

# GROUNDWATER MONITORING REPORT

**Conoco Mini-Mart UST Site**  
**3837 US Highway 64**  
**Chama, New Mexico**  
**Facility #27498                      RID #2316**

**November 30, 2017**



**Souder, Miller & Associates**  
*Engineering ♦ Environmental ♦ Surveying*

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**Cover Page**  
**Form 1216**  
**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):  
Mike Timmer, Project Manager  
New Mexico Environment Department  
Petroleum Storage Tank Bureau  
121 Tijeras Avenue NE, Suite 1000  
Albuquerque, NM 87102
  
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:**  
November 30, 2017
  
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:**



---

**Name:**

Matthew Earthman, P.G.

**Affiliation:**

Souder, Miller & Associates

**Title:**

Project Geoscientist

**Date:**

November 30, 2017

## 1.0 Introduction

### 1.1 Scope of Work

Souder, Miller and Associates (SMA) is pleased to submit the following report detailing one annual groundwater monitoring event 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 18, 2017 and approved by the NMED PSTB on October 20, 2017 (WPID #3920-1). 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 most recent groundwater monitoring event conducted at the site since April 18, 2017.

### 1.2 Monitoring Event Highlights

Groundwater monitoring was performed at the site on November 9, 2017. All six existing site wells were checked for the presence of NAPL and gauged for depth to water. Groundwater monitoring wells MW-6, MW-7, MW-8, MW-9, MW-11, and MW-12 were sampled for laboratory analysis of the groundwater by EPA Methods 8260. No NAPL was detected in any well. The average groundwater elevation at the Conoco Mini-Mart site has decreased by 2.65 feet relative to the previous gauging event conducted on April 18, 2017.

Total naphthalenes (242 µg/L) were detected above the New Mexico Water Quality Control Commission Regulations (NMWQCCR) standard of 30 µg/L in monitoring well MW-7. Total xylenes (610 µg/L), ethylbenzene (270 µg/L), and benzene (1.8 µg/L) were also detected in monitoring well MW-7 below applicable NMWQCCR standards. Ethylbenzene (5.4 µg/L) we detected in monitoring well MW-9 below applicable NMWQCCR standards. No constituents of concern were detected above the practical quantitation limit (PQL) in monitoring wells MW-8, 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 Sergeant, 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 Sergeant, 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.

In April, 2010, SMA plugged and abandoned an additional four site monitoring wells (MW-3, MW-4, MW-5, and MW-10). Following well decommissioning, 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.

During the most recent groundwater monitoring event, completed prior to this event in April 18, 2017, all six existing site wells were checked for the presence of NAPL, gauged for depth to water, and five of the six (MW-7, MW-8, MW-9, MW-11, and MW-12) were sampled for laboratory analysis of the groundwater by EPA Method 8260. Total naphthalenes were detected above the NMWQCCR standard (30 µg/L) in monitoring well MW-7 at a concentration of 277 µg/L. Monitoring well MW-6 was previously presumed to have been destroyed and was not sampled. However, it was discovered intact, checked for NAPL and gauged for depth to water during the April, 2017 monitoring event.

### **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**

All six existing site monitoring wells (MW-6, MW-7, MW-8, MW-9, MW-11, and MW-12) at the Conoco Mini-Mart site in Chama, New Mexico were sampled on November 9, 2017 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 elevation measurements is 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, did not contain any hydrocarbon COCs above the laboratory PQL.

Groundwater monitoring well MW-7 is located down gradient of the tank pits. Total naphthalenes (242 µg/L) were detected above NMWQCCR standards. Ethylbenzene (270

µg/L), total xylenes (610 µg/L), and benzene (1.8 µg/L) were also detected below applicable NMWQCCR standards.

Groundwater from MW-8, located cross gradient from the former tank pits, did not contain any hydrocarbon COCs above the laboratory PQL.

Groundwater from MW-9, located south and hydraulically down-gradient from the tank pits, contained ethylbenzene (5.4 µg/L) below 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 PQL.

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 PQL.

### **3.2 Dissolved Metals Monitoring**

Not applicable

### **3.3 Groundwater Measurements**

Depths to groundwater were measured in all six of the existing site monitoring wells (MW-6, MW-7, MW-8, MW-9, MW-11, and MW-12) on November 9, 2017. The average depth to water in the wells was 7.35 feet, which represents a 2.65 foot decrease in groundwater elevation since the wells were last gauged on April 18, 2017. Figure 2 is a potentiometric surface map of the Chama Conoco Mini-Mart UST Release site.

Groundwater flow direction, based on groundwater elevation data from the six site monitoring wells, is to the southwest at a gradient of 0.025 feet per foot. The groundwater gradient is steeper but generally consistent with what was calculated during the previous gauging event in April, 2017.

## **4.0 SUMMARY AND CONCLUSIONS**

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

Total naphthalenes was detected above the NMWQCCR standard in monitoring well MW-7. Various COCs, including total xylenes, benzene, and ethylbenzene were detected in wells MW-7 and MW-9 below the applicable NMWQCCR standards. Monitoring wells MW-8, MW-11, and MW-12 did not contain any organic hydrocarbon COCs above the laboratory



PQL. With the exception of MW-7, all monitoring wells on site show reduced contaminant concentrations relative to the previous monitoring event in April, 2017. Figure 4. illustrates seasonal trends in groundwater elevations and total naphthalene concentrations. Based on the time-series data there does not appear to be any significant relationship between groundwater elevation and total naphthalene concentrations.

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

Not applicable, no remediation system has been installed

#### **4.3 Recommendations.**

SMA recommends continued annual monitoring to evaluate contaminant trends, particularly in monitoring well MW-7.

## Figures

1. Site Map
2. Potentiometric Surface Map
3. Groundwater Contaminant Concentration Map
- 3A. Total Naphthalenes Iso-Concentration Map
4. MW-7 Groundwater Elevation vs. Total Naphthalene Time-Series Graph

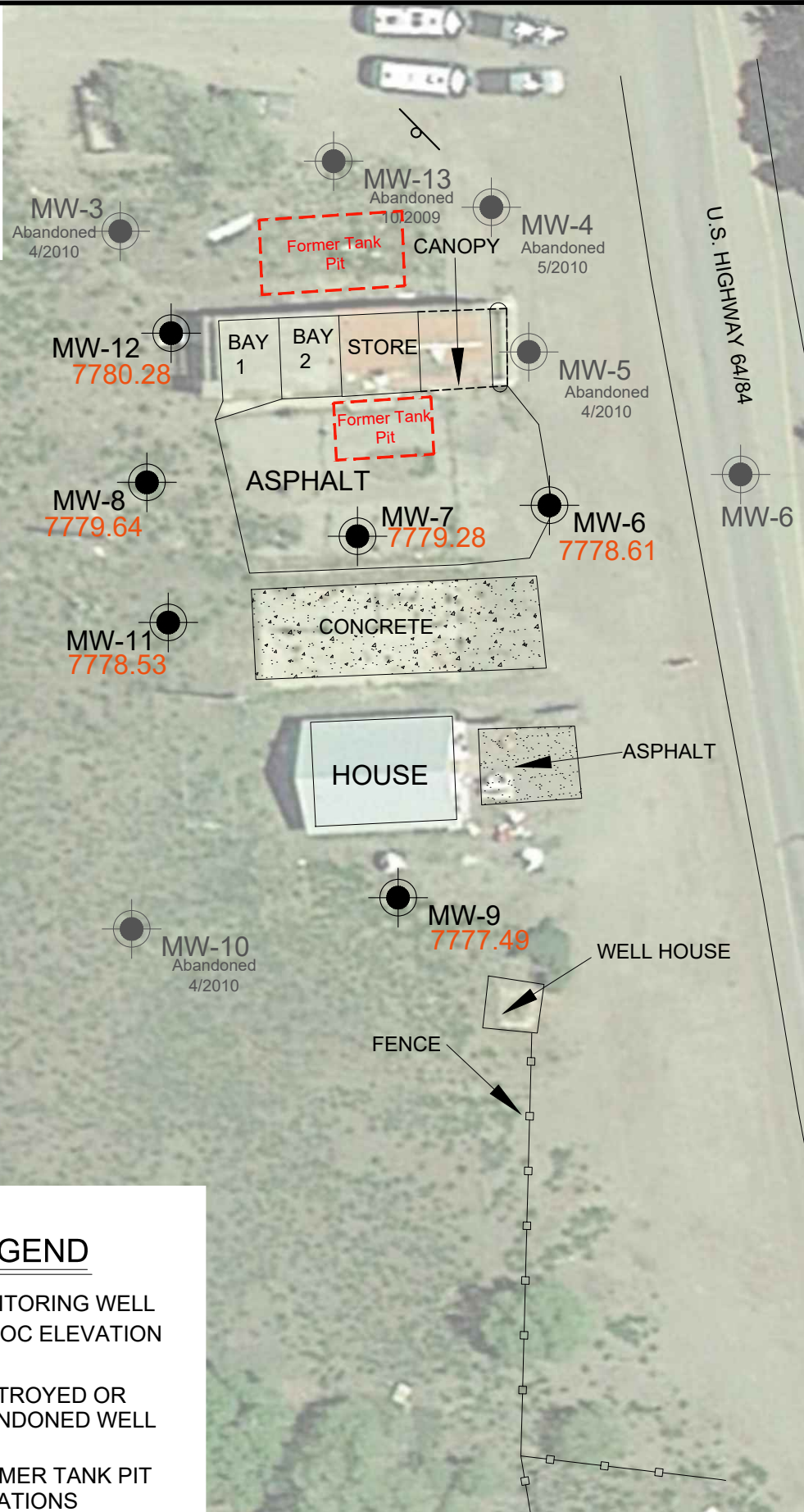
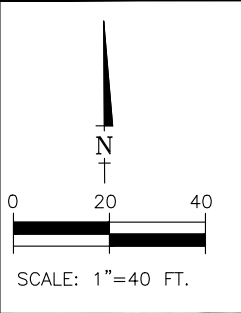
## Tables

1. Summary of Groundwater Analytical Results
- 1a. Summary of Field Parameters
4. Depth to Water Measurements

## Appendices

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

## Figures



**LEGEND**

	MONITORING WELL W/ TOC ELEVATION
	DESTROYED OR ABANDONED WELL
	FORMER TANK PIT LOCATIONS

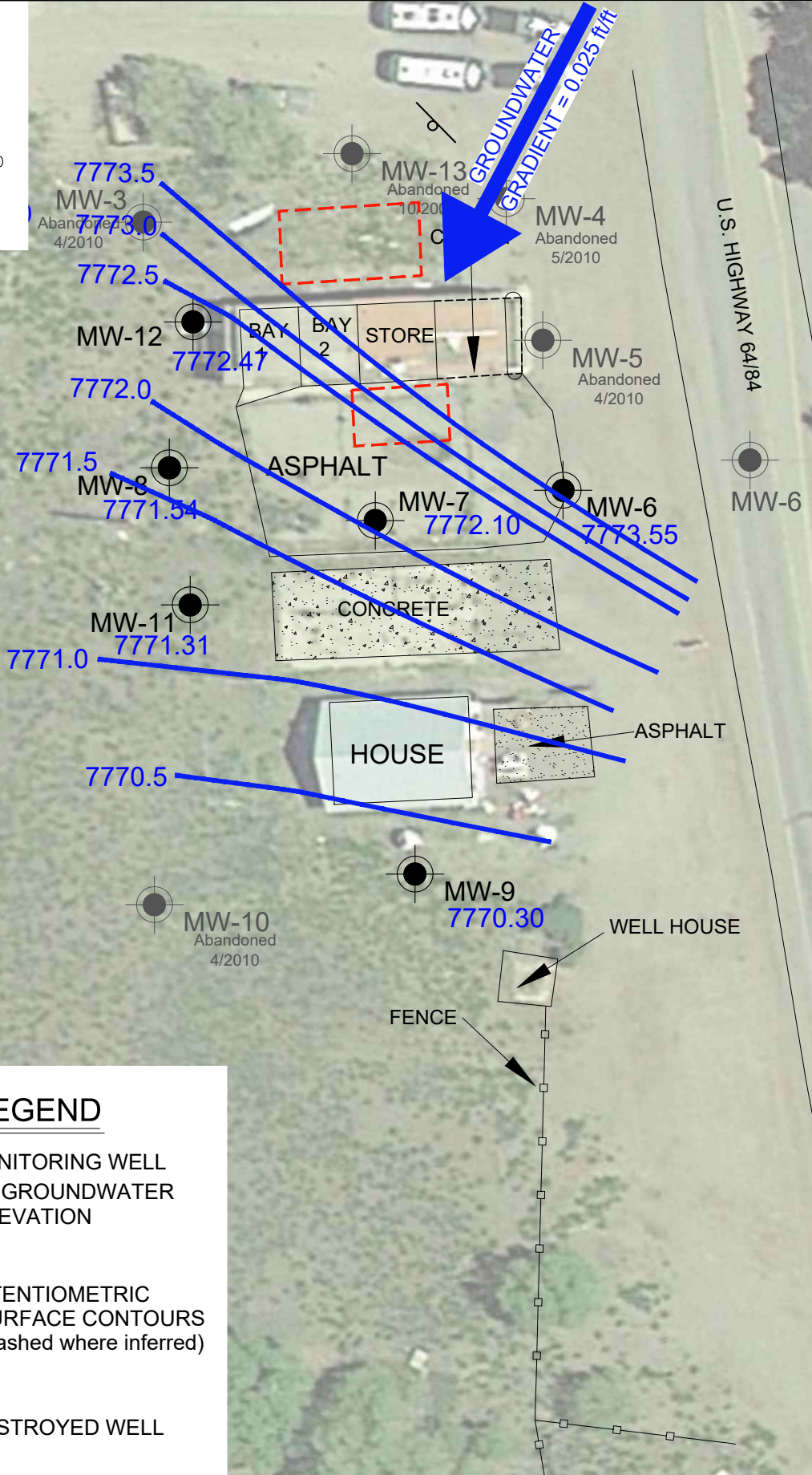
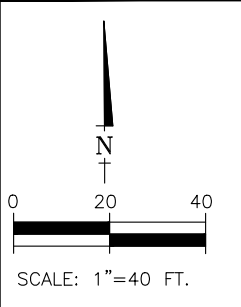
Aerial From from Google Earth Pro (2015)

Drawn MJK	Checked MAE	Approved SAM
Date: NOVEMBER, 2017		
Scale: Horiz: 1" = 40' Vert: N/A		
Project No: 3423555		
Sheet: <b>FIGURE 1</b>		

**SITE MAP**  
**CONOCO MINI-MART UST RELEASE SITE**  
**3837 US HIGHWAY 64, CHAMA, NEW MEXICO**

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**LEGEND**

	MW-3 4545.45 MONITORING WELL W/ GROUNDWATER ELEVATION
	POTENTIOMETRIC SURFACE CONTOURS (dashed where inferred)
	MW-1 DESTROYED WELL

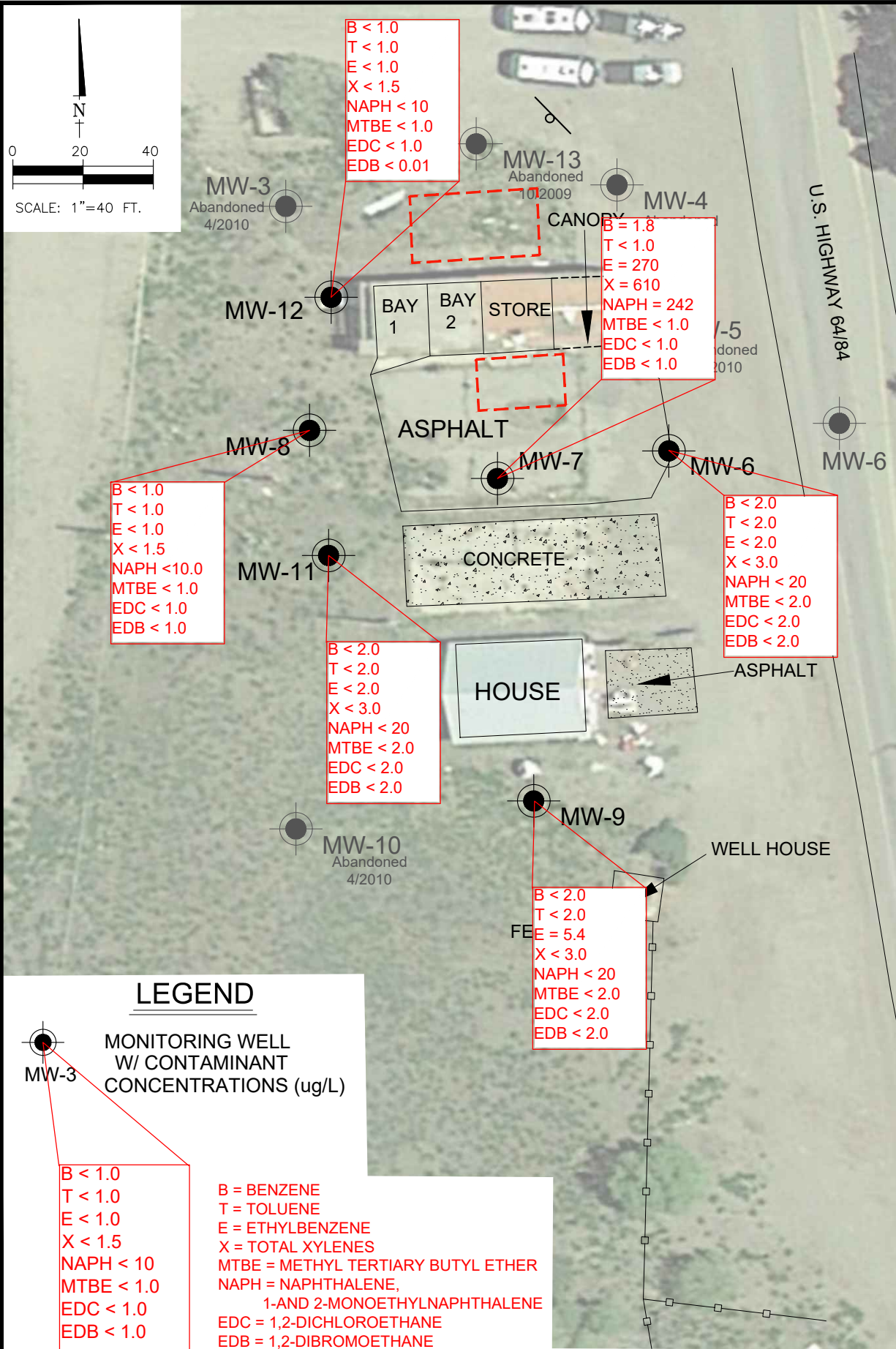
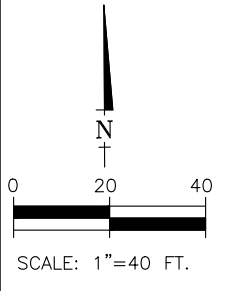
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Drawn MJK	Checked MAE	Approved SAM
Date: NOVEMBER, 2017	Project No: 3423555	
Scale: Horiz: 1" = 40' Vert: N/A	Sheet: <b>FIGURE 2</b>	

POTENTIOMETRIC SURFACE MAP - NOVEMBER 9, 2017  
**CONOCO MINI-MART UST RELEASE SITE**  
 3837 US HIGHWAY 64, CHAMA, NEW MEXICO

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B < 1.0  
 T < 1.0  
 E < 1.0  
 X < 1.5  
 NAPH < 10  
 MTBE < 1.0  
 EDC < 1.0  
 EDB < 0.01

B = 1.8  
 T < 1.0  
 E = 270  
 X = 610  
 NAPH = 242  
 MTBE < 1.0  
 EDC < 1.0  
 EDB < 1.0

B < 1.0  
 T < 1.0  
 E < 1.0  
 X < 1.5  
 NAPH < 10.0  
 MTBE < 1.0  
 EDC < 1.0  
 EDB < 1.0

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

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

B < 2.0  
 T < 2.0  
 E = 5.4  
 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

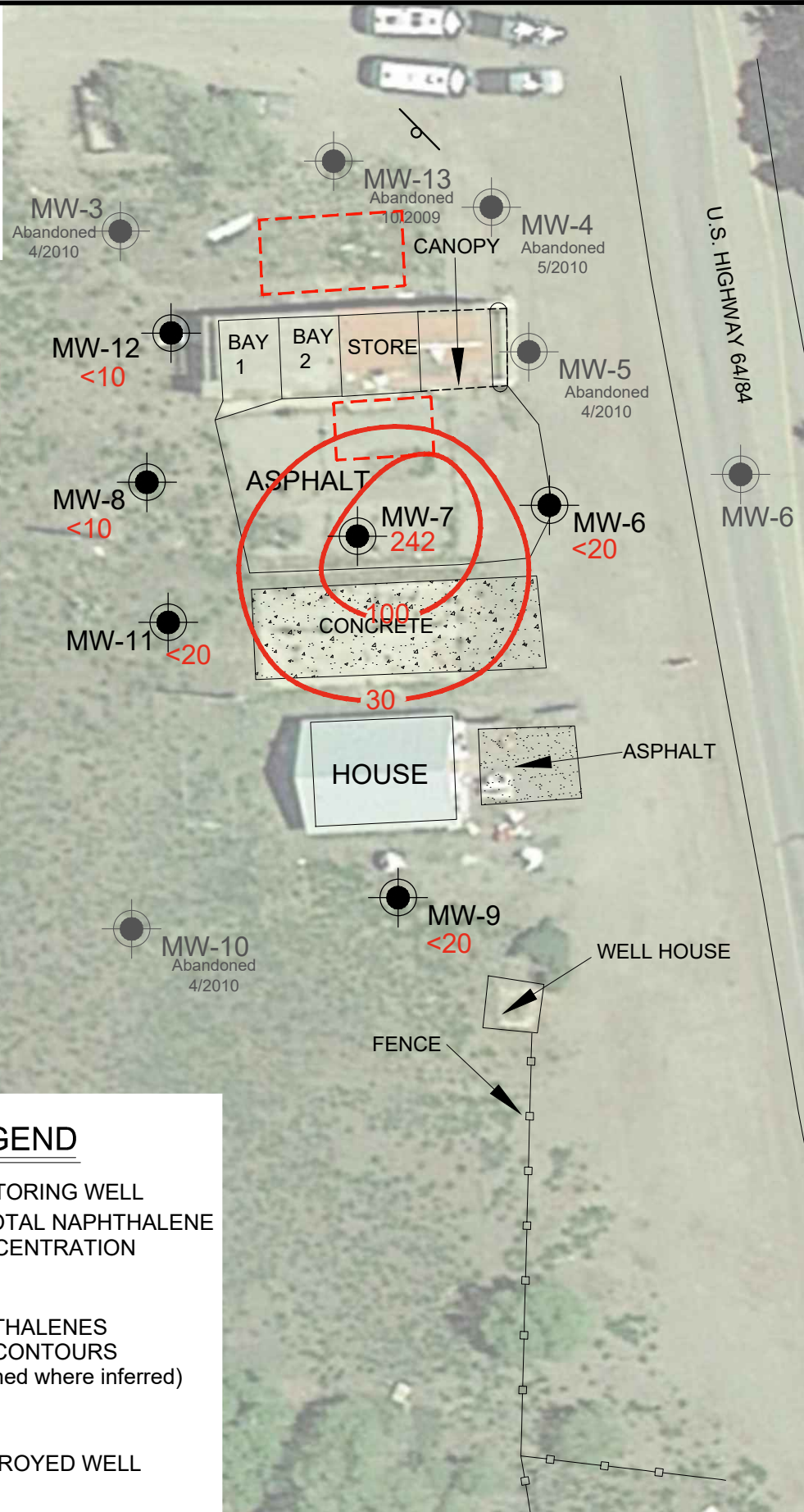
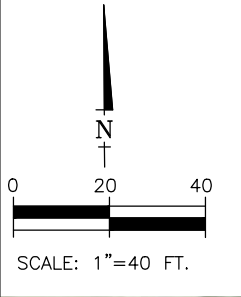
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Date: NOVEMBER, 2017	Project No: 3423555	
Scale: Horiz: 1" = 40' Vert: NA	Sheet: <b>FIGURE 3</b>	

**CONTAMINANT CONCENTRATION MAP - 11/9/2017**  
**CONOCO MINI-MART UST RELEASE SITE**  
**3837 US HIGHWAY 64, CHAMA, NEW MEXICO**

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Drawn	MJK	Checked	MAE	Approved	SAM
Date:	NOVEMBER, 2017				
Scale:	Horiz: 1" = 40' Vert: N/A				
Project No:	3423555				
Sheet:	FIGURE 3A				

**NAPHTHALENE CONCENTRATION MAP - 11/19/2017**  
**CONOCO MINI-MART UST RELEASE SITE**  
**3837 US HIGHWAY 64, CHAMA, NEW MEXICO**

**LEGEND**

MW-3  
 34  
 MONITORING WELL  
 W/ TOTAL NAPHTHALENE  
 CONCENTRATION

NAPHTHALENES  
 ISO-CONTOURS  
 (dashed where inferred)

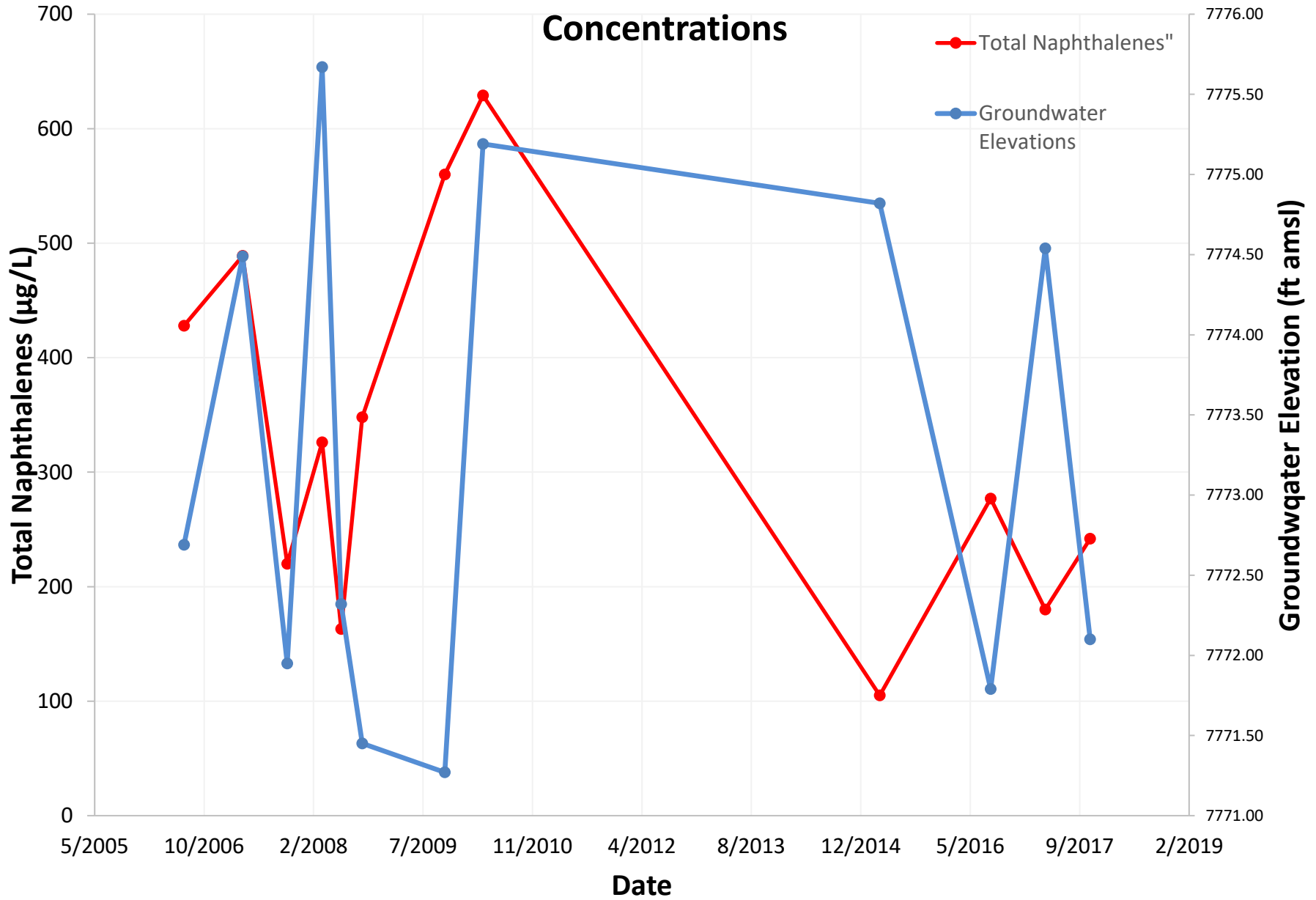
MW-1  
 DESTROYED WELL

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**Figure 4. MW-7 Groundwater Elevations & Total Naphthalene Concentrations**





## 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 <sup>o</sup>	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 <sup>o</sup>	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 <sup>o</sup>	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 <sup>o</sup>	NA
	04/04/07*	<2.5	<2.5	<2.5	<5.0	<5.0	NA	NA	<1.0 <sup>o</sup>	<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

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

43048

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	7.2	#VALUE!
	07/10/06*	<0.5	1.9	142	256	1.7	NA	NA	8	#VALUE!
	04/04/07*	1.9	0.49	195	283	<1.0	NA	NA	7	#VALUE!
	10/25/07	NOT SAMPLED								
	04/01/08	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 <sup>o</sup>	NA
	04/04/07*	<2.5	<2.5	<2.5	0.87	<5.0	NA	NA	<1.0 <sup>o</sup>	<0.009
	10/25/07*	<1.0	<1.0	<1.0	<2.0	<2.5	NA	NA	<6.0 <sup>o</sup>	NA
	04/01/08*	<1.0	<1.0	<1.0	<2.0	<2.5	NA	NA	<2.0 <sup>o</sup>	NA
	06/27/08*	<1.0	<1.0	<1.0	<2.0	<2.5	NA	NA	<2.0 <sup>o</sup>	NA
	10/01/08*	<1.0	<1.0	<1.0	<2.0	<2.5	NA	NA	<2.5 <sup>o</sup>	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
	03/24/15	NOT SAMPLED								
	04/18/17	NOT SAMPLED								
11/09/17	<2.0	<2.0	<2.0	<3.0	<2.0	<2.0	<2.0	<2.0	<20	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 <sup>o</sup>	NA
	04/04/07*	63	12	508	1655	23	NA	NA	489 <sup>o</sup>	<0.009
	10/25/07*	36	19	480	1400	<25	NA	NA	220 <sup>o</sup>	NA
	04/01/08*	48	18	530	1500	<25	NA	NA	326 <sup>o</sup>	NA
	06/27/08*	49	17	680	2500	<25	NA	NA	163 <sup>o</sup>	NA
	10/01/08*	44	15	590	1500	<25	NA	NA	348 <sup>o</sup>	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
	08/11/16	1.7	2.1	350	690	<1.0	<1.0	<0.010	277	NA
	04/18/17	2.7	1.2	260	460	<1.0	<1.0	<0.010	180	NA
11/09/17	1.8	<1.0	270	610	<1.0	<1.0	<1.0	242	NA	
NMWQCCR/NMPSTR Standards	10	750	750	620	100	10	0.1	30	0.05	

**Table 1 (Continued). 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
	08/11/16	<1.0	<1.0	<1.0	<1.5	<1.0	<1.0	<0.010	<10	NA
	04/18/17	<1.0	<1.0	<1.0	<1.5	<1.0	<1.0	<0.010	<10	NA
11/09/17	<1.0	<1.0	<1.0	<1.5	<1.0	<1.0	<1.0	<10	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								
	08/11/16	<2.0	<2.0	<2.0	8.7	<2.0	<2.0	<0.010	<20	NA
	04/18/17	<1.0	<1.0	<1.0	<1.5	<1.0	<1.0	<0.010	<10	NA
11/09/17	<2.0	<2.0	5.4	<3.0	<2.0	<2.0	<2.0	<20	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-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 1 (Continued). 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-11	04/04/07*	<b>31</b>	16.1	138	71	<5.0	NA	NA	<b>53°</b>	<0.009
	10/25/07*	<b>21</b>	5.4	280	13	17	NA	NA	15°	NA
	04/01/08*	<b>11</b>	<1.0	24	9.1	<2.5	NA	NA	3.1°	NA
	06/27/08*	<b>18</b>	<1.0	130	8.8	<2.5	NA	NA	5.5°	NA
	10/01/08*	9.2	<1.0	47	5.2	<2.5	NA	NA	<2.5°	NA
	06/01/09	10.0	<1.0	24	5.0	<1.0	NA	NA	<2.0	NA
	10/14/09	5.6	<1.0	21	6.4	<1.0	NA	NA	<4.0	NA
	04/06/10	1.1	<1.0	2.1	4.4	<1.0	NA	NA	<4.0	NA
	03/24/15	<2.0	<1.0	<2.0	<3.0	<2.0	<2.0	<2.0	<20	NA
	08/11/16	1.5	<1.0	1.7	<1.5	<1.0	<1.0	<0.010	<10	NA
	04/18/17	<1.0	<1.0	<1.0	7.9	<1.0	<1.0	<0.010	5.5	NA
11/09/17	<2.0	<2.0	<2.0	<3.0	<2.0	<2.0	<2.0	<20	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-12	04/04/07*	<b>10.9</b>	<2.5	44	129	<5.0	NA	NA	<b>40°</b>	<0.009
	10/25/07*	1.9	<1.0	35	76	2.7	NA	NA	2.1°	NA
	04/01/08*	3.2	11	150	<b>750</b>	2.5	NA	NA	12°	NA
	06/27/08*	<1.0	1.2	78	420	2.5	NA	NA	<b>62°</b>	NA
	10/01/08*	<1.0	<1.0	12	32	<2.5	NA	NA	<10°	NA
	06/01/09*	<5.0	<5.0	69	200	<5.0	NA	NA	NA	NA
	10/14/2009	<1.0	<1.0	1.8	<1.5	<1.0	NA	NA	<4.0	NA
	4/6/2010	<1.0	5.4	280	<b>1100</b>	<1.0	NA	NA	<b>146</b>	NA
	03/24/15	<2.0	<2.0	<2.0	<3.0	<3.0	<2.0	<2.0	<20	NA
	08/11/16	<1.0	<1.0	<1.0	<1.5	<1.0	<1.0	<0.010	<10	NA
	04/18/17	<1.0	<1.0	<1.0	<1.5	<1.0	<1.0	<0.010	<10	NA
11/09/17	<1.0	<1.0	<1.0	<1.5	<1.0	<1.0	<1.0	<10	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-13	04/04/07*	<b>20</b>	8.4	193	381	20	NA	NA	<b>70°</b>	<0.009
	10/25/07*	1.7	<1.0	36	13	<2.5	NA	NA	2.2°	NA
	04/01/08*	1.6	<1.0	32	89	<2.5	NA	NA	<2.0°	NA
	06/27/08*	1.5	<1.0	47	16	<2.5	NA	NA	13°	NA
	10/01/08*	1.2	<1.0	21	<2.0	<2.5	NA	NA	<2.5°	NA
	06/01/09	UNABLE TO LOCATE								
	10/14/09	WELL PLUG & ABANDON								
NMWQCCR/NMPSTR Standards	10	750	750	620	100	10	0.1	30	0.05	

**Notes:** \* = Data analyzed by Method 8021, results in µg/L  
 ° = Total Naphthalenes analyzed by Method 8310, results in µg/L  
 Method 8260 results in µg/L; Method 6010 results in mg/L  
 MTBE = Methyl Tertiary Butyl Ether  
**Red** indicates concentration exceeds standard  
 NA = Not Analyzed  
 7/8/2005<sup>INT</sup> Indicates data adopted from Intera report dated 9/7/2005



**Table 1a. Field Parameters**

Chama Conoco Mini Mart UST Release Site

3837 Highway 64, Chama, New Mexico

Facility # 27498    RID #2316

Well	11/9/2017		
	Parameter		
	pH	eC ( $\mu\text{s}/\text{cm}$ )	Temperature ( $^{\circ}\text{C}$ )
MW-6	7.52	484	56
MW-7	7.69	427	57
MW-8	7.70	1,056	57
MW-9	7.79	519	56
MW-11	7.57	712	55
MW-12	7.71	875	55

Notes:        eC= Specific Conductance

**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 (Continued). 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 (Continued). 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	03/24/15		08/11/16		04/18/17		11/09/17	
			Depth to Water	Water Elev.	Depth to Water	Water Elev.	Depth to Water	Water Elev.	Depth to Water	Water Elev.
MW-6 *	7778.61	12.0	NM		NM		3.21	7775.40	5.06	7773.55
MW-7 *	7779.28	12.5	4.46	7774.82	7.49	7771.79	4.74	7774.54	7.18	7772.10
MW-8 *	7779.64	15.0	5.50	7774.14	8.44	7771.20	5.29	7774.35	8.10	7771.54
MW-9	7777.49	11.3	Not Measured		7.56	7769.93	4.29	7773.20	7.19	7770.30
MW-11	7778.53	12.0	4.49	7774.04	7.66	7770.87	4.30	7774.23	7.22	7771.31
MW-12	7780.28	13.5	5.53	7774.75	8.06	7772.22	5.48	7774.80	7.81	7772.47
Average DTW			4.83		7.69		4.70		7.35	

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  
 NM= Not Measured



# 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.

Prior to collection of samples, monitoring wells were purged of three well bore volumes using a new disposable high-density polyethylene (HDPE) bailer. The purged water was disposed of on concrete surfaces within the boundaries of the property and allowed to evaporate.

After purging, field parameters were then measured in each monitoring well using a calibrated YSI meter. Measured parameters included:

- pH
- eC (specific conductance)
- temperature

Following collection of field parameters, groundwater samples were collected into the following laboratory-provided containers with appropriate preservatives for the following analyses:

- **EPA Method 8260** – Samples were collected in three-40-ml VOAs preserved with mercuric chloride. All VOAs were checked to ensure no headspace was present prior to labeling and securing the bottles.

Following collection, 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 hand-delivery 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: 11/9/17 Time On-site: 10:25 Time Off-site: 1300 Sampled by: M. Kelly

Weather conditions: Clear & sunny ~ 35°F  
 Equipment Used: Sounder, Hanna parameter meter, 4 2" bailers  
Hanna calibrated at 1045

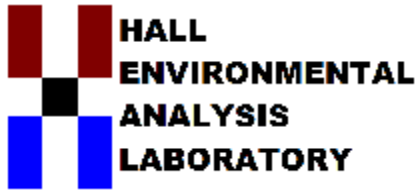
Monitoring Well Data									
MW ID	Total Depth	DTW	Gallons		Sampling Time	Remarks	PH	EC (µS)	T (°F)
			to purge	purged					
MW-6	11.5	5.06	3.2	3.25	1040	Brown muddy color/ <del>odors</del> Going Dry Slight odor	7.52 <del>8.20</del>	484 <del>404</del>	55.7 <del>60.0</del>
MW-7	12.2	7.18	2.5	2.5	1240	light Gray/strong odor Going Dry	7.69	427	56.7
MW-8	15	8.10	3.5	3.5	1225	Dark gray color/strong odor	7.70	1056	56.5
MW-9	13.8	7.19	3.3	3.0/dry	1105	muddy/slight odor Dry @ 3 gal	7.79	579	56.0
MW-11	12.5	7.22	2.6	2.75	1140	muddy/odor	7.57	712	55.3
MW-12	13.1	7.81	2.6	2.75	1200	Cloudy / strong odor	7.71	875	55.0

Notes: Sample for 8260B



## **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)

November 15, 2017

Matt Earthman

Souder Miller & Associates  
5454 Venice Ave. NE Suite D  
Albuquerque, NM 87113  
TEL: (505) 299-0942  
FAX

RE: Chama Mini Mart

OrderNo.: 1711604

Dear Matt Earthman:

Hall Environmental Analysis Laboratory received 7 sample(s) on 11/9/2017 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 in a cursive style.

Andy Freeman  
Laboratory Manager  
4901 Hawkins NE  
Albuquerque, NM 87109



# Hall Environmental Analysis Laboratory, Inc.

Analytical Report

Lab Order 1711604

Date Reported: 11/15/2017

CLIENT: Souder Miller & Associates

Client Sample ID: MW-6

Project: Chama Mini Mart

Collection Date: 11/9/2017 10:40:00 AM

Lab ID: 1711604-001

Matrix: AQUEOUS

Received Date: 11/9/2017 4:10:00 PM

Analyses	Result	PQL	Qual	Units	DF	Date Analyzed	Batch
<b>EPA METHOD 8260B: VOLATILES</b>							Analyst: RAA
Benzene	ND	2.0	D	µg/L	2	11/14/2017 7:17:00 PM	R47131
Toluene	ND	2.0	D	µg/L	2	11/14/2017 7:17:00 PM	R47131
Ethylbenzene	ND	2.0	D	µg/L	2	11/14/2017 7:17:00 PM	R47131
Methyl tert-butyl ether (MTBE)	ND	2.0	D	µg/L	2	11/14/2017 7:17:00 PM	R47131
1,2,4-Trimethylbenzene	ND	2.0	D	µg/L	2	11/14/2017 7:17:00 PM	R47131
1,3,5-Trimethylbenzene	ND	2.0	D	µg/L	2	11/14/2017 7:17:00 PM	R47131
1,2-Dichloroethane (EDC)	ND	2.0	D	µg/L	2	11/14/2017 7:17:00 PM	R47131
1,2-Dibromoethane (EDB)	ND	2.0	D	µg/L	2	11/14/2017 7:17:00 PM	R47131
Naphthalene	ND	4.0	D	µg/L	2	11/14/2017 7:17:00 PM	R47131
1-Methylnaphthalene	ND	8.0	D	µg/L	2	11/14/2017 7:17:00 PM	R47131
2-Methylnaphthalene	ND	8.0	D	µg/L	2	11/14/2017 7:17:00 PM	R47131
Acetone	ND	20	D	µg/L	2	11/14/2017 7:17:00 PM	R47131
Bromobenzene	ND	2.0	D	µg/L	2	11/14/2017 7:17:00 PM	R47131
Bromodichloromethane	ND	2.0	D	µg/L	2	11/14/2017 7:17:00 PM	R47131
Bromoform	ND	2.0	D	µg/L	2	11/14/2017 7:17:00 PM	R47131
Bromomethane	ND	6.0	D	µg/L	2	11/14/2017 7:17:00 PM	R47131
2-Butanone	ND	20	D	µg/L	2	11/14/2017 7:17:00 PM	R47131
Carbon disulfide	ND	20	D	µg/L	2	11/14/2017 7:17:00 PM	R47131
Carbon Tetrachloride	ND	2.0	D	µg/L	2	11/14/2017 7:17:00 PM	R47131
Chlorobenzene	ND	2.0	D	µg/L	2	11/14/2017 7:17:00 PM	R47131
Chloroethane	ND	4.0	D	µg/L	2	11/14/2017 7:17:00 PM	R47131
Chloroform	ND	2.0	D	µg/L	2	11/14/2017 7:17:00 PM	R47131
Chloromethane	ND	6.0	D	µg/L	2	11/14/2017 7:17:00 PM	R47131
2-Chlorotoluene	ND	2.0	D	µg/L	2	11/14/2017 7:17:00 PM	R47131
4-Chlorotoluene	ND	2.0	D	µg/L	2	11/14/2017 7:17:00 PM	R47131
cis-1,2-DCE	ND	2.0	D	µg/L	2	11/14/2017 7:17:00 PM	R47131
cis-1,3-Dichloropropene	ND	2.0	D	µg/L	2	11/14/2017 7:17:00 PM	R47131
1,2-Dibromo-3-chloropropane	ND	4.0	D	µg/L	2	11/14/2017 7:17:00 PM	R47131
Dibromochloromethane	ND	2.0	D	µg/L	2	11/14/2017 7:17:00 PM	R47131
Dibromomethane	ND	2.0	D	µg/L	2	11/14/2017 7:17:00 PM	R47131
1,2-Dichlorobenzene	ND	2.0	D	µg/L	2	11/14/2017 7:17:00 PM	R47131
1,3-Dichlorobenzene	ND	2.0	D	µg/L	2	11/14/2017 7:17:00 PM	R47131
1,4-Dichlorobenzene	ND	2.0	D	µg/L	2	11/14/2017 7:17:00 PM	R47131
Dichlorodifluoromethane	ND	2.0	D	µg/L	2	11/14/2017 7:17:00 PM	R47131
1,1-Dichloroethane	ND	2.0	D	µg/L	2	11/14/2017 7:17:00 PM	R47131
1,1-Dichloroethene	ND	2.0	D	µg/L	2	11/14/2017 7:17:00 PM	R47131
1,2-Dichloropropane	ND	2.0	D	µg/L	2	11/14/2017 7:17:00 PM	R47131
1,3-Dichloropropane	ND	2.0	D	µg/L	2	11/14/2017 7:17:00 PM	R47131
2,2-Dichloropropane	ND	4.0	D	µg/L	2	11/14/2017 7:17:00 PM	R47131

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
	D Sample Diluted Due to Matrix	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	P Sample pH Not In Range
	PQL Practical Quantitative Limit	RL Reporting Detection Limit
	S % Recovery outside of range due to dilution or matrix	W Sample container temperature is out of limit as specified

# Hall Environmental Analysis Laboratory, Inc.

Analytical Report

Lab Order 1711604

Date Reported: 11/15/2017

**CLIENT:** Souder Miller & Associates

**Client Sample ID:** MW-6

**Project:** Chama Mini Mart

**Collection Date:** 11/9/2017 10:40:00 AM

**Lab ID:** 1711604-001

**Matrix:** AQUEOUS

**Received Date:** 11/9/2017 4:10:00 PM

Analyses	Result	PQL	Qual	Units	DF	Date Analyzed	Batch
<b>EPA METHOD 8260B: VOLATILES</b>							Analyst: RAA
1,1-Dichloropropene	ND	2.0	D	µg/L	2	11/14/2017 7:17:00 PM	R47131
Hexachlorobutadiene	ND	2.0	D	µg/L	2	11/14/2017 7:17:00 PM	R47131
2-Hexanone	ND	20	D	µg/L	2	11/14/2017 7:17:00 PM	R47131
Isopropylbenzene	ND	2.0	D	µg/L	2	11/14/2017 7:17:00 PM	R47131
4-Isopropyltoluene	ND	2.0	D	µg/L	2	11/14/2017 7:17:00 PM	R47131
4-Methyl-2-pentanone	ND	20	D	µg/L	2	11/14/2017 7:17:00 PM	R47131
Methylene Chloride	ND	6.0	D	µg/L	2	11/14/2017 7:17:00 PM	R47131
n-Butylbenzene	ND	6.0	D	µg/L	2	11/14/2017 7:17:00 PM	R47131
n-Propylbenzene	ND	2.0	D	µg/L	2	11/14/2017 7:17:00 PM	R47131
sec-Butylbenzene	ND	2.0	D	µg/L	2	11/14/2017 7:17:00 PM	R47131
Styrene	ND	2.0	D	µg/L	2	11/14/2017 7:17:00 PM	R47131
tert-Butylbenzene	ND	2.0	D	µg/L	2	11/14/2017 7:17:00 PM	R47131
1,1,1,2-Tetrachloroethane	ND	2.0	D	µg/L	2	11/14/2017 7:17:00 PM	R47131
1,1,2,2-Tetrachloroethane	ND	4.0	D	µg/L	2	11/14/2017 7:17:00 PM	R47131
Tetrachloroethene (PCE)	ND	2.0	D	µg/L	2	11/14/2017 7:17:00 PM	R47131
trans-1,2-DCE	ND	2.0	D	µg/L	2	11/14/2017 7:17:00 PM	R47131
trans-1,3-Dichloropropene	ND	2.0	D	µg/L	2	11/14/2017 7:17:00 PM	R47131
1,2,3-Trichlorobenzene	ND	2.0	D	µg/L	2	11/14/2017 7:17:00 PM	R47131
1,2,4-Trichlorobenzene	ND	2.0	D	µg/L	2	11/14/2017 7:17:00 PM	R47131
1,1,1-Trichloroethane	ND	2.0	D	µg/L	2	11/14/2017 7:17:00 PM	R47131
1,1,2-Trichloroethane	ND	2.0	D	µg/L	2	11/14/2017 7:17:00 PM	R47131
Trichloroethene (TCE)	ND	2.0	D	µg/L	2	11/14/2017 7:17:00 PM	R47131
Trichlorofluoromethane	ND	2.0	D	µg/L	2	11/14/2017 7:17:00 PM	R47131
1,2,3-Trichloropropane	ND	4.0	D	µg/L	2	11/14/2017 7:17:00 PM	R47131
Vinyl chloride	ND	2.0	D	µg/L	2	11/14/2017 7:17:00 PM	R47131
Xylenes, Total	ND	3.0	D	µg/L	2	11/14/2017 7:17:00 PM	R47131
Surr: 1,2-Dichloroethane-d4	116	70-130	D	%Rec	2	11/14/2017 7:17:00 PM	R47131
Surr: 4-Bromofluorobenzene	103	70-130	D	%Rec	2	11/14/2017 7:17:00 PM	R47131
Surr: Dibromofluoromethane	111	70-130	D	%Rec	2	11/14/2017 7:17:00 PM	R47131
Surr: Toluene-d8	95.8	70-130	D	%Rec	2	11/14/2017 7:17:00 PM	R47131

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
	D Sample Diluted Due to Matrix	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	P Sample pH Not In Range
	PQL Practical Quantitative Limit	RL Reporting Detection Limit
	S % Recovery outside of range due to dilution or matrix	W Sample container temperature is out of limit as specified

# Hall Environmental Analysis Laboratory, Inc.

Analytical Report

Lab Order 1711604

Date Reported: 11/15/2017

CLIENT: Souder Miller & Associates

Client Sample ID: MW-7

Project: Chama Mini Mart

Collection Date: 11/9/2017 12:40:00 PM

Lab ID: 1711604-002

Matrix: AQUEOUS

Received Date: 11/9/2017 4:10:00 PM

Analyses	Result	PQL	Qual	Units	DF	Date Analyzed	Batch
<b>EPA METHOD 8260B: VOLATILES</b>							Analyst: RAA
Benzene	1.8	1.0		µg/L	1	11/14/2017 8:51:00 PM	R47131
Toluene	ND	1.0		µg/L	1	11/14/2017 8:51:00 PM	R47131
Ethylbenzene	270	10		µg/L	10	11/14/2017 8:28:00 PM	R47131
Methyl tert-butyl ether (MTBE)	ND	1.0		µg/L	1	11/14/2017 8:51:00 PM	R47131
1,2,4-Trimethylbenzene	220	10		µg/L	10	11/14/2017 8:28:00 PM	R47131
1,3,5-Trimethylbenzene	220	10		µg/L	10	11/14/2017 8:28:00 PM	R47131
1,2-Dichloroethane (EDC)	ND	1.0		µg/L	1	11/14/2017 8:51:00 PM	R47131
1,2-Dibromoethane (EDB)	ND	1.0		µg/L	1	11/14/2017 8:51:00 PM	R47131
Naphthalene	130	20		µg/L	10	11/14/2017 8:28:00 PM	R47131
1-Methylnaphthalene	52	4.0		µg/L	1	11/14/2017 8:51:00 PM	R47131
2-Methylnaphthalene	60	4.0		µg/L	1	11/14/2017 8:51:00 PM	R47131
Acetone	ND	10		µg/L	1	11/14/2017 8:51:00 PM	R47131
Bromobenzene	ND	1.0		µg/L	1	11/14/2017 8:51:00 PM	R47131
Bromodichloromethane	ND	1.0		µg/L	1	11/14/2017 8:51:00 PM	R47131
Bromoform	ND	1.0		µg/L	1	11/14/2017 8:51:00 PM	R47131
Bromomethane	ND	3.0		µg/L	1	11/14/2017 8:51:00 PM	R47131
2-Butanone	ND	10		µg/L	1	11/14/2017 8:51:00 PM	R47131
Carbon disulfide	ND	10		µg/L	1	11/14/2017 8:51:00 PM	R47131
Carbon Tetrachloride	ND	1.0		µg/L	1	11/14/2017 8:51:00 PM	R47131
Chlorobenzene	ND	1.0		µg/L	1	11/14/2017 8:51:00 PM	R47131
Chloroethane	ND	2.0		µg/L	1	11/14/2017 8:51:00 PM	R47131
Chloroform	ND	1.0		µg/L	1	11/14/2017 8:51:00 PM	R47131
Chloromethane	ND	3.0		µg/L	1	11/14/2017 8:51:00 PM	R47131
2-Chlorotoluene	ND	1.0		µg/L	1	11/14/2017 8:51:00 PM	R47131
4-Chlorotoluene	ND	1.0		µg/L	1	11/14/2017 8:51:00 PM	R47131
cis-1,2-DCE	ND	1.0		µg/L	1	11/14/2017 8:51:00 PM	R47131
cis-1,3-Dichloropropene	ND	1.0		µg/L	1	11/14/2017 8:51:00 PM	R47131
1,2-Dibromo-3-chloropropane	ND	2.0		µg/L	1	11/14/2017 8:51:00 PM	R47131
Dibromochloromethane	ND	1.0		µg/L	1	11/14/2017 8:51:00 PM	R47131
Dibromomethane	ND	1.0		µg/L	1	11/14/2017 8:51:00 PM	R47131
1,2-Dichlorobenzene	ND	1.0		µg/L	1	11/14/2017 8:51:00 PM	R47131
1,3-Dichlorobenzene	ND	1.0		µg/L	1	11/14/2017 8:51:00 PM	R47131
1,4-Dichlorobenzene	ND	1.0		µg/L	1	11/14/2017 8:51:00 PM	R47131
Dichlorodifluoromethane	ND	1.0		µg/L	1	11/14/2017 8:51:00 PM	R47131
1,1-Dichloroethane	ND	1.0		µg/L	1	11/14/2017 8:51:00 PM	R47131
1,1-Dichloroethene	ND	1.0		µg/L	1	11/14/2017 8:51:00 PM	R47131
1,2-Dichloropropane	ND	1.0		µg/L	1	11/14/2017 8:51:00 PM	R47131
1,3-Dichloropropane	ND	1.0		µg/L	1	11/14/2017 8:51:00 PM	R47131
2,2-Dichloropropane	ND	2.0		µg/L	1	11/14/2017 8:51:00 PM	R47131

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
	D Sample Diluted Due to Matrix	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	P Sample pH Not In Range
	PQL Practical Quantitative Limit	RL Reporting Detection Limit
	S % Recovery outside of range due to dilution or matrix	W Sample container temperature is out of limit as specified

# Hall Environmental Analysis Laboratory, Inc.

Analytical Report

Lab Order 1711604

Date Reported: 11/15/2017

CLIENT: Souder Miller & Associates

Client Sample ID: MW-7

Project: Chama Mini Mart

Collection Date: 11/9/2017 12:40:00 PM

Lab ID: 1711604-002

Matrix: AQUEOUS

Received Date: 11/9/2017 4:10:00 PM

Analyses	Result	PQL	Qual	Units	DF	Date Analyzed	Batch
<b>EPA METHOD 8260B: VOLATILES</b>							Analyst: RAA
1,1-Dichloropropene	ND	1.0		µg/L	1	11/14/2017 8:51:00 PM	R47131
Hexachlorobutadiene	ND	1.0		µg/L	1	11/14/2017 8:51:00 PM	R47131
2-Hexanone	ND	10		µg/L	1	11/14/2017 8:51:00 PM	R47131
Isopropylbenzene	19	1.0		µg/L	1	11/14/2017 8:51:00 PM	R47131
4-Isopropyltoluene	15	1.0		µg/L	1	11/14/2017 8:51:00 PM	R47131
4-Methyl-2-pentanone	ND	10		µg/L	1	11/14/2017 8:51:00 PM	R47131
Methylene Chloride	ND	3.0		µg/L	1	11/14/2017 8:51:00 PM	R47131
n-Butylbenzene	17	3.0		µg/L	1	11/14/2017 8:51:00 PM	R47131
n-Propylbenzene	53	1.0		µg/L	1	11/14/2017 8:51:00 PM	R47131
sec-Butylbenzene	8.2	1.0		µg/L	1	11/14/2017 8:51:00 PM	R47131
Styrene	ND	1.0		µg/L	1	11/14/2017 8:51:00 PM	R47131
tert-Butylbenzene	4.3	1.0		µg/L	1	11/14/2017 8:51:00 PM	R47131
1,1,1,2-Tetrachloroethane	ND	1.0		µg/L	1	11/14/2017 8:51:00 PM	R47131
1,1,2,2-Tetrachloroethane	ND	2.0		µg/L	1	11/14/2017 8:51:00 PM	R47131
Tetrachloroethene (PCE)	ND	1.0		µg/L	1	11/14/2017 8:51:00 PM	R47131
trans-1,2-DCE	ND	1.0		µg/L	1	11/14/2017 8:51:00 PM	R47131
trans-1,3-Dichloropropene	ND	1.0		µg/L	1	11/14/2017 8:51:00 PM	R47131
1,2,3-Trichlorobenzene	ND	1.0		µg/L	1	11/14/2017 8:51:00 PM	R47131
1,2,4-Trichlorobenzene	ND	1.0		µg/L	1	11/14/2017 8:51:00 PM	R47131
1,1,1-Trichloroethane	ND	1.0		µg/L	1	11/14/2017 8:51:00 PM	R47131
1,1,2-Trichloroethane	ND	1.0		µg/L	1	11/14/2017 8:51:00 PM	R47131
Trichloroethene (TCE)	ND	1.0		µg/L	1	11/14/2017 8:51:00 PM	R47131
Trichlorofluoromethane	ND	1.0		µg/L	1	11/14/2017 8:51:00 PM	R47131
1,2,3-Trichloropropane	ND	2.0		µg/L	1	11/14/2017 8:51:00 PM	R47131
Vinyl chloride	ND	1.0		µg/L	1	11/14/2017 8:51:00 PM	R47131
Xylenes, Total	610	15		µg/L	10	11/14/2017 8:28:00 PM	R47131
Surr: 1,2-Dichloroethane-d4	119	70-130		%Rec	1	11/14/2017 8:51:00 PM	R47131
Surr: 4-Bromofluorobenzene	98.6	70-130		%Rec	1	11/14/2017 8:51:00 PM	R47131
Surr: Dibromofluoromethane	109	70-130		%Rec	1	11/14/2017 8:51:00 PM	R47131
Surr: Toluene-d8	90.5	70-130		%Rec	1	11/14/2017 8:51:00 PM	R47131

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
D	Sample Diluted Due to Matrix	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	P	Sample pH Not In Range
PQL	Practical Quantitative Limit	RL	Reporting Detection Limit
S	% Recovery outside of range due to dilution or matrix	W	Sample container temperature is out of limit as specified

# Hall Environmental Analysis Laboratory, Inc.

Analytical Report

Lab Order 1711604

Date Reported: 11/15/2017

**CLIENT:** Souder Miller & Associates

**Client Sample ID:** MW-8

**Project:** Chama Mini Mart

**Collection Date:** 11/9/2017 12:25:00 PM

**Lab ID:** 1711604-003

**Matrix:** AQUEOUS

**Received Date:** 11/9/2017 4:10:00 PM

Analyses	Result	PQL	Qual	Units	DF	Date Analyzed	Batch
<b>EPA METHOD 8260B: VOLATILES</b>							Analyst: RAA
Benzene	ND	1.0		µg/L	1	11/14/2017 9:15:00 PM	R47131
Toluene	ND	1.0		µg/L	1	11/14/2017 9:15:00 PM	R47131
Ethylbenzene	ND	1.0		µg/L	1	11/14/2017 9:15:00 PM	R47131
Methyl tert-butyl ether (MTBE)	ND	1.0		µg/L	1	11/14/2017 9:15:00 PM	R47131
1,2,4-Trimethylbenzene	ND	1.0		µg/L	1	11/14/2017 9:15:00 PM	R47131
1,3,5-Trimethylbenzene	ND	1.0		µg/L	1	11/14/2017 9:15:00 PM	R47131
1,2-Dichloroethane (EDC)	ND	1.0		µg/L	1	11/14/2017 9:15:00 PM	R47131
1,2-Dibromoethane (EDB)	ND	1.0		µg/L	1	11/14/2017 9:15:00 PM	R47131
Naphthalene	ND	2.0		µg/L	1	11/14/2017 9:15:00 PM	R47131
1-Methylnaphthalene	ND	4.0		µg/L	1	11/14/2017 9:15:00 PM	R47131
2-Methylnaphthalene	ND	4.0		µg/L	1	11/14/2017 9:15:00 PM	R47131
Acetone	ND	10		µg/L	1	11/14/2017 9:15:00 PM	R47131
Bromobenzene	ND	1.0		µg/L	1	11/14/2017 9:15:00 PM	R47131
Bromodichloromethane	ND	1.0		µg/L	1	11/14/2017 9:15:00 PM	R47131
Bromoform	ND	1.0		µg/L	1	11/14/2017 9:15:00 PM	R47131
Bromomethane	ND	3.0		µg/L	1	11/14/2017 9:15:00 PM	R47131
2-Butanone	ND	10		µg/L	1	11/14/2017 9:15:00 PM	R47131
Carbon disulfide	ND	10		µg/L	1	11/14/2017 9:15:00 PM	R47131
Carbon Tetrachloride	ND	1.0		µg/L	1	11/14/2017 9:15:00 PM	R47131
Chlorobenzene	ND	1.0		µg/L	1	11/14/2017 9:15:00 PM	R47131
Chloroethane	ND	2.0		µg/L	1	11/14/2017 9:15:00 PM	R47131
Chloroform	ND	1.0		µg/L	1	11/14/2017 9:15:00 PM	R47131
Chloromethane	ND	3.0		µg/L	1	11/14/2017 9:15:00 PM	R47131
2-Chlorotoluene	ND	1.0		µg/L	1	11/14/2017 9:15:00 PM	R47131
4-Chlorotoluene	ND	1.0		µg/L	1	11/14/2017 9:15:00 PM	R47131
cis-1,2-DCE	ND	1.0		µg/L	1	11/14/2017 9:15:00 PM	R47131
cis-1,3-Dichloropropene	ND	1.0		µg/L	1	11/14/2017 9:15:00 PM	R47131
1,2-Dibromo-3-chloropropane	ND	2.0		µg/L	1	11/14/2017 9:15:00 PM	R47131
Dibromochloromethane	ND	1.0		µg/L	1	11/14/2017 9:15:00 PM	R47131
Dibromomethane	ND	1.0		µg/L	1	11/14/2017 9:15:00 PM	R47131
1,2-Dichlorobenzene	ND	1.0		µg/L	1	11/14/2017 9:15:00 PM	R47131
1,3-Dichlorobenzene	ND	1.0		µg/L	1	11/14/2017 9:15:00 PM	R47131
1,4-Dichlorobenzene	ND	1.0		µg/L	1	11/14/2017 9:15:00 PM	R47131
Dichlorodifluoromethane	ND	1.0		µg/L	1	11/14/2017 9:15:00 PM	R47131
1,1-Dichloroethane	ND	1.0		µg/L	1	11/14/2017 9:15:00 PM	R47131
1,1-Dichloroethene	ND	1.0		µg/L	1	11/14/2017 9:15:00 PM	R47131
1,2-Dichloropropane	ND	1.0		µg/L	1	11/14/2017 9:15:00 PM	R47131
1,3-Dichloropropane	ND	1.0		µg/L	1	11/14/2017 9:15:00 PM	R47131
2,2-Dichloropropane	ND	2.0		µg/L	1	11/14/2017 9:15:00 PM	R47131

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
	D Sample Diluted Due to Matrix	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	P Sample pH Not In Range
	PQL Practical Quantitative Limit	RL Reporting Detection Limit
	S % Recovery outside of range due to dilution or matrix	W Sample container temperature is out of limit as specified

# Hall Environmental Analysis Laboratory, Inc.

Analytical Report

Lab Order 1711604

Date Reported: 11/15/2017

CLIENT: Souder Miller & Associates

Client Sample ID: MW-8

Project: Chama Mini Mart

Collection Date: 11/9/2017 12:25:00 PM

Lab ID: 1711604-003

Matrix: AQUEOUS

Received Date: 11/9/2017 4:10:00 PM

Analyses	Result	PQL	Qual	Units	DF	Date Analyzed	Batch
<b>EPA METHOD 8260B: VOLATILES</b>							Analyst: RAA
1,1-Dichloropropene	ND	1.0		µg/L	1	11/14/2017 9:15:00 PM	R47131
Hexachlorobutadiene	ND	1.0		µg/L	1	11/14/2017 9:15:00 PM	R47131
2-Hexanone	ND	10		µg/L	1	11/14/2017 9:15:00 PM	R47131
Isopropylbenzene	ND	1.0		µg/L	1	11/14/2017 9:15:00 PM	R47131
4-Isopropyltoluene	ND	1.0		µg/L	1	11/14/2017 9:15:00 PM	R47131
4-Methyl-2-pentanone	ND	10		µg/L	1	11/14/2017 9:15:00 PM	R47131
Methylene Chloride	ND	3.0		µg/L	1	11/14/2017 9:15:00 PM	R47131
n-Butylbenzene	ND	3.0		µg/L	1	11/14/2017 9:15:00 PM	R47131
n-Propylbenzene	ND	1.0		µg/L	1	11/14/2017 9:15:00 PM	R47131
sec-Butylbenzene	ND	1.0		µg/L	1	11/14/2017 9:15:00 PM	R47131
Styrene	ND	1.0		µg/L	1	11/14/2017 9:15:00 PM	R47131
tert-Butylbenzene	ND	1.0		µg/L	1	11/14/2017 9:15:00 PM	R47131
1,1,1,2-Tetrachloroethane	ND	1.0		µg/L	1	11/14/2017 9:15:00 PM	R47131
1,1,2,2-Tetrachloroethane	ND	2.0		µg/L	1	11/14/2017 9:15:00 PM	R47131
Tetrachloroethene (PCE)	ND	1.0		µg/L	1	11/14/2017 9:15:00 PM	R47131
trans-1,2-DCE	ND	1.0		µg/L	1	11/14/2017 9:15:00 PM	R47131
trans-1,3-Dichloropropene	ND	1.0		µg/L	1	11/14/2017 9:15:00 PM	R47131
1,2,3-Trichlorobenzene	ND	1.0		µg/L	1	11/14/2017 9:15:00 PM	R47131
1,2,4-Trichlorobenzene	ND	1.0		µg/L	1	11/14/2017 9:15:00 PM	R47131
1,1,1-Trichloroethane	ND	1.0		µg/L	1	11/14/2017 9:15:00 PM	R47131
1,1,2-Trichloroethane	ND	1.0		µg/L	1	11/14/2017 9:15:00 PM	R47131
Trichloroethene (TCE)	ND	1.0		µg/L	1	11/14/2017 9:15:00 PM	R47131
Trichlorofluoromethane	ND	1.0		µg/L	1	11/14/2017 9:15:00 PM	R47131
1,2,3-Trichloropropane	ND	2.0		µg/L	1	11/14/2017 9:15:00 PM	R47131
Vinyl chloride	ND	1.0		µg/L	1	11/14/2017 9:15:00 PM	R47131
Xylenes, Total	ND	1.5		µg/L	1	11/14/2017 9:15:00 PM	R47131
Surr: 1,2-Dichloroethane-d4	114	70-130		%Rec	1	11/14/2017 9:15:00 PM	R47131
Surr: 4-Bromofluorobenzene	107	70-130		%Rec	1	11/14/2017 9:15:00 PM	R47131
Surr: Dibromofluoromethane	107	70-130		%Rec	1	11/14/2017 9:15:00 PM	R47131
Surr: Toluene-d8	98.3	70-130		%Rec	1	11/14/2017 9:15:00 PM	R47131

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
D	Sample Diluted Due to Matrix	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	P	Sample pH Not In Range
PQL	Practical Quantitative Limit	RL	Reporting Detection Limit
S	% Recovery outside of range due to dilution or matrix	W	Sample container temperature is out of limit as specified

# Hall Environmental Analysis Laboratory, Inc.

Analytical Report

Lab Order 1711604

Date Reported: 11/15/2017

CLIENT: Souder Miller & Associates

Client Sample ID: MW-9

Project: Chama Mini Mart

Collection Date: 11/9/2017 11:05:00 AM

Lab ID: 1711604-004

Matrix: AQUEOUS

Received Date: 11/9/2017 4:10:00 PM

Analyses	Result	PQL	Qual	Units	DF	Date Analyzed	Batch
<b>EPA METHOD 8260B: VOLATILES</b>							Analyst: RAA
Benzene	ND	2.0	D	µg/L	2	11/14/2017 9:38:00 PM	R47131
Toluene	ND	2.0	D	µg/L	2	11/14/2017 9:38:00 PM	R47131
Ethylbenzene	5.4	2.0	D	µg/L	2	11/14/2017 9:38:00 PM	R47131
Methyl tert-butyl ether (MTBE)	ND	2.0	D	µg/L	2	11/14/2017 9:38:00 PM	R47131
1,2,4-Trimethylbenzene	4.0	2.0	D	µg/L	2	11/14/2017 9:38:00 PM	R47131
1,3,5-Trimethylbenzene	ND	2.0	D	µg/L	2	11/14/2017 9:38:00 PM	R47131
1,2-Dichloroethane (EDC)	ND	2.0	D	µg/L	2	11/14/2017 9:38:00 PM	R47131
1,2-Dibromoethane (EDB)	ND	2.0	D	µg/L	2	11/14/2017 9:38:00 PM	R47131
Naphthalene	ND	4.0	D	µg/L	2	11/14/2017 9:38:00 PM	R47131
1-Methylnaphthalene	ND	8.0	D	µg/L	2	11/14/2017 9:38:00 PM	R47131
2-Methylnaphthalene	ND	8.0	D	µg/L	2	11/14/2017 9:38:00 PM	R47131
Acetone	ND	20	D	µg/L	2	11/14/2017 9:38:00 PM	R47131
Bromobenzene	ND	2.0	D	µg/L	2	11/14/2017 9:38:00 PM	R47131
Bromodichloromethane	ND	2.0	D	µg/L	2	11/14/2017 9:38:00 PM	R47131
Bromoform	ND	2.0	D	µg/L	2	11/14/2017 9:38:00 PM	R47131
Bromomethane	ND	6.0	D	µg/L	2	11/14/2017 9:38:00 PM	R47131
2-Butanone	ND	20	D	µg/L	2	11/14/2017 9:38:00 PM	R47131
Carbon disulfide	ND	20	D	µg/L	2	11/14/2017 9:38:00 PM	R47131
Carbon Tetrachloride	ND	2.0	D	µg/L	2	11/14/2017 9:38:00 PM	R47131
Chlorobenzene	ND	2.0	D	µg/L	2	11/14/2017 9:38:00 PM	R47131
Chloroethane	ND	4.0	D	µg/L	2	11/14/2017 9:38:00 PM	R47131
Chloroform	ND	2.0	D	µg/L	2	11/14/2017 9:38:00 PM	R47131
Chloromethane	ND	6.0	D	µg/L	2	11/14/2017 9:38:00 PM	R47131
2-Chlorotoluene	ND	2.0	D	µg/L	2	11/14/2017 9:38:00 PM	R47131
4-Chlorotoluene	ND	2.0	D	µg/L	2	11/14/2017 9:38:00 PM	R47131
cis-1,2-DCE	ND	2.0	D	µg/L	2	11/14/2017 9:38:00 PM	R47131
cis-1,3-Dichloropropene	ND	2.0	D	µg/L	2	11/14/2017 9:38:00 PM	R47131
1,2-Dibromo-3-chloropropane	ND	4.0	D	µg/L	2	11/14/2017 9:38:00 PM	R47131
Dibromochloromethane	ND	2.0	D	µg/L	2	11/14/2017 9:38:00 PM	R47131
Dibromomethane	ND	2.0	D	µg/L	2	11/14/2017 9:38:00 PM	R47131
1,2-Dichlorobenzene	ND	2.0	D	µg/L	2	11/14/2017 9:38:00 PM	R47131
1,3-Dichlorobenzene	ND	2.0	D	µg/L	2	11/14/2017 9:38:00 PM	R47131
1,4-Dichlorobenzene	ND	2.0	D	µg/L	2	11/14/2017 9:38:00 PM	R47131
Dichlorodifluoromethane	ND	2.0	D	µg/L	2	11/14/2017 9:38:00 PM	R47131
1,1-Dichloroethane	ND	2.0	D	µg/L	2	11/14/2017 9:38:00 PM	R47131
1,1-Dichloroethene	ND	2.0	D	µg/L	2	11/14/2017 9:38:00 PM	R47131
1,2-Dichloropropane	ND	2.0	D	µg/L	2	11/14/2017 9:38:00 PM	R47131
1,3-Dichloropropane	ND	2.0	D	µg/L	2	11/14/2017 9:38:00 PM	R47131
2,2-Dichloropropane	ND	4.0	D	µg/L	2	11/14/2017 9:38:00 PM	R47131

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
	D Sample Diluted Due to Matrix	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	P Sample pH Not In Range
	PQL Practical Quantitative Limit	RL Reporting Detection Limit
	S % Recovery outside of range due to dilution or matrix	W Sample container temperature is out of limit as specified

# Hall Environmental Analysis Laboratory, Inc.

Analytical Report

Lab Order 1711604

Date Reported: 11/15/2017

CLIENT: Souder Miller & Associates

Client Sample ID: MW-9

Project: Chama Mini Mart

Collection Date: 11/9/2017 11:05:00 AM

Lab ID: 1711604-004

Matrix: AQUEOUS

Received Date: 11/9/2017 4:10:00 PM

Analyses	Result	PQL	Qual	Units	DF	Date Analyzed	Batch
<b>EPA METHOD 8260B: VOLATILES</b>							Analyst: RAA
1,1-Dichloropropene	ND	2.0	D	µg/L	2	11/14/2017 9:38:00 PM	R47131
Hexachlorobutadiene	ND	2.0	D	µg/L	2	11/14/2017 9:38:00 PM	R47131
2-Hexanone	ND	20	D	µg/L	2	11/14/2017 9:38:00 PM	R47131
Isopropylbenzene	ND	2.0	D	µg/L	2	11/14/2017 9:38:00 PM	R47131
4-Isopropyltoluene	ND	2.0	D	µg/L	2	11/14/2017 9:38:00 PM	R47131
4-Methyl-2-pentanone	ND	20	D	µg/L	2	11/14/2017 9:38:00 PM	R47131
Methylene Chloride	ND	6.0	D	µg/L	2	11/14/2017 9:38:00 PM	R47131
n-Butylbenzene	ND	6.0	D	µg/L	2	11/14/2017 9:38:00 PM	R47131
n-Propylbenzene	2.0	2.0	D	µg/L	2	11/14/2017 9:38:00 PM	R47131
sec-Butylbenzene	ND	2.0	D	µg/L	2	11/14/2017 9:38:00 PM	R47131
Styrene	ND	2.0	D	µg/L	2	11/14/2017 9:38:00 PM	R47131
tert-Butylbenzene	ND	2.0	D	µg/L	2	11/14/2017 9:38:00 PM	R47131
1,1,1,2-Tetrachloroethane	ND	2.0	D	µg/L	2	11/14/2017 9:38:00 PM	R47131
1,1,2,2-Tetrachloroethane	ND	4.0	D	µg/L	2	11/14/2017 9:38:00 PM	R47131
Tetrachloroethene (PCE)	ND	2.0	D	µg/L	2	11/14/2017 9:38:00 PM	R47131
trans-1,2-DCE	ND	2.0	D	µg/L	2	11/14/2017 9:38:00 PM	R47131
trans-1,3-Dichloropropene	ND	2.0	D	µg/L	2	11/14/2017 9:38:00 PM	R47131
1,2,3-Trichlorobenzene	ND	2.0	D	µg/L	2	11/14/2017 9:38:00 PM	R47131
1,2,4-Trichlorobenzene	ND	2.0	D	µg/L	2	11/14/2017 9:38:00 PM	R47131
1,1,1-Trichloroethane	ND	2.0	D	µg/L	2	11/14/2017 9:38:00 PM	R47131
1,1,2-Trichloroethane	ND	2.0	D	µg/L	2	11/14/2017 9:38:00 PM	R47131
Trichloroethene (TCE)	ND	2.0	D	µg/L	2	11/14/2017 9:38:00 PM	R47131
Trichlorofluoromethane	ND	2.0	D	µg/L	2	11/14/2017 9:38:00 PM	R47131
1,2,3-Trichloropropane	ND	4.0	D	µg/L	2	11/14/2017 9:38:00 PM	R47131
Vinyl chloride	ND	2.0	D	µg/L	2	11/14/2017 9:38:00 PM	R47131
Xylenes, Total	ND	3.0	D	µg/L	2	11/14/2017 9:38:00 PM	R47131
Surr: 1,2-Dichloroethane-d4	107	70-130	D	%Rec	2	11/14/2017 9:38:00 PM	R47131
Surr: 4-Bromofluorobenzene	107	70-130	D	%Rec	2	11/14/2017 9:38:00 PM	R47131
Surr: Dibromofluoromethane	104	70-130	D	%Rec	2	11/14/2017 9:38:00 PM	R47131
Surr: Toluene-d8	96.5	70-130	D	%Rec	2	11/14/2017 9:38:00 PM	R47131

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
D	Sample Diluted Due to Matrix	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	P	Sample pH Not In Range
PQL	Practical Quantitative Limit	RL	Reporting Detection Limit
S	% Recovery outside of range due to dilution or matrix	W	Sample container temperature is out of limit as specified



# Hall Environmental Analysis Laboratory, Inc.

Analytical Report

Lab Order 1711604

Date Reported: 11/15/2017

CLIENT: Souder Miller & Associates

Client Sample ID: MW-11

Project: Chama Mini Mart

Collection Date: 11/9/2017 11:40:00 AM

Lab ID: 1711604-005

Matrix: AQUEOUS

Received Date: 11/9/2017 4:10:00 PM

Analyses	Result	PQL	Qual	Units	DF	Date Analyzed	Batch
<b>EPA METHOD 8260B: VOLATILES</b>							Analyst: RAA
Benzene	ND	2.0	D	µg/L	2	11/14/2017 10:02:00 PM	R47131
Toluene	ND	2.0	D	µg/L	2	11/14/2017 10:02:00 PM	R47131
Ethylbenzene	ND	2.0	D	µg/L	2	11/14/2017 10:02:00 PM	R47131
Methyl tert-butyl ether (MTBE)	ND	2.0	D	µg/L	2	11/14/2017 10:02:00 PM	R47131
1,2,4-Trimethylbenzene	ND	2.0	D	µg/L	2	11/14/2017 10:02:00 PM	R47131
1,3,5-Trimethylbenzene	ND	2.0	D	µg/L	2	11/14/2017 10:02:00 PM	R47131
1,2-Dichloroethane (EDC)	ND	2.0	D	µg/L	2	11/14/2017 10:02:00 PM	R47131
1,2-Dibromoethane (EDB)	ND	2.0	D	µg/L	2	11/14/2017 10:02:00 PM	R47131
Naphthalene	ND	4.0	D	µg/L	2	11/14/2017 10:02:00 PM	R47131
1-Methylnaphthalene	ND	8.0	D	µg/L	2	11/14/2017 10:02:00 PM	R47131
2-Methylnaphthalene	ND	8.0	D	µg/L	2	11/14/2017 10:02:00 PM	R47131
Acetone	ND	20	D	µg/L	2	11/14/2017 10:02:00 PM	R47131
Bromobenzene	ND	2.0	D	µg/L	2	11/14/2017 10:02:00 PM	R47131
Bromodichloromethane	ND	2.0	D	µg/L	2	11/14/2017 10:02:00 PM	R47131
Bromoform	ND	2.0	D	µg/L	2	11/14/2017 10:02:00 PM	R47131
Bromomethane	ND	6.0	D	µg/L	2	11/14/2017 10:02:00 PM	R47131
2-Butanone	ND	20	D	µg/L	2	11/14/2017 10:02:00 PM	R47131
Carbon disulfide	ND	20	D	µg/L	2	11/14/2017 10:02:00 PM	R47131
Carbon Tetrachloride	ND	2.0	D	µg/L	2	11/14/2017 10:02:00 PM	R47131
Chlorobenzene	ND	2.0	D	µg/L	2	11/14/2017 10:02:00 PM	R47131
Chloroethane	ND	4.0	D	µg/L	2	11/14/2017 10:02:00 PM	R47131
Chloroform	ND	2.0	D	µg/L	2	11/14/2017 10:02:00 PM	R47131
Chloromethane	ND	6.0	D	µg/L	2	11/14/2017 10:02:00 PM	R47131
2-Chlorotoluene	ND	2.0	D	µg/L	2	11/14/2017 10:02:00 PM	R47131
4-Chlorotoluene	ND	2.0	D	µg/L	2	11/14/2017 10:02:00 PM	R47131
cis-1,2-DCE	ND	2.0	D	µg/L	2	11/14/2017 10:02:00 PM	R47131
cis-1,3-Dichloropropene	ND	2.0	D	µg/L	2	11/14/2017 10:02:00 PM	R47131
1,2-Dibromo-3-chloropropane	ND	4.0	D	µg/L	2	11/14/2017 10:02:00 PM	R47131
Dibromochloromethane	ND	2.0	D	µg/L	2	11/14/2017 10:02:00 PM	R47131
Dibromomethane	ND	2.0	D	µg/L	2	11/14/2017 10:02:00 PM	R47131
1,2-Dichlorobenzene	ND	2.0	D	µg/L	2	11/14/2017 10:02:00 PM	R47131
1,3-Dichlorobenzene	ND	2.0	D	µg/L	2	11/14/2017 10:02:00 PM	R47131
1,4-Dichlorobenzene	ND	2.0	D	µg/L	2	11/14/2017 10:02:00 PM	R47131
Dichlorodifluoromethane	ND	2.0	D	µg/L	2	11/14/2017 10:02:00 PM	R47131
1,1-Dichloroethane	ND	2.0	D	µg/L	2	11/14/2017 10:02:00 PM	R47131
1,1-Dichloroethene	ND	2.0	D	µg/L	2	11/14/2017 10:02:00 PM	R47131
1,2-Dichloropropane	ND	2.0	D	µg/L	2	11/14/2017 10:02:00 PM	R47131
1,3-Dichloropropane	ND	2.0	D	µg/L	2	11/14/2017 10:02:00 PM	R47131
2,2-Dichloropropane	ND	4.0	D	µg/L	2	11/14/2017 10:02:00 PM	R47131

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
	D Sample Diluted Due to Matrix	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	P Sample pH Not In Range
	PQL Practical Quantitative Limit	RL Reporting Detection Limit
	S % Recovery outside of range due to dilution or matrix	W Sample container temperature is out of limit as specified

# Hall Environmental Analysis Laboratory, Inc.

Analytical Report

Lab Order 1711604

Date Reported: 11/15/2017

**CLIENT:** Souder Miller & Associates

**Client Sample ID:** MW-11

**Project:** Chama Mini Mart

**Collection Date:** 11/9/2017 11:40:00 AM

**Lab ID:** 1711604-005

**Matrix:** AQUEOUS

**Received Date:** 11/9/2017 4:10:00 PM

Analyses	Result	PQL	Qual	Units	DF	Date Analyzed	Batch
<b>EPA METHOD 8260B: VOLATILES</b>							Analyst: RAA
1,1-Dichloropropene	ND	2.0	D	µg/L	2	11/14/2017 10:02:00 PM	R47131
Hexachlorobutadiene	ND	2.0	D	µg/L	2	11/14/2017 10:02:00 PM	R47131
2-Hexanone	ND	20	D	µg/L	2	11/14/2017 10:02:00 PM	R47131
Isopropylbenzene	ND	2.0	D	µg/L	2	11/14/2017 10:02:00 PM	R47131
4-Isopropyltoluene	ND	2.0	D	µg/L	2	11/14/2017 10:02:00 PM	R47131
4-Methyl-2-pentanone	ND	20	D	µg/L	2	11/14/2017 10:02:00 PM	R47131
Methylene Chloride	ND	6.0	D	µg/L	2	11/14/2017 10:02:00 PM	R47131
n-Butylbenzene	ND	6.0	D	µg/L	2	11/14/2017 10:02:00 PM	R47131
n-Propylbenzene	ND	2.0	D	µg/L	2	11/14/2017 10:02:00 PM	R47131
sec-Butylbenzene	ND	2.0	D	µg/L	2	11/14/2017 10:02:00 PM	R47131
Styrene	ND	2.0	D	µg/L	2	11/14/2017 10:02:00 PM	R47131
tert-Butylbenzene	ND	2.0	D	µg/L	2	11/14/2017 10:02:00 PM	R47131
1,1,1,2-Tetrachloroethane	ND	2.0	D	µg/L	2	11/14/2017 10:02:00 PM	R47131
1,1,2,2-Tetrachloroethane	ND	4.0	D	µg/L	2	11/14/2017 10:02:00 PM	R47131
Tetrachloroethene (PCE)	ND	2.0	D	µg/L	2	11/14/2017 10:02:00 PM	R47131
trans-1,2-DCE	ND	2.0	D	µg/L	2	11/14/2017 10:02:00 PM	R47131
trans-1,3-Dichloropropene	ND	2.0	D	µg/L	2	11/14/2017 10:02:00 PM	R47131
1,2,3-Trichlorobenzene	ND	2.0	D	µg/L	2	11/14/2017 10:02:00 PM	R47131
1,2,4-Trichlorobenzene	ND	2.0	D	µg/L	2	11/14/2017 10:02:00 PM	R47131
1,1,1-Trichloroethane	ND	2.0	D	µg/L	2	11/14/2017 10:02:00 PM	R47131
1,1,2-Trichloroethane	ND	2.0	D	µg/L	2	11/14/2017 10:02:00 PM	R47131
Trichloroethene (TCE)	ND	2.0	D	µg/L	2	11/14/2017 10:02:00 PM	R47131
Trichlorofluoromethane	ND	2.0	D	µg/L	2	11/14/2017 10:02:00 PM	R47131
1,2,3-Trichloropropane	ND	4.0	D	µg/L	2	11/14/2017 10:02:00 PM	R47131
Vinyl chloride	ND	2.0	D	µg/L	2	11/14/2017 10:02:00 PM	R47131
Xylenes, Total	ND	3.0	D	µg/L	2	11/14/2017 10:02:00 PM	R47131
Surr: 1,2-Dichloroethane-d4	114	70-130	D	%Rec	2	11/14/2017 10:02:00 PM	R47131
Surr: 4-Bromofluorobenzene	107	70-130	D	%Rec	2	11/14/2017 10:02:00 PM	R47131
Surr: Dibromofluoromethane	109	70-130	D	%Rec	2	11/14/2017 10:02:00 PM	R47131
Surr: Toluene-d8	97.0	70-130	D	%Rec	2	11/14/2017 10:02:00 PM	R47131

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
	D Sample Diluted Due to Matrix	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	P Sample pH Not In Range
	PQL Practical Quantitative Limit	RL Reporting Detection Limit
	S % Recovery outside of range due to dilution or matrix	W Sample container temperature is out of limit as specified

# Hall Environmental Analysis Laboratory, Inc.

Analytical Report

Lab Order 1711604

Date Reported: 11/15/2017

**CLIENT:** Souder Miller & Associates

**Client Sample ID:** MW-12

**Project:** Chama Mini Mart

**Collection Date:** 11/9/2017 12:00:00 PM

**Lab ID:** 1711604-006

**Matrix:** AQUEOUS

**Received Date:** 11/9/2017 4:10:00 PM

Analyses	Result	PQL	Qual	Units	DF	Date Analyzed	Batch
<b>EPA METHOD 8260B: VOLATILES</b>							Analyst: RAA
Benzene	ND	1.0		µg/L	1	11/14/2017 10:26:00 PM	R47131
Toluene	ND	1.0		µg/L	1	11/14/2017 10:26:00 PM	R47131
Ethylbenzene	ND	1.0		µg/L	1	11/14/2017 10:26:00 PM	R47131
Methyl tert-butyl ether (MTBE)	ND	1.0		µg/L	1	11/14/2017 10:26:00 PM	R47131
1,2,4-Trimethylbenzene	ND	1.0		µg/L	1	11/14/2017 10:26:00 PM	R47131
1,3,5-Trimethylbenzene	ND	1.0		µg/L	1	11/14/2017 10:26:00 PM	R47131
1,2-Dichloroethane (EDC)	ND	1.0		µg/L	1	11/14/2017 10:26:00 PM	R47131
1,2-Dibromoethane (EDB)	ND	1.0		µg/L	1	11/14/2017 10:26:00 PM	R47131
Naphthalene	ND	2.0		µg/L	1	11/14/2017 10:26:00 PM	R47131
1-Methylnaphthalene	ND	4.0		µg/L	1	11/14/2017 10:26:00 PM	R47131
2-Methylnaphthalene	ND	4.0		µg/L	1	11/14/2017 10:26:00 PM	R47131
Acetone	ND	10		µg/L	1	11/14/2017 10:26:00 PM	R47131
Bromobenzene	ND	1.0		µg/L	1	11/14/2017 10:26:00 PM	R47131
Bromodichloromethane	ND	1.0		µg/L	1	11/14/2017 10:26:00 PM	R47131
Bromoform	ND	1.0		µg/L	1	11/14/2017 10:26:00 PM	R47131
Bromomethane	ND	3.0		µg/L	1	11/14/2017 10:26:00 PM	R47131
2-Butanone	ND	10		µg/L	1	11/14/2017 10:26:00 PM	R47131
Carbon disulfide	ND	10		µg/L	1	11/14/2017 10:26:00 PM	R47131
Carbon Tetrachloride	ND	1.0		µg/L	1	11/14/2017 10:26:00 PM	R47131
Chlorobenzene	ND	1.0		µg/L	1	11/14/2017 10:26:00 PM	R47131
Chloroethane	ND	2.0		µg/L	1	11/14/2017 10:26:00 PM	R47131
Chloroform	ND	1.0		µg/L	1	11/14/2017 10:26:00 PM	R47131
Chloromethane	ND	3.0		µg/L	1	11/14/2017 10:26:00 PM	R47131
2-Chlorotoluene	ND	1.0		µg/L	1	11/14/2017 10:26:00 PM	R47131
4-Chlorotoluene	ND	1.0		µg/L	1	11/14/2017 10:26:00 PM	R47131
cis-1,2-DCE	ND	1.0		µg/L	1	11/14/2017 10:26:00 PM	R47131
cis-1,3-Dichloropropene	ND	1.0		µg/L	1	11/14/2017 10:26:00 PM	R47131
1,2-Dibromo-3-chloropropane	ND	2.0		µg/L	1	11/14/2017 10:26:00 PM	R47131
Dibromochloromethane	ND	1.0		µg/L	1	11/14/2017 10:26:00 PM	R47131
Dibromomethane	ND	1.0		µg/L	1	11/14/2017 10:26:00 PM	R47131
1,2-Dichlorobenzene	ND	1.0		µg/L	1	11/14/2017 10:26:00 PM	R47131
1,3-Dichlorobenzene	ND	1.0		µg/L	1	11/14/2017 10:26:00 PM	R47131
1,4-Dichlorobenzene	ND	1.0		µg/L	1	11/14/2017 10:26:00 PM	R47131
Dichlorodifluoromethane	ND	1.0		µg/L	1	11/14/2017 10:26:00 PM	R47131
1,1-Dichloroethane	ND	1.0		µg/L	1	11/14/2017 10:26:00 PM	R47131
1,1-Dichloroethene	ND	1.0		µg/L	1	11/14/2017 10:26:00 PM	R47131
1,2-Dichloropropane	ND	1.0		µg/L	1	11/14/2017 10:26:00 PM	R47131
1,3-Dichloropropane	ND	1.0		µg/L	1	11/14/2017 10:26:00 PM	R47131
2,2-Dichloropropane	ND	2.0		µg/L	1	11/14/2017 10:26:00 PM	R47131

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
	D Sample Diluted Due to Matrix	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	P Sample pH Not In Range
	PQL Practical Quantitative Limit	RL Reporting Detection Limit
	S % Recovery outside of range due to dilution or matrix	W Sample container temperature is out of limit as specified

# Hall Environmental Analysis Laboratory, Inc.

Analytical Report

Lab Order 1711604

Date Reported: 11/15/2017

**CLIENT:** Souder Miller & Associates

**Client Sample ID:** MW-12

**Project:** Chama Mini Mart

**Collection Date:** 11/9/2017 12:00:00 PM

**Lab ID:** 1711604-006

**Matrix:** AQUEOUS

**Received Date:** 11/9/2017 4:10:00 PM

Analyses	Result	PQL	Qual	Units	DF	Date Analyzed	Batch
<b>EPA METHOD 8260B: VOLATILES</b>							Analyst: RAA
1,1-Dichloropropene	ND	1.0		µg/L	1	11/14/2017 10:26:00 PM	R47131
Hexachlorobutadiene	ND	1.0		µg/L	1	11/14/2017 10:26:00 PM	R47131
2-Hexanone	ND	10		µg/L	1	11/14/2017 10:26:00 PM	R47131
Isopropylbenzene	ND	1.0		µg/L	1	11/14/2017 10:26:00 PM	R47131
4-Isopropyltoluene	ND	1.0		µg/L	1	11/14/2017 10:26:00 PM	R47131
4-Methyl-2-pentanone	ND	10		µg/L	1	11/14/2017 10:26:00 PM	R47131
Methylene Chloride	ND	3.0		µg/L	1	11/14/2017 10:26:00 PM	R47131
n-Butylbenzene	ND	3.0		µg/L	1	11/14/2017 10:26:00 PM	R47131
n-Propylbenzene	ND	1.0		µg/L	1	11/14/2017 10:26:00 PM	R47131
sec-Butylbenzene	ND	1.0		µg/L	1	11/14/2017 10:26:00 PM	R47131
Styrene	ND	1.0		µg/L	1	11/14/2017 10:26:00 PM	R47131
tert-Butylbenzene	ND	1.0		µg/L	1	11/14/2017 10:26:00 PM	R47131
1,1,1,2-Tetrachloroethane	ND	1.0		µg/L	1	11/14/2017 10:26:00 PM	R47131
1,1,2,2-Tetrachloroethane	ND	2.0		µg/L	1	11/14/2017 10:26:00 PM	R47131
Tetrachloroethene (PCE)	ND	1.0		µg/L	1	11/14/2017 10:26:00 PM	R47131
trans-1,2-DCE	ND	1.0		µg/L	1	11/14/2017 10:26:00 PM	R47131
trans-1,3-Dichloropropene	ND	1.0		µg/L	1	11/14/2017 10:26:00 PM	R47131
1,2,3-Trichlorobenzene	ND	1.0		µg/L	1	11/14/2017 10:26:00 PM	R47131
1,2,4-Trichlorobenzene	ND	1.0		µg/L	1	11/14/2017 10:26:00 PM	R47131
1,1,1-Trichloroethane	ND	1.0		µg/L	1	11/14/2017 10:26:00 PM	R47131
1,1,2-Trichloroethane	ND	1.0		µg/L	1	11/14/2017 10:26:00 PM	R47131
Trichloroethene (TCE)	ND	1.0		µg/L	1	11/14/2017 10:26:00 PM	R47131
Trichlorofluoromethane	ND	1.0		µg/L	1	11/14/2017 10:26:00 PM	R47131
1,2,3-Trichloropropane	ND	2.0		µg/L	1	11/14/2017 10:26:00 PM	R47131
Vinyl chloride	ND	1.0		µg/L	1	11/14/2017 10:26:00 PM	R47131
Xylenes, Total	ND	1.5		µg/L	1	11/14/2017 10:26:00 PM	R47131
Surr: 1,2-Dichloroethane-d4	113	70-130		%Rec	1	11/14/2017 10:26:00 PM	R47131
Surr: 4-Bromofluorobenzene	102	70-130		%Rec	1	11/14/2017 10:26:00 PM	R47131
Surr: Dibromofluoromethane	109	70-130		%Rec	1	11/14/2017 10:26:00 PM	R47131
Surr: Toluene-d8	97.4	70-130		%Rec	1	11/14/2017 10:26:00 PM	R47131

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
	D Sample Diluted Due to Matrix	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	P Sample pH Not In Range
	PQL Practical Quantitative Limit	RL Reporting Detection Limit
	S % Recovery outside of range due to dilution or matrix	W Sample container temperature is out of limit as specified

# Hall Environmental Analysis Laboratory, Inc.

Analytical Report

Lab Order 1711604

Date Reported: 11/15/2017

**CLIENT:** Souder Miller & Associates

**Client Sample ID:** TRIP BLANK

**Project:** Chama Mini Mart

**Collection Date:**

**Lab ID:** 1711604-007

**Matrix:** TRIP BLANK

**Received Date:** 11/9/2017 4:10:00 PM

Analyses	Result	PQL	Qual	Units	DF	Date Analyzed	Batch
<b>EPA METHOD 8260B: VOLATILES</b>							Analyst: RAA
Benzene	ND	1.0		µg/L	1	11/14/2017 10:50:00 PM	R47131
Toluene	ND	1.0		µg/L	1	11/14/2017 10:50:00 PM	R47131
Ethylbenzene	ND	1.0		µg/L	1	11/14/2017 10:50:00 PM	R47131
Methyl tert-butyl ether (MTBE)	ND	1.0		µg/L	1	11/14/2017 10:50:00 PM	R47131
1,2,4-Trimethylbenzene	ND	1.0		µg/L	1	11/14/2017 10:50:00 PM	R47131
1,3,5-Trimethylbenzene	ND	1.0		µg/L	1	11/14/2017 10:50:00 PM	R47131
1,2-Dichloroethane (EDC)	ND	1.0		µg/L	1	11/14/2017 10:50:00 PM	R47131
1,2-Dibromoethane (EDB)	ND	1.0		µg/L	1	11/14/2017 10:50:00 PM	R47131
Naphthalene	ND	2.0		µg/L	1	11/14/2017 10:50:00 PM	R47131
1-Methylnaphthalene	ND	4.0		µg/L	1	11/14/2017 10:50:00 PM	R47131
2-Methylnaphthalene	ND	4.0		µg/L	1	11/14/2017 10:50:00 PM	R47131
Acetone	ND	10		µg/L	1	11/14/2017 10:50:00 PM	R47131
Bromobenzene	ND	1.0		µg/L	1	11/14/2017 10:50:00 PM	R47131
Bromodichloromethane	ND	1.0		µg/L	1	11/14/2017 10:50:00 PM	R47131
Bromoform	ND	1.0		µg/L	1	11/14/2017 10:50:00 PM	R47131
Bromomethane	ND	3.0		µg/L	1	11/14/2017 10:50:00 PM	R47131
2-Butanone	ND	10		µg/L	1	11/14/2017 10:50:00 PM	R47131
Carbon disulfide	ND	10		µg/L	1	11/14/2017 10:50:00 PM	R47131
Carbon Tetrachloride	ND	1.0		µg/L	1	11/14/2017 10:50:00 PM	R47131
Chlorobenzene	ND	1.0		µg/L	1	11/14/2017 10:50:00 PM	R47131
Chloroethane	ND	2.0		µg/L	1	11/14/2017 10:50:00 PM	R47131
Chloroform	ND	1.0		µg/L	1	11/14/2017 10:50:00 PM	R47131
Chloromethane	ND	3.0		µg/L	1	11/14/2017 10:50:00 PM	R47131
2-Chlorotoluene	ND	1.0		µg/L	1	11/14/2017 10:50:00 PM	R47131
4-Chlorotoluene	ND	1.0		µg/L	1	11/14/2017 10:50:00 PM	R47131
cis-1,2-DCE	ND	1.0		µg/L	1	11/14/2017 10:50:00 PM	R47131
cis-1,3-Dichloropropene	ND	1.0		µg/L	1	11/14/2017 10:50:00 PM	R47131
1,2-Dibromo-3-chloropropane	ND	2.0		µg/L	1	11/14/2017 10:50:00 PM	R47131
Dibromochloromethane	ND	1.0		µg/L	1	11/14/2017 10:50:00 PM	R47131
Dibromomethane	ND	1.0		µg/L	1	11/14/2017 10:50:00 PM	R47131
1,2-Dichlorobenzene	ND	1.0		µg/L	1	11/14/2017 10:50:00 PM	R47131
1,3-Dichlorobenzene	ND	1.0		µg/L	1	11/14/2017 10:50:00 PM	R47131
1,4-Dichlorobenzene	ND	1.0		µg/L	1	11/14/2017 10:50:00 PM	R47131
Dichlorodifluoromethane	ND	1.0		µg/L	1	11/14/2017 10:50:00 PM	R47131
1,1-Dichloroethane	ND	1.0		µg/L	1	11/14/2017 10:50:00 PM	R47131
1,1-Dichloroethene	ND	1.0		µg/L	1	11/14/2017 10:50:00 PM	R47131
1,2-Dichloropropane	ND	1.0		µg/L	1	11/14/2017 10:50:00 PM	R47131
1,3-Dichloropropane	ND	1.0		µg/L	1	11/14/2017 10:50:00 PM	R47131
2,2-Dichloropropane	ND	2.0		µg/L	1	11/14/2017 10:50:00 PM	R47131

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
	D Sample Diluted Due to Matrix	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	P Sample pH Not In Range
	PQL Practical Quantitative Limit	RL Reporting Detection Limit
	S % Recovery outside of range due to dilution or matrix	W Sample container temperature is out of limit as specified

# Hall Environmental Analysis Laboratory, Inc.

Analytical Report

Lab Order 1711604

Date Reported: 11/15/2017

**CLIENT:** Souder Miller & Associates

**Client Sample ID:** TRIP BLANK

**Project:** Chama Mini Mart

**Collection Date:**

**Lab ID:** 1711604-007

**Matrix:** TRIP BLANK

**Received Date:** 11/9/2017 4:10:00 PM

Analyses	Result	PQL	Qual	Units	DF	Date Analyzed	Batch
<b>EPA METHOD 8260B: VOLATILES</b>							Analyst: RAA
1,1-Dichloropropene	ND	1.0		µg/L	1	11/14/2017 10:50:00 PM	R47131
Hexachlorobutadiene	ND	1.0		µg/L	1	11/14/2017 10:50:00 PM	R47131
2-Hexanone	ND	10		µg/L	1	11/14/2017 10:50:00 PM	R47131
Isopropylbenzene	ND	1.0		µg/L	1	11/14/2017 10:50:00 PM	R47131
4-Isopropyltoluene	ND	1.0		µg/L	1	11/14/2017 10:50:00 PM	R47131
4-Methyl-2-pentanone	ND	10		µg/L	1	11/14/2017 10:50:00 PM	R47131
Methylene Chloride	ND	3.0		µg/L	1	11/14/2017 10:50:00 PM	R47131
n-Butylbenzene	ND	3.0		µg/L	1	11/14/2017 10:50:00 PM	R47131
n-Propylbenzene	ND	1.0		µg/L	1	11/14/2017 10:50:00 PM	R47131
sec-Butylbenzene	ND	1.0		µg/L	1	11/14/2017 10:50:00 PM	R47131
Styrene	ND	1.0		µg/L	1	11/14/2017 10:50:00 PM	R47131
tert-Butylbenzene	ND	1.0		µg/L	1	11/14/2017 10:50:00 PM	R47131
1,1,1,2-Tetrachloroethane	ND	1.0		µg/L	1	11/14/2017 10:50:00 PM	R47131
1,1,2,2-Tetrachloroethane	ND	2.0		µg/L	1	11/14/2017 10:50:00 PM	R47131
Tetrachloroethene (PCE)	ND	1.0		µg/L	1	11/14/2017 10:50:00 PM	R47131
trans-1,2-DCE	ND	1.0		µg/L	1	11/14/2017 10:50:00 PM	R47131
trans-1,3-Dichloropropene	ND	1.0		µg/L	1	11/14/2017 10:50:00 PM	R47131
1,2,3-Trichlorobenzene	ND	1.0		µg/L	1	11/14/2017 10:50:00 PM	R47131
1,2,4-Trichlorobenzene	ND	1.0		µg/L	1	11/14/2017 10:50:00 PM	R47131
1,1,1-Trichloroethane	ND	1.0		µg/L	1	11/14/2017 10:50:00 PM	R47131
1,1,2-Trichloroethane	ND	1.0		µg/L	1	11/14/2017 10:50:00 PM	R47131
Trichloroethene (TCE)	ND	1.0		µg/L	1	11/14/2017 10:50:00 PM	R47131
Trichlorofluoromethane	ND	1.0		µg/L	1	11/14/2017 10:50:00 PM	R47131
1,2,3-Trichloropropane	ND	2.0		µg/L	1	11/14/2017 10:50:00 PM	R47131
Vinyl chloride	ND	1.0		µg/L	1	11/14/2017 10:50:00 PM	R47131
Xylenes, Total	ND	1.5		µg/L	1	11/14/2017 10:50:00 PM	R47131
Surr: 1,2-Dichloroethane-d4	115	70-130		%Rec	1	11/14/2017 10:50:00 PM	R47131
Surr: 4-Bromofluorobenzene	105	70-130		%Rec	1	11/14/2017 10:50:00 PM	R47131
Surr: Dibromofluoromethane	109	70-130		%Rec	1	11/14/2017 10:50:00 PM	R47131
Surr: Toluene-d8	97.8	70-130		%Rec	1	11/14/2017 10:50:00 PM	R47131

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
	D Sample Diluted Due to Matrix	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	P Sample pH Not In Range
	PQL Practical Quantitative Limit	RL Reporting Detection Limit
	S % Recovery outside of range due to dilution or matrix	W Sample container temperature is out of limit as specified

# QC SUMMARY REPORT

## Hall Environmental Analysis Laboratory, Inc.

WO#: 1711604

15-Nov-17

**Client:** Souder Miller & Associates

**Project:** Chama 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>R47131</b>		RunNo: <b>47131</b>							
Prep Date:	Analysis Date: <b>11/14/2017</b>		SeqNo: <b>1503470</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	110	70	130			
Toluene	20	1.0	20.00	0	98.7	70	130			
Chlorobenzene	19	1.0	20.00	0	97.3	70	130			
1,1-Dichloroethene	23	1.0	20.00	0	115	70	130			
Trichloroethene (TCE)	21	1.0	20.00	0	107	70	130			
Surr: 1,2-Dichloroethane-d4	11		10.00		111	70	130			
Surr: 4-Bromofluorobenzene	11		10.00		106	70	130			
Surr: Dibromofluoromethane	11		10.00		108	70	130			
Surr: Toluene-d8	9.7		10.00		96.8	70	130			

Sample ID <b>rb</b>	SampType: <b>MBLK</b>		TestCode: <b>EPA Method 8260B: VOLATILES</b>							
Client ID: <b>PBW</b>	Batch ID: <b>R47131</b>		RunNo: <b>47131</b>							
Prep Date:	Analysis Date: <b>11/14/2017</b>		SeqNo: <b>1503471</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.
- D Sample Diluted Due to Matrix
- H Holding times for preparation or analysis exceeded
- ND Not Detected at the Reporting Limit
- PQL Practical Quantitative Limit
- S % Recovery outside of range due to dilution or matrix
- B Analyte detected in the associated Method Blank
- E Value above quantitation range
- J Analyte detected below quantitation limits
- P Sample pH Not In Range
- RL Reporting Detection Limit
- W Sample container temperature is out of limit as specified

# QC SUMMARY REPORT

## Hall Environmental Analysis Laboratory, Inc.

WO#: 1711604

15-Nov-17

**Client:** Souder Miller & Associates

**Project:** Chama Mini Mart

Sample ID	rb	SampType:	MBLK	TestCode:	EPA Method 8260B: VOLATILES					
Client ID:	PBW	Batch ID:	R47131	RunNo:	47131					
Prep Date:		Analysis Date:	11/14/2017	SeqNo:	1503471	Units:	µg/L			
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.
- D Sample Diluted Due to Matrix
- H Holding times for preparation or analysis exceeded
- ND Not Detected at the Reporting Limit
- PQL Practical Quantitative Limit
- S % Recovery outside of range due to dilution or matrix
- B Analyte detected in the associated Method Blank
- E Value above quantitation range
- J Analyte detected below quantitation limits
- P Sample pH Not In Range
- RL Reporting Detection Limit
- W Sample container temperature is out of limit as specified



# QC SUMMARY REPORT

## Hall Environmental Analysis Laboratory, Inc.

WO#: 1711604

15-Nov-17

**Client:** Souder Miller & Associates

**Project:** Chama Mini Mart

Sample ID <b>rb</b>	SampType: <b>MBLK</b>		TestCode: <b>EPA Method 8260B: VOLATILES</b>							
Client ID: <b>PBW</b>	Batch ID: <b>R47131</b>		RunNo: <b>47131</b>							
Prep Date:	Analysis Date: <b>11/14/2017</b>		SeqNo: <b>1503471</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	11		10.00		111	70	130			
Surr: 4-Bromofluorobenzene	10		10.00		104	70	130			
Surr: Dibromofluoromethane	11		10.00		110	70	130			
Surr: Toluene-d8	9.8		10.00		97.9	70	130			

Sample ID <b>1711604-001ams</b>	SampType: <b>MS</b>		TestCode: <b>EPA Method 8260B: VOLATILES</b>							
Client ID: <b>MW-6</b>	Batch ID: <b>R47131</b>		RunNo: <b>47131</b>							
Prep Date:	Analysis Date: <b>11/14/2017</b>		SeqNo: <b>1503484</b>		Units: <b>µg/L</b>					
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Benzene	45	2.0	40.00	0	113	70	130			D
Toluene	36	2.0	40.00	0	90.7	70	130			D
Chlorobenzene	38	2.0	40.00	0	95.3	70	130			D
1,1-Dichloroethene	47	2.0	40.00	0	119	70	130			D
Trichloroethene (TCE)	43	2.0	40.00	0	107	70	130			D
Surr: 1,2-Dichloroethane-d4	24		20.00		118	70	130			D
Surr: 4-Bromofluorobenzene	21		20.00		105	70	130			D
Surr: Dibromofluoromethane	22		20.00		111	70	130			D
Surr: Toluene-d8	18		20.00		90.8	70	130			D

Sample ID <b>1711604-001amsd</b>	SampType: <b>MSD</b>		TestCode: <b>EPA Method 8260B: VOLATILES</b>							
Client ID: <b>MW-6</b>	Batch ID: <b>R47131</b>		RunNo: <b>47131</b>							
Prep Date:	Analysis Date: <b>11/14/2017</b>		SeqNo: <b>1503485</b>		Units: <b>µg/L</b>					
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Benzene	43	2.0	40.00	0	107	70	130	5.21	20	D
Toluene	36	2.0	40.00	0	91.0	70	130	0.363	20	D
Chlorobenzene	37	2.0	40.00	0	92.0	70	130	3.48	20	D
1,1-Dichloroethene	45	2.0	40.00	0	112	70	130	5.36	20	D
Trichloroethene (TCE)	41	2.0	40.00	0	102	70	130	4.65	20	D
Surr: 1,2-Dichloroethane-d4	24		20.00		118	70	130	0	0	D
Surr: 4-Bromofluorobenzene	21		20.00		103	70	130	0	0	D
Surr: Dibromofluoromethane	22		20.00		112	70	130	0	0	D
Surr: Toluene-d8	19		20.00		93.8	70	130	0	0	D

**Qualifiers:**

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- B Analyte detected in the associated Method Blank
- E Value above quantitation range
- J Analyte detected below quantitation limits
- P Sample pH Not In Range
- RL Reporting Detection Limit
- W Sample container temperature is out of limit as specified

**Sample Log-In Check List**

Client Name: SMA ABQ

Work Order Number: 1711604

RcptNo: 1

Received By: Ashley Gallegos

11/9/2017 4:10:00 PM

Completed By: Ashley Gallegos

11/10/2017 9:45:21 AM

Reviewed By:

11/10/17

**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)? Samples were collected the same day and chilled. 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? Yes  No   
(Note discrepancies on chain of custody)
- 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? Yes  No   
(If no, notify customer for authorization.)

# 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	6.5	Good	Not Present			

# Chain-of-Custody Record

Client: SMA

Mailing Address: 5454 Venice Ave. NE

Suite D, Albuquerque, NM 87113

Phone #:

email or Fax#:

QA/QC Package:

Standard  Level 4 (Full Validation)

Accreditation

NELAP  Other

EDD (Type)

Project Manager:

Matt Earthman

Sampler: Mariah Kelly

On Ice:  Yes  No

Sample Temperature: 6.5

Turn-Around Time:

Standard  Rush

Project Name:

Chama Mini-Mart

Project #:

3423555



## HALL ENVIRONMENTAL ANALYSIS LABORATORY

www.hallenvironmental.com

4901 Hawkins NE - Albuquerque, NM 87109

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

### Analysis Request

BTEX + MTBE + TMBs (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		
									X		
									X		

Remarks:

Date	Time	Matrix	Sample Request ID	Container Type and #	Preservative Type	HEAL No.
11/9/17	1240	H <sub>2</sub> O	MW-6	3V00	HgCl <sub>2</sub>	1711604
	1240		MW-7			-001
	1225		MW-8			-002
	1105		MW-9			-003
	1140		MW-11			-004
	1200		MW-12			-005
			Trip Blank			-006
						-007

Date: 11/9/17 Time: 410 Relinquished by: Mariah Kelly

Date: 11/9/17 Time: 1610 Received by: [Signature]

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.