

November 13, 2009 #3116075

Ms. Lorena Goerger, Project Manager New Mexico Environment Department Petroleum Storage Tank Bureau 1301 Siler Road Building B Santa Fe, NM 87507

RE: ANNUAL GROUND WATER MONITORING REPORT FOR CONOCO MINI MART, 3837 HIGHWAY 64, CHAMA, NEW MEXICO FACILITY #27498 RID #2316 WPID #3414-2

Dear Ms. Goerger:

The following is the seventh ground water monitoring report since the UST removal and excavation at the above referenced site. The sampling event was completed on October 14, 2009.

Included with the report are the laboratory analyses for the water samples collected from the monitoring wells associated with the release site.

If you have any questions, please call our office at (505) 325-5667. Please note that Ms. Tami Ross has left Souder, Miller & Associates, and I will be the new project manager for this site.

Sincerely,

SOUDER, MILLER & ASSOCIATES

Shawna Chubbuck Staff Scientist

Scientists & Engineers www.soudermiller.com

# NOVEMBER 2009 GROUND WATER MONITORING REPORT

For

Conoco Mini-Mart 3837 Highway 64 Chama, New Mexico Facility #27498 RID #2316 WPID #3414-2

November 13, 2009



Prepared For:
New Mexico Environment Department
Petroleum Storage Tank Bureau



Souder, Miller & Associates

Engineering • Environmental • Surveying

#### COVER PAGE FORM 1216 QUARTERLY MONITORING REPORT

1. Site Name:

Conoco Mini Mart

2. Responsible party:

State Lead Site

3. Responsible party mailing address (list contact person if different):

2044 Galisteo Street Santa Fe, NM 87505

4. Facility Number:

27498

5. Address/legal description:

3837 US Hwy 64, Chama, NM

6. Author/consulting company:

Tami Ross and Souder, Miller & Associates

7. Date of report:

November 13, 2009

8. Date of confirmation of release or date PSTB was notified of release:

May 16, 1994



#### STATEMENT OF FAMILIARITY

I, the undersigned, am personally familiar with the information submitted in this report and the attached documents and attest that it is true and complete.

Shawna Chubbuck Staff Scientist Scott A. McKitrick, P.G. Senior Scientist

November 13, 2009

#### I Introduction

#### A. Scope of Work:

This report is pursuant to the September 3, 2009, work plan approved by the New Mexico Environment Department (NMED) (WPID# 3414-2). On October 14, 2009, ground water samples were collected from eight site monitoring wells: MW-4, MW-6, MW-7, MW-8, MW-9, MW-10, MW-11, and MW-12 as shown on Figure 2. The site location is illustrated in Figure 1.

B. This quarter's highlights, if any.

This is the seventh sampling event since the underground storage tank (UST) removal and remedial excavation on the north side of the site. The site excavation removed 1,060 cubic yards of hydrocarbon contaminated soil. UST removal, excavation, backfill, and compaction work was completed from December 11-15, 2006.

Contaminants of concern (COC) are above New Mexico Water Quality Control Commission Regulation (NMWQCCR) standards in monitoring well MW-7 only. Concentrations of COCs have generally decreased since the last sampling event on June 1, 2009. Tables 2 summarizes the ground water sample analyses for this sampling event.

Non-aqueous phase hydrocarbon liquid (NAPL) was not present in site monitoring wells.

As reported in the letter report dated November 2, 2009, monitoring well maintenance activities of MW-3 and MW-13 were also performed on October 14, 2009. Monitoring well MW-13 was determined to be not repairable and was plugged and abandoned. Monitoring well MW-3 was located and determined to be repairable; however, the well was dry.

#### II Activities Performed During This Sampling Event

A. Brief description of remediation system and date installed.

Not applicable.

B. Description of activities performed to keep system operating properly including: inspections, maintenance procedures and modifications, if any.

Not applicable.



C. Monitoring activities performed.

#### **Volatile Organic Monitoring**

Eight site monitoring wells (MW-4, MW-6, MW-7, MW-8, MW-9, MW-10, MW-11, and MW-12) at the Conoco Mini Mart were sampled on October 14, 2009 and analyzed for volatile organics by EPA Method 8260. Figures 4 – 6 are contaminant concentration contour maps. Procedures for sampling the monitoring wells are described in Appendix 1. Laboratory results are included in Appendix 3. Analytical results are provided in Tables 2 and 3.

The highest concentration of contaminants is located in the vicinity of MW-7. Based on this information, SMA believes that the car wash may be a second source for the ground water contamination plume. Concentrations of contaminants measured in MW-7 appear to be relatively stable, showing no signs of attenuation.

#### **Non-Aqueous Phase Liquid Monitoring**

No NAPL was observed in site monitoring wells during this quarterly sampling event.

#### **Ground Water Measurements**

Seven site monitoring wells were gauged for depth to water on October 14, 2009. Field notes are included in Appendix 2. The historical ground water elevation data for the site can be found in Table 1. Figure 3 is a potentiometric surface map. In general, the direction of ground water flow is to the south at a gradient of 0.032 ft/ft. The ground water flow direction and gradient are consistent with historical monitoring results. Ground water elevations have decreased an average of 1.49 feet since the June 2009 sampling event.

#### III Summary and Conclusions

A. Discussion of any trends or changes noted in analytical results or site conditions.

This report summarizes the seventh sampling event since the UST removal and excavation. Contaminants of concern (benzene, total xylenes, and naphthalene) are above the NMWQCCR standards in monitoring wells MW-7.

Over time, concentrations of COCs have not shown a defined trend, having decreased and increased in individual monitoring wells. It is not yet apparent whether the source area excavation of December 2006 has had a beneficial effect on dissolved phase contaminants of concern.

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B. Ongoing assessment of remediation system.

Not applicable for this quarterly event.

C. Recommendations.

SMA recommends the following:

- 1. Plugging and abandoning monitoring well MW-3.
- 2. Due to the fact the soils remaining in place beneath the car wash are above NMED standards for BTEX components and naphthalenes, SMA recommends demolition of the car wash and removal of the soils beneath the car wash.
- 3. SMA recommends continued quarterly monitoring of all site monitoring wells.

NSMA

#### **Figures**

- 1. Vicinity Map
- 2. Site Map
- 3. Potentiometric Surface Map
- 4. Benzene Concentration Map
- 5. Total Xylenes Concentration Map
- 6. Total Naphthalenes Concentration Map

#### **Tables**

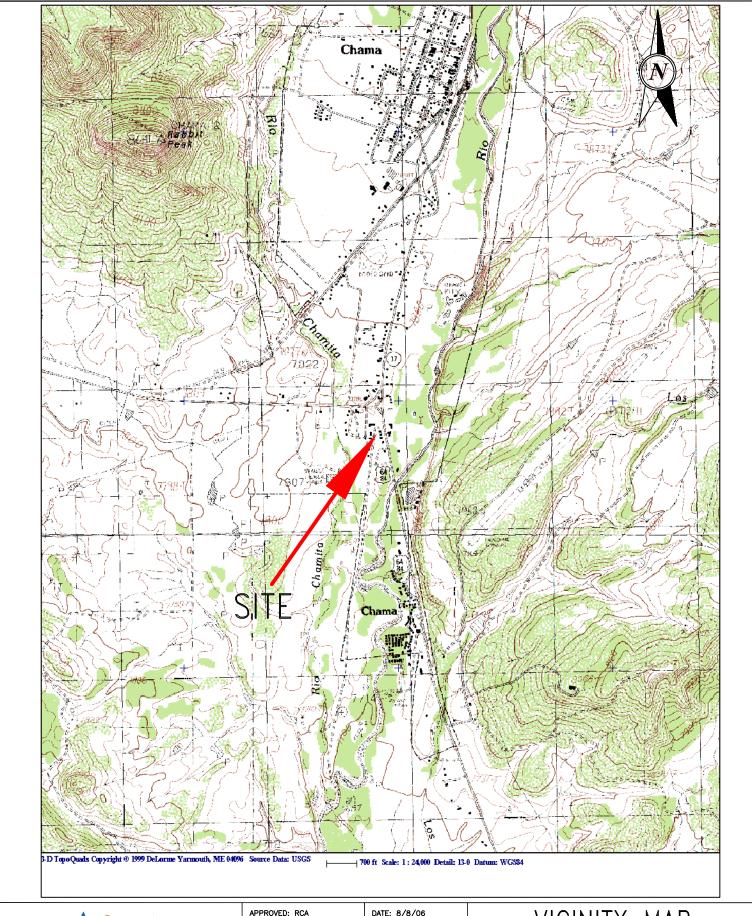
- 1. Summary of Ground Water Elevation Results
- 2. Summary of Ground Water Sample Analysis (8260)

#### **Appendices**

- 1. Sampling protocol
- 2. Field notes
- 3. Laboratory results



**Figures** 



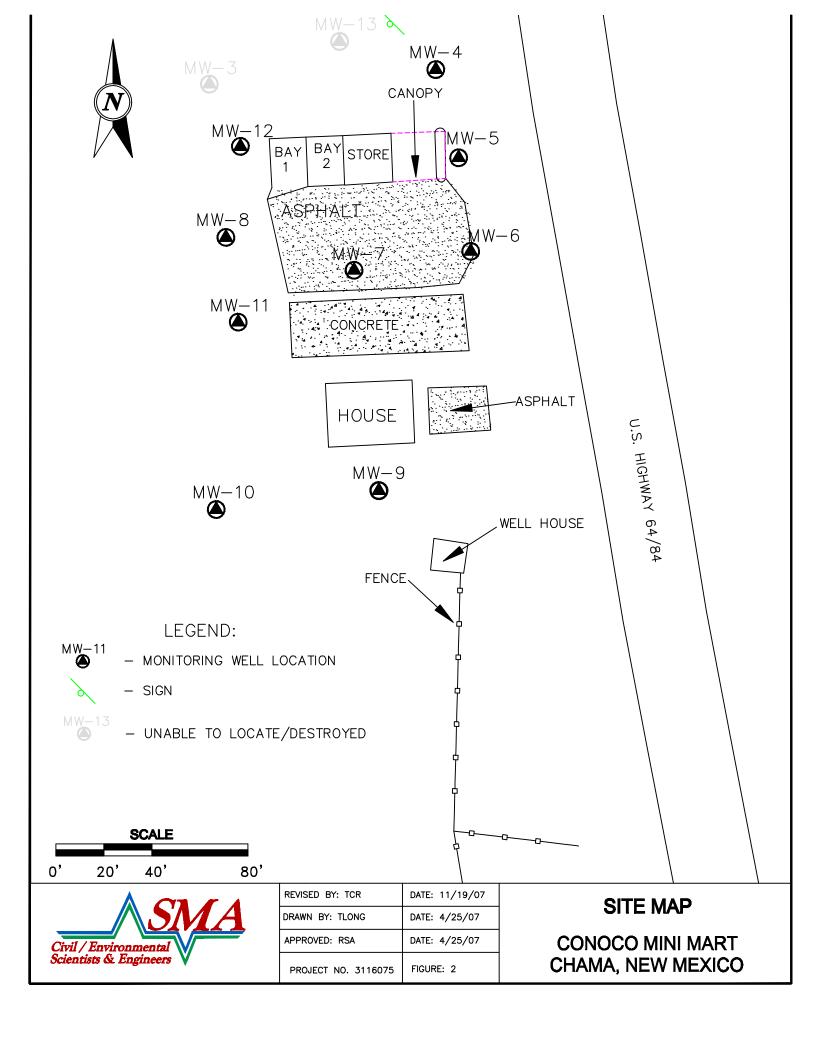
Civil / Environmental Scientists & Engineers

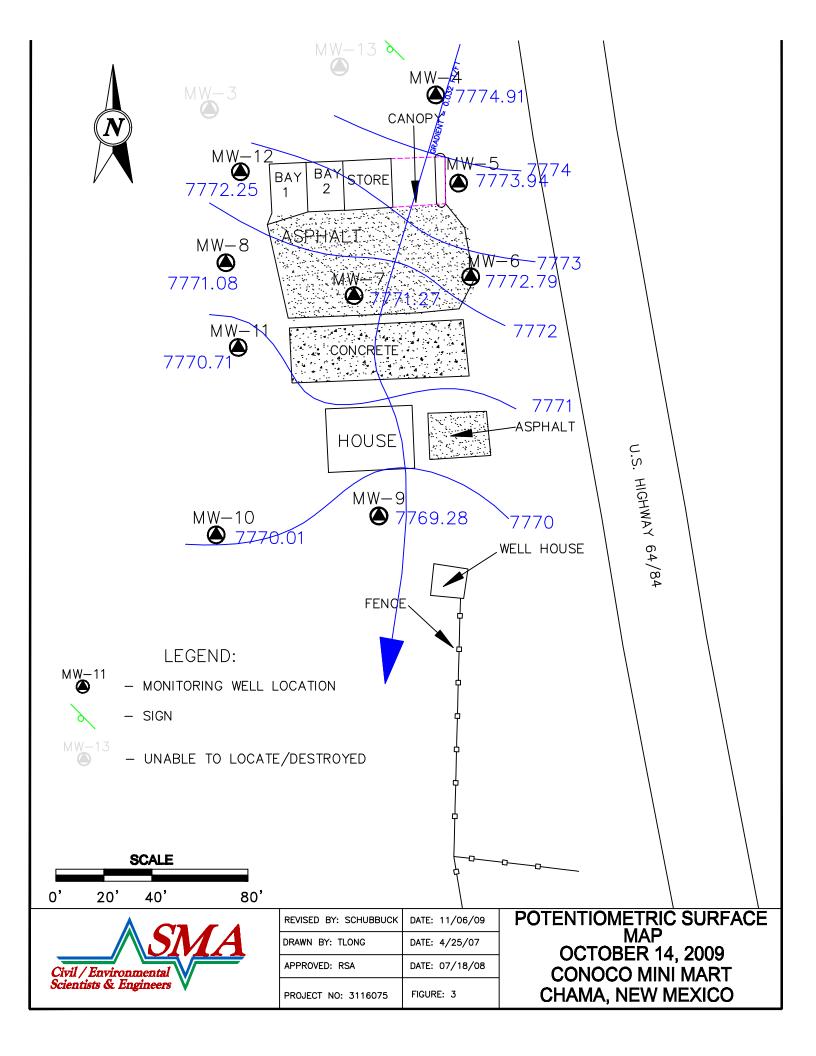
612 E. Murray Drive Farmington, New Hexico 8740 (505) 325-5867

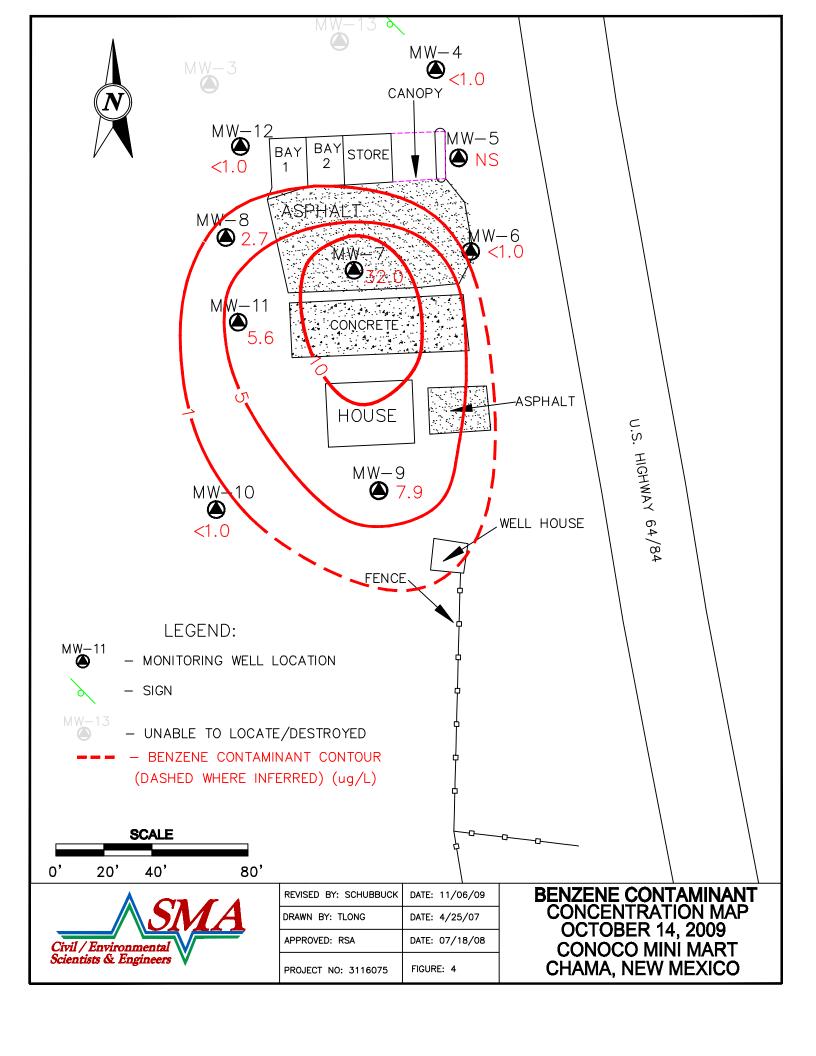
Santa Fe - Farmington Albuquerque - Las Cruces

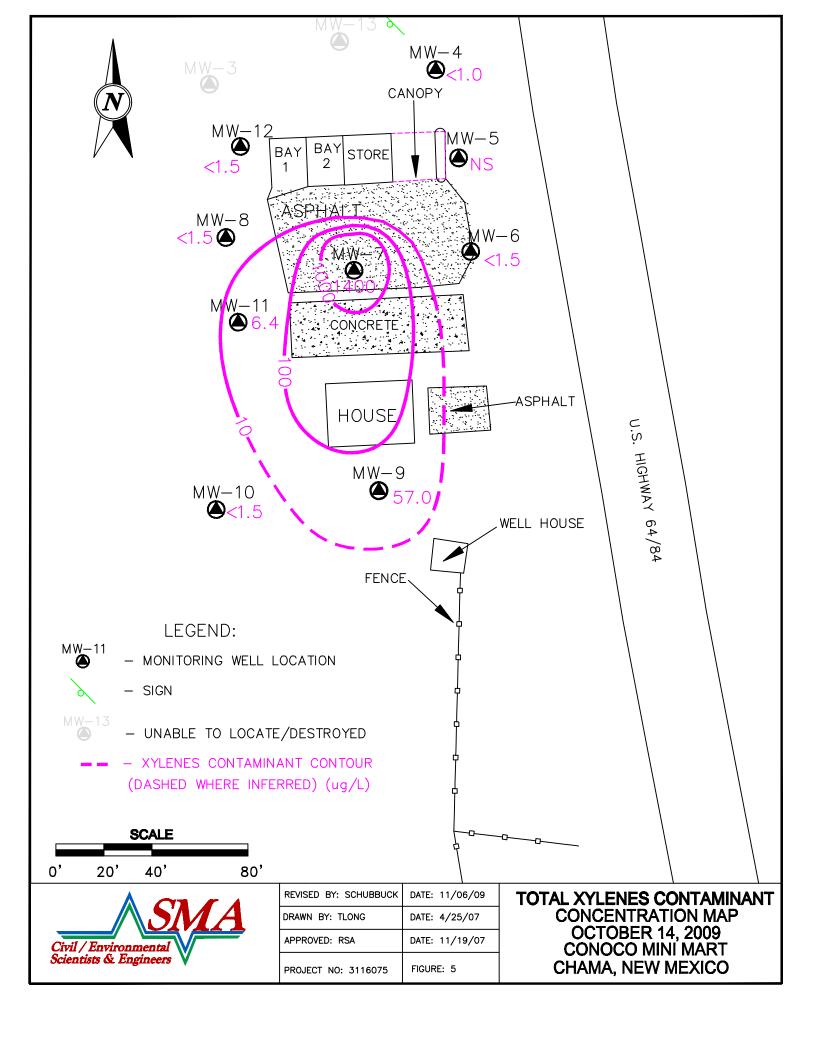
APPROVED: RCA	DATE: 8/8/06
DRAWN BY: TROSS	DATE: 8/8/06
REVISIONS BY:	DATE:
PROJECT NO: 3116075	FIGURE: 1

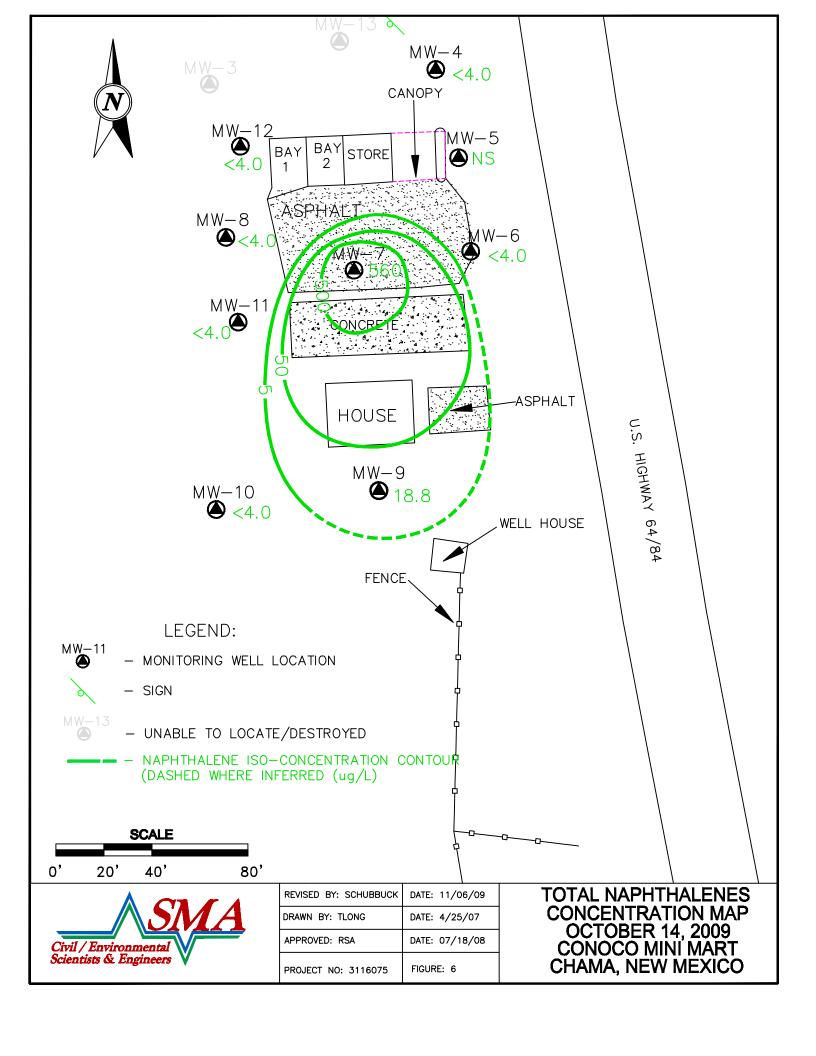
VICINITY MAP
CONOCO MINI MART
3837 HWY 64
CHAMA, NEW MEXICO











**Tables** 

### Table 1 Summary of Groundwater Elevation Results Conoco Mini Mart Chama, New Mexico

(Feet)

//8/2005 //10/2006 //4/2007 //1/2009 //14/2009 //14/2007 //1/2008 //1/2009 //1/2008 //1/2009 //1/2009 //1/2009 //1/2009 //1/2009	15.50 15.00 15.00 14.94 14.94 14.09 14.60 14.65 14.65 14.82 12.00 11.30 11.30 11.30 11.30	NOT M UNABLE WELL DAMAG 7779.55 NOT M NOT M NOT M NOT M NOT M NOT M NOT M NOT M NOT M	5.76 6.21 TO LOCATE EASURED TO LOCATE GED, NO WATI 4.40 4.58 2.96 EASURED 5.08 5.63 5.90	7774.40 7773.95 ER 7775.15 7774.97 7776.59 7774.91 7773.26 7773.09 7775.63 7777.94 7772.98 7772.71
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74/2007 7/25/2007 7/1/2008 7/27/2008 7/1/2008 7/1/2009 7/14/2009 7/8/2005	11.30 11.29 11.34		5.90	7772.71
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7/1/2008 27/2008 0/1/2008 1/1/2009 1/14/2009 1/8/2005	11.34	,	3.74 5.31	7774.87 7773.30
27/2008 0/1/2008 6/1/2009 0/14/2009 1/8/2005			5.31 2.40	7773.30 7776.21
0/1/2008 6/1/2009 6/14/2009 6/8/2005	11.45		5.22	7773.39
/14/2009 //8/2005	11.42		5.65	7772.96
7/8/2005	11.50		4.81 5.82	7773.80
	11.48 12.50	7779.28	5.82 6.84	7772.79 7772.44
/10/2006	11.90	, , , , 3.20	6.59	7772.69
/4/2007	12.00		4.79	7774.49
/25/2007	11.95		7.33	7771.95
<u>/1/2008</u> /27/2008	12.13 12.12		3.61 6.96	7775.67 7772.32
0/1/2008	12.14		7.83	7771.45
/1/2009	12.10		6.41	7772.87
/14/2009	12.15		8.01	7771.27
<u>//8/2005</u> /10/2006	15.00 14.85	7779.64	7.76 7.91	7771.88 7771.73
10/2006	14.95		6.71	7772.93
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0/1/2008 6/1/2009	15.00	NOT W	7.15	7772.49
/14/2009	15.03		8.56	7771.08
/4/2007	11.30	7777.49	4.92	7772.57
/25/2007	10.52		7.26	7770.23
/1/2008 /27/2008	13.14 12.86		3.23 6.95	7774.26 7770.54
2 <i>1/2008</i> 0/1/2008	12.96		7.72	7769.77
/1/2009	13.65		6.23	7771.26
/14/2009	13.35		8.21	7769.28
/4/2007	13.30	7777.61	4.88 6.75	7772.73
<u>/25/2007</u> //1/2008	13.17 13.40		6.75 2.68	7770.86 7774.93
/1/2008 /27/2008	13.40		6.51	7771.10
0/1/2008	13.40		7.06	7770.55
/1/2009	13.40		5.83	7771.78
		7779 52		7770.01 7773.79
/4/2007 /25/2007	14.81	1110.03		7770.70
/1/2008	11.40		3.04	7775.49
27/2008	11.44		6.76	7771.77
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/1/2009 /14/2009	11.46			7772.34 7770.71
/4/2007	13.55	7780.28	5.75	7774.53
/25/2007	12.84		7.60	7772.68
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				7772.90 7772.47
5/1/2009	13.00		6.98	7773.30
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/4/2007	13.55	7780.47	5.99	7774.48
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/14/2009		NOT M	EASURED	
	-			
	0/1/2008 1/1/2009 1/1/2009 1/1/2009 1/1/2008 1/1/2008 1/1/2008 1/1/2009 1/1/2009 1/1/2008 1/1/2008 1/1/2008 1/1/2008 1/1/2008 1/1/2008 1/1/2009 1/1/2009 1/1/2008 1/1/2009 1/1/2008 1/1/2008 1/1/2008 1/1/2008 1/1/2008 1/1/2008 1/1/2008 1/1/2008 1/1/2008 1/1/2008 1/1/2008 1/1/2008 1/1/2008 1/1/2008 1/1/2008	0/1/2008 13.40 1//2009 13.40 1/4/2009 13.43 1/4/2007 12.00 1/25/2007 14.81 1/1/2008 11.40 27/2008 11.44 0/1/2009 11.60 1/4/2009 11.60 1/4/2007 13.55 1/25/2007 12.84 1/1/2008 12.97 27/2008 13.00 0/1/2009 13.05 1/4/2009 13.05 1/4/2009 13.05 1/4/2009 13.05 1/4/2009 13.65 1/4/2007 13.55 1/25/2007 14.51 1/1/2008 13.69 1/1/2008 13.69 1/1/2008 13.69 1/1/2009 13.69 1/1/2009 13.69 1/1/2009 13.69 1/1/2009 13.69 1/1/2009 13.69	0/1/2008	0/1/2008         13.40         7.06           0/1/2009         13.40         5.83           0/14/2009         13.43         7.60           0/4/2007         12.00         7778.53         4.74           0/25/2007         14.81         7.83           0/1/2008         11.40         3.04           27/2008         11.44         6.76           0/1/2009         11.60         6.19           0/14/2009         11.46         7.82           0/1/2008         12.97         3.93           27/2008         13.00         7.38           0/1/2008         12.97         3.93           27/2008         13.00         6.98           0/14/2009         13.05         8.03           0/14/2009         13.05         8.03           0/14/2007         13.55         7780.47         5.99           0/25/2007         14.51         7.57           0/1/2008         13.69         7.10           0/1/2008         13.69         7.10           0/1/2009         13.69         7.69           0/1/2009         13.69         7.69           0/1/2009         13.69         7.69

## Table 2 Summary of Groundwater Sample Analytical Results US EPA Method 8260 Conoco Mini Mart Chama, New Mexico

Monitoring Well			Method	8021/8260 (be	ginning Octol	per 2009)				
Identification	Date	Benzene	Toluene	Ethyl- benzene	Total Xylenes	Total BTEX	MTBE	Total Naphthalenes		
MW-3	7/8/2005	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0			
INIAA-2	7/10/2006	<0.5	<0.5	<0.5	<1.0	<1.0	<1.0			
	4/4/2007		UNABLE TO LOCATE							
	10/25/2007	NOT SAMPLED								
	4/1/2008				NOT SAMPLE	D				
	6/27/2008				NOT SAMPLE	D				
	10/1/2008				NOT SAMPLE	D				
	6/1/2009		UNABLE TO LOCATE							
	10/14/2009		NOT SAMPLED							
NMWQCC and 20		10.0	750.0	750.0	620.0	_	100.0	30.00		

Monitoring Wall			Method	8021/8260 (be	ginning Octob	oer 2009)		
Monitoring Well Identification	Date	Benzene	Toluene	Ethyl- benzene	Total Xylenes	Total BTEX	MTBE	Total Naphthalenes
MW-4	7/8/2005	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	
IVI VV-4	7/10/2006	<0.5	<0.5	<0.5	<1.0	<1.0	<1.0	
	4/4/2007	<2.5	<2.5	<2.5	<5.0	<5.0	<5.0	
	10/25/2007	NOT SAMPLED						
	4/1/2008				NOT SAMPLE	D		
	6/27/2008				NOT SAMPLE	D		
	10/1/2008				NOT SAMPLE	D		
	6/1/2009				NOT SAMPLE	D		
	10/14/2009	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<4.0
NMWQCC and 20		10.0	750.0	750.0	620.0		100.0	30.00

Monitoring Well			Method	8021/8260 (be	ginning Octob	oer 2009)			
Identification	Date	Benzene	Toluene	Ethyl- benzene	Total Xylenes	Total BTEX	MTBE	Total Naphthalenes	
MW-5	7/8/2005	<1.0	4.8	210.0	940.0	1154.8	<1.0		
G-AAIAI	7/10/2006	<0.5	1.9	142.0	255.5	399.4	1.7		
	4/4/2007	1.9	0.49	195.0	282.9	478.4	<1.0		
	10/25/2007	NOT SAMPLED							
	4/1/2008				NOT SAMPLE	D			
	6/27/2008				NOT SAMPLE	D			
	10/1/2008				NOT SAMPLE	D			
	6/1/2009				NOT SAMPLE	D			
	10/14/2009	NOT SAMPLED							
NMWQCC and 20		10.0	750.0	750.0	620.0		100.0	30.00	

Monitoring Woll	Method 8021/8260 (beginning October 2009)									
Monitoring Well Identification	Date	Benzene	Toluene	Ethyl- benzene	Total Xylenes	Total BTEX	MTBE	Total Naphthalenes		
MW-6	7/8/2005	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0			
IVI V V - O	7/10/2006	<0.5	<0.5	<0.5	<1.0	<1.0	<1.0	< 0.943		
	4/4/2007	<2.5	<2.5	<2.5	0.87	0.87	<5.0	< 0.980		
	10/25/2007	<1.0	<1.0	<1.0	<2.0	<1.0	<2.5	<6.0		
	4/1/2008	<1.0	<1.0	<1.0	<2.0	<1.0	<2.5	<2.0		
	6/27/2008	<1.0	<1.0	<1.0	<2.0	<1.0	<2.5	<2.0		
	10/1/2008	<1.0	<1.0	<1.0	<2.0	<1.0	<2.5	<2.2		
	6/1/2009	<1.0	<1.0	<1.0	<1.5	<1.5	<1.0	<2.0		
	10/14/2009	<1.0	<1.0	<1.0	<1.5	<1.5	<1.0	<4.0		
NMWQCC and 20		10.0	750.0	750.0	620.0		100.0	30.00		

Monitoring Well			Method	8021/8260 (be	ginning Octo	ber 2009)		
Identification	Date	Benzene	Toluene	Ethyl- benzene	Total Xylenes	Total BTEX	MTBE	Total Naphthalenes
MW-7	7/8/2005	700.0	86.0	530.0	1300.0	2616.0	<10	
IVI VV - /	7/10/2006	50.0	21.7	399.0	1264.0	1734.7	17.5	427.6
	4/4/2007	62.6	12.00	508.0	1655.00	2237.60	23.3	488.5
	10/25/2007	36.0	19.00	480.0	1400.00	1935.00	<25	220.0
	4/1/2008	48.0	18.00	530.0	1500.00	2096.00	<25	326.0
	6/27/2008	49.0	17.00	680.0	2500.00	3246.00	<25	163.0
	10/1/2008	44.0	15.00	590.0	1500.00	2149.00	<25	348.00
	6/1/2009	40.0	16.00	550.0	1500.00	2106.00	<10	214.00
	10/14/2009	32.0	14.00	610.0	1400.00	2056.00	<5.0	560.00
NMWQCC and 20		10.0	750.0	750.0	620.0		100.0	30.00

## Table 2 Summary of Groundwater Sample Analytical Results US EPA Method 8260 Conoco Mini Mart Chama, New Mexico

Monitoring Well			Method	8021/8260 (be	ginning Octo	ber 2009)		
Identification	Date	Benzene	Toluene	Ethyl- benzene	Total Xylenes	Total BTEX	MTBE	Total Naphthalenes
MW-8	7/8/2005	49.0	42.0	600.0	1600.0	2291.0	<10	
IVIVV-O	7/10/2006	75.8	3.7	425.0	503.0	1007.5	44.3	74.1
	4/4/2007	49.7	7.96	570.0	1126.90	1754.56	80.9	233.70
	10/25/2007	NOT SAMPLED						
	4/1/2008				NOT SAMPLE	ED		
	6/27/2008				NOT SAMPLE	ED		
	10/1/2008				NOT SAMPLE	ED		
	6/1/2009	4.6	<1.0	34.0	10.00	48.60	<1.0	<2.0
	10/14/2009	2.7	<1.0	1.8	<1.5	4.50	<1.0	<4.0
NMWQCC and 20		10.0	750.0	750.0	620.0		100.0	30.00

Monitoring Well			Method	3021/8260 (be	ginning Octo	ber 2009)		
Identification	Date	Benzene	Toluene	Ethyl- benzene	Total Xylenes	Total BTEX	MTBE	Total Naphthalenes
MW-9	4/4/2007	<2.5	<2.5	<2.5	<5.0	<5.0	<5.0	< 0.971
	10/25/2007	<1.0	<1.0	<1.0	<2.0	<1.0	<2.5	<6.0
	4/1/2008	<1.0	<1.0	<1.0	<2.0	<1.0	<2.5	<2.0
	6/27/2008	8.2	3.9	50.0	<2.0	62.10	<2.5	5.00
	10/1/2008	11.0	7.5	58.0	61.0	137.50	<2.5	<10
	6/1/2009	<1.0	<1.0	1.8	1.7	3.50	<1.0	<2.0
	10/14/2009	7.9	9.2	56.0	57.0	130.10	<1.0	18.8
NMWQCC and 20		10.0	750.0	750.0	620.0		100.0	30.00

Monitoring Well	Method 8021/8260 (beginning October 2009)									
Identification	Date	Benzene	Toluene	Ethyl- benzene	Total Xylenes	Total BTEX	MTBE	Total Naphthalenes		
MW-10	4/4/2007	<2.5	<2.5	<2.5	<5.0	<5.0	<5.0	< 0.971		
	10/25/2007	<1.0	<1.0	<1.0	<2.0	<1.0	<2.5	<6.0		
	4/1/2008	<1.0	<1.0	<1.0	<2.0	<1.0	<2.5	<2.0		
	6/27/2008	<1.0	<1.0	<1.0	<2.0	<1.0	<2.5	<2.0		
	10/1/2008	<1.0	<1.0	<1.0	<2.0	<1.0	<2.5	<2.2		
	6/1/2009	<1.0	<1.0	<1.0	<2.0	<1.0	<2.5	<2.0		
	10/14/2009	<1.0	<1.0	<1.0	<1.5	<1.5	<1.0	<4.0		
NMWQCC and 20		10.0	750.0	750.0	620.0		100.0	30.00		

Monitoring Well			Method 8	3021/8260 (be	ginning Octol	per 2009)		
Identification	Date	Benzene	Toluene	Ethyl- benzene	Total Xylenes	Total BTEX	MTBE	Total Naphthalenes
MW-11	4/4/2007	31.1	16.1	138.0	70.98	256.2	< 5.0	52.8
	10/25/2007	21.0	5.4	280.0	13.00	319.4	17.0	14.9
	4/1/2008	11.0	<1.0	24.0	9.10	44.1	<2.5	3.1
	6/27/2008	18.0	<1.0	130.0	8.80	156.8	<2.5	5.5
	10/1/2008	9.2	<1.0	47.0	5.20	61.4	<2.5	<2.2
	6/1/2009	10.0	<1.0	24.0	5.00	39.0	<1.0	<2.0
	10/14/2009	5.6	<1.0	21.0	6.40	33.0	<1.0	<4.0
NMWQCC and 20		10.0	750.0	750.0	620.0		100.0	30.00

Monitoring Well	Method 8021/8260 (beginning October 2009)								
Identification	Date	Benzene	Toluene	Ethyl- benzene	Total Xylenes	Total BTEX	MTBE	Total Naphthalenes	
MW-12	4/4/2007	10.9	<2.5	43.5	129.00	183.4	<5.0	39.98	
	10/25/2007	1.9	<1.0	35.0	76.00	112.9	2.7	2.1	
	4/1/2008	3.2	11.0	150.0	750.00	914.2	2.5	12.0	
	6/27/2008	<1.0	1.2	78.0	420.00	499.2	2.5	62.00	
	10/1/2008	<1.0	<1.0	12.0	32.00	44.0	<2.5	<10	
	6/1/2009	<5.0	<5.0	69.0	200.00	269.0	<5.0	30.30	
	10/14/2009	<1.0	<1.0	1.8	<1.5	1.8	<1.0	<4.0	
NMWQCC and 20		10.0	750.0	750.0	620.0		100.0	30.00	

Monitoring Well		Method 8021/8260 (beginning October 2009)						
Identification	Date	Benzene	Toluene	Ethyl- benzene	Total Xylenes	Total BTEX	MTBE	Total Naphthalenes
MW-13	4/4/2007	19.7	8.36	193.0	380.60	601.7	19.7	
	10/25/2007	1.7	<1.0	36.0	13.00	50.7	<2.5	
	4/1/2008	1.6	<1.0	32.0	89.00	122.6	<2.5	
	6/27/2008	1.5	<1.0	47.0	16.00	64.5	<2.5	
	10/1/2008	1.2	<1.0	21.0	<2.0	22.2	<2.5	
	6/1/2009			UI	NABLE TO LO	CATE		
	10/14/2009	/2009 ABANDONED						
NMWQCC and 20		10.0	750.0	750.0	620.0	_	100.0	30.00

Notes:

Results in ug/L MTBE = Methyl Tertiary Butyl Ether Red indicates concentration exceeds standard

NA = Not Analyzed

## Appendix 1

**Sampling Protocol** 

Ground water samples were collected as established in the New Mexico Underground Storage Tank Bureau Guidelines for Corrective Action promulgated March 2000.

Water levels were measured prior to sample collection using a cleaned water level probe beginning with least contaminated, or clean monitoring wells to the most contaminated monitoring wells. Water levels of each monitoring well were recorded in field form. The water level probe was rinsed three times with distilled water prior to measuring water level in each monitoring well.

Monitoring wells were purged of three well bore volumes or until the well went dry prior to sampling. Samples collected for Method 8260 were collected in 40 ml vials, preserved with mercuric chloride, labeled with the date, time, monitoring well number, and the name of the sampler, and stored on ice. Samples collected for Method 8310 were collected in 1 L amber bottles, labeled with the date, time, monitoring well number and the name of the sampler, and stored on ice. Samples collected for Method 6010 were collected in 125 mL polypropylene bottles, labeled with the date, time, monitoring well number and the name of the sampler, and stored on ice.

Sample numbers were recorded on chain of custody forms and field notebook prior to delivery to the analyzing laboratory.

Appendix 2

**Field Notes, Copies** 



\	Emple Time 1321	ELL PURGE RECORD
-	JOB NAME: Chama Mini Mart	DATE: 10/14/09 TIME: 1220
	JOB#: 316075	Representative: 22
	1101111110	

MONITORING WELL: 12

SAMPLING METHOD: USEPA SW846

FIELD CONDITIONS: Cloudy cool, breezy

**DECONTAMINATION METHOD:** SINGLE USE BAILER, FIELD EQUIPMENT: ALCANOX

WASH, TRIPLE DI WATER RINSE

Total Depth of well: 13.05 feet

Depth to water before purging 8.03 feet

in Feet	ge in
5.02 2-inch 4-inch 3 Gallons	
0.163 0.653	

TIME	VOLUME PURGED	рН	SPECIFIC CONDUCTIVITY	TEMP IN °C	DISOLVED	TURBIDITY	COMMENTS
13:16	1.0 gal	5.94	1.07	17.2			CIEAR NO SHEEN, NO MORE
1321	1.0 gnl 2.5 gnl	5.82	1.07	15.8			HZO GRAYISH IN WA
							TILO GEHYBA IN WIL
						****	

Sample Time N/S NO HZD W	ELL PURGE RECORD
JOB NAME: Chama Mini Mart	DATE: 10/14/09 TIME: 1223
JOB#: 316075	SMA Representative: 22
MONITORING WELL: 3 SAMPLING METHOD: USEPA SW84 FIELD CONDITIONS: Cloudy	6 cod, breeze
DECONTAMINATION METHOD: WASH, TRIPLE DI WATER RINSE	SINGLE USE BAILER, FIELD EQUIPMENT: ALCANOX

Total Depth of well: 5,21 feet

Depth to water before purging € feet

WELL IS DRY"

Height of Water Column in Feet	1	PVC neter	1 Volume in Gallons	Minimum Purge Volumes	is i ungo ni
	2-inch	4-inch		3	Gallons
	0.163	0.653			

TIME	VOLUME PURGED	PΗ	SPECIFIC CONDUCTIVITY	TEMP IN.	DISOLVED OXYGEN	TURBIDITY	COMMENTS
		o PV	well was	relocal	ed by	sarveyo,	5
			cap a	W7 4	gravel	in we	//
			·				

ند		
	Sample Tines W	ELL PURGE RECORD
	JOB NAME: Chama Mini Mart	DATE: 10/14/09 TIME: 1225
	JOB#: 316075	SMA Representative: 22

MONITORING WELL: 8

SAMPLING METHOD: USEPA SW846

FIELD CONDITIONS: Cloudy, cool, breezy

DECONTAMINATION METHOD:\_\_\_

SINGLE USE BAILER, FIELD EQUIPMENT: ALCANOX

WASH, TRIPLE DI WATER RINSE

Total Depth of well: 15.03 feet

Depth to water before purging 8.54 feet

Height of Water Column	Well PVC Diameter 2-inch 4-inch	1 Volume in	Minimum Purge	Volume to Purge in
in Feet		Gallons	Volumes	Gallons
6.47	0.163 0.653			3.0

TIME	VOLUME PURGED	pH	SPECIFIC CONDUCTIVITY:	TEMPIN.	DISOLVED OXYGEN	TURBIDITY	COMMENTS
1337	1901	6.34	1.94	16.2			H20 Gray
1339	ZgAl	6.31	1.93	14.9			HLO GRAY
1342	39A/	6.14	1.94	14.5			H2O Gray SLIGHT ODOR + SH H2O GRAY SLIGHT ODOR + SHE H2O DARK GRAY
<del></del>							
		:					
					<del>                                     </del>		
						· ,	
<del>, , , , , , , , , , , , , , , , , , , </del>							
			,				
***							

Sample Time 1400 W	ELL PURGE RECORD
JOB NAME: Chama Mini Mart	DATE: 10/14/09 TIME: 1229
JOB#: 316075	SMA Representative: 22
MONITORING WELL://	

SAMPLING METHOD: USEPA SW846

FIELD CONDITIONS: EDO), cloudy

**DECONTAMINATION METHOD:** 

SINGLE USE BAILER, FIELD EQUIPMENT: ALCANOX

WASH, TRIPLE DI WATER RINSE

Total Depth of well: 11.44 feet
Depth to water before purging 7.82 feet

	Height of Water Column in Feet	Diam	eter	1 Volume in Gallons	Minimum Purge Volumes	Volume to Purge in Gallons
200	2/1/	2-inch	4-inch		3	Gallons
	5.64	0.163	0.653			20
			The state of the s			∦

TIME	VOLUME PURGED	pH	SPECIFIC CONDUCTIVITY	TEMP IN °C	DISOLVED OXYGEN	TURBIDITY	COMMENTS
1356	1901	6.40	0.93	14.8			HZO DARK GRAY
1400	ZgAl	6.37	1.08	14.1			HZO DARK GRAN PRODUCT ODOR, SN LOTS OF SEDIME
·							
					_		

Sample Time W	ELL PURGE RECORD
JOB NAME: Chuma Mini Must	DATE: 10/14/09 TIME: 1233
JOB#: 3116075	SMA Representative: 22

MONITORING WELL: 10

SAMPLING METHOD: USEPA SW846

FIELD CONDITIONS: Leaf Joudy

DECONTAMINATION METHOD:\_\_

SINGLE USE BAILER, FIELD EQUIPMENT: ALCANOX

WASH, TRIPLE DI WATER RINSE

Total Depth of well: 13.43 feet

Depth to water before purging 7.60 feet

Height of Water Column in Feet	Well PVC Diameter	1 Volume in Gallons	Minimum Purge Volumes	Volume to Purge in Gallons
5.83	2-inch 4-inch		3	Gallolis
	0.163 0.653		F	3.0

TIME .	VOLUME PURGED	РН	SPECIFIC CONDUCTIVITY:	TEMP IN	DISOLVED	TURBIDITY	COMMENTS
1413	1gn/	5.47	0.49	14.7			H20 / 10 1 1 P
1416	ZgAl	5.4/	0.53	14.2			NO SHEEN + NO
1419	3901	5.46	0.52	13.9			NO SHEEK & KIN
	*****		,				
						·	
#274 mark to proceed the second							

Cample Tine W	ELL PURGE RECORD
JOB NAME: Chama Mini Mout	DATE: 10/14/09 TIME: 1248
JOB#: 316075	SMA Representative: 22
MONITORING WELL: 9 SAMPLING METHOD: USEPA SW84 FIELD CONDITIONS: c/ordy	
DECONTAMINATION METHOD: WASH, TRIPLE DI WATER RINSE	SINGLE USE BAILER, FIELD EQUIPMENT: ALCANOX
Total Depth of well: 13.35  Depth to water before purging	<u>feet</u> <u>8-2/</u> feet

Height of Water Column in Feet	Well PVC Diameter	1 Volume in Gallons	Minimum Purge Volumes	to large m
5.14	2-inch 4-inch		3	Gallons
	0.163 0.653			250

TIME	VOLUME PURGED	pH	SPECIFIC CONDUCTIVITY	TEMP IN	DISOLVED OXYGEN	TURBIDITY	COMMENTS
1431	1.5 gal	5.65	0.69	14.7			// 1.6
1435	2.5gA/	5.85		14.1			H20 Brown SEDIMENTS
							No odor or No
	·						
						-	

Sample Time )	
1453 W	ELL PURGE RECORD
JOB NAME: Chama Mini Mart	DATE: 10/14/09 TIME: 1242
701 075	
JOB#: 3/16075	SMA Representative: 22

MONITORING WELL: 6

SAMPLING METHOD: USEPA SW846

FIELD CONDITIONS: [loody, cool.

DECONTAMINATION METHOD:\_\_

SINGLE USE BAILER, FIELD EQUIPMENT: ALCANOX

WASH, TRIPLE DI WATER RINSE

Total Depth of well: //. 48 feet

Depth to water before purging 5.82 feet

Height of Water Column in Feet	Well PVC Diameter	1 Volume in Gallons	Minimum Purge Volumes	The state of the s
5.66	2-inch 4-inch		3	Gallons
	0.163 0.653			7.0

TIME	VOLUME PURGED	pH	SPECIFIC	TEMP IN	DISOLVED OXYGEN	TURBIDITY	COMMENTS
1447	1901	5.47	0.47	17.0			1/0//
1449	igal	5.46	0.46	16.7			11/20 /19ht brown
1453	3gal	5.50	0.46	16.6			H20 light brown IVO ODOIR NO SHEEN
							110 3116/1
		,					
						,	
			:				

WELL PURGE RECORD					
JOB NAME: Chama Mini Maut	DATE: 10/14/09 TIME: 1244				
	, , , , , , , , , , , , , , , , , , , ,				
JOB#: 316075	SMA Representative: 22				
MONITORING WELL: 5 SAMPLING METHOD: USEPA SW84 FIELD CONDITIONS: 40 m d					
DECONTAMINATION METHOD: WASH, TRIPLE DI WATER RINSE	SINGLE USE BAILER, FIELD EQUIPMENT: ALCANOX				
Total Depth of well: 14.82 Depth to water before purging	feet 5.08 feet				

Height of Water Column in Feet	Well PVC Diameter		1 Volume in Gallons	Minimum Purge Volumes	Volume to Purge in Gallons
9.74	2-inel	4-inch		3	
7/	0.163	0.653			4.87

TIME	VOLUME PURGED	рН	SPECIFIC CONDUCTIVITY	TEMP IN	DISOLVED OXYGEN	TURBIDITY	COMMENTS
			1/1			///	
			1000	an	nec	el a	
						·	

/	Sample Tine W	ELL PURGE RECORD
	JOB NAME: Chama Mini Mart	DATE: 10/14/09 TIME: 1246
	JOB#: 316075	Shirt Poprocontation 11
	MONITORING WELL: U	SMA Representative:

MONITORING WELL: USEPA SW846

FIELD CONDITIONS: Cloudy, WARM

DECONTAMINATION METHOD: SING

SINGLE USE BAILER, FIELD EQUIPMENT: ALCANOX

WASH, TRIPLE DI WATER RINSE

Total Depth of well: 14.85 feet

Depth to water before purging 4.6 4 feet

Height of Water Column in Feet	1	PVC neter 4-inch	1 Volume in Gallons	Minimum Purge Volumes 3	Volume to Purge in Gallons
10.21	0.163	0.653			5.0

TIME	VOLUME PURGED	Hq	SPECIFIC CONDUCTIVITY	TEMP IN	DISOLVED	TURBIDITY	COMMENTS
1504	1.0 gd	5.37	0.44	14.3			H20 1,10
1509	1.0 gd. 3.0 gd. 5.0 gd.	5.35	0.45	16.1			Hzo 1. to brown, No sheen, no oder
1512	5.0 gal.	5.39	0.45	16.0			Sheen no
							aler
							300.0

Sample Time 1530 W	ELL PURGE RECORD
 JOB NAME: Chama Mini Mart	DATE: 10/14/09 TIME: 1248
JOB#: 3/16075	Shid Representative: 22
MONITORING WELL: 7 SAMPLING METHOD: USEPA SW84 FIELD CONDITIONS: Cloudy C	6

DECONTAMINATION METHOD:\_

SINGLE USE BAILER, FIELD EQUIPMENT: ALCANOX

WASH, TRIPLE DI WATER RINSE

Total Depth of well: /2./5 feet
Depth to water before purging 8.0/ feet

Height of Water Column in Feet	Well PVC Diameter	1 Volume in Gallons	Minimum Purge Volumes	a. go (ii
4.14	2-inch 4-inch		3	Gallons
	0.163 0.653	1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1		2.0

TIME	VOLUME PURGED	pH	SPECIFIC CONDUCTIVITY	TEMP IN	DISOLVED OXYGEN	TURBIDITY	COMMENTS
1524	1901	6.24	0.74	16.1			4-0 15 CL
1530	ZgAl	6.35	0.74	15.8			late of CHU
							HZD 15 Cles Lots of SHE STRONG Prac
		(					ODOR!

## Appendix 3

**Laboratory Results** 





#### **COVER LETTER**

Wednesday, October 21, 2009

Tami Ross Souder, Miller and Associates 612 E Murray Dr. Farmington, NM 87401

TEL: (505) 325-5667 FAX (505) 327-1496

RE: Mini Mart

Dear Tami Ross:

Order No.: 0910318

Hall Environmental Analysis Laboratory, Inc. received 8 sample(s) on 10/16/2009 for the analyses presented in the following report.

These were analyzed according to EPA procedures or equivalent. Below is a list of our accreditations. To access our accredited tests please go to www.hallenvironmental.com or the state specific web sites.

Reporting limits are determined by EPA methodology. No determination of compounds below these (denoted by the ND or < sign) has been made.

Please don't hesitate to contact HEAL for any additional information or clarifications.

Sincerely,

Andy Freeman, Laboratory Manager

NM Lab # NM9425 AZ license # AZ0682 ORELAP Lab # NM100001 Texas Lab# T104704424-08-TX



Hall Environmental Analysis Laboratory, Inc.

Date: 21-Oct-09

CLIENT:

Souder, Miller and Associates

Project:

Mini Mart

Lab Order:

0910318

CASE NARRATIVE

Analytical Comments for METHOD 8260\_W, SAMPLE 0910318-01a: pH=7.0

Analytical Comments for METHOD 8260\_W, SAMPLE 0910318-07a: pH=3.5

## Hall Environmental Analysis Laboratory, Inc.

Date: 21-Oct-09

CLIENT:

Souder, Miller and Associates

Lab Order:

0910318 Mini Mart

Project: Lab ID:

0910318-01

Client Sample ID: MW-12

Collection Date: 10/14/2009 1:21:00 PM

Date Received: 10/16/2009

Matrix: AQUEOUS

Analyses	Result	PQL Qu	al Units	DF	Date Analyzed
EPA METHOD 8260B: VOLATILES				· · · · · · · · · · · · · · · · · · ·	Analyst: HL
Benzene	ND .	1.0	μg/L	1	10/20/2009 8:33:43 AM
	ND	1.0	μg/L	1	10/20/2009 8:33:43 AM
Toluene	1.8	1.0	μg/L	1	10/20/2009 8:33:43 AM
Ethylbenzene	ND	1.0	μg/L	1	10/20/2009 8:33:43 AM
Methyl tert-butyl ether (MTBE)	1.7	1.0	μg/L	1	10/20/2009 8:33:43 AM
1,2,4-Trimethylbenzene	ND	1.0	μg/L	1	10/20/2009 8:33:43 AM
1,3,5-Trimethylbenzene	ND	1.0	μg/L	1	10/20/2009 8:33:43 AM
1,2-Dichloroethane (EDC)	ND	1.0	μg/L	1	10/20/2009 8:33:43 AM
1,2-Dibromoethane (EDB)	ND	2.0	μg/L	1	10/20/2009 8:33:43 AM
Naphthalene	ND	4.0	µg/L	1	10/20/2009 8:33:43 AM
1-Methylnaphthalene	ND	4.0	μg/L	1	10/20/2009 8:33:43 AM
2-Methylnaphthalene	ND	10	μg/L	. 1	10/20/2009 8:33:43 AM
Acetone	ND	1.0	μg/L	1	10/20/2009 8:33:43 AM
Bromobenzene	ND	1.0	μg/L	1	10/20/2009 8:33:43 AM
Bromodichloromethane	ND ND	1.0	μg/L	1	10/20/2009 8:33:43 AM
Bromoform		1.0	μg/L μg/L	1	10/20/2009 8:33:43 AM
Bromomethane	ND	1.0	μg/L	1	10/20/2009 8:33:43 AM
2-Butanone	ND	10	μg/L	1	10/20/2009 8:33:43 AM
Carbon disulfide	ND	1.0	μg/L μg/L	1	10/20/2009 8:33:43 AM
Carbon Tetrachloride	ND		μg/L	1	10/20/2009 8:33:43 AM
Chlorobenzene	ND	1.0	μg/L	1	10/20/2009 8:33:43 AM
Chloroethane	ND	2.0	μg/L	, 1	10/20/2009 8:33:43 AM
Chloroform	ND	1.0		1	10/20/2009 8:33:43 AM
Chloromethane	ND	1.0	μg/L	1	10/20/2009 8:33:43 AM
2-Chlorotoluene	ND	1.0	μg/L σ/L	1	10/20/2009 8:33:43 AM
4-Chlorotoluene	ND	1.0	μg/L ··//	1	10/20/2009 8:33:43 AM
cis-1,2-DCE	. ND	1.0	μg/L	1	10/20/2009 8:33:43 AM
cis-1,3-Dichloropropene	ND	1.0	μg/L	1	10/20/2009 8:33:43 AM
1,2-Dibromo-3-chloropropane	ND	2.0	µg/L	1	10/20/2009 8:33:43 AM
Dibromochloromethane	ND	1.0	μg/L	1	10/20/2009 8:33:43 AM
Dibromomethane	ND	1.0	μg/L	1	10/20/2009 8:33:43 AM
1,2-Dichlorobenzene	ND	1.0	μg/L 		10/20/2009 8:33:43 AM
1,3-Dichlorobenzene	ND	1.0	μg/L 	1	10/20/2009 8:33:43 AM
1,4-Dichlorobenzene	ND	1.0	μg/L 	1	10/20/2009 8:33:43 AM
Dichlorodifluoromethane	ND	1.0	μg/L 	1	10/20/2009 8:33:43 AM
1,1-Dichloroethane	ND	1.0	µg/L	1	10/20/2009 8:33:43 AM
1,1-Dichloroethene	ND	1.0	μg/L 	1	10/20/2009 8:33:43 AM
1,2-Dichloropropane	ND	1.0	μg/L 	1	10/20/2009 8:33:43 AM 10/20/2009 8:33:43 AM
1,3-Dichloropropane	ND	1.0	µg/L	1	
2,2-Dichloropropane	ND	2.0	µg/L	1	10/20/2009 8:33:43 AM
1,1-Dichloropropene	ND	1.0	µg/L	1	10/20/2009 8:33:43 AM
Hexachlorobutadiene	ND	1.0	h8/F	1	10/20/2009 8:33:43 AM
2-Hexanone	ND	10	μg/L	1	10/20/2009 8:33:43 AM

#### Qualifiers:

- Value exceeds Maximum Contaminant Level
- E Estimated value
- J Analyte detected below quantitation limits
- ND Not Detected at the Reporting Limit
- S Spike recovery outside accepted recovery limits
- B Analyte detected in the associated Method Blank
- H Holding times for preparation or analysis exceeded
- MCL Maximum Contaminant Level
- RL Reporting Limit

Page 1 of 16

Date: 21-Oct-09

CLIENT:

Souder, Miller and Associates

Lab Order:

0910318

Project:

Mini Mart

Lab ID:

0910318-01

Client Sample ID: MW-12

Collection Date: 10/14/2009 1:21:00 PM

**Date Received:** 10/16/2009

Matrix: AQUEOUS

Analyses	Result	PQL	Qual	Units	DF	Date Analyzed
	· · · · · · · · · · · · · · · · · · ·					Analyst: HL
EPA METHOD 8260B: VOLATILES	1.0	1.0		μg/L	1	10/20/2009 8:33:43 AM
Isopropylbenzene	ND	1.0		μg/L	1	10/20/2009 8:33:43 AM
4-Isopropyltoluene	ND	10		μg/L	1	10/20/2009 8:33:43 AM
4-Methyl-2-pentanone	ND	3.0		μg/L	1	10/20/2009 8:33:43 AM
Methylene Chloride	ND	1.0		μg/L	1	10/20/2009 8:33:43 AM
n-Butylbenzene	1.8	1.0		μg/L	1	10/20/2009 8:33:43 AM
n-Propylbenzene	nD	1.0		μg/L	1	10/20/2009 8:33:43 AM
sec-Butylbenzene	ND ND	1.0		µg/L	1	10/20/2009 8:33:43 AM
Styrene		1.0		μg/L	1	10/20/2009 8:33:43 AM
tert-Butylbenzene	ND	1.0		µg/L	1	10/20/2009 8:33:43 AM
1,1,1,2-Tetrachloroethane	ND			μg/L	1	10/20/2009 8:33:43 AM
1,1,2,2-Tetrachioroethane	ND	2.0			1	10/20/2009 8:33:43 AM
Tetrachloroethene (PCE)	ND	1.0		μg/L μg/L	1	10/20/2009 8:33:43 AM
trans-1,2-DCE	ND	1.0			1	10/20/2009 8:33:43 AM
trans-1,3-Dichloropropene	ND	1.0		μg/L	1	10/20/2009 8:33:43 AM
1,2,3-Trichlorobenzene	ND	1.0		μg/L "	1	10/20/2009 8:33:43 AM
1,2,4-Trichlorobenzene	ND	1.0		μg/L	1	10/20/2009 8:33:43 AM
1,1,1-Trichloroethane	ND	1.0		µg/L	1	10/20/2009 8:33:43 AM
1,1,2-Trichloroethane	ND	1.0		µg/L	1	10/20/2009 8:33:43 AM
Trichloroethene (TCE)	ND	1.0		μg/L	1	10/20/2009 8:33:43 AM
Trichlorofluoromethane	ND	1.0		μg/L	1	10/20/2009 8:33:43 AM
1,2,3-Trichloropropane	ND	2.0		μg/L	1	
Vinyl chloride	ND	1.0		μg/L	1	10/20/2009 8:33:43 AM
Xylenes, Total	ND	1.5		μg/L	1	10/20/2009 8:33:43 AM
Surr: 1,2-Dichloroethane-d4	95.2	54.6-141		%REC	1	10/20/2009 8:33:43 AM
Surr: 4-Bromofluorobenzene	94.2	60.1-133		%REC	1	10/20/2009 8:33:43 AM
Surr: Dibromofluoromethane	93.2	78.5-130		%REC	1	10/20/2009 8:33:43 AM
Surr: Toluene-d8	96.2	79.5-126		%REC	1 .	10/20/2009 8:33:43 AM

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Value exceeds Maximum Contaminant Level

Page 2 of 16

E Estimated value

J Analyte detected below quantitation limits

ND Not Detected at the Reporting Limit

S Spike recovery outside accepted recovery limits

B Analyte detected in the associated Method Blank

H Holding times for preparation or analysis exceeded

MCL Maximum Contaminant Level

RL Reporting Limit

Date: 21-Oct-09

CLIENT:

Souder, Miller and Associates

Lab Order: 0910318

Project:

Mini Mart

Lab ID:

0910318-02

Client Sample ID: MW-9

Collection Date: 10/14/2009 2:35:00 PM

Date Received: 10/16/2009

Matrix: AQUEOUS

Analyses	Result	PQL	Qual	Units	DF	Date Analyzed
EPA METHOD 8260B: VOLATILES						Analyst: HL
Benzene	7.9	1.0		μg/L	1	10/20/2009 9:01:30 AM
Toluene	9.2	1.0		μg/L	1	10/20/2009 9:01:30 AM
Ethylbenzene	56	1.0		μg/L	1	10/20/2009 9:01:30 AM
Methyl tert-butyl ether (MTBE)	ND	1.0		μg/L	1	10/20/2009 9:01:30 AM
1,2,4-Trimethylbenzene	43	1.0		μg/L	1	10/20/2009 9:01:30 AM
1,3,5-Trimethylbenzene	18	1.0		μg/L	1	10/20/2009 9:01:30 AM
1,2-Dichloroethane (EDC)	ND	1.0		μg/L	1	10/20/2009 9:01:30 AM
1,2-Dibromoethane (EDB)	ND	1.0		μg/L	1	10/20/2009 9:01:30 AM
Naphthalene	14	2.0		μg/L	1	10/20/2009 9:01:30 AM
•	4.8	4.0		μg/L	1	10/20/2009 9:01:30 AM
1-Methylnaphthalene	ND	4.0		μg/L	1	10/20/2009 9:01:30 AM
2-Methylnaphthalene	ND	10		μg/L	1	10/20/2009 9:01:30 AM
Acetone	ND	1.0		μg/L	1	10/20/2009 9:01:30 AM
Bromobenzene	ND	1.0		μg/L	· 1	10/20/2009 9:01:30 AM
Bromodichloromethane	ND	1.0		μg/L	1	10/20/2009 9:01:30 AM
Bromoform	ND	1.0		µg/L	1	10/20/2009 9:01:30 AM
Bromomethane	ND	10		μg/L	1	10/20/2009 9:01:30 AM
2-Butanone	ND	10		μg/L	1	10/20/2009 9:01:30 AM
Carbon disulfide	ND	1.0		μg/L	1	10/20/2009 9:01:30 AM
Carbon Tetrachloride	ND	1.0		μg/L	1	10/20/2009 9:01:30 AM
Chlorobenzene	ND	2.0		μg/L	1	10/20/2009 9:01:30 AM
Chloroethane	ND	1.0		μg/L	1	10/20/2009 9:01:30 AM
Chloroform	ND	1.0		µg/L	1	10/20/2009 9:01:30 AM
Chloromethane	ND	1.0		µg/L	1	10/20/2009 9:01:30 AM
2-Chlorotoluene	ND	1.0		μg/L	1	10/20/2009 9:01:30 AM
4-Chlorotoluene	ND	1.0		μg/L	1	10/20/2009 9:01:30 AM
cis-1,2-DCE	ND	1.0		μg/L	1	10/20/2009 9:01:30 AM
cis-1,3-Dichloropropene	ND	2.0		μg/L	1	10/20/2009 9:01:30 AM
1,2-Dibromo-3-chloropropane	ND ND	1.0		μg/L	1	10/20/2009 9:01:30 AM
Dibromochloromethane	ND ND	1.0		μg/L μg/L	1	10/20/2009 9:01:30 AM
Dibromomethane	ND ND	1.0		μg/L	1	10/20/2009 9:01:30 AM
1,2-Dichlorobenzene		1.0		μg/L	1	10/20/2009 9:01:30 AM
1,3-Dichlorobenzene	ND	1.0		μg/L	1	10/20/2009 9:01:30 AM
1,4-Dichlorobenzene	ND	1.0		μg/L	1	10/20/2009 9:01:30 AN
Dichlorodifluoromethane	ND	1.0		μg/L	1	10/20/2009 9:01:30 AM
1,1-Dichloroethane	ND				1	10/20/2009 9:01:30 AM
1,1-Dichloroethene	ND	1.0		μg/L ug/l	1	10/20/2009 9:01:30 AM
1,2-Dichloropropane	ND	1.0		μg/L μg/l	1	10/20/2009 9:01:30 AM
1,3-Dichloropropane	ND	1.0		μg/L	1	10/20/2009 9:01:30 AN
2,2-Dichloropropane	ND	2.0		μg/L	1	10/20/2009 9:01:30 AN
1,1-Dichloropropene	ND	1.0		μg/L ug/l	1	10/20/2009 9:01:30 AN
Hexachlorobutadiene	ND	1.0		μg/L	1	10/20/2009 9:01:30 AN
2-Hexanone	ND	10	ı	μg/L	1	TUIZUIZUUG G,UT.UU MIN

#### Qualifiers:

- Value exceeds Maximum Contaminant Level
- E Estimated value
- J Analyte detected below quantitation limits
- ND Not Detected at the Reporting Limit
- S Spike recovery outside accepted recovery limits
- B Analyte detected in the associated Method Blank
- H Holding times for preparation or analysis exceeded
- MCL Maximum Contaminant Level
- RL Reporting Limit

Page 3 of 16

Date: 21-Oct-09

CLIENT:

Souder, Miller and Associates

Client Sample ID: MW-9

Lab Order:

0910318

Collection Date: 10/14/2009 2:35:00 PM

Project:

Mini Mart

Date Received: 10/16/2009

Lab ID:

0910318-02

Matrix: AQUEOUS

Analyses	Result	PQL	Qual	Units	DF	Date Analyzed
		<del> </del>		<del></del>		Analyst: HL
PA METHOD 8260B: VOLATILES	9.1	1.0		μg/L	1	10/20/2009 9:01:30 AM
Isopropylbenzene	1.6	1.0		μg/L	1	10/20/2009 9:01:30 AM
4-Isopropyltoluene	ND	10		μg/L	1	10/20/2009 9:01:30 AM
4-Methyl-2-pentanone	ND	3.0		μg/L	1	10/20/2009 9:01:30 AM
Methylene Chloride	ND	1.0		μg/L	1	10/20/2009 9:01:30 AM
n-Butylbenzene	13	1.0		μg/L	1	10/20/2009 9:01:30 AM
n-Propylbenzene	2.7	1.0		μg/L	1	10/20/2009 9:01:30 AM
sec-Butylbenzene	Z.7 ND	1.0		μg/L	1	10/20/2009 9:01:30 AM
Styrene	1.1	1.0		μg/L	1	10/20/2009 9:01:30 AM
tert-Butylbenzene	ND	1.0		μg/L	1	10/20/2009 9:01:30 AM
1,1,1,2-Tetrachloroethane	ND	2.0		μg/L	1	10/20/2009 9:01:30 AM
1,1,2,2-Tetrachloroethane	ND ND	1.0		μg/L	1	10/20/2009 9:01:30 AM
Tetrachloroethene (PCE)		1.0		μg/L	1	10/20/2009 9:01:30 AM
trans-1,2-DCE	ND	1.0		μg/L	1	10/20/2009 9:01:30 AM
trans-1,3-Dichloropropene	ND			μg/L	1	10/20/2009 9:01:30 AM
1,2,3-Trichlorobenzene	ND	1.0 1.0		μg/L	1	10/20/2009 9:01:30 AM
1,2,4-Trichlorobenzene	ND				1	10/20/2009 9:01:30 AM
1,1,1-Trichloroethane	ND	1.0		μg/L	1	10/20/2009 9:01:30 AM
1,1,2-Trichloroethane	ND	1.0		µg/L	1	10/20/2009 9:01:30 AM
Trichloroethene (TCE)	ND	1.0		µg/L	1	10/20/2009 9:01:30 AM
Trichlorofluoromethane	ND	1.0		μg/L	1	10/20/2009 9:01:30 AM
1,2,3-Trichloropropane	ND	2.0		μg/L	1	10/20/2009 9:01:30 AM
Vinyl chloride	ND	1.0		μg/L	1	10/20/2009 9:01:30 AM
Xylenes, Total	57	1.5		µg/L	1	10/20/2009 9:01:30 AM
Surr: 1,2-Dichloroethane-d4	99.5	54.6-141		%REC	1	10/20/2009 9:01:30 AM
Surr: 4-Bromofluorobenzene	86.7	60.1-133		%REC	1	10/20/2009 9:01:30 AN
Surr: Dibromofluoromethane	95.4	78.5-130		%REC	1	10/20/2009 9:01:30 AM
Surr: Toluene-d8	101	79.5-126		%REC	1	10/20/2009 9.01.30 AW

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Value exceeds Maximum Contaminant Level

S Spike recovery outside accepted recovery limits

RL Reporting Limit

Page 4 of 16

E Estimated value

J Analyte detected below quantitation limits

ND Not Detected at the Reporting Limit

B Analyte detected in the associated Method Blank

H Holding times for preparation or analysis exceeded

MCL Maximum Contaminant Level

CLIENT: Souder, Miller and Associates

Lab Order: 0910318

Project: Mini Mart

Lab ID: 0910318-03

Date: 21-Oct-09

Client Sample ID: MW-6

Collection Date: 10/14/2009 2:53:00 PM

Date Received: 10/16/2009 Matrix: AQUEOUS

Result	PQL Qua	d Units	DF	Date Analyzed
				Analyst: HL
NID .	1.0	ua/L	1	10/20/2009 5:47:21 AM
			1	10/20/2009 5:47:21 AM
			1	10/20/2009 5:47:21 AM
			1	10/20/2009 5:47:21 AM
			1	10/20/2009 5:47:21 AM
			1	10/20/2009 5:47:21 AM
			1	10/20/2009 5:47:21 AM
			1	10/20/2009 5:47:21 AM
				10/20/2009 5:47:21 AM
				10/20/2009 5:47:21 AM
				10/20/2009 5:47:21 AM
				10/20/2009 5:47:21 AM
				10/20/2009 5:47:21 AM
				10/20/2009 5:47:21 AM
				10/20/2009 5:47:21 AM
				10/20/2009 5:47:21 AM
				10/20/2009 5:47:21 AM
			-	10/20/2009 5:47:21 AM
				10/20/2009 5:47:21 AM
				10/20/2009 5:47:21 AM
				10/20/2009 5:47:21 AM
ND				10/20/2009 5:47:21 AM
ND				10/20/2009 5:47:21 AM
ND				10/20/2009 5:47:21 AM
ND				10/20/2009 5:47:21 AM
ND	1.0			10/20/2009 5:47:21 AM 10/20/2009 5:47:21 AM
ND	1.0			10/20/2009 5:47:21 AM 10/20/2009 5:47:21 AM
ND	1.0	µg/L		
ND	2.0	μg/L		10/20/2009 5:47:21 AM
ND	1.0	μg/L		10/20/2009 5:47:21 AM
ND	1.0	µg/L		10/20/2009 5:47:21 AM
ND	1.0	μg/L		10/20/2009 5:47:21 AM
ND	1.0	µg/L		10/20/2009 5:47:21 AM
ND	1.0	μg/L	1	10/20/2009 5:47:21 AN
ND	1.0	µg/L	1	10/20/2009 5:47:21 AN
ND	1.0	μg/L	1	10/20/2009 5:47:21 AN
ND	1.0	μg/L	1	10/20/2009 5:47:21 AN
ND	1.0	μg/L	1	10/20/2009 5:47:21 AN
ND	1.0	μg/L	1	10/20/2009 5:47:21 AN
	2.0	μg/L	1	10/20/2009 5:47:21 AN
	1.0	μg/L	1	10/20/2009 5:47:21 AM
			1	10/20/2009 5:47:21 AM
			1	10/20/2009 5:47:21 AM
		ND 1.0 ND	ND 1.0	ND 1.0 µg/L 1

Qualifiers:

- Value exceeds Maximum Contaminant Level
- E Estimated value
- J Analyte detected below quantitation limits
- ND Not Detected at the Reporting Limit
- S Spike recovery outside accepted recovery limits
- B Analyte detected in the associated Method Blank
- H Holding times for preparation or analysis exceeded
- MCL Maximum Contaminant Level
- RL Reporting Limit

Page 5 of 16

Date: 21-Oct-09

CLIENT:

Souder, Miller and Associates

Client Sample ID: MW-6

Lab Order:

0910318

Collection Date: 10/14/2009 2:53:00 PM

Project:

Mini Mart

Date Received: 10/16/2009

Lab ID:

0910318-03

Matrix: AQUEOUS

Lab ID.	Result	PQL	Qual Units	DF	Date Analyzed
Analyses					Analyst: HL
EPA METHOD 8260B: VOLATILES	ND	1.0	μg/ <b>L</b>	1	10/20/2009 5:47:21 AM
Isopropylbenzene	ND	1.0	μg/L	1	10/20/2009 5:47:21 AM
4-Isopropyltoluene	ND	10	μg/L	1	10/20/2009 5:47:21 AM
4-Methyl-2-pentanone	ND	3.0	μg/L	1	10/20/2009 5:47:21 AM
Methylene Chloride	ND DN	1.0	μg/L	1	10/20/2009 5:47:21 AM
n-Butylbenzene	ND ND	1.0	μg/L	1	10/20/2009 5:47:21 AM
n-Propylbenzene		1.0	μg/L	1	10/20/2009 5:47:21 AM
sec-Butylbenzene	ND	1.0	μg/L	1	10/20/2009 5:47:21 AM
Styrene	ND	1.0	μg/L	1	10/20/2009 5:47:21 AM
tert-Butylbenzene	ND	1.0	μg/L	1	10/20/2009 5:47:21 AM
1,1,1,2-Tetrachloroethane	ND	2.0	μg/L	1	10/20/2009 5:47:21 AM
1,1,2,2-Tetrachloroethane	ND	1.0	μg/L	1	10/20/2009 5:47:21 AM
Tetrachloroethene (PCE)	ND	1.0	μg/L	1	10/20/2009 5:47:21 AM
trans-1,2-DCE	ND	1.0	μg/L	1	10/20/2009 5:47:21 AM
trans-1,3-Dichloropropene	NĎ	1.0	μg/L	1	10/20/2009 5:47:21 AM
1,2,3-Trichlorobenzene	ND	1.0	μg/L	1	10/20/2009 5:47:21 AM
1,2,4-Trichlorobenzene	ND	1.0	μg/L	1	10/20/2009 5:47:21 AM
1,1,1-Trichloroethane	ND	1.0	μg/L	1	10/20/2009 5:47:21 AM
1,1,2-Trichloroethane	ND	1.0	μg/L	1	10/20/2009 5:47:21 AM
Trichloroethene (TCE)	ND	1.0	μg/L	1	10/20/2009 5:47:21 AM
Trichlorofluoromethane	ND	2.0	μg/L	1	10/20/2009 5:47:21 AM
1,2,3-Trichloropropane	ND		μg/L	1	10/20/2009 5:47:21 AM
Vinyl chloride	ND	1.0	μg/L	1	10/20/2009 5:47:21 AM
Xylenes, Total	ND	1.5	%RE	· 1	10/20/2009 5:47:21 AM
Surr: 1,2-Dichloroethane-d4	95.7	54.6-141	%RE	•	10/20/2009 5:47:21 AM
Surr: 4-Bromofluorobenzene	98.4	60.1-133	%K⊏ %RE	•	10/20/2009 5:47:21 AM
Surr: Dibromofluoromethane	94.4	78.5-130		•	10/20/2009 5:47:21 AM
Surr: Toluene-d8	96.3	79.5-126	%RE	'	

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Value exceeds Maximum Contaminant Level

S Spike recovery outside accepted recovery limits

RL Reporting Limit

Page 6 of 16

E Estimated value

J Analyte detected below quantitation limits

ND Not Detected at the Reporting Limit

B Analyte detected in the associated Method Blank

H Holding times for preparation or analysis exceeded

MCL Maximum Contaminant Level

Date: 21-Oct-09

CLIENT:

Souder, Miller and Associates

Client Sample ID: MW-10

Lab Order:

0910318

Collection Date: 10/14/2009 2:19:00 PM

Mini Mart

Date Received: 10/16/2009

Project: Lab ID:

0910318-04

Matrix: AQUEOUS

Analyses	Result	PQL Q	ual Units	DF	Date Analyzed
EPA METHOD 8260B: VOLATILES	_ <del>, ,</del>				Analyst: <b>HL</b>
	ND	1.0	μg/L	1	10/20/2009 6:15:04 AM
Benzene Toluene	ND	1.0	μg/L	1	10/20/2009 6:15:04 AM
	ND	1.0	μg/L	1	10/20/2009 6:15:04 AM
Ethylbenzene	· ND	1.0	μg/L	1	10/20/2009 6:15:04 AM
Methyl tert-butyl ether (MTBE)	ND	1.0	μg/L	1 .	10/20/2009 6:15:04 AM
1,2,4-Trimethylbenzene	ND	1.0	μg/L	1	10/20/2009 6:15:04 AM
1,3,5-Trimethylbenzene	ND	1.0	μg/L	1	10/20/2009 6:15:04 AM
1,2-Dichloroethane (EDC)	ND	1.0	μg/L	1	10/20/2009 6:15:04 AM
1,2-Dibromoethane (EDB)	ND	2.0	μg/L	1	10/20/2009 6:15:04 AM
Naphthalene	ND	4.0	μg/L	1	10/20/2009 6:15:04 AM
1-Methylnaphthalene	ND	4.0	µg/L	1	10/20/2009 6:15:04 AM
2-Methylnaphthalene	ND	10	μg/L	1	10/20/2009 6:15:04 AM
Acetone	ND	1.0	μg/L	1	10/20/2009 6:15:04 AM
Bromobenzene	ND ND	1.0	µg/L	1	10/20/2009 6:15:04 AM
Bromodichloromethane	ND	1.0	μg/L	1	10/20/2009 6:15:04 AM
Bromoform	ND ND	1.0	μg/L	1	10/20/2009 6:15:04 AM
Bromomethane	ND	1.0	μg/L	1	10/20/2009 6:15:04 AM
2-Butanone	ND	10	µg/L	1	10/20/2009 6:15:04 AM
Carbon disulfide	ND ND	1.0	μg/L	1	10/20/2009 6:15:04 AM
Carbon Tetrachloride	ND	1.0	μg/L	1	10/20/2009 6:15:04 AM
Chlorobenzene		2.0	μg/L	1	10/20/2009 6:15:04 AM
Chloroethane	ND	1.0	μg/L μg/L	1	10/20/2009 6:15:04 AM
Chloroform	ND		μg/L μg/L	1	10/20/2009 6:15:04 AM
Chloromethane	ND	1.0		1	10/20/2009 6:15:04 AM
2-Chlorotoluene	ND	1.0	μg/L	1	10/20/2009 6:15:04 AM
4-Chlorotoluene	ND	1.0	μg/L	1	10/20/2009 6:15:04 AM
cis-1,2-DCE	ND	1.0	μg/L	1	10/20/2009 6:15:04 AM
cis-1,3-Dichloropropene	ND	1.0	μg/L	1.	10/20/2009 6:15:04 AM
1,2-Dibromo-3-chloropropane	ND	2.0	μg/L	1	10/20/2009 6:15:04 AM
Dibromochloromethane	ND	1.0	µg/L	1	10/20/2009 6:15:04 AM
Dibromomethane	ND	1.0	µg/L	1	10/20/2009 6:15:04 AM
1,2-Dichlorobenzene	ND	1.0	µg/L	1	10/20/2009 6:15:04 AM
1,3-Dichlorobenzene	ND	1.0	μg/L "	1	10/20/2009 6:15:04 AM
1,4-Dichlorobenzene	ND	1.0	µg/L		10/20/2009 6:15:04 AM
Dichlorodifluoromethane	ND	1.0	μg/L	1	10/20/2009 6:15:04 AM
1,1-Dichloroethane	ND	1.0	μg/L 	1	
1,1-Dichloroethene	ND	1.0	μg/L 	1	10/20/2009 6:15:04 AM
1,2-Dichloropropane	ND	1.0	µg/L 	1	10/20/2009 6:15:04 AM
1,3-Dichloropropane	ND	1.0	μg/L	1	10/20/2009 6:15:04 AM
2,2-Dichloropropane	ND	2.0	μg/L	1	10/20/2009 6:15:04 AM
1,1-Dichloropropene	ND	1.0	μg/L	1	10/20/2009 6:15:04 AM
Hexachlorobutadiene	ND	1.0	μg/L	1	10/20/2009 6:15:04 AM
2-Hexanone	ND	10	μg/L	1	10/20/2009 6:15:04 AM

#### Qualifiers:

- Value exceeds Maximum Contaminant Level
- Е Estimated value
- Analyte detected below quantitation limits
- ND Not Detected at the Reporting Limit
- Spike recovery outside accepted recovery limits
- Analyte detected in the associated Method Blank
- Holding times for preparation or analysis exceeded Н
- MCL Maximum Contaminant Level
- Reporting Limit

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Date: 21-Oct-09

CLIENT:

Souder, Miller and Associates

Client Sample ID: MW-10

Lab Order:

0910318

Collection Date: 10/14/2009 2:19:00 PM

Project:

Mini Mart

Date Received: 10/16/2009

Lab ID:

0910318-04

Matrix: AQUEOUS

Analysis	Result	PQL	Qual U	nits	DF	Date Analyzed
Analyses				<u>,, , , , , , , , , , , , , , , , , , ,</u>		Analyst: HL
EPA METHOD 8260B: VOLATILES	ND	1.0	LII	g/L	.1	10/20/2009 6:15:04 AM
Isopropylbenzene	ND ND	1.0		g/L	1	10/20/2009 6:15:04 AM
4-Isopropyltoluene	ND ND	10		g/L	1	10/20/2009 6:15:04 AM
4-Methyl-2-pentanone	ND ND	3.0		g/L	1	10/20/2009 6:15:04 AM
Methylene Chloride	ND ND	1.0		g/L	1	10/20/2009 6:15:04 AM
n-Butylbenzene		1.0	-	g/L	1	10/20/2009 6:15:04 AM
n-Propylbenzene	ND	1.0		g/L	. 1	10/20/2009 6:15:04 AM
sec-Butylbenzene	ND	1.0		g/L g/L	1	10/20/2009 6:15:04 AM
Styrene	ND			g/L	1	10/20/2009 6:15:04 AM
tert-Butylbenzene	ND	1.0		g/L g/L	1	10/20/2009 6:15:04 AM
1,1,1,2-Tetrachloroethane	ND	1.0		g/L g/L	1	10/20/2009 6:15:04 AM
1,1,2,2-Tetrachioroethane	ND	2.0			1	10/20/2009 6:15:04 AM
Tetrachloroethene (PCE)	ND	1.0	· · · · · · · · · · · · · · · · · · ·	ig/L	1	10/20/2009 6:15:04 AM
trans-1,2-DCE	ND	1.0		ıg/L	1	10/20/2009 6:15:04 AM
trans-1,3-Dichloropropene	ND	1.0		ıg/L ·/l	1	10/20/2009 6:15:04 AM
1,2,3-Trichlorobenzene	ND	1.0		ıg/L	1	10/20/2009 6:15:04 AM
1,2,4-Trichlorobenzene	ND	1.0		ıg/L	1	10/20/2009 6:15:04 AM
1,1,1-Trichloroethane	ND	1.0		ıg/L	1	10/20/2009 6:15:04 AM
1,1,2-Trichloroethane	ND	1.0		ıg/L	1	10/20/2009 6:15:04 AM
Trichloroethene (TCE)	ND	1.0		ıg/L 	1	10/20/2009 6:15:04 AM
Trichlorofluoromethane	ND	1.0		ıg/L	1	10/20/2009 6:15:04 AM
1.2.3-Trichloropropane	ND	2.0		19/L	1	10/20/2009 6:15:04 AM
Vinyl chloride	ND	1.0	-	ug/L	1	10/20/2009 6:15:04 AM
Xylenes, Total	ND	1.5	· ·	Jg/L	1	
Surr: 1,2-Dichloroethane-d4	95.7	54.6-141		%REC	1	10/20/2009 6:15:04 AM
Surr: 4-Bromofluorobenzene	98.6	60.1-133	•	%REC	1	10/20/2009 6:15:04 AM
Surr: Dibromofluoromethane	97.9	78.5-130	) '	%REC	• 1	10/20/2009 6:15:04 AM
Surr: Toluene-d8	93.1	79.5-126	<b>3</b>	%REC	1	10/20/2009 6:15:04 AM

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- Value exceeds Maximum Contaminant Level
- E Estimated value
- Analyte detected below quantitation limits
- ND Not Detected at the Reporting Limit
- Spike recovery outside accepted recovery limits
- Analyte detected in the associated Method Blank
- Holding times for preparation or analysis exceeded Н
- MCL Maximum Contaminant Level
- RL Reporting Limit

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Date: 21-Oct-09

CLIENT:

Souder, Miller and Associates

Lab Order:

0910318

Project: Lab ID: Mini Mart 0910318-05 Client Sample ID: MW-8

Collection Date: 10/14/2009 1:42:00 PM

Date Received: 10/16/2009

Matrix: AQUEOUS

Analyses	Result	PQL	Qual U	<b>Units</b>	DF	Date Analyzed
PA METHOD 8260B: VOLATILES	<u></u>					Analyst: HL
Benzene	2.7	1.0	Ļ	ıg/L	1	10/20/2009 9:29:17 AM
Toluene	ND	1.0	ļ.	ıg/L	1	10/20/2009 9:29:17 AM
Ethylbenzene	1.8	1.0	١	ıg/L	1	10/20/2009 9:29:17 AM
Methyl tert-butyl ether (MTBE)	ND	1.0	ŀ	ıg/L	1	10/20/2009 9:29:17 AM
1,2,4-Trimethylbenzene	ND	1.0	١	ıg/L	1	10/20/2009 9:29:17 AM
1,3,5-Trimethylbenzene	ND	1.0	۲	ıg/L	1	10/20/2009 9:29:17 AM
1,2-Dichloroethane (EDC)	ND	1.0	ŀ	ıg/L	1	10/20/2009 9:29:17 AM
1,2-Dibromoethane (EDB)	ND	1.0	ŀ	ıg/L	1	10/20/2009 9:29:17 AM
Naphthalene	ND	2.0	ŀ	ıg/L	1	10/20/2009 9:29:17 AM
1-Methylnaphthalene	ND	4.0	ļ.	ıg/L	1	10/20/2009 9:29:17 AM
2-Methylnaphthalene	ND	4.0	ŀ	ıg/L	1	10/20/2009 9:29:17 AM
Acetone	ND	10	ŀ	ug/L	1	10/20/2009 9:29:17 AM
Bromobenzene	ND	1.0		ug/L	1	10/20/2009 9:29:17 AM
Bromodichloromethane	ND	1.0		ug/L	1	10/20/2009 9:29:17 AM
Bromoform	ND	1.0	ļ.	ug/L	1	10/20/2009 9:29:17 AM
Bromomethane	ND	1.0	ļ	μg/L	1	10/20/2009 9:29:17 AM
2-Butanone	ND	10	Į.	μg/L	1	10/20/2009 9:29:17 AM
Carbon disulfide	ND	10	1	μg/L	1	10/20/2009 9:29:17 AM
Carbon Tetrachloride	ND	1.0	ŀ	µg/L	1	10/20/2009 9:29:17 AM
Chlorobenzene	ND	1.0		μg/L	1	10/20/2009 9:29:17 AM
Chloroethane	ND	2.0		μg/L	1	10/20/2009 9:29:17 AM
Chloroform	ND	1.0		μg/L	1	10/20/2009 9:29:17 AM
Chloromethane	ND	1.0		μg/L	1	10/20/2009 9:29:17 AM
2-Chlorotoluene	ND	1.0		μg/L	1	10/20/2009 9:29:17 AM
4-Chlorotoluene	ND	1.0		μg/L	1	10/20/2009 9:29:17 AM
	ND	1.0		μg/L	1	10/20/2009 9:29:17 AM
cis-1,2-DCE	ND	1.0		μg/L	1	10/20/2009 9:29:17 AM
cis-1,3-Dichloropropene 1,2-Dibromo-3-chloropropane	ND	2.0		μg/L	1	10/20/2009 9:29:17 AM
Dibromochloromethane	ND	1.0		μg/L	1	10/20/2009 9:29:17 AM
	ND	1.0		μg/L	1	10/20/2009 9:29:17 AM
Dibromomethane	ND	1.0		μg/L	1	10/20/2009 9:29:17 AM
1,2-Dichlorobenzene	ND	1.0		μg/L	1	10/20/2009 9:29:17 AN
1,3-Dichlorobenzene	ND	1.0		μg/L	1	10/20/2009 9:29:17 AM
1,4-Dichlorobenzene	ND	1.0		µg/L	1	10/20/2009 9:29:17 AM
Dichlorodifluoromethane	ND	1.0		µg/L	1	10/20/2009 9:29:17 AM
1,1-Dichloroethane	ND	1.0		μg/L	1	10/20/2009 9:29:17 AM
1,1-Dichloroethene	ND	1.0		µg/L	1	10/20/2009 9:29:17 AN
1,2-Dichloropropane	ND	1.0		μg/L	1	10/20/2009 9:29:17 AM
1,3-Dichloropropane	ND	2.0		µg/L	1	10/20/2009 9:29:17 AN
2,2-Dichloropropane	ND	1.0		μg/L	1	10/20/2009 9:29:17 AN
1,1-Dichloropropene	ND ND	1.0		µg/L	1	10/20/2009 9:29:17 AN
Hexachlorobutadiene	ND ND	1.0		µg/L	1	10/20/2009 9:29:17 AN

#### Qualifiers:

- \* Value exceeds Maximum Contaminant Level
- E Estimated value
- J Analyte detected below quantitation limits
- ND Not Detected at the Reporting Limit
- S Spike recovery outside accepted recovery limits
- B Analyte detected in the associated Method Blank
- H Holding times for preparation or analysis exceeded
- MCL Maximum Contaminant Level
- RL Reporting Limit

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Date: 21-Oct-09

CLIENT:

Souder, Miller and Associates

Client Sample ID: MW-8

Lab Order:

0910318

Collection Date: 10/14/2009 1:42:00 PM

Project:

Mini Mart

**Date Received:** 10/16/2009

Lab ID:

0910318-05

Matrix: AQUEOUS

Analyses	Result	PQL	Qual Units	DF	Date Analyzed	
					Analyst: <b>HL</b>	
EPA METHOD 8260B: VOLATILES	5.1	1.0	μg/L	1	10/20/2009 9:29:17 AM	
Isopropylbenzene	ND	1.0	μg/L	1	10/20/2009 9:29:17 AM	
4-Isopropyltoluene	ND	10	μg/L	1	10/20/2009 9:29:17 AM	
4-Methyl-2-pentanone	ND	3.0	μg/L	1	10/20/2009 9:29:17 AM	
Methylene Chloride	ND	1.0	µg/L	1	10/20/2009 9:29:17 AM	
n-Butylbenzene	2.5	1.0	μg/L	1	10/20/2009 9:29:17 AM	
n-Propylbenzene	4.2	1.0	μg/L	1	10/20/2009 9:29:17 AM	
sec-Butylbenzene	ND	1.0	μg/L	1	10/20/2009 9:29:17 AM	
Styrene	ND UD	1.0	μg/L	1	10/20/2009 9:29:17 AM	
tert-Butylbenzene	ND	1.0	μg/L	1	10/20/2009 9:29:17 AM	
1,1,1,2-Tetrachloroethane	ND	2.0	μg/L	1	10/20/2009 9:29:17 AM	
1,1,2,2-Tetrachloroethane	ND	1.0	μg/L	1	10/20/2009 9:29:17 AM	
Tetrachloroethene (PCE)		1.0	μg/L	1	10/20/2009 9:29:17 AM	
trans-1,2-DCE	ND	1.0	μg/L	1	10/20/2009 9:29:17 AM	
trans-1,3-Dichloropropene	ND	1.0	μg/L	1	10/20/2009 9:29:17 AM	
1,2,3-Trichlorobenzene	ND		· -	1	10/20/2009 9:29:17 AM	
1,2,4-Trichlorobenzene	ND	1.0	µg/L	1	10/20/2009 9:29:17 AM	
1,1,1-Trichloroethane	ND	1.0	μg/L	1	10/20/2009 9:29:17 AM	
1,1,2-Trichloroethane	ND	1.0	μg/L	1	10/20/2009 9:29:17 AM	
Trichloroethene (TCE)	ИĎ	1.0	μg/L	1	10/20/2009 9:29:17 AM	
Trichlorofluoromethane	ND	1.0	μg/L	1	10/20/2009 9:29:17 AM	
1,2,3-Trichloropropane	ND	2.0	μg/L 	1	10/20/2009 9:29:17 AM	
Vinyl chloride	ND	1.0	µg/L	1	10/20/2009 9:29:17 AM	
Xylenes, Total	ND	1.5	. 🗸	1	10/20/2009 9:29:17 AM	
Surr: 1,2-Dichloroethane-d4	97.3	54.6-141	%REC	1	10/20/2009 9:29:17 AM	
Surr: 4-Bromofluorobenzene	106	60.1-133		1	10/20/2009 9:29:17 AM 10/20/2009 9:29:17 AM	
Surr: Dibromofluoromethane	97.8	78.5-130		1	10/20/2009 9:29:17 AM 10/20/2009 9:29:17 AM	
Surr: Toluene-d8	99.3	79.5-126	%REC	1	10/20/2009 9:29.17 AW	

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Value exceeds Maximum Contaminant Level

S Spike recovery outside accepted recovery limits

RL Reporting Limit

Page 10 of 16

E Estimated value

J Analyte detected below quantitation limits

ND Not Detected at the Reporting Limit

B Analyte detected in the associated Method Blank

H Holding times for preparation or analysis exceeded

MCL Maximum Contaminant Level

Date: 21-Oct-09

CLIENT:

Souder, Miller and Associates

Client Sample ID: MW-4

Lab Order:

0910318

Collection Date: 10/14/2009 3:12:00 PM

Project:

Mini Mart

**Date Received:** 10/16/2009

Lab ID:

0910318-06

Matrix: AQUEOUS

Analyses	Result	PQL Qu	al Units	DF	Date Analyzed
					Analyst: HL
EPA METHOD 8260B: VOLATILES	ND	1.0	μg/L	1	10/20/2009 7:10:27 AM
Benzene	ND	1.0	μg/L	1	10/20/2009 7:10:27 AM
Toluene	ND	1.0	μg/L	1	10/20/2009 7:10:27 AM
Ethylbenzene	ND	1.0	μg/L	. 1	10/20/2009 7:10:27 AM
Methyl tert-butyl ether (MTBE)	ND	1.0	μg/L	1	10/20/2009 7:10:27 AM
1,2,4-Trimethylbenzene	ND	1.0	μg/L	1	10/20/2009 7:10:27 AM
1,3,5-Trimethylbenzene	ND	1.0	μg/L	1	10/20/2009 7:10:27 AM
1,2-Dichloroethane (EDC)	ND	1.0	μg/L	1	10/20/2009 7:10:27 AM
1,2-Dibromoethane (EDB)	ND	2.0	μg/L	1	10/20/2009 7:10:27 AM
Naphthalene	ND	4.0	μg/L	1	10/20/2009 7:10:27 AM
1-Methylnaphthalene	ND	4.0	μg/L	1	10/20/2009 7:10:27 AM
2-Methylnaphthalene	ND	10	μg/L	1	10/20/2009 7:10:27 AM
Acetone	ND	1.0	μg/L	1	10/20/2009 7:10:27 AM
Bromobenzene	ND	1.0	µg/L	1	10/20/2009 7:10:27 AM
Bromodichloromethane	ND	1.0	μg/L	1	10/20/2009 7:10:27 AM
Bromoform	ND	1.0	μg/L	1	10/20/2009 7:10:27 AM
Bromomethane	ND	10	μg/L	1	10/20/2009 7:10:27 AM
2-Butanone	ND	10	μg/L	1	10/20/2009 7:10:27 AM
Carbon disulfide	· ND	1.0	μg/L	1	10/20/2009 7:10:27 AM
Carbon Tetrachloride	ND	1.0	μg/L	1	10/20/2009 7:10:27 AM
Chlorobenzene	ND	2.0	μg/L	1	10/20/2009 7:10:27 AM
Chloroethane	ND	1.0	μg/L	1	10/20/2009 7:10:27 AM
Chloroform	ND	1.0	µg/L	1	10/20/2009 7:10:27 AM
Chloromethane	ND ND	1.0	μg/L	1	10/20/2009 7:10:27 AM
2-Chlorotoluene		1.0	μg/L	1	10/20/2009 7:10:27 AM
4-Chlorotoluene	ND	1.0	μg/L	1	10/20/2009 7:10:27 AM
cis-1,2-DCE	ND	1.0	μg/L	1	10/20/2009 7:10:27 AM
cis-1,3-Dichloropropene	ND	2.0	μg/L	1	10/20/2009 7:10:27 AM
1,2-Dibromo-3-chloropropane	ND	1.0	μg/L	1	10/20/2009 7:10:27 AM
Dibromochloromethane	ND	1.0	μg/L	1	10/20/2009 7:10:27 AM
Dibromomethane	ND	1.0	μg/L	1	10/20/2009 7:10:27 AM
1,2-Dichlorobenzene	ND		μg/L	1	10/20/2009 7:10:27 AM
1,3-Dichlorobenzene	ND	1.0	μg/L	1	10/20/2009 7:10:27 AM
1,4-Dichlorobenzene	ND	1.0	μg/L	1	10/20/2009 7:10:27 AM
Dichlorodifluoromethane	ND	1.0		1	10/20/2009 7:10:27 AM
1,1-Dichloroethane	ND	1.0	µg/L	1	10/20/2009 7:10:27 AN
1,1-Dichloroethene	ND	1.0	μg/L	1	10/20/2009 7:10:27 AM
1,2-Dichloropropane	ND	1.0	μg/L ug/l	1	10/20/2009 7:10:27 AM
1,3-Dichloropropane	ND	1.0	µg/L	1	10/20/2009 7:10:27 AN
2,2-Dichloropropane	ND	2.0	µg/L	1	10/20/2009 7:10:27 AM
1,1-Dichloropropene	ND	1.0	µg/L	1	10/20/2009 7:10:27 AN
Hexachlorobutadiene	ND	1.0	μg/L		10/20/2009 7:10:27 AN
2-Hexanone	ND	10	µg/L	1	IUIZUIZUUS I. IU.ZI MI

#### Qualifiers:

- Value exceeds Maximum Contaminant Level
- E Estimated value
- J Analyte detected below quantitation limits
- ND Not Detected at the Reporting Limit
- S Spike recovery outside accepted recovery limits
- B Analyte detected in the associated Method Blank
- H Holding times for preparation or analysis exceeded
- MCL Maximum Contaminant Level
- RL Reporting Limit

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Date: 21-Oct-09

CLIENT:

Souder, Miller and Associates

Lab Order:

0910318

Project:

Mini Mart

Lab ID:

0910318-06

Client Sample ID: MW-4

Collection Date: 10/14/2009 3:12:00 PM

**Date Received:** 10/16/2009

Matrix: AQUEOUS

Analyses	Result	PQL	Qual	Units	DF	Date Analyzed
EPA METHOD 8260B: VOLATILES				· · · · · · · · · · · · · · · · · · ·		Analyst: <b>HL</b>
	ND	1.0		μg/L	1	10/20/2009 7:10:27 AM
Isopropylbenzene	ND	1.0		μg/L	1	10/20/2009 7:10:27 AM
4-isopropyltoluene	ND	10		μg/L	1	10/20/2009 7:10:27 AM
4-Methyl-2-pentanone	ND	3.0		μg/L	1	10/20/2009 7:10:27 AM
Methylene Chloride	ND	1.0		μg/L	1	10/20/2009 7:10:27 AM
n-Butylbenzene	ND	1.0		μg/L	1	10/20/2009 7:10:27 AM
n-Propylbenzene	ND	1.0		μg/L	1	10/20/2009 7:10:27 AM
sec-Butylbenzene	ND	1.0		μg/L	1	10/20/2009 7:10:27 AM
Styrene	ND	1.0		μg/L	1	10/20/2009 7:10:27 AM
tert-Butylbenzene	ND	1.0		μg/L	1	10/20/2009 7:10:27 AM
1,1,1,2-Tetrachloroethane	ND	2.0		µg/L	1	10/20/2009 7:10:27 AM
1,1,2,2-Tetrachloroethane	ND	1.0		μg/L	1	10/20/2009 7:10:27 AM
Tetrachloroethene (PCE)	ND	1.0		μg/L	1	10/20/2009 7:10:27 AM
trans-1,2-DCE	ND	1.0		μg/L	1	10/20/2009 7:10:27 AM
trans-1,3-Dichloropropene	ND	1.0		μg/L	1	10/20/2009 7:10:27 AM
1,2,3-Trichlorobenzene	ND	1.0		μg/L	1	10/20/2009 7:10:27 AM
1,2,4-Trichlorobenzene	ND	1.0		μg/L	1	10/20/2009 7:10:27 AM
1,1,1-Trichloroethane	ND	1.0		μg/L	1	10/20/2009 7:10:27 AM
1,1,2-Trichloroethane	ND	1.0		μg/L	1	10/20/2009 7:10:27 AM
Trichloroethene (TCE)	ND	1.0		μg/L	1	10/20/2009 7:10:27 AM
Trichlorofluoromethane	ND ND	2.0		μg/L	1	10/20/2009 7:10:27 AM
1,2,3-Trichloropropane		1.0		μg/L	1	10/20/2009 7:10:27 AM
Vinyl chloride	ND ND	1.5		µg/L	1	10/20/2009 7:10:27 AM
Xylenes, Total	ND 95.4	54.6-141		%REC	1	10/20/2009 7:10:27 AM
Surr: 1,2-Dichloroethane-d4	,	60.1-133		%REC	1	10/20/2009 7:10:27 AM
Surr: 4-Bromofluorobenzene	88.0			%REC	1	10/20/2009 7:10:27 AN
Surr: Dibromofluoromethane	94.5	78.5-130		%REC	1	10/20/2009 7:10:27 AM
Surr: Toluene-d8	95.9	79.5-126		70NEU	'	( U.E. O. E. C.

Value exceeds Maximum Contaminant Level

RL Reporting Limit

E Estimated value

J Analyte detected below quantitation limits

ND Not Detected at the Reporting Limit

S Spike recovery outside accepted recovery limits

B Analyte detected in the associated Method Blank

H Holding times for preparation or analysis exceeded

MCL Maximum Contaminant Level

Date: 21-Oct-09

CLIENT:

Souder, Miller and Associates

Lab Order:

0910318

Mini Mart

Project: Lab ID:

0910318-07

Client Sample ID: MW-11

Collection Date: 10/14/2009 2:00:00 PM

Date Received: 10/16/2009

Matrix: AQUEOUS

Analyses	Result	PQL	PQL Qual Units		DF	Date Analyzed	
EPA METHOD 8260B: VOLATILES						Analyst: HL	
	5.6	1.0		μg/L	1	10/20/2009 7:38:08 AM	
Benzene	ND	1.0		µg/L	1	10/20/2009 7:38:08 AM	
Toluene	21	1.0		μg/L	1	10/20/2009 7:38:08 AM	
Ethylbenzene	ND	1.0		μg/L	1	10/20/2009 7:38:08 AM	
Methyl tert-butyl ether (MTBE)	ND	1.0		μg/L	<sup></sup> 1	10/20/2009 7:38:08 AM	
1,2,4-Trimethylbenzene	ND	1.0		μg/L	1	10/20/2009 7:38:08 AM	
1,3,5-Trimethylbenzene	ND	1.0		µg/L	1	10/20/2009 7:38:08 AM	
1,2-Dichloroethane (EDC)	ND	1.0		μg/L	1	10/20/2009 7:38:08 AM	
1,2-Dibromoethane (EDB)	ND	2.0		µg/L	1	10/20/2009 7:38:08 AM	
Naphthalene	ND	4.0		μg/L	1	10/20/2009 7:38:08 AM	
1-Methylnaphthalene		4.0		µg/L	1	10/20/2009 7:38:08 AM	
2-Methylnaphthalene	ND	10		μg/L	1	10/20/2009 7:38:08 AM	
Acetone	ND	1.0		μg/L	1	10/20/2009 7:38:08 AM	
Bromobenzene	ND			µg/L	1	10/20/2009 7:38:08 AM	
Bromodichloromethane	ND	1.0		μg/L	1	10/20/2009 7:38:08 AM	
Bromoform	ND	1.0		μg/L μg/L	1	10/20/2009 7:38:08 AM	
Bromomethane	ND	1.0			1	10/20/2009 7:38:08 AM	
2-Butanone	ND	10		μg/L μg/L	1	10/20/2009 7:38:08 AM	
Carbon disulfide	ND	10			1	10/20/2009 7:38:08 AM	
Carbon Tetrachloride	ND	1.0		μg/L	1	10/20/2009 7:38:08 AM	
Chlorobenzene	ND	1.0		μg/L	1	10/20/2009 7:38:08 AM	
Chloroethane	ND	2.0		µg/L	1	10/20/2009 7:38:08 AM	
Chloroform	ND	1.0		μg/L	1	10/20/2009 7:38:08 AM	
Chloromethane	ND	1.0		μg/L	1	10/20/2009 7:38:08 AM	
2-Chlorotoluene	ND	1.0		µg/L	1	10/20/2009 7:38:08 AM	
4-Chlorotoluene	ND	1.0		μg/L	1	10/20/2009 7:38:08 AM	
cis-1,2-DCE	ND	1.0		µg/L	1	10/20/2009 7:38:08 AM	
cis-1,3-Dichloropropene	ND	1.0		μg/L "		10/20/2009 7:38:08 AM	
1,2-Dibromo-3-chloropropane	ND	2.0		μg/L	1	10/20/2009 7:38:08 AM	
Dibromochloromethane	ND	1.0		μg/L "	1	10/20/2009 7:38:08 AN	
Dibromomethane	ND	1.0		μg/L	1	10/20/2009 7:38:08 AM	
1,2-Dichlorobenzene	ND	1.0		µg/L	1	10/20/2009 7:38:08 AM	
1,3-Dichlorobenzene	ND	1.0		μg/L 	1	10/20/2009 7:38:08 AM	
1,4-Dichlorobenzene	ND	1.0		μg/L	1	10/20/2009 7:38:08 AM	
Dichlorodifluoromethane	ND	1.0		μg/L	1	10/20/2009 7:38:08 AN	
1,1-Dichloroethane	ND	1.0		µg/L	1	10/20/2009 7:38:08 AN	
1,1-Dichloroethene	ND	1.0		μg/L	1	10/20/2009 7:38:08 AN	
1,2-Dichloropropane	ND	1.0		µg/L	1	10/20/2009 7:38:08 AN	
1,3-Dichloropropane	ND	1.0		µg/L	1	10/20/2009 7:38:08 AN	
2,2-Dichloropropane	ND	2.0		µg/L	1		
1,1-Dichloropropene	ND	1.0		μg/L	1	10/20/2009 7:38:08 AN	
Hexachlorobutadiene	ND	1.0		µg/L	1	10/20/2009 7:38:08 AN	
2-Hexanone	ND	10	0	µg/L	1	10/20/2009 7:38:08 AM	

#### Qualifiers:

- \* Value exceeds Maximum Contaminant Level
- E Estimated value
- J Analyte detected below quantitation limits
- ND Not Detected at the Reporting Limit
- S Spike recovery outside accepted recovery limits
- B Analyte detected in the associated Method Blank
- H Holding times for preparation or analysis exceeded
- MCL Maximum Contaminant Level
- RL Reporting Limit

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Date: 21-Oct-09

CLIENT:

Souder, Miller and Associates

Client Sample ID: MW-11

Lab Order:

0910318

Collection Date: 10/14/2009 2:00:00 PM

Project:

Mini Mart

**Date Received:** 10/16/2009

Lab ID:

0910318-07

Matrix: AQUEOUS

Analyses	Result	PQL	Qual	Units	DF	Date Analyzed	
EPA METHOD 8260B: VOLATILES		<del></del>		· <u>·</u> ·········		Analyst: HL	
Isopropylbenzene	3.1	1.0		μg/L	1	10/20/2009 7:38:08 AM	
4-isopropyltoluene	ND	1.0		μg/L	1	10/20/2009 7:38:08 AM	
,	ND	10		μg/L	1	10/20/2009 7:38:08 AM	
4-Methyl-2-pentanone	ND	3.0		μg/L	1	10/20/2009 7:38:08 AM	
Methylene Chloride	ND	1.0		μg/L	1	10/20/2009 7:38:08 AM	
n-Butylbenzene	4.4	1.0		μg/L	1	10/20/2009 7:38:08 AM	
n-Propylbenzene	1.8	1.0		μg/L	1	10/20/2009 7:38:08 AM	
sec-Butylbenzene	ND	1.0		μg/L	1	10/20/2009 7:38:08 AM	
Styrene	ND	1.0		μg/L	1	10/20/2009 7:38:08 AM	
tert-Butylbenzene	ND	1.0		μg/L	1	10/20/2009 7:38:08 AM	
1,1,1,2-Tetrachloroethane	ND	2.0		μg/L	1	10/20/2009 7:38:08 AM	
1,1,2,2-Tetrachloroethane	ND	1.0		μg/L	1	10/20/2009 7:38:08 AM	
Tetrachloroethene (PCE)	ND	1.0		μg/L	1	10/20/2009 7:38:08 AM	
trans-1,2-DCE	ND	1.0		μg/L	1	10/20/2009 7:38:08 AM	
trans-1,3-Dichloropropene	ND	1.0		μg/L	1	10/20/2009 7:38:08 AM	
1,2,3-Trichlorobenzene	ND	1.0		μg/L	1	10/20/2009 7:38:08 AM	
1,2,4-Trichlorobenzene	ND	1.0		μg/L	1	10/20/2009 7:38:08 AM	
1,1,1-Trichloroethane	ND	1.0		μg/L	1	10/20/2009 7:38:08 AM	
1,1,2-Trichloroethane	ND	1.0		μg/L	1	10/20/2009 7:38:08 AM	
Trichloroethene (TCE)	ND	1.0		μg/L	1	10/20/2009 7:38:08 AM	
Trichlorofluoromethane	ND	2.0		µg/L	1	10/20/2009 7:38:08 AM	
1,2,3-Trichloropropane	***	1.0		μg/L μg/L	1	10/20/2009 7:38:08 AM	
Vinyl chloride	ND 6.4	1.5		μg/L μg/L	1	10/20/2009 7:38:08 AM	
Xylenes, Total	6.4			%REC	1	10/20/2009 7:38:08 AM	
Surr: 1,2-Dichloroethane-d4	98.9	54.6-141		%REC	1	10/20/2009 7:38:08 AM	
Surr: 4-Bromofluorobenzene	102	60.1-133		%REC	1	10/20/2009 7:38:08 AM	
Surr: Dibromofluoromethane	99.3	78.5-130			1.	10/20/2009 7:38:08 AM	
Surr: Toluene-d8	95.8	79.5-126		%REC	I,	10/20/2000 7.00.00 7 100	

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Value exceeds Maximum Contaminant Level

S Spike recovery outside accepted recovery limits

RL Reporting Limit

Page 14 of 16

E Estimated value

J Analyte detected below quantitation limits

ND Not Detected at the Reporting Limit

B Analyte detected in the associated Method Blank

H Holding times for preparation or analysis exceeded

MCL Maximum Contaminant Level

Date: 21-Oct-09

CLIENT:

Souder, Miller and Associates

Lab Order:

0910318

Project:

Mini Mart

Lab ID:

0910318-08

Client Sample ID: MW-7

Collection Date: 10/14/2009 3:30:00 PM

Date Received: 10/16/2009

Matrix: AQUEOUS

Analyses	Result	PQL (	Qual Units	DF	Date Analyzed ,
EPA METHOD 8260B: VOLATILES					Analyst: HL
	32	5:0	μg/L	5	10/20/2009 9:57:05 AM
Benzene	14	5.0	μg/L	5	10/20/2009 9:57:05 AM
Toluene	610	100	μg/L	100	10/20/2009 8:05:55 AM
Ethylbenzene	ND	5.0	μg/L	5	10/20/2009 9:57:05 AM
Methyl tert-butyl ether (MTBE)	750	100	μg/L	100	10/20/2009 8:05:55 AM
1,2,4-Trimethylbenzene	300	5.0	μg/L	5	10/20/2009 9:57:05 AM
1,3,5-Trimethylbenzene	ND	5.0	μg/L	5	10/20/2009 9:57:05 AM
1,2-Dichloroethane (EDC)	ND	5.0	μg/L	5	10/20/2009 9:57:05 AM
1,2-Dibromoethane (EDB)	300	10	μg/L	5	10/20/2009 9:57:05 AM
Naphthalene	80	20	μg/L	5	10/20/2009 9:57:05 AM
1-Methylnaphthalene		20	µg/L	5	10/20/2009 9:57:05 AM
2-Methylnaphthalene	180	50 50	μg/L	5	10/20/2009 9:57:05 AM
Acetone	ND	5.0	μg/L	5	10/20/2009 9:57:05 AM
Bromobenzene	ND	5.0	μg/L	5	10/20/2009 9:57:05 AM
Bromodichloromethane	ND		μg/L	5	10/20/2009 9:57:05 AM
Bromoform	ND	5.0 5.0	μg/L	5	10/20/2009 9:57:05 AM
Bromomethane	ND	5.0	μg/L	5	10/20/2009 9:57:05 AM
2-Butanone	ND	50 50		5	10/20/2009 9:57:05 AM
Carbon disulfide	ND	50	μg/L	5	10/20/2009 9:57:05 AM
Carbon Tetrachloride	ND	5.0	μg/L	5	10/20/2009 9:57:05 AM
Chlorobenzene	ND	5.0	µg/L	5	10/20/2009 9:57:05 AM
Chloroethane	ND	10	μg/L	5	10/20/2009 9:57:05 AM
Chloroform	ND	5.0	µg/L	5	10/20/2009 9:57:05 AM
Chloromethane	ND	5.0	μg/L	5	10/20/2009 9:57:05 AM
2-Chiorotoluene	ND	5.0	μg/L	5	10/20/2009 9:57:05 AM
4-Chlorotoluene	ND	5.0	μg/L	5	10/20/2009 9:57:05 AM
cis-1,2-DCE	ND	5.0	µg/L	5	10/20/2009 9:57:05 AM
cis-1,3-Dichloropropene	ND	5.0	μg/L "	5	10/20/2009 9:57:05 AM
1,2-Dibromo-3-chloropropane	ND	10	μg/L	5	10/20/2009 9:57:05 AM
Dibromochloromethane	ND	5.0	μg/L 		10/20/2009 9:57:05 AM
Dibromomethane	ND	5.0	μg/L 	5	10/20/2009 9:57:05 AM
1,2-Dichlorobenzene	ND	5.0	μg/L	5	10/20/2009 9:57:05 AM
1,3-Dichlorobenzene	ND	5.0	μg/L 	5	10/20/2009 9:57:05 AM
1,4-Dichlorobenzene	ND	5.0	μg/L	5	10/20/2009 9:57:05 AM
Dichlorodifluoromethane	ND	5.0	μg/L	5	
1,1-Dichloroethane	ND	5.0	μg/L	5	10/20/2009 9:57:05 AM
1,1-Dichloroethene	ND	5.0	μg/L	5	10/20/2009 9:57:05 AM
1,2-Dichloropropane	ND	5.0	μg/L	5	10/20/2009 9:57:05 AM
1,3-Dichloropropane	ND	5.0	μg/L	5	10/20/2009 9:57:05 AM
2,2-Dichloropropane	ND	10	μg/L	5	10/20/2009 9:57:05 AM
1,1-Dichloropropene	ND	5.0	μg/L	5	10/20/2009 9:57:05 AM
Hexachlorobutadiene	ND	5.0	µg/L	5	10/20/2009 9:57:05 AM
2-Hexanone	ND	50	μg/L	5	10/20/2009 9:57:05 AN

Qualifiers:

Page 15 of 16

Value exceeds Maximum Contaminant Level

E Estimated value

J Analyte detected below quantitation limits

ND Not Detected at the Reporting Limit

S Spike recovery outside accepted recovery limits

B Analyte detected in the associated Method Blank

H Holding times for preparation or analysis exceeded

MCL Maximum Contaminant Level

RL Reporting Limit

Date: 21-Oct-09

CLIENT: Lab Order: Souder, Miller and Associates

0910318

Project:

Mini Mart

Lab ID:

0910318-08

Client Sample ID: MW-7

Collection Date: 10/14/2009 3:30:00 PM

Date Received: 10/16/2009

Matrix: AQUEOUS

Analyses	Result	PQL	Qual	Units	DF	Date Analyzed
						Analyst: HL
EPA METHOD 8260B: VOLATILES	43	5.0		μg/L	5	10/20/2009 9:57:05 AM
Isopropylbenzene	26	5.0		μg/L	5	10/20/2009 9:57:05 AM
4-Isopropyltoluene	ND	50		μg/L	5	10/20/2009 9:57:05 AM
4-Methyl-2-pentanone	ND	15		μg/L	5	10/20/2009 9:57:05 AM
Methylene Chloride	ND	5.0		μg/L	5	10/20/2009 9:57:05 AM
n-Butylbenzene	80	5.0		μg/L	5	10/20/2009 9:57:05 AM
n-Propylbenzene	12 ·	5.0		μg/L	5	10/20/2009 9:57:05 AM
sec-Butylbenzene	ND	5.0		μg/L	5	10/20/2009 9:57:05 AM
Styrene	6.4	5.0		μg/L	5	10/20/2009 9:57:05 AM
tert-Butylbenzene	ND	5.0		μg/L	5	10/20/2009 9:57:05 AM
1,1,1,2-Tetrachloroethane	ND ND	10		μg/L	5	10/20/2009 9:57:05 AM
1,1,2,2-Tetrachloroethane	ND	5.0		μg/L	5	10/20/2009 9:57:05 AM
Tetrachloroethene (PCE)	ND	5.0		μg/L	5	10/20/2009 9:57:05 AM
trans-1,2-DCE	ND	5.0		µg/L	5	10/20/2009 9:57:05 AM
trans-1,3-Dichloropropene	ND	5.0		μg/L	5	10/20/2009 9:57:05 AM
1,2,3-Trichlorobenzene	ND	5.0		μg/L	5	10/20/2009 9:57:05 AM
1,2,4-Trichlorobenzene	ND	5.0		μg/L	5	10/20/2009 9:57:05 AM
1,1,1-Trichloroethane	ND	5.0		μg/L	5	10/20/2009 9:57:05 AM
1,1,2-Trichloroethane	ND	5.0		μg/L	5	10/20/2009 9:57:05 AM
Trichloroethene (TCE)	ND	5.0		μg/L	5	10/20/2009 9:57:05 AM
Trichlorofluoromethane	ND	10		µg/L	5	10/20/2009 9:57:05 AM
1,2,3-Trichloropropane	ND	5.0		μg/L	5	10/20/2009 9:57:05 AM
Vinyl chloride	1400	150		μg/L	100	10/20/2009 8:05:55 AN
Xylenes, Total	95.4	54.6-141		%REC	5	10/20/2009 9:57:05 AN
Surr: 1,2-Dichloroethane-d4	95.4 73.0	60.1-133		%REC	5	10/20/2009 9:57:05 AN
Surr: 4-Bromofluorobenzene	75.0 95.7	78.5-130		%REC	5	10/20/2009 9:57:05 AN
Surr: Dibromofluoromethane Surr: Toluene-d8	95.7 95.1	79.5-126		%REC	5	10/20/2009 9:57:05 AM

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Value exceeds Maximum Contaminant Level

RL Reporting Limit

Page 16 of 16

E Estimated value

J Analyte detected below quantitation limits

ND Not Detected at the Reporting Limit

S Spike recovery outside accepted recovery limits

B Analyte detected in the associated Method Blank

H Holding times for preparation or analysis exceeded

MCL Maximum Contaminant Level

## QA/QC SUMMARY REPORT

Client:

Souder, Miller and Associates

Project:

Mini Mart

Work Order:

0910318

Analyte	Result	Units	PQL	SPK Va SPK ref	%Rec LowLimit HighLimit			%RPD	RPDLimit	Qual
Method: EPA Method 8260B:	VOLATILES	145112			Batch ID:	R35790	Analysi	is Date:	10/19/2009	8:59:35 AN
Sample ID: 5ml rb		MBLK			Daton ID.	1100100		. =		
Benzene	ND	μg/L	1.0							
Toluene	ND	µg/L	1.0							
Ethylbenzene	ND	μg/L	1.0							
Methyl tert-butyl ether (MTBE)	ND	μg/L	1.0							
1,2,4-Trimethylbenzene	ND	μg/L	1.0							
1,3,5-Trimethylbenzene	ND	µg/L	1.0							
1,2-Dichloroethane (EDC)	ND	μg/L	1.0							
1,2-Dibromoethane (EDB)	ND	µg/L	1.0							
Naphthalene	ND	µg/L	2.0							
1-Methylnaphthalene	ND	μg/L	4.0							
2-Methylnaphthalene	ND	μg/L	4.0			-				
Acetone	ND	µg/L	10							
Bromobenzene	ND	μg/L	1.0							
Bromodichloromethane	ND	μg/L	1.0						,	
Bromoform	ND	μg/L	1.0							
Bromomethane	ND	μg/L	1.0							
2-Butanone	ND	μg/L	10							
Carbon disulfide	ND	µg/L	10							
Carbon Tetrachloride	ND	µg/L	1.0							
Chlorobenzene	ND	μg/L	1.0							
Chloroethane	ND	μg/L	2.0							
Chloroform	ND	μg/L	1.0							
Chloromethane	ND	μg/L	1.0							
2-Chlorotoluene	ND	μg/L	1.0							
4-Chlorotoluene	ND	μg/L	1.0							
cis-1,2-DCE	ND	μg/L	1.0							
cis-1,3-Dichloropropene	ND	μg/L	1.0							
1,2-Dibromo-3-chloropropane	ND	μg/L	2.0							
Dibromochloromethane	ND	μg/L	1.0							
Dibromomethane	ND	μg/L	1.0							
1,2-Dichlorobenzene	ND	μg/L	1.0							
1,3-Dichlorobenzene	ND	µg/L	1.0							
1,4-Dichlorobenzene	ND	μg/L	1.0							
Dichlorodifluoromethane	ND	μg/L	1.0							
1,1-Dichloroethane	ND	μg/L	1.0							
1,1-Dichloroethene	ND	μg/L	1.0							
1,2-Dichloropropane	ND	µg/L	1.0							
1,3-Dichloropropane	ND	μg/L	1.0							
2,2-Dichloropropane	ND	μg/L	2.0							
1,1-Dichloropropene	ND	µg/L	1.0							
Hexachlorobutadiene	ND	μg/L	1.0							
2-Hexanone	ND	μg/L	10							
Isopropylbenzene	ND	μg/L	1.0							
	ND	μg/L	1.0							

#### Qualifiers:

Page 1

E Estimated value

J Analyte detected below quantitation limits

R RPD outside accepted recovery limits

H Holding times for preparation or analysis exceeded

ND Not Detected at the Reporting Limit

S Spike recovery outside accepted recovery limits

# QA/QC SUMMARY REPORT

Client:

Souder, Miller and Associates

Project:

Mini Mart

Work Order:

0910318

Analyte	Result	Units	PQL	SPK Va SPK ref	%Rec Lo	wLimit Hig	hLimit	%RPD	RPDLimit Qual
Method: EPA Method 8260B:	VOLATILES			•	Batch ID:	R35790	Anahe	sis Date:	10/19/2009 8:59:35 AM
Sample ID: 5ml rb		MBLK			Batch ID.	K301 90	Allalys	no Dato.	(6,10,200
4-Methyl-2-pentanone	ND	μg/L	10		i				
Methylene Chloride	ND	μg/L	3.0						
n-Butylbenzene	ND	μg/L	1.0						
n-Propylbenzene	ND	μg/L	1.0		-				
sec-Butylbenzene	ND	μg/L	1.0		•				
Styrene	ND	μg/L	1.0						
tert-Butylbenzene	ND	μg/L	1.0						
1,1,1,2-Tetrachloroethane	ND	μg/L	1.0						
1,1,2,2-Tetrachloroethane	ND	μg/L	2.0						
Tetrachloroethene (PCE)	ND	μg/L	1.0						
trans-1,2-DCE	ND	µg/L	1.0						
trans-1,3-Dichloropropene	ND	μg/L	1.0						
1,2,3-Trichlorobenzene	ND	μg/L	1.0		*				
1,2,4-Trichlorobenzene	NÐ	μg/L	1.0						
1,1,1-Trichloroethane	ND	μg/L	1.0						e*
1,1,2-Trichloroethane	ND	µg/L	1.0						
Trichloroethene (TCE)	ND	μg/L	1.0						1
Trichlorofluoromethane	ND	μg/L	1.0						
1,2,3-Trichloropropane	ND	μg/L	2.0						
Vinyl chloride	ND	μg/L	1.0						
Xylenes, Total	ND	µg/L	1.5		D - 1 - 1 - 1 D -	D05700	Analy	sis Date:	10/20/2009 12:15:04 AM
Sample ID: b6		MBLK			Batch ID:	R35790	Allaly	SIS Date.	10/20/2000 12:10:077
Benzene	ND	μg/L	1.0						
Toluene	ND	μg/L	1.0						
Ethylbenzene	ND	μg/L	1.0						
Methyl tert-butyl ether (MTBE)	ND	μg/L	1.0						
1,2,4-Trimethylbenzene	ND	μg/L	1.0						
1,3,5-Trimethylbenzene	ND	μg/L	1.0						
1,2-Dichloroethane (EDC)	ND	μg/L	1.0						
1,2-Dibromoethane (EDB)	ND	µg/L	1.0						
Naphthalene	ND	μg/L	2.0						
1-Methylnaphthalene	ND	μg/L	4.0						
2-Methylnaphthalene	ND	μg/L	4.0						
Acetone	ΝĎ	μg/L	10						
Bromobenzene	ND	μg/L	1.0						
Bromodichloromethane	ND	μg/L	1.0						
Bromoform	ND	μg/L	1.0						
Bromomethane	ND	μg/L	1.0						
2-Butanone	ND	μg/L	10						
Carbon disulfide	ND	μg/L	10						
Carbon Tetrachloride	ND	μg/L	1.0						
Chlorobenzene	ND	μg/L	1.0						
~···~·~	ND	μg/L	2.0						
Chloroethane	NU	µg/L	£.0						

Qualifiers:

R RPD outside accepted recovery limits

ND Not Detected at the Reporting Limit

S Spike recovery outside accepted recovery limits

Page 2

E Estimated value

J Analyte detected below quantitation limits

H Holding times for preparation or analysis exceeded

# QA/QC SUMMARY REPORT

Client:

Souder, Miller and Associates

Project:

Mini Mart

Work Order:

0910318

Analyte	Result	Units	PQL	SPK Va SPK ref	%Rec Lo	wLimit Hig	hLimit %RPD	RPDLimit Qual
Method: EPA Method 8260B:	VOLATILES				Batch ID:	R35790	Analysis Date:	10/20/2009 12:15:04 AM
Sample ID: b6		MBLK			Batti ID.	K201 20	, and you but on	
Chloromethane	ND	μg/L	1.0					
2-Chlorotoluene	ND	μg/L	1.0			•		
4-Chlorotoluene	ND	μg/L	1.0					•
cis-1,2-DCE	ND	μg/L	1.0					
cis-1,3-Dichloropropene	ND	μg/L	1.0					
1,2-Dibromo-3-chloropropane	ND	µg/L	2.0					
Dibromochloromethane	ND	μg/L	1.0					
Dibromomethane	ND	μg/L	1.0					
1,2-Dichlorobenzene	ND	μg/L	1.0					
1,3-Dichlorobenzene	ND	μg/L	1.0					
1,4-Dichlorobenzene	ND	μg/L	1.0					
Dichlorodifluoromethane	ND	μg/L	1.0					
1,1-Dichloroethane	ND	μg/L	1.0					
1,1-Dichloroethene	ND	μg/L	1.0					
1,2-Dichloropropane	ND	μg/L	1.0					
1,3-Dichloropropane	ND	µg/L	1.0					
2,2-Dichloropropane	ND	μg/L	2.0					
1,1-Dichloropropene	ND	μg/L	1.0					
Hexachlorobutadiene	ND	μg/L	1.0					
2-Hexanone	ND	μg/L	10					
Isopropylbenzene	ND	µg/L	1.0					
4-Isopropyltoluene	ND	μg/L	1.0			•		
4-Methyl-2-pentanone	ND	μg/L	10					
Methylene Chloride	ND	μg/L	3.0					
n-Butylbenzene	ND	μg/L	1.0					
n-Propylbenzene	ND	µg/L	1.0					
sec-Butylbenzene	ND	μg/L	1.0					
Styrene	ND	hâ/r	1.0					
tert-Butylbenzene	ND	μg/L	1.0					
1,1,1,2-Tetrachioroethane	ND	μg/L	1.0					
1,1,2,2-Tetrachloroethane	ND	μg/L	2.0					
Tetrachloroethene (PCE)	ND	μg/L	1.0					
trans-1,2-DCE	ND	μg/L	1.0		•			
trans-1,3-Dichloropropene	ND	µg/L	1.0					
1,2,3-Trichlorobenzene	ND	μg/L	1.0					
1,2,4-Trichlorobenzene	ND	µg/L	1.0					-
1,1,1-Trichloroethane	ND	µg/L	1.0					
1,1,2-Trichloroethane	ND	µg/L	1.0					
Trichloroethene (TCE)	ND	µg/L	1.0					
Trichlorofluoromethane	ND	μg/L	1.0		٠			
1,2,3-Trichloropropane	ND	µg/L	2.0				•	
Vinyl chloride	ND	μg/L	1.0					
Xylenes, Total	ND	µg/L	1.5		Datek ID	. Dosto	n Analysis Date	10/19/2009 1:04:50 P
Sample ID: 100ng Ics		LCS			Batch ID	: R3579	, Allalysis Dale	

Qualifiers:

R RPD outside accepted recovery limits

ND Not Detected at the Reporting Limit

Spike recovery outside accepted recovery limits

Page 3

S

E Estimated value

J Analyte detected below quantitation limits

H Holding times for preparation or analysis exceeded

## QA/QC SUMMARY REPORT

Client:

Souder, Miller and Associates

Project:

Mini Mart

Work Order:

0910318

Analyte	Result	Units	PQL	SPK Va S	PK ref	%Rec Lo	owLimit Hig	ghLimit %RPD	RPDLimit Qual
Method: EPA Method 8260B: Sample ID: 100ng ics	VOLATILES	LCS				Batch ID:	R35790	Analysis Date:	10/19/2009 1:04:50 PM
Benzene	19.60	μg/L	1.0	20	0	98.0	76.7	114	
Toluene	21.47	μg/L	1.0	20	0	107	78.4	117	
Chlorobenzene	20.91	μg/L	1.0	20	0	105	80.7	127	
1,1-Dichloroethene	21.91	μg/L	1.0	20	0	110	80.2	128	
Trichloroethene (TCE)	19.77	μg/L	1.0	20	0	98.8	77.4	115	
Sample ID: 100ng lcs_b		LCS		•		Batch ID:	R35790	Analysis Date:	10/20/2009 1:10:28 AM
Benzene	18.88	μg/L	1.0	20	0	94.4	76.7	114	
Toluene	20.53	μg/L	1.0	20	0	103	78.4	117	
Chlorobenzene	19.99	μg/L	1.0	20	0	99.9	80.7	127	
1,1-Dichloroethene	20.99	μg/L	1.0	20	0	105	80.2	128	
Trichloroethene (TCE)	16.66	µg/L	1.0	20	0	83.3	77.4	115	

#### Qualifiers:

- E Estimated value
  - Analyte detected below quantitation limits
- R RPD outside accepted recovery limits

- H Holding times for preparation or analysis exceeded
- ND Not Detected at the Reporting Limit
- S Spike recovery outside accepted recovery limits

Page 4

#### Sample Receipt Checklist

10/16/2009

Client Name SMA-FARM		Date Receive	ed:	10/16/2009
Work Order Number 0910318		Received by	: TLS	
	10h	Sample ID I	abels checked by:	Toilida S
Checklist completed by: Signature		107		Initials
Oignation ( )	I		•	
Matrix: Carrier nat	me: <u>Greyhound</u>			
Shipping container/cooler in good condition?	Yes 🗹	No 🗌	Not Present	
Custody seals intact on shipping container/cooler?	Yes 🗹	No 🗀	Not Present	Not Shipped
Custody seals intact on sample bottles?	Yes 🗌	No 🗀	N/A ✓	
Chain of custody present?	Yes 🗹	No 🗌		
Chain of custody signed when relinquished and received?	Yes 🗹	No 🗌		
Chain of custody agrees with sample labels?	Yes 🗹	No 🗀	•	
Samples in proper container/bottle?	Yes 🗹	No 🗌		
Sample containers intact?	Yes 📉	Wo X		
Sufficient sample volume for indicated test?	Yes 🗹	No □		
	Yes 🗹	No 🗆		Number of preserved
All samples received within holding time?  No VOA vials have zero headspace?  No VOA vials	_	Yes 🗹	No 🗌	bottles checked for pH:
Water - VOA vials have zero headspace?  No VOA vials  Water - Preservation labels on bottle and cap match?	Yes	No 🗌	N/A 🗹	•
Water - pH acceptable upon receipt?	Yes 🗌	No 🗌	N/A 🗹	<2 >12 unless noted below.
Container/Temp Blank temperature?	6.3°	<6° C Accepta	ble	Delow.
COMMENTS:		If given sufficier	nt time to cool.	
CONTRACTO.				
Client contacted Date contacted:		Pe	rson contacted	
Contacted by: Regarding:				
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	) broke			woon
arrival. To idialed	<u> </u>			
		. <u></u>		
Corrective Action	<u></u>			

ر اح	Time	HALL ENVIRONMENTAL
SMK	Project Name:	
,		www.hallenvironmental.com
612 E R		4901 Hawkins NE - Albuquerque, NM 87109
FARMINGE MASTADI	Project #:	Tel. 505-345-3975 Fax 505-345-4107
hone #: 325-5667 (588)		Analysis Requ
email or Fax#:	Project Manager:	(φ) (φ)
DA/QC Package:	1	seiC
Standard 🗆 Level 4 (Full Validation)	( Ani for)	]/se
n.	Sampler: LLA K	) Hc(G)
□ NELAP □ Other	On the second to Make the second seco	HT - 1.8 1.4(HA 08 /
□ EDD (Type)	Sample Representation (**)	NO N
		hood hooch hood A ole (AC), (AC)
Date   Time   Matrix   Sample Request ID	D S	// + // Meth/Meth/Meth/Meth/Meth/Meth/Meth/Meth/
-	lype and # lype	31EX 310 310 32CR/ 32CR/ 310 310 310 310 310
1/4/0 1321 1/20 MW -12	3 100a Halls	88 × 88 × 1 × 1 × 1 × 1 × 1 × 1 × 1 × 1
7277		
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1342 MW-8		
1512 NWW Y		
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ate: Time: Relinguished-tox	-	
100 1600	10 Note Index	Remarks:
ate: Time: Felinquis, ed by:	Received by Date Time	
If necessary, samples submitted to Hall Environmental may be subo	Dontracted to other accredited laboratories. This serves as notice of this parts	If necessary, samples submitted to Hall Environmental may be subcontracted to other accredited taboratories. This serves as notice of this possibility. Any sub-contracted data will be clearly notated on the analytical report