



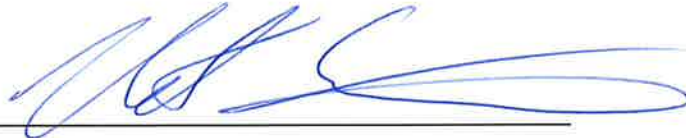
**Cover Page**  
**Form 1216**  
**Quarterly Groundwater Monitoring Report**

1. **Site Name:**  
Conoco Mini-Mart UST Release Site
2. **Responsible party:**  
State Lead Site
3. **Responsible party mailing address** (list contact person if different):  
Ms. Sarah McGrath  
New Mexico Environment Department  
Petroleum Storage Tank Bureau  
2905 Rodeo Park Drive East, Building 1  
Santa Fe, New Mexico 87505
4. **Facility Number:**  
Facility #: 27498      RID #: 2316
5. **Address/legal description:**  
3837 Highway 64  
Chama, New Mexico 87520
6. **Author/consulting company:**  
Matthew Earthman, P.G. – Souder, Miller & Associates
7. **Date of report:**  
April 16, 2015
8. **Date of confirmation of release or date PSTB was notified of release:**  
A release was confirmed at the Conoco Mini-Mart on 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 to the best of my knowledge it is true and complete.

**Signature:**



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**Name:**

Matthew Earthman, P.G.

**Affiliation:**

Souder, Miller & Associates

**Title:**

Project Geoscientist

**Date:**

April 16, 2015

## 1.0 Introduction

### A. Scope of Work

Souder, Miller and Associates (SMA) is pleased to submit the following report detailing groundwater monitoring at the Conoco Mini-Mart UST release site located at 3837 Highway 64 in Chama, New Mexico. This report is submitted pursuant to the work plan and cost schedule dated October 20, 2014 and approved by the NMED PSTB on November 18, 2014 (WPID #3791-1). SMA requested a time extension for weather related delays on January 12, 2015. The Petroleum Storage Tank Bureau (PSTB) approved a 90 day extension on February 9, 2015. This report was prepared pursuant to the contract between SMA and the New Mexico Environment Department (contract number 14-667-2000-0033). This report constitutes the only deliverable associated with the current work plan and is the first groundwater monitoring event conducted at the site since April, 2010.

### 1.2 Monitoring Event's Highlights

Groundwater monitoring was performed at the site on March 24, 2015. Four of the five existing site wells were checked for the presence of NAPL, gauged for depth to water, and sampled for laboratory analysis of the groundwater by EPA Method 8260. Groundwater monitoring well MW-6 has been destroyed since the previous groundwater monitoring event in April, 2010. It was likely scraped off by snow removal activities. MW-9 was seen at the site and appeared to be in good condition but was not sampled because the field tech incorrectly believed MW-9 had already been plugged and abandon. No NAPL was detected in any well. The average groundwater elevation at the Conoco Mini-Mart site has decreased by 1.08 feet relative to the previous gauging event conducted in April, 2010.

Total naphthalenes were detected above the New Mexico Water Quality Control Commission Regulations (NMWQCCR) standard (30 µg/L) in monitoring well MW-7 at a concentration of 105 µg/L. Ethylbenzene (170 µg/L) and total xylenes (390 µg/L) were also detected in monitoring well MW-7 above the laboratory reporting limit (RL) but below applicable NMWQCCR standards. Total xylenes (18 µg/L) and total naphthalenes (4.8 µg/L) were detected in monitoring well MW-8 above the RL but below applicable NMWQCCR standards. No constituents were detected above the RL in monitoring wells MW-11 or MW-12.

## 2.0 Site Background

Historical files report that the owner of the adjoining property to the south of the Conoco Mini-Mart had complained of gasoline odors in the basement sometime in the 1970's. A 1989 "Environmental Evaluation" performed by Sergent, Hauskins & Beckwith included the drilling of four exploratory soil borings and groundwater sampling from three of the four soil borings. Depths to groundwater at the soil boring locations ranged from 9 to 13 feet below ground surface (bgs). The groundwater samples were submitted to an analytical laboratory for analysis. The sum of benzene, toluene, ethylbenzene, and total xylenes (BTEX) concentrations in the groundwater samples ranged from 71 µg/L to 17,500 µg/L. Methyl tert-butyl ether (MTBE) was also identified in groundwater, while 1,2-dibromoethane (EDB) and 1,2-dichloroethane were not. A sheen was also noted on purged groundwater at two of the sampling locations. Groundwater flow was estimated by Sergent, Hauskins & Beckwith to be in a south-southeasterly direction.

The NMED PSTB contracted with INTERA in January, 2005 to perform soil boring and monitoring well installation at the site in an attempt to determine the extent of on-site contamination and to determine the location of USTs remaining on site. The 1994 PSTB inspection records indicated the existence of two abandon USTs, one filled with water and one with several inches of petroleum product. Pumps and dispensers had apparently been removed. Analytical results for the subsurface soils located immediately south of the USTs showed concentrations of contaminants of concern (COC) to be above PSTB Tier 1 Soil Concentrations Protective of Groundwater. Eight groundwater monitoring wells were installed. Groundwater analytical results showed concentrations of COC to be above NMWQCCR standards in monitoring wells MW-1, MW-2, MW-5, MW-7, and MW-8.

INTERA reported that two USTs were present in the northern portion of the property. Real estate contract records show that three storage tanks were present at the site when the former owner, Diamond J. Oil Company, purchased the property. Based on the contaminant levels in the soil on the south side of the property, the third UST is suspected to be located along the south side of the former gas station building. It was recommended that the three USTs be located and removed.

The analytical results from the 2005 INTERA Site Assessment show that the groundwater contamination has migrated off site and that the groundwater gradient is south-southwest.

SMA was contracted by the NMED PSTB in January, 2006 to complete a site assessment and other necessary work at the Conoco Mini-Mart release site. Following the site assessment, SMA removed three USTs and excavated a total of 1,060 cubic yards of contaminated soil in December, 2006. Five site monitoring wells (MW-9, MW-10, MW-11, MW-12, and MW-13) were installed from March 27-29, 2007 after the remedial excavation was completed. Existing site monitoring wells MW-1 and MW-2 were destroyed during the remedial excavation activities.

SMA completed the first quarterly ground water monitoring of the subject site on April 4, 2007. Contaminants of concern (COC) were above NMWQCCR standards in monitoring wells MW-5, MW-7, MW-8, MW-11, MW-12, and MW-13. Five additional monitoring events were completed between 2007 and 2009, and in October, 2009, monitoring well MW-13 was plugged and abandoned.

During the most recent groundwater monitoring event in April, 2010, SMA plugged and abandoned an additional four site monitoring wells (MW-3, MW-4, MW-5, and MW-10). Following well decommission, SMA also conducted a groundwater monitoring event of the six (6) existing site wells (MW-6, MW-7, MW-8, MW-9, MW-11, and MW-12). Concentrations of benzene, total xylenes, and total naphthalenes continued to exceed the applicable NMWQCCR standard in monitoring well MW-7. Monitoring well MW-12 also contained total xylenes and total naphthalenes above the applicable NMWQCCR standard.

### **3.0 Completed Tasks**

#### **3.0.1 Brief description of remediation system and date installed.**

Not applicable, no remediation system has been installed.

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

Not applicable

### **3.1 Volatile Organic Hydrocarbon Monitoring**

Four of the five existing site monitoring wells (MW-7, MW-8, MW-11, and MW-12) at the Conoco Mini-Mart site in Chama, New Mexico were sampled on March 24, 2015 and analyzed for volatile organic hydrocarbon COCs by Environmental Protection Agency (EPA) Method 8260. Figure 1 illustrates the location of the monitoring wells. Figure 2 illustrates the groundwater gradient and direction. Figure 3 illustrates contaminant concentrations. Current and previous analytical results are provided in Table 1. A summary of groundwater level measurements are provided in Table 4. Procedures for sampling the monitoring wells are described in Appendix 1. Field Notes are included in Appendix 2. Laboratory analytical results are included in Appendix 3.

Monitoring well MW-6, located on the eastern edge of the property and down gradient from the tank pits, was not located. SMA field personnel used a metal detector, digging bar, and the survey coordinates to attempt to locate the well. The well was likely destroyed during snow removal activities along Highway 64.

Groundwater monitoring well MW-7, is located down gradient of the tank pits. Total naphthalenes (105 µg/L) were detected above NMWQCCR standards. Ethylbenzene (170 µg/L) and total xylenes (390 µg/L) were also detected above the RL but below applicable NMWQCCR standards.

Groundwater from MW-8, located cross gradient from the former tank pits, contained total xylenes (18 µg/L) and total naphthalenes (4.8 µg/L) above the RL but below applicable NMWQCCR standards.

Groundwater from MW-11, located down gradient from the northern tank pit and cross gradient from the southern tank pit did not contain any hydrocarbon COCs above the laboratory RL.

Groundwater from MW-12, located cross gradient from the northern tank pit and up gradient from the southern tank pit did not contain any hydrocarbon COCs above the laboratory RL.

Due to a misunderstanding, SMA field personnel incorrectly believed that MW-9 had been plugged and abandoned and MW-13 was supposed to be sampled during this event. SMA field personnel did see MW-9, but mistook it for utility access associated with the nearby business. The well appeared to be in good condition and will be sampled during future events.

### **3.2 Dissolved Metals Monitoring**

Not applicable

### **3.3 Groundwater Measurements**

Depths to groundwater were measured in four of the five site monitoring wells (MW-6, MW-7, MW-11, and MW-12) on March 24, 2015. The average depth to water in the wells was 4.83 feet, which represents a 1.08 foot decrease since the wells were last gauged on April 6, 2010. Figure 2 is a potentiometric surface map of the Chama Conoco Mini-Mart UST Release site.

Groundwater flow direction, based on groundwater elevation data of the five site monitoring wells, is to the southwest at a gradient of 0.015 feet per foot. The groundwater gradient is slightly shallower and is generally consistent with what was calculated during the previous gauging event in April, 2010.



## **4.0 SUMMARY AND CONCLUSIONS**

### **4.1 Discussion of any trends or changes noted in analytical results or site conditions.**

Total naphthalenes were detected above the NMWQCCR standard in monitoring well MW-7. Monitoring wells MW-7 and MW-8 also contained ethylbenzene and total xylenes above the RL but below the applicable NMWQCCR standards. The destruction of MW-6 since the previous monitoring event in April, 2010 is not likely to have a significant impact on tracking future contamination plumes. Groundwater monitoring data for MW-6 shows the most recent detection was of total xylenes (0.87 µg/L) in April, 2007. All monitoring wells on site have improved significantly in quality since the previous monitoring event in April, 2010.

### **4.2 Ongoing assessment of remediation system.**

Not applicable, no remediation system has been installed

### **4.3 Recommendations.**

The March, 2015 monitoring event is the third groundwater monitoring event to analyze for volatile organic hydrocarbon COCs by EPA Method 8260. All previous monitoring events used EPA Method 8021 for hydrocarbon COCs and EPA Method 8310 for total naphthalenes. Although EPA method 8260 is slightly more expensive, it analyzes for EDC, EDB, and total naphthalenes, while Method 8021 does not. From July, 2005 to October, 2009 there are no records of EDC or EDB concentrations in any well at the Conoco Mini-Mart Site. The three most recent groundwater monitoring events using method 8260 have not detected EDC or EDB above the RL. SMA recommends using EPA Method 504.1 to detect EDB at concentrations at or below the NMWQCCR standards and analyzing for dissolved metals (iron, manganese, and lead) using method EPA Method 6010. This would allow SMA and the PSTB to assess the full extent of natural attenuation occurring on site.



## Figures

1. Site Map
2. Potentiometric Surface Map
3. Groundwater Contaminant Concentration Map

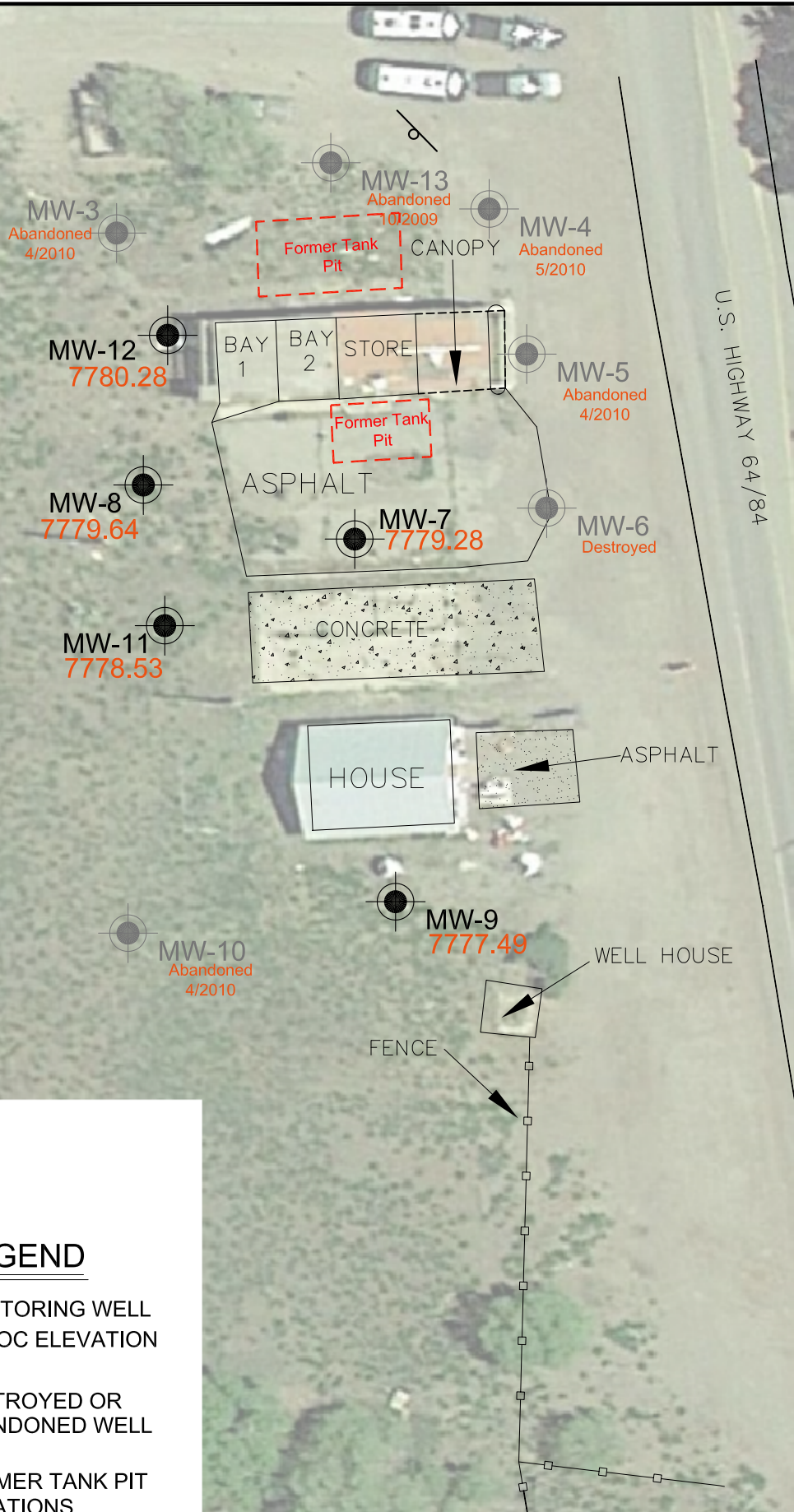
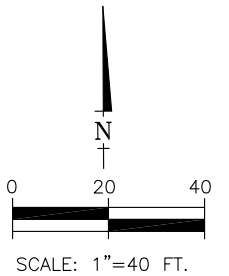
## Tables

1. Summary of Groundwater Analytical Results
4. Depth to Water Measurements

## Appendices

1. Sampling protocol
2. Field Notes/Copies
3. Laboratory Results

## Figures



**LEGEND**

	MW-3 4545.45	MONITORING WELL W/ TOC ELEVATION
	MW-9	DESTROYED OR ABANDONED WELL
		FORMER TANK PIT LOCATIONS

Aerial From from Google Earth Pro (2015)

Drawn MAE	Checked LVA	Approved SAM
Date: APRIL, 2015	Scale: Horiz: 1" = 40' Vert: NA	Project No: 3423555
Sheet: <b>FIGURE 1</b>		

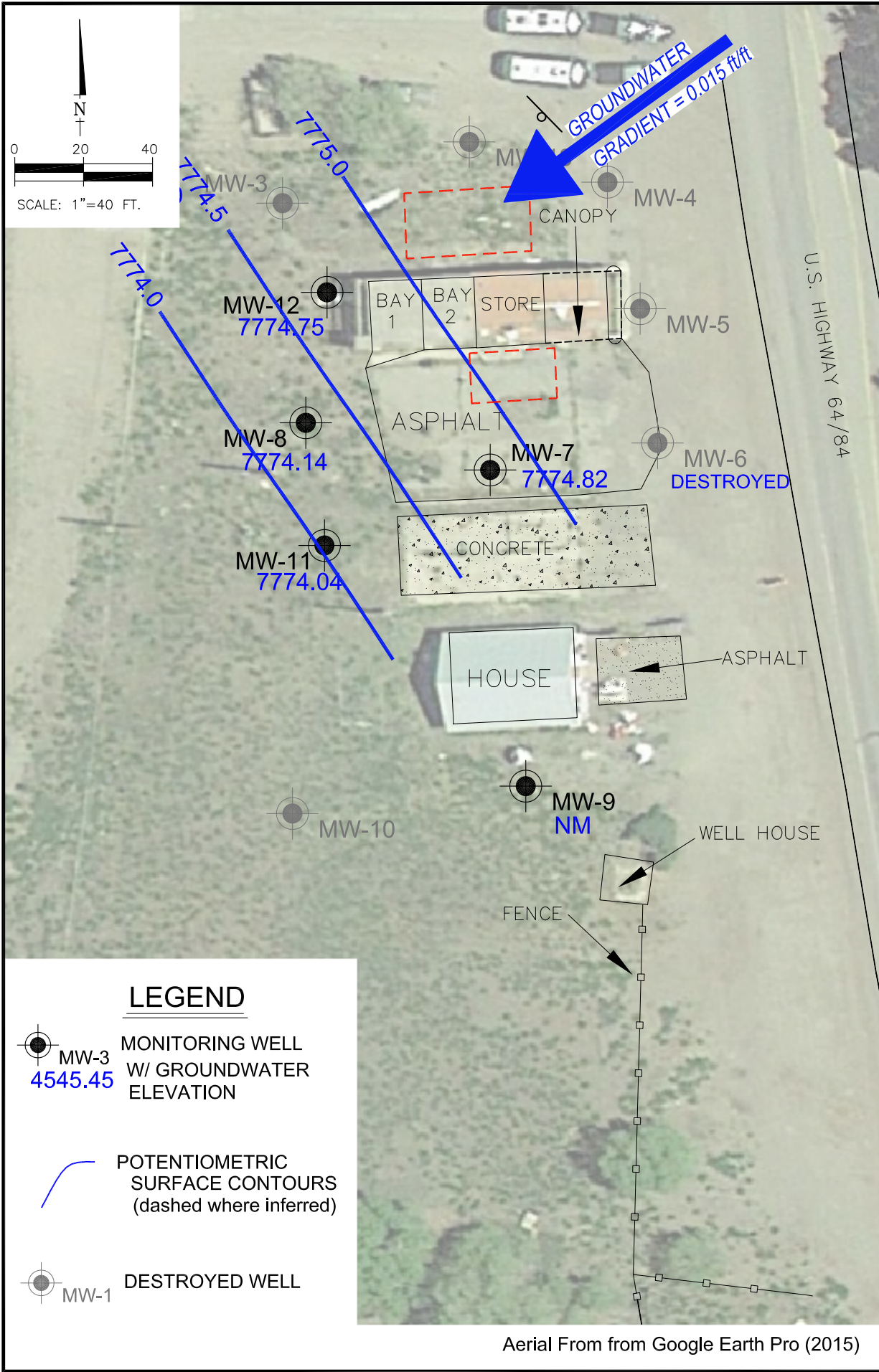
**SITE MAP**

**CONOCO MINI-MART UST RELEASE SITE**

**3837 US HIGHWAY 64, CHAMA, NEW MEXICO**

**SOUDER, MILLER & ASSOCIATES**  
 3451 CANDELARIA RD NE, SUITE D  
 Albuquerque, NM 87107  
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**LEGEND**

- MONITORING WELL W/ GROUNDWATER ELEVATION
- POTENTIOMETRIC SURFACE CONTOURS (dashed where inferred)
- DESTROYED WELL

Drawn MAE	Checked LVA	Approved SAM
Date: April, 2015	Scale: Horiz: 1" = 40' Vert: NA	
Project No: 3423555		Sheet: <b>FIGURE 2</b>

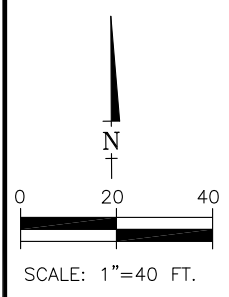
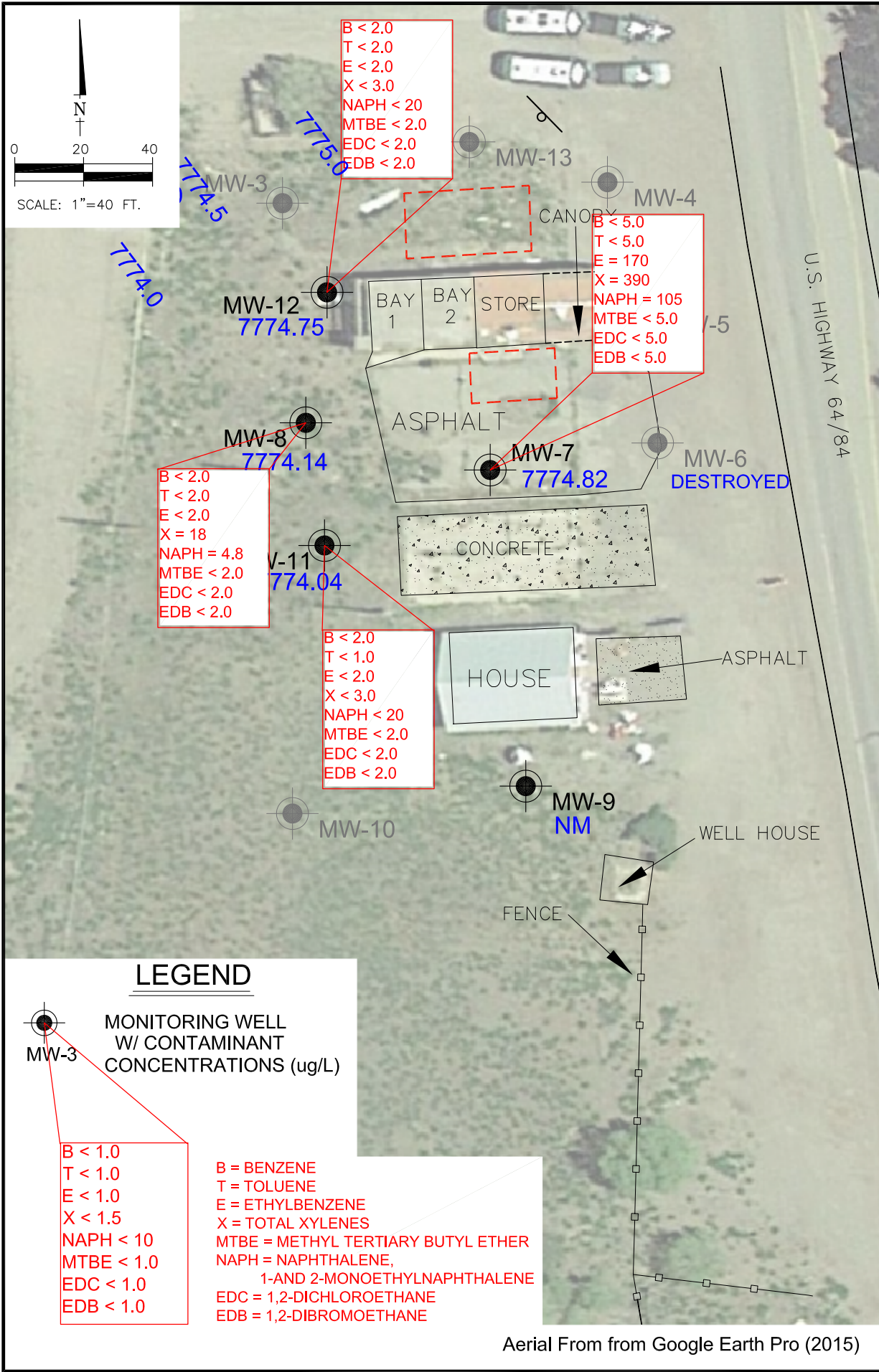
**POTENTIOMETRIC SURFACE MAP - MARCH 24, 2015**  
**CONOCO MINI-MART UST RELEASE SITE**  
**3837 US HIGHWAY 64, CHAMA, NEW MEXICO**

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Aerial From from Google Earth Pro (2015)





B < 2.0  
 T < 2.0  
 E < 2.0  
 X < 3.0  
 NAPH < 20  
 MTBE < 2.0  
 EDC < 2.0  
 EDB < 2.0

B < 5.0  
 T < 5.0  
 E = 170  
 X = 390  
 NAPH = 105  
 MTBE < 5.0  
 EDC < 5.0  
 EDB < 5.0

B < 2.0  
 T < 2.0  
 E < 2.0  
 X = 18  
 NAPH = 4.8  
 MTBE < 2.0  
 EDC < 2.0  
 EDB < 2.0

B < 2.0  
 T < 1.0  
 E < 2.0  
 X < 3.0  
 NAPH < 20  
 MTBE < 2.0  
 EDC < 2.0  
 EDB < 2.0

**LEGEND**

MONITORING WELL  
 W/ CONTAMINANT  
 CONCENTRATIONS (ug/L)

B < 1.0  
 T < 1.0  
 E < 1.0  
 X < 1.5  
 NAPH < 10  
 MTBE < 1.0  
 EDC < 1.0  
 EDB < 1.0

B = BENZENE  
 T = TOLUENE  
 E = ETHYLBENZENE  
 X = TOTAL XYLENES  
 MTBE = METHYL TERTIARY BUTYL ETHER  
 NAPH = NAPHTHALENE,  
 1-AND 2-MONOETHYLNAPHTHALENE  
 EDC = 1,2-DICHLOROETHANE  
 EDB = 1,2-DIBROMOETHANE

Aerial From from Google Earth Pro (2015)

Drawn MAE	Checked LVA	Approved SAM
Date:	APRIL, 2015	
Scale:	Horiz: 1" = 40' Vert: NA	
Project No:	3423555	
Sheet:	FIGURE 2	

**POTENTIOMETRIC SURFACE MAP - MARCH 24, 2015**  
**CONOCO MINI-MART UST RELEASE SITE**  
**3837 US HIGHWAY 64, CHAMA, NEW MEXICO**

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## Tables

Table 1  
 Summary of Groundwater Analytical Results  
 Chama Conoco Mini Mart, 3837 Highway 64, Chama, New Mexico  
 Facility # 27498 RID #2316

MW #	Method 8260									Method 6010
	Date	Benzene	Toluene	Ethyl-benzene	Total Xylenes	MTBE	EDC	EDB	Total Naphthalenes	Lead
MW-1	07/08/05 <sup>INT</sup>	58	2.1	160	290	<1.0	NA	NA	NA	NA
	07/10/06*	5.8	<0.5	17.9	13.2	<1.0	NA	NA	1.57°	NA
	04/04/07	DESTROYED DURING TANK PULL								
NMWQCCR/NMPSTR Standards		10	750	750	620	100	10	0.1	30	0.05

MW #	Method 8260									Method 6010
	Date	Benzene	Toluene	Ethyl-benzene	Total Xylenes	MTBE	EDC	EDB	Total Naphthalenes	Lead
MW-2	07/08/05 <sup>INT</sup>	290	32.0	720	1800	<5.0	NA	NA	NA	NA
	07/10/06*	174	9.0	357	418	11.5	NA	NA	620°	NA
	04/04/07	DESTROYED DURING TANK PULL								
NMWQCCR/NMPSTR Standards		10	750	750	620	100	10	0.1	30	0.05

MW #	Method 8260									Method 6010
	Date	Benzene	Toluene	Ethyl-benzene	Total Xylenes	MTBE	EDC	EDB	Total Naphthalenes	Lead
MW-3	07/08/05 <sup>INT</sup>	<1.0	<1.0	<1.0	<1.0	<1.0	NA	NA	NA	NA
	07/10/06*	<0.5	<0.5	<0.5	<1.0	<1.0	NA	NA	<1.0°	NA
	04/04/07	UNABLE TO LOCATE								
	10/25/07	NOT SAMPLED								
	04/01/08	NOT SAMPLED								
	06/27/08	NOT SAMPLED								
	10/01/08	NOT SAMPLED								
	06/01/09	NOT SAMPLED								
	10/14/09	WELL DAMAGED, NO SAMPLE								
	04/05/10	WELL PLUG & ABANDON								
NMWQCCR/NMPSTR Standards		10	750	750	620	100	10	0.1	30	0.05

MW #	Method 8260									Method 6010
	Date	Benzene	Toluene	Ethyl-benzene	Total Xylenes	MTBE	EDC	EDB	Total Naphthalenes	Lead
MW-4	07/08/05 <sup>INT</sup>	<1.0	<1.0	<1.0	<1.0	<1.0	NA	NA	NA	NA
	07/10/06*	<0.5	<0.5	<0.5	<1.0	<1.0	NA	NA	<1.0°	NA
	04/04/07*	<2.5	<2.5	<2.5	<5.0	<5.0	NA	NA	<1.0°	<0.009
	10/25/07	NOT SAMPLED								
	04/01/08	NOT SAMPLED								
	06/27/08	NOT SAMPLED								
	10/01/08	NOT SAMPLED								
	06/01/09	NOT SAMPLED								
	10/14/09	<1.0	<1.0	<1.0	<1.0	<1.0	NA	NA	<4.0	NA
	04/06/10	WELL PLUG & ABANDON								
NMWQCCR/NMPSTR Standards		10	750	750	620	100	10	0.1	30	0.05



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 Summary of Groundwater Analytical Results  
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 Facility # 27498 RID #2316

MW #	Method 8260									Method 6010
	Date	Benzene	Toluene	Ethyl-benzene	Total Xylenes	MTBE	EDC	EDB	Total Naphthalenes	Lead
MW-5	07/08/05 <sup>INT</sup>	<1.0	4.8	210	940	<1.0	NA	NA	NA	NA
	07/10/06*	<0.5	1.9	142	256	1.7	NA	NA	97°	NA
	04/04/07*	1.9	0.49	195	283	<1.0	NA	NA	105°	<0.009
	10/25/07	NOT SAMPLED								
	04/01/08	NOT SAMPLED								
	06/27/08	NOT SAMPLED								
	10/01/08	NOT SAMPLED								
	06/01/09	NOT SAMPLED								
	10/14/09	NOT SAMPLED								
	04/05/10	WELL PLUG & ABANDON								
NMWQCCR/NMPSTR Standards	10	750	750	620	100	10	0.1	30	0.05	
MW #	Method 8260									Method 6010
	Date	Benzene	Toluene	Ethyl-benzene	Total Xylenes	MTBE	EDC	EDB	Total Naphthalenes	Lead
MW-6	07/08/05 <sup>INT</sup>	<1.0	<1.0	<1.0	<1.0	<1.0	NA	NA	NA	NA
	07/10/06*	<0.5	<0.5	<0.5	<1.0	<1.0	NA	NA	<1.0°	NA
	04/04/07*	<2.5	<2.5	<2.5	0.87	<5.0	NA	NA	<1.0°	<0.009
	10/25/07*	<1.0	<1.0	<1.0	<2.0	<2.5	NA	NA	<6.0°	NA
	04/01/08*	<1.0	<1.0	<1.0	<2.0	<2.5	NA	NA	<2.0°	NA
	06/27/08*	<1.0	<1.0	<1.0	<2.0	<2.5	NA	NA	<2.0°	NA
	10/01/08*	<1.0	<1.0	<1.0	<2.0	<2.5	NA	NA	<2.5°	NA
	06/01/09*	<1.0	<1.0	<1.0	<1.5	<1.0	NA	NA	NA	NA
	10/14/09	<1.0	<1.0	<1.0	<1.5	<1.0	NA	NA	<4.0	NA
	04/06/10	<1.0	<1.0	<1.0	<1.5	<1.0	NA	NA	<4.0	NA
NMWQCCR/NMPSTR Standards	10	750	750	620	100	10	0.1	30	0.05	
MW #	Method 8260									Method 6010
	Date	Benzene	Toluene	Ethyl-benzene	Total Xylenes	MTBE	EDC	EDB	Total Naphthalenes	Lead
MW-7	07/08/05 <sup>INT</sup>	700	86	530	1300	<10	NA	NA	NA	NA
	07/10/06*	50	22	399	1264	18	NA	NA	428°	NA
	04/04/07*	63	12	508	1655	23	NA	NA	489°	<0.009
	10/25/07*	36	19	480	1400	<25	NA	NA	220°	NA
	04/01/08*	48	18	530	1500	<25	NA	NA	326°	NA
	06/27/08*	49	17	680	2500	<25	NA	NA	163°	NA
	10/01/08*	44	15	590	1500	<25	NA	NA	348°	NA
	06/01/09*	40	16	550	1500	<10	NA	NA	NA	NA
	10/14/09	32	14	610	1400	<5.0	NA	NA	560	NA
	04/06/10	28	11	600	1400	<5.0	NA	NA	629	NA
03/24/15	<5.0	<5.0	170	390	<5.0	<5.0	<5.0	105	NA	
NMWQCCR/NMPSTR Standards	10	750	750	620	100	10	0.1	30	0.05	

Table 1  
 Summary of Groundwater Analytical Results  
 Chama Conoco Mini Mart, 3837 Highway 64, Chama, New Mexico  
 Facility # 27498 RID #2316

MW #	Method 8260									Method 6010
	Date	Benzene	Toluene	Ethyl-benzene	Total Xylenes	MTBE	EDC	EDB	Total Naphthalenes	Lead
MW-8	07/08/05 <sup>INT</sup>	49	42	600	1600	<10	NA	NA	NA	NA
	07/10/06*	76	3.7	425	503	44	NA	NA	74°	NA
	04/04/07*	50	8.0	570	1127	81	NA	NA	234°	<0.018
	10/25/07	NOT SAMPLED								
	04/01/08	NOT SAMPLED								
	06/27/08	NOT SAMPLED								
	10/01/08	NOT SAMPLED								
	06/01/09*	4.6	<1.0	34	10	<1.0	NA	NA	NA	NA
	10/14/09	2.7	<1.0	1.8	<1.5	<1.0	NA	NA	<4.0	NA
	04/06/10	7.9	1.6	180	180	<1.0	NA	NA	<4.0	NA
03/24/15	<2.0	<2.0	<2.0	18	<2.0	<2.0	<2.0	4.8	NA	
NMWQCCR/NMPSTR Standards	10	750	750	620	100	10	0.1	30	0.05	

MW #	Method 8260									Method 6010
	Date	Benzene	Toluene	Ethyl-benzene	Total Xylenes	MTBE	EDC	EDB	Total Naphthalenes	Lead
MW-9	04/04/07*	<2.5	<2.5	<2.5	<5.0	<5.0	NA	NA	<1.0°	<0.009
	10/25/07*	<1.0	<1.0	<1.0	<2.0	<2.5	NA	NA	<6.0°	NA
	04/01/08*	<1.0	<1.0	<1.0	<2.0	<2.5	NA	NA	<2.0°	NA
	06/27/08*	8.2	3.9	50	<2.0	<2.5	NA	NA	5.0°	NA
	10/01/08*	11	7.5	58	61	<2.5	NA	NA	<10°	NA
	06/01/09*	<1.0	<1.0	1.8	1.7	<1.0	NA	NA	NA	NA
	10/14/09	7.9	9.2	56	57	<1.0	NA	NA	19	NA
	04/06/10	<1.0	<1.0	<1.0	<1.0	<1.0	NA	NA	<4.0	NA
03/24/15	WELL MISSED									
NMWQCCR/NMPSTR Standards	10	750	750	620	100	10	0.1	30	0.05	

MW #	Method 8260									Method 6010
	Date	Benzene	Toluene	Ethyl-benzene	Total Xylenes	MTBE	EDC	EDB	Total Naphthalenes	Lead
MW-10	04/04/07*	<2.5	<2.5	<2.5	<5.0	<5.0	NA	NA	<1.0°	<0.009
	10/25/07*	<1.0	<1.0	<1.0	<2.0	<2.5	NA	NA	<6.0°	NA
	04/01/08*	<1.0	<1.0	<1.0	<2.0	<2.5	NA	NA	<2.0°	NA
	06/27/08*	<1.0	<1.0	<1.0	<2.0	<2.5	NA	NA	5.0°	NA
	10/01/08*	<1.0	<1.0	<1.0	<2.0	<2.5	NA	NA	<10°	NA
	06/01/09*	<1.0	<1.0	<1.0	<2.0	<2.5	NA	NA	NA	NA
	10/14/09	<1.0	<1.0	<1.0	<1.5	<1.0	NA	NA	<4.0	NA
	04/05/10	WELL PLUG & ABANDON								
NMWQCCR/NMPSTR Standards	10	750	750	620	100	10	0.1	30	0.05	



Table 4 Depth to Water Measurements  
 Chama Conoco Mini Mart UST Release Site, 3837 Highway 64, Chama, New Mexico  
 Facility # 27498      RID #2316

MW #	TOC Elev.	Total Well Depth	07/08/05		07/10/06		04/04/07		10/25/07		04/01/08	
			Depth to Water	Water Elev.	Depth to Water	Water Elev.	Depth to Water	Water Elev.	Depth to Water	Water Elev.	Depth to Water	Water Elev.
MW-1 *	7780.17	15.0	5.74	7774.43	5.26	7774.91	Destroyed					
MW-2 *	7779.97	15.0	6.01	7773.96	5.78	7774.19	Destroyed					
MW-3 *	7780.16	15.5	5.76	7774.40	6.21	7773.95	Not Located		Not Measured		Not Measured	
MW-4 *	7779.55	15.5	4.40	7775.15	4.58	7774.97	Not Measured		Not Measured		Not Measured	
MW-5 *	7779.02	15.0	5.76	7773.26	5.93	7773.09	Not Measured		Not Measured		Not Measured	
MW-6 *	7778.61	12.0	5.63	7772.98	5.90	7772.71	3.74	7774.87	5.31	7773.30	2.40	7776.21
MW-7 *	7779.28	12.5	6.84	7772.44	6.59	7772.69	4.79	7774.49	7.33	7771.95	3.61	7775.67
MW-8 *	7779.64	15.0	7.76	7771.88	7.91	7771.73	6.71	7772.93	Not Measured		Not Measured	
MW-9	7777.49	11.3	Wells Installed March 27-29, 2007				4.92	7772.57	7.26	7770.23	3.23	7774.26
MW-10	7777.61	13.3					4.88	7772.73	6.75	7770.86	2.68	7774.93
MW-11	7778.53	12.0					4.74	7773.79	7.83	7770.70	3.04	7775.49
MW-12	7780.28	13.5					5.75	7774.53	7.60	7772.68	3.93	7776.35
MW-13	7780.47	13.5					5.99	7774.48	7.57	7772.90	3.54	7776.93
Average DTW			5.99		6.02		5.19		7.09		3.20	

MW-X \* Indicates a monitoring well that was installed and surveyed under contracted by Interra in January, 2005.  
 Monitoring wells MW-9, MW-10, MW-11, MW-12, and MW-13 were installed and surveyed by SMA in March, 2007.  
 All top of casing elevations taken from October, 2008 SMA Groundwater Monitoring Report.  
 All measurements in feet

Table 4 Depth to Water Measurements  
 Chama Conoco Mini Mart UST Release Site, 3837 Highway 64, Chama, New Mexico  
 Facility # 27498    RID #2316

MW #	TOC Elev.	Total Well Depth	06/27/08		10/01/08		06/01/09		10/14/09		04/06/10	
			Depth to Water	Water Elev.	Depth to Water	Water Elev.	Depth to Water	Water Elev.	Depth to Water	Water Elev.	Depth to Water	Water Elev.
MW-4 *	7779.55	15.5	Not Measured		Not Measured		Not Measured		4.64	7774.91	Plugged & Abandon	
MW-5 *	7779.02	15.0	Not Measured		Not Measured		Not Measured		5.08	7773.94	Plugged & Abandon	
MW-6 *	7778.61	12.0	5.22	7773.39	5.65	7772.96	4.81	7773.80	5.82	7772.79	2.61	7776.00
MW-7 *	7779.28	12.5	6.96	7772.32	7.83	7771.45	6.41	7772.87	8.01	7771.27	4.09	7775.19
MW-8 *	7779.64	15.0	Not Measured		Not Measured		7.15	7772.49	8.56	7771.08	4.64	7775.00
MW-9	7777.49	11.3	6.95	7770.54	7.72	7769.77	6.23	7771.26	8.21	7769.28	3.69	7775.95
MW-10	7777.61	13.3	6.51	7771.10	7.06	7770.55	5.83	7771.78	7.60	7770.01	Plugged & Abandon	
MW-11	7778.53	12.0	6.76	7771.77	7.31	7771.22	6.19	7772.34	7.82	7770.71	3.69	7774.84
MW-12	7780.28	13.5	7.38	7772.90	7.81	7772.47	6.98	7773.30	8.03	7772.25	4.65	7775.63
MW-13	7780.47	13.5	7.10	7773.37	7.69	7772.78	Not Located		Plugged & Abandon			
Average DTW			6.70		7.30		6.23		7.72		3.75	

MW-X \* Indicates a monitoring well that was installed and surveyed under contracted by Interra in January, 2005.  
 Monitoring wells MW-9, MW-10, MW-11, MW-12, and MW-13 were installed and surveyed by SMA in March, 2007.  
 All top of casing elevations taken from October, 2008 SMA Groundwater Monitoring Report.  
 SMA Plugged and Abandon MW-3, MW-4, MW-5 and MW-10 in April, 2010.  
 All measurements in feet

Table 4 Depth to Water Measurements  
 Chama Conoco Mini Mart UST Release Site, 3837 Highway 64, Chama, New Mexico  
 Facility # 27498      RID #2316

			03/24/15	
MW #	TOC Elev.	Total Well Depth	Depth to Water	Water Elev.
MW-6 *	7778.61	12.0	Destroyed	
MW-7 *	7779.28	12.5	4.46	7774.82
MW-8 *	7779.64	15.0	5.50	7774.14
MW-9	7777.49	11.3	Not Measured	
MW-11	7778.53	12.0	4.49	7774.04
MW-12	7780.28	13.5	5.53	7774.75
Average DTW			4.83	

MW-X \* Indicates a monitoring well that was installed and surveyed under contracted by Interra in January, 2005.  
 Monitoring wells MW-9, MW-10, MW-11, MW-12, and MW-13 were installed and surveyed by SMA in March, 2007.  
 All top of casing elevations taken from October, 2008 SMA Groundwater Monitoring Report.  
 SMA Plugged and Abandon MW-3, MW-4, MW-5 and MW-10 in April, 2010.  
 All measurements in feet

# Appendix 1

## Sampling Protocol



Groundwater 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 clean 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 on a field form or in the field notebook. The water level probe was rinsed with distilled water prior to measuring the water level in each monitoring well. A cleaned oil/water interface probe was used to measure fluid levels in wells suspected to have NAPL.

Monitoring wells were purged of three well bore volumes, until water quality parameters stabilized, or until the well went dry prior to sampling. Using clean gloves and disposable bailers, ground water samples to be analyzed using EPA Method 8260 were collected in 40-ml vials preserved with mercuric chloride. All samples were labeled with the date, time, site and sample identification, the initials of the sampler, and the desired laboratory analysis. The samples were then stored on ice in a cooler for shipment to the analytical laboratory.

Sample ID were recorded on chain of custody forms prior to delivery to Hall Environmental Analysis Laboratory.

## Appendix 2

### Field Notes, Copies

**Chama Mini-Mart UST Release Site, 3837 Highway 64**

**SMA Job # 3423555**

Date: 3-24-15 Time On-site: 1100 Time Off-site: \_\_\_\_\_ Sampled by: Laura Van Aist

Weather conditions: Sunny, 45°

Equipment Used: Metal detector, well sounder, plastic bailers.

Monitoring Well Data

MW ID	Total Depth	DTW	Gallons		Sampling Time	Remarks
			to purge	purged		
#1 MW-6	11.5	—			—	could not locate (no detection from metal presumed destroyed detector)
#6 MW-7	12.2	4.46	3.75	3.75	1245	water cloudy black w/ mild HC odor and very light sheen.
#5 MW-8	15 ✓	5.50	4.75	4.75	1230	water black w/ no odor
#4 MW-11	12.5	4.49	<del>4.0</del> 3.50	4.0	1210	water muddy brown w/ no odor
#2 MW-12	13.0	5.53	3.75	3.75	1146	water black w/ no odor
#3 MW-13	✓	—			—	could not locate (no detection from metal presumed destroyed detector)

Notes: Sample for 8260B

# Chain-of-Custody Record

Client: Soutis Miller, & Associates

Mailing Address: 3451 Candelaria

Bird NE Suite D

Phone #: (505) 299-0942

email or Fax#:

QA/QC Package:

Standard  Level 4 (Full Validation)

Accreditation

NELAP  Other \_\_\_\_\_

EDD (Type) \_\_\_\_\_

Turn-Around Time:  
 Standard  Rush

Project Name: Chama Conoco Mini-Mort

Project #: 3423555

Project Manager: Scott McKittrick

Sampler: Laura Van Aist

On Ice:  Yes  No

Sample Temperature: 1.5°C



## HALL ENVIRONMENTAL ANALYSIS LABORATORY

www.hallenvironmental.com

4901 Hawkins NE - Albuquerque, NM 87109

Tel. 505-345-3975 Fax 505-345-4107

### Analysis Request

Date	Time	Matrix	Sample Request ID	Container Type and #	Preservative Type	HEAL No.	BTEX + MTBE + TMB's (8021)	BTEX + MTBE + TPH (Gas only)	TPH 8015B (GRO / DRO / MRO)	TPH (Method 418.1)	EDB (Method 504.1)	PAH's (8310 or 8270 SIMS)	RCRA 8 Metals	Anions (F, Cl, NO <sub>3</sub> , NO <sub>2</sub> , PO <sub>4</sub> , SO <sub>4</sub> )	8081 Pesticides / 8082 PCB's	8260B (VOA)	8270 (Semi-VOA)	Air Bubbles (Y or N)	
3-24-15	1245	H <sub>2</sub> O	MW-7	3 VOA's	HgCl <sub>2</sub>											X			
3-24-15	1230	H <sub>2</sub> O	MW-8	3 VOA's	HgCl <sub>2</sub>											X			
3-24-15	1210	H <sub>2</sub> O	MW-11	3 VOA's	HgCl <sub>2</sub>											X			
3-24-15	1146	H <sub>2</sub> O	MW-12	3 VOA's	HgCl <sub>2</sub>											X			
3-24-15	1200	H <sub>2</sub> O	Trip Blank	2 VOA's	N/A											X			

Date: 3-24-15 Time: 1640 Relinquished by: Laura Van Aist  
 Received by: Celine Simon Date: 03/24/15 Time: 1640

Remarks:

If necessary, samples submitted to Hall Environmental may be subcontracted to other accredited laboratories. This serves as notice of this possibility. Any sub-contracted data will be clearly notated on the analytical report.

## Appendix 3

### Laboratory Results



Hall Environmental Analysis Laboratory  
4901 Hawkins NE  
Albuquerque, NM 87109  
TEL: 505-345-3975 FAX: 505-345-4107  
Website: [www.hallenvironmental.com](http://www.hallenvironmental.com)

April 02, 2015

Scott McKittrick

Souder Miller & Associates  
3451 Candelaria, NE Suite D  
Albuquerque, NM 87107  
TEL: (505) 299-0942  
FAX

RE: Chama Conoco Mini-Mart

OrderNo.: 1503B63

Dear Scott McKittrick:

Hall Environmental Analysis Laboratory received 5 sample(s) on 3/24/2015 for the analyses presented in the following report.

These were analyzed according to EPA procedures or equivalent. To access our accredited tests please go to [www.hallenvironmental.com](http://www.hallenvironmental.com) or the state specific web sites. In order to properly interpret your results it is imperative that you review this report in its entirety. See the sample checklist and/or the Chain of Custody for information regarding the sample receipt temperature and preservation. Data qualifiers or a narrative will be provided if the sample analysis or analytical quality control parameters require a flag. When necessary, data qualifiers are provided on both the sample analysis report and the QC summary report, both sections should be reviewed. All samples are reported, as received, unless otherwise indicated. Lab measurement of analytes considered field parameters that require analysis within 15 minutes of sampling such as pH and residual chlorine are qualified as being analyzed outside of the recommended holding time.

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

ADHS Cert #AZ0682 -- NMED-DWB Cert #NM9425 -- NMED-Micro Cert #NM0190

Sincerely,

A handwritten signature in black ink, appearing to read 'Andy Freeman', is written over a white background.

Andy Freeman

Laboratory Manager

4901 Hawkins NE  
Albuquerque, NM 87109

# Hall Environmental Analysis Laboratory, Inc.

Analytical Report

Lab Order 1503B63

Date Reported: 4/2/2015

**CLIENT:** Souder Miller & Associates

**Client Sample ID:** MW-7

**Project:** Chama Conoco Mini-Mart

**Collection Date:** 3/24/2015 12:45:00 PM

**Lab ID:** 1503B63-001

**Matrix:** AQUEOUS

**Received Date:** 3/24/2015 4:40:00 PM

Analyses	Result	RL	Qual	Units	DF	Date Analyzed	Batch
<b>EPA METHOD 8260B: VOLATILES</b>							Analyst: cadg
Benzene	ND	5.0		µg/L	5	3/30/2015 1:35:18 PM	R25170
Toluene	ND	5.0		µg/L	5	3/30/2015 1:35:18 PM	R25170
Ethylbenzene	170	5.0		µg/L	5	3/30/2015 1:35:18 PM	R25170
Methyl tert-butyl ether (MTBE)	ND	5.0		µg/L	5	3/30/2015 1:35:18 PM	R25170
1,2,4-Trimethylbenzene	150	5.0		µg/L	5	3/30/2015 1:35:18 PM	R25170
1,3,5-Trimethylbenzene	120	5.0		µg/L	5	3/30/2015 1:35:18 PM	R25170
1,2-Dichloroethane (EDC)	ND	5.0		µg/L	5	3/30/2015 1:35:18 PM	R25170
1,2-Dibromoethane (EDB)	ND	5.0		µg/L	5	3/30/2015 1:35:18 PM	R25170
Naphthalene	49	10		µg/L	5	3/30/2015 1:35:18 PM	R25170
1-Methylnaphthalene	21	20		µg/L	5	3/30/2015 1:35:18 PM	R25170
2-Methylnaphthalene	35	20		µg/L	5	3/30/2015 1:35:18 PM	R25170
Acetone	ND	50		µg/L	5	3/30/2015 1:35:18 PM	R25170
Bromobenzene	ND	5.0		µg/L	5	3/30/2015 1:35:18 PM	R25170
Bromodichloromethane	ND	5.0		µg/L	5	3/30/2015 1:35:18 PM	R25170
Bromoform	ND	5.0		µg/L	5	3/30/2015 1:35:18 PM	R25170
Bromomethane	ND	15		µg/L	5	3/30/2015 1:35:18 PM	R25170
2-Butanone	ND	50		µg/L	5	3/30/2015 1:35:18 PM	R25170
Carbon disulfide	ND	50		µg/L	5	3/30/2015 1:35:18 PM	R25170
Carbon Tetrachloride	ND	5.0		µg/L	5	3/30/2015 1:35:18 PM	R25170
Chlorobenzene	ND	5.0		µg/L	5	3/30/2015 1:35:18 PM	R25170
Chloroethane	ND	10		µg/L	5	3/30/2015 1:35:18 PM	R25170
Chloroform	ND	5.0		µg/L	5	3/30/2015 1:35:18 PM	R25170
Chloromethane	ND	15		µg/L	5	3/30/2015 1:35:18 PM	R25170
2-Chlorotoluene	ND	5.0		µg/L	5	3/30/2015 1:35:18 PM	R25170
4-Chlorotoluene	ND	5.0		µg/L	5	3/30/2015 1:35:18 PM	R25170
cis-1,2-DCE	ND	5.0		µg/L	5	3/30/2015 1:35:18 PM	R25170
cis-1,3-Dichloropropene	ND	5.0		µg/L	5	3/30/2015 1:35:18 PM	R25170
1,2-Dibromo-3-chloropropane	ND	10		µg/L	5	3/30/2015 1:35:18 PM	R25170
Dibromochloromethane	ND	5.0		µg/L	5	3/30/2015 1:35:18 PM	R25170
Dibromomethane	ND	5.0		µg/L	5	3/30/2015 1:35:18 PM	R25170
1,2-Dichlorobenzene	ND	5.0		µg/L	5	3/30/2015 1:35:18 PM	R25170
1,3-Dichlorobenzene	ND	5.0		µg/L	5	3/30/2015 1:35:18 PM	R25170
1,4-Dichlorobenzene	ND	5.0		µg/L	5	3/30/2015 1:35:18 PM	R25170
Dichlorodifluoromethane	ND	5.0		µg/L	5	3/30/2015 1:35:18 PM	R25170
1,1-Dichloroethane	ND	5.0		µg/L	5	3/30/2015 1:35:18 PM	R25170
1,1-Dichloroethene	ND	5.0		µg/L	5	3/30/2015 1:35:18 PM	R25170
1,2-Dichloropropane	ND	5.0		µg/L	5	3/30/2015 1:35:18 PM	R25170
1,3-Dichloropropane	ND	5.0		µg/L	5	3/30/2015 1:35:18 PM	R25170
2,2-Dichloropropane	ND	10		µg/L	5	3/30/2015 1:35:18 PM	R25170

Refer to the QC Summary report and sample login checklist for flagged QC data and preservation information.

<b>Qualifiers:</b>	* Value exceeds Maximum Contaminant Level.	B Analyte detected in the associated Method Blank	
	E Value above quantitation range	H Holding times for preparation or analysis exceeded	
	J Analyte detected below quantitation limits	ND Not Detected at the Reporting Limit	Page 1 of 15
	O RSD is greater than RSDlimit	P Sample pH Not In Range	
	R RPD outside accepted recovery limits	RL Reporting Detection Limit	
	S Spike Recovery outside accepted recovery limits		



# Hall Environmental Analysis Laboratory, Inc.

Analytical Report

Lab Order 1503B63

Date Reported: 4/2/2015

CLIENT: Souder Miller & Associates

Client Sample ID: MW-7

Project: Chama Conoco Mini-Mart

Collection Date: 3/24/2015 12:45:00 PM

Lab ID: 1503B63-001

Matrix: AQUEOUS

Received Date: 3/24/2015 4:40:00 PM

Analyses	Result	RL	Qual	Units	DF	Date Analyzed	Batch
<b>EPA METHOD 8260B: VOLATILES</b>							Analyst: cadg
1,1-Dichloropropene	ND	5.0		µg/L	5	3/30/2015 1:35:18 PM	R25170
Hexachlorobutadiene	ND	5.0		µg/L	5	3/30/2015 1:35:18 PM	R25170
2-Hexanone	ND	50		µg/L	5	3/30/2015 1:35:18 PM	R25170
Isopropylbenzene	14	5.0		µg/L	5	3/30/2015 1:35:18 PM	R25170
4-Isopropyltoluene	11	5.0		µg/L	5	3/30/2015 1:35:18 PM	R25170
4-Methyl-2-pentanone	ND	50		µg/L	5	3/30/2015 1:35:18 PM	R25170
Methylene Chloride	ND	15		µg/L	5	3/30/2015 1:35:18 PM	R25170
n-Butylbenzene	ND	15		µg/L	5	3/30/2015 1:35:18 PM	R25170
n-Propylbenzene	16	5.0		µg/L	5	3/30/2015 1:35:18 PM	R25170
sec-Butylbenzene	ND	5.0		µg/L	5	3/30/2015 1:35:18 PM	R25170
Styrene	ND	5.0		µg/L	5	3/30/2015 1:35:18 PM	R25170
tert-Butylbenzene	ND	5.0		µg/L	5	3/30/2015 1:35:18 PM	R25170
1,1,1,2-Tetrachloroethane	ND	5.0		µg/L	5	3/30/2015 1:35:18 PM	R25170
1,1,2,2-Tetrachloroethane	ND	10		µg/L	5	3/30/2015 1:35:18 PM	R25170
Tetrachloroethene (PCE)	ND	5.0		µg/L	5	3/30/2015 1:35:18 PM	R25170
trans-1,2-DCE	ND	5.0		µg/L	5	3/30/2015 1:35:18 PM	R25170
trans-1,3-Dichloropropene	ND	5.0		µg/L	5	3/30/2015 1:35:18 PM	R25170
1,2,3-Trichlorobenzene	ND	5.0		µg/L	5	3/30/2015 1:35:18 PM	R25170
1,2,4-Trichlorobenzene	ND	5.0		µg/L	5	3/30/2015 1:35:18 PM	R25170
1,1,1-Trichloroethane	ND	5.0		µg/L	5	3/30/2015 1:35:18 PM	R25170
1,1,2-Trichloroethane	ND	5.0		µg/L	5	3/30/2015 1:35:18 PM	R25170
Trichloroethene (TCE)	ND	5.0		µg/L	5	3/30/2015 1:35:18 PM	R25170
Trichlorofluoromethane	ND	5.0		µg/L	5	3/30/2015 1:35:18 PM	R25170
1,2,3-Trichloropropane	ND	10		µg/L	5	3/30/2015 1:35:18 PM	R25170
Vinyl chloride	ND	5.0		µg/L	5	3/30/2015 1:35:18 PM	R25170
Xylenes, Total	390	7.5		µg/L	5	3/30/2015 1:35:18 PM	R25170
Surr: 1,2-Dichloroethane-d4	94.8	70-130		%REC	5	3/30/2015 1:35:18 PM	R25170
Surr: 4-Bromofluorobenzene	74.0	70-130		%REC	5	3/30/2015 1:35:18 PM	R25170
Surr: Dibromofluoromethane	99.1	70-130		%REC	5	3/30/2015 1:35:18 PM	R25170
Surr: Toluene-d8	101	70-130		%REC	5	3/30/2015 1:35:18 PM	R25170

Refer to the QC Summary report and sample login checklist for flagged QC data and preservation information.

Qualifiers:			
*	Value exceeds Maximum Contaminant Level.	B	Analyte detected in the associated Method Blank
E	Value above quantitation range	H	Holding times for preparation or analysis exceeded
J	Analyte detected below quantitation limits	ND	Not Detected at the Reporting Limit
O	RSD is greater than RSDlimit	P	Sample pH Not In Range
R	RPD outside accepted recovery limits	RL	Reporting Detection Limit
S	Spike Recovery outside accepted recovery limits		

# Hall Environmental Analysis Laboratory, Inc.

Analytical Report

Lab Order 1503B63

Date Reported: 4/2/2015

**CLIENT:** Souder Miller & Associates

**Client Sample ID:** MW-8

**Project:** Chama Conoco Mini-Mart

**Collection Date:** 3/24/2015 12:30:00 PM

**Lab ID:** 1503B63-002

**Matrix:** AQUEOUS

**Received Date:** 3/24/2015 4:40:00 PM

Analyses	Result	RL	Qual	Units	DF	Date Analyzed	Batch
<b>EPA METHOD 8260B: VOLATILES</b>							Analyst: cadg
Benzene	ND	2.0		µg/L	2	3/30/2015 2:04:14 PM	R25170
Toluene	ND	2.0		µg/L	2	3/30/2015 2:04:14 PM	R25170
Ethylbenzene	ND	2.0		µg/L	2	3/30/2015 2:04:14 PM	R25170
Methyl tert-butyl ether (MTBE)	ND	2.0		µg/L	2	3/30/2015 2:04:14 PM	R25170
1,2,4-Trimethylbenzene	4.5	2.0		µg/L	2	3/30/2015 2:04:14 PM	R25170
1,3,5-Trimethylbenzene	ND	2.0		µg/L	2	3/30/2015 2:04:14 PM	R25170
1,2-Dichloroethane (EDC)	ND	2.0		µg/L	2	3/30/2015 2:04:14 PM	R25170
1,2-Dibromoethane (EDB)	ND	2.0		µg/L	2	3/30/2015 2:04:14 PM	R25170
Naphthalene	4.8	4.0		µg/L	2	3/30/2015 2:04:14 PM	R25170
1-Methylnaphthalene	ND	8.0		µg/L	2	3/30/2015 2:04:14 PM	R25170
2-Methylnaphthalene	ND	8.0		µg/L	2	3/30/2015 2:04:14 PM	R25170
Acetone	ND	20		µg/L	2	3/30/2015 2:04:14 PM	R25170
Bromobenzene	ND	2.0		µg/L	2	3/30/2015 2:04:14 PM	R25170
Bromodichloromethane	ND	2.0		µg/L	2	3/30/2015 2:04:14 PM	R25170
Bromoform	ND	2.0		µg/L	2	3/30/2015 2:04:14 PM	R25170
Bromomethane	ND	6.0		µg/L	2	3/30/2015 2:04:14 PM	R25170
2-Butanone	ND	20		µg/L	2	3/30/2015 2:04:14 PM	R25170
Carbon disulfide	ND	20		µg/L	2	3/30/2015 2:04:14 PM	R25170
Carbon Tetrachloride	ND	2.0		µg/L	2	3/30/2015 2:04:14 PM	R25170
Chlorobenzene	ND	2.0		µg/L	2	3/30/2015 2:04:14 PM	R25170
Chloroethane	ND	4.0		µg/L	2	3/30/2015 2:04:14 PM	R25170
Chloroform	ND	2.0		µg/L	2	3/30/2015 2:04:14 PM	R25170
Chloromethane	ND	6.0		µg/L	2	3/30/2015 2:04:14 PM	R25170
2-Chlorotoluene	ND	2.0		µg/L	2	3/30/2015 2:04:14 PM	R25170
4-Chlorotoluene	ND	2.0		µg/L	2	3/30/2015 2:04:14 PM	R25170
cis-1,2-DCE	ND	2.0		µg/L	2	3/30/2015 2:04:14 PM	R25170
cis-1,3-Dichloropropene	ND	2.0		µg/L	2	3/30/2015 2:04:14 PM	R25170
1,2-Dibromo-3-chloropropane	ND	4.0		µg/L	2	3/30/2015 2:04:14 PM	R25170
Dibromochloromethane	ND	2.0		µg/L	2	3/30/2015 2:04:14 PM	R25170
Dibromomethane	ND	2.0		µg/L	2	3/30/2015 2:04:14 PM	R25170
1,2-Dichlorobenzene	ND	2.0		µg/L	2	3/30/2015 2:04:14 PM	R25170
1,3-Dichlorobenzene	ND	2.0		µg/L	2	3/30/2015 2:04:14 PM	R25170
1,4-Dichlorobenzene	ND	2.0		µg/L	2	3/30/2015 2:04:14 PM	R25170
Dichlorodifluoromethane	ND	2.0		µg/L	2	3/30/2015 2:04:14 PM	R25170
1,1-Dichloroethane	ND	2.0		µg/L	2	3/30/2015 2:04:14 PM	R25170
1,1-Dichloroethene	ND	2.0		µg/L	2	3/30/2015 2:04:14 PM	R25170
1,2-Dichloropropane	ND	2.0		µg/L	2	3/30/2015 2:04:14 PM	R25170
1,3-Dichloropropane	ND	2.0		µg/L	2	3/30/2015 2:04:14 PM	R25170
2,2-Dichloropropane	ND	4.0		µg/L	2	3/30/2015 2:04:14 PM	R25170

Refer to the QC Summary report and sample login checklist for flagged QC data and preservation information.

<b>Qualifiers:</b>	* Value exceeds Maximum Contaminant Level.	B Analyte detected in the associated Method Blank	
	E Value above quantitation range	H Holding times for preparation or analysis exceeded	
	J Analyte detected below quantitation limits	ND Not Detected at the Reporting Limit	Page 3 of 15
	O RSD is greater than RSDlimit	P Sample pH Not In Range	
	R RPD outside accepted recovery limits	RL Reporting Detection Limit	
	S Spike Recovery outside accepted recovery limits		

# Hall Environmental Analysis Laboratory, Inc.

Analytical Report

Lab Order 1503B63

Date Reported: 4/2/2015

**CLIENT:** Souder Miller & Associates

**Client Sample ID:** MW-8

**Project:** Chama Conoco Mini-Mart

**Collection Date:** 3/24/2015 12:30:00 PM

**Lab ID:** 1503B63-002

**Matrix:** AQUEOUS

**Received Date:** 3/24/2015 4:40:00 PM

Analyses	Result	RL	Qual	Units	DF	Date Analyzed	Batch
<b>EPA METHOD 8260B: VOLATILES</b>							Analyst: cadg
1,1-Dichloropropene	ND	2.0		µg/L	2	3/30/2015 2:04:14 PM	R25170
Hexachlorobutadiene	ND	2.0		µg/L	2	3/30/2015 2:04:14 PM	R25170
2-Hexanone	ND	20		µg/L	2	3/30/2015 2:04:14 PM	R25170
Isopropylbenzene	ND	2.0		µg/L	2	3/30/2015 2:04:14 PM	R25170
4-Isopropyltoluene	ND	2.0		µg/L	2	3/30/2015 2:04:14 PM	R25170
4-Methyl-2-pentanone	ND	20		µg/L	2	3/30/2015 2:04:14 PM	R25170
Methylene Chloride	ND	6.0		µg/L	2	3/30/2015 2:04:14 PM	R25170
n-Butylbenzene	ND	6.0		µg/L	2	3/30/2015 2:04:14 PM	R25170
n-Propylbenzene	ND	2.0		µg/L	2	3/30/2015 2:04:14 PM	R25170
sec-Butylbenzene	ND	2.0		µg/L	2	3/30/2015 2:04:14 PM	R25170
Styrene	ND	2.0		µg/L	2	3/30/2015 2:04:14 PM	R25170
tert-Butylbenzene	ND	2.0		µg/L	2	3/30/2015 2:04:14 PM	R25170
1,1,1,2-Tetrachloroethane	ND	2.0		µg/L	2	3/30/2015 2:04:14 PM	R25170
1,1,2,2-Tetrachloroethane	ND	4.0		µg/L	2	3/30/2015 2:04:14 PM	R25170
Tetrachloroethene (PCE)	ND	2.0		µg/L	2	3/30/2015 2:04:14 PM	R25170
trans-1,2-DCE	ND	2.0		µg/L	2	3/30/2015 2:04:14 PM	R25170
trans-1,3-Dichloropropene	ND	2.0		µg/L	2	3/30/2015 2:04:14 PM	R25170
1,2,3-Trichlorobenzene	ND	2.0		µg/L	2	3/30/2015 2:04:14 PM	R25170
1,2,4-Trichlorobenzene	ND	2.0		µg/L	2	3/30/2015 2:04:14 PM	R25170
1,1,1-Trichloroethane	ND	2.0		µg/L	2	3/30/2015 2:04:14 PM	R25170
1,1,2-Trichloroethane	ND	2.0		µg/L	2	3/30/2015 2:04:14 PM	R25170
Trichloroethene (TCE)	ND	2.0		µg/L	2	3/30/2015 2:04:14 PM	R25170
Trichlorofluoromethane	ND	2.0		µg/L	2	3/30/2015 2:04:14 PM	R25170
1,2,3-Trichloropropane	ND	4.0		µg/L	2	3/30/2015 2:04:14 PM	R25170
Vinyl chloride	ND	2.0		µg/L	2	3/30/2015 2:04:14 PM	R25170
Xylenes, Total	18	3.0		µg/L	2	3/30/2015 2:04:14 PM	R25170
Surr: 1,2-Dichloroethane-d4	99.2	70-130		%REC	2	3/30/2015 2:04:14 PM	R25170
Surr: 4-Bromofluorobenzene	89.8	70-130		%REC	2	3/30/2015 2:04:14 PM	R25170
Surr: Dibromofluoromethane	101	70-130		%REC	2	3/30/2015 2:04:14 PM	R25170
Surr: Toluene-d8	99.7	70-130		%REC	2	3/30/2015 2:04:14 PM	R25170

Refer to the QC Summary report and sample login checklist for flagged QC data and preservation information.

<b>Qualifiers:</b>	* Value exceeds Maximum Contaminant Level.	B Analyte detected in the associated Method Blank
	E Value above quantitation range	H Holding times for preparation or analysis exceeded
	J Analyte detected below quantitation limits	ND Not Detected at the Reporting Limit
	O RSD is greater than RSDlimit	P Sample pH Not In Range
	R RPD outside accepted recovery limits	RL Reporting Detection Limit
	S Spike Recovery outside accepted recovery limits	

# Hall Environmental Analysis Laboratory, Inc.

Analytical Report

Lab Order 1503B63

Date Reported: 4/2/2015

CLIENT: Souder Miller & Associates

Client Sample ID: MW-11

Project: Chama Conoco Mini-Mart

Collection Date: 3/24/2015 12:10:00 PM

Lab ID: 1503B63-003

Matrix: AQUEOUS

Received Date: 3/24/2015 4:40:00 PM

Analyses	Result	RL	Qual	Units	DF	Date Analyzed	Batch
<b>EPA METHOD 8260B: VOLATILES</b>							Analyst: cadg
Benzene	ND	2.0		µg/L	2	3/30/2015 2:32:57 PM	R25170
Toluene	ND	2.0		µg/L	2	3/30/2015 2:32:57 PM	R25170
Ethylbenzene	ND	2.0		µg/L	2	3/30/2015 2:32:57 PM	R25170
Methyl tert-butyl ether (MTBE)	ND	2.0		µg/L	2	3/30/2015 2:32:57 PM	R25170
1,2,4-Trimethylbenzene	ND	2.0		µg/L	2	3/30/2015 2:32:57 PM	R25170
1,3,5-Trimethylbenzene	ND	2.0		µg/L	2	3/30/2015 2:32:57 PM	R25170
1,2-Dichloroethane (EDC)	ND	2.0		µg/L	2	3/30/2015 2:32:57 PM	R25170
1,2-Dibromoethane (EDB)	ND	2.0		µg/L	2	3/30/2015 2:32:57 PM	R25170
Naphthalene	ND	4.0		µg/L	2	3/30/2015 2:32:57 PM	R25170
1-Methylnaphthalene	ND	8.0		µg/L	2	3/30/2015 2:32:57 PM	R25170
2-Methylnaphthalene	ND	8.0		µg/L	2	3/30/2015 2:32:57 PM	R25170
Acetone	ND	20		µg/L	2	3/30/2015 2:32:57 PM	R25170
Bromobenzene	ND	2.0		µg/L	2	3/30/2015 2:32:57 PM	R25170
Bromodichloromethane	ND	2.0		µg/L	2	3/30/2015 2:32:57 PM	R25170
Bromoform	ND	2.0		µg/L	2	3/30/2015 2:32:57 PM	R25170
Bromomethane	ND	6.0		µg/L	2	3/30/2015 2:32:57 PM	R25170
2-Butanone	ND	20		µg/L	2	3/30/2015 2:32:57 PM	R25170
Carbon disulfide	ND	20		µg/L	2	3/30/2015 2:32:57 PM	R25170
Carbon Tetrachloride	ND	2.0		µg/L	2	3/30/2015 2:32:57 PM	R25170
Chlorobenzene	ND	2.0		µg/L	2	3/30/2015 2:32:57 PM	R25170
Chloroethane	ND	4.0		µg/L	2	3/30/2015 2:32:57 PM	R25170
Chloroform	ND	2.0		µg/L	2	3/30/2015 2:32:57 PM	R25170
Chloromethane	ND	6.0		µg/L	2	3/30/2015 2:32:57 PM	R25170
2-Chlorotoluene	ND	2.0		µg/L	2	3/30/2015 2:32:57 PM	R25170
4-Chlorotoluene	ND	2.0		µg/L	2	3/30/2015 2:32:57 PM	R25170
cis-1,2-DCE	ND	2.0		µg/L	2	3/30/2015 2:32:57 PM	R25170
cis-1,3-Dichloropropene	ND	2.0		µg/L	2	3/30/2015 2:32:57 PM	R25170
1,2-Dibromo-3-chloropropane	ND	4.0		µg/L	2	3/30/2015 2:32:57 PM	R25170
Dibromochloromethane	ND	2.0		µg/L	2	3/30/2015 2:32:57 PM	R25170
Dibromomethane	ND	2.0		µg/L	2	3/30/2015 2:32:57 PM	R25170
1,2-Dichlorobenzene	ND	2.0		µg/L	2	3/30/2015 2:32:57 PM	R25170
1,3-Dichlorobenzene	ND	2.0		µg/L	2	3/30/2015 2:32:57 PM	R25170
1,4-Dichlorobenzene	ND	2.0		µg/L	2	3/30/2015 2:32:57 PM	R25170
Dichlorodifluoromethane	ND	2.0		µg/L	2	3/30/2015 2:32:57 PM	R25170
1,1-Dichloroethane	ND	2.0		µg/L	2	3/30/2015 2:32:57 PM	R25170
1,1-Dichloroethene	ND	2.0		µg/L	2	3/30/2015 2:32:57 PM	R25170
1,2-Dichloropropane	ND	2.0		µg/L	2	3/30/2015 2:32:57 PM	R25170
1,3-Dichloropropane	ND	2.0		µg/L	2	3/30/2015 2:32:57 PM	R25170
2,2-Dichloropropane	ND	4.0		µg/L	2	3/30/2015 2:32:57 PM	R25170

Refer to the QC Summary report and sample login checklist for flagged QC data and preservation information.

Qualifiers:			
*	Value exceeds Maximum Contaminant Level.	B	Analyte detected in the associated Method Blank
E	Value above quantitation range	H	Holding times for preparation or analysis exceeded
J	Analyte detected below quantitation limits	ND	Not Detected at the Reporting Limit
O	RSD is greater than RSDlimit	P	Sample pH Not In Range
R	RPD outside accepted recovery limits	RL	Reporting Detection Limit
S	Spike Recovery outside accepted recovery limits		

# Hall Environmental Analysis Laboratory, Inc.

Analytical Report

Lab Order 1503B63

Date Reported: 4/2/2015

CLIENT: Souder Miller & Associates

Client Sample ID: MW-11

Project: Chama Conoco Mini-Mart

Collection Date: 3/24/2015 12:10:00 PM

Lab ID: 1503B63-003

Matrix: AQUEOUS

Received Date: 3/24/2015 4:40:00 PM

Analyses	Result	RL	Qual	Units	DF	Date Analyzed	Batch
<b>EPA METHOD 8260B: VOLATILES</b>							Analyst: cadg
1,1-Dichloropropene	ND	2.0		µg/L	2	3/30/2015 2:32:57 PM	R25170
Hexachlorobutadiene	ND	2.0		µg/L	2	3/30/2015 2:32:57 PM	R25170
2-Hexanone	ND	20		µg/L	2	3/30/2015 2:32:57 PM	R25170
Isopropylbenzene	ND	2.0		µg/L	2	3/30/2015 2:32:57 PM	R25170
4-Isopropyltoluene	ND	2.0		µg/L	2	3/30/2015 2:32:57 PM	R25170
4-Methyl-2-pentanone	ND	20		µg/L	2	3/30/2015 2:32:57 PM	R25170
Methylene Chloride	ND	6.0		µg/L	2	3/30/2015 2:32:57 PM	R25170
n-Butylbenzene	ND	6.0		µg/L	2	3/30/2015 2:32:57 PM	R25170
n-Propylbenzene	ND	2.0		µg/L	2	3/30/2015 2:32:57 PM	R25170
sec-Butylbenzene	ND	2.0		µg/L	2	3/30/2015 2:32:57 PM	R25170
Styrene	ND	2.0		µg/L	2	3/30/2015 2:32:57 PM	R25170
tert-Butylbenzene	ND	2.0		µg/L	2	3/30/2015 2:32:57 PM	R25170
1,1,1,2-Tetrachloroethane	ND	2.0		µg/L	2	3/30/2015 2:32:57 PM	R25170
1,1,2,2-Tetrachloroethane	ND	4.0		µg/L	2	3/30/2015 2:32:57 PM	R25170
Tetrachloroethene (PCE)	ND	2.0		µg/L	2	3/30/2015 2:32:57 PM	R25170
trans-1,2-DCE	ND	2.0		µg/L	2	3/30/2015 2:32:57 PM	R25170
trans-1,3-Dichloropropene	ND	2.0		µg/L	2	3/30/2015 2:32:57 PM	R25170
1,2,3-Trichlorobenzene	ND	2.0		µg/L	2	3/30/2015 2:32:57 PM	R25170
1,2,4-Trichlorobenzene	ND	2.0		µg/L	2	3/30/2015 2:32:57 PM	R25170
1,1,1-Trichloroethane	ND	2.0		µg/L	2	3/30/2015 2:32:57 PM	R25170
1,1,2-Trichloroethane	ND	2.0		µg/L	2	3/30/2015 2:32:57 PM	R25170
Trichloroethene (TCE)	ND	2.0		µg/L	2	3/30/2015 2:32:57 PM	R25170
Trichlorofluoromethane	ND	2.0		µg/L	2	3/30/2015 2:32:57 PM	R25170
1,2,3-Trichloropropane	ND	4.0		µg/L	2	3/30/2015 2:32:57 PM	R25170
Vinyl chloride	ND	2.0		µg/L	2	3/30/2015 2:32:57 PM	R25170
Xylenes, Total	ND	3.0		µg/L	2	3/30/2015 2:32:57 PM	R25170
Surr: 1,2-Dichloroethane-d4	92.1	70-130		%REC	2	3/30/2015 2:32:57 PM	R25170
Surr: 4-Bromofluorobenzene	101	70-130		%REC	2	3/30/2015 2:32:57 PM	R25170
Surr: Dibromofluoromethane	97.3	70-130		%REC	2	3/30/2015 2:32:57 PM	R25170
Surr: Toluene-d8	100	70-130		%REC	2	3/30/2015 2:32:57 PM	R25170

Refer to the QC Summary report and sample login checklist for flagged QC data and preservation information.

Qualifiers:			
*	Value exceeds Maximum Contaminant Level.	B	Analyte detected in the associated Method Blank
E	Value above quantitation range	H	Holding times for preparation or analysis exceeded
J	Analyte detected below quantitation limits	ND	Not Detected at the Reporting Limit
O	RSD is greater than RSDlimit	P	Sample pH Not In Range
R	RPD outside accepted recovery limits	RL	Reporting Detection Limit
S	Spike Recovery outside accepted recovery limits		

# Hall Environmental Analysis Laboratory, Inc.

Analytical Report

Lab Order 1503B63

Date Reported: 4/2/2015

**CLIENT:** Souder Miller & Associates

**Client Sample ID:** MW-12

**Project:** Chama Conoco Mini-Mart

**Collection Date:** 3/24/2015 11:46:00 AM

**Lab ID:** 1503B63-004

**Matrix:** AQUEOUS

**Received Date:** 3/24/2015 4:40:00 PM

Analyses	Result	RL	Qual	Units	DF	Date Analyzed	Batch
<b>EPA METHOD 8260B: VOLATILES</b>							Analyst: cadg
Benzene	ND	2.0		µg/L	2	3/30/2015 3:01:44 PM	R25170
Toluene	ND	2.0		µg/L	2	3/30/2015 3:01:44 PM	R25170
Ethylbenzene	ND	2.0		µg/L	2	3/30/2015 3:01:44 PM	R25170
Methyl tert-butyl ether (MTBE)	ND	2.0		µg/L	2	3/30/2015 3:01:44 PM	R25170
1,2,4-Trimethylbenzene	ND	2.0		µg/L	2	3/30/2015 3:01:44 PM	R25170
1,3,5-Trimethylbenzene	ND	2.0		µg/L	2	3/30/2015 3:01:44 PM	R25170
1,2-Dichloroethane (EDC)	ND	2.0		µg/L	2	3/30/2015 3:01:44 PM	R25170
1,2-Dibromoethane (EDB)	ND	2.0		µg/L	2	3/30/2015 3:01:44 PM	R25170
Naphthalene	ND	4.0		µg/L	2	3/30/2015 3:01:44 PM	R25170
1-Methylnaphthalene	ND	8.0		µg/L	2	3/30/2015 3:01:44 PM	R25170
2-Methylnaphthalene	ND	8.0		µg/L	2	3/30/2015 3:01:44 PM	R25170
Acetone	ND	20		µg/L	2	3/30/2015 3:01:44 PM	R25170
Bromobenzene	ND	2.0		µg/L	2	3/30/2015 3:01:44 PM	R25170
Bromodichloromethane	ND	2.0		µg/L	2	3/30/2015 3:01:44 PM	R25170
Bromoform	ND	2.0		µg/L	2	3/30/2015 3:01:44 PM	R25170
Bromomethane	ND	6.0		µg/L	2	3/30/2015 3:01:44 PM	R25170
2-Butanone	ND	20		µg/L	2	3/30/2015 3:01:44 PM	R25170
Carbon disulfide	ND	20		µg/L	2	3/30/2015 3:01:44 PM	R25170
Carbon Tetrachloride	ND	2.0		µg/L	2	3/30/2015 3:01:44 PM	R25170
Chlorobenzene	ND	2.0		µg/L	2	3/30/2015 3:01:44 PM	R25170
Chloroethane	ND	4.0		µg/L	2	3/30/2015 3:01:44 PM	R25170
Chloroform	ND	2.0		µg/L	2	3/30/2015 3:01:44 PM	R25170
Chloromethane	ND	6.0		µg/L	2	3/30/2015 3:01:44 PM	R25170
2-Chlorotoluene	ND	2.0		µg/L	2	3/30/2015 3:01:44 PM	R25170
4-Chlorotoluene	ND	2.0		µg/L	2	3/30/2015 3:01:44 PM	R25170
cis-1,2-DCE	ND	2.0		µg/L	2	3/30/2015 3:01:44 PM	R25170
cis-1,3-Dichloropropene	ND	2.0		µg/L	2	3/30/2015 3:01:44 PM	R25170
1,2-Dibromo-3-chloropropane	ND	4.0		µg/L	2	3/30/2015 3:01:44 PM	R25170
Dibromochloromethane	ND	2.0		µg/L	2	3/30/2015 3:01:44 PM	R25170
Dibromomethane	ND	2.0		µg/L	2	3/30/2015 3:01:44 PM	R25170
1,2-Dichlorobenzene	ND	2.0		µg/L	2	3/30/2015 3:01:44 PM	R25170
1,3-Dichlorobenzene	ND	2.0		µg/L	2	3/30/2015 3:01:44 PM	R25170
1,4-Dichlorobenzene	ND	2.0		µg/L	2	3/30/2015 3:01:44 PM	R25170
Dichlorodifluoromethane	ND	2.0		µg/L	2	3/30/2015 3:01:44 PM	R25170
1,1-Dichloroethane	ND	2.0		µg/L	2	3/30/2015 3:01:44 PM	R25170
1,1-Dichloroethene	ND	2.0		µg/L	2	3/30/2015 3:01:44 PM	R25170
1,2-Dichloropropane	ND	2.0		µg/L	2	3/30/2015 3:01:44 PM	R25170
1,3-Dichloropropane	ND	2.0		µg/L	2	3/30/2015 3:01:44 PM	R25170
2,2-Dichloropropane	ND	4.0		µg/L	2	3/30/2015 3:01:44 PM	R25170

Refer to the QC Summary report and sample login checklist for flagged QC data and preservation information.

<b>Qualifiers:</b>	* Value exceeds Maximum Contaminant Level.	B Analyte detected in the associated Method Blank	
	E Value above quantitation range	H Holding times for preparation or analysis exceeded	
	J Analyte detected below quantitation limits	ND Not Detected at the Reporting Limit	Page 7 of 15
	O RSD is greater than RSDlimit	P Sample pH Not In Range	
	R RPD outside accepted recovery limits	RL Reporting Detection Limit	
	S Spike Recovery outside accepted recovery limits		

# Hall Environmental Analysis Laboratory, Inc.

Analytical Report

Lab Order 1503B63

Date Reported: 4/2/2015

**CLIENT:** Souder Miller & Associates

**Client Sample ID:** MW-12

**Project:** Chama Conoco Mini-Mart

**Collection Date:** 3/24/2015 11:46:00 AM

**Lab ID:** 1503B63-004

**Matrix:** AQUEOUS

**Received Date:** 3/24/2015 4:40:00 PM

Analyses	Result	RL	Qual	Units	DF	Date Analyzed	Batch
<b>EPA METHOD 8260B: VOLATILES</b>							Analyst: cadg
1,1-Dichloropropene	ND	2.0		µg/L	2	3/30/2015 3:01:44 PM	R25170
Hexachlorobutadiene	ND	2.0		µg/L	2	3/30/2015 3:01:44 PM	R25170
2-Hexanone	ND	20		µg/L	2	3/30/2015 3:01:44 PM	R25170
Isopropylbenzene	ND	2.0		µg/L	2	3/30/2015 3:01:44 PM	R25170
4-Isopropyltoluene	ND	2.0		µg/L	2	3/30/2015 3:01:44 PM	R25170
4-Methyl-2-pentanone	ND	20		µg/L	2	3/30/2015 3:01:44 PM	R25170
Methylene Chloride	ND	6.0		µg/L	2	3/30/2015 3:01:44 PM	R25170
n-Butylbenzene	ND	6.0		µg/L	2	3/30/2015 3:01:44 PM	R25170
n-Propylbenzene	ND	2.0		µg/L	2	3/30/2015 3:01:44 PM	R25170
sec-Butylbenzene	ND	2.0		µg/L	2	3/30/2015 3:01:44 PM	R25170
Styrene	ND	2.0		µg/L	2	3/30/2015 3:01:44 PM	R25170
tert-Butylbenzene	ND	2.0		µg/L	2	3/30/2015 3:01:44 PM	R25170
1,1,1,2-Tetrachloroethane	ND	2.0		µg/L	2	3/30/2015 3:01:44 PM	R25170
1,1,2,2-Tetrachloroethane	ND	4.0		µg/L	2	3/30/2015 3:01:44 PM	R25170
Tetrachloroethene (PCE)	ND	2.0		µg/L	2	3/30/2015 3:01:44 PM	R25170
trans-1,2-DCE	ND	2.0		µg/L	2	3/30/2015 3:01:44 PM	R25170
trans-1,3-Dichloropropene	ND	2.0		µg/L	2	3/30/2015 3:01:44 PM	R25170
1,2,3-Trichlorobenzene	ND	2.0		µg/L	2	3/30/2015 3:01:44 PM	R25170
1,2,4-Trichlorobenzene	ND	2.0		µg/L	2	3/30/2015 3:01:44 PM	R25170
1,1,1-Trichloroethane	ND	2.0		µg/L	2	3/30/2015 3:01:44 PM	R25170
1,1,2-Trichloroethane	ND	2.0		µg/L	2	3/30/2015 3:01:44 PM	R25170
Trichloroethene (TCE)	ND	2.0		µg/L	2	3/30/2015 3:01:44 PM	R25170
Trichlorofluoromethane	ND	2.0		µg/L	2	3/30/2015 3:01:44 PM	R25170
1,2,3-Trichloropropane	ND	4.0		µg/L	2	3/30/2015 3:01:44 PM	R25170
Vinyl chloride	ND	2.0		µg/L	2	3/30/2015 3:01:44 PM	R25170
Xylenes, Total	ND	3.0		µg/L	2	3/30/2015 3:01:44 PM	R25170
Surr: 1,2-Dichloroethane-d4	98.5	70-130		%REC	2	3/30/2015 3:01:44 PM	R25170
Surr: 4-Bromofluorobenzene	103	70-130		%REC	2	3/30/2015 3:01:44 PM	R25170
Surr: Dibromofluoromethane	99.4	70-130		%REC	2	3/30/2015 3:01:44 PM	R25170
Surr: Toluene-d8	96.3	70-130		%REC	2	3/30/2015 3:01:44 PM	R25170

Refer to the QC Summary report and sample login checklist for flagged QC data and preservation information.

<b>Qualifiers:</b>	* Value exceeds Maximum Contaminant Level.	B Analyte detected in the associated Method Blank
	E Value above quantitation range	H Holding times for preparation or analysis exceeded
	J Analyte detected below quantitation limits	ND Not Detected at the Reporting Limit
	O RSD is greater than RSDlimit	P Sample pH Not In Range
	R RPD outside accepted recovery limits	RL Reporting Detection Limit
	S Spike Recovery outside accepted recovery limits	

# Hall Environmental Analysis Laboratory, Inc.

Analytical Report

Lab Order 1503B63

Date Reported: 4/2/2015

**CLIENT:** Souder Miller & Associates

**Client Sample ID:** TRIP BLANK

**Project:** Chama Conoco Mini-Mart

**Collection Date:**

**Lab ID:** 1503B63-005

**Matrix:** TRIP BLANK

**Received Date:** 3/24/2015 4:40:00 PM

Analyses	Result	RL	Qual	Units	DF	Date Analyzed	Batch
<b>EPA METHOD 8260B: VOLATILES</b>							Analyst: cadg
Benzene	ND	1.0		µg/L	1	3/28/2015 8:47:44 AM	R25144
Toluene	ND	1.0		µg/L	1	3/28/2015 8:47:44 AM	R25144
Ethylbenzene	ND	1.0		µg/L	1	3/28/2015 8:47:44 AM	R25144
Methyl tert-butyl ether (MTBE)	ND	1.0		µg/L	1	3/28/2015 8:47:44 AM	R25144
1,2,4-Trimethylbenzene	ND	1.0		µg/L	1	3/28/2015 8:47:44 AM	R25144
1,3,5-Trimethylbenzene	ND	1.0		µg/L	1	3/28/2015 8:47:44 AM	R25144
1,2-Dichloroethane (EDC)	ND	1.0		µg/L	1	3/28/2015 8:47:44 AM	R25144
1,2-Dibromoethane (EDB)	ND	1.0		µg/L	1	3/28/2015 8:47:44 AM	R25144
Naphthalene	ND	2.0		µg/L	1	3/28/2015 8:47:44 AM	R25144
1-Methylnaphthalene	ND	4.0		µg/L	1	3/28/2015 8:47:44 AM	R25144
2-Methylnaphthalene	ND	4.0		µg/L	1	3/28/2015 8:47:44 AM	R25144
Acetone	ND	10		µg/L	1	3/28/2015 8:47:44 AM	R25144
Bromobenzene	ND	1.0		µg/L	1	3/28/2015 8:47:44 AM	R25144
Bromodichloromethane	ND	1.0		µg/L	1	3/28/2015 8:47:44 AM	R25144
Bromoform	ND	1.0		µg/L	1	3/28/2015 8:47:44 AM	R25144
Bromomethane	ND	3.0		µg/L	1	3/28/2015 8:47:44 AM	R25144
2-Butanone	ND	10		µg/L	1	3/28/2015 8:47:44 AM	R25144
Carbon disulfide	ND	10		µg/L	1	3/28/2015 8:47:44 AM	R25144
Carbon Tetrachloride	ND	1.0		µg/L	1	3/28/2015 8:47:44 AM	R25144
Chlorobenzene	ND	1.0		µg/L	1	3/28/2015 8:47:44 AM	R25144
Chloroethane	ND	2.0		µg/L	1	3/28/2015 8:47:44 AM	R25144
Chloroform	ND	1.0		µg/L	1	3/28/2015 8:47:44 AM	R25144
Chloromethane	ND	3.0		µg/L	1	3/28/2015 8:47:44 AM	R25144
2-Chlorotoluene	ND	1.0		µg/L	1	3/28/2015 8:47:44 AM	R25144
4-Chlorotoluene	ND	1.0		µg/L	1	3/28/2015 8:47:44 AM	R25144
cis-1,2-DCE	ND	1.0		µg/L	1	3/28/2015 8:47:44 AM	R25144
cis-1,3-Dichloropropene	ND	1.0		µg/L	1	3/28/2015 8:47:44 AM	R25144
1,2-Dibromo-3-chloropropane	ND	2.0		µg/L	1	3/28/2015 8:47:44 AM	R25144
Dibromochloromethane	ND	1.0		µg/L	1	3/28/2015 8:47:44 AM	R25144
Dibromomethane	ND	1.0		µg/L	1	3/28/2015 8:47:44 AM	R25144
1,2-Dichlorobenzene	ND	1.0		µg/L	1	3/28/2015 8:47:44 AM	R25144
1,3-Dichlorobenzene	ND	1.0		µg/L	1	3/28/2015 8:47:44 AM	R25144
1,4-Dichlorobenzene	ND	1.0		µg/L	1	3/28/2015 8:47:44 AM	R25144
Dichlorodifluoromethane	ND	1.0		µg/L	1	3/28/2015 8:47:44 AM	R25144
1,1-Dichloroethane	ND	1.0		µg/L	1	3/28/2015 8:47:44 AM	R25144
1,1-Dichloroethene	ND	1.0		µg/L	1	3/28/2015 8:47:44 AM	R25144
1,2-Dichloropropane	ND	1.0		µg/L	1	3/28/2015 8:47:44 AM	R25144
1,3-Dichloropropane	ND	1.0		µg/L	1	3/28/2015 8:47:44 AM	R25144
2,2-Dichloropropane	ND	2.0		µg/L	1	3/28/2015 8:47:44 AM	R25144

Refer to the QC Summary report and sample login checklist for flagged QC data and preservation information.

<b>Qualifiers:</b>	* Value exceeds Maximum Contaminant Level.	B Analyte detected in the associated Method Blank	
	E Value above quantitation range	H Holding times for preparation or analysis exceeded	
	J Analyte detected below quantitation limits	ND Not Detected at the Reporting Limit	Page 9 of 15
	O RSD is greater than RSDlimit	P Sample pH Not In Range	
	R RPD outside accepted recovery limits	RL Reporting Detection Limit	
	S Spike Recovery outside accepted recovery limits		



# Hall Environmental Analysis Laboratory, Inc.

Analytical Report

Lab Order 1503B63

Date Reported: 4/2/2015

**CLIENT:** Souder Miller & Associates

**Client Sample ID:** TRIP BLANK

**Project:** Chama Conoco Mini-Mart

**Collection Date:**

**Lab ID:** 1503B63-005

**Matrix:** TRIP BLANK

**Received Date:** 3/24/2015 4:40:00 PM

Analyses	Result	RL	Qual	Units	DF	Date Analyzed	Batch
<b>EPA METHOD 8260B: VOLATILES</b>							Analyst: cadg
1,1-Dichloropropene	ND	1.0		µg/L	1	3/28/2015 8:47:44 AM	R25144
Hexachlorobutadiene	ND	1.0		µg/L	1	3/28/2015 8:47:44 AM	R25144
2-Hexanone	ND	10		µg/L	1	3/28/2015 8:47:44 AM	R25144
Isopropylbenzene	ND	1.0		µg/L	1	3/28/2015 8:47:44 AM	R25144
4-Isopropyltoluene	ND	1.0		µg/L	1	3/28/2015 8:47:44 AM	R25144
4-Methyl-2-pentanone	ND	10		µg/L	1	3/28/2015 8:47:44 AM	R25144
Methylene Chloride	ND	3.0		µg/L	1	3/28/2015 8:47:44 AM	R25144
n-Butylbenzene	ND	3.0		µg/L	1	3/28/2015 8:47:44 AM	R25144
n-Propylbenzene	ND	1.0		µg/L	1	3/28/2015 8:47:44 AM	R25144
sec-Butylbenzene	ND	1.0		µg/L	1	3/28/2015 8:47:44 AM	R25144
Styrene	ND	1.0		µg/L	1	3/28/2015 8:47:44 AM	R25144
tert-Butylbenzene	ND	1.0		µg/L	1	3/28/2015 8:47:44 AM	R25144
1,1,1,2-Tetrachloroethane	ND	1.0		µg/L	1	3/28/2015 8:47:44 AM	R25144
1,1,2,2-Tetrachloroethane	ND	2.0		µg/L	1	3/28/2015 8:47:44 AM	R25144
Tetrachloroethene (PCE)	ND	1.0		µg/L	1	3/28/2015 8:47:44 AM	R25144
trans-1,2-DCE	ND	1.0		µg/L	1	3/28/2015 8:47:44 AM	R25144
trans-1,3-Dichloropropene	ND	1.0		µg/L	1	3/28/2015 8:47:44 AM	R25144
1,2,3-Trichlorobenzene	ND	1.0		µg/L	1	3/28/2015 8:47:44 AM	R25144
1,2,4-Trichlorobenzene	ND	1.0		µg/L	1	3/28/2015 8:47:44 AM	R25144
1,1,1-Trichloroethane	ND	1.0		µg/L	1	3/28/2015 8:47:44 AM	R25144
1,1,2-Trichloroethane	ND	1.0		µg/L	1	3/28/2015 8:47:44 AM	R25144
Trichloroethene (TCE)	ND	1.0		µg/L	1	3/28/2015 8:47:44 AM	R25144
Trichlorofluoromethane	ND	1.0		µg/L	1	3/28/2015 8:47:44 AM	R25144
1,2,3-Trichloropropane	ND	2.0		µg/L	1	3/28/2015 8:47:44 AM	R25144
Vinyl chloride	ND	1.0		µg/L	1	3/28/2015 8:47:44 AM	R25144
Xylenes, Total	ND	1.5		µg/L	1	3/28/2015 8:47:44 AM	R25144
Surr: 1,2-Dichloroethane-d4	101	70-130		%REC	1	3/28/2015 8:47:44 AM	R25144
Surr: 4-Bromofluorobenzene	102	70-130		%REC	1	3/28/2015 8:47:44 AM	R25144
Surr: Dibromofluoromethane	99.8	70-130		%REC	1	3/28/2015 8:47:44 AM	R25144
Surr: Toluene-d8	100	70-130		%REC	1	3/28/2015 8:47:44 AM	R25144

Refer to the QC Summary report and sample login checklist for flagged QC data and preservation information.

<b>Qualifiers:</b>	* Value exceeds Maximum Contaminant Level.	B Analyte detected in the associated Method Blank	
	E Value above quantitation range	H Holding times for preparation or analysis exceeded	
	J Analyte detected below quantitation limits	ND Not Detected at the Reporting Limit	Page 10 of 15
	O RSD is greater than RSDlimit	P Sample pH Not In Range	
	R RPD outside accepted recovery limits	RL Reporting Detection Limit	
	S Spike Recovery outside accepted recovery limits		

# QC SUMMARY REPORT

## Hall Environmental Analysis Laboratory, Inc.

WO#: 1503B63

02-Apr-15

**Client:** Souder Miller & Associates

**Project:** Chama Conoco Mini-Mart

Sample ID <b>100ng lcs</b>	SampType: <b>LCS</b>		TestCode: <b>EPA Method 8260B: VOLATILES</b>							
Client ID: <b>LCSW</b>	Batch ID: <b>R25144</b>		RunNo: <b>25144</b>							
Prep Date:	Analysis Date: <b>3/27/2015</b>		SeqNo: <b>742715</b>		Units: <b>µg/L</b>					
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Benzene	21	1.0	20.00	0	107	70	130			
Toluene	22	1.0	20.00	0	108	70	130			
Chlorobenzene	20	1.0	20.00	0	101	70	130			
1,1-Dichloroethene	24	1.0	20.00	0	120	75.6	144			
Trichloroethene (TCE)	20	1.0	20.00	0	98.9	70	130			
Surr: 1,2-Dichloroethane-d4	10		10.00		101	70	130			
Surr: 4-Bromofluorobenzene	10		10.00		104	70	130			
Surr: Dibromofluoromethane	10		10.00		103	70	130			
Surr: Toluene-d8	10		10.00		102	70	130			

Sample ID <b>5mL rb</b>	SampType: <b>MBLK</b>		TestCode: <b>EPA Method 8260B: VOLATILES</b>							
Client ID: <b>PBW</b>	Batch ID: <b>R25144</b>		RunNo: <b>25144</b>							
Prep Date:	Analysis Date: <b>3/27/2015</b>		SeqNo: <b>742729</b>		Units: <b>µg/L</b>					
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Benzene	ND	1.0								
Toluene	ND	1.0								
Ethylbenzene	ND	1.0								
Methyl tert-butyl ether (MTBE)	ND	1.0								
1,2,4-Trimethylbenzene	ND	1.0								
1,3,5-Trimethylbenzene	ND	1.0								
1,2-Dichloroethane (EDC)	ND	1.0								
1,2-Dibromoethane (EDB)	ND	1.0								
Naphthalene	ND	2.0								
1-Methylnaphthalene	ND	4.0								
2-Methylnaphthalene	ND	4.0								
Acetone	ND	10								
Bromobenzene	ND	1.0								
Bromodichloromethane	ND	1.0								
Bromoform	ND	1.0								
Bromomethane	ND	3.0								
2-Butanone	ND	10								
Carbon disulfide	ND	10								
Carbon Tetrachloride	ND	1.0								
Chlorobenzene	ND	1.0								
Chloroethane	ND	2.0								
Chloroform	ND	1.0								
Chloromethane	ND	3.0								
2-Chlorotoluene	ND	1.0								

**Qualifiers:**

- \* Value exceeds Maximum Contaminant Level.
- E Value above quantitation range
- J Analyte detected below quantitation limits
- O RSD is greater than RSDlimit
- R RPD outside accepted recovery limits
- S Spike Recovery outside accepted recovery limits
- B Analyte detected in the associated Method Blank
- H Holding times for preparation or analysis exceeded
- ND Not Detected at the Reporting Limit
- P Sample pH Not In Range
- RL Reporting Detection Limit

# QC SUMMARY REPORT

## Hall Environmental Analysis Laboratory, Inc.

WO#: 1503B63

02-Apr-15

**Client:** Souder Miller & Associates

**Project:** Chama Conoco Mini-Mart

Sample ID: <b>5mL rb</b>	SampType: <b>MBLK</b>	TestCode: <b>EPA Method 8260B: VOLATILES</b>
Client ID: <b>PBW</b>	Batch ID: <b>R25144</b>	RunNo: <b>25144</b>
Prep Date:	Analysis Date: <b>3/27/2015</b>	SeqNo: <b>742729</b> Units: <b>µg/L</b>

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
4-Chlorotoluene	ND	1.0								
cis-1,2-DCE	ND	1.0								
cis-1,3-Dichloropropene	ND	1.0								
1,2-Dibromo-3-chloropropane	ND	2.0								
Dibromochloromethane	ND	1.0								
Dibromomethane	ND	1.0								
1,2-Dichlorobenzene	ND	1.0								
1,3-Dichlorobenzene	ND	1.0								
1,4-Dichlorobenzene	ND	1.0								
Dichlorodifluoromethane	ND	1.0								
1,1-Dichloroethane	ND	1.0								
1,1-Dichloroethene	ND	1.0								
1,2-Dichloropropane	ND	1.0								
1,3-Dichloropropane	ND	1.0								
2,2-Dichloropropane	ND	2.0								
1,1-Dichloropropene	ND	1.0								
Hexachlorobutadiene	ND	1.0								
2-Hexanone	ND	10								
Isopropylbenzene	ND	1.0								
4-Isopropyltoluene	ND	1.0								
4-Methyl-2-pentanone	ND	10								
Methylene Chloride	ND	3.0								
n-Butylbenzene	ND	3.0								
n-Propylbenzene	ND	1.0								
sec-Butylbenzene	ND	1.0								
Styrene	ND	1.0								
tert-Butylbenzene	ND	1.0								
1,1,1,2-Tetrachloroethane	ND	1.0								
1,1,2,2-Tetrachloroethane	ND	2.0								
Tetrachloroethene (PCE)	ND	1.0								
trans-1,2-DCE	ND	1.0								
trans-1,3-Dichloropropene	ND	1.0								
1,2,3-Trichlorobenzene	ND	1.0								
1,2,4-Trichlorobenzene	ND	1.0								
1,1,1-Trichloroethane	ND	1.0								
1,1,2-Trichloroethane	ND	1.0								
Trichloroethene (TCE)	ND	1.0								
Trichlorofluoromethane	ND	1.0								
1,2,3-Trichloropropane	ND	2.0								

**Qualifiers:**

- \* Value exceeds Maximum Contaminant Level.
- E Value above quantitation range
- J Analyte detected below quantitation limits
- O RSD is greater than RSDlimit
- R RPD outside accepted recovery limits
- S Spike Recovery outside accepted recovery limits
- B Analyte detected in the associated Method Blank
- H Holding times for preparation or analysis exceeded
- ND Not Detected at the Reporting Limit
- P Sample pH Not In Range
- RL Reporting Detection Limit

# QC SUMMARY REPORT

## Hall Environmental Analysis Laboratory, Inc.

WO#: 1503B63

02-Apr-15

**Client:** Souder Miller & Associates

**Project:** Chama Conoco Mini-Mart

Sample ID	<b>5mL rb</b>	SampType:	<b>MBLK</b>	TestCode:	<b>EPA Method 8260B: VOLATILES</b>					
Client ID:	<b>PBW</b>	Batch ID:	<b>R25144</b>	RunNo:	<b>25144</b>					
Prep Date:		Analysis Date:	<b>3/27/2015</b>	SeqNo:	<b>742729</b>	Units:	<b>µg/L</b>			
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Vinyl chloride	ND	1.0								
Xylenes, Total	ND	1.5								
Surr: 1,2-Dichloroethane-d4	9.9		10.00		99.3	70	130			
Surr: 4-Bromofluorobenzene	11		10.00		109	70	130			
Surr: Dibromofluoromethane	10		10.00		102	70	130			
Surr: Toluene-d8	10		10.00		101	70	130			

Sample ID	<b>5mL rb</b>	SampType:	<b>MBLK</b>	TestCode:	<b>EPA Method 8260B: VOLATILES</b>					
Client ID:	<b>PBW</b>	Batch ID:	<b>R25170</b>	RunNo:	<b>25170</b>					
Prep Date:		Analysis Date:	<b>3/30/2015</b>	SeqNo:	<b>743700</b>	Units:	<b>µg/L</b>			
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Benzene	ND	1.0								
Toluene	ND	1.0								
Ethylbenzene	ND	1.0								
Methyl tert-butyl ether (MTBE)	ND	1.0								
1,2,4-Trimethylbenzene	ND	1.0								
1,3,5-Trimethylbenzene	ND	1.0								
1,2-Dichloroethane (EDC)	ND	1.0								
1,2-Dibromoethane (EDB)	ND	1.0								
Naphthalene	ND	2.0								
1-Methylnaphthalene	ND	4.0								
2-Methylnaphthalene	ND	4.0								
Acetone	ND	10								
Bromobenzene	ND	1.0								
Bromodichloromethane	ND	1.0								
Bromoform	ND	1.0								
Bromomethane	ND	3.0								
2-Butanone	ND	10								
Carbon disulfide	ND	10								
Carbon Tetrachloride	ND	1.0								
Chlorobenzene	ND	1.0								
Chloroethane	ND	2.0								
Chloroform	ND	1.0								
Chloromethane	ND	3.0								
2-Chlorotoluene	ND	1.0								
4-Chlorotoluene	ND	1.0								
cis-1,2-DCE	ND	1.0								
cis-1,3-Dichloropropene	ND	1.0								

**Qualifiers:**

- \* Value exceeds Maximum Contaminant Level.
- E Value above quantitation range
- J Analyte detected below quantitation limits
- O RSD is greater than RSDlimit
- R RPD outside accepted recovery limits
- S Spike Recovery outside accepted recovery limits
- B Analyte detected in the associated Method Blank
- H Holding times for preparation or analysis exceeded
- ND Not Detected at the Reporting Limit
- P Sample pH Not In Range
- RL Reporting Detection Limit

# QC SUMMARY REPORT

## Hall Environmental Analysis Laboratory, Inc.

WO#: 1503B63

02-Apr-15

**Client:** Souder Miller & Associates

**Project:** Chama Conoco Mini-Mart

Sample ID	5mL rb	SampType:	MBLK	TestCode:	EPA Method 8260B: VOLATILES					
Client ID:	PBW	Batch ID:	R25170	RunNo:	25170					
Prep Date:		Analysis Date:	3/30/2015	SeqNo:	743700	Units:	µg/L			
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
1,2-Dibromo-3-chloropropane	ND	2.0								
Dibromochloromethane	ND	1.0								
Dibromomethane	ND	1.0								
1,2-Dichlorobenzene	ND	1.0								
1,3-Dichlorobenzene	ND	1.0								
1,4-Dichlorobenzene	ND	1.0								
Dichlorodifluoromethane	ND	1.0								
1,1-Dichloroethane	ND	1.0								
1,1-Dichloroethene	ND	1.0								
1,2-Dichloropropane	ND	1.0								
1,3-Dichloropropane	ND	1.0								
2,2-Dichloropropane	ND	2.0								
1,1-Dichloropropene	ND	1.0								
Hexachlorobutadiene	ND	1.0								
2-Hexanone	ND	10								
Isopropylbenzene	ND	1.0								
4-Isopropyltoluene	ND	1.0								
4-Methyl-2-pentanone	ND	10								
Methylene Chloride	ND	3.0								
n-Butylbenzene	ND	3.0								
n-Propylbenzene	ND	1.0								
sec-Butylbenzene	ND	1.0								
Styrene	ND	1.0								
tert-Butylbenzene	ND	1.0								
1,1,1,2-Tetrachloroethane	ND	1.0								
1,1,2,2-Tetrachloroethane	ND	2.0								
Tetrachloroethene (PCE)	ND	1.0								
trans-1,2-DCE	ND	1.0								
trans-1,3-Dichloropropene	ND	1.0								
1,2,3-Trichlorobenzene	ND	1.0								
1,2,4-Trichlorobenzene	ND	1.0								
1,1,1-Trichloroethane	ND	1.0								
1,1,2-Trichloroethane	ND	1.0								
Trichloroethene (TCE)	ND	1.0								
Trichlorofluoromethane	ND	1.0								
1,2,3-Trichloropropane	ND	2.0								
Vinyl chloride	ND	1.0								
Xylenes, Total	ND	1.5								
Surr: 1,2-Dichloroethane-d4	10		10.00		100	70	130			

**Qualifiers:**

- \* Value exceeds Maximum Contaminant Level.
- E Value above quantitation range
- J Analyte detected below quantitation limits
- O RSD is greater than RSDlimit
- R RPD outside accepted recovery limits
- S Spike Recovery outside accepted recovery limits
- B Analyte detected in the associated Method Blank
- H Holding times for preparation or analysis exceeded
- ND Not Detected at the Reporting Limit
- P Sample pH Not In Range
- RL Reporting Detection Limit

# QC SUMMARY REPORT

## Hall Environmental Analysis Laboratory, Inc.

WO#: 1503B63

02-Apr-15

**Client:** Souder Miller & Associates

**Project:** Chama Conoco Mini-Mart

Sample ID <b>5mL rb</b>	SampType: <b>MBLK</b>		TestCode: <b>EPA Method 8260B: VOLATILES</b>							
Client ID: <b>PBW</b>	Batch ID: <b>R25170</b>		RunNo: <b>25170</b>							
Prep Date:	Analysis Date: <b>3/30/2015</b>		SeqNo: <b>743700</b>		Units: <b>µg/L</b>					
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Surr: 4-Bromofluorobenzene	11		10.00		108	70	130			
Surr: Dibromofluoromethane	10		10.00		103	70	130			
Surr: Toluene-d8	10		10.00		104	70	130			

Sample ID <b>100ng lcs</b>	SampType: <b>LCS</b>		TestCode: <b>EPA Method 8260B: VOLATILES</b>							
Client ID: <b>LCSW</b>	Batch ID: <b>R25170</b>		RunNo: <b>25170</b>							
Prep Date:	Analysis Date: <b>3/30/2015</b>		SeqNo: <b>743704</b>		Units: <b>µg/L</b>					
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Benzene	22	1.0	20.00	0	108	70	130			
Toluene	22	1.0	20.00	0	108	70	130			
Chlorobenzene	20	1.0	20.00	0	101	70	130			
1,1-Dichloroethene	24	1.0	20.00	0	122	75.6	144			
Trichloroethene (TCE)	21	1.0	20.00	0	105	70	130			
Surr: 1,2-Dichloroethane-d4	10		10.00		101	70	130			
Surr: 4-Bromofluorobenzene	11		10.00		106	70	130			
Surr: Dibromofluoromethane	10		10.00		99.8	70	130			
Surr: Toluene-d8	10		10.00		101	70	130			

**Qualifiers:**

- \* Value exceeds Maximum Contaminant Level.
- E Value above quantitation range
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- RL Reporting Detection Limit

**Sample Log-In Check List**

Client Name: SMA ABQ

Work Order Number: 1503B63

RcptNo: 1

Received by/date: CS 03/24/15

Logged By: Ashley Gallegos

3/24/2015 4:40:00 PM

*AG*

Completed By: Ashley Gallegos

3/25/2015 5:41:53 PM

*AG*

Reviewed By: *AG*

03/26/15

**Chain of Custody**

- 1. Custody seals intact on sample bottles? Yes  No  Not Present
- 2. Is Chain of Custody complete? Yes  No  Not Present
- 3. How was the sample delivered? Client

**Log In**

- 4. Was an attempt made to cool the samples? Yes  No  NA
  - 5. Were all samples received at a temperature of >0° C to 6.0°C Yes  No  NA
  - 6. Sample(s) in proper container(s)? Yes  No
  - 7. Sufficient sample volume for indicated test(s)? Yes  No
  - 8. Are samples (except VOA and ONG) properly preserved? Yes  No
  - 9. Was preservative added to bottles? Yes  No  NA
  - 10. VOA vials have zero headspace? Yes  No  No VOA Vials
  - 11. Were any sample containers received broken? Yes  No
  - 12. Does paperwork match bottle labels? (Note discrepancies on chain of custody) Yes  No
  - 13. Are matrices correctly identified on Chain of Custody? Yes  No
  - 14. Is it clear what analyses were requested? Yes  No
  - 15. Were all holding times able to be met? (If no, notify customer for authorization.) Yes  No
- # of preserved bottles checked for pH: \_\_\_\_\_  
 (<2 or >12 unless noted)  
 Adjusted? \_\_\_\_\_  
 Checked by: \_\_\_\_\_

**Special Handling (if applicable)**

- 16. Was client notified of all discrepancies with this order? Yes  No  NA

Person Notified: \_\_\_\_\_ Date: \_\_\_\_\_  
 By Whom: \_\_\_\_\_ Via:  eMail  Phone  Fax  In Person  
 Regarding: \_\_\_\_\_  
 Client Instructions: \_\_\_\_\_

17. Additional remarks:

**18. Cooler Information**

Cooler No	Temp °C	Condition	Seal Intact	Seal No	Seal Date	Signed By
1	1.5	Good	Not Present			

# Chain-of-Custody Record

Client: Spivey Miller, & Associates  
 Mailing Address: 3451 Candelaria Blvd NE Suite D  
 Phone #: (505) 299-0942  
 Email or Fax#: \_\_\_\_\_  
 QA/QC Package:  Level 4 (Full Validation)  
 Standard  Other \_\_\_\_\_  
 Accreditation:  NELAP  Other \_\_\_\_\_  
 EDD (Type) \_\_\_\_\_

Turn-Around Time: \_\_\_\_\_  
 Standard  Rush  
 Project Name: Chama Conoco Mini-Mart  
 Project #: 34 23555  
 Project Manager: Scott McKittrick  
 Sampler: Lauren Van Alst  
 On Ice:  Yes  No  
 Sample Temperature: 1.5°C

Date	Time	Matrix	Sample Request ID	Container Type and #	Preservative Type	HEAL No.
24-15	1245	H <sub>2</sub> O	MW-7	3 VOA's	HgCl <sub>2</sub>	1503 BUB3 -001
24-15	1250	H <sub>2</sub> O	MW-8	3 VOA's	HgCl <sub>2</sub>	-002
24-15	1210	H <sub>2</sub> O	MW-11	3 VOA's	HgCl <sub>2</sub>	-003
24-15	1146	H <sub>2</sub> O	MW-12	3 VOA's	HgCl <sub>2</sub>	-004
24-15	1200	H <sub>2</sub> O	Trip Blank	2 VOA's	N/A	-005

BTEX + MTBE + TMB's (8021)	BTEX + MTBE + TPH (Gas only)	TPH 8015B (GRO / DRO / MRO)	TPH (Method 418.1)	EDB (Method 504.1)	PAH's (8310 or 8270 SIMS)	RCRA 8 Metals	Anions (F, Cl, NO <sub>3</sub> , NO <sub>2</sub> , PO <sub>4</sub> , SO <sub>4</sub> )	8081 Pesticides / 8082 PCB's	8260B (VOA)	8270 (Semi-VOA)	Air Bubbles (Y or N)
									X		
									X		
									X		
									X		
									X		

Relinquished by: Lauren Van Alst Date: 24-15-16 Time: 1640  
 Received by: Celine Somo Date: 03/24/15 Time: 1640



**HALL ENVIRONMENTAL ANALYSIS LABORATORY**

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 4901 Hawkins NE - Albuquerque, NM 87109  
 Tel. 505-345-3975 Fax 505-345-4107

## Analysis Request