
Validated Analytical Results

Parameter	Units	Exposure Area Fraction	Site ID / Sample Date / Sample ID		RS-17 10/17/2002 RS-17-T02N-SOL SS16		RS-18 10/17/2002 RS-18-T02N-SOL SS16		RS-19 10/16/2002 RS-19-T02N-SOL SS16		RS-2 10/17/2002 RS-2-T02N-SOL SS9		RS-20 10/16/2002 RS-20-T02N-SOL SS16		RS-3 10/14/2002 RS-3-T02N-SOL SS9	
Mercury	mg/kg-dry	T			<0.021	:	<0.021	:	<0.021	:	<0.018	:	<0.019	:	<0.018	:
Molybdenum	mg/kg-dry	T			24.4	:	15.8	:	64.2	:	34.5	:	8.9	J	28.1	:
Nickel	mg/kg-dry	T			19.7	J	43.6	J	18.1	J	14.8	J	14.3	J	18.1	J
Potassium	mg/kg-dry	T			2030.	J	1750.	J	2300.	J	2280.	J	1130.	J	1990.	J
Selenium	mg/kg-dry	T			0.95	J	1.4	J	0.83	:	1.1	J	0.83	J	1.1	J
Silver	mg/kg-dry	T			0.25	:	0.21	:	0.21	:	0.23	J	0.16	:	0.29	:
Sodium	mg/kg-dry	T			222.	:	171.	:	<253.	:	<179.	:	<51.7	:	<93.1	:
Thallium	mg/kg-dry	T			0.15	:	0.14	:	0.17	:	0.15	:	0.096	:	0.14	:
Vanadium	mg/kg-dry	T			27.9	:	22.4	:	30.8	:	24.3	:	15.5	:	24.9	:
Zinc	mg/kg-dry	T			124.	J	359.	J	99.9	J	81.7	J	88.2	J	115.	J
Volatile Organics																
1,1,1-Trichloroethane	mg/kg-dry	T			-		-		-		<0.007	:	-		-	
1,1,2,2-Tetrachloroethane	mg/kg-dry	T			-		-		-		<0.007	:	-		-	
1,1,2-Trichloro-1,2,2-trifluoroethane	mg/kg-dry	T			-		-		-		<0.007	:	-		-	
1,1,2-Trichloroethane	mg/kg-dry	T			-		-		-		<0.007	:	-		-	
1,1-Dichloroethane	mg/kg-dry	T			-		-		-		<0.007	:	-		-	
1,1-Dichloroethene	mg/kg-dry	T			-		-		-		<0.007	:	-		-	
1,2,4-Trichlorobenzene	mg/kg-dry	T			-		-		-		<0.007	:	-		-	
1,2-Dibromo-3-chloropropane	mg/kg-dry	T			-		-		-		<0.007	:	-		-	
1,2-Dichlorobenzene	mg/kg-dry	T			-		-		-		<0.007	:	-		-	
1,2-Dichloroethane	mg/kg-dry	T			-		-		-		<0.007	:	-		-	
1,2-Dichloroethene (total)	mg/kg-dry	T			-		-		-		<0.007	:	-		-	
1,2-Dichloropropane	mg/kg-dry	T			-		-		-		<0.007	:	-		-	
1,3-Dichlorobenzene	mg/kg-dry	T			-		-		-		<0.007	:	-		-	
1,4-Dichlorobenzene	mg/kg-dry	T			-		-		-		<0.007	:	-		-	
2-Butanone	mg/kg-dry	T			-		-		-		<0.007	:	-		-	
2-Hexanone	mg/kg-dry	T			-		-		-		<0.007	:	-		-	
4-Methyl-2-pentanone	mg/kg-dry	T			-		-		-		<0.007	:	-		-	
Acetone	mg/kg-dry	T			-		-		-		0.002	J	-		-	
Benzene	mg/kg-dry	T			-		-		-		<0.007	:	-		-	
Bromodichloromethane	mg/kg-dry	T			-		-		-		<0.007	:	-		-	
Bromoform	mg/kg-dry	T			-		-		-		<0.007	:	-		-	
Bromomethane	mg/kg-dry	T			-		-		-		<0.007	J	-		-	
Carbon disulfide	mg/kg-dry	T			-		-		-		<0.007	:	-		-	

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Appendix A-7g
Soil - Random 0-24 inches
Validated Analytical Results

Parameter	Units	Exposure Area Fraction	Site ID / Sample Date / Sample ID					
			RS-17 10/17/2002 RS-17-T02N-SOL	RS-18 10/17/2002 RS-18-T02N-SOL	RS-19 10/16/2002 RS-19-T02N-SOL	RS-2 10/17/2002 RS-2-T02N-SOL	RS-20 10/16/2002 RS-20-T02N-SOL	RS-3 10/14/2002 RS-3-T02N-SOL
			SS16	SS16	SS16	SS9	SS16	SS9
Carbon tetrachloride	mg/kg-dry	T	-	-	-	<0.007 :	-	-
Chlorobenzene	mg/kg-dry	T	-	-	-	<0.007 :	-	-
Chloroethane	mg/kg-dry	T	-	-	-	<0.007 :	-	-
Chloroform	mg/kg-dry	T	-	-	-	<0.007 :	-	-
Chloromethane	mg/kg-dry	T	-	-	-	<0.007 J	-	-
cis-1,2-Dichloroethene	mg/kg-dry	T	-	-	-	<0.007 :	-	-
cis-1,3-Dichloropropene	mg/kg-dry	T	-	-	-	<0.007 :	-	-
Dibromochloromethane	mg/kg-dry	T	-	-	-	<0.007 :	-	-
Dichlorodifluoromethane	mg/kg-dry	T	-	-	-	<0.007 J	-	-
Ethylbenzene	mg/kg-dry	T	-	-	-	<0.007 :	-	-
Methylene chloride	mg/kg-dry	T	-	-	-	<0.007 :	-	-
Styrene	mg/kg-dry	T	-	-	-	<0.007 :	-	-
Tetrachloroethene	mg/kg-dry	T	-	-	-	<0.007 :	-	-
Toluene	mg/kg-dry	T	-	-	-	<0.007 :	-	-
Total Xylene	mg/kg-dry	T	-	-	-	<0.007 :	-	-
trans-1,2-Dichloroethene	mg/kg-dry	T	-	-	-	<0.007 :	-	-
trans-1,3-Dichloropropene	mg/kg-dry	T	-	-	-	<0.007 :	-	-
Trichloroethene	mg/kg-dry	T	-	-	-	<0.007 :	-	-
Trichlorofluoromethane	mg/kg-dry	T	-	-	-	<0.007 :	-	-
Vinyl chloride	mg/kg-dry	T	-	-	-	<0.007 J	-	-
Semi-Volatile Organics								
1,1`-Biphenyl	mg/kg-dry	T	-	-	-	<0.37 J	-	-
2,4,5-Trichlorophenol	mg/kg-dry	T	-	-	-	<0.92 :	-	-
2,4,6-Trichlorophenol	mg/kg-dry	T	-	-	-	<0.37 :	-	-
2,4-Dichlorophenol	mg/kg-dry	T	-	-	-	<0.37 :	-	-
2,4-Dimethylphenol	mg/kg-dry	T	-	-	-	<0.37 :	-	-
2,4-Dinitrophenol	mg/kg-dry	T	-	-	-	<0.92 :	-	-
2,4-Dinitrotoluene	mg/kg-dry	T	-	-	-	<0.37 :	-	-
2,6-Dinitrotoluene	mg/kg-dry	T	-	-	-	<0.37 :	-	-
2-Chloronaphthalene	mg/kg-dry	T	-	-	-	<0.37 :	-	-
2-Chlorophenol	mg/kg-dry	T	-	-	-	<0.37 :	-	-
2-Methylnaphthalene	mg/kg-dry	T	-	-	-	<0.37 :	-	-
2-Methylphenol	mg/kg-dry	T	-	-	-	<0.37 :	-	-
2-Nitroaniline	mg/kg-dry	T	-	-	-	<0.92 :	-	-

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R = Qualified as rejected value from data validation and results are considered unusable for any purpose
T = Total Fraction

Appendix A-7g
Soil - Random 0-24 inches
Validated Analytical Results

Parameter	Units	Exposure Area Fraction	Site ID / Sample Date / Sample ID					
			RS-17 10/17/2002 RS-17-T02N-SOL	RS-18 10/17/2002 RS-18-T02N-SOL	RS-19 10/16/2002 RS-19-T02N-SOL	RS-2 10/17/2002 RS-2-T02N-SOL	RS-20 10/16/2002 RS-20-T02N-SOL	RS-3 10/14/2002 RS-3-T02N-SOL
			SS16	SS16	SS16	SS9	SS16	SS9
2-Nitrophenol	mg/kg-dry	T	-	-	-	<0.37 :	-	-
3,3-Dichlorobenzidine	mg/kg-dry	T	-	-	-	<0.37 :	-	-
3-Nitroaniline	mg/kg-dry	T	-	-	-	<0.92 :	-	-
4,6-Dinitro-2-methylphenol	mg/kg-dry	T	-	-	-	<0.92 :	-	-
4-Bromophenyl phenyl ether	mg/kg-dry	T	-	-	-	<0.37 :	-	-
4-Chloro-3-methylphenol	mg/kg-dry	T	-	-	-	<0.37 :	-	-
4-Chloroaniline	mg/kg-dry	T	-	-	-	<0.37 :	-	-
4-Chlorophenyl phenyl ether	mg/kg-dry	T	-	-	-	<0.37 :	-	-
4-Methylphenol	mg/kg-dry	T	-	-	-	<0.37 :	-	-
4-Nitroaniline	mg/kg-dry	T	-	-	-	<0.92 :	-	-
4-Nitrophenol	mg/kg-dry	T	-	-	-	<0.92 :	-	-
Acenaphthene	mg/kg-dry	T	-	-	-	<0.37 :	-	-
Acenaphthylene	mg/kg-dry	T	-	-	-	<0.37 :	-	-
Anthracene	mg/kg-dry	T	-	-	-	<0.37 J	-	-
Benzaldehyde	mg/kg-dry	T	-	-	-	0.14 J	-	-
Benzo(a)anthracene	mg/kg-dry	T	-	-	-	<0.37 :	-	-
Benzo(a)pyrene	mg/kg-dry	T	-	-	-	<0.37 :	-	-
Benzo(b)fluoranthene	mg/kg-dry	T	-	-	-	<0.37 :	-	-
Benzo(g,h,i)perylene	mg/kg-dry	T	-	-	-	<0.37 :	-	-
Benzo(k)fluoranthene	mg/kg-dry	T	-	-	-	<0.37 :	-	-
Bis(2-chloroethoxy)methane	mg/kg-dry	T	-	-	-	<0.37 :	-	-
Bis(2-chloroethyl)ether	mg/kg-dry	T	-	-	-	<0.37 :	-	-
Bis(2-ethylhexyl)phthalate	mg/kg-dry	T	-	-	-	<0.37 :	-	-
Butyl benzyl phthalate	mg/kg-dry	T	-	-	-	<0.37 :	-	-
Carbazole	mg/kg-dry	T	-	-	-	<0.37 :	-	-
Chrysene	mg/kg-dry	T	-	-	-	<0.37 :	-	-
Dibenz(a,h)anthracene	mg/kg-dry	T	-	-	-	<0.37 J	-	-
Dibenzofuran	mg/kg-dry	T	-	-	-	<0.37 :	-	-
Dichlorodiisopropyl ether	mg/kg-dry	T	-	-	-	<0.37 :	-	-
Diethylphthalate	mg/kg-dry	T	-	-	-	<0.37 :	-	-
Dimethylphthalate	mg/kg-dry	T	-	-	-	<0.37 :	-	-
Di-n-Butyl phthalate	mg/kg-dry	T	-	-	-	<0.37 :	-	-
Di-n-Octyl phthalate	mg/kg-dry	T	-	-	-	<0.37 :	-	-
Fluoranthene	mg/kg-dry	T	-	-	-	<0.37 :	-	-

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Appendix A-7g
Soil - Random 0-24 inches
Validated Analytical Results

Parameter	Units	Exposure Area Fraction	Site ID / Sample Date / Sample ID	RS-17 10/17/2002 RS-17-T02N-SOL SS16	RS-18 10/17/2002 RS-18-T02N-SOL SS16	RS-19 10/16/2002 RS-19-T02N-SOL SS16	RS-2 10/17/2002 RS-2-T02N-SOL SS9	RS-20 10/16/2002 RS-20-T02N-SOL SS16	RS-3 10/14/2002 RS-3-T02N-SOL SS9
Fluorene	mg/kg-dry	T		-	-	-	<0.37 :	-	-
Hexachlorobenzene	mg/kg-dry	T		-	-	-	<0.37 :	-	-
Hexachlorobutadiene	mg/kg-dry	T		-	-	-	<0.37 :	-	-
Hexachlorocyclopentadiene	mg/kg-dry	T		-	-	-	<0.37 :	-	-
Hexachloroethane	mg/kg-dry	T		-	-	-	<0.37 :	-	-
Indeno(1,2,3-cd)pyrene	mg/kg-dry	T		-	-	-	<0.37 :	-	-
Isophorone	mg/kg-dry	T		-	-	-	<0.37 :	-	-
Naphthalene	mg/kg-dry	T		-	-	-	<0.37 :	-	-
Nitrobenzene	mg/kg-dry	T		-	-	-	<0.37 :	-	-
N-Nitrosodi-n-propylamine	mg/kg-dry	T		-	-	-	<0.37 :	-	-
N-Nitrosodiphenylamine	mg/kg-dry	T		-	-	-	<0.37 :	-	-
Pentachlorophenol	mg/kg-dry	T		-	-	-	<0.92 :	-	-
Phenanthrene	mg/kg-dry	T		-	-	-	<0.37 :	-	-
Phenol	mg/kg-dry	T		-	-	-	0.08 J	-	-
Pyrene	mg/kg-dry	T		-	-	-	<0.37 J	-	-
Explosives									
2,4,6-Trinitrotoluene	mg/kg-dry	T		-	-	-	<0.12 :	-	-
2,6-Pyridinediamine,	mg/kg-dry	T		-	-	-	<0.12 :	-	-
Cyclotetramethylenetetranitramine	mg/kg-dry	T		-	-	-	<0.12 :	-	-
Cyclotrimethylenetrinitramine	mg/kg-dry	T		-	-	-	<0.12 :	-	-
Pentaerythritol tetranitrate	mg/kg-dry	T		-	-	-	<5. :	-	-
Pesticides-PCBs									
Aroclor 1016	mg/kg-dry	T		-	-	-	<0.037 :	-	-
Aroclor 1221	mg/kg-dry	T		-	-	-	<0.074 :	-	-
Aroclor 1232	mg/kg-dry	T		-	-	-	<0.037 :	-	-
Aroclor 1242	mg/kg-dry	T		-	-	-	<0.037 :	-	-
Aroclor 1248	mg/kg-dry	T		-	-	-	<0.037 :	-	-
Aroclor 1254	mg/kg-dry	T		-	-	-	<0.037 :	-	-
Aroclor 1260	mg/kg-dry	T		-	-	-	<0.037 :	-	-

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Appendix A-7g
Soil - Random 0-24 inches
Validated Analytical Results

Parameter	Units	Exposure Area Fraction	Site ID / Sample Date / Sample ID / Exposure Area		RS-4 10/14/2002 RS-4-T02N-SOL SS9		RS-5 10/14/2002 RS-5-T02N-SOL SS9		RS-6 10/14/2002 RS-6-T02N-SOL SS9		RS-7 10/16/2002 RS-7-T02N-SOL SS9		RS-8 10/17/2002 RS-8-T02N-SOL SS9		RS-9 10/17/2002 RS-9-T02N-SOL SS9	
General Chemistry																
Ammonia	mg/kg-dry	T			30.3	J	35.4	J	40.5	J	105.	:	51.9	:	64.2	:
Chloride	mg/kg-dry	T			5.2	J	2.9	J	9.3	J	24.6	J	8.5	J	17.5	J
Fluoride	mg/kg-dry	T			0.44	J	0.29	J	1.1	J	4.6	J	1.2	J	0.6	J
Nitrate	mg/kg-dry	T			<2.4	J	<2.3	J	<2.2	J	<3.1	J	<3.2	J	6.7	J
Phosphorus	mg/kg-dry	T			808.	J	638.	J	486.	J	1270.	J	701.	J	764.	J
Sulfate	mg/kg-dry	T			144.	J	54.8	J	215.	J	1100.	J	144.	J	249.	J
Total Kjeldahl Nitrogen	mg/kg-dry	T			390.	:	557.	:	485.	:	1400.	:	370.	:	1090.	:
Total Organic Carbon	mg/kg-dry	T			5670.	J	10900.	J	8800.	J	18200.	J	13700.	J	21500.	J
Laboratory Parameters																
pH	SU	T			5.6	:	6.7	:	5.2	:	4.4	:	6.9	:	6.5	:
Solids, Percent	%	T			83.9	:	88.4	:	92.5	:	65.5	:	64.5	:	92.4	:
Specific Conductance	umhos/cm	T			122.	:	31.1	:	204.	:	1340.	:	109.	:	283.	:
Geotechnical																
Organic Soils	%	T			2.59	J	3.71	J	3.55	J	7.53	J	2.1	J	4.81	J
Physical Properties																
Cation-Exchange Capacity	meq/100g	T			12.6	:	16.2	:	11.1	:	15.4	:	11.	:	36.6	:
Sodium Absorption Ratio	ratio	T			0.14	:	0.1	:	0.27	:	0.4	:	0.18	:	0.31	:
Metals																
Aluminum	mg/kg-dry	T			6840.	:	7910.	:	6320.	:	8950.	:	10200.	:	8510.	:
Antimony	mg/kg-dry	T			<0.3	J	<0.26	J	<0.26	J	<0.37	J	<0.31	J	<0.24	J
Arsenic	mg/kg-dry	T			3.4	:	4.4	:	3.6	:	4.1	:	4.3	:	4.3	:
Barium	mg/kg-dry	T			211.	:	424.	:	210.	:	531.	:	309.	:	304.	:
Beryllium	mg/kg-dry	T			0.61	:	0.71	:	0.62	:	1.8	:	1.4	:	0.85	:
Boron	mg/kg-dry	T			3.2	:	3.9	J	3.3	J	<1.6	:	<0.51	J	<0.38	J
Cadmium	mg/kg-dry	T			0.34	:	0.45	:	0.076	:	0.76	:	0.97	:	0.23	J
Calcium	mg/kg-dry	T			1790.	:	2350.	:	1680.	:	2790.	:	2030.	:	3160.	:
Chromium	mg/kg-dry	T			13.2	:	18.5	:	16.1	:	20.6	:	17.1	:	19.5	:
Cobalt	mg/kg-dry	T			7.1	:	9.4	:	7.1	:	4.6	:	13.9	:	9.8	:
Copper	mg/kg-dry	T			44.2	:	60.3	:	45.3	:	69.5	:	77.5	:	57.5	:
Iron	mg/kg-dry	T			17300.	:	23400.	:	19200.	:	20700.	:	21600.	:	21900.	:
Lead	mg/kg-dry	T			39.2	:	58.3	:	46.2	:	54.9	:	50.3	:	44.5	J
Magnesium	mg/kg-dry	T			3590.	:	3810.	:	3250.	:	3590.	:	3730.	:	4210.	:
Manganese	mg/kg-dry	T			448.	J	545.	J	415.	J	296.	J	964.	J	582.	J

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T = Total Fraction

Appendix A-7g
Soil - Random 0-24 inches
Validated Analytical Results

Parameter	Units	Exposure Area Fraction	Site ID / Sample Date / Sample ID											
			RS-4 10/14/2002 RS-4-T02N-SOL		RS-5 10/14/2002 RS-5-T02N-SOL		RS-6 10/14/2002 RS-6-T02N-SOL		RS-7 10/16/2002 RS-7-T02N-SOL		RS-8 10/17/2002 RS-8-T02N-SOL		RS-9 10/17/2002 RS-9-T02N-SOL	
			SS9		SS9		SS9		SS9		SS9		SS9	
Mercury	mg/kg-dry	T	0.022	:	0.02	:	<0.018	:	<0.025	:	<0.024	:	<0.018	:
Molybdenum	mg/kg-dry	T	12.8	:	19.5	:	36.1	:	54.6	:	18.1	:	17.8	:
Nickel	mg/kg-dry	T	20.	J	21.4	J	12.8	J	24.7	J	42.8	J	21.9	J
Potassium	mg/kg-dry	T	1910.	J	1890.	J	1740.	J	1480.	J	2140.	J	1880.	J
Selenium	mg/kg-dry	T	<0.79	J	1.6	J	<0.69	J	2.4	J	1.7	J	1.3	:
Silver	mg/kg-dry	T	0.19	:	0.83	:	0.27	:	0.42	:	0.28	:	<0.26	:
Sodium	mg/kg-dry	T	<96.8	:	<97.4	:	<97.7	:	<113.	:	136.	:	88.5	:
Thallium	mg/kg-dry	T	0.13	:	0.16	:	0.17	:	0.2	:	0.16	:	0.16	:
Vanadium	mg/kg-dry	T	18.4	:	24.4	:	19.3	:	28.1	:	21.4	:	24.9	:
Zinc	mg/kg-dry	T	128.	J	148.	J	73.	J	147.	J	327.	J	143.	J

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Appendix A-7g
Soil - Random 0-24 inches
Validated Analytical Results

Parameter	Units	Exposure Area Fraction	Site ID / Sample Date / Sample ID	TSS14-1 6/11/2003 TSS14-1-T02N-SOL SS14		TSS14-10 6/11/2003 TSS14-10-T02N-SOL SS14		TSS14-2 6/11/2003 TSS14-2-T02N-SOL SS14		TSS14-3 6/11/2003 TSS14-3-T02N-SOL SS14		TSS14-4 6/11/2003 TSS14-4-T02N-SOL SS14		TSS14-5 6/11/2003 TSS14-5-T02N-SOL SS14	
General Chemistry															
Ammonia	mg/kg-dry	T		23.3	J	42.4	:	32.5	:	29.9	J	52.6	J	38.3	:
Chloride	mg/kg-dry	T		<0.21	J	2.8	:	2.1	:	12.3	:	<2.1	:	4.2	:
Fluoride	mg/kg-dry	T		1.1	:	1.4	J	0.69	:	1.4	:	0.42	:	0.6	J
Nitrate	mg/kg-dry	T		4.4	J	5.7	J	1.6	J	<2.2	J	<2.1	J	1.7	J
Phosphorus	mg/kg-dry	T		1360.	:	670.	:	477.	:	1150.	:	1170.	:	1110.	:
Sulfate	mg/kg-dry	T		162.	J	666.	:	464.	:	742.	:	719.	J	737.	:
Total Kjeldahl Nitrogen	mg/kg-dry	T		-		219.	J	82.4	J	-		-		95.4	J
Total Organic Carbon	mg/kg-dry	T		2310.	J	5490.	:	<102.	:	794.	:	915.	:	1340.	:
Laboratory Parameters															
pH	SU	T		7.7	J	7.9	J	7.7	J	7.6	J	7.9	J	7.9	J
Solids, Percent	%	T		97.6	:	94.6	:	98.5	:	93.1	:	96.6	:	95.5	:
Specific Conductance	umhos/cm	T		1980.	J	1490.	J	1220.	J	2500.	J	1370.	J	1510.	J
Geotechnical															
Organic Soils	%	T		1.4	:	2.6	:	1.3	:	1.4	:	1.4	:	1.7	:
Physical Properties															
Cation-Exchange Capacity	meq/100g	T		7.3	:	15.2	:	8.4	:	25.	:	21.9	J	14.4	:
Sodium Absorption Ratio	ratio	T		0.03	:	0.26	:	0.01	:	0.93	:	0.04	:	0.07	:
Metals															
Aluminum	mg/kg-dry	T		12300.	J	9710.	:	9160.	:	16600.	:	11900.	:	12900.	:
Antimony	mg/kg-dry	T		<0.48	J	<0.096	J	<0.46	J	<0.52	J	<0.51	J	<0.09	J
Arsenic	mg/kg-dry	T		4.4	:	3.6	:	2.4	:	4.7	:	1.7	:	2.8	J
Barium	mg/kg-dry	T		111.	J	86.3	:	54.5	:	111.	:	115.	:	107.	:
Beryllium	mg/kg-dry	T		1.1	J	0.82	:	0.76	:	1.5	:	1.2	:	1.1	:
Boron	mg/kg-dry	T		2.3	J	2.1	:	1.6	:	2.6	J	2.	J	0.48	J
Cadmium	mg/kg-dry	T		0.52	J	0.43	:	1.5	:	<0.031	J	0.17	J	0.41	:
Calcium	mg/kg-dry	T		13300.	J	21500.	:	7610.	:	7600.	:	16400.	:	13700.	:
Chromium	mg/kg-dry	T		41.	J	18.9	:	19.8	:	32.1	:	46.7	:	40.5	:
Cobalt	mg/kg-dry	T		12.3	J	5.2	:	8.2	:	11.3	:	14.7	:	9.2	:
Copper	mg/kg-dry	T		120.	:	57.	:	114.	:	145.	:	172.	:	94.	:
Iron	mg/kg-dry	T		21800.	J	13400.	:	13800.	:	22800.	:	21700.	:	18200.	:
Lead	mg/kg-dry	T		47.4	J	47.2	:	150.	:	38.6	:	54.4	:	27.5	:
Magnesium	mg/kg-dry	T		8030.	J	4850.	:	3910.	:	5790.	:	8470.	:	7330.	:
Manganese	mg/kg-dry	T		968.	J	487.	:	458.	:	609.	:	468.	:	417.	:

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T = Total Fraction

Appendix A-7g
Soil - Random 0-24 inches
Validated Analytical Results

Parameter	Units	Exposure Area Fraction	Site ID / Sample Date / Sample ID											
			TSS14-1 6/11/2003 TSS14-1-T02N-SOL		TSS14-10 6/11/2003 TSS14-10-T02N-SOL		TSS14-2 6/11/2003 TSS14-2-T02N-SOL		TSS14-3 6/11/2003 TSS14-3-T02N-SOL		TSS14-4 6/11/2003 TSS14-4-T02N-SOL		TSS14-5 6/11/2003 TSS14-5-T02N-SOL	
			SS14		SS14		SS14		SS14		SS14		SS14	
Mercury	mg/kg-dry	T	<0.017	:	<0.016	:	<0.017	:	<0.017	:	<0.015	:	<0.016	:
Molybdenum	mg/kg-dry	T	137.	J	73.5	:	168.	:	70.	:	288.	:	108.	:
Nickel	mg/kg-dry	T	29.6	J	11.6	:	17.3	:	26.8	:	36.9	:	27.4	:
Potassium	mg/kg-dry	T	4100.	J	2130.	J	2420.	J	2860.	J	5120.	J	3650.	J
Selenium	mg/kg-dry	T	<0.77	:	<0.15	:	<0.73	:	<0.83	:	<0.82	:	<0.14	:
Silver	mg/kg-dry	T	0.83	:	<0.22	:	<0.56	:	0.41	J	0.83	:	<0.35	:
Sodium	mg/kg-dry	T	906.	:	<148.	:	103.	:	411.	:	553.	:	86.3	:
Thallium	mg/kg-dry	T	0.22	:	0.034	:	0.13	:	0.23	:	0.42	:	0.078	:
Vanadium	mg/kg-dry	T	43.4	J	25.4	:	21.9	:	35.7	:	46.3	:	38.5	:
Zinc	mg/kg-dry	T	162.	J	81.5	:	304.	:	115.	:	131.	:	86.9	:

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R = Qualified as rejected value from data validation and results are considered unusable for any purpose
T = Total Fraction

Appendix A-7g
Soil - Random 0-24 inches
Validated Analytical Results

Parameter	Units	Exposure Area Fraction	Site ID / Sample Date / Sample ID											
			TSS14-6 6/11/2003 TSS14-6-T02N-SOL		TSS14-7 6/11/2003 TSS14-7-T02N-SOL		TSS14-8 6/11/2003 TSS14-8-T02N-SOL		TSS14-9 6/11/2003 TSS14-9-T02N-SOL		----	----
			SS14		SS14		SS14		SS14			
General Chemistry												
Ammonia	mg/kg-dry	T	19.9	:	32.7	:	35.	:	34.4	J	-	-
Chloride	mg/kg-dry	T	14.	:	<2.2	:	<2.2	:	<2.1	:	-	-
Fluoride	mg/kg-dry	T	1.4	J	1.6	:	2.1	:	1.4	:	-	-
Nitrate	mg/kg-dry	T	3.4	J	<2.2	J	<2.2	J	<2.1	J	-	-
Phosphorus	mg/kg-dry	T	996.	:	831.	:	1400.	:	711.	:	-	-
Sulfate	mg/kg-dry	T	759.	:	3.	:	485.	:	108.	:	-	-
Total Kjeldahl Nitrogen	mg/kg-dry	T	224.	J	79.8	J	46.2	J	-		-	-
Total Organic Carbon	mg/kg-dry	T	2800.	:	725.	:	<107.	:	1840.	:	-	-
Laboratory Parameters												
pH	SU	T	8.	J	7.9	J	7.9	J	8.1	J	-	-
Solids, Percent	%	T	91.4	:	91.2	:	93.6	:	97.6	:	-	-
Specific Conductance	umhos/cm	T	1660.	J	66.5	J	1270.	J	315.	J	-	-
Geotechnical												
Organic Soils	%	T	5.2	:	2.1	:	1.6	:	1.3	:	-	-
Physical Properties												
Cation-Exchange Capacity	meq/100g	T	22.2	:	13.5	:	14.	:	21.	:	-	-
Sodium Absorption Ratio	ratio	T	1.04	:	1.68	:	0.2	:	0.04	:	-	-
Metals												
Aluminum	mg/kg-dry	T	15800.	:	15300.	:	12500.	:	9170.	:	-	-
Antimony	mg/kg-dry	T	<0.11	J	<0.53	J	<0.49	J	<0.45	J	-	-
Arsenic	mg/kg-dry	T	5.1	:	4.	:	2.8	:	3.	:	-	-
Barium	mg/kg-dry	T	337.	:	68.1	:	121.	:	63.3	:	-	-
Beryllium	mg/kg-dry	T	0.88	:	1.2	:	1.1	:	0.83	:	-	-
Boron	mg/kg-dry	T	5.8	:	3.1	J	2.4	J	2.4	J	-	-
Cadmium	mg/kg-dry	T	0.33	J	<0.025	:	0.42	:	<0.03	J	-	-
Calcium	mg/kg-dry	T	57800.	:	3760.	:	15800.	:	8030.	:	-	-
Chromium	mg/kg-dry	T	24.5	:	45.1	:	29.5	:	26.1	:	-	-
Cobalt	mg/kg-dry	T	7.6	:	10.5	:	11.4	:	7.4	:	-	-
Copper	mg/kg-dry	T	75.	:	30.1	:	153.	:	50.8	:	-	-
Iron	mg/kg-dry	T	16200.	:	22200.	:	18700.	:	15100.	:	-	-
Lead	mg/kg-dry	T	19.2	:	15.5	:	43.4	:	20.4	:	-	-
Magnesium	mg/kg-dry	T	8220.	:	6430.	:	6730.	:	5620.	:	-	-
Manganese	mg/kg-dry	T	329.	:	508.	:	427.	:	343.	:	-	-

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T = Total Fraction

Appendix A-7g
Soil - Random 0-24 inches
Validated Analytical Results

Site ID			TSS14-6		TSS14-7		TSS14-8		TSS14-9		----	----
Sample Date			6/11/2003		6/11/2003		6/11/2003		6/11/2003			
Sample ID			TSS14-6-T02N-SOL		TSS14-7-T02N-SOL		TSS14-8-T02N-SOL		TSS14-9-T02N-SOL			
Exposure Area			SS14		SS14		SS14		SS14			
Parameter	Units	Fraction										
Mercury	mg/kg-dry	T	<0.017	:	<0.016	:	<0.017	:	<0.017	:	-	-
Molybdenum	mg/kg-dry	T	65.	:	2.9	:	84.6	:	26.1	:	-	-
Nickel	mg/kg-dry	T	18.1	:	34.1	:	26.4	:	18.7	:	-	-
Potassium	mg/kg-dry	T	3220.	J	1710.	J	4400.	J	2570.	J	-	-
Selenium	mg/kg-dry	T	<0.17	:	<0.85	:	<0.78	:	<0.72	:	-	-
Silver	mg/kg-dry	T	<0.23	:	<0.24	J	<0.71	:	0.3	J	-	-
Sodium	mg/kg-dry	T	<322.	:	420.	:	413.	:	308.	:	-	-
Thallium	mg/kg-dry	T	0.053	:	<0.11	:	0.38	:	0.18	:	-	-
Vanadium	mg/kg-dry	T	42.6	:	34.5	:	41.7	:	30.9	:	-	-
Zinc	mg/kg-dry	T	64.9	:	72.5	:	126.	:	67.	:	-	-

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T = Total Fraction

Appendix A-7h
Soil - SPLP Random 0-24 inches
Validated Analytical Results

Parameter	Units	Exposure Area Fraction	Site ID / Sample Date / Sample ID		CR-10 6/9/2003 CR-10-T02N-SOL RCR		CR-5 6/11/2003 CR-5-T02N-SOL RCR		CR-6 6/10/2003 CR-6-T02N-SOL RCR		CR-8 6/9/2003 CR-8-T02N-SOL RCR		MRSS-1 10/6/2002 MRSS-1-T02N-SOL RefMine		MRSS-17 10/8/2002 MRSS-17-T02N-SOL RefMine	
General Chemistry																
Ammonia	mg/L	T			<0.12	:	<0.15	:	<0.11	:	<0.12	:	0.49	J	<0.054	J
Bicarbonate (as CaCO3)	mg/L	T			49.6	J	43.6	J	54.5	:	48.7	J	14.4	J	<1.	J
Carbonate (as CaCO3)	mg/L	T			20.9	J	<1.	J	7.2	:	39.1	J	<1.	J	20.4	J
Chloride	mg/L	T			0.56	:	0.72	:	0.47	:	0.47	:	<5.	:	70.9	J
Fluoride	mg/L	T			0.47	:	0.57	:	0.71	:	0.74	:	1.1	J	0.13	J
Hydroxide (as CaCO3)	mg/L	T			<1.	J	<1.	J	<1.	:	<1.	J	<1.	J	<1.	J
Nitrate	mg/L	T			0.71	J	1.4	J	<0.4	J	0.47	J	<0.5	J	0.58	J
Nitrite	mg/L	T			0.019	J	0.02	J	0.023	J	0.018	J	0.007	J	0.011	J
Phosphate, Ortho As P	mg/L	T			0.22	J	0.36	J	0.03	J	0.12	J	0.19	J	0.071	J
Phosphorus	mg/L	T			0.3	:	0.75	:	0.42	:	0.33	:	0.62	J	0.061	J
Sulfate	mg/L	T			1.5	:	1.8	:	0.67	:	0.87	:	2.2	:	<4.1	J
Total Alkalinity	mg/L	T			70.5	J	43.6	:	61.7	:	87.9	J	14.4	J	<1.	J
Total Kjeldahl Nitrogen	mg/L	T			0.42	:	1.4	:	0.57	:	0.51	:	<0.24	J	0.35	J
Inorganics																
Cyanide	mg/L	T			<0.01	:	<0.01	J	<0.01	:	<0.01	:	<0.01	J	<0.01	J
Metals																
Aluminum	mg/L	T			4.56	:	17.9	:	1.72	:	8.78	:	39.5	:	1.55	J
Antimony	mg/L	T			<0.0005	:	<0.0005	:	<0.001	:	<0.0025	:	<0.00096	:	<0.0006	J
Arsenic	mg/L	T			0.0012	:	0.0019	:	0.0018	:	<0.001	:	0.0208	:	<0.0004	J
Barium	mg/L	T			0.0374	:	0.0977	:	0.0313	:	0.0413	:	0.933	:	<0.0474	J
Beryllium	mg/L	T			<0.00069	:	0.00081	:	<0.0002	J	<0.00065	:	0.001	:	<0.0002	J
Boron	mg/L	T			<0.174	:	0.156	:	0.208	:	<0.0705	:	0.236	:	<0.0387	J
Cadmium	mg/L	T			<0.0002	:	<0.0002	:	<0.0004	:	<0.001	:	<0.0001	:	<0.0002	J
Calcium	mg/L	T			11.4	:	25.	:	15.	:	11.6	:	11.9	:	2.76	J
Chromium	mg/L	T			0.0066	:	0.0207	:	<0.0006	J	0.0108	:	0.0278	:	<0.0037	J
Cobalt	mg/L	T			<0.0018	:	0.0038	:	<0.0018	:	0.0022	:	0.0022	:	<0.0016	J
Copper	mg/L	T			0.0067	:	0.0244	:	0.0049	:	<0.0045	:	0.0313	:	<0.0016	J
Iron	mg/L	T			3.86	J	18.3	:	1.32	:	8.33	:	32.6	:	1.25	J
Lead	mg/L	T			0.0024	:	0.0081	:	0.0126	:	<0.0005	:	0.28	:	0.0023	J
Magnesium	mg/L	T			2.67	:	7.45	:	3.5	:	3.28	:	9.28	:	0.511	J
Manganese	mg/L	T			0.0399	J	0.141	:	0.0134	:	0.0463	:	0.15	:	0.0172	J
Mercury	mg/L	T			<0.01	:	<0.01	:	<0.01	:	<0.01	:	<0.01	:	<0.01	J
Molybdenum	mg/L	T			0.0014	:	0.001	:	0.0014	J	<0.0015	:	0.0268	:	<0.0011	J

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T = Total Fraction

Appendix A-7h
Soil - SPLP Random 0-24 inches
Validated Analytical Results

Parameter	Units	Site ID / Sample Date / Sample ID / Exposure Area / Fraction	CR-10 6/9/2003 CR-10-T02N-SOL RCR		CR-5 6/11/2003 CR-5-T02N-SOL RCR		CR-6 6/10/2003 CR-6-T02N-SOL RCR		CR-8 6/9/2003 CR-8-T02N-SOL RCR		MRSS-1 10/6/2002 MRSS-1-T02N-SOL RefMine		MRSS-17 10/8/2002 MRSS-17-T02N-SOL RefMine	
Nickel	mg/L	T	0.0026	:	0.0113	:	<0.0012	:	<0.003	:	0.0152	J	<0.0083	J
Potassium	mg/L	T	<1.48	:	9.9	:	1.14	:	2.54	:	13.9	J	1.87	J
Selenium	mg/L	T	<0.0008	:	0.00085	:	<0.0016	:	<0.004	:	<0.0039	:	<0.0016	J
Silver	mg/L	T	<0.0001	:	<0.0001	:	<0.0002	:	<0.0005	:	0.00053	:	<0.0002	J
Sodium	mg/L	T	19.9	:	14.7	:	24.1	:	8.08	:	-		<6.28	J
Thallium	mg/L	T	<0.0001	:	<0.0001	:	<0.0002	:	<0.0005	:	0.00061	:	<0.0002	J
Vanadium	mg/L	T	0.0172	:	0.043	:	0.0486	:	0.0291	:	0.0362	J	0.0015	J
Zinc	mg/L	T	0.0271	:	0.0648	:	0.0071	:	0.0308	:	0.0769	:	0.0091	J

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Appendix A-7h
Soil - SPLP Random 0-24 inches
Validated Analytical Results

Parameter	Units	Exposure Area Fraction	Site ID / Sample Date / Sample ID		MRSS-2 10/7/2002 MRSS-2-T02N-SOL RefMine		MSS3-1 9/27/2002 MSS3-1-T02N-SOL SS3		MSS3-2 9/27/2002 MSS3-2-T02N-SOL SS3		MSS3-3 9/30/2002 MSS3-3-T02N-SOL SS3		MSS3-4 9/30/2002 MSS3-4-T02N-SOL SS3		RRS-1 9/29/2002 RRS-1-T02N-SOL RefMineR	
General Chemistry																
Ammonia	mg/L	T			0.55	J	<0.09	J	0.074	J	<0.13	J	<0.081	J	0.091	:
Bicarbonate (as CaCO3)	mg/L	T			7.4	J	8.4	J	16.4	J	3.9	J	9.6	J	23.4	J
Carbonate (as CaCO3)	mg/L	T			5.3	J	7.4	J	9.2	J	2.4	J	27.8	J	8.1	J
Chloride	mg/L	T			0.76	:	<9.9	:	76.6	J	<3.7	J	<0.46	J	<5.	:
Fluoride	mg/L	T			0.18	J	0.17	J	0.12	J	0.41	J	0.22	J	0.46	:
Hydroxide (as CaCO3)	mg/L	T			<1.	J	<1.	J	<1.	J	<1.	J	<1.	J	<1.	J
Nitrate	mg/L	T			<0.4	J	0.42	J	0.88	J	<0.4	J	0.49	J	<0.5	J
Nitrite	mg/L	T			0.017	J	0.0068	J	0.0075	J	<0.005	J	0.01	J	<0.005	J
Phosphate, Ortho As P	mg/L	T			0.11	:	0.14	J	0.16	J	<0.047	J	0.28	J	0.026	J
Phosphorus	mg/L	T			0.48	J	0.1	J	0.13	J	0.053	J	0.18	J	0.093	:
Sulfate	mg/L	T			1.9	:	<1.6	:	<5.4	J	504.	J	<0.83	J	7.3	:
Total Alkalinity	mg/L	T			12.7	J	8.4	J	16.4	J	3.9	J	9.6	J	31.5	J
Total Kjeldahl Nitrogen	mg/L	T			<0.24	J	0.28	J	0.43	J	0.33	J	0.36	J	<0.24	:
Inorganics																
Cyanide	mg/L	T			-		<0.01	J	<0.01	J	<0.01	J	<0.01	J	<0.01	J
Metals																
Aluminum	mg/L	T			19.4	:	5.7	J	3.28	J	0.168	J	8.79	J	3.27	:
Antimony	mg/L	T			<0.0002	:	<0.0027	J	<0.0009	J	<0.0006	J	<0.00071	J	<0.0002	:
Arsenic	mg/L	T			0.0036	:	0.0047	J	0.0018	J	<0.0004	J	0.0029	J	0.00077	:
Barium	mg/L	T			0.301	:	<0.124	J	<0.129	J	<0.204	J	<0.199	J	0.809	:
Beryllium	mg/L	T			0.00049	:	<0.0002	J	<0.0002	J	<0.0002	J	<0.0002	J	<0.0002	:
Boron	mg/L	T			0.213	:	0.135	J	<0.0642	J	<0.111	J	0.298	J	<0.163	:
Cadmium	mg/L	T			<0.0001	:	<0.0002	J	<0.0002	J	0.00029	J	<0.0002	J	<0.0001	:
Calcium	mg/L	T			3.84	:	2.83	J	4.6	J	124.	J	4.62	J	14.6	:
Chromium	mg/L	T			0.0289	:	<0.0037	J	<0.0037	J	<0.0037	J	0.0049	J	0.0051	:
Cobalt	mg/L	T			0.0025	:	<0.0016	J	<0.0016	J	<0.0016	J	<0.0016	J	<0.0018	:
Copper	mg/L	T			0.0211	:	<0.0072	J	<0.0029	J	<0.0053	J	<0.0066	J	0.0054	:
Iron	mg/L	T			16.3	:	3.57	J	2.48	J	0.0761	J	6.57	J	2.22	:
Lead	mg/L	T			0.0212	:	0.0114	J	0.0041	J	0.00024	J	0.0157	J	0.0017	:
Magnesium	mg/L	T			4.25	:	0.821	J	0.966	J	19.9	J	1.61	J	4.03	:
Manganese	mg/L	T			0.199	:	0.0227	J	0.0664	J	1.8	J	0.0462	J	0.0461	:
Mercury	mg/L	T			<0.01	:	<0.01	J	<0.01	J	<0.01	J	<0.01	J	<0.01	:
Molybdenum	mg/L	T			<0.0014	:	<0.0043	J	<0.0015	J	<0.0011	J	0.0089	J	0.0013	:

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T = Total Fraction

Appendix A-7h
Soil - SPLP Random 0-24 inches
Validated Analytical Results

Parameter	Units	Site ID / Sample Date / Sample ID / Exposure Area / Fraction	MRSS-2 10/7/2002 MRSS-2-T02N-SOL RefMine T		MSS3-1 9/27/2002 MSS3-1-T02N-SOL SS3 T		MSS3-2 9/27/2002 MSS3-2-T02N-SOL SS3 T		MSS3-3 9/30/2002 MSS3-3-T02N-SOL SS3 T		MSS3-4 9/30/2002 MSS3-4-T02N-SOL SS3 T		RRS-1 9/29/2002 RRS-1-T02N-SOL RefMineR T	
Nickel	mg/L	T	0.0169	J	<0.0102	J	<0.0111	J	<0.0393	J	<0.0102	J	<0.0002	J
Potassium	mg/L	T	4.21	J	<1.33	J	4.	J	7.96	J	2.98	J	3.67	:
Selenium	mg/L	T	0.0014	:	0.0027	J	<0.0016	J	<0.0016	J	<0.0016	J	<0.0045	:
Silver	mg/L	T	0.00039	:	<0.0002	J	<0.0002	J	<0.0002	J	<0.0002	J	<0.0001	:
Sodium	mg/L	T	-		<7.	J	<5.89	J	<15.8	J	<13.6	J	-	
Thallium	mg/L	T	0.00015	:	<0.0002	J	<0.0002	J	<0.0002	J	<0.0002	J	<0.0001	:
Vanadium	mg/L	T	0.0244	J	0.0018	J	0.0043	J	0.00063	J	0.0041	J	0.0041	J
Zinc	mg/L	T	0.0895	:	0.0662	J	0.0209	J	0.0152	J	0.112	J	0.144	:

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Appendix A-7h
Soil - SPLP Random 0-24 inches
Validated Analytical Results

Parameter	Units	Exposure Area Fraction	Site ID / Sample Date / Sample ID	RRS-10 10/22/2002 RRS-10-T02N-SOL RefMineR		RRS-17 10/18/2002 RRS-17-T02N-SOL RLCCR		RRS-18 10/18/2002 RRS-18-T02N-SOL RLCCR		RRS-2 9/29/2002 RRS-2-T02N-SOL RefMineR		RRS-9 10/22/2002 RRS-9-T02N-SOL RefMineR		RS-1 10/17/2002 RS-1-T02N-SOL SS9	
General Chemistry															
Ammonia	mg/L	T		0.085	J	<0.13	J	<0.12	J	0.11	J	0.098	J	<0.13	J
Bicarbonate (as CaCO3)	mg/L	T		5.8	J	16.6	:	1.7	:	14.9	J	5.	J	4.1	:
Carbonate (as CaCO3)	mg/L	T		6.3	J	5.4	:	<1.	:	<1.	J	<1.	J	<1.	:
Chloride	mg/L	T		1.3	J	4.6	:	4.8	:	15.8	:	296.	J	13.8	:
Fluoride	mg/L	T		0.18	J	0.35	J	0.31	J	0.22	J	0.11	J	0.46	J
Hydroxide (as CaCO3)	mg/L	T		<1.	J	<1.	:	<1.	:	<1.	J	<1.	J	<1.	:
Nitrate	mg/L	T		<0.2	J	<0.4	:	<0.4	:	<0.5	J	1.2	J	<0.4	J
Nitrite	mg/L	T		<0.005	J	<0.005	:	<0.005	:	<0.005	J	0.074	J	<0.005	J
Phosphate, Ortho As P	mg/L	T		0.03	J	<0.01	:	1.1	J	<0.01	J	0.03	J	0.23	J
Phosphorus	mg/L	T		0.051	J	0.058	J	0.056	J	0.13	J	0.31	J	0.083	J
Sulfate	mg/L	T		2.	J	7.6	:	8.	:	<5.	:	16.2	J	22.6	J
Total Alkalinity	mg/L	T		5.8	J	22.	:	1.7	:	14.9	J	5.	J	4.1	:
Total Kjeldahl Nitrogen	mg/L	T		<0.24	J	<0.24	J	<0.24	J	<0.24	J	0.32	J	<0.24	J
Inorganics															
Cyanide	mg/L	T		<0.01	:	<0.01	J	<0.01	J	<0.01	J	<0.01	:	<0.01	J
Metals															
Aluminum	mg/L	T		0.568	:	2.73	:	1.22	:	7.34	:	0.523	:	2.83	:
Antimony	mg/L	T		<0.0006	J	<0.0006	:	<0.0015	:	<0.0002	:	<0.0006	J	<0.0017	:
Arsenic	mg/L	T		0.00051	:	<0.00095	:	<0.00057	:	0.00077	:	<0.0004	:	<0.0004	:
Barium	mg/L	T		0.0498	:	0.212	:	<0.085	:	0.0785	:	0.0261	:	<0.119	:
Beryllium	mg/L	T		<0.0002	:	<0.0003	:	<0.0003	:	0.00023	:	<0.0002	:	<0.0003	:
Boron	mg/L	T		0.0286	:	<0.2	:	<0.081	:	<0.116	:	0.0203	:	<0.0916	:
Cadmium	mg/L	T		<0.0002	:	<0.0002	:	<0.0002	:	<0.0001	:	<0.0002	:	<0.0002	:
Calcium	mg/L	T		2.83	:	11.8	:	5.73	:	12.8	:	2.13	:	18.2	:
Chromium	mg/L	T		<0.0037	:	0.0024	J	<0.0016	J	0.0079	:	<0.0037	:	0.0019	:
Cobalt	mg/L	T		<0.0016	:	<0.0023	:	<0.0023	:	<0.0018	:	<0.0016	:	<0.0023	:
Copper	mg/L	T		<0.0006	:	<0.0241	:	<0.0226	:	0.0062	:	<0.0006	:	<0.0314	:
Iron	mg/L	T		0.562	:	2.04	:	1.05	:	4.28	:	0.56	:	2.67	:
Lead	mg/L	T		0.00099	:	0.0034	:	0.0018	:	0.0043	:	0.0015	:	0.0065	:
Magnesium	mg/L	T		0.649	:	2.4	:	1.21	:	2.6	:	0.547	:	3.3	:
Manganese	mg/L	T		0.0144	:	0.0218	:	0.026	:	0.0462	:	0.0219	:	0.0317	:
Mercury	mg/L	T		<0.01	:	<0.01	:	<0.01	:	<0.01	:	<0.01	:	<0.01	:
Molybdenum	mg/L	T		<0.0004	:	0.0016	:	0.0013	:	0.0011	:	0.00049	:	0.0165	:

J = Qualified as estimated during data validation

R = Qualified as rejected value from data validation and results are considered unusable for any purpose

T = Total Fraction

Appendix A-7h
Soil - SPLP Random 0-24 inches
Validated Analytical Results

Parameter	Units	Exposure Area Fraction	Site ID / Sample Date / Sample ID											
			RRS-10 10/22/2002 RRS-10-T02N-SOL RefMineR		RRS-17 10/18/2002 RRS-17-T02N-SOL RLCCR		RRS-18 10/18/2002 RRS-18-T02N-SOL RLCCR		RRS-2 9/29/2002 RRS-2-T02N-SOL RefMineR		RRS-9 10/22/2002 RRS-9-T02N-SOL RefMineR		RS-1 10/17/2002 RS-1-T02N-SOL SS9	
Nickel	mg/L	T	0.00073	J	0.0023	:	0.001	:	<0.0002	J	0.001	J	0.0036	:
Potassium	mg/L	T	0.649	J	3.45	:	5.82	:	3.87	:	0.699	:	2.69	:
Selenium	mg/L	T	<0.0016	:	<0.0017	:	<0.0016	:	<0.0045	:	<0.0016	:	0.0023	:
Silver	mg/L	T	<0.0002	:	<0.0002	:	<0.0002	:	<0.0001	:	<0.0002	:	<0.0002	:
Sodium	mg/L	T	5.14	:	-		-		-		1.95	:	-	
Thallium	mg/L	T	<0.0002	:	<0.0002	:	<0.0002	:	<0.0001	:	<0.0002	:	<0.0002	:
Vanadium	mg/L	T	0.00062	J	0.0029	J	0.0014	J	0.0079	J	0.0014	J	<0.0004	J
Zinc	mg/L	T	0.0091	J	0.057	:	<0.0283	:	0.0207	:	0.0116	J	<0.0345	J

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T = Total Fraction

Appendix A-7h
Soil - SPLP Random 0-24 inches
Validated Analytical Results

Parameter	Units	Exposure Area Fraction	Site ID / Sample Date / Sample ID		RS-11 10/17/2002 RS-11-T02N-SOL SS16		RS-12 10/16/2002 RS-12-T02N-SOL SS16		RS-2 10/17/2002 RS-2-T02N-SOL SS9		TSS14-1 6/11/2003 TSS14-1-T02N-SOL SS14		TSS14-3 6/11/2003 TSS14-3-T02N-SOL SS14		TSS14-4 6/11/2003 TSS14-4-T02N-SOL SS14	
General Chemistry																
Ammonia	mg/L	T			<0.077	:	0.092	J	<0.11	:	<0.054	:	<0.16	:	<0.054	:
Bicarbonate (as CaCO3)	mg/L	T			3.2	J	8.7	:	4.6	J	35.4	:	36.5	:	41.6	:
Carbonate (as CaCO3)	mg/L	T			<1.	J	<1.	:	<1.	J	<1.	:	<1.	:	<1.	:
Chloride	mg/L	T			0.83	:	0.92	:	<1.	:	<0.4	:	0.7	:	<0.4	:
Fluoride	mg/L	T			0.99	:	0.43	J	0.46	J	0.45	:	0.83	:	0.4	:
Hydroxide (as CaCO3)	mg/L	T			<1.	J	<1.	:	<1.	J	<1.	:	<1.	:	<1.	:
Nitrate	mg/L	T			<0.4	J	<0.4	J	<1.	J	0.4	J	<0.4	J	<0.4	J
Nitrite	mg/L	T			<0.005	J	<0.005	J	<0.005	J	0.011	J	<0.005	J	0.0054	J
Phosphate, Ortho As P	mg/L	T			<0.01	J	0.014	J	9.5	J	<0.01	J	0.011	J	<0.01	J
Phosphorus	mg/L	T			0.021	:	0.043	J	0.055	J	<0.01	:	0.016	:	<0.01	:
Sulfate	mg/L	T			4.2	:	2.6	:	6.2	:	257.	:	166.	:	77.5	:
Total Alkalinity	mg/L	T			3.2	J	8.7	:	4.6	J	35.4	:	36.5	:	41.6	:
Total Kjeldahl Nitrogen	mg/L	T			<0.24	:	<0.24	J	<0.24	J	0.3	:	0.26	:	0.26	J
Inorganics																
Cyanide	mg/L	T			<0.01	J	<0.01	J	<0.01	:	<0.01	:	<0.01	:	<0.01	:
Metals																
Aluminum	mg/L	T			0.414	:	0.458	:	0.887	:	<0.0183	:	<0.0183	:	0.0887	:
Antimony	mg/L	T			0.00062	:	<0.00081	:	<0.0006	:	<0.001	:	<0.001	:	<0.001	:
Arsenic	mg/L	T			<0.0004	:	<0.0004	:	<0.0004	:	<0.0004	:	<0.0004	:	<0.0004	:
Barium	mg/L	T			<0.037	:	<0.0173	:	<0.1	:	0.0351	J	0.0387	:	0.0546	:
Beryllium	mg/L	T			<0.0003	:	<0.0002	:	<0.0003	:	<0.0002	J	<0.0002	J	<0.0002	J
Boron	mg/L	T			<0.0352	:	<0.0383	J	<0.0553	:	<0.0266	:	<0.0244	:	<0.0394	J
Cadmium	mg/L	T			<0.0002	:	<0.0002	:	<0.0002	:	<0.0004	:	<0.0004	:	<0.0004	:
Calcium	mg/L	T			5.43	:	5.06	:	6.54	:	133.	:	56.5	:	37.7	:
Chromium	mg/L	T			<0.0016	:	<0.0046	:	<0.0016	:	<0.0006	J	<0.0006	J	<0.0006	J
Cobalt	mg/L	T			<0.0023	:	<0.0022	:	<0.0023	:	<0.0018	:	<0.0018	:	<0.0018	:
Copper	mg/L	T			<0.0186	:	0.007	:	<0.0221	:	0.0046	:	0.0162	:	0.0037	:
Iron	mg/L	T			0.432	:	0.422	:	1.04	:	<0.0168	:	<0.0168	:	<0.0168	:
Lead	mg/L	T			0.0015	:	0.0016	:	0.0042	:	<0.0002	:	0.001	:	0.0011	:
Magnesium	mg/L	T			1.06	:	0.897	:	1.16	:	2.26	:	7.32	:	2.18	:
Manganese	mg/L	T			0.0239	:	0.0156	:	0.0375	:	<0.0007	:	<0.0007	:	0.0014	:
Mercury	mg/L	T			<0.01	:	<0.01	:	<0.01	:	<0.01	:	<0.01	:	<0.01	:
Molybdenum	mg/L	T			0.0184	:	0.0078	:	0.003	:	0.393	:	1.38	:	1.69	:

J = Qualified as estimated during data validation
R = Qualified as rejected value from data validation and results are considered unusable for any purpose
T = Total Fraction

Appendix A-7h
Soil - SPLP Random 0-24 inches
Validated Analytical Results

Parameter	Units	Site ID / Sample Date / Sample ID / Exposure Area / Fraction	RS-11 10/17/2002 RS-11-T02N-SOL SS16		RS-12 10/16/2002 RS-12-T02N-SOL SS16		RS-2 10/17/2002 RS-2-T02N-SOL SS9		TSS14-1 6/11/2003 TSS14-1-T02N-SOL SS14		TSS14-3 6/11/2003 TSS14-3-T02N-SOL SS14		TSS14-4 6/11/2003 TSS14-4-T02N-SOL SS14	
Nickel	mg/L	T	0.00079	:	0.0011	:	0.0046	:	<0.0012	:	<0.0012	:	<0.0012	:
Potassium	mg/L	T	<1.3	:	<1.73	:	<1.71	:	4.48	:	2.29	:	2.91	:
Selenium	mg/L	T	<0.0016	:	<0.0016	:	<0.0016	:	<0.0016	:	<0.0016	:	<0.0016	:
Silver	mg/L	T	<0.0002	:	<0.0002	:	<0.0002	:	<0.0002	:	<0.0002	:	<0.0002	:
Sodium	mg/L	T	-		-		-		<1.04	:	8.6	:	<5.08	J
Thallium	mg/L	T	<0.0002	:	<0.0002	:	<0.0002	:	<0.0002	:	<0.0002	:	<0.0002	:
Vanadium	mg/L	T	0.00053	J	0.00075	J	0.0013	:	<0.0004	:	0.00043	:	0.002	:
Zinc	mg/L	T	<0.0178	:	0.01	:	<0.0203	:	<0.0057	:	<0.0057	:	<0.0057	:

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T = Total Fraction

Appendix A-7h
Soil - SPLP Random 0-24 inches
Validated Analytical Results

Parameter	Units	Exposure Area Fraction	Site ID / Sample Date / Sample ID / Exposure Area					
			TSS14-5 / 6/11/2003 / TSS14-5-T02N-SOL / SS14	----	----	----	----	----
General Chemistry								
Ammonia	mg/L	T	0.059 :	-	-	-	-	-
Bicarbonate (as CaCO3)	mg/L	T	<15.4 J	-	-	-	-	-
Carbonate (as CaCO3)	mg/L	T	<1. J	-	-	-	-	-
Chloride	mg/L	T	0.42 :	-	-	-	-	-
Fluoride	mg/L	T	0.24 :	-	-	-	-	-
Hydroxide (as CaCO3)	mg/L	T	<1. J	-	-	-	-	-
Nitrate	mg/L	T	<0.4 J	-	-	-	-	-
Nitrite	mg/L	T	<0.005 J	-	-	-	-	-
Phosphate, Ortho As P	mg/L	T	0.021 J	-	-	-	-	-
Phosphorus	mg/L	T	0.011 :	-	-	-	-	-
Sulfate	mg/L	T	91.8 :	-	-	-	-	-
Total Alkalinity	mg/L	T	<15.4 J	-	-	-	-	-
Total Kjeldahl Nitrogen	mg/L	T	0.76 J	-	-	-	-	-
Inorganics								
Cyanide	mg/L	T	<0.01 :	-	-	-	-	-
Metals								
Aluminum	mg/L	T	0.0519 :	-	-	-	-	-
Antimony	mg/L	T	<0.00054 :	-	-	-	-	-
Arsenic	mg/L	T	0.0004 :	-	-	-	-	-
Barium	mg/L	T	0.0445 :	-	-	-	-	-
Beryllium	mg/L	T	<0.0002 :	-	-	-	-	-
Boron	mg/L	T	0.135 :	-	-	-	-	-
Cadmium	mg/L	T	<0.0002 :	-	-	-	-	-
Calcium	mg/L	T	40.3 :	-	-	-	-	-
Chromium	mg/L	T	0.00068 :	-	-	-	-	-
Cobalt	mg/L	T	<0.002 :	-	-	-	-	-
Copper	mg/L	T	0.003 :	-	-	-	-	-
Iron	mg/L	T	<0.0333 J	-	-	-	-	-
Lead	mg/L	T	0.00073 :	-	-	-	-	-
Magnesium	mg/L	T	1.81 :	-	-	-	-	-
Manganese	mg/L	T	<0.0007 :	-	-	-	-	-
Mercury	mg/L	T	<0.01 :	-	-	-	-	-
Molybdenum	mg/L	T	1.45 :	-	-	-	-	-

J = Qualified as estimated during data validation
R = Qualified as rejected value from data validation and results are considered unusable for any purpose
T = Total Fraction

Appendix A-7h
Soil - SPLP Random 0-24 inches
Validated Analytical Results

Parameter	Units	Exposure Area Fraction	Site ID Sample Date Sample ID					
			TSS14-5 6/11/2003 TSS14-5-T02N-SOL	----	----	----	----	----
			SS14					
Nickel	mg/L	T	<0.0006 :	-	-	-	-	-
Potassium	mg/L	T	1.67 :	-	-	-	-	-
Selenium	mg/L	T	<0.0008 :	-	-	-	-	-
Silver	mg/L	T	0.00059 :	-	-	-	-	-
Sodium	mg/L	T	7.23 :	-	-	-	-	-
Thallium	mg/L	T	<0.0001 :	-	-	-	-	-
Vanadium	mg/L	T	0.0195 :	-	-	-	-	-
Zinc	mg/L	T	<0.0047 :	-	-	-	-	-

J = Qualified as estimated during data validation
R = Qualified as rejected value from data validation and results are considered unusable for any purpose
T = Total Fraction

Appendix A-7i
Soil - Biased 0-2 inches
Validated Analytical Results

Parameter	Units	Exposure Area Fraction	Site ID / Sample Date / Sample ID		TSS15-1 1/7/2003 TSS15-1-T01N-SOL SS15		TSS15-1 1/10/2003 TSS15-1-T01N-SOL SS15		TSS15-10 10/14/2002 TSS15-10-T01N-SOL SS15		TSS15-11 1/7/2003 TSS15-11-T01N-SOL SS15		TSS15-12 1/7/2003 TSS15-12-T01N-SOL SS15		TSS15-13 1/7/2003 TSS15-13-T01N-SOL SS15	
General Chemistry																
Ammonia	mg/kg-dry	T		-	76.8	:	118.	J	18.2	:	132.	:	24.8	:		
Chloride	mg/kg-dry	T		-	<2.4	:	<2.3	J	2.4	:	8.6	:	3.7	:		
Fluoride	mg/kg-dry	T		-	1.4	J	0.22	J	0.14	J	<0.13	J	<0.12	J		
Nitrate	mg/kg-dry	T		-	3.4	J	4.	J	5.8	J	22.4	J	5.6	J		
Phosphorus	mg/kg-dry	T		-	633.	:	440.	J	785.	:	884.	:	411.	:		
Sulfate	mg/kg-dry	T		-	3.7	:	2.8	J	3.4	:	14.8	:	5.3	:		
Total Kjeldahl Nitrogen	mg/kg-dry	T		-	778.	:	1540.	:	2290.	:	6040.	:	2030.	:		
Total Organic Carbon	mg/kg-dry	T		-	10000.	J	23700.	J	37500.	J	96800.	J	23100.	J		
Laboratory Parameters																
pH	SU	T		-	7.5	:	8.3	:	7.8	:	7.8	:	7.6	:		
Solids, Percent	%	T		-	86.7	:	88.3	:	87.4	:	79.6	:	88.8	:		
Specific Conductance	umhos/cm	T		-	188.	:	45.5	:	199.	:	295.	:	173.	:		
Geotechnical																
Organic Soils	%	T		-	4.8	:	6.81	J	9.6	:	19.3	:	6.3	:		
Physical Properties																
Cation-Exchange Capacity	meq/100g	T		-	31.9	:	36.5	:	33.2	:	45.2	:	36.3	:		
Sodium Absorption Ratio	ratio	T		-	0.07	:	<0.03	:	0.02	:	0.03	:	0.06	:		
Metals																
Aluminum	mg/kg-dry	T		-	20900.	:	19800.	:	22600.	:	21100.	:	26800.	:		
Antimony	mg/kg-dry	T		-	<0.27	J	<0.26	J	<0.32	J	<0.36	J	<0.33	J		
Arsenic	mg/kg-dry	T		-	3.5	J	2.6	:	2.7	J	3.1	J	3.2	J		
Barium	mg/kg-dry	T		-	258.	:	246.	:	289.	:	269.	:	274.	:		
Beryllium	mg/kg-dry	T		-	0.97	:	0.78	:	0.9	:	0.85	:	1.1	:		
Boron	mg/kg-dry	T		-	10.8	:	11.1	J	12.9	:	19.4	:	10.7	:		
Cadmium	mg/kg-dry	T		-	<0.043	:	0.11	:	<0.044	:	<0.045	:	<0.04	J		
Calcium	mg/kg-dry	T		-	32800.	:	19700.	:	24400.	:	18400.	:	6540.	:		
Chromium	mg/kg-dry	T		-	14.3	J	15.7	:	17.3	J	15.9	J	20.3	J		
Cobalt	mg/kg-dry	T		-	9.5	:	9.3	:	10.7	:	8.9	:	10.9	:		
Copper	mg/kg-dry	T		-	14.3	J	15.	:	17.4	J	17.7	J	14.9	J		
Iron	mg/kg-dry	T		-	18200.	:	19200.	:	20900.	:	19100.	:	23800.	:		
Lead	mg/kg-dry	T		-	12.	:	14.1	:	14.8	:	21.2	:	14.4	:		
Magnesium	mg/kg-dry	T		-	5220.	:	4560.	:	5030.	:	5040.	:	4960.	:		
Manganese	mg/kg-dry	T		-	468.	:	528.	J	614.	:	531.	:	609.	:		

J = Qualified as estimated during data validation

R = Qualified as rejected value from data validation and results are considered unusable for any purpose

T = Total Fraction

Appendix A-7i
Soil - Biased 0-2 inches
Validated Analytical Results

Parameter	Units	Exposure Area Fraction	Site ID / Sample Date / Sample ID		TSS15-1 1/7/2003 TSS15-1-T01N-SOL SS15		TSS15-1 1/10/2003 TSS15-1-T01N-SOL SS15		TSS15-10 10/14/2002 TSS15-10-T01N-SOL SS15		TSS15-11 1/7/2003 TSS15-11-T01N-SOL SS15		TSS15-12 1/7/2003 TSS15-12-T01N-SOL SS15		TSS15-13 1/7/2003 TSS15-13-T01N-SOL SS15	
Mercury	mg/kg-dry	T		-		<0.018	:	0.032	:	0.029	:	0.069	:	0.035	:
Molybdenum	mg/kg-dry	T		-		0.73	:	1.8	:	1.4	:	1.9	:	<0.27	:
Nickel	mg/kg-dry	T		-		12.4	:	11.8	J	13.4	:	11.1	:	12.9	:
Potassium	mg/kg-dry	T		-		3850.	J	3240.	J	3920.	J	4680.	J	3600.	J
Selenium	mg/kg-dry	T		-		<0.72	J	1.1	J	<0.86	J	<0.97	J	<0.88	J
Silver	mg/kg-dry	T		-		<0.17	:	<0.13	:	<0.17	:	<0.18	:	<0.16	:
Sodium	mg/kg-dry	T		-		77.6	:	<50.	:	<35.7	:	<36.7	:	<32.9	:
Thallium	mg/kg-dry	T		-		0.22	:	0.22	:	0.23	:	0.25	:	0.25	:
Vanadium	mg/kg-dry	T		-		38.3	:	35.7	:	39.1	:	32.7	:	44.	:
Zinc	mg/kg-dry	T		-		47.7	:	53.5	J	59.8	:	70.	:	59.4	:
Pesticides-PCBs															
a-Chlordane	mg/kg-dry	T		-		<0.002	:	-		-		-		-	
Aldrin	mg/kg-dry	T		-		<0.002	:	-		-		-		-	
alpha-Hexachlorocyclohexane	mg/kg-dry	T		-		<0.002	:	-		-		-		-	
beta-Hexachlorocyclohexane	mg/kg-dry	T		-		<0.002	:	-		-		-		-	
delta-Hexachlorocyclohexane	mg/kg-dry	T		-		<0.002	:	-		-		-		-	
Dichlorodiphenyldichloroethane	mg/kg-dry	T		-		<0.0038	:	-		-		-		-	
Dichlorodiphenyldichloroethylene	mg/kg-dry	T		-		<0.0038	:	-		-		-		-	
Dichlorodiphenyltrichloroethane	mg/kg-dry	T		-		<0.0038	:	-		-		-		-	
Dieldrin	mg/kg-dry	T		-		<0.0038	:	-		-		-		-	
Endosulfan I	mg/kg-dry	T		-		<0.002	:	-		-		-		-	
Endosulfan II	mg/kg-dry	T		-		<0.0038	:	-		-		-		-	
Endosulfan sulfate	mg/kg-dry	T		-		<0.0038	:	-		-		-		-	
Endrin	mg/kg-dry	T		-		<0.0038	:	-		-		-		-	
Endrin aldehyde	mg/kg-dry	T		-		<0.0038	:	-		-		-		-	
Endrin ketone	mg/kg-dry	T		-		<0.0038	:	-		-		-		-	
g-Chlordane	mg/kg-dry	T		-		<0.002	:	-		-		-		-	
Heptachlor	mg/kg-dry	T		-		<0.002	:	-		-		-		-	
Heptachlor epoxide	mg/kg-dry	T		-		<0.002	:	-		-		-		-	
Lindane	mg/kg-dry	T		-		<0.002	:	-		-		-		-	
Methoxychlor	mg/kg-dry	T		-		<0.02	:	-		-		-		-	
Dibenzodioxins-Dibenzofurans															
1,2,3,4,6,7,8,9-Octachlorodibenzofur	pg/g	T		<0.28	:	-		-		-		-		-	
1,2,3,4,6,7,8,9-Octachlorodibenzo-p	pg/g	T		<0.95	:	-		-		-		-		-	

J = Qualified as estimated during data validation
R = Qualified as rejected value from data validation and results are considered unusable for any purpose
T = Total Fraction

Appendix A-7i
Soil - Biased 0-2 inches
Validated Analytical Results

Parameter	Units	Site ID / Sample Date / Sample ID / Exposure Area / Fraction	TSS15-1 1/7/2003 TSS15-1-T01N-SOL SS15		TSS15-1 1/10/2003 TSS15-1-T01N-SOL SS15	TSS15-10 10/14/2002 TSS15-10-T01N-SOL SS15	TSS15-11 1/7/2003 TSS15-11-T01N-SOL SS15	TSS15-12 1/7/2003 TSS15-12-T01N-SOL SS15	TSS15-13 1/7/2003 TSS15-13-T01N-SOL SS15
1,2,3,4,6,7,8-Heptachlorodibenzofur	pg/g	T	<0.15	:	-	-	-	-	-
1,2,3,4,6,7,8-Heptachlorodibenzo-p-	pg/g	T	<0.29	:	-	-	-	-	-
1,2,3,4,7,8,9-Heptachlorodibenzofur	pg/g	T	<0.19	:	-	-	-	-	-
1,2,3,4,7,8-Hexachlorodibenzofuran	pg/g	T	<0.076	:	-	-	-	-	-
1,2,3,4,7,8-hexachlorodibenzo-p-dio	pg/g	T	<0.17	:	-	-	-	-	-
1,2,3,6,7,8-Hexachlorodibenzofuran	pg/g	T	<0.07	:	-	-	-	-	-
1,2,3,6,7,8-Hexachlorodibenzo-p-dio	pg/g	T	<0.16	:	-	-	-	-	-
1,2,3,7,8,9-Hexachlorodibenzofuran	pg/g	T	<0.089	:	-	-	-	-	-
1,2,3,7,8,9-Hexachlorodibenzo-p-dio	pg/g	T	<0.17	:	-	-	-	-	-
1,2,3,7,8-Pentachlorodibenzofuran	pg/g	T	<0.15	:	-	-	-	-	-
1,2,3,7,8-Pentachlorodibenzo-p-diox	pg/g	T	<0.17	:	-	-	-	-	-
2,3,4,6,7,8-Hexachlorodibenzofuran	pg/g	T	<0.08	:	-	-	-	-	-
2,3,4,7,8-Pentachlorodibenzofuran	pg/g	T	<0.15	:	-	-	-	-	-
2,3,7,8-Tetrachlorodibenzofuran	pg/g	T	0.31	J	-	-	-	-	-
2,3,7,8-Tetrachlorodibenzo-p-dioxin	pg/g	T	<0.35	:	-	-	-	-	-

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T = Total Fraction

Appendix A-7i
Soil - Biased 0-2 inches
Validated Analytical Results

Parameter	Units	Exposure Area Fraction	Site ID	TSS15-14		TSS15-15		TSS15-16		TSS15-17		TSS15-18		TSS15-19	
			Sample Date	1/7/2003		1/7/2003		1/7/2003		10/12/2002		10/12/2002		10/12/2002	
			Sample ID	TSS15-14-T01N-SOL		TSS15-15-T01N-SOL		TSS15-16-T01N-SOL		TSS15-17-T01N-SOL		TSS15-18-T01N-SOL		TSS15-19-T01N-SOL	
			Exposure Area	SS15		SS15		SS15		SS15		SS15		SS15	
General Chemistry															
Ammonia	mg/kg-dry	T		14.4	:	37.1	:	90.3	J	<13.7	:	25.4	:	40.8	:
Chloride	mg/kg-dry	T		<2.4	:	4.2	:	3.6	:	<2.1	J	<2.1	J	<2.1	J
Fluoride	mg/kg-dry	T		0.14	J	<0.13	J	-		2.1	J	0.7	J	0.2	J
Nitrate	mg/kg-dry	T		4.8	J	9.6	J	14.	J	2.7	J	7.6	J	3.9	J
Phosphorus	mg/kg-dry	T		242.	:	319.	:	554.	:	455.	J	592.	J	464.	J
Sulfate	mg/kg-dry	T		<2.4	:	5.7	:	9.	:	3.5	J	4.4	J	2.8	J
Total Kjeldahl Nitrogen	mg/kg-dry	T		1510.	:	1970.	:	3970.	:	76.2	J	218.	J	984.	J
Total Organic Carbon	mg/kg-dry	T		39700.	J	64600.	J	96300.	J	866.	J	1360.	J	20500.	J
Laboratory Parameters															
pH	SU	T		7.4	:	7.7	:	6.8	:	8.4	:	8.3	:	8.3	:
Solids, Percent	%	T		86.9	:	79.4	:	70.7	:	97.6	:	98.4	:	96.	:
Specific Conductance	umhos/cm	T		229.	:	128.	:	161.	:	42.8	J	46.7	J	16.1	J
Geotechnical															
Organic Soils	%	T		6.7	:	9.2	:	24.3	:	2.16	J	2.32	J	4.45	J
Physical Properties															
Cation-Exchange Capacity	meq/100g	T		40.7	:	24.7	:	23.5	:	10.9	:	9.6	:	28.6	:
Sodium Absorption Ratio	ratio	T		<0.04	:	0.06	:	0.04	:	0.07	:	0.08	:	<0.05	:
Metals															
Aluminum	mg/kg-dry	T		25800.	:	14000.	:	14400.	J	11400.	:	11800.	:	16000.	:
Antimony	mg/kg-dry	T		<0.27	J	<0.31	J	<0.33	J	<0.17	J	<0.16	J	<0.16	J
Arsenic	mg/kg-dry	T		2.	J	2.	J	2.2	J	6.2	:	4.4	:	2.7	:
Barium	mg/kg-dry	T		274.	:	328.	:	253.	:	72.5	:	70.1	:	161.	:
Beryllium	mg/kg-dry	T		1.1	:	0.64	:	0.67	:	0.78	:	0.75	:	0.7	:
Boron	mg/kg-dry	T		12.1	:	7.7	:	8.8	:	<2.3	J	<2.7	:	5.2	:
Cadmium	mg/kg-dry	T		<0.039	J	<0.049	:	<0.056	:	0.028	:	0.061	:	<0.025	:
Calcium	mg/kg-dry	T		8510.	:	5340.	:	7630.	J	11000.	:	8270.	:	4700.	:
Chromium	mg/kg-dry	T		17.7	J	14.5	J	13.6	J	19.7	:	20.7	:	17.	:
Cobalt	mg/kg-dry	T		10.	:	9.1	:	9.5	:	7.4	:	7.8	:	7.6	:
Copper	mg/kg-dry	T		15.2	J	11.	J	16.1	J	22.3	:	22.3	:	15.4	:
Iron	mg/kg-dry	T		22600.	:	17300.	:	16300.	J	18900.	:	18400.	:	17300.	:
Lead	mg/kg-dry	T		13.5	:	17.7	:	20.6	J	23.9	:	19.	:	13.1	:
Magnesium	mg/kg-dry	T		5510.	:	2860.	:	3150.	J	5620.	:	5730.	:	3800.	:
Manganese	mg/kg-dry	T		426.	:	812.	:	691.	J	365.	J	393.	J	404.	J

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T = Total Fraction

Appendix A-7i
Soil - Biased 0-2 inches
Validated Analytical Results

Parameter	Units	Exposure Area Fraction	Site ID Sample Date Sample ID Exposure Area	TSS15-14 1/7/2003 TSS15-14-T01N-SOL SS15	TSS15-15 1/7/2003 TSS15-15-T01N-SOL SS15	TSS15-16 1/7/2003 TSS15-16-T01N-SOL SS15	TSS15-17 10/12/2002 TSS15-17-T01N-SOL SS15	TSS15-18 10/12/2002 TSS15-18-T01N-SOL SS15	TSS15-19 10/12/2002 TSS15-19-T01N-SOL SS15
Mercury	mg/kg-dry	T		0.025 :	0.041 :	0.074 :	<0.016 :	<0.015 :	0.021 :
Molybdenum	mg/kg-dry	T		0.16 J	0.47 :	2.3 :	2.4 :	4.1 :	4.4 :
Nickel	mg/kg-dry	T		14.3 :	9.2 :	9.7 :	16.7 J	17.3 J	11.8 J
Potassium	mg/kg-dry	T		3970. J	2330. J	2850. J	1680. J	1980. J	2430. J
Selenium	mg/kg-dry	T		<0.71 J	<0.84 J	<0.89 J	0.49 J	0.66 J	0.44 J
Silver	mg/kg-dry	T		<0.16 :	<0.2 :	<0.22 :	<0.11 :	<0.11 :	<0.12 :
Sodium	mg/kg-dry	T		<31.9 :	<40. :	<45.4 :	<42.5 :	<41.2 :	<45.6 :
Thallium	mg/kg-dry	T		0.24 :	0.18 :	0.17 :	0.14 :	0.14 :	0.19 :
Vanadium	mg/kg-dry	T		34. :	34.8 :	32.9 J	38.3 :	29.8 :	30.2 :
Zinc	mg/kg-dry	T		55.5 :	49.7 :	66.7 J	67.5 J	68.6 J	50. J

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Appendix A-7i
Soil - Biased 0-2 inches
Validated Analytical Results

Parameter	Units	Fraction	TSS15-2	TSS15-20	TSS15-21	TSS15-22	TSS15-23	TSS15-24
Sample Date			1/7/2003	10/12/2002	10/13/2002	10/31/2002	10/30/2002	10/31/2002
Sample ID			TSS15-2-T01N-SOL	TSS15-20-T01N-SOL	TSS15-21-T01N-SOL	TSS15-22-T01N-SOL	TSS15-23-T01N-SOL	TSS15-24-T01N-SOL
Exposure Area			SS15	SS15	SS15	SS15	SS15	SS15
General Chemistry								
Ammonia	mg/kg-dry	T	9.8 :	82.1 :	80.3 :	109. J	29.8 :	83.8 J
Chloride	mg/kg-dry	T	2.5 :	4.4 J	<2.2 J	9.3 J	<37. :	11. J
Fluoride	mg/kg-dry	T	<0.12 J	1.7 J	0.38 J	0.13 J	0.64 J	0.17 J
Nitrate	mg/kg-dry	T	3. J	3.5 J	5.4 J	4.7 J	4.9 J	40. J
Phosphorus	mg/kg-dry	T	573. :	554. J	584. J	902. J	853. J	972. J
Sulfate	mg/kg-dry	T	5.6 :	6.6 J	3.7 J	10. J	<61. :	25. J
Total Kjeldahl Nitrogen	mg/kg-dry	T	823. :	435. :	874. :	1040. :	899. J	4340. :
Total Organic Carbon	mg/kg-dry	T	10000. J	5580. J	10100. J	9930. J	10200. J	94400. J
Laboratory Parameters								
pH	SU	T	7.9 :	7.9 :	8. :	7.8 :	8.1 :	7.5 :
Solids, Percent	%	T	85.8 :	93.1 :	93.4 :	81.7 :	82.1 :	69.8 :
Specific Conductance	umhos/cm	T	76.3 :	104. :	88.9 :	171. :	240. J	226. :
Geotechnical								
Organic Soils	%	T	4. :	8.18 J	4.41 J	4.43 J	5.7 J	16.24 J
Physical Properties								
Cation-Exchange Capacity	meq/100g	T	24.5 :	25.5 :	34.1 :	18.8 :	30.7 :	28.9 :
Sodium Absorption Ratio	ratio	T	<0.04 :	0.17 :	0.07 :	<0.02 :	0.03 :	0.02 :
Metals								
Aluminum	mg/kg-dry	T	19000. :	17700. :	20400. :	20800. :	23400. J	19300. :
Antimony	mg/kg-dry	T	<0.34 J	<0.2 J	<0.21 J	<0.3 J	<0.3 J	<0.35 J
Arsenic	mg/kg-dry	T	2.3 J	6.7 :	4.5 :	3.3 :	<4.8 J	3.5 :
Barium	mg/kg-dry	T	213. :	525. :	235. :	192. :	279. J	191. :
Beryllium	mg/kg-dry	T	0.76 :	0.75 :	0.87 :	0.86 :	0.97 :	0.82 :
Boron	mg/kg-dry	T	7. :	14.2 J	12. J	4.9 :	7.5 :	6. :
Cadmium	mg/kg-dry	T	<0.04 J	<0.025 J	<0.019 J	<0.041 :	<0.041 J	0.12 :
Calcium	mg/kg-dry	T	4160. :	100000. :	13800. :	5730. :	21900. J	6400. :
Chromium	mg/kg-dry	T	18.2 J	15.9 :	17.2 :	18.8 :	20.6 J	17.6 :
Cobalt	mg/kg-dry	T	10. :	7. :	9.2 :	10.8 :	11.2 J	8.4 :
Copper	mg/kg-dry	T	16.3 J	11.6 :	16. :	18.3 :	18.8 J	24.9 :
Iron	mg/kg-dry	T	20800. :	15100. :	19500. :	18900. :	21900. J	18600. :
Lead	mg/kg-dry	T	14.9 :	8.8 :	11.6 :	13.5 :	23.5 J	26.6 :
Magnesium	mg/kg-dry	T	4150. :	8010. :	4910. :	7140. :	5120. J	4270. :
Manganese	mg/kg-dry	T	591. :	295. J	499. J	538. J	632. J	605. J

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Appendix A-7i
Soil - Biased 0-2 inches
Validated Analytical Results

Parameter	Units	Exposure Area Fraction	Site ID / Sample Date / Sample ID											
			TSS15-2		TSS15-20		TSS15-21		TSS15-22		TSS15-23		TSS15-24	
			1/7/2003		10/12/2002		10/13/2002		10/31/2002		10/30/2002		10/31/2002	
			TSS15-2-T01N-SOL		TSS15-20-T01N-SOL		TSS15-21-T01N-SOL		TSS15-22-T01N-SOL		TSS15-23-T01N-SOL		TSS15-24-T01N-SOL	
			SS15		SS15		SS15		SS15		SS15		SS15	
Mercury	mg/kg-dry	T	0.022	:	<0.018	:	0.021	:	<0.02	J	<0.019	:	<0.024	J
Molybdenum	mg/kg-dry	T	3.1	J	1.1	:	<0.48	:	1.9	:	0.79	J	12.5	:
Nickel	mg/kg-dry	T	12.5	:	12.5	J	12.9	J	16.3	J	15.	J	11.7	J
Potassium	mg/kg-dry	T	3030.	J	2810.	J	2700.	J	2880.	J	3860.	J	3710.	J
Selenium	mg/kg-dry	T	<0.9	J	<0.61	J	<0.93	J	<0.79	J	0.96	J	<0.93	J
Silver	mg/kg-dry	T	<0.16	:	<0.11	:	<0.089	:	<0.16	:	<0.16	:	<0.19	:
Sodium	mg/kg-dry	T	<32.6	:	<122.	:	<43.8	:	74.9	:	<52.8	:	131.	:
Thallium	mg/kg-dry	T	0.22	:	0.17	:	0.2	:	0.21	:	0.25	:	0.21	:
Vanadium	mg/kg-dry	T	41.4	:	45.2	:	39.8	:	36.8	:	45.2	J	35.4	:
Zinc	mg/kg-dry	T	55.6	:	43.2	J	53.9	J	63.7	J	62.8	J	97.5	J
Pesticides-PCBs														
a-Chlordane	mg/kg-dry	T	<0.002	:	-		-		-		-		-	
Aldrin	mg/kg-dry	T	<0.002	:	-		-		-		-		-	
alpha-Hexachlorocyclohexane	mg/kg-dry	T	<0.002	:	-		-		-		-		-	
beta-Hexachlorocyclohexane	mg/kg-dry	T	<0.002	:	-		-		-		-		-	
delta-Hexachlorocyclohexane	mg/kg-dry	T	<0.002	:	-		-		-		-		-	
Dichlorodiphenyldichloroethane	mg/kg-dry	T	<0.0038	:	-		-		-		-		-	
Dichlorodiphenyldichloroethylene	mg/kg-dry	T	<0.0038	:	-		-		-		-		-	
Dichlorodiphenyltrichloroethane	mg/kg-dry	T	<0.0038	:	-		-		-		-		-	
Dieldrin	mg/kg-dry	T	<0.0038	:	-		-		-		-		-	
Endosulfan I	mg/kg-dry	T	<0.002	:	-		-		-		-		-	
Endosulfan II	mg/kg-dry	T	<0.0038	:	-		-		-		-		-	
Endosulfan sulfate	mg/kg-dry	T	<0.0038	:	-		-		-		-		-	
Endrin	mg/kg-dry	T	<0.0038	:	-		-		-		-		-	
Endrin aldehyde	mg/kg-dry	T	<0.0038	:	-		-		-		-		-	
Endrin ketone	mg/kg-dry	T	<0.0038	:	-		-		-		-		-	
g-Chlordane	mg/kg-dry	T	<0.002	:	-		-		-		-		-	
Heptachlor	mg/kg-dry	T	<0.002	:	-		-		-		-		-	
Heptachlor epoxide	mg/kg-dry	T	<0.002	:	-		-		-		-		-	
Lindane	mg/kg-dry	T	<0.002	:	-		-		-		-		-	
Methoxychlor	mg/kg-dry	T	<0.02	:	-		-		-		-		-	
Dibenzodioxins-Dibenzofurans														
1,2,3,4,6,7,8,9-Octachlorodibenzofur	pg/g	T	<0.56	:	-		-		-		-		-	
1,2,3,4,6,7,8,9-Octachlorodibenzo-p	pg/g	T	<6.7	:	-		-		-		-		-	

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Appendix A-7i
Soil - Biased 0-2 inches
Validated Analytical Results

Parameter	Units	Exposure Area Fraction	Site ID	Sample Date	Sample ID		TSS15-2	TSS15-20	TSS15-21	TSS15-22	TSS15-23	TSS15-24
							1/7/2003	10/12/2002	10/13/2002	10/31/2002	10/30/2002	10/31/2002
							TSS15-2-T01N-SOL	TSS15-20-T01N-SOL	TSS15-21-T01N-SOL	TSS15-22-T01N-SOL	TSS15-23-T01N-SOL	TSS15-24-T01N-SOL
							SS15	SS15	SS15	SS15	SS15	SS15
1,2,3,4,6,7,8-Heptachlorodibenzofur	pg/g	T					<0.3 :	-	-	-	-	-
1,2,3,4,6,7,8-Heptachlorodibenzo-p-	pg/g	T					<1. :	-	-	-	-	-
1,2,3,4,7,8,9-Heptachlorodibenzofur	pg/g	T					<0.17 :	-	-	-	-	-
1,2,3,4,7,8-Hexachlorodibenzofuran	pg/g	T					<0.16 :	-	-	-	-	-
1,2,3,4,7,8-hexachlorodibenzo-p-dio	pg/g	T					<0.15 :	-	-	-	-	-
1,2,3,6,7,8-Hexachlorodibenzofuran	pg/g	T					<0.066 :	-	-	-	-	-
1,2,3,6,7,8-Hexachlorodibenzo-p-dio	pg/g	T					<0.14 :	-	-	-	-	-
1,2,3,7,8,9-Hexachlorodibenzofuran	pg/g	T					<0.083 :	-	-	-	-	-
1,2,3,7,8,9-Hexachlorodibenzo-p-dio	pg/g	T					<0.15 :	-	-	-	-	-
1,2,3,7,8-Pentachlorodibenzofuran	pg/g	T					<0.14 :	-	-	-	-	-
1,2,3,7,8-Pentachlorodibenzo-p-diox	pg/g	T					<0.15 :	-	-	-	-	-
2,3,4,6,7,8-Hexachlorodibenzofuran	pg/g	T					<0.075 :	-	-	-	-	-
2,3,4,7,8-Pentachlorodibenzofuran	pg/g	T					<0.13 :	-	-	-	-	-
2,3,7,8-Tetrachlorodibenzofuran	pg/g	T					<0.21 :	-	-	-	-	-
2,3,7,8-Tetrachlorodibenzo-p-dioxin	pg/g	T					<0.26 :	-	-	-	-	-

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T = Total Fraction

Appendix A-7i
Soil - Biased 0-2 inches
Validated Analytical Results

Parameter	Units	Exposure Area Fraction	Site ID / Sample Date / Sample ID	TSS15-25 10/30/2002 TSS15-25-T01N-SOL SS15	TSS15-26 10/30/2002 TSS15-26-T01N-SOL SS15	TSS15-27 10/31/2002 TSS15-27-T01N-SOL SS15	TSS15-28 10/31/2002 TSS15-28-T01N-SOL SS15	TSS15-29 10/31/2002 TSS15-29-T01N-SOL SS15	TSS15-3 1/7/2003 TSS15-3-T01N-SOL SS15
General Chemistry									
Ammonia	mg/kg-dry	T		85.1 :	38.8 :	29.1 :	79.6 :	102. :	63.3 :
Chloride	mg/kg-dry	T		39. :	<37. :	9.1 J	8.8 J	13. J	6.2 :
Fluoride	mg/kg-dry	T		0.31 J	0.21 J	0.15 J	0.15 J	0.14 J	<0.14 J
Nitrate	mg/kg-dry	T		11. :	7.5 :	4.8 J	8.7 :	3.3 J	7.9 J
Phosphorus	mg/kg-dry	T		912. J	774. J	590. J	677. J	182. J	579. :
Sulfate	mg/kg-dry	T		<65. :	<61. :	11. J	10. J	9.7 J	25.9 :
Total Kjeldahl Nitrogen	mg/kg-dry	T		2380. :	1290. :	818. :	1890. :	472. :	3220. :
Total Organic Carbon	mg/kg-dry	T		33200. J	15400. J	7720. J	22600. J	5130. J	119100. J
Laboratory Parameters									
pH	SU	T		7.8 :	8.4 :	8.1 :	7.5 :	6.4 :	7. :
Solids, Percent	%	T		76.5 :	81.7 :	82.2 :	78.7 :	87.6 :	75.9 :
Specific Conductance	umhos/cm	T		240. J	302. J	187. :	138. :	46.7 :	238. :
Geotechnical									
Organic Soils	%	T		8.4 J	5.2 J	4.1 J	6.55 J	3.14 J	15.1 :
Physical Properties									
Cation-Exchange Capacity	meq/100g	T		30.2 :	30.5 :	19.7 :	21.3 :	18. :	38. :
Sodium Absorption Ratio	ratio	T		0.05 :	0.07 :	0.07 :	0.02 :	0.06 :	0.04 :
Metals									
Aluminum	mg/kg-dry	T		19900. :	23600. :	22400. :	21400. :	16600. :	20800. :
Antimony	mg/kg-dry	T		<0.3 J	<0.28 J	<0.3 J	<0.3 J	<0.27 J	<0.38 J
Arsenic	mg/kg-dry	T		4. :	4.4 :	4.2 :	3.6 :	2.9 :	2.1 J
Barium	mg/kg-dry	T		201. :	223. :	191. :	203. :	179. :	277. :
Beryllium	mg/kg-dry	T		0.89 :	1. :	0.97 :	0.99 :	0.81 :	0.95 :
Boron	mg/kg-dry	T		9. :	7.5 :	5. J	4.5 J	3. J	13.1 :
Cadmium	mg/kg-dry	T		<0.037 :	<0.037 J	<0.041 J	<0.041 J	<0.037 J	<0.045 :
Calcium	mg/kg-dry	T		11600. :	6970. :	5170. :	4040. :	3270. :	8590. :
Chromium	mg/kg-dry	T		18.7 :	19.4 :	21. :	20. :	19.5 :	17.4 J
Cobalt	mg/kg-dry	T		9.8 :	11.2 :	10.5 :	10.3 :	12.5 :	8.1 :
Copper	mg/kg-dry	T		19.1 :	18.1 :	19.9 :	21.1 :	17.6 :	16.3 J
Iron	mg/kg-dry	T		20200. :	22900. :	23300. :	22500. :	20800. :	17700. :
Lead	mg/kg-dry	T		22.5 :	15. :	16.7 :	17.6 :	18.5 :	17. :
Magnesium	mg/kg-dry	T		4940. :	5230. :	5130. :	4280. :	3780. :	4010. :
Manganese	mg/kg-dry	T		571. J	659. J	583. J	602. J	753. J	498. :

J = Qualified as estimated during data validation

R = Qualified as rejected value from data validation and results are considered unusable for any purpose

T = Total Fraction

Appendix A-7i
Soil - Biased 0-2 inches
Validated Analytical Results

Parameter	Units	Fraction	TSS15-25		TSS15-26		TSS15-27		TSS15-28		TSS15-29		TSS15-3	
Sample Date			10/30/2002		10/30/2002		10/31/2002		10/31/2002		10/31/2002		1/7/2003	
Sample ID			TSS15-25-T01N-SOL		TSS15-26-T01N-SOL		TSS15-27-T01N-SOL		TSS15-28-T01N-SOL		TSS15-29-T01N-SOL		TSS15-3-T01N-SOL	
Exposure Area			SS15		SS15		SS15		SS15		SS15		SS15	
Mercury	mg/kg-dry	T	<0.021	:	<0.018	:	<0.018	J	<0.019	J	<0.018	J	0.044	:
Molybdenum	mg/kg-dry	T	17.5	:	0.82	J	0.64	J	1.5	:	1.3	:	5.2	:
Nickel	mg/kg-dry	T	13.4	J	14.3	J	15.8	J	14.3	J	14.3	J	13.	:
Potassium	mg/kg-dry	T	4030.	J	3380.	J	3040.	J	3820.	J	2560.	J	4320.	J
Selenium	mg/kg-dry	T	0.97	J	1.	J	<0.8	J	0.82	J	<0.72	J	<1.	J
Silver	mg/kg-dry	T	<0.15	:	<0.15	:	<0.16	:	<0.16	:	<0.15	:	<0.18	:
Sodium	mg/kg-dry	T	<70.1	:	<92.7	:	73.5	J	34.7	:	<30.1	:	<39.4	:
Thallium	mg/kg-dry	T	0.2	:	0.24	:	0.23	:	0.28	:	0.21	:	0.23	:
Vanadium	mg/kg-dry	T	39.3	:	46.7	:	44.4	:	40.7	:	38.2	:	28.6	:
Zinc	mg/kg-dry	T	83.4	J	63.4	J	69.	J	74.6	J	59.5	J	68.1	:

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Appendix A-7i
Soil - Biased 0-2 inches
Validated Analytical Results

Parameter	Units	Exposure Area Fraction	Site ID	TSS15-30		TSS15-31		TSS15-32		TSS15-33		TSS15-34		TSS15-35	
			Sample Date	10/31/2002		10/11/2002		10/11/2002		10/12/2002		10/14/2002		10/31/2002	
			Sample ID	TSS15-30-T01N-SOL		TSS15-31-T01N-SOL		TSS15-32-T01N-SOL		TSS15-33-T01N-SOL		TSS15-34-T01N-SOL		TSS15-35-T01N-SOL	
			Exposure Area	SS15		SS15		SS15		SS15		SS15		SS15	
General Chemistry															
Ammonia	mg/kg-dry	T		57.3	:	47.3	:	58.7	J	32.8	:	79.7	:	110.	:
Chloride	mg/kg-dry	T		13.	J	2.8	J	<2.2	J	<2.1	J	<2.1	J	13.	J
Fluoride	mg/kg-dry	T		0.13	J	0.53	J	0.23	J	0.16	J	0.16	J	0.57	J
Nitrate	mg/kg-dry	T		3.2	J	6.4	J	2.6	J	2.7	J	2.9	J	5.	J
Phosphorus	mg/kg-dry	T		562.	J	788.	J	624.	J	263.	J	266.	J	403.	J
Sulfate	mg/kg-dry	T		9.8	J	6.7	J	<2.2	J	<2.1	J	2.1	J	12.	J
Total Kjeldahl Nitrogen	mg/kg-dry	T		495.	:	1120.	J	813.	J	1220.	J	1750.	:	1190.	:
Total Organic Carbon	mg/kg-dry	T		5730.	J	17000.	J	12500.	J	16100.	J	24100.	J	14200.	J
Laboratory Parameters															
pH	SU	T		7.2	:	8.	:	8.1	:	8.3	:	7.7	:	7.3	:
Solids, Percent	%	T		85.6	:	93.2	:	93.3	:	95.7	:	95.9	:	87.8	:
Specific Conductance	umhos/cm	T		26.8	:	128.	:	68.5	:	64.9	J	38.8	:	225.	:
Geotechnical															
Organic Soils	%	T		3.1	J	5.47	J	3.93	J	5.25	J	7.27	J	6.22	J
Physical Properties															
Cation-Exchange Capacity	meq/100g	T		16.9	:	25.8	:	24.8	:	29.3	:	31.4	:	20.7	:
Sodium Absorption Ratio	ratio	T		0.04	:	<0.04	:	<0.04	:	<0.03	:	0.04	:	0.05	:
Metals															
Aluminum	mg/kg-dry	T		16600.	:	19100.	:	18500.	:	15900.	:	17200.	:	15400.	:
Antimony	mg/kg-dry	T		<0.27	J	<0.17	J	<0.17	J	<0.16	J	<0.25	J	<0.27	J
Arsenic	mg/kg-dry	T		2.9	:	4.1	:	3.3	:	3.5	:	3.3	:	3.9	:
Barium	mg/kg-dry	T		162.	:	229.	:	184.	:	187.	:	141.	:	242.	:
Beryllium	mg/kg-dry	T		0.77	:	0.86	:	0.84	:	0.73	:	0.83	:	0.76	:
Boron	mg/kg-dry	T		2.8	J	9.7	:	7.9	:	6.4	:	7.7	J	5.2	:
Cadmium	mg/kg-dry	T		<0.039	J	0.14	:	0.17	:	0.083	:	0.18	:	<0.037	:
Calcium	mg/kg-dry	T		2710.	:	17700.	:	8140.	:	12800.	:	6880.	:	40600.	:
Chromium	mg/kg-dry	T		18.	:	21.7	:	19.6	:	15.2	:	20.2	:	23.4	:
Cobalt	mg/kg-dry	T		10.2	:	9.1	:	9.2	:	8.	:	8.2	:	8.6	:
Copper	mg/kg-dry	T		16.1	:	32.3	:	26.8	:	19.	:	21.7	:	21.9	:
Iron	mg/kg-dry	T		20400.	:	20100.	:	20600.	:	16700.	:	18200.	:	17400.	:
Lead	mg/kg-dry	T		20.9	:	20.5	:	22.7	:	15.2	:	28.8	:	28.3	:
Magnesium	mg/kg-dry	T		3170.	:	5790.	:	5020.	:	5090.	:	4780.	:	6230.	:
Manganese	mg/kg-dry	T		597.	J	491.	J	520.	J	474.	J	447.	J	413.	J

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T = Total Fraction

Appendix A-7i
Soil - Biased 0-2 inches
Validated Analytical Results

Parameter	Units	Fraction	Site ID	Sample Date	Sample ID	Exposure Area
			TSS15-30	10/31/2002	TSS15-30-T01N-SOL	SS15
			TSS15-31	10/11/2002	TSS15-31-T01N-SOL	SS15
			TSS15-32	10/11/2002	TSS15-32-T01N-SOL	SS15
			TSS15-33	10/12/2002	TSS15-33-T01N-SOL	SS15
			TSS15-34	10/14/2002	TSS15-34-T01N-SOL	SS15
			TSS15-35	10/31/2002	TSS15-35-T01N-SOL	SS15
Mercury	mg/kg-dry	T	<0.019 J	<0.017 :	<0.017 :	<0.017 :	<0.017 :	0.018 J
Molybdenum	mg/kg-dry	T	1.3 :	18.1 :	10.6 :	3.7 :	10.1 :	5.3 :
Nickel	mg/kg-dry	T	12.2 J	15.5 J	13.7 J	12.2 J	15. J	20.4 J
Potassium	mg/kg-dry	T	2750. J	3410. J	2920. J	2770. J	2670. J	2830. J
Selenium	mg/kg-dry	T	<0.73 J	<0.81 J	<0.76 J	0.7 J	0.77 J	<0.72 J
Silver	mg/kg-dry	T	<0.16 :	0.14 :	<0.11 :	<0.11 :	<0.11 :	<0.15 :
Sodium	mg/kg-dry	T	<31.9 :	<47.4 :	<44.1 :	<43.3 :	<44.3 :	39.1 :
Thallium	mg/kg-dry	T	0.18 :	0.24 :	0.22 :	0.22 :	0.18 :	0.15 :
Vanadium	mg/kg-dry	T	39.1 :	40.3 :	39.1 :	30.8 :	34.5 :	35.3 :
Zinc	mg/kg-dry	T	62. J	68.7 J	68.9 J	53.8 J	76.1 J	64.7 J

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T = Total Fraction

Appendix A-7i
Soil - Biased 0-2 inches
Validated Analytical Results

Parameter	Units	Exposure Area Fraction	Site ID / Sample Date / Sample ID	TSS15-36 10/31/2002 TSS15-36-T01N-SOL SS15		TSS15-37 10/13/2002 TSS15-37-T01N-SOL SS15		TSS15-38 10/11/2002 TSS15-38-T01N-SOL SS15		TSS15-39 10/13/2002 TSS15-39-T01N-SOL SS15		TSS15-4 1/10/2003 TSS15-4-T01N-SOL SS15		TSS15-40 10/13/2002 TSS15-40-T01N-SOL SS15	
General Chemistry															
Ammonia	mg/kg-dry	T		127.	J	149.	:	29.3	J	118.	:	15.5	:	78.3	:
Chloride	mg/kg-dry	T		18.	J	4.4	J	2.4	J	<2.2	J	<2.9	:	4.9	J
Fluoride	mg/kg-dry	T		0.35	J	1.5	J	0.18	J	-		<0.15	J	-	
Nitrate	mg/kg-dry	T		110.	:	6.	J	2.3	J	6.2	J	<2.9	J	4.	J
Phosphorus	mg/kg-dry	T		814.	J	431.	J	715.	J	592.	J	490.	:	527.	J
Sulfate	mg/kg-dry	T		54.	J	38.4	J	5.6	J	3.8	J	6.2	:	14.	J
Total Kjeldahl Nitrogen	mg/kg-dry	T		6700.	:	310.	J	291.	J	153.	J	1570.	:	422.	J
Total Organic Carbon	mg/kg-dry	T		128600.	J	2130.	J	10400.	J	16700.	J	45700.	J	10400.	J
Laboratory Parameters															
pH	SU	T		7.9	:	8.6	:	8.3	:	7.8	:	7.7	:	8.3	:
Solids, Percent	%	T		74.6	:	90.7	:	92.4	:	93.	:	70.9	:	95.5	:
Specific Conductance	umhos/cm	T		727.	:	70.	:	44.2	:	56.2	:	97.6	:	27.1	:
Geotechnical															
Organic Soils	%	T		22.59	J	5.64	J	3.6	J	5.07	J	4.8	:	4.12	J
Physical Properties															
Cation-Exchange Capacity	meq/100g	T		29.1	:	24.8	:	28.7	:	26.5	:	35.6	:	28.6	:
Sodium Absorption Ratio	ratio	T		0.13	:	1.05	:	<0.06	:	<0.05	:	0.04	:	0.04	:
Metals															
Aluminum	mg/kg-dry	T		11800.	:	17700.	:	22900.	:	19200.	:	18300.	:	19300.	J
Antimony	mg/kg-dry	T		<0.33	J	<0.17	J	<0.17	J	<0.17	J	<0.33	J	<0.17	J
Arsenic	mg/kg-dry	T		2.4	:	4.8	:	4.4	:	4.	:	2.4	J	4.5	:
Barium	mg/kg-dry	T		145.	:	312.	:	248.	:	197.	:	235.	:	206.	J
Beryllium	mg/kg-dry	T		0.62	:	0.85	:	1.	:	0.89	:	0.94	:	0.89	J
Boron	mg/kg-dry	T		16.8	:	8.	J	8.	:	8.8	J	6.7	:	8.7	J
Cadmium	mg/kg-dry	T		0.36	:	0.043	:	<0.027	:	0.14	:	<0.051	:	0.051	:
Calcium	mg/kg-dry	T		18000.	:	68600.	:	5260.	:	3570.	:	6120.	:	4710.	J
Chromium	mg/kg-dry	T		20.4	:	19.4	:	20.1	:	16.9	:	16.	J	17.2	:
Cobalt	mg/kg-dry	T		6.4	:	7.8	:	9.9	:	9.9	:	9.2	:	9.1	J
Copper	mg/kg-dry	T		32.7	:	18.3	:	22.	:	17.8	:	12.1	J	16.8	:
Iron	mg/kg-dry	T		18000.	:	17500.	:	23300.	:	19900.	:	17000.	:	20200.	J
Lead	mg/kg-dry	T		61.7	:	23.3	:	14.6	:	15.7	:	13.2	:	13.4	J
Magnesium	mg/kg-dry	T		5480.	:	7320.	:	5500.	:	4050.	:	3110.	:	4680.	J
Manganese	mg/kg-dry	T		487.	J	314.	J	508.	J	596.	J	516.	:	481.	J

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T = Total Fraction

Appendix A-7i
Soil - Biased 0-2 inches
Validated Analytical Results

Parameter	Units	Exposure Area Fraction	Site ID / Sample Date / Sample ID		TSS15-36 10/31/2002 TSS15-36-T01N-SOL SS15		TSS15-37 10/13/2002 TSS15-37-T01N-SOL SS15		TSS15-38 10/11/2002 TSS15-38-T01N-SOL SS15		TSS15-39 10/13/2002 TSS15-39-T01N-SOL SS15		TSS15-4 1/10/2003 TSS15-4-T01N-SOL SS15		TSS15-40 10/13/2002 TSS15-40-T01N-SOL SS15	
Mercury	mg/kg-dry	T		<0.022	J	<0.017	:	<0.017	:	<0.015	:	0.025	:	<0.015	:
Molybdenum	mg/kg-dry	T		19.3	:	<0.56	J	4.3	:	2.5	:	0.77	:	1.2	:
Nickel	mg/kg-dry	T		14.4	J	15.4	J	15.8	J	12.3	J	11.2	:	13.	J
Potassium	mg/kg-dry	T		4090.	J	2060.	J	2810.	J	3610.	J	3000.	J	2620.	J
Selenium	mg/kg-dry	T		<0.88	J	0.43	J	<0.77	J	0.18	J	<0.87	J	0.9	J
Silver	mg/kg-dry	T		<0.17	:	<0.12	:	<0.13	:	<0.11	:	<0.21	:	<0.11	:
Sodium	mg/kg-dry	T		128.	:	102.	:	<48.6	:	<42.	:	<42.	:	<42.1	:
Thallium	mg/kg-dry	T		0.13	:	0.22	:	0.23	:	0.26	:	0.18	:	0.24	:
Vanadium	mg/kg-dry	T		25.8	:	37.4	:	45.9	:	38.5	:	30.2	:	40.2	J
Zinc	mg/kg-dry	T		127.	J	51.5	J	58.8	J	57.4	J	40.7	:	53.4	J

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Appendix A-7i
Soil - Biased 0-2 inches
Validated Analytical Results

Parameter	Units	Exposure Area Fraction	Site ID	TSS15-41		TSS15-42		TSS15-43		TSS15-44		TSS15-45		TSS15-46	
			Sample Date	10/13/2002		10/31/2002		10/31/2002		10/31/2002		10/31/2002		10/31/2002	
			Sample ID	TSS15-41-T01N-SOL		TSS15-42-T01N-SOL		TSS15-43-T01N-SOL		TSS15-44-T01N-SOL		TSS15-45-T01N-SOL		TSS15-46-T01N-SOL	
			Exposure Area	SS15		SS15		SS15		SS15		SS15		SS15	
General Chemistry															
Ammonia	mg/kg-dry	T		152.	:	109.	:	22.2	:	125.	:	61.4	:	63.4	:
Chloride	mg/kg-dry	T		3.2	J	<36.	:	<35.	:	<36.	:	<36.	:	<36.	:
Fluoride	mg/kg-dry	T		0.14	J	0.38	J	-		-		0.14	J	-	
Nitrate	mg/kg-dry	T		11.6	J	7.5	:	3.6	J	13.	:	4.3	J	5.9	:
Phosphorus	mg/kg-dry	T		570.	J	820.	J	691.	J	698.	J	819.	J	629.	J
Sulfate	mg/kg-dry	T		9.5	J	<60.	:	<58.	:	<59.	:	<59.	:	<59.	:
Total Kjeldahl Nitrogen	mg/kg-dry	T		110.	J	1430.	:	775.	:	1140.	:	742.	:	735.	:
Total Organic Carbon	mg/kg-dry	T		18100.	J	14700.	J	8630.	J	12400.	J	8200.	J	10200.	J
Laboratory Parameters															
pH	SU	T		8.2	:	8.3	:	8.5	:	7.4	:	8.	:	7.8	:
Solids, Percent	%	T		95.	:	83.7	:	86.8	:	84.3	:	84.4	:	84.4	:
Specific Conductance	umhos/cm	T		126.	:	305.	J	103.	J	224.	J	40.2	J	86.6	J
Geotechnical															
Organic Soils	%	T		6.59	J	6.	J	3.1	J	4.7	J	3.4	J	3.6	J
Physical Properties															
Cation-Exchange Capacity	meq/100g	T		26.4	:	32.8	:	21.2	:	27.2	:	19.3	:	26.3	:
Sodium Absorption Ratio	ratio	T		<0.03	:	<0.02	:	0.02	:	0.03	:	0.07	:	0.05	:
Metals															
Aluminum	mg/kg-dry	T		17500.	:	23100.	:	18800.	:	25300.	:	18200.	J	22000.	:
Antimony	mg/kg-dry	T		<0.15	J	<0.3	J	<0.27	J	<0.3	J	<0.33	J	<0.29	J
Arsenic	mg/kg-dry	T		4.	:	4.1	:	3.5	:	4.1	:	3.7	J	4.3	:
Barium	mg/kg-dry	T		204.	:	272.	:	186.	:	242.	:	162.	J	187.	:
Beryllium	mg/kg-dry	T		0.82	:	0.95	:	0.8	:	1.	:	0.75	:	0.89	:
Boron	mg/kg-dry	T		9.3	J	7.6	:	4.7	:	9.6	:	6.2	:	6.9	:
Cadmium	mg/kg-dry	T		0.093	:	<0.038	J	<0.037	J	<0.036	J	<0.04	J	<0.037	J
Calcium	mg/kg-dry	T		13200.	:	16600.	:	4320.	:	4290.	:	2980.	J	3550.	:
Chromium	mg/kg-dry	T		16.	:	18.2	:	19.9	:	19.5	:	17.5	:	18.5	:
Cobalt	mg/kg-dry	T		8.2	:	10.1	:	10.1	:	11.4	:	10.5	J	10.1	:
Copper	mg/kg-dry	T		16.5	:	17.3	:	15.9	:	19.4	:	17.8	:	16.5	:
Iron	mg/kg-dry	T		18100.	:	20800.	:	19900.	:	23200.	:	20100.	J	22400.	:
Lead	mg/kg-dry	T		12.3	:	15.5	:	15.6	:	16.3	:	17.4	:	15.1	:
Magnesium	mg/kg-dry	T		5040.	:	5570.	:	4770.	:	4760.	:	2990.	J	4150.	:
Manganese	mg/kg-dry	T		427.	J	559.	J	561.	J	709.	J	616.	J	560.	J

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R = Qualified as rejected value from data validation and results are considered unusable for any purpose

T = Total Fraction

Appendix A-7i
Soil - Biased 0-2 inches
Validated Analytical Results

Parameter	Units	Fraction	TSS15-41		TSS15-42		TSS15-43		TSS15-44		TSS15-45		TSS15-46	
Sample Date			10/13/2002		10/31/2002		10/31/2002		10/31/2002		10/31/2002		10/31/2002	
Sample ID			TSS15-41-T01N-SOL		TSS15-42-T01N-SOL		TSS15-43-T01N-SOL		TSS15-44-T01N-SOL		TSS15-45-T01N-SOL		TSS15-46-T01N-SOL	
Exposure Area			SS15		SS15		SS15		SS15		SS15		SS15	
Mercury	mg/kg-dry	T	<0.017	:	<0.019	:	<0.019	:	<0.018	:	<0.018	:	<0.018	:
Molybdenum	mg/kg-dry	T	1.7	:	<0.52	J	1.1	:	0.94	:	1.5	:	1.3	:
Nickel	mg/kg-dry	T	12.4	J	13.9	J	15.	J	13.2	J	10.9	J	12.5	J
Potassium	mg/kg-dry	T	3540.	J	4090.	J	2670.	J	3830.	J	2590.	J	2820.	J
Selenium	mg/kg-dry	T	0.87	J	<0.79	J	0.82	J	<0.81	J	0.88	J	1.1	J
Silver	mg/kg-dry	T	<0.12	:	<0.15	:	<0.15	:	<0.14	:	<0.16	:	<0.15	:
Sodium	mg/kg-dry	T	<44.7	:	<68.	:	<43.7	:	<52.9	:	<44.4	:	<69.5	:
Thallium	mg/kg-dry	T	0.22	:	0.23	:	0.18	:	0.28	:	0.2	:	0.2	:
Vanadium	mg/kg-dry	T	36.5	:	41.2	:	41.3	:	44.3	:	42.7	J	46.6	:
Zinc	mg/kg-dry	T	53.4	J	60.3	J	53.8	J	64.1	J	53.8	J	56.7	J

J = Qualified as estimated during data validation
R = Qualified as rejected value from data validation and results are considered unusable for any purpose
T = Total Fraction

Appendix A-7i
Soil - Biased 0-2 inches
Validated Analytical Results

Parameter	Units	Fraction	TSS15-47	TSS15-48	TSS15-49	TSS15-5	TSS15-50	TSS15-51
Sample Date			11/3/2003	11/3/2003	11/3/2003	1/10/2003	11/3/2003	11/3/2003
Sample ID			TSS15-47-T01N-SOL	TSS15-48-T01N-SOL	TSS15-49-T01N-SOL	TSS15-5-T01N-SOL	TSS15-50-T01N-SOL	TSS15-51-T01N-SOL
Exposure Area			SS15	SS15	SS15	SS15	SS15	SS15
General Chemistry								
Ammonia	mg/kg-dry	T	138. :	33.6 :	41.5 :	168. :	25.1 :	33.8 :
Chloride	mg/kg-dry	T	<2.1 :	3. :	7. :	<3. :	4.2 :	6.8 :
Fluoride	mg/kg-dry	T	<0.11 :	<0.11 :	1.2 :	<0.15 J	<0.11 :	0.39 :
Nitrate	mg/kg-dry	T	2.2 J	4.7 J	2.6 J	<3. J	<2.1 J	<2.1 J
Phosphorus	mg/kg-dry	T	147. J	88.8 J	123. J	466. :	110. J	121. J
Sulfate	mg/kg-dry	T	3. :	8.9 :	8.3 :	4.3 :	5.6 :	8. :
Total Kjeldahl Nitrogen	mg/kg-dry	T	1080. J	993. J	452. J	1280. :	645. J	585. J
Total Organic Carbon	mg/kg-dry	T	18100. :	9910. :	5720. :	31900. J	6980. :	5110. :
Laboratory Parameters								
pH	SU	T	8.1 J	7.2 J	8.6 J	7.3 :	8.1 J	7.9 J
Solids, Percent	%	T	95.9 :	96.5 :	95.2 :	68.2 :	96.5 :	97.9 :
Specific Conductance	umhos/cm	T	172. J	83. J	223. J	77.7 :	150. J	143. J
Geotechnical								
Organic Soils	%	T	4.6 J	4. J	3.1 J	3.7 :	3.8 J	3.2 J
Physical Properties								
Cation-Exchange Capacity	meq/100g	T	28.4 :	30.4 :	30.2 :	28.5 :	27. :	27.7 :
Sodium Absorption Ratio	ratio	T	<0.05 :	0.07 :	0.07 :	0.04 :	<0.06 :	<0.06 :
Metals								
Aluminum	mg/kg-dry	T	16000. :	15300. :	14500. :	19700. :	13900. :	11000. :
Antimony	mg/kg-dry	T	<0.49 J	<0.47 J	<0.46 J	<0.33 J	<0.46 J	<0.4 J
Arsenic	mg/kg-dry	T	3.5 J	3.5 J	4.3 J	1.8 J	3.5 J	2.5 J
Barium	mg/kg-dry	T	176. :	168. :	128. :	213. :	121. :	96.8 :
Beryllium	mg/kg-dry	T	0.8 :	0.77 :	0.79 :	0.76 :	0.79 :	0.7 :
Boron	mg/kg-dry	T	<4.5 :	<6. :	<2.6 :	5.9 :	<4.9 :	<4.2 :
Cadmium	mg/kg-dry	T	0.37 :	0.59 J	0.46 :	<0.056 :	0.49 :	0.46 :
Calcium	mg/kg-dry	T	6030. :	2980. :	11900. :	4970. :	9580. :	3640. :
Chromium	mg/kg-dry	T	18.6 :	14.5 :	20.3 :	16.1 J	20.6 :	22.9 :
Cobalt	mg/kg-dry	T	8. :	9.4 :	7.9 :	10.5 :	7.2 :	7.5 :
Copper	mg/kg-dry	T	17.4 :	21. :	28.3 :	11. J	20.4 :	18.8 :
Iron	mg/kg-dry	T	17300. :	16500. :	16800. :	19500. :	16200. :	15300. :
Lead	mg/kg-dry	T	16.8 :	17.3 :	18. :	14.6 :	14.3 :	13.4 :
Magnesium	mg/kg-dry	T	4940. :	3250. :	5450. :	3180. :	5070. :	4200. :
Manganese	mg/kg-dry	T	433. :	597. :	380. :	447. :	352. :	425. :

J = Qualified as estimated during data validation
R = Qualified as rejected value from data validation and results are considered unusable for any purpose
T = Total Fraction

Appendix A-7i
Soil - Biased 0-2 inches
Validated Analytical Results

Parameter	Units	Exposure Area Fraction	Site ID / Sample Date / Sample ID													
			TSS15-47 11/3/2003 TSS15-47-T01N-SOL SS15		TSS15-48 11/3/2003 TSS15-48-T01N-SOL SS15		TSS15-49 11/3/2003 TSS15-49-T01N-SOL SS15		TSS15-5 1/10/2003 TSS15-5-T01N-SOL SS15		TSS15-50 11/3/2003 TSS15-50-T01N-SOL SS15		TSS15-51 11/3/2003 TSS15-51-T01N-SOL SS15	
Mercury	mg/kg-dry	T	0.02	:	<0.017	:	<0.015	:	<0.023	:	<0.015	:	<0.014	:
Molybdenum	mg/kg-dry	T	2.4	:	3.3	:	12.3	:	0.47	:	2.9	:	3.2	:
Nickel	mg/kg-dry	T	16.1	:	11.9	:	17.6	:	12.	:	17.7	:	18.8	:
Potassium	mg/kg-dry	T	2340.	J	2390.	J	1850.	J	3160.	J	1850.	J	2200.	J
Selenium	mg/kg-dry	T	0.64	J	0.81	J	0.61	J	<0.88	J	0.62	J	0.54	J
Silver	mg/kg-dry	T	<0.17	:	<0.13	:	<0.14	:	<0.23	:	<0.15	:	<0.16	:
Sodium	mg/kg-dry	T	<47.3	:	<35.9	:	<38.4	:	<46.2	:	<42.	:	<44.1	:
Thallium	mg/kg-dry	T	0.15	:	0.2	:	0.14	:	0.19	:	0.1	:	0.1	:
Vanadium	mg/kg-dry	T	28.1	:	28.1	:	32.3	:	39.4	:	27.	:	24.3	:
Zinc	mg/kg-dry	T	52.3	J	49.8	J	67.7	J	40.9	:	56.	J	55.9	J

J = Qualified as estimated during data validation
R = Qualified as rejected value from data validation and results are considered unusable for any purpose
T = Total Fraction

Appendix A-7i
Soil - Biased 0-2 inches
Validated Analytical Results

Parameter	Units	Exposure Area Fraction	Site ID / Sample Date / Sample ID		Site ID / Sample Date / Sample ID		Site ID / Sample Date / Sample ID		Site ID / Sample Date / Sample ID		Site ID / Sample Date / Sample ID		Site ID / Sample Date / Sample ID	
			TSS15-52 11/4/2003 TSS15-52-T01N-SOL		TSS15-53 11/5/2003 TSS15-53-T01N-SOL		TSS15-54 11/5/2003 TSS15-54-T01N-SOL		TSS15-55 11/5/2003 TSS15-55-T01N-SOL		TSS15-56 11/5/2003 TSS15-56-T01N-SOL		TSS15-57 11/5/2003 TSS15-57-T01N-SOL	
			SS15		SS15		SS15		SS15		SS15		SS15	
General Chemistry														
Ammonia	mg/kg-dry	T	1480.	:	37.7	:	26.6	:	49.8	:	115.	J	125.	:
Chloride	mg/kg-dry	T	82.4	:	4.1	:	2.8	:	2.9	:	5.4	:	11.	:
Fluoride	mg/kg-dry	T	6.8	:	64.	:	<0.11	:	0.12	J	<0.11	:	1.3	:
Nitrate	mg/kg-dry	T	<7.4	J	2.8	J	2.3	J	<2.1	J	14.8	J	30.3	J
Phosphorus	mg/kg-dry	T	1390.	J	78.3	J	298.	J	72.4	J	980.	J	725.	J
Sulfate	mg/kg-dry	T	3570.	:	8.1	:	2.9	:	4.6	:	8.1	:	25.6	:
Total Kjeldahl Nitrogen	mg/kg-dry	T	38200.	J	588.	J	254.	J	1030.	J	2180.	J	1750.	J
Total Organic Carbon	mg/kg-dry	T	423500.	:	7660.	:	5690.	:	13600.	:	23100.	:	101400.	:
Laboratory Parameters														
pH	SU	T	6.7	J	7.6	J	7.2	J	8.1	J	7.1	J	7.7	J
Solids, Percent	%	T	27.3	:	98.8	:	99.	:	96.7	:	97.	:	96.1	:
Specific Conductance	umhos/cm	T	1830.	J	671.	J	40.5	J	92.5	J	219.	J	407.	J
Geotechnical														
Organic Soils	%	T	63.8	J	2.2	J	1.9	J	4.2	J	6.8	J	6.4	J
Physical Properties														
Cation-Exchange Capacity	meq/100g	T	73.5	:	20.8	:	-		30.1	:	-		37.7	:
Sodium Absorption Ratio	ratio	T	1.34	:	0.03	:	-		0.04	:	-		0.31	:
Metals														
Aluminum	mg/kg-dry	T	9320.	:	7160.	:	1820.	:	13900.	:	8440.	J	14200.	:
Antimony	mg/kg-dry	T	<1.6	J	<0.48	J	<0.48	J	<0.47	J	-		<0.44	J
Arsenic	mg/kg-dry	T	3.3	J	1.8	J	0.97	J	2.	J	2.7	J	4.5	J
Barium	mg/kg-dry	T	244.	:	94.6	:	30.9	:	143.	:	125.	J	186.	:
Beryllium	mg/kg-dry	T	0.69	:	0.46	:	0.2	:	0.57	:	0.59	:	1.2	:
Boron	mg/kg-dry	T	23.3	:	<4.1	:	<0.63	:	7.2	:	5.1	:	3.6	:
Cadmium	mg/kg-dry	T	<0.64	:	0.22	:	0.09	:	0.2	:	0.35	:	0.87	:
Calcium	mg/kg-dry	T	18100.	:	1710.	:	904.	:	4400.	:	5380.	J	4230.	:
Chromium	mg/kg-dry	T	12.4	:	7.2	:	3.1	:	18.3	:	15.6	J	19.5	:
Cobalt	mg/kg-dry	T	7.1	:	5.	:	1.7	:	7.5	:	7.1	:	9.3	:
Copper	mg/kg-dry	T	44.5	:	8.9	:	4.5	:	15.4	:	23.4	J	56.7	:
Iron	mg/kg-dry	T	17400.	:	10300.	:	4320.	:	16200.	:	12800.	J	23600.	:
Lead	mg/kg-dry	T	29.7	:	20.3	:	9.1	:	14.4	:	20.7	J	43.	:
Magnesium	mg/kg-dry	T	3840.	:	1650.	:	677.	:	5340.	:	4050.	J	4900.	:
Manganese	mg/kg-dry	T	273.	:	517.	:	184.	:	367.	:	480.	J	662.	:

J = Qualified as estimated during data validation

R = Qualified as rejected value from data validation and results are considered unusable for any purpose

T = Total Fraction

Appendix A-7i
Soil - Biased 0-2 inches
Validated Analytical Results

Parameter	Units	Exposure Area Fraction	Site ID / Sample Date / Sample ID											
			TSS15-52 11/4/2003 TSS15-52-T01N-SOL SS15		TSS15-53 11/5/2003 TSS15-53-T01N-SOL SS15		TSS15-54 11/5/2003 TSS15-54-T01N-SOL SS15		TSS15-55 11/5/2003 TSS15-55-T01N-SOL SS15		TSS15-56 11/5/2003 TSS15-56-T01N-SOL SS15		TSS15-57 11/5/2003 TSS15-57-T01N-SOL SS15	
Mercury	mg/kg-dry	T	0.071	:	<0.017	:	<0.016	:	<0.017	:	<0.017	:	<0.017	:
Molybdenum	mg/kg-dry	T	16.3	:	1.3	:	<0.52	J	3.4	:	3.	:	43.	:
Nickel	mg/kg-dry	T	15.1	:	5.8	:	2.3	:	14.4	:	14.	J	31.9	:
Potassium	mg/kg-dry	T	1840.	J	1710.	J	626.	J	2380.	J	2910.	J	3020.	J
Selenium	mg/kg-dry	T	3.8	J	0.38	J	<0.29	J	0.29	J	0.28	J	1.2	J
Silver	mg/kg-dry	T	0.46	:	<0.14	:	<0.16	:	<0.16	:	<0.16	:	0.55	:
Sodium	mg/kg-dry	T	1030.	:	<38.9	:	<45.4	:	<46.5	:	<44.6	:	<378.	:
Thallium	mg/kg-dry	T	<0.32	:	0.1	:	<0.096	:	0.12	:	0.13	:	0.22	:
Vanadium	mg/kg-dry	T	23.8	:	14.	:	5.	:	24.7	:	19.8	J	26.1	:
Zinc	mg/kg-dry	T	141.	J	38.6	J	18.5	J	49.7	J	57.9	J	149.	J

J = Qualified as estimated during data validation
R = Qualified as rejected value from data validation and results are considered unusable for any purpose
T = Total Fraction

Appendix A-7i
Soil - Biased 0-2 inches
Validated Analytical Results

Parameter	Units	Exposure Area Fraction	Site ID / Sample Date / Sample ID		TSS15-58 11/5/2003 TSS15-58-T01N-SOL SS15		TSS15-59 11/5/2003 TSS15-59-T01N-SOL SS15		TSS15-6 1/10/2003 TSS15-6-T01N-SOL SS15		TSS15-60 11/5/2003 TSS15-60-T01N-SOL SS15		TSS15-61 11/5/2003 TSS15-61-T01N-SOL SS15		TSS15-62 11/5/2003 TSS15-62-T01N-SOL SS15	
General Chemistry																
Ammonia	mg/kg-dry	T			47.1	:	55.3	:	24.1	:	34.4	:	55.1	:	34.3	:
Chloride	mg/kg-dry	T			6.3	:	3.4	:	3.3	:	3.4	:	8.4	:	2.4	:
Fluoride	mg/kg-dry	T			0.15	:	<0.11	:	<0.15	J	0.42	:	<0.11	:	0.45	:
Nitrate	mg/kg-dry	T			6.5	J	4.1	J	19.6	J	6.4	J	5.3	J	2.8	J
Phosphorus	mg/kg-dry	T			87.3	J	27.2	J	591.	:	799.	J	816.	J	731.	J
Sulfate	mg/kg-dry	T			10.6	:	4.9	:	10.9	:	4.2	:	8.6	:	3.	:
Total Kjeldahl Nitrogen	mg/kg-dry	T			1350.	J	967.	J	6020.	:	202.	J	242.	J	157.	J
Total Organic Carbon	mg/kg-dry	T			14700.	:	17200.	:	132000.	J	9450.	:	12300.	:	5110.	:
Laboratory Parameters																
pH	SU	T			6.9	J	7.	J	7.4	:	8.2	J	7.9	J	8.2	J
Solids, Percent	%	T			97.4	:	98.5	:	69.1	:	94.8	:	96.1	:	97.8	:
Specific Conductance	umhos/cm	T			131.	J	107.	J	353.	:	136.	J	180.	J	119.	J
Geotechnical																
Organic Soils	%	T			4.2	J	3.1	J	6.5	:	5.8	J	4.7	J	4.	J
Physical Properties																
Cation-Exchange Capacity	meq/100g	T			27.4	:	19.1	:	38.	:	-		-		-	
Sodium Absorption Ratio	ratio	T			0.05	:	<0.03	:	0.02	:	-		-		-	
Metals																
Aluminum	mg/kg-dry	T			9150.	:	4810.	:	16700.	:	11500.	:	10500.	:	8530.	:
Antimony	mg/kg-dry	T			<0.5	J	<0.45	J	<0.34	J	<0.47	J	<0.51	J	<0.48	J
Arsenic	mg/kg-dry	T			4.	J	1.1	J	2.5	J	4.6	J	3.1	J	3.4	J
Barium	mg/kg-dry	T			150.	:	55.	:	327.	:	223.	:	195.	:	133.	:
Beryllium	mg/kg-dry	T			0.7	:	0.34	:	0.69	:	0.84	:	0.74	:	0.62	:
Boron	mg/kg-dry	T			<5.3	:	<3.4	:	21.7	:	3.	:	3.9	:	2.7	:
Cadmium	mg/kg-dry	T			0.39	J	0.11	:	<0.05	:	0.23	:	0.31	:	0.21	:
Calcium	mg/kg-dry	T			2570.	:	1580.	:	15400.	:	22000.	:	5420.	:	12000.	:
Chromium	mg/kg-dry	T			17.6	:	5.4	:	14.4	J	10.5	:	10.1	:	11.9	:
Cobalt	mg/kg-dry	T			7.	:	3.2	:	8.9	:	7.8	:	8.1	:	6.6	:
Copper	mg/kg-dry	T			41.7	:	10.2	:	18.2	J	16.1	:	19.9	:	15.4	:
Iron	mg/kg-dry	T			20300.	:	9230.	:	16900.	:	12000.	:	11400.	:	11200.	:
Lead	mg/kg-dry	T			49.5	:	14.9	:	19.3	:	12.6	:	13.8	:	12.8	:
Magnesium	mg/kg-dry	T			4220.	:	1340.	:	3650.	:	4750.	:	3550.	:	4260.	:
Manganese	mg/kg-dry	T			442.	:	275.	:	620.	:	445.	:	560.	:	382.	:

J = Qualified as estimated during data validation

R = Qualified as rejected value from data validation and results are considered unusable for any purpose

T = Total Fraction

Appendix A-7i
Soil - Biased 0-2 inches
Validated Analytical Results

Parameter	Units	Exposure Area Fraction	Site ID / Sample Date / Sample ID													
			TSS15-58 / 11/5/2003 / TSS15-58-T01N-SOL		TSS15-59 / 11/5/2003 / TSS15-59-T01N-SOL		TSS15-6 / 1/10/2003 / TSS15-6-T01N-SOL		TSS15-60 / 11/5/2003 / TSS15-60-T01N-SOL		TSS15-61 / 11/5/2003 / TSS15-61-T01N-SOL		TSS15-62 / 11/5/2003 / TSS15-62-T01N-SOL	
			SS15		SS15		SS15		SS15		SS15		SS15	
Mercury	mg/kg-dry	T	0.019	:	<0.016	:	0.061	:	0.022	:	0.022	:	<0.014	:
Molybdenum	mg/kg-dry	T	31.2	:	4.7	:	2.8	:	1.8	:	2.7	:	2.1	:
Nickel	mg/kg-dry	T	14.8	:	8.7	:	10.4	:	12.	:	10.9	:	12.5	:
Potassium	mg/kg-dry	T	2630.	J	1570.	J	3790.	J	2040.	J	2510.	J	1490.	J
Selenium	mg/kg-dry	T	0.75	J	0.3	J	<0.92	J	<0.28	J	<0.31	J	0.37	J
Silver	mg/kg-dry	T	0.42	J	<0.14	:	<0.2	:	<0.16	:	<0.14	:	<0.16	:
Sodium	mg/kg-dry	T	82.4	J	<41.1	:	<40.8	:	<46.	:	<40.7	:	<45.9	:
Thallium	mg/kg-dry	T	0.2	:	<0.089	:	0.17	:	0.19	:	0.2	:	0.14	:
Vanadium	mg/kg-dry	T	20.	:	11.2	:	32.9	:	23.6	:	18.	:	19.4	:
Zinc	mg/kg-dry	T	94.1	J	37.4	J	52.1	:	40.7	J	42.9	J	42.4	J

J = Qualified as estimated during data validation
R = Qualified as rejected value from data validation and results are considered unusable for any purpose
T = Total Fraction

Appendix A-7i
Soil - Biased 0-2 inches
Validated Analytical Results

Parameter	Units	Exposure Area Fraction	Site ID / Sample Date / Sample ID								
			TSS15-7 10/11/2002 TSS15-7-T01N-SOL		TSS15-8 10/14/2002 TSS15-8-T01N-SOL		TSS15-9 10/14/2002 TSS15-9-T01N-SOL		----	----	----
			SS15		SS15		SS15				
General Chemistry											
Ammonia	mg/kg-dry	T	10.	J	18.5	J	56.4	J	-	-	-
Chloride	mg/kg-dry	T	8.3	J	<2.2	J	<2.2	J	-	-	-
Fluoride	mg/kg-dry	T	1.4	J	0.66	J	0.45	J	-	-	-
Nitrate	mg/kg-dry	T	2.2	J	3.9	J	3.1	J	-	-	-
Phosphorus	mg/kg-dry	T	852.	J	553.	J	159.	J	-	-	-
Sulfate	mg/kg-dry	T	923.	J	4.6	J	3.7	J	-	-	-
Total Kjeldahl Nitrogen	mg/kg-dry	T	32.3	J	225.	:	1270.	:	-	-	-
Total Organic Carbon	mg/kg-dry	T	<107.	J	1460.	J	16000.	J	-	-	-
Laboratory Parameters											
pH	SU	T	7.7	:	8.	:	8.3	:	-	-	-
Solids, Percent	%	T	94.3	:	94.6	:	92.9	:	-	-	-
Specific Conductance	umhos/cm	T	449.	:	52.2	:	93.4	:	-	-	-
Geotechnical											
Organic Soils	%	T	2.56	J	4.07	J	7.22	J	-	-	-
Physical Properties											
Cation-Exchange Capacity	meq/100g	T	19.	:	20.4	:	32.9	:	-	-	-
Sodium Absorption Ratio	ratio	T	2.06	:	0.09	:	<0.03	:	-	-	-
Metals											
Aluminum	mg/kg-dry	T	14700.	:	14500.	:	19000.	:	-	-	-
Antimony	mg/kg-dry	T	<0.17	J	<0.24	J	<0.26	J	-	-	-
Arsenic	mg/kg-dry	T	5.2	:	3.	:	3.4	:	-	-	-
Barium	mg/kg-dry	T	123.	:	168.	:	263.	:	-	-	-
Beryllium	mg/kg-dry	T	1.2	:	0.72	:	0.74	:	-	-	-
Boron	mg/kg-dry	T	4.6	J	7.8	:	12.6	:	-	-	-
Cadmium	mg/kg-dry	T	0.28	:	0.03	:	0.072	:	-	-	-
Calcium	mg/kg-dry	T	4780.	:	13900.	:	47200.	:	-	-	-
Chromium	mg/kg-dry	T	17.8	:	10.	:	14.7	:	-	-	-
Cobalt	mg/kg-dry	T	9.7	:	6.5	:	8.5	:	-	-	-
Copper	mg/kg-dry	T	32.6	:	10.1	:	16.1	:	-	-	-
Iron	mg/kg-dry	T	22200.	:	12900.	:	18200.	:	-	-	-
Lead	mg/kg-dry	T	59.4	:	8.2	:	9.3	:	-	-	-
Magnesium	mg/kg-dry	T	4800.	:	3840.	:	6540.	:	-	-	-
Manganese	mg/kg-dry	T	732.	J	336.	J	403.	J	-	-	-

J = Qualified as estimated during data validation
R = Qualified as rejected value from data validation and results are considered unusable for any purpose
T = Total Fraction

Appendix A-7i
Soil - Biased 0-2 inches
Validated Analytical Results

Parameter	Units	Exposure Area Fraction	Site ID / Sample Date / Sample ID											
			TSS15-7 10/11/2002 TSS15-7-T01N-SOL		TSS15-8 10/14/2002 TSS15-8-T01N-SOL		TSS15-9 10/14/2002 TSS15-9-T01N-SOL		----	----	----
			SS15		SS15		SS15				
Mercury	mg/kg-dry	T	0.025	:	<0.017	:	0.026	:	-	-	-
Molybdenum	mg/kg-dry	T	5.	:	<0.38	:	<0.34	J	-	-	-
Nickel	mg/kg-dry	T	17.3	J	9.3	J	12.	J	-	-	-
Potassium	mg/kg-dry	T	2090.	J	2410.	J	3250.	J	-	-	-
Selenium	mg/kg-dry	T	<1.1	J	0.38	J	0.89	J	-	-	-
Silver	mg/kg-dry	T	<0.12	:	<0.11	:	<0.12	:	-	-	-
Sodium	mg/kg-dry	T	188.	:	<64.6	:	<47.6	:	-	-	-
Thallium	mg/kg-dry	T	0.21	:	0.18	:	0.19	:	-	-	-
Vanadium	mg/kg-dry	T	29.	:	30.5	:	34.9	:	-	-	-
Zinc	mg/kg-dry	T	121.	J	37.8	J	48.	J	-	-	-

J = Qualified as estimated during data validation
R = Qualified as rejected value from data validation and results are considered unusable for any purpose
T = Total Fraction

Appendix A-7j
Soils - Random 0-2 inches
Validated Analytical Results

Parameter	Units	Exposure Area Fraction	Site ID / Sample Date / Sample ID		CR-1 6/10/2003 CR-1-T03N-SOL RCR		CR-10 6/9/2003 CR-10-T03N-SOL RCR		CR-11 6/9/2003 CR-11-T03N-SOL RCR		CR-12 6/11/2003 CR-12-T03N-SOL RCR		CR-13 6/10/2003 CR-13-T03N-SOL RCR		CR-14 6/11/2003 CR-14-T03N-SOL RCR	
General Chemistry																
Ammonia	mg/kg-dry	T			85.6	:	163.	:	79.9	:	129.	:	52.6	:	87.9	:
Chloride	mg/kg-dry	T			108.	:	5.8	:	2.6	:	5.2	:	3.7	:	2.1	:
Fluoride	mg/kg-dry	T			0.8	:	<0.11	:	<0.11	:	0.17	:	0.2	:	0.17	:
Nitrate	mg/kg-dry	T			14.1	J	5.8	J	2.6	J	26.6	J	5.6	J	15.6	J
Phosphorus	mg/kg-dry	T			1740.	:	987.	:	939.	:	1510.	:	1100.	:	530.	:
Sulfate	mg/kg-dry	T			95.9	:	6.6	:	3.3	:	14.	:	8.9	:	6.1	:
Total Kjeldahl Nitrogen	mg/kg-dry	T			-		-		-		3450.	J	-		1500.	J
Total Organic Carbon	mg/kg-dry	T			13500.	:	13200.	:	8790.	:	23000.	:	4590.	:	9160.	:
Laboratory Parameters																
pH	SU	T			8.4	J	5.5	J	6.6	J	7.8	J	7.6	J	8.	J
Solids, Percent	%	T			98.5	:	98.7	:	98.7	:	98.8	:	98.8	:	99.5	:
Specific Conductance	umhos/cm	T			845.	J	126.	J	53.9	J	535.	J	106.	J	343.	J
Geotechnical																
Organic Soils	%	T			7.7	:	3.8	:	2.7	:	6.6	:	2.9	:	2.8	:
Physical Properties																
Cation-Exchange Capacity	meq/100g	T			24.3	:	18.	:	15.4	:	32.8	:	18.	:	11.3	:
Sodium Absorption Ratio	ratio	T			12.89	:	<0.03	:	0.03	:	0.02	:	0.03	:	0.11	:
Metals																
Aluminum	mg/kg-dry	T			11500.	J	11600.	:	10200.	:	17400.	:	12100.	:	6840.	:
Antimony	mg/kg-dry	T			<0.5	J	<0.49	J	<0.5	J	<0.5	J	<0.5	J	<0.48	J
Arsenic	mg/kg-dry	T			<1.2	:	2.2	:	1.9	:	2.3	:	1.9	:	1.	:
Barium	mg/kg-dry	T			191.	:	98.	:	97.7	:	129.	:	88.5	:	50.8	:
Beryllium	mg/kg-dry	T			0.64	:	0.89	:	0.74	:	1.1	:	0.84	:	0.4	J
Boron	mg/kg-dry	T			9.4	:	<3.7	:	<3.3	:	8.9	:	<4.2	:	3.3	:
Cadmium	mg/kg-dry	T			0.044	J	<0.026	:	<0.027	:	<0.023	:	<0.03	:	<0.023	:
Calcium	mg/kg-dry	T			45700.	J	3690.	:	3350.	:	11200.	:	4340.	:	3610.	:
Chromium	mg/kg-dry	T			14.9	:	19.3	:	16.6	:	23.2	:	18.2	:	12.3	:
Cobalt	mg/kg-dry	T			7.2	:	9.4	:	9.1	:	9.8	:	8.6	:	5.7	:
Copper	mg/kg-dry	T			14.8	:	17.3	:	14.2	:	25.1	:	15.2	:	10.3	:
Iron	mg/kg-dry	T			13900.	J	15600.	:	13400.	:	19900.	:	15800.	:	10500.	:
Lead	mg/kg-dry	T			7.4	J	10.8	:	9.2	:	11.	:	8.3	:	4.6	:
Magnesium	mg/kg-dry	T			13500.	J	4280.	:	3850.	:	6060.	:	4090.	:	3390.	:
Manganese	mg/kg-dry	T			708.	J	452.	:	454.	:	402.	:	324.	:	245.	:

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R = Qualified as rejected value from data validation and results are considered unusable for any purpose

T = Total Fraction

Appendix A-7j
Soils - Random 0-2 inches
Validated Analytical Results

		Site ID	CR-1		CR-10		CR-11		CR-12		CR-13		CR-14	
		Sample Date	6/10/2003		6/9/2003		6/9/2003		6/11/2003		6/10/2003		6/11/2003	
		Sample ID	CR-1-T03N-SOL		CR-10-T03N-SOL		CR-11-T03N-SOL		CR-12-T03N-SOL		CR-13-T03N-SOL		CR-14-T03N-SOL	
		Exposure Area	RCR		RCR		RCR		RCR		RCR		RCR	
Parameter	**Units**	**Fraction**												
Mercury	mg/kg-dry	T	0.021	:	0.017	:	<0.016	:	<0.016	:	<0.016	:	<0.016	:
Molybdenum	mg/kg-dry	T	<0.15	J	0.59	:	0.42	:	0.4	J	<0.16	:	0.25	:
Nickel	mg/kg-dry	T	12.2	J	13.5	:	13.2	:	14.4	:	12.5	:	8.4	:
Potassium	mg/kg-dry	T	3700.	J	2720.	J	2350.	J	4650.	J	2310.	J	2390.	J
Selenium	mg/kg-dry	T	<0.8	:	<0.78	:	<0.79	:	<0.8	:	<0.79	:	<0.77	:
Silver	mg/kg-dry	T	0.14	J	0.14	:	0.094	:	<0.28	J	<0.09	:	<0.12	:
Sodium	mg/kg-dry	T	1960.	:	502.	:	<415.	:	691.	:	475.	:	396.	:
Thallium	mg/kg-dry	T	0.1	:	0.15	:	<0.099	:	0.16	:	0.12	:	<0.096	:
Vanadium	mg/kg-dry	T	22.	:	26.1	:	23.9	:	35.9	:	25.6	:	19.6	:
Zinc	mg/kg-dry	T	51.6	:	52.8	:	48.8	:	66.8	:	49.4	:	29.4	:

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T = Total Fraction

Appendix A-7j
Soils - Random 0-2 inches
Validated Analytical Results

Parameter	Units	Exposure Area Fraction	Site ID / Sample Date / Sample ID		CR-15 6/11/2003 CR-15-T03N-SOL RCR		CR-16 6/11/2003 CR-16-T03N-SOL RCR		CR-2 6/10/2003 CR-2-T03N-SOL RCR		CR-3 6/10/2003 CR-3-T03N-SOL RCR		CR-4 6/10/2003 CR-4-T03N-SOL RCR		CR-5 6/11/2003 CR-5-T03N-SOL RCR	
General Chemistry																
Ammonia	mg/kg-dry	T			133.	:	112.	:	246.	:	77.6	:	100.	:	62.8	:
Chloride	mg/kg-dry	T			7.1	:	3.7	:	10.8	:	4.6	J	3.3	:	6.	:
Fluoride	mg/kg-dry	T			0.57	:	0.48	:	1.2	:	1.9	:	1.2	:	<0.11	:
Nitrate	mg/kg-dry	T			27.1	J	23.3	J	74.2	J	8.3	J	12.5	J	46.	J
Phosphorus	mg/kg-dry	T			991.	:	1520.	:	1640.	:	1350.	:	1640.	:	1840.	:
Sulfate	mg/kg-dry	T			17.7	:	9.9	:	27.2	:	9.4	J	9.	:	14.	:
Total Kjeldahl Nitrogen	mg/kg-dry	T			2590.	J	3580.	J	-		-		-		2470.	J
Total Organic Carbon	mg/kg-dry	T			21400.	:	21700.	:	42000.	:	18000.	:	32100.	:	25300.	:
Laboratory Parameters																
pH	SU	T			7.8	J	8.1	J	7.9	J	7.9	J	8.2	J	8.1	J
Solids, Percent	%	T			98.6	:	98.5	:	95.6	:	97.9	:	96.3	:	96.5	:
Specific Conductance	umhos/cm	T			500.	J	514.	J	476.	J	219.	J	173.	J	586.	J
Geotechnical																
Organic Soils	%	T			5.5	:	7.9	:	14.9	:	11.3	:	9.1	:	6.7	:
Physical Properties																
Cation-Exchange Capacity	meq/100g	T			31.3	:	27.	:	42.	:	30.5	:	29.3	:	30.1	:
Sodium Absorption Ratio	ratio	T			0.07	:	0.1	:	0.24	:	0.05	:	0.71	:	0.07	:
Metals																
Aluminum	mg/kg-dry	T			16600.	:	12600.	:	11100.	:	12600.	:	12600.	:	14000.	:
Antimony	mg/kg-dry	T			<0.5	J	<0.49	J	<0.51	J	<0.46	J	<0.48	J	<0.5	J
Arsenic	mg/kg-dry	T			2.6	:	2.1	:	2.1	:	2.4	:	1.7	:	1.8	:
Barium	mg/kg-dry	T			137.	:	148.	:	194.	:	246.	:	159.	:	123.	:
Beryllium	mg/kg-dry	T			1.1	:	0.72	:	0.66	:	0.58	:	0.75	:	0.88	:
Boron	mg/kg-dry	T			6.5	:	12.5	:	16.6	:	17.1	:	16.9	:	8.2	:
Cadmium	mg/kg-dry	T			<0.025	:	<0.046	:	<0.03	:	<0.027	J	<0.031	J	<0.025	:
Calcium	mg/kg-dry	T			6240.	:	35900.	:	93200.	:	91700.	:	56100.	:	19700.	:
Chromium	mg/kg-dry	T			22.6	:	15.1	:	14.1	:	12.9	:	19.6	:	21.8	:
Cobalt	mg/kg-dry	T			10.5	:	7.8	:	6.6	:	5.9	:	7.7	:	8.7	:
Copper	mg/kg-dry	T			22.6	:	21.5	:	21.6	:	16.7	:	18.5	:	23.8	:
Iron	mg/kg-dry	T			20000.	:	15500.	:	14600.	:	12700.	:	15300.	:	17100.	:
Lead	mg/kg-dry	T			10.4	:	8.5	:	6.6	:	6.4	:	7.6	:	8.3	:
Magnesium	mg/kg-dry	T			5310.	:	11900.	:	20700.	:	30000.	:	20400.	:	7310.	:
Manganese	mg/kg-dry	T			479.	:	454.	:	455.	:	412.	:	463.	:	366.	:

J = Qualified as estimated during data validation

R = Qualified as rejected value from data validation and results are considered unusable for any purpose

T = Total Fraction

Appendix A-7j
Soils - Random 0-2 inches
Validated Analytical Results

Parameter	Units	Exposure Area Fraction	Site ID / Sample Date / Sample ID											
			CR-15 6/11/2003 CR-15-T03N-SOL		CR-16 6/11/2003 CR-16-T03N-SOL		CR-2 6/10/2003 CR-2-T03N-SOL		CR-3 6/10/2003 CR-3-T03N-SOL		CR-4 6/10/2003 CR-4-T03N-SOL		CR-5 6/11/2003 CR-5-T03N-SOL	
			RCR		RCR		RCR		RCR		RCR		RCR	
Mercury	mg/kg-dry	T	<0.016	:	<0.017	:	<0.016	:	<0.016	:	<0.016	:	<0.016	:
Molybdenum	mg/kg-dry	T	<0.13	J	0.31	:	0.33	:	<0.14	J	<0.17	J	<0.14	:
Nickel	mg/kg-dry	T	15.1	:	11.4	:	13.5	:	8.9	:	12.9	:	14.3	:
Potassium	mg/kg-dry	T	4380.	J	4850.	J	4340.	J	4920.	J	5090.	J	4410.	J
Selenium	mg/kg-dry	T	<0.8	:	<0.78	:	<0.81	:	<0.73	:	<0.76	:	<0.8	:
Silver	mg/kg-dry	T	<0.25	J	<0.17	:	<0.089	:	<0.08	J	0.14	J	0.2	:
Sodium	mg/kg-dry	T	649.	:	608.	:	586.	:	1010.	:	963.	:	620.	:
Thallium	mg/kg-dry	T	0.18	:	0.11	:	<0.1	:	0.12	:	<0.095	:	0.12	:
Vanadium	mg/kg-dry	T	37.2	:	26.8	:	24.	:	24.5	:	30.1	:	33.	:
Zinc	mg/kg-dry	T	61.9	:	51.6	:	53.3	:	48.5	:	54.3	:	56.3	:

J = Qualified as estimated during data validation
R = Qualified as rejected value from data validation and results are considered unusable for any purpose
T = Total Fraction

Appendix A-7j
Soils - Random 0-2 inches
Validated Analytical Results

Parameter	Units	Exposure Area Fraction	Site ID / Sample Date / Sample ID		Site ID / Sample Date / Sample ID		Site ID / Sample Date / Sample ID		Site ID / Sample Date / Sample ID		Site ID / Sample Date / Sample ID		Site ID / Sample Date / Sample ID	
			CR-6 6/10/2003 CR-6-T03N-SOL		CR-7 6/9/2003 CR-7-T03N-SOL		CR-8 6/9/2003 CR-8-T03N-SOL		CR-9 6/11/2003 CR-9-T03N-SOL		----		----	
			RCR		RCR		RCR		RCR					
General Chemistry														
Ammonia	mg/kg-dry	T	73.3	:	50.8	:	103.	:	146.	:	-		-	
Chloride	mg/kg-dry	T	3.2	:	4.7	:	4.2	:	2.2	:	-		-	
Fluoride	mg/kg-dry	T	0.93	:	1.2	:	0.23	:	<0.11	:	-		-	
Nitrate	mg/kg-dry	T	2.3	J	4.7	J	6.3	J	7.3	J	-		-	
Phosphorus	mg/kg-dry	T	1280.	:	1390.	:	1550.	:	1500.	:	-		-	
Sulfate	mg/kg-dry	T	7.5	:	8.4	:	6.7	:	7.6	:	-		-	
Total Kjeldahl Nitrogen	mg/kg-dry	T	-		-		-		2310.	J	-		-	
Total Organic Carbon	mg/kg-dry	T	10800.	:	6340.	:	9020.	:	13500.	:	-		-	
Laboratory Parameters														
pH	SU	T	8.2	J	7.9	J	7.2	J	6.	J	-		-	
Solids, Percent	%	T	94.2	:	98.7	:	98.7	:	99.	:	-		-	
Specific Conductance	umhos/cm	T	133.	J	264.	J	232.	J	121.	J	-		-	
Geotechnical														
Organic Soils	%	T	6.8	:	4.7	:	2.9	:	4.2	:	-		-	
Physical Properties														
Cation-Exchange Capacity	meq/100g	T	25.4	:	16.9	:	16.8	:	20.4	:	-		-	
Sodium Absorption Ratio	ratio	T	0.08	:	0.06	:	<0.02	:	<0.03	:	-		-	
Metals														
Aluminum	mg/kg-dry	T	13800.	:	10000.	:	9710.	:	14300.	:	-		-	
Antimony	mg/kg-dry	T	<0.53	J	<0.5	J	<0.49	J	<0.48	J	-		-	
Arsenic	mg/kg-dry	T	2.5	:	2.3	:	1.6	:	1.9	:	-		-	
Barium	mg/kg-dry	T	185.	:	131.	:	72.9	:	100.	:	-		-	
Beryllium	mg/kg-dry	T	0.83	:	0.83	:	0.71	:	0.9	:	-		-	
Boron	mg/kg-dry	T	8.8	:	6.7	:	<4.	:	4.6	:	-		-	
Cadmium	mg/kg-dry	T	<0.031	J	<0.03	:	<0.029	:	<0.023	:	-		-	
Calcium	mg/kg-dry	T	55400.	:	38900.	:	4320.	:	3860.	:	-		-	
Chromium	mg/kg-dry	T	19.8	:	12.9	:	17.5	:	22.1	:	-		-	
Cobalt	mg/kg-dry	T	9.1	:	7.2	:	7.5	:	9.3	:	-		-	
Copper	mg/kg-dry	T	18.6	:	16.	:	14.5	:	18.5	:	-		-	
Iron	mg/kg-dry	T	18700.	:	13300.	:	13800.	:	16400.	:	-		-	
Lead	mg/kg-dry	T	7.4	:	7.4	:	8.	:	9.2	:	-		-	
Magnesium	mg/kg-dry	T	12300.	:	7140.	:	4430.	:	3740.	:	-		-	
Manganese	mg/kg-dry	T	422.	:	341.	:	259.	:	375.	:	-		-	

J = Qualified as estimated during data validation

R = Qualified as rejected value from data validation and results are considered unusable for any purpose

T = Total Fraction

Appendix A-7j
Soils - Random 0-2 inches
Validated Analytical Results

Parameter	Units	Exposure Area Fraction	Site ID / Sample Date / Sample ID											
			CR-6 6/10/2003 CR-6-T03N-SOL		CR-7 6/9/2003 CR-7-T03N-SOL		CR-8 6/9/2003 CR-8-T03N-SOL		CR-9 6/11/2003 CR-9-T03N-SOL		----	----
			RCR		RCR		RCR		RCR			
Mercury	mg/kg-dry	T	<0.016	:	0.02	:	0.017	:	<0.015	:	-	-
Molybdenum	mg/kg-dry	T	<0.16	J	<0.16	:	0.3	:	0.33	:	-	-
Nickel	mg/kg-dry	T	15.3	:	11.1	:	12.6	:	12.5	:	-	-
Potassium	mg/kg-dry	T	3730.	J	2450.	J	2450.	J	3230.	J	-	-
Selenium	mg/kg-dry	T	<0.84	:	<0.79	:	<0.78	:	<0.76	:	-	-
Silver	mg/kg-dry	T	0.2	J	<0.091	:	<0.088	:	<0.22	:	-	-
Sodium	mg/kg-dry	T	849.	:	504.	:	415.	:	643.	:	-	-
Thallium	mg/kg-dry	T	<0.11	:	0.12	:	<0.097	:	0.14	:	-	-
Vanadium	mg/kg-dry	T	33.5	:	26.5	:	23.8	:	30.4	:	-	-
Zinc	mg/kg-dry	T	47.8	:	40.7	:	43.7	:	51.4	:	-	-

J = Qualified as estimated during data validation
R = Qualified as rejected value from data validation and results are considered unusable for any purpose
T = Total Fraction

Appendix A-7k
Soils - Biased SPLP 0-2 inches
Validated Analytical Results

Parameter	Units	Exposure Area Fraction	Site ID / Sample Date / Sample ID		Site ID / Sample Date / Sample ID		Site ID / Sample Date / Sample ID		Site ID / Sample Date / Sample ID			
			TSS15-1 1/10/2003 TSS15-1-T01N-SOL		TSS15-2 1/7/2003 TSS15-2-T01N-SOL		TSS15-3 1/7/2003 TSS15-3-T01N-SOL		TSS15-4 1/10/2003 TSS15-4-T01N-SOL		----	----
			SS15		SS15		SS15		SS15			
General Chemistry												
Ammonia	mg/L	T	<0.088	:	<0.04	:	0.14	:	<0.2	:	-	-
Bicarbonate (as CaCO3)	mg/L	T	37.2	J	<1.	:	32.9	J	14.9	J	-	-
Carbonate (as CaCO3)	mg/L	T	11.6	J	<1.	:	16.1	J	61.5	J	-	-
Chloride	mg/L	T	<1.5	:	<0.4	:	3.4	:	<1.3	:	-	-
Fluoride	mg/L	T	-		<0.1	:	0.17	:	-		-	-
Hydroxide (as CaCO3)	mg/L	T	<1.	J	<1.	:	<1.	J	<1.	J	-	-
Nitrate	mg/L	T	<0.4	J	0.51	J	0.73	J	<0.4	J	-	-
Nitrite	mg/L	T	-		0.005	:	0.007	:	-		-	-
Phosphate, Ortho As P	mg/L	T	0.047	J	0.16	:	1.6	:	0.21	J	-	-
Phosphorus	mg/L	T	0.11	:	0.27	:	1.8	:	0.59	:	-	-
Sulfate	mg/L	T	0.64	:	<0.4	:	11.7	:	1.9	:	-	-
Total Alkalinity	mg/L	T	48.8	J	<1.	:	48.9	J	76.3	J	-	-
Total Kjeldahl Nitrogen	mg/L	T	<0.24	:	<0.24	:	<0.24	:	1.3	:	-	-
Inorganics												
Cyanide	mg/L	T	<0.01	:	0.0163	:	<0.01	:	<0.01	:	-	-
Metals												
Aluminum	mg/L	T	2.29	:	13.3	J	9.55	J	15.2	:	-	-
Antimony	mg/L	T	<0.0006	:	<0.0006	J	<0.0006	J	<0.0006	:	-	-
Arsenic	mg/L	T	0.0033	:	0.00092	:	0.0014	:	0.0017	:	-	-
Barium	mg/L	T	0.0873	:	0.111	:	0.0742	:	0.146	:	-	-
Beryllium	mg/L	T	<0.0002	:	0.00039	:	0.00032	:	0.00059	:	-	-
Boron	mg/L	T	<0.0455	:	0.108	:	0.158	:	<0.127	:	-	-
Cadmium	mg/L	T	<0.0002	:	<0.0002	:	<0.0002	:	<0.0002	:	-	-
Calcium	mg/L	T	34.6	:	4.64	:	12.8	:	9.64	:	-	-
Chromium	mg/L	T	<0.0037	:	0.0076	:	0.0064	:	0.0089	:	-	-
Cobalt	mg/L	T	<0.0016	:	<0.0016	:	<0.0016	:	0.0019	:	-	-
Copper	mg/L	T	<0.0006	:	<0.0059	:	<0.0208	:	0.0076	:	-	-
Iron	mg/L	T	1.06	:	7.74	J	5.26	J	9.23	:	-	-
Lead	mg/L	T	0.0019	:	0.0044	:	0.004	:	0.006	:	-	-
Magnesium	mg/L	T	1.99	:	2.76	:	3.09	:	3.5	:	-	-
Manganese	mg/L	T	0.0392	:	0.0665	:	0.0467	:	0.0643	:	-	-
Mercury	mg/L	T	<0.01	:	<0.01	:	<0.01	:	<0.01	:	-	-
Molybdenum	mg/L	T	<0.0025	:	<0.0014	:	<0.0035	:	<0.00066	:	-	-

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T = Total Fraction

Appendix A-7k
Soils - Biased SPLP 0-2 inches
Validated Analytical Results

Parameter	Units	Site ID / Sample Date / Sample ID / Exposure Area / Fraction	TSS15-1 1/10/2003 TSS15-1-T01N-SOL SS15 T		TSS15-2 1/7/2003 TSS15-2-T01N-SOL SS15 T		TSS15-3 1/7/2003 TSS15-3-T01N-SOL SS15 T		TSS15-4 1/10/2003 TSS15-4-T01N-SOL SS15 T		----	----
Nickel	mg/L	T	<0.0029	:	0.0048	:	0.0056	:	0.0072	:	-	-
Potassium	mg/L	T	1.34	:	2.77 J	:	10.7 J	:	5.21	:	-	-
Selenium	mg/L	T	<0.0016	:	<0.0016	:	<0.0016	:	<0.0016	:	-	-
Silver	mg/L	T	<0.0002	:	<0.0002	:	<0.0002	:	<0.0002	:	-	-
Thallium	mg/L	T	<0.0002	:	<0.0002	:	<0.0002	:	<0.0002	:	-	-
Vanadium	mg/L	T	0.0333	:	0.0106	:	0.0109	:	0.0166	:	-	-
Zinc	mg/L	T	<0.0061	:	<0.0322	:	<0.0307	:	<0.0471	:	-	-

J = Qualified as estimated during data validation
R = Qualified as rejected value from data validation and results are considered unusable for any purpose
T = Total Fraction

Appendix A-7l
Soils - Biased 2-6 inches
Validated Analytical Results

Parameter	Units	Exposure Area Fraction	Site ID / Sample Date / Sample ID		TSS15-1 1/7/2003 TSS15-1-T02N-SOL SS15		TSS15-1 1/10/2003 TSS15-1-T02N-SOL SS15		TSS15-10 10/14/2002 TSS15-10-T02N-SOL SS15		TSS15-11 1/7/2003 TSS15-11-T02N-SOL SS15		TSS15-12 1/7/2003 TSS15-12-T02N-SOL SS15		TSS15-13 1/7/2003 TSS15-13-T02N-SOL SS15	
General Chemistry																
Ammonia	mg/kg-dry	T		-	17.1	:	140.	J	9.4	:	60.2	:	17.7	:		
Chloride	mg/kg-dry	T		-	<2.5	:	<2.5	J	3.4	:	4.1	:	2.9	:		
Fluoride	mg/kg-dry	T		-	2.8	J	0.17	J	0.16	J	0.14	J	<0.13	J		
Nitrate	mg/kg-dry	T		-	3.4	J	3.9	J	4.7	J	10.5	J	3.7	J		
Phosphorus	mg/kg-dry	T		-	653.	:	138.	J	747.	:	567.	:	376.	:		
Sulfate	mg/kg-dry	T		-	6.	:	3.	J	12.	:	11.8	:	5.	:		
Total Kjeldahl Nitrogen	mg/kg-dry	T		-	670.	:	1580.	:	2310.	:	2770.	:	1560.	:		
Total Organic Carbon	mg/kg-dry	T		-	7280.	J	26300.	J	41000.	J	60100.	J	19300.	J		
Laboratory Parameters																
pH	SU	T		-	7.9	:	8.3	:	7.9	:	7.7	:	8.	:		
Solids, Percent	%	T		-	82.2	:	82.8	:	81.1	:	80.	:	78.9	:		
Specific Conductance	umhos/cm	T		-	184.	:	101.	:	219.	:	242.	:	225.	:		
Geotechnical																
Organic Soils	%	T		-	4.4	:	6.68	J	10.2	:	12.8	:	6.9	:		
Physical Properties																
Cation-Exchange Capacity	meq/100g	T		-	29.1	:	41.5	:	40.6	:	43.6	:	37.2	:		
Sodium Absorption Ratio	ratio	T		-	0.09	:	0.02	J	0.04	:	0.03	:	0.13	:		
Metals																
Aluminum	mg/kg-dry	T		-	19000.	:	20800.	:	22400.	:	21000.	:	31200.	:		
Antimony	mg/kg-dry	T		-	<0.28	J	<0.28	J	<0.32	J	<0.36	J	<0.36	J		
Arsenic	mg/kg-dry	T		-	3.6	J	3.	:	3.6	J	2.6	J	3.5	J		
Barium	mg/kg-dry	T		-	246.	:	246.	:	304.	:	287.	:	285.	:		
Beryllium	mg/kg-dry	T		-	0.9	:	0.84	:	0.9	:	0.85	:	1.2	:		
Boron	mg/kg-dry	T		-	10.2	:	11.8	:	13.8	:	14.8	:	11.5	:		
Cadmium	mg/kg-dry	T		-	<0.042	:	0.077	:	<0.043	:	<0.046	:	<0.044	J		
Calcium	mg/kg-dry	T		-	37100.	:	22200.	:	42300.	:	25900.	:	8650.	:		
Chromium	mg/kg-dry	T		-	13.1	J	15.7	:	16.6	J	15.9	J	21.8	J		
Cobalt	mg/kg-dry	T		-	8.7	:	9.	:	10.4	:	9.3	:	11.2	:		
Copper	mg/kg-dry	T		-	12.5	J	13.5	:	17.1	J	14.9	J	15.5	J		
Iron	mg/kg-dry	T		-	16700.	:	19300.	:	20200.	:	19700.	:	25600.	:		
Lead	mg/kg-dry	T		-	10.5	:	12.2	:	11.7	:	16.9	:	13.	:		
Magnesium	mg/kg-dry	T		-	5010.	:	5000.	:	5120.	:	5130.	:	5700.	:		
Manganese	mg/kg-dry	T		-	423.	:	470.	J	559.	:	508.	:	536.	:		

J = Qualified as estimated during data validation

R = Qualified as rejected value from data validation and results are considered unusable for any purpose

T = Total Fraction

Appendix A-7l
Soils - Biased 2-6 inches
Validated Analytical Results

Parameter	Units	Exposure Area Fraction	Site ID / Sample Date / Sample ID					
			TSS15-1 1/7/2003 TSS15-1-T02N-SOL	TSS15-1 1/10/2003 TSS15-1-T02N-SOL	TSS15-10 10/14/2002 TSS15-10-T02N-SOL	TSS15-11 1/7/2003 TSS15-11-T02N-SOL	TSS15-12 1/7/2003 TSS15-12-T02N-SOL	TSS15-13 1/7/2003 TSS15-13-T02N-SOL
			SS15	SS15	SS15	SS15	SS15	SS15
Mercury	mg/kg-dry	T	-	<0.018 :	0.02 :	0.036 :	0.053 :	0.035 :
Molybdenum	mg/kg-dry	T	-	0.29 :	<0.17 J	<0.37 :	<0.29 :	<0.12 :
Nickel	mg/kg-dry	T	-	11.4 :	12.4 J	13.5 :	11.6 :	14.4 :
Potassium	mg/kg-dry	T	-	3540. J	3170. J	3680. J	3910. J	3720. J
Selenium	mg/kg-dry	T	-	<0.74 J	1. J	<0.87 J	<0.97 J	<0.96 J
Silver	mg/kg-dry	T	-	<0.17 :	<0.13 :	<0.17 :	<0.18 :	<0.18 :
Sodium	mg/kg-dry	T	-	95. :	<49.7 :	<34.8 :	<40.5 :	<36.4 :
Thallium	mg/kg-dry	T	-	0.21 :	0.19 :	0.23 :	0.23 :	0.3 :
Vanadium	mg/kg-dry	T	-	37.9 :	34. :	40.2 :	34.5 :	46.8 :
Zinc	mg/kg-dry	T	-	43.6 :	50.7 J	54. :	59.4 :	61.2 :
Pesticides-PCBs								
a-Chlordane	mg/kg-dry	T	-	<0.0021 :	-	-	-	-
Aldrin	mg/kg-dry	T	-	<0.0021 :	-	-	-	-
alpha-Hexachlorocyclohexane	mg/kg-dry	T	-	<0.0021 :	-	-	-	-
beta-Hexachlorocyclohexane	mg/kg-dry	T	-	<0.0021 :	-	-	-	-
delta-Hexachlorocyclohexane	mg/kg-dry	T	-	<0.0021 :	-	-	-	-
Dichlorodiphenyldichloroethane	mg/kg-dry	T	-	<0.004 :	-	-	-	-
Dichlorodiphenyldichloroethylene	mg/kg-dry	T	-	<0.004 :	-	-	-	-
Dichlorodiphenyltrichloroethane	mg/kg-dry	T	-	<0.004 :	-	-	-	-
Dieldrin	mg/kg-dry	T	-	<0.004 :	-	-	-	-
Endosulfan I	mg/kg-dry	T	-	<0.0021 :	-	-	-	-
Endosulfan II	mg/kg-dry	T	-	<0.004 :	-	-	-	-
Endosulfan sulfate	mg/kg-dry	T	-	<0.004 :	-	-	-	-
Endrin	mg/kg-dry	T	-	<0.004 :	-	-	-	-
Endrin aldehyde	mg/kg-dry	T	-	<0.004 :	-	-	-	-
Endrin ketone	mg/kg-dry	T	-	<0.004 :	-	-	-	-
g-Chlordane	mg/kg-dry	T	-	<0.0021 :	-	-	-	-
Heptachlor	mg/kg-dry	T	-	<0.0021 :	-	-	-	-
Heptachlor epoxide	mg/kg-dry	T	-	<0.0021 :	-	-	-	-
Lindane	mg/kg-dry	T	-	<0.0021 :	-	-	-	-
Methoxychlor	mg/kg-dry	T	-	<0.021 :	-	-	-	-
Dibenzodioxins-Dibenzofurans								
1,2,3,4,6,7,8,9-Octachlorodibenzofur	pg/g	T	<0.15 :	-	-	-	-	-
1,2,3,4,6,7,8,9-Octachlorodibenzo-p	pg/g	T	<0.52 :	-	-	-	-	-

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Appendix A-7l
Soils - Biased 2-6 inches
Validated Analytical Results

Parameter	Units	Exposure Area Fraction	Site ID / Sample Date / Sample ID		TSS15-1 1/7/2003 TSS15-1-T02N-SOL SS15		TSS15-1 1/10/2003 TSS15-1-T02N-SOL SS15	TSS15-10 10/14/2002 TSS15-10-T02N-SOL SS15	TSS15-11 1/7/2003 TSS15-11-T02N-SOL SS15	TSS15-12 1/7/2003 TSS15-12-T02N-SOL SS15	TSS15-13 1/7/2003 TSS15-13-T02N-SOL SS15
1,2,3,4,6,7,8-Heptachlorodibenzofur	pg/g	T	<0.083	:	-	-	-	-	-	-	
1,2,3,4,6,7,8-Heptachlorodibenzo-p-	pg/g	T	<0.096	:	-	-	-	-	-	-	
1,2,3,4,7,8,9-Heptachlorodibenzofur	pg/g	T	<0.1	:	-	-	-	-	-	-	
1,2,3,4,7,8-Hexachlorodibenzofuran	pg/g	T	<0.058	:	-	-	-	-	-	-	
1,2,3,4,7,8-hexachlorodibenzo-p-dio	pg/g	T	<0.12	:	-	-	-	-	-	-	
1,2,3,6,7,8-Hexachlorodibenzofuran	pg/g	T	<0.054	:	-	-	-	-	-	-	
1,2,3,6,7,8-Hexachlorodibenzo-p-dio	pg/g	T	<0.12	:	-	-	-	-	-	-	
1,2,3,7,8,9-Hexachlorodibenzofuran	pg/g	T	<0.069	:	-	-	-	-	-	-	
1,2,3,7,8,9-Hexachlorodibenzo-p-dio	pg/g	T	<0.12	:	-	-	-	-	-	-	
1,2,3,7,8-Pentachlorodibenzofuran	pg/g	T	<0.1	:	-	-	-	-	-	-	
1,2,3,7,8-Pentachlorodibenzo-p-diox	pg/g	T	<0.11	:	-	-	-	-	-	-	
2,3,4,6,7,8-Hexachlorodibenzofuran	pg/g	T	<0.062	:	-	-	-	-	-	-	
2,3,4,7,8-Pentachlorodibenzofuran	pg/g	T	<0.097	:	-	-	-	-	-	-	
2,3,7,8-Tetrachlorodibenzofuran	pg/g	T	<0.15	:	-	-	-	-	-	-	
2,3,7,8-Tetrachlorodibenzo-p-dioxin	pg/g	T	<0.23	:	-	-	-	-	-	-	

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T = Total Fraction

Appendix A-7l
Soils - Biased 2-6 inches
Validated Analytical Results

Parameter	Units	Exposure Area Fraction	Site ID	TSS15-14		TSS15-15		TSS15-16		TSS15-17		TSS15-18		TSS15-19	
			Sample Date	1/7/2003		1/7/2003		1/7/2003		10/12/2002		10/12/2002		10/12/2002	
			Sample ID	TSS15-14-T02N-SOL		TSS15-15-T02N-SOL		TSS15-16-T02N-SOL		TSS15-17-T02N-SOL		TSS15-18-T02N-SOL		TSS15-19-T02N-SOL	
			Exposure Area	SS15		SS15		SS15		SS15		SS15		SS15	
General Chemistry															
Ammonia	mg/kg-dry	T		13.7	:	13.4	:	17.4	:	<13.2	:	10.4	:	22.4	:
Chloride	mg/kg-dry	T		<2.6	:	<2.5	:	2.9	:	<2.2	J	<2.1	J	<2.4	J
Fluoride	mg/kg-dry	T		0.32	J	<0.13	J	<0.13	J	0.83	J	1.	J	0.19	J
Nitrate	mg/kg-dry	T		3.6	J	4.8	J	6.7	J	4.3	J	3.7	J	3.4	J
Phosphorus	mg/kg-dry	T		538.	:	241.	:	449.	:	492.	J	489.	J	378.	J
Sulfate	mg/kg-dry	T		<2.6	:	5.	:	4.7	:	12.	J	2.2	J	<2.4	J
Total Kjeldahl Nitrogen	mg/kg-dry	T		1730.	:	1150.	:	1250.	:	155.	J	127.	J	987.	J
Total Organic Carbon	mg/kg-dry	T		24700.	J	33100.	J	43200.	J	4090.	J	2540.	J	20100.	J
Laboratory Parameters															
pH	SU	T		7.7	:	7.5	:	7.	:	8.4	:	8.6	:	8.3	:
Solids, Percent	%	T		78.4	:	82.7	:	78.9	:	95.1	:	96.7	:	84.7	:
Specific Conductance	umhos/cm	T		216.	:	83.1	:	81.9	:	54.2	J	36.2	J	75.5	J
Geotechnical															
Organic Soils	%	T		8.1	:	5.5	:	6.2	:	2.44	J	2.07	J	5.2	J
Physical Properties															
Cation-Exchange Capacity	meq/100g	T		41.7	:	22.	:	21.5	:	11.8	:	14.3	:	34.5	:
Sodium Absorption Ratio	ratio	T		<0.05	:	0.09	:	0.05	:	0.12	:	0.27	:	0.08	:
Metals															
Aluminum	mg/kg-dry	T		25300.	:	13400.	:	17000.	:	11600.	:	11600.	:	23700.	:
Antimony	mg/kg-dry	T		<0.3	J	<0.3	J	<0.3	J	<0.17	J	<0.16	J	<0.19	J
Arsenic	mg/kg-dry	T		1.9	J	1.6	J	2.1	J	4.1	:	3.9	:	3.1	:
Barium	mg/kg-dry	T		332.	:	261.	:	254.	:	74.3	:	64.2	:	220.	:
Beryllium	mg/kg-dry	T		1.	:	0.64	:	0.73	:	0.73	:	0.72	:	1.	:
Boron	mg/kg-dry	T		13.8	:	5.8	:	7.1	:	<2.7	:	<2.8	:	6.9	:
Cadmium	mg/kg-dry	T		<0.047	:	<0.043	:	<0.046	:	0.066	:	0.067	:	<0.028	:
Calcium	mg/kg-dry	T		32800.	:	4060.	:	4150.	:	10300.	:	7690.	:	6980.	:
Chromium	mg/kg-dry	T		16.8	J	14.	J	15.8	J	21.6	:	21.2	:	21.1	:
Cobalt	mg/kg-dry	T		9.8	:	9.5	:	11.5	:	7.5	:	7.7	:	9.	:
Copper	mg/kg-dry	T		19.3	J	8.7	J	12.5	J	26.9	:	22.7	:	13.9	:
Iron	mg/kg-dry	T		21400.	:	17100.	:	19500.	:	17500.	:	18000.	:	22200.	:
Lead	mg/kg-dry	T		11.6	:	12.	:	14.7	:	37.2	:	20.9	:	13.4	:
Magnesium	mg/kg-dry	T		5530.	:	2630.	:	3200.	:	5550.	:	5820.	:	5390.	:
Manganese	mg/kg-dry	T		407.	:	659.	:	672.	:	391.	J	396.	J	403.	J

J = Qualified as estimated during data validation

R = Qualified as rejected value from data validation and results are considered unusable for any purpose

T = Total Fraction

Appendix A-7l
Soils - Biased 2-6 inches
Validated Analytical Results

Parameter	Units	Exposure Area Fraction	Site ID	TSS15-14		TSS15-15		TSS15-16		TSS15-17		TSS15-18		TSS15-19	
			Sample Date	1/7/2003		1/7/2003		1/7/2003		10/12/2002		10/12/2002		10/12/2002	
			Sample ID	TSS15-14-T02N-SOL		TSS15-15-T02N-SOL		TSS15-16-T02N-SOL		TSS15-17-T02N-SOL		TSS15-18-T02N-SOL		TSS15-19-T02N-SOL	
			Exposure Area	SS15		SS15		SS15		SS15		SS15		SS15	
Mercury	mg/kg-dry	T		<0.021	:	0.026	:	0.025	:	<0.016	:	<0.016	:	<0.018	:
Molybdenum	mg/kg-dry	T		<0.13	:	<0.12	:	0.34	:	6.5	:	4.3	:	0.97	:
Nickel	mg/kg-dry	T		15.	:	9.2	:	11.4	:	17.3	J	17.5	J	15.5	J
Potassium	mg/kg-dry	T		3820.	J	1840.	J	2790.	J	1860.	J	1930.	J	2780.	J
Selenium	mg/kg-dry	T		<0.81	J	<0.8	J	<0.81	J	0.47	J	0.46	J	0.66	J
Silver	mg/kg-dry	T		<0.19	:	<0.17	:	<0.18	:	<0.12	:	<0.1	:	<0.13	:
Sodium	mg/kg-dry	T		<38.7	:	<35.3	:	<37.4	:	<46.5	:	<39.5	:	<50.5	:
Thallium	mg/kg-dry	T		0.22	:	0.16	:	0.18	:	0.14	:	0.15	:	0.21	:
Vanadium	mg/kg-dry	T		33.	:	35.3	:	39.6	:	34.5	:	30.3	:	36.7	:
Zinc	mg/kg-dry	T		51.1	:	42.	:	48.9	:	65.	J	68.6	J	58.	J

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T = Total Fraction

Appendix A-7l
Soils - Biased 2-6 inches
Validated Analytical Results

Parameter	Units	Exposure Area Fraction	Site ID	TSS15-2	TSS15-20	TSS15-21	TSS15-22	TSS15-23	TSS15-24
			Sample Date	1/7/2003	10/12/2002	10/13/2002	10/31/2002	10/30/2002	10/31/2002
			Sample ID	TSS15-2-T02N-SOL	TSS15-20-T02N-SOL	TSS15-21-T02N-SOL	TSS15-22-T02N-SOL	TSS15-23-T02N-SOL	TSS15-24-T02N-SOL
			Exposure Area	SS15	SS15	SS15	SS15	SS15	SS15
General Chemistry									
Ammonia	mg/kg-dry	T		10.6 :	61.9 :	60.1 :	83.5 J	35. :	165. J
Chloride	mg/kg-dry	T		<2.4 :	<2.4 J	2.5 J	9.3 J	<36. :	9.5 J
Fluoride	mg/kg-dry	T		<0.12 J	3.2 J	0.21 J	0.13 J	0.31 J	0.16 J
Nitrate	mg/kg-dry	T		3.2 J	3.4 J	9.1 J	4. J	4.5 J	16. J
Phosphorus	mg/kg-dry	T		560. :	652. J	878. J	709. J	700. J	781. J
Sulfate	mg/kg-dry	T		4.6 J	8.2 J	27.5 J	10. J	<59. :	18. J
Total Kjeldahl Nitrogen	mg/kg-dry	T		767. :	286. :	1100. :	1060. :	897. J	1640. :
Total Organic Carbon	mg/kg-dry	T		7730. J	28800. J	17500. J	13400. J	11900. J	22400. J
Laboratory Parameters									
pH	SU	T		7.7 :	8.1 :	8. :	8. :	8.3 :	7.3 :
Solids, Percent	%	T		84.8 :	85.8 :	87.1 :	82.6 :	84.2 :	81.4 :
Specific Conductance	umhos/cm	T		70. :	110. :	119. :	198. :	208. J	339. :
Geotechnical									
Organic Soils	%	T		3.5 :	8.17 J	4.47 J	4.66 J	4.7 J	5.9 J
Physical Properties									
Cation-Exchange Capacity	meq/100g	T		27. :	26.6 :	30.5 :	22.8 :	21.2 :	26. :
Sodium Absorption Ratio	ratio	T		<0.06 :	1.08 :	0.17 :	0.05 :	0.13 :	0.03 :
Metals									
Aluminum	mg/kg-dry	T		20400. :	18600. :	21600. :	21300. :	21000. J	21700. :
Antimony	mg/kg-dry	T		<0.31 J	<0.23 J	<0.23 J	<0.28 J	<0.29 J	<0.28 J
Arsenic	mg/kg-dry	T		2.5 J	6.8 :	4.3 :	4.4 :	3.6 :	4.3 :
Barium	mg/kg-dry	T		226. :	469. :	232. :	214. :	231. J	208. :
Beryllium	mg/kg-dry	T		0.81 :	0.79 :	0.9 :	0.89 :	0.91 J	0.92 :
Boron	mg/kg-dry	T		7.2 :	13.3 J	13.3 J	5.7 J	6.9 :	6. J
Cadmium	mg/kg-dry	T		<0.042 J	<0.025 J	<0.021 J	<0.039 J	<0.034 J	<0.038 J
Calcium	mg/kg-dry	T		4370. :	92300. :	8950. :	6650. :	8050. J	8160. :
Chromium	mg/kg-dry	T		18.7 J	16.7 :	18.7 :	18.1 :	18. J	19.1 :
Cobalt	mg/kg-dry	T		10.3 :	7.7 :	9.7 :	9.2 :	11.8 J	9.6 :
Copper	mg/kg-dry	T		16.2 J	11.5 :	18.2 :	18.2 :	18.3 J	17.9 :
Iron	mg/kg-dry	T		21700. :	15600. :	20900. :	20200. :	20700. J	21200. :
Lead	mg/kg-dry	T		14.9 :	9.3 :	13.8 :	14.4 :	17.8 J	16.1 :
Magnesium	mg/kg-dry	T		4370. :	7960. :	4940. :	4990. :	3810. J	5090. :
Manganese	mg/kg-dry	T		604. :	318. J	566. J	532. J	778. J	540. J

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Appendix A-7l
Soils - Biased 2-6 inches
Validated Analytical Results

Parameter	Units	Fraction	TSS15-2	TSS15-20	TSS15-21	TSS15-22	TSS15-23	TSS15-24
Sample Date			1/7/2003	10/12/2002	10/13/2002	10/31/2002	10/30/2002	10/31/2002
Sample ID			TSS15-2-T02N-SOL	TSS15-20-T02N-SOL	TSS15-21-T02N-SOL	TSS15-22-T02N-SOL	TSS15-23-T02N-SOL	TSS15-24-T02N-SOL
Exposure Area			SS15	SS15	SS15	SS15	SS15	SS15
Mercury	mg/kg-dry	T	0.03 J	<0.018 :	0.019 :	<0.02 J	<0.019 :	<0.02 J
Molybdenum	mg/kg-dry	T	2.5 J	<0.45 :	2.4 :	1.3 :	<0.57 J	1.9 :
Nickel	mg/kg-dry	T	12.8 :	12.8 J	13.1 J	14.2 J	13.2 J	14. J
Potassium	mg/kg-dry	T	3170. :	2770. J	3120. J	3030. J	3710. J	2750. J
Selenium	mg/kg-dry	T	<0.82 J	<1.3 J	<1.2 J	<0.74 J	0.94 J	<0.76 J
Silver	mg/kg-dry	T	<0.17 :	<0.12 :	<0.1 :	<0.15 :	<0.14 :	<0.15 :
Sodium	mg/kg-dry	T	<34.5 :	<212. :	<59.2 :	52.6 :	<28.2 :	79.6 :
Thallium	mg/kg-dry	T	0.22 :	0.17 :	0.17 :	0.24 :	0.28 :	0.22 :
Vanadium	mg/kg-dry	T	42.4 :	48.2 :	41.2 :	36.6 :	39.6 J	42.1 :
Zinc	mg/kg-dry	T	57.3 :	45.1 J	59.4 J	59.3 J	59.6 J	63. J
Pesticides-PCBs								
a-Chlordane	mg/kg-dry	T	<0.002 :	-	-	-	-	-
Aldrin	mg/kg-dry	T	<0.002 :	-	-	-	-	-
alpha-Hexachlorocyclohexane	mg/kg-dry	T	<0.002 :	-	-	-	-	-
beta-Hexachlorocyclohexane	mg/kg-dry	T	<0.002 :	-	-	-	-	-
delta-Hexachlorocyclohexane	mg/kg-dry	T	<0.002 :	-	-	-	-	-
Dichlorodiphenyldichloroethane	mg/kg-dry	T	<0.0039 :	-	-	-	-	-
Dichlorodiphenyldichloroethylene	mg/kg-dry	T	<0.0039 :	-	-	-	-	-
Dichlorodiphenyltrichloroethane	mg/kg-dry	T	<0.0039 :	-	-	-	-	-
Dieldrin	mg/kg-dry	T	<0.0039 :	-	-	-	-	-
Endosulfan I	mg/kg-dry	T	<0.002 :	-	-	-	-	-
Endosulfan II	mg/kg-dry	T	<0.0039 :	-	-	-	-	-
Endosulfan sulfate	mg/kg-dry	T	<0.0039 :	-	-	-	-	-
Endrin	mg/kg-dry	T	<0.0039 :	-	-	-	-	-
Endrin aldehyde	mg/kg-dry	T	<0.0039 :	-	-	-	-	-
Endrin ketone	mg/kg-dry	T	<0.0039 :	-	-	-	-	-
g-Chlordane	mg/kg-dry	T	<0.002 :	-	-	-	-	-
Heptachlor	mg/kg-dry	T	<0.002 :	-	-	-	-	-
Heptachlor epoxide	mg/kg-dry	T	<0.002 :	-	-	-	-	-
Lindane	mg/kg-dry	T	<0.002 :	-	-	-	-	-
Methoxychlor	mg/kg-dry	T	<0.02 :	-	-	-	-	-
Dibenzodioxins-Dibenzofurans								
1,2,3,4,6,7,8,9-Octachlorodibenzofur	pg/g	T	<0.53 :	-	-	-	-	-
1,2,3,4,6,7,8,9-Octachlorodibenzo-p	pg/g	T	<4.1 :	-	-	-	-	-

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Appendix A-7l
Soils - Biased 2-6 inches
Validated Analytical Results

Parameter	Units	Exposure Area Fraction	Site ID	TSS15-2	TSS15-20	TSS15-21	TSS15-22	TSS15-23	TSS15-24
			Sample Date	1/7/2003	10/12/2002	10/13/2002	10/31/2002	10/30/2002	10/31/2002
			Sample ID	TSS15-2-T02N-SOL	TSS15-20-T02N-SOL	TSS15-21-T02N-SOL	TSS15-22-T02N-SOL	TSS15-23-T02N-SOL	TSS15-24-T02N-SOL
			Exposure Area	SS15	SS15	SS15	SS15	SS15	SS15
1,2,3,4,6,7,8-Heptachlorodibenzofur	pg/g	T		<0.32 :	-	-	-	-	-
1,2,3,4,6,7,8-Heptachlorodibenzo-p-	pg/g	T		<0.71 :	-	-	-	-	-
1,2,3,4,7,8,9-Heptachlorodibenzofur	pg/g	T		<0.096 :	-	-	-	-	-
1,2,3,4,7,8-Hexachlorodibenzofuran	pg/g	T		<0.15 :	-	-	-	-	-
1,2,3,4,7,8-hexachlorodibenzo-p-dio	pg/g	T		<0.1 :	-	-	-	-	-
1,2,3,6,7,8-Hexachlorodibenzofuran	pg/g	T		<0.066 :	-	-	-	-	-
1,2,3,6,7,8-Hexachlorodibenzo-p-dio	pg/g	T		<0.094 :	-	-	-	-	-
1,2,3,7,8,9-Hexachlorodibenzofuran	pg/g	T		<0.062 :	-	-	-	-	-
1,2,3,7,8,9-Hexachlorodibenzo-p-dio	pg/g	T		<0.098 :	-	-	-	-	-
1,2,3,7,8-Pentachlorodibenzofuran	pg/g	T		<0.084 :	-	-	-	-	-
1,2,3,7,8-Pentachlorodibenzo-p-diox	pg/g	T		<0.097 :	-	-	-	-	-
2,3,4,6,7,8-Hexachlorodibenzofuran	pg/g	T		<0.099 :	-	-	-	-	-
2,3,4,7,8-Pentachlorodibenzofuran	pg/g	T		<0.08 :	-	-	-	-	-
2,3,7,8-Tetrachlorodibenzofuran	pg/g	T		<0.14 :	-	-	-	-	-
2,3,7,8-Tetrachlorodibenzo-p-dioxin	pg/g	T		<0.2 :	-	-	-	-	-

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Appendix A-7l
Soils - Biased 2-6 inches
Validated Analytical Results

Parameter	Units	Exposure Area Fraction	Site ID	TSS15-25	TSS15-26	TSS15-27	TSS15-28	TSS15-29	TSS15-3
			Sample Date	10/30/2002	10/30/2002	10/31/2002	10/31/2002	10/31/2002	1/7/2003
			Sample ID	TSS15-25-T02N-SOL	TSS15-26-T02N-SOL	TSS15-27-T02N-SOL	TSS15-28-T02N-SOL	TSS15-29-T02N-SOL	TSS15-3-T02N-SOL
			Exposure Area	SS15	SS15	SS15	SS15	SS15	SS15
General Chemistry									
Ammonia	mg/kg-dry	T		31.9 :	31. :	22.1 :	101. J	158. :	30.2 :
Chloride	mg/kg-dry	T		<37. :	<36. :	9.1 J	8.9 J	11. J	8. :
Fluoride	mg/kg-dry	T		0.21 J	0.13 J	0.17 J	0.15 J	0.14 J	<0.14 J
Nitrate	mg/kg-dry	T		6.8 :	6.4 :	2.6 J	5.6 J	2.8 J	8.4 J
Phosphorus	mg/kg-dry	T		749. J	616. J	595. J	648. J	123. J	450. :
Sulfate	mg/kg-dry	T		<62. :	<60. :	10. J	16. J	9.4 J	25.8 :
Total Kjeldahl Nitrogen	mg/kg-dry	T		1560. :	909. :	774. :	1270. :	478. :	1850. :
Total Organic Carbon	mg/kg-dry	T		24600. J	14400. J	7590. J	14600. J	5800. J	40100. J
Laboratory Parameters									
pH	SU	T		8.1 :	8.3 :	8.3 :	7.4 :	7. :	7.5 :
Solids, Percent	%	T		80.1 :	83.9 :	82.5 :	82.2 :	89.6 :	76.1 :
Specific Conductance	umhos/cm	T		234. J	275. J	149. :	162. :	74.5 :	264. :
Geotechnical									
Organic Soils	%	T		5.7 J	4.1 J	4.05 J	5.33 J	3.38 J	9.6 :
Physical Properties									
Cation-Exchange Capacity	meq/100g	T		23.8 :	28.3 :	23.7 :	27.1 :	19.9 :	33.3 :
Sodium Absorption Ratio	ratio	T		0.07 :	0.23 :	0.1 :	0.05 :	0.12 :	0.04 :
Metals									
Aluminum	mg/kg-dry	T		21900. :	23700. :	22200. :	22700. :	17200. :	22800. :
Antimony	mg/kg-dry	T		<0.3 J	<0.28 J	<0.29 J	<0.3 J	<0.27 J	<0.34 J
Arsenic	mg/kg-dry	T		4.4 :	4.7 :	4.2 :	3.8 :	3.4 :	1.9 J
Barium	mg/kg-dry	T		202. :	204. :	205. :	212. :	170. :	291. :
Beryllium	mg/kg-dry	T		0.96 :	1. :	0.99 :	1. :	0.85 :	1. :
Boron	mg/kg-dry	T		8.4 :	5.9 :	4.3 J	4.5 J	2.9 J	12.6 :
Cadmium	mg/kg-dry	T		<0.042 J	<0.037 J	<0.04 J	<0.037 J	<0.034 J	<0.044 :
Calcium	mg/kg-dry	T		9800. :	4520. :	4690. :	4480. :	3540. :	7400. :
Chromium	mg/kg-dry	T		20.1 :	19.6 :	19.1 :	20.6 :	18.8 :	18.4 J
Cobalt	mg/kg-dry	T		10.1 :	10.7 :	10.4 :	10.3 :	10.5 :	8.4 :
Copper	mg/kg-dry	T		19. :	34. :	18.2 :	20.3 :	17.1 :	14. J
Iron	mg/kg-dry	T		22100. :	23300. :	23000. :	23300. :	21000. :	18800. :
Lead	mg/kg-dry	T		19.7 :	14.6 :	15.1 :	17.3 :	15.4 :	14.2 :
Magnesium	mg/kg-dry	T		5160. :	5030. :	4510. :	4530. :	3840. :	4160. :
Manganese	mg/kg-dry	T		554. J	593. J	603. J	580. J	615. J	478. :

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Appendix A-7l
Soils - Biased 2-6 inches
Validated Analytical Results

Parameter	Units	Exposure Area Fraction	Site ID / Sample Date / Sample ID											
			TSS15-25 10/30/2002 TSS15-25-T02N-SOL		TSS15-26 10/30/2002 TSS15-26-T02N-SOL		TSS15-27 10/31/2002 TSS15-27-T02N-SOL		TSS15-28 10/31/2002 TSS15-28-T02N-SOL		TSS15-29 10/31/2002 TSS15-29-T02N-SOL		TSS15-3 1/7/2003 TSS15-3-T02N-SOL	
			SS15		SS15		SS15		SS15		SS15		SS15	
Mercury	mg/kg-dry	T	<0.021	:	<0.018	:	<0.019	J	<0.019	J	0.024	J	0.031	:
Molybdenum	mg/kg-dry	T	9.3	:	1.	:	0.34	J	1.1	:	0.8	:	2.1	:
Nickel	mg/kg-dry	T	14.7	J	14.1	J	13.9	J	14.6	J	14.	J	13.7	:
Potassium	mg/kg-dry	T	3820.	J	2930.	J	2500.	J	3500.	J	2330.	J	4490.	J
Selenium	mg/kg-dry	T	<0.81	J	0.93	J	<0.77	J	<0.8	J	<0.73	J	<0.91	J
Silver	mg/kg-dry	T	<0.17	:	<0.15	:	<0.16	:	<0.15	:	<0.14	:	<0.18	:
Sodium	mg/kg-dry	T	<76.	:	<89.5	:	86.3	:	45.2	:	<28.1	:	<36.5	:
Thallium	mg/kg-dry	T	0.2	:	0.24	:	0.24	:	0.25	:	0.19	:	0.24	:
Vanadium	mg/kg-dry	T	43.3	:	46.7	:	44.2	:	42.	:	36.3	:	29.6	:
Zinc	mg/kg-dry	T	77.7	J	61.9	J	62.5	J	73.6	J	65.4	J	59.1	:

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T = Total Fraction

Appendix A-7l
Soils - Biased 2-6 inches
Validated Analytical Results

Parameter	Units	Exposure Area Fraction	Site ID	TSS15-30		TSS15-31		TSS15-32		TSS15-33		TSS15-34		TSS15-35	
			Sample Date	10/31/2002		10/11/2002		10/11/2002		10/12/2002		10/14/2002		10/31/2002	
			Sample ID	TSS15-30-T02N-SOL		TSS15-31-T02N-SOL		TSS15-32-T02N-SOL		TSS15-33-T02N-SOL		TSS15-34-T02N-SOL		TSS15-35-T02N-SOL	
			Exposure Area	SS15		SS15		SS15		SS15		SS15		SS15	
General Chemistry															
Ammonia	mg/kg-dry	T		68.6	:	54.6	J	44.	J	24.4	:	76.	:	27.6	:
Chloride	mg/kg-dry	T		13.	J	5.6	J	<2.5	J	<2.3	J	<2.3	J	15.	J
Fluoride	mg/kg-dry	T		0.12	J	0.48	J	0.31	J	0.38	J	0.26	J	0.69	J
Nitrate	mg/kg-dry	T		2.8	J	17.1	J	4.4	J	3.1	J	3.	J	3.3	J
Phosphorus	mg/kg-dry	T		179.	J	624.	J	542.	J	594.	J	733.	J	762.	J
Sulfate	mg/kg-dry	T		10.	J	41.9	J	3.2	J	3.1	J	3.4	J	27.	J
Total Kjeldahl Nitrogen	mg/kg-dry	T		635.	:	1280.	J	1110.	J	906.	J	1530.	:	691.	:
Total Organic Carbon	mg/kg-dry	T		7860.	J	16700.	J	19400.	J	12300.	J	21500.	J	9060.	J
Laboratory Parameters															
pH	SU	T		7.	:	7.8	:	8.2	:	8.6	:	7.7	:	7.9	:
Solids, Percent	%	T		85.1	:	86.2	:	82.8	:	89.8	:	90.9	:	88.9	:
Specific Conductance	umhos/cm	T		71.1	:	168.	:	91.5	:	85.2	J	65.9	:	235.	:
Geotechnical															
Organic Soils	%	T		4.09	J	5.41	J	5.78	J	5.37	J	6.43	J	5.29	J
Physical Properties															
Cation-Exchange Capacity	meq/100g	T		23.4	:	24.1	:	30.2	:	28.4	:	32.6	:	21.3	:
Sodium Absorption Ratio	ratio	T		0.07	:	0.05	:	0.05	:	0.08	:	0.06	:	0.18	:
Metals															
Aluminum	mg/kg-dry	T		22900.	:	19300.	:	21100.	:	17900.	:	19000.	:	14100.	:
Antimony	mg/kg-dry	T		<0.28	J	<0.19	J	<0.2	J	<0.18	J	<0.26	J	<0.27	J
Arsenic	mg/kg-dry	T		3.9	:	4.2	:	4.3	:	4.1	:	3.5	:	4.5	:
Barium	mg/kg-dry	T		214.	:	234.	:	225.	:	219.	:	149.	:	158.	:
Beryllium	mg/kg-dry	T		1.	:	0.87	:	0.93	:	0.78	:	0.87	:	0.74	:
Boron	mg/kg-dry	T		3.9	J	9.8	:	9.4	:	7.3	:	8.2	J	3.4	:
Cadmium	mg/kg-dry	T		<0.036	J	0.15	:	0.06	:	0.051	:	0.081	:	<0.035	:
Calcium	mg/kg-dry	T		3840.	:	16800.	:	17400.	:	24600.	:	5530.	:	34800.	:
Chromium	mg/kg-dry	T		22.6	:	21.9	:	19.	:	15.7	:	21.5	:	18.5	:
Cobalt	mg/kg-dry	T		11.5	:	9.7	:	9.6	:	8.5	:	8.7	:	7.1	:
Copper	mg/kg-dry	T		21.	:	30.8	:	18.3	:	17.8	:	17.6	:	17.1	:
Iron	mg/kg-dry	T		25000.	:	20400.	:	21400.	:	17800.	:	20300.	:	16200.	:
Lead	mg/kg-dry	T		21.7	:	21.6	:	15.3	:	13.5	:	22.	:	23.4	:
Magnesium	mg/kg-dry	T		4390.	:	5830.	:	5440.	:	5560.	:	5050.	:	4930.	:
Manganese	mg/kg-dry	T		645.	J	532.	J	542.	J	458.	J	456.	J	330.	J

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R = Qualified as rejected value from data validation and results are considered unusable for any purpose

T = Total Fraction

Appendix A-7l
Soils - Biased 2-6 inches
Validated Analytical Results

Parameter	Units	Fraction	TSS15-30		TSS15-31		TSS15-32		TSS15-33		TSS15-34		TSS15-35	
Sample Date			10/31/2002		10/11/2002		10/11/2002		10/12/2002		10/14/2002		10/31/2002	
Sample ID			TSS15-30-T02N-SOL		TSS15-31-T02N-SOL		TSS15-32-T02N-SOL		TSS15-33-T02N-SOL		TSS15-34-T02N-SOL		TSS15-35-T02N-SOL	
Exposure Area			SS15		SS15		SS15		SS15		SS15		SS15	
Mercury	mg/kg-dry	T	0.021	J	<0.018	:	<0.019	:	0.024	:	<0.018	:	<0.017	J
Molybdenum	mg/kg-dry	T	1.4	:	19.4	:	1.8	:	1.4	:	4.4	:	4.3	:
Nickel	mg/kg-dry	T	16.	J	16.	J	14.1	J	12.7	J	15.	J	15.3	J
Potassium	mg/kg-dry	T	3100.	J	3300.	J	2830.	J	2570.	J	2840.	J	2240.	J
Selenium	mg/kg-dry	T	<0.76	J	<0.93	J	<0.99	J	0.74	J	0.68	J	<0.71	J
Silver	mg/kg-dry	T	<0.15	:	<0.14	:	<0.12	:	<0.12	:	<0.12	:	<0.14	:
Sodium	mg/kg-dry	T	<29.8	:	<52.1	:	<47.5	:	<47.6	:	<47.8	:	49.	:
Thallium	mg/kg-dry	T	0.24	:	0.22	:	0.25	:	0.2	:	0.18	:	0.14	:
Vanadium	mg/kg-dry	T	45.7	:	40.5	:	41.3	:	34.5	:	36.3	:	34.3	:
Zinc	mg/kg-dry	T	78.1	J	70.2	J	58.5	J	52.5	J	69.9	J	54.5	J

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Appendix A-7l
Soils - Biased 2-6 inches
Validated Analytical Results

Parameter	Units	Exposure Area Fraction	Site ID Sample Date Sample ID	TSS15-36 10/31/2002 TSS15-36-T02N-SOL	TSS15-37 10/13/2002 TSS15-37-T02N-SOL	TSS15-38 10/11/2002 TSS15-38-T02N-SOL	TSS15-39 10/13/2002 TSS15-39-T02N-SOL	TSS15-4 1/10/2003 TSS15-4-T02N-SOL	TSS15-40 10/13/2002 TSS15-40-T02N-SOL
			Exposure Area	SS15	SS15	SS15	SS15	SS15	SS15
General Chemistry									
Ammonia	mg/kg-dry	T		205. J	135. :	33.7 J	107. :	152. :	100. :
Chloride	mg/kg-dry	T		9.4 J	3.2 J	<2.4 J	<2.4 J	<2.7 :	3.3 J
Fluoride	mg/kg-dry	T		0.39 J	3. J	0.24 J	-	<0.14 J	-
Nitrate	mg/kg-dry	T		19. :	3.5 J	2.7 J	8.7 J	<2.7 J	4.8 J
Phosphorus	mg/kg-dry	T		2350. J	444. J	582. J	539. J	361. :	410. J
Sulfate	mg/kg-dry	T		18. J	32.3 J	<2.4 J	3.6 J	6.8 :	11.6 J
Total Kjeldahl Nitrogen	mg/kg-dry	T		1890. :	326. J	252. J	113. J	1160. :	195. J
Total Organic Carbon	mg/kg-dry	T		29900. J	2200. J	11200. J	14800. J	43700. J	9670. J
Laboratory Parameters									
pH	SU	T		8. :	8.9 :	8.3 :	7.7 :	8. :	8.5 :
Solids, Percent	%	T		83.3 :	84.4 :	84.2 :	85.6 :	76. :	86.6 :
Specific Conductance	umhos/cm	T		287. :	88.8 :	25.7 :	48.4 :	97.5 :	70.6 :
Geotechnical									
Organic Soils	%	T		6.44 J	5.61 J	3.37 J	4.68 J	4.3 :	4.09 J
Physical Properties									
Cation-Exchange Capacity	meq/100g	T		27.5 :	26. :	28.8 :	27.8 :	38.6 :	29.2 :
Sodium Absorption Ratio	ratio	T		0.2 :	1.85 :	0.1 :	<0.05 :	0.06 :	0.13 :
Metals									
Aluminum	mg/kg-dry	T		14500. :	18400. :	24700. :	20100. :	19300. :	19900. :
Antimony	mg/kg-dry	T		<0.29 J	<0.2 J	<0.19 J	<0.19 J	<0.3 J	<0.17 J
Arsenic	mg/kg-dry	T		3.1 :	4.9 :	4.7 :	4.4 :	2. J	4.8 :
Barium	mg/kg-dry	T		169. :	311. :	277. :	207. :	213. :	232. :
Beryllium	mg/kg-dry	T		0.68 :	0.85 :	1.1 :	0.94 :	0.97 :	0.94 :
Boron	mg/kg-dry	T		13.7 :	8.4 J	9. :	9.3 J	5.6 :	8.7 J
Cadmium	mg/kg-dry	T		<0.04 :	<0.03 :	<0.029 :	0.08 :	<0.051 :	<0.027 :
Calcium	mg/kg-dry	T		15200. :	77100. :	5530. :	4120. :	5490. :	4860. :
Chromium	mg/kg-dry	T		24.8 :	19.4 :	21.1 :	17.1 :	16.5 J	17.3 :
Cobalt	mg/kg-dry	T		7.9 :	8. :	10.6 :	9.9 :	9.3 :	9.4 :
Copper	mg/kg-dry	T		29.6 :	15.8 :	16.7 :	16.6 :	11. J	15.3 :
Iron	mg/kg-dry	T		19600. :	17100. :	24300. :	20500. :	17900. :	20500. :
Lead	mg/kg-dry	T		51.7 :	11.5 :	13.6 :	14.4 :	11.7 :	12.9 :
Magnesium	mg/kg-dry	T		5690. :	7750. :	5660. :	4190. :	3190. :	4870. :
Manganese	mg/kg-dry	T		451. J	319. J	566. J	567. J	439. :	512. J

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Appendix A-7l
Soils - Biased 2-6 inches
Validated Analytical Results

Parameter	Units	Exposure Area Fraction	Site ID / Sample Date / Sample ID											
			TSS15-36 10/31/2002 TSS15-36-T02N-SOL		TSS15-37 10/13/2002 TSS15-37-T02N-SOL		TSS15-38 10/11/2002 TSS15-38-T02N-SOL		TSS15-39 10/13/2002 TSS15-39-T02N-SOL		TSS15-4 1/10/2003 TSS15-4-T02N-SOL		TSS15-40 10/13/2002 TSS15-40-T02N-SOL	
			SS15		SS15		SS15		SS15		SS15		SS15	
Mercury	mg/kg-dry	T	<0.02	J	<0.018	:	<0.018	:	0.025	:	0.022	:	<0.019	:
Molybdenum	mg/kg-dry	T	12.9	:	<0.34	J	<0.75	:	<0.96	J	<0.14	:	<0.16	J
Nickel	mg/kg-dry	T	17.8	J	15.6	J	16.1	J	12.7	J	11.8	:	13.6	J
Potassium	mg/kg-dry	T	4510.	J	2100.	J	2520.	J	3230.	J	2940.	J	2240.	J
Selenium	mg/kg-dry	T	<0.76	J	0.74	J	<1.	J	0.88	J	<0.8	J	0.38	J
Silver	mg/kg-dry	T	<0.16	:	<0.14	:	<0.13	:	<0.13	:	<0.2	:	<0.12	:
Sodium	mg/kg-dry	T	126.	:	228.	:	<51.2	:	<50.4	:	<41.4	:	<47.9	:
Thallium	mg/kg-dry	T	0.15	:	0.22	:	0.25	:	0.28	:	0.18	:	0.27	:
Vanadium	mg/kg-dry	T	33.3	:	37.5	:	48.9	:	38.8	:	32.	:	40.8	:
Zinc	mg/kg-dry	T	112.	J	49.6	J	59.1	J	56.4	J	41.5	:	52.5	J

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Appendix A-7l
Soils - Biased 2-6 inches
Validated Analytical Results

Parameter	Units	Exposure Area Fraction	Site ID	TSS15-41		TSS15-42		TSS15-43		TSS15-44		TSS15-45		TSS15-46	
			Sample Date	10/13/2002		10/31/2002		10/31/2002		10/31/2002		10/31/2002		10/31/2002	
			Sample ID	TSS15-41-T02N-SOL		TSS15-42-T02N-SOL		TSS15-43-T02N-SOL		TSS15-44-T02N-SOL		TSS15-45-T02N-SOL		TSS15-46-T02N-SOL	
			Exposure Area	SS15		SS15		SS15		SS15		SS15		SS15	
General Chemistry															
Ammonia	mg/kg-dry	T		84.5	:	90.2	:	23.5	:	92.5	:	108.	:	84.6	:
Chloride	mg/kg-dry	T		<2.4	J	<37.	:	<36.	:	<36.	:	<36.	:	<36.	:
Fluoride	mg/kg-dry	T		-		0.36	J	-		-		-		-	
Nitrate	mg/kg-dry	T		9.4	J	7.	:	3.8	J	13.	:	3.4	J	2.8	J
Phosphorus	mg/kg-dry	T		495.	J	676.	J	573.	J	70.	J	712.	J	637.	J
Sulfate	mg/kg-dry	T		4.8	J	<61.	:	<60.	:	<61.	:	<59.	:	<60.	:
Total Kjeldahl Nitrogen	mg/kg-dry	T		126.	J	974.	:	949.	:	1010.	:	922.	:	718.	:
Total Organic Carbon	mg/kg-dry	T		17700.	J	18700.	J	11600.	J	12700.	J	10300.	J	8960.	J
Laboratory Parameters															
pH	SU	T		8.3	:	8.4	:	7.8	:	7.4	:	7.9	:	7.3	:
Solids, Percent	%	T		86.6	:	81.7	:	83.6	:	82.4	:	84.2	:	84.	:
Specific Conductance	umhos/cm	T		91.6	:	309.	J	198.	J	257.	J	113.	J	75.2	J
Geotechnical															
Organic Soils	%	T		5.06	J	5.6	J	3.9	J	4.3	J	4.1	J	3.6	J
Physical Properties															
Cation-Exchange Capacity	meq/100g	T		26.6	:	33.3	:	30.3	:	30.6	:	29.	:	29.1	:
Sodium Absorption Ratio	ratio	T		0.04	:	0.08	:	0.06	:	0.14	:	0.18	:	0.2	:
Metals															
Aluminum	mg/kg-dry	T		18700.	:	23800.	:	21300.	:	26600.	:	23800.	:	24200.	:
Antimony	mg/kg-dry	T		<0.18	J	<0.28	j	<0.28	J	<0.34	J	<0.3	J	<0.29	J
Arsenic	mg/kg-dry	T		4.4	:	4.1	:	4.5	:	4.4	:	4.2	:	4.5	:
Barium	mg/kg-dry	T		205.	:	291.	:	222.	:	254.	:	207.	:	207.	:
Beryllium	mg/kg-dry	T		0.86	:	0.96	:	0.89	:	1.1	:	0.95	:	0.96	:
Boron	mg/kg-dry	T		9.1	J	7.4	:	6.1	:	9.4	:	7.5	:	7.9	:
Cadmium	mg/kg-dry	T		0.033	:	<0.039	J	<0.039	J	<0.038	J	<0.039	J	<0.039	J
Calcium	mg/kg-dry	T		5340.	:	22400.	:	5810.	:	4660.	:	3860.	:	4150.	:
Chromium	mg/kg-dry	T		17.	:	18.4	:	19.7	:	20.	:	18.7	:	19.4	:
Cobalt	mg/kg-dry	T		9.1	:	10.6	:	10.3	:	11.7	:	10.6	:	10.3	:
Copper	mg/kg-dry	T		15.	:	16.7	:	16.7	:	19.1	:	17.1	:	16.6	:
Iron	mg/kg-dry	T		19600.	:	20900.	:	20800.	:	23800.	:	22700.	:	23600.	:
Lead	mg/kg-dry	T		12.3	:	13.1	:	18.5	:	15.6	:	14.7	:	14.2	:
Magnesium	mg/kg-dry	T		4520.	:	5650.	:	5180.	:	4920.	:	3680.	:	4570.	:
Manganese	mg/kg-dry	T		473.	J	571.	J	589.	J	719.	J	619.	J	562.	J

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Appendix A-7l
Soils - Biased 2-6 inches
Validated Analytical Results

Parameter	Units	Exposure Area Fraction	Site ID	TSS15-41		TSS15-42		TSS15-43		TSS15-44		TSS15-45		TSS15-46	
			Sample Date	10/13/2002		10/31/2002		10/31/2002		10/31/2002		10/31/2002		10/31/2002	
			Sample ID	TSS15-41-T02N-SOL		TSS15-42-T02N-SOL		TSS15-43-T02N-SOL		TSS15-44-T02N-SOL		TSS15-45-T02N-SOL		TSS15-46-T02N-SOL	
			Exposure Area	SS15		SS15		SS15		SS15		SS15		SS15	
Mercury	mg/kg-dry	T		<0.018	:	<0.02	:	<0.019	:	<0.019	:	<0.019	:	<0.017	:
Molybdenum	mg/kg-dry	T		<0.42	J	<0.29	J	<0.22	J	<0.54	J	<0.5	J	<0.34	J
Nickel	mg/kg-dry	T		13.	J	14.2	:	14.	J	13.7	J	12.3	J	13.3	J
Potassium	mg/kg-dry	T		2940.	J	3630.	J	2690.	J	3330.	J	2620.	J	2720.	J
Selenium	mg/kg-dry	T		<0.18	J	1.1	J	1.	J	<0.91	J	<0.79	J	0.97	J
Silver	mg/kg-dry	T		<0.13	:	<0.15	J	<0.15	:	<0.15	:	<0.16	:	<0.16	:
Sodium	mg/kg-dry	T		<48.6	:	<79.1	:	<67.6	:	<77.4	:	<32.7	:	<100.	:
Thallium	mg/kg-dry	T		0.24	:	0.23	:	0.2	:	0.29	:	0.24	:	0.22	:
Vanadium	mg/kg-dry	T		39.4	:	42.6	:	43.9	:	45.	:	45.4	:	48.4	:
Zinc	mg/kg-dry	T		51.7	J	57.7	J	57.3	J	64.7	J	59.5	J	59.1	J

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Appendix A-7l
Soils - Biased 2-6 inches
Validated Analytical Results

Parameter	Units	Exposure Area Fraction	Site ID	TSS15-47		TSS15-48		TSS15-49		TSS15-5		TSS15-50		TSS15-51	
			Sample Date	11/3/2003		11/3/2003		11/3/2003		1/10/2003		11/3/2003		11/3/2003	
			Sample ID	TSS15-47-T02N-SOL		TSS15-48-T02N-SOL		TSS15-49-T02N-SOL		TSS15-5-T02N-SOL		TSS15-50-T02N-SOL		TSS15-51-T02N-SOL	
			Exposure Area	SS15		SS15		SS15		SS15		SS15		SS15	
General Chemistry															
Ammonia	mg/kg-dry	T		131.	:	40.6	:	37.1	:	138.	:	13.5	:	23.	:
Chloride	mg/kg-dry	T		4.4	:	2.4	:	7.6	:	2.9	:	2.9	:	2.4	:
Fluoride	mg/kg-dry	T		<0.11	:	0.15	:	1.9	:	<0.14	J	0.3	:	0.87	:
Nitrate	mg/kg-dry	T		<2.2	J	2.8	J	5.4	J	<2.7	J	<2.2	J	3.1	J
Phosphorus	mg/kg-dry	T		73.	J	53.6	J	161.	J	242.	:	353.	J	132.	J
Sulfate	mg/kg-dry	T		3.4	:	6.3	:	18.8	:	4.3	:	3.3	:	10.3	:
Total Kjeldahl Nitrogen	mg/kg-dry	T		1340.	J	937.	J	535.	J	960.	:	656.	J	504.	J
Total Organic Carbon	mg/kg-dry	T		23500.	:	6970.	:	7090.	:	12600.	J	11200.	:	6750.	:
Laboratory Parameters															
pH	SU	T		8.1	J	7.4	J	8.4	J	7.4	:	8.1	J	8.	J
Solids, Percent	%	T		93.5	:	92.8	:	93.	:	75.3	:	94.5	:	96.7	:
Specific Conductance	umhos/cm	T		199.	J	74.9	J	206.	J	77.1	:	167.	J	137.	J
Geotechnical															
Organic Soils	%	T		5.7	J	4.3	J	3.2	J	3.5	:	4.6	J	3.	J
Physical Properties															
Cation-Exchange Capacity	meq/100g	T		39.1	:	35.7	:	32.7	:	29.8	:	37.9	:	25.6	:
Sodium Absorption Ratio	ratio	T		<0.05	:	0.17	:	0.2	:	0.06	:	<0.05	:	0.11	:
Metals															
Aluminum	mg/kg-dry	T		16300.	:	20400.	:	15700.	:	21100.	:	13800.	:	12600.	:
Antimony	mg/kg-dry	T		<0.49	J	<0.47	J	<0.51	J	<0.3	J	<0.49	J	<0.44	J
Arsenic	mg/kg-dry	T		3.2	J	3.8	J	3.9	J	1.4	J	3.8	J	3.3	J
Barium	mg/kg-dry	T		197.	:	209.	:	162.	:	220.	:	135.	:	105.	:
Beryllium	mg/kg-dry	T		0.84	:	0.97	:	0.85	:	0.84	:	0.81	:	0.8	:
Boron	mg/kg-dry	T		<5.1	:	<7.1	:	<3.4	:	6.	:	<5.1	:	<4.3	:
Cadmium	mg/kg-dry	T		0.35	J	0.63	J	0.38	:	<0.047	:	0.48	:	0.52	:
Calcium	mg/kg-dry	T		11100.	:	3710.	:	12000.	:	4680.	:	16800.	:	4270.	:
Chromium	mg/kg-dry	T		16.	:	17.	:	19.1	:	17.2	J	20.5	:	23.4	:
Cobalt	mg/kg-dry	T		7.4	:	10.	:	8.4	:	10.5	:	7.	:	7.7	:
Copper	mg/kg-dry	T		16.8	:	20.4	:	22.7	:	10.8	J	20.2	:	23.5	:
Iron	mg/kg-dry	T		16400.	:	20000.	:	17400.	:	20400.	:	16100.	:	16600.	:
Lead	mg/kg-dry	T		14.	:	16.5	:	18.6	:	13.3	:	14.5	:	15.6	:
Magnesium	mg/kg-dry	T		4750.	:	4260.	:	5450.	:	3460.	:	5060.	:	4360.	:
Manganese	mg/kg-dry	T		369.	:	608.	:	435.	:	438.	:	351.	:	494.	:

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Appendix A-7l
Soils - Biased 2-6 inches
Validated Analytical Results

Parameter	Units	Exposure Area Fraction	Site ID	TSS15-47		TSS15-48		TSS15-49		TSS15-5		TSS15-50		TSS15-51	
			Sample Date	11/3/2003		11/3/2003		11/3/2003		1/10/2003		11/3/2003		11/3/2003	
			Sample ID	TSS15-47-T02N-SOL		TSS15-48-T02N-SOL		TSS15-49-T02N-SOL		TSS15-5-T02N-SOL		TSS15-50-T02N-SOL		TSS15-51-T02N-SOL	
			Exposure Area	SS15		SS15		SS15		SS15		SS15		SS15	
Mercury	mg/kg-dry	T		0.023	:	<0.016	:	<0.016	:	<0.02	:	<0.016	:	<0.015	:
Molybdenum	mg/kg-dry	T		1.1	:	1.1	:	6.6	:	<0.13	:	2.9	:	7.4	:
Nickel	mg/kg-dry	T		15.1	:	13.8	:	16.6	:	11.9	:	17.9	:	19.2	:
Potassium	mg/kg-dry	T		2140.	J	2630.	J	1920.	J	3240.	J	1650.	J	2080.	J
Selenium	mg/kg-dry	T		0.8	J	0.53	J	0.52	J	<0.79	J	0.68	J	0.61	J
Silver	mg/kg-dry	T		<0.13	:	<0.16	:	<0.15	:	<0.19	:	<0.17	:	<0.14	:
Sodium	mg/kg-dry	T		<36.8	:	<44.9	:	<41.7	:	<38.1	:	<47.1	:	<90.3	:
Thallium	mg/kg-dry	T		0.18	:	0.24	:	0.16	:	0.21	:	0.11	:	0.11	:
Vanadium	mg/kg-dry	T		26.7	:	32.9	:	32.2	:	38.7	:	33.8	:	26.3	:
Zinc	mg/kg-dry	T		45.2	J	57.7	J	59.7	J	41.6	:	53.2	J	60.3	J

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Appendix A-7l
Soils - Biased 2-6 inches
Validated Analytical Results

Parameter	Units	Exposure Area Fraction	Site ID / Sample Date / Sample ID		TSS15-52 11/4/2003 TSS15-52-T02N-SOL SS15		TSS15-53 11/5/2003 TSS15-53-T02N-SOL SS15		TSS15-54 11/5/2003 TSS15-54-T02N-SOL SS15		TSS15-55 11/5/2003 TSS15-55-T02N-SOL SS15		TSS15-56 11/5/2003 TSS15-56-T02N-SOL SS15		TSS15-57 11/5/2003 TSS15-57-T02N-SOL SS15	
General Chemistry																
Ammonia	mg/kg-dry	T			1130.	:	76.9	:	27.1	:	47.	:	56.5	:	81.3	:
Chloride	mg/kg-dry	T			17.3	:	4.5	:	<2.1	:	2.2	:	3.7	:	19.	:
Fluoride	mg/kg-dry	T			2.2	:	93.3	:	<0.11	:	0.2	J	<0.11	:	1.2	:
Nitrate	mg/kg-dry	T			<6.2	J	3.1	J	<2.1	J	<2.2	J	7.4	J	74.6	J
Phosphorus	mg/kg-dry	T			456.	J	69.2	J	188.	J	83.	J	866.	J	51.5	J
Sulfate	mg/kg-dry	T			2240.	:	6.1	:	<2.1	:	2.5	:	9.5	:	93.2	:
Total Kjeldahl Nitrogen	mg/kg-dry	T			24100.	J	587.	J	119.	J	984.	J	290.	J	1440.	J
Total Organic Carbon	mg/kg-dry	T			271000.	:	7930.	:	511.	:	15000.	:	16100.	:	28700.	:
Laboratory Parameters																
pH	SU	T			6.	J	7.4	J	7.5	J	7.7	J	7.6	J	7.5	J
Solids, Percent	%	T			32.3	:	97.4	:	99.3	:	93.4	:	95.	:	91.6	:
Specific Conductance	umhos/cm	T			1060.	J	705.	J	11.1	J	189.	J	179.	J	700.	J
Geotechnical																
Organic Soils	%	T			57.3	J	2.5	J	0.7	J	4.3	J	5.1	J	6.2	J
Physical Properties																
Cation-Exchange Capacity	meq/100g	T			61.9	:	19.8	:	-		34.6	:	-		38.6	:
Sodium Absorption Ratio	ratio	T			1.21	:	0.04	:	-		0.04	:	-		0.44	:
Metals																
Aluminum	mg/kg-dry	T			22700.	:	8730.	:	1850.	:	16500.	:	9220.	:	16900.	:
Antimony	mg/kg-dry	T			<1.5	J	<0.49	J	<0.47	J	<0.48	J	<0.45	J	<0.51	J
Arsenic	mg/kg-dry	T			5.8	J	2.2	J	1.3	J	2.	J	2.8	J	4.5	J
Barium	mg/kg-dry	T			341.	:	97.	:	30.8	:	174.	:	131.	:	220.	:
Beryllium	mg/kg-dry	T			1.3	:	0.55	:	0.21	:	0.68	:	0.65	:	1.2	:
Boron	mg/kg-dry	T			18.2	:	<4.5	:	<0.52	:	8.7	:	4.3	:	3.6	:
Cadmium	mg/kg-dry	T			0.83	:	0.17	:	0.078	:	0.15	:	0.31	:	0.64	:
Calcium	mg/kg-dry	T			12200.	:	1800.	:	647.	:	6050.	:	5400.	:	5360.	:
Chromium	mg/kg-dry	T			23.8	:	8.2	:	4.	:	17.4	:	17.2	:	22.3	:
Cobalt	mg/kg-dry	T			9.3	:	4.7	:	2.4	:	7.8	:	7.8	:	9.1	:
Copper	mg/kg-dry	T			44.4	:	8.7	:	4.5	:	14.9	:	23.9	:	54.3	:
Iron	mg/kg-dry	T			27900.	:	12000.	:	4880.	:	17300.	:	13900.	:	27000.	:
Lead	mg/kg-dry	T			35.4	:	18.2	:	9.	:	13.5	:	21.3	:	48.7	:
Magnesium	mg/kg-dry	T			5530.	:	1940.	:	803.	:	5650.	:	4400.	:	5660.	:
Manganese	mg/kg-dry	T			117.	:	471.	:	207.	:	369.	:	485.	:	716.	:

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Appendix A-7l
Soils - Biased 2-6 inches
Validated Analytical Results

Parameter	Units	Exposure Area Fraction	Site ID / Sample Date / Sample ID											
			TSS15-52 11/4/2003 TSS15-52-T02N-SOL		TSS15-53 11/5/2003 TSS15-53-T02N-SOL		TSS15-54 11/5/2003 TSS15-54-T02N-SOL		TSS15-55 11/5/2003 TSS15-55-T02N-SOL		TSS15-56 11/5/2003 TSS15-56-T02N-SOL		TSS15-57 11/5/2003 TSS15-57-T02N-SOL	
			SS15		SS15		SS15		SS15		SS15		SS15	
Mercury	mg/kg-dry	T	0.07	:	<0.017	:	<0.016	:	<0.018	:	<0.017	:	<0.015	:
Molybdenum	mg/kg-dry	T	20.6	:	0.74	:	<0.19	J	1.7	:	1.8	:	38.2	:
Nickel	mg/kg-dry	T	25.2	:	7.5	:	3.1	:	14.	:	15.2	:	29.7	:
Potassium	mg/kg-dry	T	1830.	J	1860.	J	597.	J	2610.	J	3040.	J	2930.	J
Selenium	mg/kg-dry	T	4.6	J	0.39	J	0.32	J	0.34	J	<0.27	J	1.1	J
Silver	mg/kg-dry	T	0.55	:	<0.16	:	<0.13	:	<0.14	:	<0.17	:	0.45	:
Sodium	mg/kg-dry	T	985.	:	<44.8	:	<37.2	:	<40.5	:	<46.8	:	512.	:
Thallium	mg/kg-dry	T	<0.3	:	0.12	:	<0.095	:	0.15	:	0.14	:	0.25	:
Vanadium	mg/kg-dry	T	38.5	:	15.8	:	6.4	:	26.2	:	21.	:	31.4	:
Zinc	mg/kg-dry	T	111.	J	41.	J	17.8	J	46.8	J	56.9	J	134.	J

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Appendix A-7l
Soils - Biased 2-6 inches
Validated Analytical Results

Parameter	Units	Exposure Area Fraction	Site ID / Sample Date / Sample ID		TSS15-58 11/5/2003 TSS15-58-T02N-SOL SS15		TSS15-59 11/5/2003 TSS15-59-T02N-SOL SS15		TSS15-6 1/10/2003 TSS15-6-T02N-SOL SS15		TSS15-60 11/5/2003 TSS15-60-T02N-SOL SS15		TSS15-61 11/5/2003 TSS15-61-T02N-SOL SS15		TSS15-62 11/5/2003 TSS15-62-T02N-SOL SS15	
General Chemistry																
Ammonia	mg/kg-dry	T			86.4	:	37.5	:	12.8	:	29.5	:	62.4	:	32.6	:
Chloride	mg/kg-dry	T			2.7	:	<2.1	:	3.6	:	2.7	:	3.7	:	2.3	:
Fluoride	mg/kg-dry	T			0.11	:	0.15	:	<0.14	J	0.95	:	0.84	:	1.6	:
Nitrate	mg/kg-dry	T			13.2	J	<2.1	J	10.4	J	10.	J	6.1	J	<2.2	J
Phosphorus	mg/kg-dry	T			73.1	J	459.	J	563.	:	744.	J	746.	J	722.	J
Sulfate	mg/kg-dry	T			5.3	:	3.	:	8.6	:	6.9	:	6.	:	2.8	:
Total Kjeldahl Nitrogen	mg/kg-dry	T			601.	J	563.	J	2840.	:	633.	J	202.	J	157.	J
Total Organic Carbon	mg/kg-dry	T			14300.	:	11400.	:	41300.	J	9170.	:	9400.	:	6500.	:
Laboratory Parameters																
pH	SU	T			6.6	J	7.3	J	7.2	:	8.1	J	8.3	J	8.5	J
Solids, Percent	%	T			94.1	:	97.2	:	73.9	:	91.9	:	92.1	:	94.6	:
Specific Conductance	umhos/cm	T			111.	J	60.4	J	282.	:	154.	J	114.	J	106.	J
Geotechnical																
Organic Soils	%	T			4.5	J	2.3	J	6.	:	5.7	J	4.	J	3.8	J
Physical Properties																
Cation-Exchange Capacity	meq/100g	T			25.6	:	19.1	:	36.	:	-		-		-	
Sodium Absorption Ratio	ratio	T			0.04	:	0.05	:	0.06	:	-		-		-	
Metals																
Aluminum	mg/kg-dry	T			8430.	:	5730.	:	19500.	:	11900.	J	11100.	:	9640.	:
Antimony	mg/kg-dry	T			<0.51	J	<0.51	J	<0.33	J	-		<0.47	J	<0.45	J
Arsenic	mg/kg-dry	T			4.1	J	1.3	J	2.5	J	4.7	J	3.5	J	3.5	J
Barium	mg/kg-dry	T			140.	:	68.2	:	279.	:	235.	J	216.	:	191.	:
Beryllium	mg/kg-dry	T			0.65	:	0.4	:	0.78	:	0.86	:	0.78	:	0.69	:
Boron	mg/kg-dry	T			<4.8	:	<3.5	:	12.7	:	3.2	J	2.8	:	3.2	:
Cadmium	mg/kg-dry	T			0.38	J	0.14	:	<0.051	:	0.2	:	0.24	:	0.22	:
Calcium	mg/kg-dry	T			2390.	:	1540.	:	10100.	:	26300.	J	4900.	:	8500.	:
Chromium	mg/kg-dry	T			16.8	:	6.5	J	16.7	J	10.5	J	10.2	:	9.1	:
Cobalt	mg/kg-dry	T			6.2	:	3.4	:	11.	:	7.7	:	8.5	:	7.4	:
Copper	mg/kg-dry	T			39.3	:	11.1	:	14.7	J	14.8	:	15.4	:	13.8	:
Iron	mg/kg-dry	T			19200.	:	10300.	J	20100.	:	12100.	J	12000.	:	10400.	:
Lead	mg/kg-dry	T			46.5	:	18.	J	16.1	:	12.1	J	12.3	:	11.2	:
Magnesium	mg/kg-dry	T			3950.	:	1440.	:	3590.	:	4940.	J	3380.	:	3740.	:
Manganese	mg/kg-dry	T			378.	:	359.	J	603.	:	420.	J	576.	:	477.	:

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Appendix A-7l
Soils - Biased 2-6 inches
Validated Analytical Results

Parameter	Units	Exposure Area Fraction	Site ID / Sample Date / Sample ID											
			TSS15-58 11/5/2003 TSS15-58-T02N-SOL		TSS15-59 11/5/2003 TSS15-59-T02N-SOL		TSS15-6 1/10/2003 TSS15-6-T02N-SOL		TSS15-60 11/5/2003 TSS15-60-T02N-SOL		TSS15-61 11/5/2003 TSS15-61-T02N-SOL		TSS15-62 11/5/2003 TSS15-62-T02N-SOL	
			SS15		SS15		SS15		SS15		SS15		SS15	
Mercury	mg/kg-dry	T	<0.017	:	<0.017	:	0.028	:	0.022	:	<0.015	:	<0.015	:
Molybdenum	mg/kg-dry	T	32.6	:	5.5	:	0.9	:	1.2	J	<0.32	J	<0.31	J
Nickel	mg/kg-dry	T	14.	:	5.8	:	13.3	:	12.1	:	10.8	:	10.4	:
Potassium	mg/kg-dry	T	2420.	J	1640.	J	3680.	J	1850.	J	1720.	J	1530.	J
Selenium	mg/kg-dry	T	0.69	J	<0.31	J	<0.89	J	0.49	J	0.53	J	0.53	J
Silver	mg/kg-dry	T	0.41	J	<0.16	:	<0.2	:	<0.17	:	<0.16	:	<0.14	:
Sodium	mg/kg-dry	T	87.3	J	<45.8	:	<41.4	:	<68.8	:	<45.2	:	<39.	:
Thallium	mg/kg-dry	T	0.21	:	<0.1	:	0.21	:	0.2	:	0.24	:	0.19	:
Vanadium	mg/kg-dry	T	18.9	:	11.1	:	41.4	:	23.6	J	18.7	:	17.6	:
Zinc	mg/kg-dry	T	85.9	J	40.1	J	48.4	:	41.9	J	37.8	J	34.2	J

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Appendix A-7l
Soils - Biased 2-6 inches
Validated Analytical Results

Parameter	Units	Exposure Area Fraction	Site ID		Sample Date		Sample ID								
			TSS15-7		10/11/2002		TSS15-7-T02N-SOL		TSS15-8		10/14/2002		TSS15-8-T02N-SOL		
			TSS15-9		10/14/2002		TSS15-9-T02N-SOL		----		----		----		
			SS15						SS15						
			SS15												
General Chemistry															
Ammonia	mg/kg-dry	T	14.9	J	22.7	J	61.1	J	-		-		-		
Chloride	mg/kg-dry	T	23.3	J	<2.3	J	3.	J	-		-		-		
Fluoride	mg/kg-dry	T	2.3	J	1.1	J	0.72	J	-		-		-		
Nitrate	mg/kg-dry	T	2.4	J	4.2	J	4.2	J	-		-		-		
Phosphorus	mg/kg-dry	T	774.	J	308.	J	171.	J	-		-		-		
Sulfate	mg/kg-dry	T	956.	J	4.2	J	7.8	J	-		-		-		
Total Kjeldahl Nitrogen	mg/kg-dry	T	39.5	J	239.	:	1340.	J	-		-		-		
Total Organic Carbon	mg/kg-dry	T	<112.	J	1400.	J	21900.	J	-		-		-		
Laboratory Parameters															
pH	SU	T	7.8	:	8.4	:	8.2	:	-		-		-		
Solids, Percent	%	T	89.7	:	88.1	:	83.9	:	-		-		-		
Specific Conductance	umhos/cm	T	662.	:	63.6	:	161.	:	-		-		-		
Geotechnical															
Organic Soils	%	T	2.48	J	4.1	J	8.65	J	-		-		-		
Physical Properties															
Cation-Exchange Capacity	meq/100g	T	22.9	:	18.4	:	35.8	:	-		-		-		
Sodium Absorption Ratio	ratio	T	2.9	:	<0.07	:	0.02	J	-		-		-		
Metals															
Aluminum	mg/kg-dry	T	14300.	:	15100.	:	18100.	J	-		-		-		
Antimony	mg/kg-dry	T	<0.19	J	<0.27	J	<0.29	J	-		-		-		
Arsenic	mg/kg-dry	T	5.	:	3.2	:	3.6	:	-		-		-		
Barium	mg/kg-dry	T	83.6	:	193.	:	278.	:	-		-		-		
Beryllium	mg/kg-dry	T	1.2	:	0.73	:	0.72	:	-		-		-		
Boron	mg/kg-dry	T	3.9	J	8.1	:	12.1	:	-		-		-		
Cadmium	mg/kg-dry	T	0.2	:	0.025	:	0.066	:	-		-		-		
Calcium	mg/kg-dry	T	4050.	:	17200.	:	61900.	:	-		-		-		
Chromium	mg/kg-dry	T	17.2	:	10.6	:	13.6	:	-		-		-		
Cobalt	mg/kg-dry	T	8.8	:	6.8	:	8.1	:	-		-		-		
Copper	mg/kg-dry	T	27.4	:	10.1	:	15.	:	-		-		-		
Iron	mg/kg-dry	T	21200.	:	13200.	:	17000.	J	-		-		-		
Lead	mg/kg-dry	T	55.9	:	8.5	:	8.2	J	-		-		-		
Magnesium	mg/kg-dry	T	4670.	:	4130.	:	6130.	J	-		-		-		
Manganese	mg/kg-dry	T	700.	J	387.	J	377.	J	-		-		-		

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Appendix A-7l
Soils - Biased 2-6 inches
Validated Analytical Results

Parameter	Units	Exposure Area Fraction	Site ID / Sample Date / Sample ID									
			TSS15-7 10/11/2002 TSS15-7-T02N-SOL SS15		TSS15-8 10/14/2002 TSS15-8-T02N-SOL SS15		TSS15-9 10/14/2002 TSS15-9-T02N-SOL SS15		----	----	----
Mercury	mg/kg-dry	T	<0.018	:	<0.018	:	<0.02	:	-	-	-
Molybdenum	mg/kg-dry	T	2.	:	<0.57	:	<0.09	:	-	-	-
Nickel	mg/kg-dry	T	16.3	J	10.3	J	11.6	J	-	-	-
Potassium	mg/kg-dry	T	2050.	J	2540.	J	2810.	J	-	-	-
Selenium	mg/kg-dry	T	<1.	J	0.45	J	0.94	J	-	-	-
Silver	mg/kg-dry	T	0.15	:	<0.12	:	<0.13	:	-	-	-
Sodium	mg/kg-dry	T	283.	:	<90.5	:	<48.3	:	-	-	-
Thallium	mg/kg-dry	T	0.18	:	0.18	:	0.18	J	-	-	-
Vanadium	mg/kg-dry	T	29.8	:	32.7	:	32.9	:	-	-	-
Zinc	mg/kg-dry	T	113.	J	38.1	J	45.	J	-	-	-

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R = Qualified as rejected value from data validation and results are considered unusable for any purpose
T = Total Fraction

Appendix A-7m
Soils - Biased SPLP Soil 2-6 inches
Validated Analytical Results

Parameter	Units	Exposure Area Fraction	Site ID	TSS15-1		TSS15-2		TSS15-3		TSS15-4		----	----
			Sample Date	1/10/2003		1/7/2003		1/7/2003		1/10/2003			
			Sample ID	TSS15-1-T02N-SOL		TSS15-2-T02N-SOL		TSS15-3-T02N-SOL		TSS15-4-T02N-SOL			
			Exposure Area	SS15		SS15		SS15		SS15			
General Chemistry													
Ammonia	mg/L	T		<0.1	:	<0.04	J	0.081	:	<0.26	:	-	-
Bicarbonate (as CaCO3)	mg/L	T		76.7	:	13.5	J	19.6	:	<1.	:	-	-
Carbonate (as CaCO3)	mg/L	T		48.2	:	<1.	J	15.7	:	<1.	:	-	-
Chloride	mg/L	T		<1.8	:	1.3	:	2.2	:	<8.7	:	-	-
Fluoride	mg/L	T		-		0.22	:	0.15	:	-		-	-
Hydroxide (as CaCO3)	mg/L	T		<1.	:	<1.	:	<1.	:	<1.	:	-	-
Nitrate	mg/L	T		0.41	J	0.47	J	0.79	J	0.45	J	-	-
Nitrite	mg/L	T		-		<0.005	:	0.013	:	-		-	-
Phosphate, Ortho As P	mg/L	T		0.054	J	0.15	:	1.6	:	0.24	J	-	-
Phosphorus	mg/L	T		0.16	:	0.2	:	1.6	:	0.4	:	-	-
Sulfate	mg/L	T		0.49	:	<0.4	:	2.6	:	0.55	:	-	-
Total Alkalinity	mg/L	T		125.	:	13.5	J	35.3	:	<1.	:	-	-
Total Kjeldahl Nitrogen	mg/L	T		0.5	:	0.28	:	0.81	:	0.76	:	-	-
Inorganics													
Cyanide	mg/L	T		<0.01	:	<0.01	:	<0.01	:	<0.01	:	-	-
Metals													
Aluminum	mg/L	T		7.37	:	14.7	J	9.77	J	48.	:	-	-
Antimony	mg/L	T		<0.0012	:	<0.0016	J	<0.0006	J	<0.0006	:	-	-
Arsenic	mg/L	T		0.0034	:	0.001	:	0.0017	:	0.0022	:	-	-
Barium	mg/L	T		0.0732	:	0.0936	:	0.0895	:	0.235	:	-	-
Beryllium	mg/L	T		0.00031	:	0.00038	:	0.0003	:	0.0014	:	-	-
Boron	mg/L	T		<0.23	:	0.0592	:	0.0787	:	<0.186	:	-	-
Cadmium	mg/L	T		<0.0002	:	<0.0002	:	<0.0002	:	<0.0002	:	-	-
Calcium	mg/L	T		35.	:	4.44	:	9.96	:	9.51	:	-	-
Chromium	mg/L	T		0.0045	:	0.0082	:	0.0058	:	0.0301	:	-	-
Cobalt	mg/L	T		<0.0016	:	<0.0016	:	<0.0016	:	0.0061	:	-	-
Copper	mg/L	T		0.00078	J	<0.0061	:	<0.0068	:	0.0115	:	-	-
Iron	mg/L	T		4.07	:	8.68	J	5.38	J	30.2	:	-	-
Lead	mg/L	T		0.0025	:	0.0049	:	0.0038	:	0.0114	:	-	-
Magnesium	mg/L	T		2.64	:	2.83	:	2.54	:	7.19	:	-	-
Manganese	mg/L	T		0.0597	:	0.0595	:	0.0466	:	0.16	:	-	-
Mercury	mg/L	T		<0.01	:	<0.01	:	<0.01	:	<0.01	:	-	-
Molybdenum	mg/L	T		<0.0028	:	<0.001	:	<0.0024	:	<0.00055	:	-	-

J = Qualified as estimated during data validation
R = Qualified as rejected value from data validation and results are considered unusable for any purpose
T = Total Fraction

Appendix A-7m
Soils - Biased SPLP Soil 2-6 inches
Validated Analytical Results

Parameter	Units	Exposure Area Fraction	Site ID / Sample Date / Sample ID											
			TSS15-1 1/10/2003 TSS15-1-T02N-SOL		TSS15-2 1/7/2003 TSS15-2-T02N-SOL		TSS15-3 1/7/2003 TSS15-3-T02N-SOL		TSS15-4 1/10/2003 TSS15-4-T02N-SOL		----	----
			SS15		SS15		SS15		SS15			
Nickel	mg/L	T	<0.0032	:	0.0045	:	0.007	:	0.0149	:	-	-
Potassium	mg/L	T	2.	:	2.8 J	:	9.96 J	:	8.11	:	-	-
Selenium	mg/L	T	<0.0016	:	<0.0016	:	<0.0016	:	<0.0016	:	-	-
Silver	mg/L	T	<0.0002	:	<0.0002	:	<0.0002	:	<0.0002	:	-	-
Thallium	mg/L	T	<0.0002	:	<0.0002	:	<0.0002	:	0.0003	:	-	-
Vanadium	mg/L	T	0.0286	:	0.012	:	0.0131	:	0.0318	:	-	-
Zinc	mg/L	T	<0.0184	:	<0.0329	:	<0.0215	:	<0.0922	:	-	-

J = Qualified as estimated during data validation
R = Qualified as rejected value from data validation and results are considered unusable for any purpose
T = Total Fraction

Appendix A-7n
Soils - Biased Hunt's Pond
Validated Analytical Results

Parameter	Units	Exposure Area Fraction	Site ID / Sample Date / Sample ID	HUNT-SOL1 5/11/2004 HUNT1-T01N-SOL SS9		HUNT-SOL2 5/11/2004 HUNT2-T01N-SOL SS9		HUNT-SOL3 5/11/2004 HUNT3-T01N-SOL SS9		HUNT-SOL4 5/11/2004 HUNT4-T01N-SOL SS9		----	----
General Chemistry													
Ammonia	mg/kg-dry	T		47.2	:	9.5	:	51.3	:	48.2	:	-	-
Chloride	mg/kg-dry	T		6.	:	4.4	:	9.5	:	21.6	:	-	-
Fluoride	mg/kg-dry	T		3.5	:	2.5	:	4.7	:	3.2	:	-	-
Nitrate	mg/kg-dry	T		5.3	J	4.2	J	<2.3	J	4.9	J	-	-
Phosphorus	mg/kg-dry	T		126.	J	306.	J	169.	J	437.	J	-	-
Sulfate	mg/kg-dry	T		105.	J	30.7	J	783.	J	49.1	J	-	-
Total Kjeldahl Nitrogen	mg/kg-dry	T		641.	:	235.	:	424.	:	561.	:	-	-
Total Organic Carbon	mg/kg-dry	T		5320.	:	2150.	:	9710.	:	8630.	:	-	-
Laboratory Parameters													
pH	SU	T		7.2	J	8.1	J	7.6	J	7.3	J	-	-
Solids, Percent	%	T		99.1	:	99.6	:	90.4	:	88.3	:	-	-
Specific Conductance	umhos/cm	T		376.	J	166.	J	1360.	J	222.	J	-	-
Geotechnical													
Organic Soils	%	T		4.2	:	2.	:	2.9	:	3.2	:	-	-
Physical Properties													
Cation-Exchange Capacity	meq/100g	T		17.4	:	9.5	:	13.6	:	15.8	:	-	-
Sodium Absorption Ratio	ratio	T		0.8	:	0.1	:	0.35	:	0.95	:	-	-
Metals													
Aluminum	mg/kg-dry	T		7530.	:	4830.	:	6220.	:	6900.	:	-	-
Antimony	mg/kg-dry	T		<0.38	J	<0.39	:	<0.41	J	<0.42	J	-	-
Arsenic	mg/kg-dry	T		3.9	:	2.3	:	3.8	:	3.3	:	-	-
Barium	mg/kg-dry	T		137.	:	57.3	:	107.	:	126.	:	-	-
Beryllium	mg/kg-dry	T		0.69	:	0.44	:	0.62	:	0.67	:	-	-
Boron	mg/kg-dry	T		<0.48	:	<0.48	:	<0.51	:	<0.2	:	-	-
Cadmium	mg/kg-dry	T		0.42	:	0.18	:	0.29	:	0.23	:	-	-
Calcium	mg/kg-dry	T		3680.	:	1800.	:	3850.	:	2800.	:	-	-
Chromium	mg/kg-dry	T		21.9	:	11.9	:	14.8	:	16.8	:	-	-
Cobalt	mg/kg-dry	T		5.7	:	3.8	:	6.3	:	6.8	:	-	-
Copper	mg/kg-dry	T		48.4	:	19.4	:	36.6	:	46.1	:	-	-
Iron	mg/kg-dry	T		18600.	:	11700.	:	15800.	:	17300.	:	-	-
Lead	mg/kg-dry	T		48.4	:	18.3	:	30.6	:	36.	:	-	-
Magnesium	mg/kg-dry	T		4850.	:	3160.	:	3950.	:	4040.	:	-	-
Manganese	mg/kg-dry	T		278.	:	327.	:	385.	:	352.	:	-	-

J = Qualified as estimated during data validation

R = Qualified as rejected value from data validation and results are considered unusable for any purpose

T = Total Fraction

Appendix A-7n
Soils - Biased Hunt's Pond
Validated Analytical Results

Parameter	Units	Exposure Area Fraction	Site ID	HUNT-SOL1		HUNT-SOL2		HUNT-SOL3		HUNT-SOL4		----	----
			Sample Date	5/11/2004		5/11/2004		5/11/2004		5/11/2004			
			Sample ID	HUNT1-T01N-SOL		HUNT2-T01N-SOL		HUNT3-T01N-SOL		HUNT4-T01N-SOL			
			Exposure Area	SS9		SS9		SS9		SS9			
Mercury	mg/kg-dry	T		<0.017	J	<0.016	J	<0.016	J	<0.015	:	-	-
Molybdenum	mg/kg-dry	T		47.7	:	9.7	:	19.7	:	25.6	:	-	-
Nickel	mg/kg-dry	T		18.2	:	10.9	:	15.5	:	16.5	:	-	-
Potassium	mg/kg-dry	T		1520.	:	1250.	:	1220.	J	1460.	:	-	-
Selenium	mg/kg-dry	T		<0.67	:	<0.68	:	<0.72	:	<0.73	:	-	-
Silver	mg/kg-dry	T		0.32	J	<0.094	J	<0.11	J	<0.11	J	-	-
Sodium	mg/kg-dry	T		<102.	:	<60.9	:	<115.	:	<175.	:	-	-
Thallium	mg/kg-dry	T		0.14	:	0.12	:	<0.1	:	0.11	:	-	-
Vanadium	mg/kg-dry	T		21.8	:	12.7	:	17.4	:	17.8	:	-	-
Zinc	mg/kg-dry	T		84.2	:	51.2	:	72.4	:	78.7	:	-	-

J = Qualified as estimated during data validation
R = Qualified as rejected value from data validation and results are considered unusable for any purpose
T = Total Fraction

Appendix A-7o
Soils - Biased Variable Depth
Validated Analytical Results

Parameter	Units	Exposure Area Fraction	Site ID / Sample Date / Sample ID / Exposure Area									
			MMW-50A 2/25/2004 MMW-50A-T03N-SOL GW1		MMW-50A 2/25/2004 MMW-50A-T02N-SOL GW1		MMW-50A 2/25/2004 MMW-50A-T01N-SOL GW1		----	----	----
General Chemistry											
Fluoride	mg/kg-dry	T	1.4	:	1.4	:	0.87	:	-	-	-
Sulfate	mg/kg-dry	T	90.2	:	134.	:	205.	:	-	-	-
Total Organic Carbon	mg/kg-dry	T	<532.	:	<534.	:	585.	:	-	-	-
Laboratory Parameters											
pH	SU	T	4.4	J	4.	J	4.2	J	-	-	-
Solids, Percent	%	T	94.	:	93.7	:	95.	:	-	-	-
Metals											
Aluminum	mg/Kg-dry	T	419.	:	3720.	:	1560.	J	-	-	-
Antimony	mg/kg-dry	T	<0.33	:	<1.9	J	<0.38	J	-	-	-
Arsenic	mg/kg-dry	T	<0.3	:	11.9	:	1.6	J	-	-	-
Barium	mg/kg-dry	T	0.65	J	70.1	:	23.8	J	-	-	-
Beryllium	mg/kg-dry	T	0.1	:	1.1	:	0.17	J	-	-	-
Boron	mg/Kg-dry	T	<0.5	:	8.4	J	<1.9	J	-	-	-
Cadmium	mg/kg-dry	T	0.57	:	0.47	:	0.083	J	-	-	-
Calcium	mg/kg-dry	T	61.7	:	271.	:	64.3	J	-	-	-
Chromium	mg/kg-dry	T	<0.84	:	29.8	:	7.	J	-	-	-
Cobalt	mg/kg-dry	T	0.27	:	2.9	:	0.88	J	-	-	-
Copper	mg/kg-dry	T	96.4	:	139.	:	40.	J	-	-	-
Iron	mg/kg-dry	T	2200.	:	65900.	:	12200.	J	-	-	-
Lead	mg/kg-dry	T	9.1	:	19.2	J	7.	J	-	-	-
Magnesium	mg/kg-dry	T	15.7	J	1600.	:	981.	J	-	-	-
Manganese	mg/kg-dry	T	5.4	:	66.2	:	27.9	J	-	-	-
Mercury	mg/Kg-dry	T	<0.018	:	<0.017	:	<0.016	J	-	-	-
Molybdenum	mg/Kg-dry	T	93.2	:	15.6	J	33.5	J	-	-	-
Nickel	mg/Kg-dry	T	0.23	:	5.8	:	2.7	J	-	-	-
Potassium	mg/kg-dry	T	460.	:	3780.	:	772.	J	-	-	-
Selenium	mg/Kg-dry	T	<0.5	:	<0.5	:	<0.51	J	-	-	-
Silver	mg/Kg-dry	T	<0.56	:	<0.44	J	<0.21	J	-	-	-
Sodium	mg/kg-dry	T	<74.	J	<53.9	J	<71.9	J	-	-	-
Thallium	mg/kg-dry	T	<0.39	:	5.3	J	0.77	J	-	-	-
Vanadium	mg/kg-dry	T	1.7	J	36.2	:	8.5	J	-	-	-
Zinc	mg/kg-dry	T	62.7	J	29.4	:	18.4	J	-	-	-

J = Qualified as estimated during data validation
R = Qualified as rejected value from data validation and results are considered unusable for any purpose
T = Total Fraction

Appendix A-7p
Soils - Biased Tailings
Validated Analytical Results

Parameter	Units	Exposure Area Fraction	Site ID / Sample Date / Sample ID								
			MSS1-114 11/2/2003 MSS1-114-T01N-SOL SS1		MSS1-115 11/2/2003 MSS1-115-T01N-SOL SS1		MSS1-116 11/2/2003 MSS1-116-T01N-SOL SS1		----	----	----
General Chemistry											
Ammonia	mg/kg-dry	T	16.4	:	12.5	:	9.3	:	-	-	-
Chloride	mg/kg-dry	T	535.	:	187.	:	294.	:	-	-	-
Fluoride	mg/kg-dry	T	8.4	:	7.5	:	7.9	:	-	-	-
Nitrate	mg/kg-dry	T	<11.8	J	<11.	J	<10.7	J	-	-	-
Phosphorus	mg/kg-dry	T	1310.	J	786.	J	955.	J	-	-	-
Sulfate	mg/kg-dry	T	13200.	:	6800.	J	15600.	:	-	-	-
Total Kjeldahl Nitrogen	mg/kg-dry	T	845.	J	29.4	J	34.	J	-	-	-
Total Organic Carbon	mg/kg-dry	T	190.	:	<110.	:	<107.	:	-	-	-
Laboratory Parameters											
pH	SU	T	2.8	J	2.7	J	2.9	J	-	-	-
Solids, Percent	%	T	85.	:	91.3	:	93.5	:	-	-	-
Specific Conductance	umhos/cm	T	8380.	J	5810.	J	8350.	J	-	-	-
Geotechnical											
Organic Soils	%	T	3.6	J	2.1	J	1.9	J	-	-	-
Physical Properties											
Cation-Exchange Capacity	meq/100g	T	18.8	:	18.8	:	18.3	:	-	-	-
Sodium Absorption Ratio	ratio	T	0.05	:	0.04	:	0.03	:	-	-	-
Metals											
Aluminum	mg/kg-dry	T	14900.	:	13000.	:	16800.	:	-	-	-
Antimony	mg/kg-dry	T	<0.56	J	<0.51	J	<0.52	J	-	-	-
Arsenic	mg/kg-dry	T	5.8	J	6.2	J	5.8	J	-	-	-
Barium	mg/kg-dry	T	124.	:	105.	:	128.	:	-	-	-
Beryllium	mg/kg-dry	T	17.7	:	10.4	:	12.8	:	-	-	-
Boron	mg/kg-dry	T	<4.2	:	<3.	:	<1.6	:	-	-	-
Cadmium	mg/kg-dry	T	1.7	J	2.	J	2.8	:	-	-	-
Calcium	mg/kg-dry	T	23800.	:	28200.	:	28800.	:	-	-	-
Chromium	mg/kg-dry	T	5.4	:	3.7	:	13.4	:	-	-	-
Cobalt	mg/kg-dry	T	3.	:	3.	:	3.5	:	-	-	-
Copper	mg/kg-dry	T	109.	:	80.1	:	117.	:	-	-	-
Iron	mg/kg-dry	T	31900.	:	24400.	:	20800.	:	-	-	-
Lead	mg/kg-dry	T	192.	:	133.	:	168.	:	-	-	-
Magnesium	mg/kg-dry	T	1730.	:	1220.	:	2620.	:	-	-	-
Manganese	mg/kg-dry	T	392.	:	249.	:	438.	:	-	-	-

J = Qualified as estimated during data validation
R = Qualified as rejected value from data validation and results are considered unusable for any purpose
T = Total Fraction

Appendix A-7p
Soils - Biased Tailings
Validated Analytical Results

Parameter	Units	Exposure Area Fraction	Site ID / Sample Date / Sample ID									
			MSS1-114 11/2/2003 MSS1-114-T01N-SOL		MSS1-115 11/2/2003 MSS1-115-T01N-SOL		MSS1-116 11/2/2003 MSS1-116-T01N-SOL		----	----	----	
			SS1		SS1		SS1					
Mercury	mg/kg-dry	T	0.2	:	0.06	:	0.072	:	-	-	-	
Molybdenum	mg/kg-dry	T	1510.	:	1290.	:	560.	:	-	-	-	
Nickel	mg/kg-dry	T	4.4	:	2.9	:	7.1	:	-	-	-	
Potassium	mg/kg-dry	T	15500.	J	9210.	J	8230.	J	-	-	-	
Selenium	mg/kg-dry	T	1.1	J	1.7	J	1.1	J	-	-	-	
Silver	mg/kg-dry	T	4.3	:	3.8	:	2.5	:	-	-	-	
Sodium	mg/kg-dry	T	1670.	:	1390.	:	1900.	:	-	-	-	
Thallium	mg/kg-dry	T	0.76	:	0.57	:	0.65	:	-	-	-	
Vanadium	mg/kg-dry	T	24.6	:	17.8	:	19.6	:	-	-	-	
Zinc	mg/kg-dry	T	206.	J	219.	J	366.	J	-	-	-	

J = Qualified as estimated during data validation
R = Qualified as rejected value from data validation and results are considered unusable for any purpose
T = Total Fraction

Appendix A-7q
Soils - Random Tailings
Validated Analytical Results

Parameter	Units	Exposure Area Fraction	Site ID / Sample Date / Sample ID											
			TSS14-1 11/3/2003 TSS14-1-T05N-TLG		TSS14-10 11/3/2003 TSS14-10-T05N-TLG		TSS14-2 11/3/2003 TSS14-2-T05N-TLG		TSS14-3 11/3/2003 TSS14-3-T05N-TLG		TSS14-4 11/3/2003 TSS14-4-T05N-TLG		TSS14-5 11/3/2003 TSS14-5-T05N-TLG	
			SS14		SS14		SS14		SS14		SS14		SS14	
General Chemistry														
Ammonia	mg/kg-dry	T	13.8	J	12.8	J	7.5	J	<8.2	J	<8.3	J	7.2	J
Chloride	mg/kg-dry	T	3.5	:	2.7	:	2.1	:	5.	:	3.6	:	<2.1	:
Fluoride	mg/kg-dry	T	1.7	:	0.96	:	1.2	:	2.1	:	1.6	:	1.2	:
Nitrate	mg/kg-dry	T	<2.1	J	2.8	J	<2.1	J	<2.2	J	<2.1	J	<2.1	J
Phosphorus	mg/kg-dry	T	76.5	J	1070.	J	363.	J	956.	J	1100.	J	1010.	J
Sulfate	mg/kg-dry	T	2620.	:	577.	:	197.	:	575.	:	2120.	:	397.	:
Total Kjeldahl Nitrogen	mg/kg-dry	T	140.	:	<19.1	:	<25.5	:	<25.8	:	30.2	:	<23.3	:
Total Organic Carbon	mg/kg-dry	T	1710.	J	<104.	J	<103.	J	<107.	J	<104.	J	<103.	J
Laboratory Parameters														
pH	SU	T	7.6	J	8.	J	7.8	J	7.7	J	7.7	J	7.9	J
Solids, Percent	%	T	97.8	:	96.9	:	97.6	:	94.1	:	96.9	:	97.2	:
Specific Conductance	umhos/cm	T	2170.	J	1360.	J	740.	J	1390.	J	2350.	J	1130.	J
Geotechnical														
Organic Soils	%	T	1.	J	0.6	J	0.5	J	0.7	J	1.6	J	1.4	J
Physical Properties														
Cation-Exchange Capacity	meq/100g	T	20.8	:	16.	:	6.2	:	18.7	:	17.9	:	15.1	:
Sodium Absorption Ratio	ratio	T	0.02	:	0.12	:	<0.03	:	0.11	:	0.21	:	0.13	:
Metals														
Aluminum	mg/kg-dry	T	11300.	:	3260.	:	5780.	:	9740.	:	11700.	:	9310.	:
Antimony	mg/kg-dry	T	<0.41	J	<0.43	:	<0.5	:	<0.47	:	<0.46	:	<0.44	:
Arsenic	mg/kg-dry	T	3.8	:	<1.8	:	<2.	:	<0.86	:	<2.	:	<1.8	:
Barium	mg/kg-dry	T	100.	:	15.9	:	46.9	:	97.4	:	138.	:	106.	:
Beryllium	mg/kg-dry	T	0.9	:	0.54	:	0.59	:	1.1	:	1.1	:	1.	:
Boron	mg/kg-dry	T	<0.58	:	<0.63	:	<0.64	:	<0.64	:	<0.58	:	<0.54	:
Cadmium	mg/kg-dry	T	1.1	J	0.67	:	2.1	:	0.66	:	2.	:	1.1	J
Calcium	mg/kg-dry	T	11600.	J	11900.	:	8200.	:	17400.	:	19300.	:	17700.	:
Chromium	mg/kg-dry	T	36.7	:	6.1	:	15.5	:	42.1	:	49.6	:	43.7	:
Cobalt	mg/kg-dry	T	10.1	:	3.5	:	5.4	:	7.5	:	20.	:	18.8	:
Copper	mg/kg-dry	T	113.	:	57.6	:	110.	:	114.	:	218.	:	177.	:
Iron	mg/kg-dry	T	18600.	J	7390.	:	9710.	:	13900.	:	27100.	:	24300.	:
Lead	mg/kg-dry	T	50.4	J	51.1	:	141.	:	28.1	:	74.1	:	49.6	:
Magnesium	mg/kg-dry	T	7930.	J	1830.	:	3700.	:	8550.	:	9220.	:	8610.	:
Manganese	mg/kg-dry	T	803.	J	525.	:	452.	:	401.	:	435.	:	419.	:

J = Qualified as estimated during data validation

R = Qualified as rejected value from data validation and results are considered unusable for any purpose

T = Total Fraction

Appendix A-7q
Soils - Random Tailings
Validated Analytical Results

Parameter	Units	Exposure Area Fraction	Site ID	TSS14-1		TSS14-10		TSS14-2		TSS14-3		TSS14-4		TSS14-5	
			Sample Date	11/3/2003		11/3/2003		11/3/2003		11/3/2003		11/3/2003		11/3/2003	
			Sample ID	TSS14-1-T05N-TLG		TSS14-10-T05N-TLG		TSS14-2-T05N-TLG		TSS14-3-T05N-TLG		TSS14-4-T05N-TLG		TSS14-5-T05N-TLG	
			Exposure Area	SS14		SS14		SS14		SS14		SS14		SS14	
Mercury	mg/kg-dry	T		<0.017	:	<0.017	:	<0.017	:	<0.018	:	<0.017	:	<0.017	:
Molybdenum	mg/kg-dry	T		122.	J	122.	:	258.	:	124.	:	334.	:	322.	:
Nickel	mg/kg-dry	T		26.9	J	5.3	:	12.7	:	27.8	:	44.3	:	42.5	:
Potassium	mg/kg-dry	T		3490.	J	1020.	J	2160.	J	4920.	J	5420.	J	5050.	J
Selenium	mg/kg-dry	T		0.61	:	0.39	:	0.66	:	0.7	:	1.3	:	1.2	:
Silver	mg/kg-dry	T		0.54	J	0.26	:	0.4	:	0.22	:	0.84	:	0.69	J
Sodium	mg/kg-dry	T		423.	:	92.3	:	210.	:	189.	:	334.	:	278.	:
Thallium	mg/kg-dry	T		0.23	:	<0.086	:	0.14	:	0.44	:	0.44	:	0.36	:
Uranium	mg/kg	T		1.1	J	2.9	J	1.7	J	0.74	J	0.74	J	0.73	J
Vanadium	mg/kg-dry	T		37.9	J	9.1	:	17.7	:	40.5	:	47.2	:	43.2	:
Zinc	mg/kg-dry	T		144.	J	84.8	:	308.	:	88.4	:	207.	:	123.	:

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T = Total Fraction

Appendix A-7q
Soils - Random Tailings
Validated Analytical Results

Parameter	Units	Fraction	Site ID	TSS14-6	TSS14-7A	TSS14-8	TSS14-9	----	----
			Sample Date	11/3/2003	11/3/2003	11/3/2003	11/3/2003		
			Sample ID	TSS14-6-T05N-TLG	TSS14-7-T05N-TLG	TSS14-8-T05N-TLG	TSS14-9-T05N-TLG		
			Exposure Area	SS14	SS14	SS14	SS14		
General Chemistry									
Ammonia	mg/kg-dry	T		<7.6 J	7.8 J	8. J	12.3 J	-	-
Chloride	mg/kg-dry	T		3.9 :	3.6 :	2.3 :	<2.2 :	-	-
Fluoride	mg/kg-dry	T		2.3 :	1.8 :	1. :	1.5 :	-	-
Nitrate	mg/kg-dry	T		<2.2 J	2.1 J	<2.2 J	<2.2 J	-	-
Phosphorus	mg/kg-dry	T		1230. J	1690. J	1260. J	857. J	-	-
Sulfate	mg/kg-dry	T		840. :	458. :	883. :	560. :	-	-
Total Kjeldahl Nitrogen	mg/kg-dry	T		32. :	27.3 :	<24.1 J	41. :	-	-
Total Organic Carbon	mg/kg-dry	T		<106. J	808. J	<107. J	179. J	-	-
Laboratory Parameters									
pH	SU	T		7.6 J	7.8 J	7.8 J	7.8 J	-	-
Solids, Percent	%	T		94.6 :	98.7 :	93.8 :	95. :	-	-
Specific Conductance	umhos/cm	T		1580. J	1410. J	1900. J	1600. J	-	-
Geotechnical									
Organic Soils	%	T		0.8 J	1.3 J	1.3 J	1.1 J	-	-
Physical Properties									
Cation-Exchange Capacity	meq/100g	T		18.9 :	17.3 :	9.1 :	13.4 :	-	-
Sodium Absorption Ratio	ratio	T		0.21 :	0.05 :	0.09 :	0.02 :	-	-
Metals									
Aluminum	mg/kg-dry	T		10900. :	8770. :	9530. :	10100. :	-	-
Antimony	mg/kg-dry	T		0.68 :	<0.48 :	<0.46 :	<0.5 :	-	-
Arsenic	mg/kg-dry	T		<1.3 :	<1.7 :	<1.4 :	<2.2 :	-	-
Barium	mg/kg-dry	T		117. :	156. :	121. :	87.3 :	-	-
Beryllium	mg/kg-dry	T		1.4 :	0.91 :	0.98 :	1. :	-	-
Boron	mg/kg-dry	T		<0.61 :	<0.59 :	<0.7 :	<1.2 :	-	-
Cadmium	mg/kg-dry	T		0.7 :	2. :	1.4 :	0.86 :	-	-
Calcium	mg/kg-dry	T		20500. :	20400. :	19700. :	14600. :	-	-
Chromium	mg/kg-dry	T		44.1 :	28.5 :	32.4 :	40. :	-	-
Cobalt	mg/kg-dry	T		9.8 :	14.6 :	12.8 :	10.5 :	-	-
Copper	mg/kg-dry	T		147. :	295. :	215. :	142. :	-	-
Iron	mg/kg-dry	T		16200. :	21800. :	19600. :	18700. :	-	-
Lead	mg/kg-dry	T		37.7 :	105. :	68. :	37.6 :	-	-
Magnesium	mg/kg-dry	T		9070. :	6460. :	7960. :	8940. :	-	-
Manganese	mg/kg-dry	T		424. :	401. :	412. :	411. :	-	-

J = Qualified as estimated during data validation

R = Qualified as rejected value from data validation and results are considered unusable for any purpose

T = Total Fraction

Appendix A-7q
Soils - Random Tailings
Validated Analytical Results

Parameter	Units	Site ID / Sample Date / Sample ID / Exposure Area / Fraction	TSS14-6 11/3/2003 TSS14-6-T05N-TLG SS14 T		TSS14-7A 11/3/2003 TSS14-7-T05N-TLG SS14 T		TSS14-8 11/3/2003 TSS14-8-T05N-TLG SS14 T		TSS14-9 11/3/2003 TSS14-9-T05N-TLG SS14 T		---- ---- ---- ---- T		---- ---- ---- ---- T	
Mercury	mg/kg-dry	T	<0.015	:	<0.017	:	<0.018	:	<0.015	:	-	:	-	:
Molybdenum	mg/kg-dry	T	210.	:	102.	:	113.	:	187.	:	-	:	-	:
Nickel	mg/kg-dry	T	31.6	:	31.8	:	31.6	:	29.5	:	-	:	-	:
Potassium	mg/kg-dry	T	5340.	J	4120.	J	4690.	J	4700.	J	-	:	-	:
Selenium	mg/kg-dry	T	0.84	:	1.	:	0.84	:	0.89	:	-	:	-	:
Silver	mg/kg-dry	T	0.55	:	1.2	:	0.53	:	0.53	:	-	:	-	:
Sodium	mg/kg-dry	T	221.	:	272.	:	253.	:	135.	:	-	:	-	:
Thallium	mg/kg-dry	T	0.44	:	0.35	:	0.41	:	0.36	:	-	:	-	:
Uranium	mg/kg	T	0.89	J	0.94	J	0.84	J	1.9	J	-	:	-	:
Vanadium	mg/kg-dry	T	43.8	:	35.6	:	40.1	:	42.3	:	-	:	-	:
Zinc	mg/kg-dry	T	89.7	:	230.	:	165.	:	112.	:	-	:	-	:

J = Qualified as estimated during data validation
R = Qualified as rejected value from data validation and results are considered unusable for any purpose
T = Total Fraction

Appendix A-7r
Soils - SPLP Random Tailings
Validated Analytical Results

Parameter	Units	Exposure Area Fraction	Site ID		Sample Date		Sample ID								
			TSS14-1		11/3/2003		TSS14-1-T05N-TLG		TSS14-5		11/3/2003		TSS14-5-T05N-TLG		
			TSS14-7A		11/3/2003		TSS14-7-T05N-TLG		----		----		----		
			SS14		SS14		SS14								
General Chemistry															
Ammonia	mg/L	T	<0.069	:	<0.053	:	0.06	:	-		-		-		
Bicarbonate (as CaCO3)	mg/L	T	<26.4	:	<26.3	:	<25.	:	-		-		-		
Carbonate (as CaCO3)	mg/L	T	<1.	:	<1.	:	<1.	:	-		-		-		
Chloride	mg/L	T	<0.52	:	<0.53	:	<0.56	:	-		-		-		
Fluoride	mg/L	T	0.53	:	0.4	:	0.35	:	-		-		-		
Hydroxide (as CaCO3)	mg/L	T	<1.	:	<1.	:	<1.	:	-		-		-		
Nitrate	mg/L	T	<0.28	:	<0.24	:	<0.29	:	-		-		-		
Nitrite	mg/L	T	0.0088	:	<0.005	:	<0.005	:	-		-		-		
Phosphate, Ortho As P	mg/L	T	<0.01	:	<0.01	:	<0.01	:	-		-		-		
Phosphorus	mg/L	T	<0.01	:	<0.01	:	<0.01	:	-		-		-		
Sulfate	mg/L	T	260.	:	43.3	:	88.3	:	-		-		-		
Total Alkalinity	mg/L	T	<26.4	:	<26.3	:	<25.	:	-		-		-		
Total Kjeldahl Nitrogen	mg/L	T	<0.24	:	<0.24	:	<0.24	:	-		-		-		
Inorganics															
Cyanide	mg/L	T	<0.01	:	<0.01	:	<0.01	:	-		-		-		
Metals															
Aluminum	mg/L	T	<0.0298	:	0.196	:	0.0663	:	-		-		-		
Antimony	mg/L	T	<0.0004	J	<0.0004	J	<0.0004	J	-		-		-		
Arsenic	mg/L	T	<0.0002	:	<0.0002	:	<0.0002	:	-		-		-		
Barium	mg/L	T	0.0264	:	0.056	:	0.105	:	-		-		-		
Beryllium	mg/L	T	<0.0002	J	<0.0002	J	<0.0002	J	-		-		-		
Boron	mg/L	T	<0.0066	:	<0.0055	:	<0.0048	:	-		-		-		
Cadmium	mg/L	T	<0.0002	:	0.00021	:	0.00038	:	-		-		-		
Calcium	mg/L	T	105.	:	20.1	:	36.8	:	-		-		-		
Chromium	mg/L	T	<0.0008	J	<0.0012	:	<0.00087	:	-		-		-		
Cobalt	mg/L	T	<0.0011	:	<0.0011	:	<0.0011	:	-		-		-		
Copper	mg/L	T	0.0028	:	<0.0008	:	0.0023	:	-		-		-		
Iron	mg/L	T	<0.0222	:	<0.019	J	<0.019	J	-		-		-		
Lead	mg/L	T	<0.0004	:	<0.0004	:	<0.0004	:	-		-		-		
Magnesium	mg/L	T	1.7	:	1.13	:	1.66	:	-		-		-		
Manganese	mg/L	T	<0.0019	:	0.0028	:	0.0075	:	-		-		-		
Mercury	mg/L	T	<0.01	J	<0.01	J	<0.01	J	-		-		-		
Molybdenum	mg/L	T	0.403	:	1.05	:	1.4	:	-		-		-		

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T = Total Fraction

Appendix A-7r
Soils - SPLP Random Tailings
Validated Analytical Results

Parameter	Units	Site ID / Sample Date / Sample ID / Exposure Area / Fraction											
		Site ID	TSS14-1		TSS14-5		TSS14-7A		----	----	----
		Sample Date	11/3/2003		11/3/2003		11/3/2003				
		Sample ID	TSS14-1-T05N-TLG		TSS14-5-T05N-TLG		TSS14-7-T05N-TLG				
		Exposure Area	SS14		SS14		SS14				
Nickel	mg/L	T	0.0014	:	<0.0009	:	<0.0009	:	-	-	-
Potassium	mg/L	T	3.51	:	3.05	:	2.23	:	-	-	-
Selenium	mg/L	T	<0.0007	:	<0.0007	:	<0.0007	:	-	-	-
Silver	mg/L	T	<0.001	J	<0.001	J	<0.001	J	-	-	-
Sodium	mg/L	T	<0.64	:	0.543	:	<0.315	:	-	-	-
Thallium	mg/L	T	<0.00012	:	0.00011	:	0.00012	:	-	-	-
Vanadium	mg/L	T	<0.0002	:	0.00069	:	<0.0002	:	-	-	-
Zinc	mg/L	T	<0.0019	:	<0.0035	:	<0.0038	:	-	-	-

J = Qualified as estimated during data validation
R = Qualified as rejected value from data validation and results are considered unusable for any purpose
T = Total Fraction