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GROUNDWATER MONITORING REPORT

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

May 10, 2021

SMA
Souder, Miller & Associates
Engineering ♦ Environmental ♦ Surveying
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May 10, 2021 #3423555

Mr. Corey Jarrett, Project Manager
New Mexico Environment Department
Petroleum Storage Tank Bureau
121 Tijeras Ave. NE, Suite 1000
Albuquerque, NM 87102
Corey.Jarrett@state.nm.us

RE: Groundwater Monitoring Report, Conoco Mini-Mart UST Site, 3837 US Highway 64, Chama, New Mexico
Facility # 27498 RID # 2316 WPID # 4165-1

Dear Mr. Jarrett:

Souder, Miller & Associates (SMA) is pleased to submit the attached Groundwater Monitoring Report for the above referenced site. The enclosed report completes the only deliverable associated with the work plan and cost schedule dated July 14, 2020, approved by the New Mexico Environment Department (NMED) Petroleum Storage Tank Bureau (PSTB) on March 31, 2021 (WPID #4165-1). This report was prepared pursuant to the contract between SMA and the New Mexico Environment Department (contract number 18-667-3200-0017).

The invoice will be reduced by $379.72 for analytical costs not incurred, as MW-7 was not sampled. The final invoice amount will therefore be $8,298.13.

If you have any questions, please do not hesitate to call me at 505.220.6542 or to e-mail me at scott.mckitrick@soudermiller.com.

Sincerely,
SOUDER, MILLER AND ASSOCIATES

Scott A. McKitrick, P.G.
Senior Geoscientist / Environmental Services Manager

encl.: Groundwater Monitoring Report

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)**:**
   Corey Jarrett, Project Manager
   New Mexico Environment Department
   Petroleum Storage Tank Bureau
   121 Tijeras Ave. 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:**
   Scott A. McKitrick, P.G. – Souder, Miller & Associates

7. **Date of report:**
   May 10, 2021

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:

Scott A. McKitrick, P.G.

Affiliation:

Souder, Miller & Associates

Title:

Senior Geoscientist / Environmental Services Manager

Date:

May 10, 2021

1.0 Introduction

1.1 Scope of Work

Souder, Miller & Associates (SMA) is pleased to submit the following report detailing groundwater monitoring at the Conoco Mini-Mart UST release site located at 3837 Highway 64 in Chama, New Mexico. This report is submitted pursuant to the work plan and cost schedule dated July 14, 2020 and approved by the NMED PSTB on March 31, 2021 (WPID #4165-1). This report was prepared pursuant to the contract between SMA and the New Mexico Environment Department. This report constitutes the only deliverable associated with the current work plan and is the first groundwater monitoring event conducted at the site since April, 2019.

1.2 Monitoring Event Highlights

Groundwater monitoring was performed at the site on April 22, 2021. All six existing site wells were checked for the presence of NAPL and gauged for depth to water. Groundwater monitoring wells MW-6, MW-8, MW-9, MW-11, and MW-12 were sampled for laboratory analysis of the groundwater by EPA Methods 8260, EPA Method 8015B and EPA Method 300.0. No NAPL was detected in any well but a thick sheen was seen in MW-7 and the well was therefore not sampled. The average groundwater elevation at the Conoco Mini-Mart site has decreased by 0.82 feet relative to the previous gauging event conducted on April 29, 2019.

Benzene (1.7 µg/L) was detected in monitoring well MW-11 below the applicable NMWQCCR standard. No constituents of concern were detected above the practical quantitation limit (PQL) in monitoring wells MW-6, MW-8, MW-9, or MW-12.

2.0 Site Background

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

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

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

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

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

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

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.

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.

In November 9, 2017, total naphthalenes (242 µg/L) were detected above the 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.

During the most recent groundwater monitoring event, conducted in April, 2019, Ethylbenzene was detected in monitoring well MW-9 below applicable New Mexico Water Quality Control Commission Regulation (NMWQCCR) standard. Ethylbenzene, Total Xylenes, and Total Naphthalenes were also detected in monitoring well MW-11 below applicable NMWQCCR standards. No constituents of concern were detected above the practical quantitation limit (PQL) in monitoring wells MW-6, MW-8, or MW-12.

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 and In-Situ Chemical Oxidation Constituent Monitoring

Five of the six existing site monitoring wells (MW-6, MW-8, MW-9, MW-11, and MW-12) at the Conoco Mini-Mart site in Chama, New Mexico were sampled on April 22, 2021 and analyzed for volatile organic hydrocarbon COCs by Environmental Protection Agency (EPA) Method 8260, gasoline-range organics (GRO) and diesel-range organics (DRO) by EPA Method 8015B, and nitrate and sulfate by EPA Method 300.0. Additionally, a Hach

1R-18C Ferrous Iron Test was ran in the field to determine the ferrous iron concentration in each well. Monitoring well MW-7 was not sampled due to the presence of a strong hydrocarbon sheen on the water. 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. Field parameters monitored are summarized in Table 1a. 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 cross-gradient 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. NAPL was not detected when gauged but a sheen could be observed. The well was therefore not sampled.

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, did not contain any hydrocarbon COCs above the laboratory PQL.

Groundwater from MW-11, located down gradient from the tank pits, contained benzene (1.7 µg/L) below NMWQCCR standards.

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.

Constituents including nitrate (reported as N), sulfate, Total Petroleum Hydrocarbons (TPH, gasoline, diesel and motor-oil range organics), and ferrous iron were analyzed for each sampled wells. Nitrate was present in MW-6 at 2.1 mg/l, but not in any other well. Sulfate ranged from 10 mg/l in MW-9 to 200 mg/l in MW-12. TPH GRO was detected at low concentrations in several wells, while TPH DRO and MRO was not detected in any sampled well. Ferrous iron concentrations ranged from non-detect to 2.4 mg/l in MW-12.

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 April 22, 2021. The average depth to water in the wells was 5.73 feet, which represents a 0.82 foot decrease in groundwater elevation since the wells were last gauged on April 29, 2019. Figure 2 is a potentiometric surface map of the Chama Conoco Mini-Mart UST Release site. Figure 4 is a hydrograph featuring the groundwater elevation in all current site wells.

Groundwater flow direction, based on groundwater elevation data from the six site monitoring wells, is to the southwest at a gradient of 0.021 feet per foot. The groundwater gradient is consistent with what was calculated during previous gauging events.

4.0 SUMMARY AND CONCLUSIONS

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

Benzene was detected in well MW-11 below the applicable NMWQCCR standards. Monitoring wells MW-6, MW-8, MW-9, and MW-12 did not contain any organic hydrocarbon COCs above the laboratory PQL. With the exception of MW-7, which was not sampled due to the presence of a heavy sheen, all monitoring wells on site show reduced contaminant concentrations relative to the previous monitoring event in April, 2019.

4.2 Ongoing assessment of remediation system.

Not applicable, no remediation system has been installed

4.3 Recommendations.

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

Figures

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

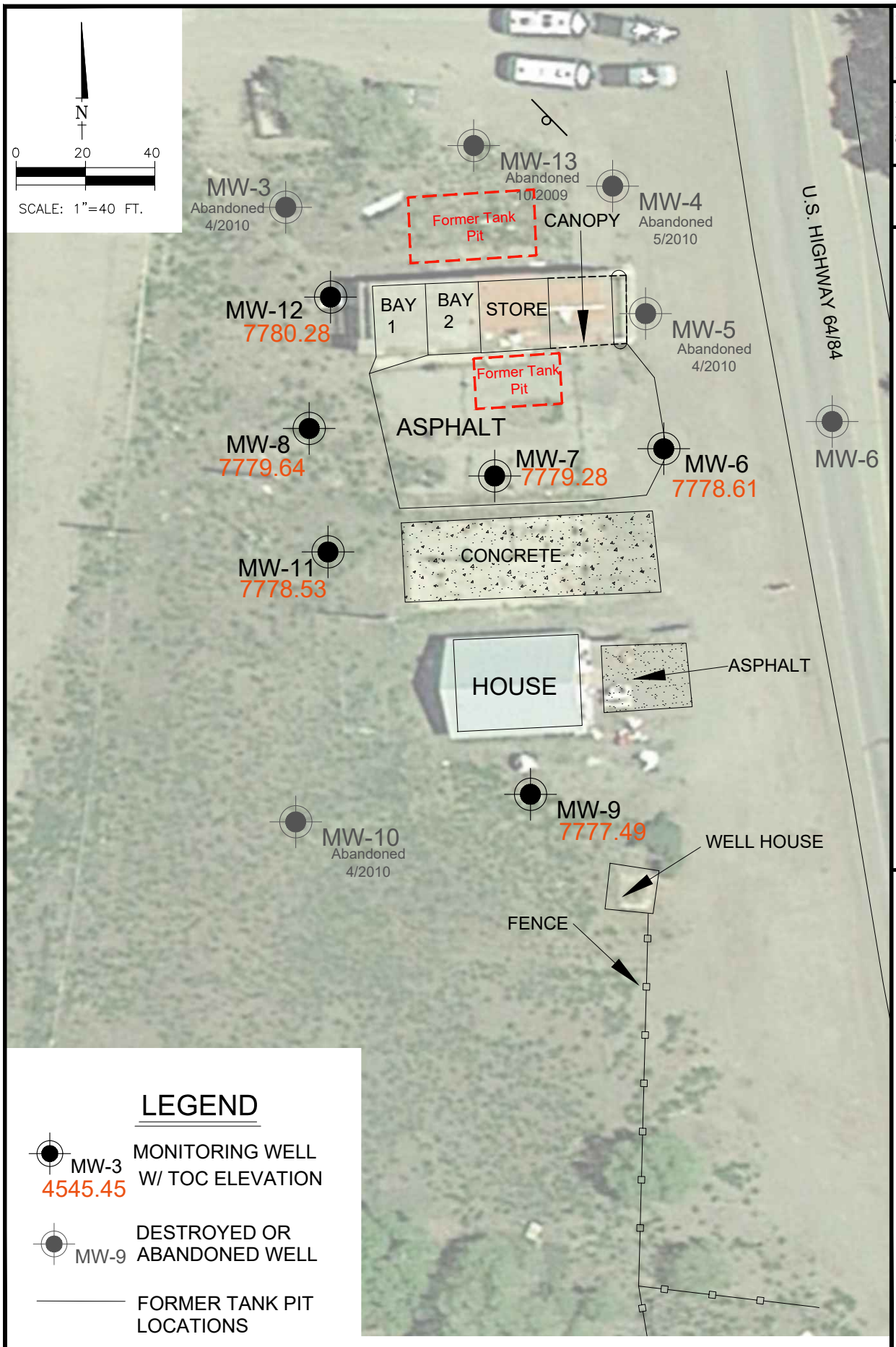
Tables

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



Aerial From from Google Earth Pro (2015)

Drawn	Checked	Approved
MJK	MAE	SAM

Date: NOVEMBER, 2017

Scale: Horiz: 1" = 40'
Vert: NA

Project No: 3423555

Sheet: FIGURE 1

SITE MAP

CONOCO MINI-MART UST RELEASE SITE

3837 US HIGHWAY 64, CHAMA, NEW MEXICO

SOUDER, MILLER & ASSOCIATES
5454 VENICE AVENUE NE, SUITE D
Albuquerque, NM 87113
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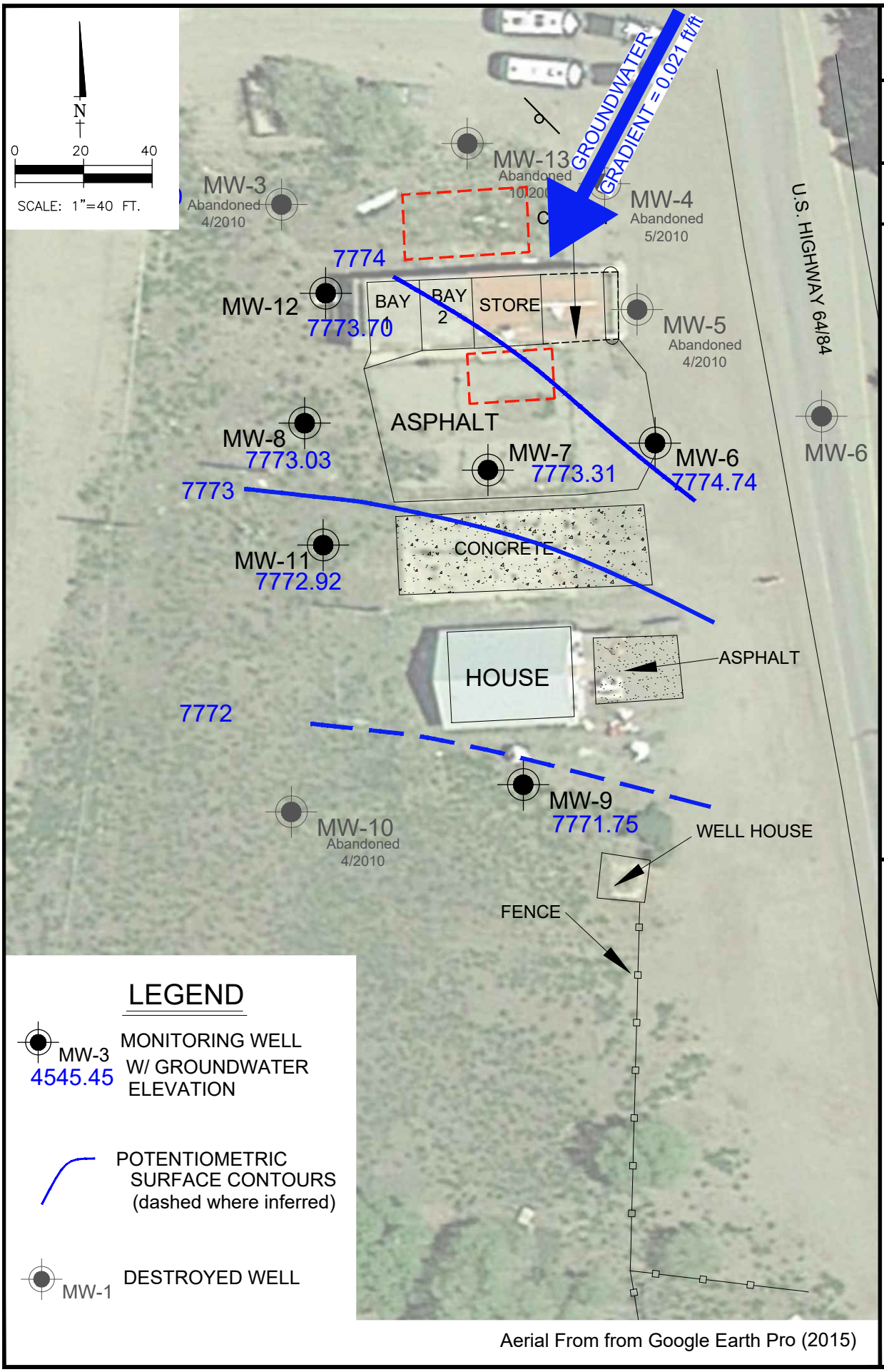
SMA Engineering ♦ Environmental Surveying

P:\3-Conoco Mini Mart 3116075\AutoCAD Files\2017-12 Updated Site Map.dwg, 11/30/2017 11:37:32 AM mae



Drawn EMM | Checked SAM | Approved SAM

Date: APRIL, 2021

Scale: Horiz: 1" = 40' Vert: NA

Project No: 3423555

Sheet: FIGURE 2

POTENTIOMETRIC SURFACE MAP - APRIL 22, 2021

CONOCO MINI-MART UST RELEASE SITE

3837 US HIGHWAY 64, CHAMA, NEW MEXICO

SOUDER, MILLER & ASSOCIATES
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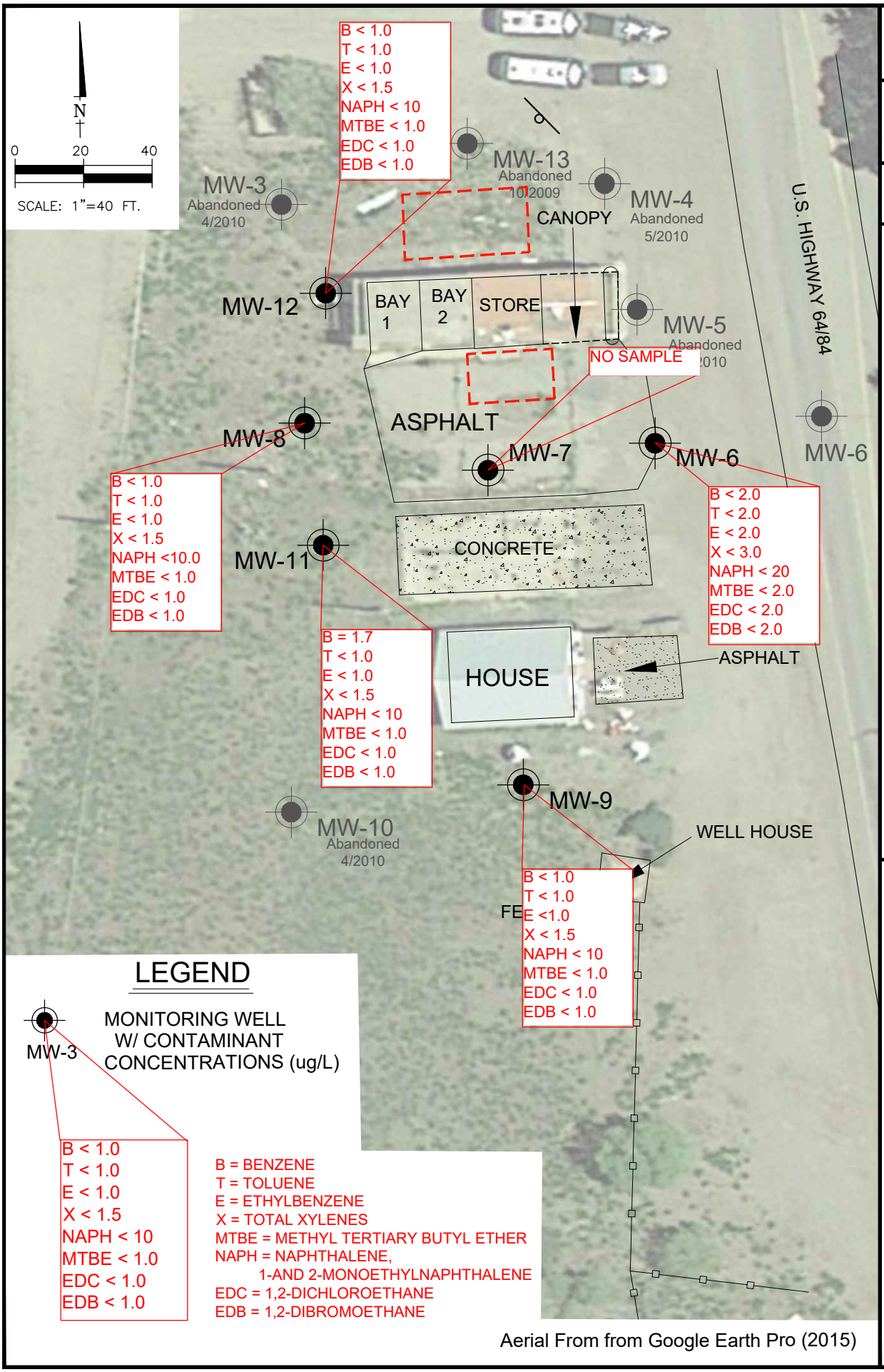
P:\3-Conoco Mini Mart 3116075\AutoCAD Files\2021-04 Updated Site Map.dwg, 5/10/2021 9:33:36 AM emm



Aerial From from Google Earth Pro (2015)

Drawn EMM | Checked MAE | Approved SAM

Date: MAY 2021

Scale: Horiz: 1" = 40'
Vert: NA

Project No: 3423555

Sheet: FIGURE 3

CONTAMINANT CONCENTRATION MAP - 4/22/2021

CONOCO MINI-MART UST RELEASE SITE

3837 US HIGHWAY 64, CHAMA, NEW MEXICO

SOUDER, MILLER & ASSOCIATES
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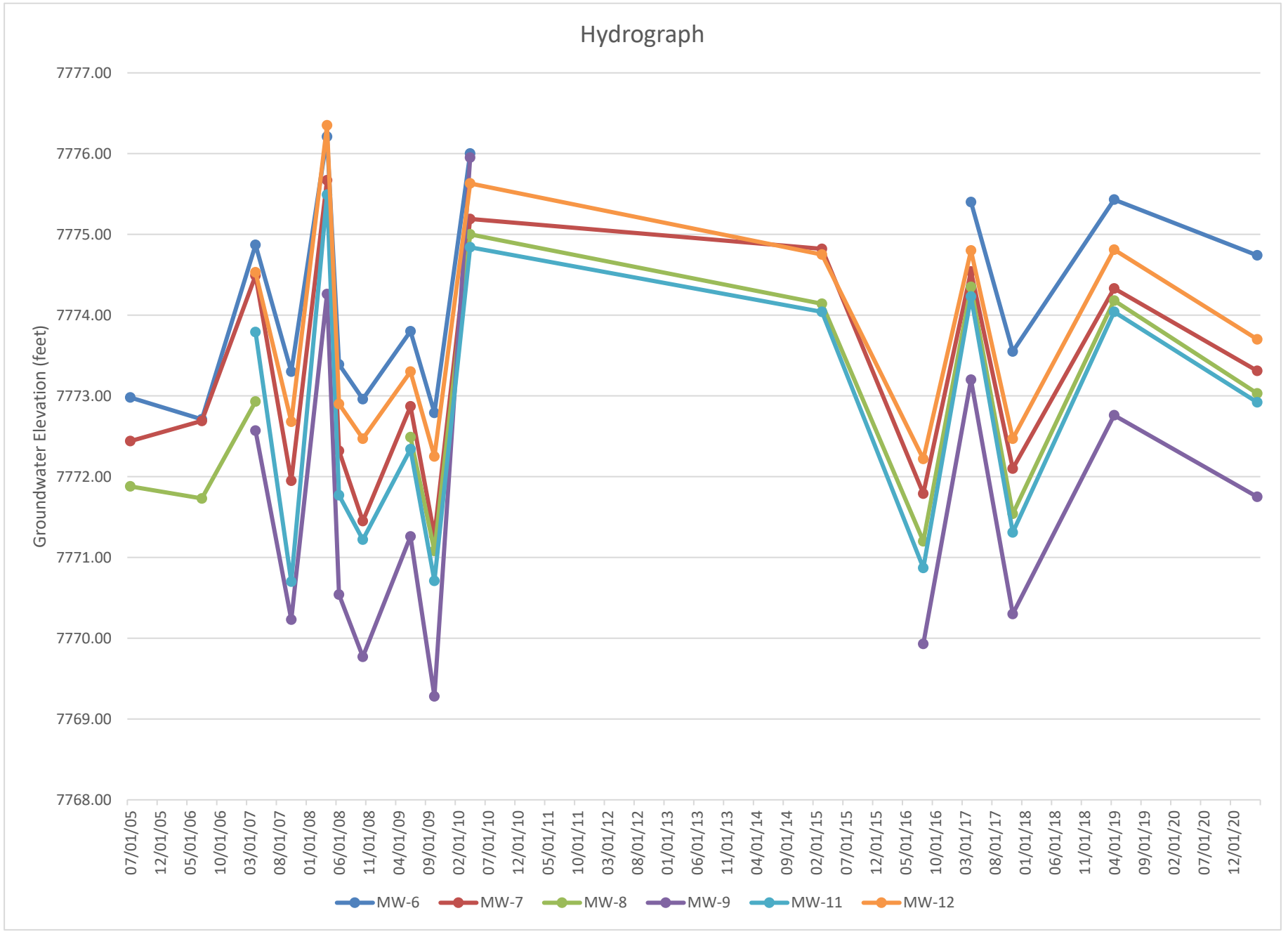
P:\3-Conoco Mini Mart 3116075\AutoCAD Files\2021-04 Updated Site Map.dwg, 5/6/2021 11:27:50 AM emm


Hydrograph
Groundwater Elevation (feet)
7777.00
7776.00
7775.00
7774.00
7773.00
7772.00
7771.00
7770.00
7769.00
7768.00
07/01/05
12/01/05
05/01/06
10/01/06
03/01/07
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08/01/17
01/01/18
06/01/18
11/01/18
04/01/19
09/01/19
02/01/20
07/01/20
12/01/20
MW-6
MW-7
MW-8
MW-9
MW-11
MW-12

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[INT]	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[o]	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[INT]	290	32.0	720	1800	<5.0	NA	NA	NA	NA
	07/10/06*	174	9.0	357	418	11.5	NA	NA	620[o]	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[INT]	<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[o]	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[INT]	<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[o]	NA
	04/04/07*	<2.5	<2.5	<2.5	<5.0	<5.0	NA	NA	<1.0[o]	<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 #	Date	Method 8260 Benzene	Toluene	Ethyl-benzene	Total Xylenes	MTBE	EDC	EDB	Total Naphthalenes	Method 6010 Lead
MW-5	07/08/05[INT]	<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 #	Date	Method 8260 Benzene	Toluene	Ethyl-benzene	Total Xylenes	MTBE	EDC	EDB	Total Naphthalenes	Method 6010 Lead	Method 300.0 Nitrate	Sulfate	TPH Gasoline Range Organics (GRO)	Motor Oil Range Organics (MRO)	Diesel Range Organics (DRO)
MW-6	07/08/05[INT]	<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[o]	NA					
	04/04/07*	<2.5	<2.5	<2.5	0.87	<5.0	NA	NA	<1.0[o]	<0.009					
	10/25/07*	<1.0	<1.0	<1.0	<2.0	<2.5	NA	NA	<6.0[o]	NA					
	04/01/08*	<1.0	<1.0	<1.0	<2.0	<2.5	NA	NA	<2.0[o]	NA					
	06/27/08*	<1.0	<1.0	<1.0	<2.0	<2.5	NA	NA	<2.0[o]	NA					
	10/01/08*	<1.0	<1.0	<1.0	<2.0	<2.5	NA	NA	<2.5[o]	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	<20	NA					
	04/29/19	<1.0	<1.0	<1.0	<1.5	<1.0	<1.0	<1.0	<10	NA	3.4	15	<0.10	<5.0	<1.0
	04/22/21	<2.0	<2.0	<2.0	<3.0	<2.0	<2.0	<2.0	<20	NA	2.1	13	<0.050	<5.0	<1.0
NMWQCCR/NMPSTR Standards		5	1000	700	620	100	5	0.05	30	0.05	10	600	-	-	-

MW #	Date	Method 8260 Benzene	Toluene	Ethyl-benzene	Total Xylenes	MTBE	EDC	EDB	Total Naphthalenes	Method 6010 Lead	Method 300.0 Nitrate	Sulfate	TPH Gasoline Range Organics (GRO)	Motor Oil Range Organics (MRO)	Diesel Range Organics (DRO)
MW-7	07/08/05[INT]	700	86	530	1300	<10	NA	NA	NA	NA					
	07/10/06*	50	22	399	1264	18	NA	NA	428[o]	NA					
	04/04/07*	63	12	508	1655	23	NA	NA	489[o]	<0.009					
	10/25/07*	36	19	480	1400	<25	NA	NA	220[o]	NA					
	04/01/08*	48	18	530	1500	<25	NA	NA	326[o]	NA					
	06/27/08*	49	17	680	2500	<25	NA	NA	163[o]	NA					
	10/01/08*	44	15	590	1500	<25	NA	NA	348[o]	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					
	04/29/19	Strong Sheen Observed													
	04/22/21	Strong Sheen Observed													
NMWQCCR/NMPSTR Standards		5	1000	700	620	100	5	0.05	30	0.05	10	600	-	-	-

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	Method 300.0		TPH		
	Date	Benzene	Toluene	Ethyl-benzene	Total Xylenes	MTBE	EDC	EDB	Total Naphthalenes	Lead	Nitrate	Sulfate	Gasoline Range Organics (GRO)	Motor Oil Range Organics (MRO)	Diesel Range Organics (DRO)
MW-8	07/08/05[INT]	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					
	04/29/19	<1.0	<1.0	<1.0	<1.5	<1.0	<1.0	<1.0	<10	NA	<0.50	580	<0.050	<5.0	<1.0
	04/22/21	<1.0	<1.0	<1.0	<1.5	<1.0	<1.0	<1.0	<10	NA	<0.50	140	<0.050	<5.0	<1.0
NMWQCCR/NMPSTR Standards		5	1000	700	620	100	5	0.05	30	0.05	10	600	-	-	-

MW #	Method 8260									Method 6010	Method 300.0		TPH		
	Date	Benzene	Toluene	Ethyl-benzene	Total Xylenes	MTBE	EDC	EDB	Total Naphthalenes	Lead	Nitrate	Sulfate	Gasoline Range Organics (GRO)	Motor Oil Range Organics (MRO)	Diesel Range Organics (DRO)
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					
	04/29/19	<1.0	<1.0	1.4	<1.5	<1.0	<1.0	<1.0	<10	NA	0.5	17	0.20	<5.0	<1.0
	04/22/21	<1.0	<1.0	<1.0	<1.5	<1.0	<1.0	<1.0	<10	NA	<0.50	10	0.074	<5.0	<1.0
NMWQCCR/NMPSTR Standards		5	1000	700	620	100	5	0.05	30	0.05	10	600	-	-	-

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		5	1000	700	620	100	5	0.05	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	Method 300.0		TPH		
	Date	Benzene	Toluene	Ethyl-benzene	Total Xylenes	MTBE	EDC	EDB	Total Naphthalenes	Lead	Nitrate	Sulfate	Gasoline Range Organics (GRO)	Motor Oil Range Organics (MRO)	Diesel Range Organics (DRO)
MW-11	04/04/07*	31	16.1	138	71	<5.0	NA	NA	53°	<0.009					
	10/25/07*	21	5.4	280	13	17	NA	NA	15°	NA					
	04/01/08*	11	<1.0	24	9.1	<2.5	NA	NA	3.1°	NA					
	06/27/08*	18	<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					
	04/29/19	1.2	<1.0	2.6	27.0	<1.0	<1.0	<1.0	8.0	NA	<0.50	88	0.38	<5.0	<1.0
	04/22/21	1.7	<1.0	<1.0	<1.5	<1.0	<1.0	<1.0	<10	NA	<0.50	21	0.17	<5.0	<1.0
NMWQCCR/NMPSTR Standards		5	1000	700	620	100	5	0.05	30	0.05	10	600	-	-	-

MW #	Method 8260									Method 6010	Method 300.0		TPH		
	Date	Benzene	Toluene	Ethyl-benzene	Total Xylenes	MTBE	EDC	EDB	Total Naphthalenes	Lead	Nitrate	Sulfate	Gasoline Range Organics (GRO)	Motor Oil Range Organics (MRO)	Diesel Range Organics (DRO)
MW-12	04/04/07*	10.9	<2.5	44	129	<5.0	NA	NA	40°	<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	750	2.5	NA	NA	12°	NA					
	06/27/08*	<1.0	1.2	78	420	2.5	NA	NA	62°	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	1100	<1.0	NA	NA	146	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					
	04/29/19	<1.0	<1.0	<1.0	<1.5	<1.0	<1.0	<1.0	<10	NA	<0.50	420	<0.050	<5.0	<1.0
	04/22/21	<1.0	<1.0	<1.0	<1.5	<1.0	<1.0	<1.0	<10	NA	<0.50	200	<0.050	<5.0	<1.0
NMWQCCR/NMPSTR Standards		5	1000	700	620	100	5	0.05	30	0.05	10	600	-	-	-

MW #	Method 8260									Method 6010
	Date	Benzene	Toluene	Ethyl-benzene	Total Xylenes	MTBE	EDC	EDB	Total Naphthalenes	Lead
MW-13	04/04/07*	20	8.4	193	381	20	NA	NA	70°	<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		5	1000	700	620	100	5	0.05	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[INT] 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			4/29/2019			4/22/2021				
	Parameter			Parameter			Parameter				
	pH	eC (µs/cm)	Temperature (°C)	pH	eC (µs/cm)	Temperature (°C)	pH	eC (µs/cm)	Temperature (°C)	DO%	MvORP
MW-6	7.52	484	13	7.83	963	13	6.78	777	10.25	13.6	80.9
MW-7	7.69	427	14	Not Sampled			Not Sampled - Sheen Visible				
MW-8	7.70	1,056	14	6.43	1,748	9	6.02	1,096	8.17	13.3	88.4
MW-9	7.79	519	13	6.95	383	10	6.44	555	8.95	13.6	66.1
MW-11	7.57	712	13	7.09	954	10	6.14	763	9.21	14.4	47.1
MW-12	7.71	875	13	6.59	1,734	9	6.39	1,268	7.93	13.6	-21.9

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

			07/08/05		07/10/06		04/04/07		10/25/07		04/01/08	
MW #	TOC Elev.	Total Well Depth	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

			06/27/08		10/01/08		06/01/09		10/14/09		04/06/10	
MW #	TOC Elev.	Total Well Depth	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

			03/24/15		08/11/16		04/18/17		11/09/17		04/29/19	
MW #	TOC Elev.	Total Well Depth	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-6 *	7778.61	12.0	NM		NM		3.21	7775.40	5.06	7773.55	3.18	7775.43
MW-7 *	7779.28	12.5	4.46	7774.82	7.49	7771.79	4.74	7774.54	7.18	7772.10	4.95**	7774.33
MW-8 *	7779.64	15.0	5.50	7774.14	8.44	7771.20	5.29	7774.35	8.10	7771.54	5.46	7774.18
MW-9	7777.49	11.3	Not Measured		7.56	7769.93	4.29	7773.20	7.19	7770.30	4.73	7772.76
MW-11	7778.53	12.0	4.49	7774.04	7.66	7770.87	4.30	7774.23	7.22	7771.31	4.49	7774.04
MW-12	7780.28	13.5	5.53	7774.75	8.06	7772.22	5.48	7774.80	7.81	7772.47	5.47	7774.81
Average DTW			4.83		7.69		4.70		7.35		4.90	

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

Table 4 (Continued). Depth to Water Measurements

Chama Conoco Mini Mart UST Release Site, 3837 Highway 64, Chama, New Mexico

Facility # 27498 RID #2316

			04/22/21	
MW #	TOC Elev.	Total Well Depth	Depth to Water	Water Elev.
MW-6 *	7778.61	12.0	3.87	7774.74
MW-7 *	7779.28	12.5	5.97**	7773.31
MW-8 *	7779.64	15.0	6.61	7773.03
MW-9	7777.49	11.3	5.74	7771.75
MW-11	7778.53	12.0	5.61	7772.92
MW-12	7780.28	13.5	6.58	7773.70
Average DTW			5.73	

MW-X * Indicates a monitoring well that was installed and surveyed under contracted by Interra in January, 2005.

** Product sheen

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
- Ferrous iron

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

- ***EPA Method 8260B*** to detect volatile organic hydrocarbons, including benzene, toluene, ethylbenzene, total xylenes (BTEX), 1,2-dichloroethane (EDC), 1,2,4- and 1,3,5-trimethylbenzene (TMB) and methyl tertiary butyl ether (MTBE), as well as naphthalene and monomethyl naphthalenes
- ***EPA Method 8015B*** to detect TPH gasoline-range organics (GRO) and diesel-range organics (DRO)
- ***EPA Method 300.0*** to detect nitrate and sulfate

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: 4/22/21 Time On-site: 0900 Time Off-site: 1230 Sampled by: C. Parker

Weather conditions: Sunny, Clear ~49°F Windy

Equipment Used: Bailer, Heron NAPL, Hanna, Ferrous Fe kit

Monitoring Well Data

	MW ID	Total Depth	DTW	Gallons to purge	Gallons purged	Sampling Time	Temp (C)	pH	ec	Remarks
1	MW-6	11.5	3.87	3.8	2/going Dry	0950	10.25	6.78	777	%DO = 13.6 mVORP = 80.9 Fe^{3+} = 0.4 Brown/
6	MW-7	12.2	5.97	3.1	—	—	—	—	—	Napl 5.96 - 5.97 Strong odor + Bright Rainbow sheen
2	MW-8	15	6.61	4.2	4.33	1030	8.17	6.02	1096	%DO = 13.3 mVORP = 88.4 Fe^{3+} = 0.0 Clear
4	MW-9	13.8	5.74	4.0	4.33	1130	8.95	6.44	555	%DO = 13.6 mVORP = 66.1 Fe^{3+} = 0.0 Brown / Strong odor
5	MW-11	12.5	5.61	3.4	3.66	1200	9.21	6.14	763	DO% = 14.4 mVORP = 47.1 Fe = 0.6 clear/orange
3	MW-12	13.1	6.58	3.26	3.33	1100	7.93	6.39	1268	%DO = 13.6 mVORP = -21.9 Fe^{3+} = 2.4 Cloudy Green/

Notes: Sample for 8260B

Appendix 3

Laboratory Results

HALL ENVIRONMENTAL ANALYSIS LABORATORY

Hall Environmental Analysis Laboratory
4901 Hawkins NE
Albuquerque, NM 87109
TEL: 505-345-3975 FAX: 505-345-4107
Website: clients.hallenvironmental.com

May 05, 2021

Scott McKitrick

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

RE: Chama Conoco OrderNo.: 2104A25

Dear Scott McKitrick:

Hall Environmental Analysis Laboratory received 6 sample(s) on 4/22/2021 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 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 #NM0901

Sincerely,

Andy Freeman
Laboratory Manager
4901 Hawkins NE
Albuquerque, NM 87109

Hall Environmental Analysis Laboratory, Inc.

CLIENT: Souder Miller & Associates
Client Sample ID: MW-6
Project: Chama Conoco
Collection Date: 4/22/2021 9:50:00 AM
Lab ID: 2104A25-001 **Matrix:** AQUEOUS **Received Date:** 4/22/2021 3:44:00 PM

Analyses	Result	RL	Qual	Units	DF	Date Analyzed	Batch
EPA METHOD 300.0: ANIONS						Analyst: **CAS**	
Nitrogen, Nitrate (As N)	2.1	0.50		mg/L	5	4/23/2021 12:38:25 AM	A76894
Sulfate	13	2.5		mg/L	5	4/23/2021 12:38:25 AM	A76894
SM2540C MOD: TOTAL DISSOLVED SOLIDS						Analyst: **KS**	
Total Dissolved Solids	2890	200	*D	mg/L	1	4/29/2021 10:43:00 AM	59650
EPA METHOD 8015M/D: DIESEL RANGE						Analyst: **mb**	
Diesel Range Organics (DRO)	ND	1.0		mg/L	1	4/26/2021 11:20:36 AM	59606
Motor Oil Range Organics (MRO)	ND	5.0		mg/L	1	4/26/2021 11:20:36 AM	59606
Surr: DNOP	93.1	63.7-164		%Rec	1	4/26/2021 11:20:36 AM	59606
EPA METHOD 8015D: GASOLINE RANGE						Analyst: **CCM**	
Gasoline Range Organics (GRO)	ND	0.050		mg/L	1	4/23/2021 11:28:00 PM	G76911
Surr: BFB	102	68.5-136		%Rec	1	4/23/2021 11:28:00 PM	G76911
EPA METHOD 8260B: VOLATILES						Analyst: **BRM**	
Benzene	ND	2.0	D	µg/L	2	4/26/2021 1:09:25 PM	B76961
Toluene	ND	2.0	D	µg/L	2	4/26/2021 1:09:25 PM	B76961
Ethylbenzene	ND	2.0	D	µg/L	2	4/26/2021 1:09:25 PM	B76961
Methyl tert-butyl ether (MTBE)	ND	2.0	D	µg/L	2	4/26/2021 1:09:25 PM	B76961
1,2,4-Trimethylbenzene	ND	2.0	D	µg/L	2	4/26/2021 1:09:25 PM	B76961
1,3,5-Trimethylbenzene	ND	2.0	D	µg/L	2	4/26/2021 1:09:25 PM	B76961
1,2-Dichloroethane (EDC)	ND	2.0	D	µg/L	2	4/26/2021 1:09:25 PM	B76961
1,2-Dibromoethane (EDB)	ND	2.0	D	µg/L	2	4/26/2021 1:09:25 PM	B76961
Naphthalene	ND	4.0	D	µg/L	2	4/26/2021 1:09:25 PM	B76961
1-Methylnaphthalene	ND	8.0	D	µg/L	2	4/26/2021 1:09:25 PM	B76961
2-Methylnaphthalene	ND	8.0	D	µg/L	2	4/26/2021 1:09:25 PM	B76961
Acetone	ND	20	D	µg/L	2	4/26/2021 1:09:25 PM	B76961
Bromobenzene	ND	2.0	D	µg/L	2	4/26/2021 1:09:25 PM	B76961
Bromodichloromethane	ND	2.0	D	µg/L	2	4/26/2021 1:09:25 PM	B76961
Bromoform	ND	2.0	D	µg/L	2	4/26/2021 1:09:25 PM	B76961
Bromomethane	ND	6.0	D	µg/L	2	4/26/2021 1:09:25 PM	B76961
2-Butanone	ND	20	D	µg/L	2	4/26/2021 1:09:25 PM	B76961
Carbon disulfide	ND	20	D	µg/L	2	4/26/2021 1:09:25 PM	B76961
Carbon Tetrachloride	ND	2.0	D	µg/L	2	4/26/2021 1:09:25 PM	B76961
Chlorobenzene	ND	2.0	D	µg/L	2	4/26/2021 1:09:25 PM	B76961
Chloroethane	ND	4.0	D	µg/L	2	4/26/2021 1:09:25 PM	B76961
Chloroform	ND	2.0	D	µg/L	2	4/26/2021 1:09:25 PM	B76961
Chloromethane	ND	6.0	D	µg/L	2	4/26/2021 1:09:25 PM	B76961
2-Chlorotoluene	ND	2.0	D	µg/L	2	4/26/2021 1:09:25 PM	B76961
4-Chlorotoluene	ND	2.0	D	µg/L	2	4/26/2021 1:09:25 PM	B76961

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 Quanitative Limit	RL	Reporting Limit
S	% Recovery outside of range due to dilution or matrix		

Hall Environmental Analysis Laboratory, Inc.

CLIENT: Souder Miller & Associates
Client Sample ID: MW-6
Project: Chama Conoco
Collection Date: 4/22/2021 9:50:00 AM
Lab ID: 2104A25-001 **Matrix:** AQUEOUS **Received Date:** 4/22/2021 3:44:00 PM

Analyses	Result	RL	Qual	Units	DF	Date Analyzed	Batch
EPA METHOD 8260B: VOLATILES						Analyst: **BRM**	
cis-1,2-DCE	ND	2.0	D	µg/L	2	4/26/2021 1:09:25 PM	B76961
cis-1,3-Dichloropropene	ND	2.0	D	µg/L	2	4/26/2021 1:09:25 PM	B76961
1,2-Dibromo-3-chloropropane	ND	4.0	D	µg/L	2	4/26/2021 1:09:25 PM	B76961
Dibromochloromethane	ND	2.0	D	µg/L	2	4/26/2021 1:09:25 PM	B76961
Dibromomethane	ND	2.0	D	µg/L	2	4/26/2021 1:09:25 PM	B76961
1,2-Dichlorobenzene	ND	2.0	D	µg/L	2	4/26/2021 1:09:25 PM	B76961
1,3-Dichlorobenzene	ND	2.0	D	µg/L	2	4/26/2021 1:09:25 PM	B76961
1,4-Dichlorobenzene	ND	2.0	D	µg/L	2	4/26/2021 1:09:25 PM	B76961
Dichlorodifluoromethane	ND	2.0	D	µg/L	2	4/26/2021 1:09:25 PM	B76961
1,1-Dichloroethane	ND	2.0	D	µg/L	2	4/26/2021 1:09:25 PM	B76961
1,1-Dichloroethene	ND	2.0	D	µg/L	2	4/26/2021 1:09:25 PM	B76961
1,2-Dichloropropane	ND	2.0	D	µg/L	2	4/26/2021 1:09:25 PM	B76961
1,3-Dichloropropane	ND	2.0	D	µg/L	2	4/26/2021 1:09:25 PM	B76961
2,2-Dichloropropane	ND	4.0	D	µg/L	2	4/26/2021 1:09:25 PM	B76961
1,1-Dichloropropene	ND	2.0	D	µg/L	2	4/26/2021 1:09:25 PM	B76961
Hexachlorobutadiene	ND	2.0	D	µg/L	2	4/26/2021 1:09:25 PM	B76961
2-Hexanone	ND	20	D	µg/L	2	4/26/2021 1:09:25 PM	B76961
Isopropylbenzene	ND	2.0	D	µg/L	2	4/26/2021 1:09:25 PM	B76961
4-Isopropyltoluene	ND	2.0	D	µg/L	2	4/26/2021 1:09:25 PM	B76961
4-Methyl-2-pentanone	ND	20	D	µg/L	2	4/26/2021 1:09:25 PM	B76961
Methylene Chloride	ND	6.0	D	µg/L	2	4/26/2021 1:09:25 PM	B76961
n-Butylbenzene	ND	6.0	D	µg/L	2	4/26/2021 1:09:25 PM	B76961
n-Propylbenzene	ND	2.0	D	µg/L	2	4/26/2021 1:09:25 PM	B76961
sec-Butylbenzene	ND	2.0	D	µg/L	2	4/26/2021 1:09:25 PM	B76961
Styrene	ND	2.0	D	µg/L	2	4/26/2021 1:09:25 PM	B76961
tert-Butylbenzene	ND	2.0	D	µg/L	2	4/26/2021 1:09:25 PM	B76961
1,1,1,2-Tetrachloroethane	ND	2.0	D	µg/L	2	4/26/2021 1:09:25 PM	B76961
1,1,2,2-Tetrachloroethane	ND	4.0	D	µg/L	2	4/26/2021 1:09:25 PM	B76961
Tetrachloroethene (PCE)	ND	2.0	D	µg/L	2	4/26/2021 1:09:25 PM	B76961
trans-1,2-DCE	ND	2.0	D	µg/L	2	4/26/2021 1:09:25 PM	B76961
trans-1,3-Dichloropropene	ND	2.0	D	µg/L	2	4/26/2021 1:09:25 PM	B76961
1,2,3-Trichlorobenzene	ND	2.0	D	µg/L	2	4/26/2021 1:09:25 PM	B76961
1,2,4-Trichlorobenzene	ND	2.0	D	µg/L	2	4/26/2021 1:09:25 PM	B76961
1,1,1-Trichloroethane	ND	2.0	D	µg/L	2	4/26/2021 1:09:25 PM	B76961
1,1,2-Trichloroethane	ND	2.0	D	µg/L	2	4/26/2021 1:09:25 PM	B76961
Trichloroethene (TCE)	ND	2.0	D	µg/L	2	4/26/2021 1:09:25 PM	B76961
Trichlorofluoromethane	ND	2.0	D	µg/L	2	4/26/2021 1:09:25 PM	B76961
1,2,3-Trichloropropane	ND	4.0	D	µg/L	2	4/26/2021 1:09:25 PM	B76961
Vinyl chloride	ND	2.0	D	µg/L	2	4/26/2021 1:09:25 PM	B76961

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
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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 Quanitative Limit	RL	Reporting Limit
S	% Recovery outside of range due to dilution or matrix		

Hall Environmental Analysis Laboratory, Inc.

CLIENT: Souder Miller & Associates
Client Sample ID: MW-6
Project: Chama Conoco
Collection Date: 4/22/2021 9:50:00 AM
Lab ID: 2104A25-001 **Matrix:** AQUEOUS **Received Date:** 4/22/2021 3:44:00 PM

Analyses	Result	RL	Qual	Units	DF	Date Analyzed	Batch
EPA METHOD 8260B: VOLATILES						Analyst: **BRM**	
Xylenes, Total	ND	3.0	D	µg/L	2	4/26/2021 1:09:25 PM	B76961
Surr: 1,2-Dichloroethane-d4	106	70-130	D	%Rec	2	4/26/2021 1:09:25 PM	B76961
Surr: 4-Bromofluorobenzene	101	70-130	D	%Rec	2	4/26/2021 1:09:25 PM	B76961
Surr: Dibromofluoromethane	108	70-130	D	%Rec	2	4/26/2021 1:09:25 PM	B76961
Surr: Toluene-d8	99.5	70-130	D	%Rec	2	4/26/2021 1:09:25 PM	B76961

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 Quanitative Limit	RL	Reporting Limit
S	% Recovery outside of range due to dilution or matrix		

Hall Environmental Analysis Laboratory, Inc.

CLIENT: Souder Miller & Associates
Client Sample ID: MW-8
Project: Chama Conoco
Collection Date: 4/22/2021 10:30:00 AM
Lab ID: 2104A25-002 **Matrix:** AQUEOUS **Received Date:** 4/22/2021 3:44:00 PM

Analyses	Result	RL	Qual	Units	DF	Date Analyzed	Batch
EPA METHOD 300.0: ANIONS						Analyst: **CAS**	
Nitrogen, Nitrate (As N)	ND	0.50		mg/L	5	4/23/2021 1:03:14 AM	A76894
Sulfate	140	2.5		mg/L	5	4/23/2021 1:03:14 AM	A76894
SM2540C MOD: TOTAL DISSOLVED SOLIDS						Analyst: **KS**	
Total Dissolved Solids	706	40.0	*D	mg/L	1	4/29/2021 10:43:00 AM	59650
EPA METHOD 8015M/D: DIESEL RANGE						Analyst: **mb**	
Diesel Range Organics (DRO)	ND	1.0		mg/L	1	4/26/2021 12:32:14 PM	59606
Motor Oil Range Organics (MRO)	ND	5.0		mg/L	1	4/26/2021 12:32:14 PM	59606
Surr: DNOP	95.8	63.7-164		%Rec	1	4/26/2021 12:32:14 PM	59606
EPA METHOD 8015D: GASOLINE RANGE						Analyst: **CCM**	
Gasoline Range Organics (GRO)	ND	0.050		mg/L	1	4/23/2021 11:47:00 PM	G76911
Surr: BFB	105	68.5-136		%Rec	1	4/23/2021 11:47:00 PM	G76911
EPA METHOD 8260B: VOLATILES						Analyst: **BRM**	
Benzene	ND	1.0		µg/L	1	4/26/2021 1:36:38 PM	B76961
Toluene	ND	1.0		µg/L	1	4/26/2021 1:36:38 PM	B76961
Ethylbenzene	ND	1.0		µg/L	1	4/26/2021 1:36:38 PM	B76961
Methyl tert-butyl ether (MTBE)	ND	1.0		µg/L	1	4/26/2021 1:36:38 PM	B76961
1,2,4-Trimethylbenzene	ND	1.0		µg/L	1	4/26/2021 1:36:38 PM	B76961
1,3,5-Trimethylbenzene	ND	1.0		µg/L	1	4/26/2021 1:36:38 PM	B76961
1,2-Dichloroethane (EDC)	ND	1.0		µg/L	1	4/26/2021 1:36:38 PM	B76961
1,2-Dibromoethane (EDB)	ND	1.0		µg/L	1	4/26/2021 1:36:38 PM	B76961
Naphthalene	ND	2.0		µg/L	1	4/26/2021 1:36:38 PM	B76961
1-Methylnaphthalene	ND	4.0		µg/L	1	4/26/2021 1:36:38 PM	B76961
2-Methylnaphthalene	ND	4.0		µg/L	1	4/26/2021 1:36:38 PM	B76961
Acetone	ND	10		µg/L	1	4/26/2021 1:36:38 PM	B76961
Bromobenzene	ND	1.0		µg/L	1	4/26/2021 1:36:38 PM	B76961
Bromodichloromethane	ND	1.0		µg/L	1	4/26/2021 1:36:38 PM	B76961
Bromoform	ND	1.0		µg/L	1	4/26/2021 1:36:38 PM	B76961
Bromomethane	ND	3.0		µg/L	1	4/26/2021 1:36:38 PM	B76961
2-Butanone	ND	10		µg/L	1	4/26/2021 1:36:38 PM	B76961
Carbon disulfide	ND	10		µg/L	1	4/26/2021 1:36:38 PM	B76961
Carbon Tetrachloride	ND	1.0		µg/L	1	4/26/2021 1:36:38 PM	B76961
Chlorobenzene	ND	1.0		µg/L	1	4/26/2021 1:36:38 PM	B76961
Chloroethane	ND	2.0		µg/L	1	4/26/2021 1:36:38 PM	B76961
Chloroform	ND	1.0		µg/L	1	4/26/2021 1:36:38 PM	B76961
Chloromethane	ND	3.0		µg/L	1	4/26/2021 1:36:38 PM	B76961
2-Chlorotoluene	ND	1.0		µg/L	1	4/26/2021 1:36:38 PM	B76961
4-Chlorotoluene	ND	1.0		µg/L	1	4/26/2021 1:36:38 PM	B76961

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 Quanitative Limit	RL	Reporting Limit
S	% Recovery outside of range due to dilution or matrix		

Hall Environmental Analysis Laboratory, Inc.

CLIENT: Souder Miller & Associates
Client Sample ID: MW-8
Project: Chama Conoco
Collection Date: 4/22/2021 10:30:00 AM
Lab ID: 2104A25-002 **Matrix:** AQUEOUS **Received Date:** 4/22/2021 3:44:00 PM

Analyses	Result	RL	Qual	Units	DF	Date Analyzed	Batch
EPA METHOD 8260B: VOLATILES						Analyst: **BRM**	
cis-1,2-DCE	ND	1.0		µg/L	1	4/26/2021 1:36:38 PM	B76961
cis-1,3-Dichloropropene	ND	1.0		µg/L	1	4/26/2021 1:36:38 PM	B76961
1,2-Dibromo-3-chloropropane	ND	2.0		µg/L	1	4/26/2021 1:36:38 PM	B76961
Dibromochloromethane	ND	1.0		µg/L	1	4/26/2021 1:36:38 PM	B76961
Dibromomethane	ND	1.0		µg/L	1	4/26/2021 1:36:38 PM	B76961
1,2-Dichlorobenzene	ND	1.0		µg/L	1	4/26/2021 1:36:38 PM	B76961
1,3-Dichlorobenzene	ND	1.0		µg/L	1	4/26/2021 1:36:38 PM	B76961
1,4-Dichlorobenzene	ND	1.0		µg/L	1	4/26/2021 1:36:38 PM	B76961
Dichlorodifluoromethane	ND	1.0		µg/L	1	4/26/2021 1:36:38 PM	B76961
1,1-Dichloroethane	ND	1.0		µg/L	1	4/26/2021 1:36:38 PM	B76961
1,1-Dichloroethene	ND	1.0		µg/L	1	4/26/2021 1:36:38 PM	B76961
1,2-Dichloropropane	ND	1.0		µg/L	1	4/26/2021 1:36:38 PM	B76961
1,3-Dichloropropane	ND	1.0		µg/L	1	4/26/2021 1:36:38 PM	B76961
2,2-Dichloropropane	ND	2.0		µg/L	1	4/26/2021 1:36:38 PM	B76961
1,1-Dichloropropene	ND	1.0		µg/L	1	4/26/2021 1:36:38 PM	B76961
Hexachlorobutadiene	ND	1.0		µg/L	1	4/26/2021 1:36:38 PM	B76961
2-Hexanone	ND	10		µg/L	1	4/26/2021 1:36:38 PM	B76961
Isopropylbenzene	ND	1.0		µg/L	1	4/26/2021 1:36:38 PM	B76961
4-Isopropyltoluene	ND	1.0		µg/L	1	4/26/2021 1:36:38 PM	B76961
4-Methyl-2-pentanone	ND	10		µg/L	1	4/26/2021 1:36:38 PM	B76961
Methylene Chloride	ND	3.0		µg/L	1	4/26/2021 1:36:38 PM	B76961
n-Butylbenzene	ND	3.0		µg/L	1	4/26/2021 1:36:38 PM	B76961
n-Propylbenzene	ND	1.0		µg/L	1	4/26/2021 1:36:38 PM	B76961
sec-Butylbenzene	ND	1.0		µg/L	1	4/26/2021 1:36:38 PM	B76961
Styrene	ND	1.0		µg/L	1	4/26/2021 1:36:38 PM	B76961
tert-Butylbenzene	ND	1.0		µg/L	1	4/26/2021 1:36:38 PM	B76961
1,1,1,2-Tetrachloroethane	ND	1.0		µg/L	1	4/26/2021 1:36:38 PM	B76961
1,1,2,2-Tetrachloroethane	ND	2.0		µg/L	1	4/26/2021 1:36:38 PM	B76961
Tetrachloroethene (PCE)	ND	1.0		µg/L	1	4/26/2021 1:36:38 PM	B76961
trans-1,2-DCE	ND	1.0		µg/L	1	4/26/2021 1:36:38 PM	B76961
trans-1,3-Dichloropropene	ND	1.0		µg/L	1	4/26/2021 1:36:38 PM	B76961
1,2,3-Trichlorobenzene	ND	1.0		µg/L	1	4/26/2021 1:36:38 PM	B76961
1,2,4-Trichlorobenzene	ND	1.0		µg/L	1	4/26/2021 1:36:38 PM	B76961
1,1,1-Trichloroethane	ND	1.0		µg/L	1	4/26/2021 1:36:38 PM	B76961
1,1,2-Trichloroethane	ND	1.0		µg/L	1	4/26/2021 1:36:38 PM	B76961
Trichloroethene (TCE)	ND	1.0		µg/L	1	4/26/2021 1:36:38 PM	B76961
Trichlorofluoromethane	ND	1.0		µg/L	1	4/26/2021 1:36:38 PM	B76961
1,2,3-Trichloropropane	ND	2.0		µg/L	1	4/26/2021 1:36:38 PM	B76961
Vinyl chloride	ND	1.0		µg/L	1	4/26/2021 1:36:38 PM	B76961

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 Quanitative Limit	RL	Reporting Limit
S	% Recovery outside of range due to dilution or matrix		

Hall Environmental Analysis Laboratory, Inc.

CLIENT: Souder Miller & Associates
Client Sample ID: MW-8
Project: Chama Conoco
Collection Date: 4/22/2021 10:30:00 AM
Lab ID: 2104A25-002 **Matrix:** AQUEOUS **Received Date:** 4/22/2021 3:44:00 PM

Analyses	Result	RL	Qual	Units	DF	Date Analyzed	Batch
EPA METHOD 8260B: VOLATILES						Analyst: **BRM**	
Xylenes, Total	ND	1.5		µg/L	1	4/26/2021 1:36:38 PM	B76961
Surr: 1,2-Dichloroethane-d4	105	70-130		%Rec	1	4/26/2021 1:36:38 PM	B76961
Surr: 4-Bromofluorobenzene	106	70-130		%Rec	1	4/26/2021 1:36:38 PM	B76961
Surr: Dibromofluoromethane	110	70-130		%Rec	1	4/26/2021 1:36:38 PM	B76961
Surr: Toluene-d8	97.5	70-130		%Rec	1	4/26/2021 1:36:38 PM	B76961

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 Quanitative Limit	RL	Reporting Limit
S	% Recovery outside of range due to dilution or matrix		

Hall Environmental Analysis Laboratory, Inc.

CLIENT: Souder Miller & Associates
Client Sample ID: MW-9
Project: Chama Conoco
Collection Date: 4/22/2021 11:30:00 AM
Lab ID: 2104A25-003 **Matrix:** AQUEOUS **Received Date:** 4/22/2021 3:44:00 PM

Analyses	Result	RL	Qual	Units	DF	Date Analyzed	Batch
EPA METHOD 300.0: ANIONS						Analyst: **CAS**	
Nitrogen, Nitrate (As N)	ND	0.50		mg/L	5	4/23/2021 1:28:03 AM	A76894
Sulfate	10	2.5		mg/L	5	4/23/2021 1:28:03 AM	A76894
SM2540C MOD: TOTAL DISSOLVED SOLIDS						Analyst: **KS**	
Total Dissolved Solids	630	200	*D	mg/L	1	4/29/2021 10:43:00 AM	59650
EPA METHOD 8015M/D: DIESEL RANGE						Analyst: **mb**	
Diesel Range Organics (DRO)	ND	1.0		mg/L	1	4/26/2021 12:56:16 PM	59606
Motor Oil Range Organics (MRO)	ND	5.0		mg/L	1	4/26/2021 12:56:16 PM	59606
Surr: DNOP	94.2	63.7-164		%Rec	1	4/26/2021 12:56:16 PM	59606
EPA METHOD 8015D: GASOLINE RANGE						Analyst: **CCM**	
Gasoline Range Organics (GRO)	0.074	0.050		mg/L	1	4/24/2021 12:07:00 AM	G76911
Surr: BFB	113	68.5-136		%Rec	1	4/24/2021 12:07:00 AM	G76911
EPA METHOD 8260B: VOLATILES						Analyst: **BRM**	
Benzene	ND	1.0		µg/L	1	4/26/2021 2:03:48 PM	B76961
Toluene	ND	1.0		µg/L	1	4/26/2021 2:03:48 PM	B76961
Ethylbenzene	ND	1.0		µg/L	1	4/26/2021 2:03:48 PM	B76961
Methyl tert-butyl ether (MTBE)	ND	1.0		µg/L	1	4/26/2021 2:03:48 PM	B76961
1,2,4-Trimethylbenzene	ND	1.0		µg/L	1	4/26/2021 2:03:48 PM	B76961
1,3,5-Trimethylbenzene	ND	1.0		µg/L	1	4/26/2021 2:03:48 PM	B76961
1,2-Dichloroethane (EDC)	ND	1.0		µg/L	1	4/26/2021 2:03:48 PM	B76961
1,2-Dibromoethane (EDB)	ND	1.0		µg/L	1	4/26/2021 2:03:48 PM	B76961
Naphthalene	ND	2.0		µg/L	1	4/26/2021 2:03:48 PM	B76961
1-Methylnaphthalene	ND	4.0		µg/L	1	4/26/2021 2:03:48 PM	B76961
2-Methylnaphthalene	ND	4.0		µg/L	1	4/26/2021 2:03:48 PM	B76961
Acetone	ND	10		µg/L	1	4/26/2021 2:03:48 PM	B76961
Bromobenzene	ND	1.0		µg/L	1	4/26/2021 2:03:48 PM	B76961
Bromodichloromethane	ND	1.0		µg/L	1	4/26/2021 2:03:48 PM	B76961
Bromoform	ND	1.0		µg/L	1	4/26/2021 2:03:48 PM	B76961
Bromomethane	ND	3.0		µg/L	1	4/26/2021 2:03:48 PM	B76961
2-Butanone	ND	10		µg/L	1	4/26/2021 2:03:48 PM	B76961
Carbon disulfide	ND	10		µg/L	1	4/26/2021 2:03:48 PM	B76961
Carbon Tetrachloride	ND	1.0		µg/L	1	4/26/2021 2:03:48 PM	B76961
Chlorobenzene	ND	1.0		µg/L	1	4/26/2021 2:03:48 PM	B76961
Chloroethane	ND	2.0		µg/L	1	4/26/2021 2:03:48 PM	B76961
Chloroform	ND	1.0		µg/L	1	4/26/2021 2:03:48 PM	B76961
Chloromethane	ND	3.0		µg/L	1	4/26/2021 2:03:48 PM	B76961
2-Chlorotoluene	ND	1.0		µg/L	1	4/26/2021 2:03:48 PM	B76961
4-Chlorotoluene	ND	1.0		µg/L	1	4/26/2021 2:03:48 PM	B76961

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 Quanitative Limit	RL	Reporting Limit
S	% Recovery outside of range due to dilution or matrix		

Hall Environmental Analysis Laboratory, Inc.

CLIENT: Souder Miller & Associates
Client Sample ID: MW-9
Project: Chama Conoco
Collection Date: 4/22/2021 11:30:00 AM
Lab ID: 2104A25-003 **Matrix:** AQUEOUS **Received Date:** 4/22/2021 3:44:00 PM

Analyses	Result	RL	Qual	Units	DF	Date Analyzed	Batch
EPA METHOD 8260B: VOLATILES						Analyst: **BRM**	
cis-1,2-DCE	ND	1.0		µg/L	1	4/26/2021 2:03:48 PM	B76961
cis-1,3-Dichloropropene	ND	1.0		µg/L	1	4/26/2021 2:03:48 PM	B76961
1,2-Dibromo-3-chloropropane	ND	2.0		µg/L	1	4/26/2021 2:03:48 PM	B76961
Dibromochloromethane	ND	1.0		µg/L	1	4/26/2021 2:03:48 PM	B76961
Dibromomethane	ND	1.0		µg/L	1	4/26/2021 2:03:48 PM	B76961
1,2-Dichlorobenzene	ND	1.0		µg/L	1	4/26/2021 2:03:48 PM	B76961
1,3-Dichlorobenzene	ND	1.0		µg/L	1	4/26/2021 2:03:48 PM	B76961
1,4-Dichlorobenzene	ND	1.0		µg/L	1	4/26/2021 2:03:48 PM	B76961
Dichlorodifluoromethane	ND	1.0		µg/L	1	4/26/2021 2:03:48 PM	B76961
1,1-Dichloroethane	ND	1.0		µg/L	1	4/26/2021 2:03:48 PM	B76961
1,1-Dichloroethene	ND	1.0		µg/L	1	4/26/2021 2:03:48 PM	B76961
1,2-Dichloropropane	ND	1.0		µg/L	1	4/26/2021 2:03:48 PM	B76961
1,3-Dichloropropane	ND	1.0		µg/L	1	4/26/2021 2:03:48 PM	B76961
2,2-Dichloropropane	ND	2.0		µg/L	1	4/26/2021 2:03:48 PM	B76961
1,1-Dichloropropene	ND	1.0		µg/L	1	4/26/2021 2:03:48 PM	B76961
Hexachlorobutadiene	ND	1.0		µg/L	1	4/26/2021 2:03:48 PM	B76961
2-Hexanone	ND	10		µg/L	1	4/26/2021 2:03:48 PM	B76961
Isopropylbenzene	ND	1.0		µg/L	1	4/26/2021 2:03:48 PM	B76961
4-Isopropyltoluene	ND	1.0		µg/L	1	4/26/2021 2:03:48 PM	B76961
4-Methyl-2-pentanone	ND	10		µg/L	1	4/26/2021 2:03:48 PM	B76961
Methylene Chloride	ND	3.0		µg/L	1	4/26/2021 2:03:48 PM	B76961
n-Butylbenzene	ND	3.0		µg/L	1	4/26/2021 2:03:48 PM	B76961
n-Propylbenzene	ND	1.0		µg/L	1	4/26/2021 2:03:48 PM	B76961
sec-Butylbenzene	ND	1.0		µg/L	1	4/26/2021 2:03:48 PM	B76961
Styrene	ND	1.0		µg/L	1	4/26/2021 2:03:48 PM	B76961
tert-Butylbenzene	ND	1.0		µg/L	1	4/26/2021 2:03:48 PM	B76961
1,1,1,2-Tetrachloroethane	ND	1.0		µg/L	1	4/26/2021 2:03:48 PM	B76961
1,1,2,2-Tetrachloroethane	ND	2.0		µg/L	1	4/26/2021 2:03:48 PM	B76961
Tetrachloroethene (PCE)	ND	1.0		µg/L	1	4/26/2021 2:03:48 PM	B76961
trans-1,2-DCE	ND	1.0		µg/L	1	4/26/2021 2:03:48 PM	B76961
trans-1,3-Dichloropropene	ND	1.0		µg/L	1	4/26/2021 2:03:48 PM	B76961
1,2,3-Trichlorobenzene	ND	1.0		µg/L	1	4/26/2021 2:03:48 PM	B76961
1,2,4-Trichlorobenzene	ND	1.0		µg/L	1	4/26/2021 2:03:48 PM	B76961
1,1,1-Trichloroethane	ND	1.0		µg/L	1	4/26/2021 2:03:48 PM	B76961
1,1,2-Trichloroethane	ND	1.0		µg/L	1	4/26/2021 2:03:48 PM	B76961
Trichloroethene (TCE)	ND	1.0		µg/L	1	4/26/2021 2:03:48 PM	B76961
Trichlorofluoromethane	ND	1.0		µg/L	1	4/26/2021 2:03:48 PM	B76961
1,2,3-Trichloropropane	ND	2.0		µg/L	1	4/26/2021 2:03:48 PM	B76961
Vinyl chloride	ND	1.0		µg/L	1	4/26/2021 2:03:48 PM	B76961

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 Quanitative Limit	RL	Reporting Limit
S	% Recovery outside of range due to dilution or matrix		

Hall Environmental Analysis Laboratory, Inc.

CLIENT: Souder Miller & Associates
Client Sample ID: MW-9
Project: Chama Conoco
Collection Date: 4/22/2021 11:30:00 AM
Lab ID: 2104A25-003 **Matrix:** AQUEOUS **Received Date:** 4/22/2021 3:44:00 PM

Analyses	Result	RL	Qual	Units	DF	Date Analyzed	Batch
EPA METHOD 8260B: VOLATILES						Analyst: **BRM**	
Xylenes, Total	ND	1.5		µg/L	1	4/26/2021 2:03:48 PM	B76961
Surr: 1,2-Dichloroethane-d4	107	70-130		%Rec	1	4/26/2021 2:03:48 PM	B76961
Surr: 4-Bromofluorobenzene	102	70-130		%Rec	1	4/26/2021 2:03:48 PM	B76961
Surr: Dibromofluoromethane	110	70-130		%Rec	1	4/26/2021 2:03:48 PM	B76961
Surr: Toluene-d8	101	70-130		%Rec	1	4/26/2021 2:03:48 PM	B76961

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 Quanitative Limit	RL	Reporting Limit
S	% Recovery outside of range due to dilution or matrix		

Hall Environmental Analysis Laboratory, Inc.

CLIENT: Souder Miller & Associates
Client Sample ID: MW-11
Project: Chama Conoco
Collection Date: 4/22/2021 12:00:00 PM
Lab ID: 2104A25-004 **Matrix:** AQUEOUS **Received Date:** 4/22/2021 3:44:00 PM

Analyses	Result	RL	Qual	Units	DF	Date Analyzed	Batch
EPA METHOD 300.0: ANIONS						Analyst: **CAS**	
Nitrogen, Nitrate (As N)	ND	0.50		mg/L	5	4/23/2021 1:52:54 AM	A76894
Sulfate	21	2.5		mg/L	5	4/23/2021 1:52:54 AM	A76894
SM2540C MOD: TOTAL DISSOLVED SOLIDS						Analyst: **KS**	
Total Dissolved Solids	500	100	D	mg/L	1	4/29/2021 10:43:00 AM	59650
EPA METHOD 8015M/D: DIESEL RANGE						Analyst: **mb**	
Diesel Range Organics (DRO)	ND	1.0		mg/L	1	4/26/2021 1:20:15 PM	59606
Motor Oil Range Organics (MRO)	ND	5.0		mg/L	1	4/26/2021 1:20:15 PM	59606
Surr: DNOP	96.2	63.7-164		%Rec	1	4/26/2021 1:20:15 PM	59606
EPA METHOD 8015D: GASOLINE RANGE						Analyst: **CCM**	
Gasoline Range Organics (GRO)	0.17	0.050		mg/L	1	4/24/2021 12:27:00 AM	G76911
Surr: BFB	113	68.5-136		%Rec	1	4/24/2021 12:27:00 AM	G76911
EPA METHOD 8260B: VOLATILES						Analyst: **BRM**	
Benzene	1.7	1.0		µg/L	1	4/26/2021 2:30:58 PM	B76961
Toluene	ND	1.0		µg/L	1	4/26/2021 2:30:58 PM	B76961
Ethylbenzene	ND	1.0		µg/L	1	4/26/2021 2:30:58 PM	B76961
Methyl tert-butyl ether (MTBE)	ND	1.0		µg/L	1	4/26/2021 2:30:58 PM	B76961
1,2,4-Trimethylbenzene	ND	1.0		µg/L	1	4/26/2021 2:30:58 PM	B76961
1,3,5-Trimethylbenzene	ND	1.0		µg/L	1	4/26/2021 2:30:58 PM	B76961
1,2-Dichloroethane (EDC)	ND	1.0		µg/L	1	4/26/2021 2:30:58 PM	B76961
1,2-Dibromoethane (EDB)	ND	1.0		µg/L	1	4/26/2021 2:30:58 PM	B76961
Naphthalene	ND	2.0		µg/L	1	4/26/2021 2:30:58 PM	B76961
1-Methylnaphthalene	ND	4.0		µg/L	1	4/26/2021 2:30:58 PM	B76961
2-Methylnaphthalene	ND	4.0		µg/L	1	4/26/2021 2:30:58 PM	B76961
Acetone	ND	10		µg/L	1	4/26/2021 2:30:58 PM	B76961
Bromobenzene	ND	1.0		µg/L	1	4/26/2021 2:30:58 PM	B76961
Bromodichloromethane	ND	1.0		µg/L	1	4/26/2021 2:30:58 PM	B76961
Bromoform	ND	1.0		µg/L	1	4/26/2021 2:30:58 PM	B76961
Bromomethane	ND	3.0		µg/L	1	4/26/2021 2:30:58 PM	B76961
2-Butanone	ND	10		µg/L	1	4/26/2021 2:30:58 PM	B76961
Carbon disulfide	ND	10		µg/L	1	4/26/2021 2:30:58 PM	B76961
Carbon Tetrachloride	ND	1.0		µg/L	1	4/26/2021 2:30:58 PM	B76961
Chlorobenzene	ND	1.0		µg/L	1	4/26/2021 2:30:58 PM	B76961
Chloroethane	ND	2.0		µg/L	1	4/26/2021 2:30:58 PM	B76961
Chloroform	ND	1.0		µg/L	1	4/26/2021 2:30:58 PM	B76961
Chloromethane	ND	3.0		µg/L	1	4/26/2021 2:30:58 PM	B76961
2-Chlorotoluene	ND	1.0		µg/L	1	4/26/2021 2:30:58 PM	B76961
4-Chlorotoluene	ND	1.0		µg/L	1	4/26/2021 2:30:58 PM	B76961

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 Quanitative Limit	RL	Reporting Limit
S	% Recovery outside of range due to dilution or matrix		

Hall Environmental Analysis Laboratory, Inc.

CLIENT: Souder Miller & Associates
Client Sample ID: MW-11
Project: Chama Conoco
Collection Date: 4/22/2021 12:00:00 PM
Lab ID: 2104A25-004 **Matrix:** AQUEOUS **Received Date:** 4/22/2021 3:44:00 PM

Analyses	Result	RL	Qual	Units	DF	Date Analyzed	Batch
EPA METHOD 8260B: VOLATILES						Analyst: **BRM**	
cis-1,2-DCE	ND	1.0		µg/L	1	4/26/2021 2:30:58 PM	B76961
cis-1,3-Dichloropropene	ND	1.0		µg/L	1	4/26/2021 2:30:58 PM	B76961
1,2-Dibromo-3-chloropropane	ND	2.0		µg/L	1	4/26/2021 2:30:58 PM	B76961
Dibromochloromethane	ND	1.0		µg/L	1	4/26/2021 2:30:58 PM	B76961
Dibromomethane	ND	1.0		µg/L	1	4/26/2021 2:30:58 PM	B76961
1,2-Dichlorobenzene	ND	1.0		µg/L	1	4/26/2021 2:30:58 PM	B76961
1,3-Dichlorobenzene	ND	1.0		µg/L	1	4/26/2021 2:30:58 PM	B76961
1,4-Dichlorobenzene	ND	1.0		µg/L	1	4/26/2021 2:30:58 PM	B76961
Dichlorodifluoromethane	ND	1.0		µg/L	1	4/26/2021 2:30:58 PM	B76961
1,1-Dichloroethane	ND	1.0		µg/L	1	4/26/2021 2:30:58 PM	B76961
1,1-Dichloroethene	ND	1.0		µg/L	1	4/26/2021 2:30:58 PM	B76961
1,2-Dichloropropane	ND	1.0		µg/L	1	4/26/2021 2:30:58 PM	B76961
1,3-Dichloropropane	ND	1.0		µg/L	1	4/26/2021 2:30:58 PM	B76961
2,2-Dichloropropane	ND	2.0		µg/L	1	4/26/2021 2:30:58 PM	B76961
1,1-Dichloropropene	ND	1.0		µg/L	1	4/26/2021 2:30:58 PM	B76961
Hexachlorobutadiene	ND	1.0		µg/L	1	4/26/2021 2:30:58 PM	B76961
2-Hexanone	ND	10		µg/L	1	4/26/2021 2:30:58 PM	B76961
Isopropylbenzene	ND	1.0		µg/L	1	4/26/2021 2:30:58 PM	B76961
4-Isopropyltoluene	ND	1.0		µg/L	1	4/26/2021 2:30:58 PM	B76961
4-Methyl-2-pentanone	ND	10		µg/L	1	4/26/2021 2:30:58 PM	B76961
Methylene Chloride	ND	3.0		µg/L	1	4/26/2021 2:30:58 PM	B76961
n-Butylbenzene	ND	3.0		µg/L	1	4/26/2021 2:30:58 PM	B76961
n-Propylbenzene	ND	1.0		µg/L	1	4/26/2021 2:30:58 PM	B76961
sec-Butylbenzene	1.5	1.0		µg/L	1	4/26/2021 2:30:58 PM	B76961
Styrene	ND	1.0		µg/L	1	4/26/2021 2:30:58 PM	B76961
tert-Butylbenzene	1.2	1.0		µg/L	1	4/26/2021 2:30:58 PM	B76961
1,1,1,2-Tetrachloroethane	ND	1.0		µg/L	1	4/26/2021 2:30:58 PM	B76961
1,1,2,2-Tetrachloroethane	ND	2.0		µg/L	1	4/26/2021 2:30:58 PM	B76961
Tetrachloroethene (PCE)	ND	1.0		µg/L	1	4/26/2021 2:30:58 PM	B76961
trans-1,2-DCE	ND	1.0		µg/L	1	4/26/2021 2:30:58 PM	B76961
trans-1,3-Dichloropropene	ND	1.0		µg/L	1	4/26/2021 2:30:58 PM	B76961
1,2,3-Trichlorobenzene	ND	1.0		µg/L	1	4/26/2021 2:30:58 PM	B76961
1,2,4-Trichlorobenzene	ND	1.0		µg/L	1	4/26/2021 2:30:58 PM	B76961
1,1,1-Trichloroethane	ND	1.0		µg/L	1	4/26/2021 2:30:58 PM	B76961
1,1,2-Trichloroethane	ND	1.0		µg/L	1	4/26/2021 2:30:58 PM	B76961
Trichloroethene (TCE)	ND	1.0		µg/L	1	4/26/2021 2:30:58 PM	B76961
Trichlorofluoromethane	ND	1.0		µg/L	1	4/26/2021 2:30:58 PM	B76961
1,2,3-Trichloropropane	ND	2.0		µg/L	1	4/26/2021 2:30:58 PM	B76961
Vinyl chloride	ND	1.0		µg/L	1	4/26/2021 2:30:58 PM	B76961

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 Quanitative Limit	RL	Reporting Limit
S	% Recovery outside of range due to dilution or matrix		

Hall Environmental Analysis Laboratory, Inc.

CLIENT: Souder Miller & Associates
Client Sample ID: MW-11
Project: Chama Conoco
Collection Date: 4/22/2021 12:00:00 PM
Lab ID: 2104A25-004 **Matrix:** AQUEOUS **Received Date:** 4/22/2021 3:44:00 PM

Analyses	Result	RL	Qual	Units	DF	Date Analyzed	Batch
EPA METHOD 8260B: VOLATILES						Analyst: **BRM**	
Xylenes, Total	ND	1.5		µg/L	1	4/26/2021 2:30:58 PM	B76961
Surr: 1,2-Dichloroethane-d4	109	70-130		%Rec	1	4/26/2021 2:30:58 PM	B76961
Surr: 4-Bromofluorobenzene	99.5	70-130		%Rec	1	4/26/2021 2:30:58 PM	B76961
Surr: Dibromofluoromethane	108	70-130		%Rec	1	4/26/2021 2:30:58 PM	B76961
Surr: Toluene-d8	99.5	70-130		%Rec	1	4/26/2021 2:30:58 PM	B76961

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 Quanitative Limit	RL	Reporting Limit
S	% Recovery outside of range due to dilution or matrix		

Hall Environmental Analysis Laboratory, Inc.

CLIENT: Souder Miller & Associates
Client Sample ID: MW-12
Project: Chama Conoco
Collection Date: 4/22/2021 11:00:00 AM
Lab ID: 2104A25-005 **Matrix:** AQUEOUS **Received Date:** 4/22/2021 3:44:00 PM

Analyses	Result	RL	Qual	Units	DF	Date Analyzed	Batch
EPA METHOD 300.0: ANIONS						Analyst: **CAS**	
Nitrogen, Nitrate (As N)	ND	0.50		mg/L	5	4/23/2021 2:17:44 AM	A76894
Sulfate	200	2.5		mg/L	5	4/23/2021 2:17:44 AM	A76894
SM2540C MOD: TOTAL DISSOLVED SOLIDS						Analyst: **KS**	
Total Dissolved Solids	875	100	*D	mg/L	1	4/29/2021 10:43:00 AM	59650
EPA METHOD 8015M/D: DIESEL RANGE						Analyst: **mb**	
Diesel Range Organics (DRO)	ND	1.0		mg/L	1	4/26/2021 1:44:12 PM	59606
Motor Oil Range Organics (MRO)	ND	5.0		mg/L	1	4/26/2021 1:44:12 PM	59606
Surr: DNOP	92.0	63.7-164		%Rec	1	4/26/2021 1:44:12 PM	59606
EPA METHOD 8015D: GASOLINE RANGE						Analyst: **CCM**	
Gasoline Range Organics (GRO)	ND	0.050		mg/L	1	4/24/2021 12:47:00 AM	G76911
Surr: BFB	103	68.5-136		%Rec	1	4/24/2021 12:47:00 AM	G76911
EPA METHOD 8260B: VOLATILES						Analyst: **BRM**	
Benzene	ND	1.0		µg/L	1	4/26/2021 2:58:07 PM	B76961
Toluene	ND	1.0		µg/L	1	4/26/2021 2:58:07 PM	B76961
Ethylbenzene	ND	1.0		µg/L	1	4/26/2021 2:58:07 PM	B76961
Methyl tert-butyl ether (MTBE)	ND	1.0		µg/L	1	4/26/2021 2:58:07 PM	B76961
1,2,4-Trimethylbenzene	ND	1.0		µg/L	1	4/26/2021 2:58:07 PM	B76961
1,3,5-Trimethylbenzene	ND	1.0		µg/L	1	4/26/2021 2:58:07 PM	B76961
1,2-Dichloroethane (EDC)	ND	1.0		µg/L	1	4/26/2021 2:58:07 PM	B76961
1,2-Dibromoethane (EDB)	ND	1.0		µg/L	1	4/26/2021 2:58:07 PM	B76961
Naphthalene	ND	2.0		µg/L	1	4/26/2021 2:58:07 PM	B76961
1-Methylnaphthalene	ND	4.0		µg/L	1	4/26/2021 2:58:07 PM	B76961
2-Methylnaphthalene	ND	4.0		µg/L	1	4/26/2021 2:58:07 PM	B76961
Acetone	ND	10		µg/L	1	4/26/2021 2:58:07 PM	B76961
Bromobenzene	ND	1.0		µg/L	1	4/26/2021 2:58:07 PM	B76961
Bromodichloromethane	ND	1.0		µg/L	1	4/26/2021 2:58:07 PM	B76961
Bromoform	ND	1.0		µg/L	1	4/26/2021 2:58:07 PM	B76961
Bromomethane	ND	3.0		µg/L	1	4/26/2021 2:58:07 PM	B76961
2-Butanone	ND	10		µg/L	1	4/26/2021 2:58:07 PM	B76961
Carbon disulfide	ND	10		µg/L	1	4/26/2021 2:58:07 PM	B76961
Carbon Tetrachloride	ND	1.0		µg/L	1	4/26/2021 2:58:07 PM	B76961
Chlorobenzene	ND	1.0		µg/L	1	4/26/2021 2:58:07 PM	B76961
Chloroethane	ND	2.0		µg/L	1	4/26/2021 2:58:07 PM	B76961
Chloroform	ND	1.0		µg/L	1	4/26/2021 2:58:07 PM	B76961
Chloromethane	ND	3.0		µg/L	1	4/26/2021 2:58:07 PM	B76961
2-Chlorotoluene	ND	1.0		µg/L	1	4/26/2021 2:58:07 PM	B76961
4-Chlorotoluene	ND	1.0		µg/L	1	4/26/2021 2:58:07 PM	B76961

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 Quanitative Limit	RL	Reporting Limit
S	% Recovery outside of range due to dilution or matrix		

Hall Environmental Analysis Laboratory, Inc.

CLIENT: Souder Miller & Associates
Client Sample ID: MW-12
Project: Chama Conoco
Collection Date: 4/22/2021 11:00:00 AM
Lab ID: 2104A25-005 **Matrix:** AQUEOUS **Received Date:** 4/22/2021 3:44:00 PM

Analyses	Result	RL	Qual	Units	DF	Date Analyzed	Batch
EPA METHOD 8260B: VOLATILES						Analyst: **BRM**	
cis-1,2-DCE	ND	1.0		µg/L	1	4/26/2021 2:58:07 PM	B76961
cis-1,3-Dichloropropene	ND	1.0		µg/L	1	4/26/2021 2:58:07 PM	B76961
1,2-Dibromo-3-chloropropane	ND	2.0		µg/L	1	4/26/2021 2:58:07 PM	B76961
Dibromochloromethane	ND	1.0		µg/L	1	4/26/2021 2:58:07 PM	B76961
Dibromomethane	ND	1.0		µg/L	1	4/26/2021 2:58:07 PM	B76961
1,2-Dichlorobenzene	ND	1.0		µg/L	1	4/26/2021 2:58:07 PM	B76961
1,3-Dichlorobenzene	ND	1.0		µg/L	1	4/26/2021 2:58:07 PM	B76961
1,4-Dichlorobenzene	ND	1.0		µg/L	1	4/26/2021 2:58:07 PM	B76961
Dichlorodifluoromethane	ND	1.0		µg/L	1	4/26/2021 2:58:07 PM	B76961
1,1-Dichloroethane	ND	1.0		µg/L	1	4/26/2021 2:58:07 PM	B76961
1,1-Dichloroethene	ND	1.0		µg/L	1	4/26/2021 2:58:07 PM	B76961
1,2-Dichloropropane	ND	1.0		µg/L	1	4/26/2021 2:58:07 PM	B76961
1,3-Dichloropropane	ND	1.0		µg/L	1	4/26/2021 2:58:07 PM	B76961
2,2-Dichloropropane	ND	2.0		µg/L	1	4/26/2021 2:58:07 PM	B76961
1,1-Dichloropropene	ND	1.0		µg/L	1	4/26/2021 2:58:07 PM	B76961
Hexachlorobutadiene	ND	1.0		µg/L	1	4/26/2021 2:58:07 PM	B76961
2-Hexanone	ND	10		µg/L	1	4/26/2021 2:58:07 PM	B76961
Isopropylbenzene	ND	1.0		µg/L	1	4/26/2021 2:58:07 PM	B76961
4-Isopropyltoluene	ND	1.0		µg/L	1	4/26/2021 2:58:07 PM	B76961
4-Methyl-2-pentanone	ND	10		µg/L	1	4/26/2021 2:58:07 PM	B76961
Methylene Chloride	ND	3.0		µg/L	1	4/26/2021 2:58:07 PM	B76961
n-Butylbenzene	ND	3.0		µg/L	1	4/26/2021 2:58:07 PM	B76961
n-Propylbenzene	ND	1.0		µg/L	1	4/26/2021 2:58:07 PM	B76961
sec-Butylbenzene	ND	1.0		µg/L	1	4/26/2021 2:58:07 PM	B76961
Styrene	ND	1.0		µg/L	1	4/26/2021 2:58:07 PM	B76961
tert-Butylbenzene	ND	1.0		µg/L	1	4/26/2021 2:58:07 PM	B76961
1,1,1,2-Tetrachloroethane	ND	1.0		µg/L	1	4/26/2021 2:58:07 PM	B76961
1,1,2,2-Tetrachloroethane	ND	2.0		µg/L	1	4/26/2021 2:58:07 PM	B76961
Tetrachloroethene (PCE)	ND	1.0		µg/L	1	4/26/2021 2:58:07 PM	B76961
trans-1,2-DCE	ND	1.0		µg/L	1	4/26/2021 2:58:07 PM	B76961
trans-1,3-Dichloropropene	ND	1.0		µg/L	1	4/26/2021 2:58:07 PM	B76961
1,2,3-Trichlorobenzene	ND	1.0		µg/L	1	4/26/2021 2:58:07 PM	B76961
1,2,4-Trichlorobenzene	ND	1.0		µg/L	1	4/26/2021 2:58:07 PM	B76961
1,1,1-Trichloroethane	ND	1.0		µg/L	1	4/26/2021 2:58:07 PM	B76961
1,1,2-Trichloroethane	ND	1.0		µg/L	1	4/26/2021 2:58:07 PM	B76961
Trichloroethene (TCE)	ND	1.0		µg/L	1	4/26/2021 2:58:07 PM	B76961
Trichlorofluoromethane	ND	1.0		µg/L	1	4/26/2021 2:58:07 PM	B76961
1,2,3-Trichloropropane	ND	2.0		µg/L	1	4/26/2021 2:58:07 PM	B76961
Vinyl chloride	ND	1.0		µg/L	1	4/26/2021 2:58:07 PM	B76961

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 Quanitative Limit	RL	Reporting Limit
S	% Recovery outside of range due to dilution or matrix		

Hall Environmental Analysis Laboratory, Inc.

CLIENT: Souder Miller & Associates
Client Sample ID: MW-12
Project: Chama Conoco
Collection Date: 4/22/2021 11:00:00 AM
Lab ID: 2104A25-005 **Matrix:** AQUEOUS **Received Date:** 4/22/2021 3:44:00 PM

Analyses	Result	RL	Qual	Units	DF	Date Analyzed	Batch
EPA METHOD 8260B: VOLATILES						Analyst: **BRM**	
Xylenes, Total	ND	1.5		µg/L	1	4/26/2021 2:58:07 PM	B76961
Surr: 1,2-Dichloroethane-d4	110	70-130		%Rec	1	4/26/2021 2:58:07 PM	B76961
Surr: 4-Bromofluorobenzene	103	70-130		%Rec	1	4/26/2021 2:58:07 PM	B76961
Surr: Dibromofluoromethane	115	70-130		%Rec	1	4/26/2021 2:58:07 PM	B76961
Surr: Toluene-d8	99.2	70-130		%Rec	1	4/26/2021 2:58:07 PM	B76961

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 Quanitative Limit	RL	Reporting Limit
S	% Recovery outside of range due to dilution or matrix		

Hall Environmental Analysis Laboratory, Inc.

CLIENT: Souder Miller & Associates
Client Sample ID: Trip Blank
Project: Chama Conoco
Collection Date:
Lab ID: 2104A25-006
Matrix: TRIP BLANK
Received Date: 4/22/2021 3:44:00 PM

Analyses	Result	RL	Qual	Units	DF	Date Analyzed	Batch
EPA METHOD 8260B: VOLATILES						Analyst: **BRM**	
Benzene	ND	1.0		µg/L	1	4/26/2021 3:25:15 PM	B76961
Toluene	ND	1.0		µg/L	1	4/26/2021 3:25:15 PM	B76961
Ethylbenzene	ND	1.0		µg/L	1	4/26/2021 3:25:15 PM	B76961
Methyl tert-butyl ether (MTBE)	ND	1.0		µg/L	1	4/26/2021 3:25:15 PM	B76961
1,2,4-Trimethylbenzene	ND	1.0		µg/L	1	4/26/2021 3:25:15 PM	B76961
1,3,5-Trimethylbenzene	ND	1.0		µg/L	1	4/26/2021 3:25:15 PM	B76961
1,2-Dichloroethane (EDC)	ND	1.0		µg/L	1	4/26/2021 3:25:15 PM	B76961
1,2-Dibromoethane (EDB)	ND	1.0		µg/L	1	4/26/2021 3:25:15 PM	B76961
Naphthalene	ND	2.0		µg/L	1	4/26/2021 3:25:15 PM	B76961
1-Methylnaphthalene	ND	4.0		µg/L	1	4/26/2021 3:25:15 PM	B76961
2-Methylnaphthalene	ND	4.0		µg/L	1	4/26/2021 3:25:15 PM	B76961
Acetone	ND	10		µg/L	1	4/26/2021 3:25:15 PM	B76961
Bromobenzene	ND	1.0		µg/L	1	4/26/2021 3:25:15 PM	B76961
Bromodichloromethane	ND	1.0		µg/L	1	4/26/2021 3:25:15 PM	B76961
Bromoform	ND	1.0		µg/L	1	4/26/2021 3:25:15 PM	B76961
Bromomethane	ND	3.0		µg/L	1	4/26/2021 3:25:15 PM	B76961
2-Butanone	ND	10		µg/L	1	4/26/2021 3:25:15 PM	B76961
Carbon disulfide	ND	10		µg/L	1	4/26/2021 3:25:15 PM	B76961
Carbon Tetrachloride	ND	1.0		µg/L	1	4/26/2021 3:25:15 PM	B76961
Chlorobenzene	ND	1.0		µg/L	1	4/26/2021 3:25:15 PM	B76961
Chloroethane	ND	2.0		µg/L	1	4/26/2021 3:25:15 PM	B76961
Chloroform	ND	1.0		µg/L	1	4/26/2021 3:25:15 PM	B76961
Chloromethane	ND	3.0		µg/L	1	4/26/2021 3:25:15 PM	B76961
2-Chlorotoluene	ND	1.0		µg/L	1	4/26/2021 3:25:15 PM	B76961
4-Chlorotoluene	ND	1.0		µg/L	1	4/26/2021 3:25:15 PM	B76961
cis-1,2-DCE	ND	1.0		µg/L	1	4/26/2021 3:25:15 PM	B76961
cis-1,3-Dichloropropene	ND	1.0		µg/L	1	4/26/2021 3:25:15 PM	B76961
1,2-Dibromo-3-chloropropane	ND	2.0		µg/L	1	4/26/2021 3:25:15 PM	B76961
Dibromochloromethane	ND	1.0		µg/L	1	4/26/2021 3:25:15 PM	B76961
Dibromomethane	ND	1.0		µg/L	1	4/26/2021 3:25:15 PM	B76961
1,2-Dichlorobenzene	ND	1.0		µg/L	1	4/26/2021 3:25:15 PM	B76961
1,3-Dichlorobenzene	ND	1.0		µg/L	1	4/26/2021 3:25:15 PM	B76961
1,4-Dichlorobenzene	ND	1.0		µg/L	1	4/26/2021 3:25:15 PM	B76961
Dichlorodifluoromethane	ND	1.0		µg/L	1	4/26/2021 3:25:15 PM	B76961
1,1-Dichloroethane	ND	1.0		µg/L	1	4/26/2021 3:25:15 PM	B76961
1,1-Dichloroethene	ND	1.0		µg/L	1	4/26/2021 3:25:15 PM	B76961
1,2-Dichloropropane	ND	1.0		µg/L	1	4/26/2021 3:25:15 PM	B76961
1,3-Dichloropropane	ND	1.0		µg/L	1	4/26/2021 3:25:15 PM	B76961
2,2-Dichloropropane	ND	2.0		µg/L	1	4/26/2021 3:25:15 PM	B76961

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 Quanitative Limit	RL	Reporting Limit
S	% Recovery outside of range due to dilution or matrix		

Hall Environmental Analysis Laboratory, Inc.

CLIENT: Souder Miller & Associates
Client Sample ID: Trip Blank
Project: Chama Conoco
Collection Date:
Lab ID: 2104A25-006
Matrix: TRIP BLANK
Received Date: 4/22/2021 3:44:00 PM

Analyses	Result	RL	Qual	Units	DF	Date Analyzed	Batch
EPA METHOD 8260B: VOLATILES						Analyst: **BRM**	
1,1-Dichloropropene	ND	1.0		µg/L	1	4/26/2021 3:25:15 PM	B76961
Hexachlorobutadiene	ND	1.0		µg/L	1	4/26/2021 3:25:15 PM	B76961
2-Hexanone	ND	10		µg/L	1	4/26/2021 3:25:15 PM	B76961
Isopropylbenzene	ND	1.0		µg/L	1	4/26/2021 3:25:15 PM	B76961
4-Isopropyltoluene	ND	1.0		µg/L	1	4/26/2021 3:25:15 PM	B76961
4-Methyl-2-pentanone	ND	10		µg/L	1	4/26/2021 3:25:15 PM	B76961
Methylene Chloride	ND	3.0		µg/L	1	4/26/2021 3:25:15 PM	B76961
n-Butylbenzene	ND	3.0		µg/L	1	4/26/2021 3:25:15 PM	B76961
n-Propylbenzene	ND	1.0		µg/L	1	4/26/2021 3:25:15 PM	B76961
sec-Butylbenzene	ND	1.0		µg/L	1	4/26/2021 3:25:15 PM	B76961
Styrene	ND	1.0		µg/L	1	4/26/2021 3:25:15 PM	B76961
tert-Butylbenzene	ND	1.0		µg/L	1	4/26/2021 3:25:15 PM	B76961
1,1,1,2-Tetrachloroethane	ND	1.0		µg/L	1	4/26/2021 3:25:15 PM	B76961
1,1,2,2-Tetrachloroethane	ND	2.0		µg/L	1	4/26/2021 3:25:15 PM	B76961
Tetrachloroethene (PCE)	ND	1.0		µg/L	1	4/26/2021 3:25:15 PM	B76961
trans-1,2-DCE	ND	1.0		µg/L	1	4/26/2021 3:25:15 PM	B76961
trans-1,3-Dichloropropene	ND	1.0		µg/L	1	4/26/2021 3:25:15 PM	B76961
1,2,3-Trichlorobenzene	ND	1.0		µg/L	1	4/26/2021 3:25:15 PM	B76961
1,2,4-Trichlorobenzene	ND	1.0		µg/L	1	4/26/2021 3:25:15 PM	B76961
1,1,1-Trichloroethane	ND	1.0		µg/L	1	4/26/2021 3:25:15 PM	B76961
1,1,2-Trichloroethane	ND	1.0		µg/L	1	4/26/2021 3:25:15 PM	B76961
Trichloroethene (TCE)	ND	1.0		µg/L	1	4/26/2021 3:25:15 PM	B76961
Trichlorofluoromethane	ND	1.0		µg/L	1	4/26/2021 3:25:15 PM	B76961
1,2,3-Trichloropropane	ND	2.0		µg/L	1	4/26/2021 3:25:15 PM	B76961
Vinyl chloride	ND	1.0		µg/L	1	4/26/2021 3:25:15 PM	B76961
Xylenes, Total	ND	1.5		µg/L	1	4/26/2021 3:25:15 PM	B76961
Surr: 1,2-Dichloroethane-d4	112	70-130		%Rec	1	4/26/2021 3:25:15 PM	B76961
Surr: 4-Bromofluorobenzene	105	70-130		%Rec	1	4/26/2021 3:25:15 PM	B76961
Surr: Dibromofluoromethane	111	70-130		%Rec	1	4/26/2021 3:25:15 PM	B76961
Surr: Toluene-d8	98.8	70-130		%Rec	1	4/26/2021 3:25:15 PM	B76961

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 Quanitative Limit	RL	Reporting Limit
S	% Recovery outside of range due to dilution or matrix		

ANALYTICAL REPORT

May 05, 2021

Hall Environmental Analysis Laboratory

Sample Delivery Group:	L1344224
Samples Received:	04/27/2021
Project Number:	
Description:	

Report To: Jackie Bolte
4901 Hawkins NE
Albuquerque, NM 87109

Entire Report Reviewed By:

John Hawkins
Project Manager

Pace Analytical National
12065 Lebanon Rd Mount Juliet, TN 37122 615-758-5858 800-767-5859 www.pacenational.com

TABLE OF CONTENTS

SAMPLE SUMMARY

2104A25-001D MW-6 L1344224-01 WW

			Collected by	Collected date/time	Received date/time	
				04/22/21 09:50	04/27/21 09:15	
Method	Batch	Dilution	Preparation date/time	Analysis date/time	Analyst	Location
Wet Chemistry by Method 410.4	WG1663817	1	05/04/21 10:19	05/04/21 16:51	LRP	Mt. Juliet, TN

2104A25-002D MW-8 L1344224-02 WW

			Collected by	Collected date/time	Received date/time	
				04/22/21 10:30	04/27/21 09:15	
Method	Batch	Dilution	Preparation date/time	Analysis date/time	Analyst	Location
Wet Chemistry by Method 410.4	WG1663817	1	05/04/21 10:19	05/04/21 16:51	LRP	Mt. Juliet, TN

2104A25-003D MW-9 L1344224-03 WW

			Collected by	Collected date/time	Received date/time	
				04/22/21 11:30	04/27/21 09:15	
Method	Batch	Dilution	Preparation date/time	Analysis date/time	Analyst	Location
Wet Chemistry by Method 410.4	WG1663817	1	05/04/21 10:19	05/04/21 16:51	LRP	Mt. Juliet, TN

2104A25-004D MW-11 L1344224-04 WW

			Collected by	Collected date/time	Received date/time	
				04/22/21 12:00	04/27/21 09:15	
Method	Batch	Dilution	Preparation date/time	Analysis date/time	Analyst	Location
Wet Chemistry by Method 410.4	WG1663817	1	05/04/21 10:19	05/04/21 16:51	LRP	Mt. Juliet, TN

2104A25-005D MW-12 L1344224-05 WW

			Collected by	Collected date/time	Received date/time	
				04/22/21 11:00	04/27/21 09:15	
Method	Batch	Dilution	Preparation date/time	Analysis date/time	Analyst	Location
Wet Chemistry by Method 410.4	WG1663817	1	05/04/21 10:19	05/04/21 16:51	LRP	Mt. Juliet, TN

CASE NARRATIVE

All sample aliquots were received at the correct temperature, in the proper containers, with the appropriate preservatives, and within method specified holding times, unless qualified or notated within the report. Where applicable, all MDL (LOD) and RDL (LOQ) values reported for environmental samples have been corrected for the dilution factor used in the analysis. All Method and Batch Quality Control are within established criteria except where addressed in this case narrative, a non-conformance form or properly qualified within the sample results. By my digital signature below, I affirm to the best of my knowledge, all problems/anomalies observed by the laboratory as having the potential to affect the quality of the data have been identified by the laboratory, and no information or data have been knowingly withheld that would affect the quality of the data.

John Hawkins
Project Manager

Wet Chemistry by Method 410.4

Analyte	Result	Qualifier	RDL	Dilution	Analysis	Batch
	mg/l		mg/l		date / time	
COD	99.0		20.0	1	05/04/2021 16:51	WG1663817

Wet Chemistry by Method 410.4

Analyte	Result	Qualifier	RDL	Dilution	Analysis	Batch
	mg/l		mg/l		date / time	
COD	32.3		20.0	1	05/04/2021 16:51	WG1663817

Wet Chemistry by Method 410.4

Analyte	Result	Qualifier	RDL	Dilution	Analysis	Batch
	mg/l		mg/l		date / time	
COD	71.4		20.0	1	05/04/2021 16:51	WG1663817

Wet Chemistry by Method 410.4

Analyte	Result	Qualifier	RDL	Dilution	Analysis	Batch
	mg/l		mg/l		date / time	
COD	34.6		20.0	1	05/04/2021 16:51	WG1663817

Wet Chemistry by Method 410.4

Analyte	Result	Qualifier	RDL	Dilution	Analysis	Batch
	mg/l		mg/l		date / time	
COD	24.2		20.0	1	05/04/2021 16:51	WG1663817

Method Blank (MB)

(MB) R3650264-1 05/04/21 16:47

Analyte	MB Result mg/l	MB Qualifier	MB MDL mg/l	MB RDL mg/l
COD	U		11.7	20.0

L1343679-01 Original Sample (OS) • Duplicate (DUP)

(OS) L1343679-01 05/04/21 16:48 • (DUP) R3650264-5 05/04/21 16:48

Analyte	Original Result mg/l	DUP Result mg/l	Dilution	DUP RPD %	DUP Qualifier	DUP RPD Limits %
COD	87.2	92.3	1	5.61		20

L1343991-01 Original Sample (OS) • Duplicate (DUP)

(OS) L1343991-01 05/04/21 16:49 • (DUP) R3650264-6 05/04/21 16:50

Analyte	Original Result mg/l	DUP Result mg/l	Dilution	DUP RPD %	DUP Qualifier	DUP RPD Limits %
COD	ND	ND	1	0.000		20

Laboratory Control Sample (LCS)

(LCS) R3650264-2 05/04/21 16:47

Analyte	Spike Amount mg/l	LCS Result mg/l	LCS Rec. %	Rec. Limits %	LCS Qualifier
COD	500	503	101	90.0-110	

L1343627-01 Original Sample (OS) • Matrix Spike (MS) • Matrix Spike Duplicate (MSD)

(OS) L1343627-01 05/04/21 16:48 • (MS) R3650264-3 05/04/21 16:48 • (MSD) R3650264-4 05/04/21 16:48

Analyte	Spike Amount mg/l	Original Result mg/l	MS Result mg/l	MSD Result mg/l	MS Rec. %	MSD Rec. %	Dilution	Rec. Limits %	MS Qualifier	MSD Qualifier	RPD %	RPD Limits %
COD	500	26.8	564	575	107	110	1	80.0-120			1.89	20

GLOSSARY OF TERMS

Guide to Reading and Understanding Your Laboratory Report

The information below is designed to better explain the various terms used in your report of analytical results from the Laboratory. This is not intended as a comprehensive explanation, and if you have additional questions please contact your project representative.

Results Disclaimer - Information that may be provided by the customer, and contained within this report, include Permit Limits, Project Name, Sample ID, Sample Matrix, Sample Preservation, Field Blanks, Field Spikes, Field Duplicates, On-Site Data, Sampling Collection Dates/Times, and Sampling Location. Results relate to the accuracy of this information provided, and as the samples are received.

Abbreviations and Definitions

MDL	Method Detection Limit.
ND	Not detected at the Reporting Limit (or MDL where applicable).
RDL	Reported Detection Limit.
Rec.	Recovery.
RPD	Relative Percent Difference.
SDG	Sample Delivery Group.
U	Not detected at the Reporting Limit (or MDL where applicable).
Analyte	The name of the particular compound or analysis performed. Some Analyses and Methods will have multiple analytes reported.
Dilution	If the sample matrix contains an interfering material, the sample preparation volume or weight values differ from the standard, or if concentrations of analytes in the sample are higher than the highest limit of concentration that the laboratory can accurately report, the sample may be diluted for analysis. If a value different than 1 is used in this field, the result reported has already been corrected for this factor.
Limits	These are the target % recovery ranges or % difference value that the laboratory has historically determined as normal for the method and analyte being reported. Successful QC Sample analysis will target all analytes recovered or duplicated within these ranges.
Original Sample	The non-spiked sample in the prep batch used to determine the Relative Percent Difference (RPD) from a quality control sample. The Original Sample may not be included within the reported SDG.
Qualifier	This column provides a letter and/or number designation that corresponds to additional information concerning the result reported. If a Qualifier is present, a definition per Qualifier is provided within the Glossary and Definitions page and potentially a discussion of possible implications of the Qualifier in the Case Narrative if applicable.
Result	The actual analytical final result (corrected for any sample specific characteristics) reported for your sample. If there was no measurable result returned for a specific analyte, the result in this column may state “ND” (Not Detected) or “BDL” (Below Detectable Levels). The information in the results column should always be accompanied by either an MDL (Method Detection Limit) or RDL (Reporting Detection Limit) that defines the lowest value that the laboratory could detect or report for this analyte.
Uncertainty (Radiochemistry)	Confidence level of 2 sigma.
Case Narrative (Cn)	A brief discussion about the included sample results, including a discussion of any non-conformances to protocol observed either at sample receipt by the laboratory from the field or during the analytical process. If present, there will be a section in the Case Narrative to discuss the meaning of any data qualifiers used in the report.
Quality Control Summary (Qc)	This section of the report includes the results of the laboratory quality control analyses required by procedure or analytical methods to assist in evaluating the validity of the results reported for your samples. These analyses are not being performed on your samples typically, but on laboratory generated material.
Sample Chain of Custody (Sc)	This is the document created in the field when your samples were initially collected. This is used to verify the time and date of collection, the person collecting the samples, and the analyses that the laboratory is requested to perform. This chain of custody also documents all persons (excluding commercial shippers) that have had control or possession of the samples from the time of collection until delivery to the laboratory for analysis.
Sample Results (Sr)	This section of your report will provide the results of all testing performed on your samples. These results are provided by sample ID and are separated by the analyses performed on each sample. The header line of each analysis section for each sample will provide the name and method number for the analysis reported.
Sample Summary (Ss)	This section of the Analytical Report defines the specific analyses performed for each sample ID, including the dates and times of preparation and/or analysis.

Qualifier	Description

The remainder of this page intentionally left blank, there are no qualifiers applied to this SDG.

ACCREDITATIONS & LOCATIONS

Pace Analytical National 12065 Lebanon Rd Mount Juliet, TN 37122

Alabama	40660	Nebraska	NE-OS-15-05
Alaska	17-026	Nevada	TN000032021-1
Arizona	AZ0612	New Hampshire	2975
Arkansas	88-0469	New Jersey–NELAP	TN002
California	2932	New Mexico [1]	TN00003
Colorado	TN00003	New York	11742
Connecticut	PH-0197	North Carolina	Env375
Florida	E87487	North Carolina [1]	DW21704
Georgia	NELAP	North Carolina [3]	41
Georgia [1]	923	North Dakota	R-140
Idaho	TN00003	Ohio–VAP	CL0069
Illinois	200008	Oklahoma	9915
Indiana	C-TN-01	Oregon	TN200002
Iowa	364	Pennsylvania	68-02979
Kansas	E-10277	Rhode Island	LAO000356
Kentucky [1 6]	KY90010	South Carolina	84004002
Kentucky [2]	16	South Dakota	n/a
Louisiana	AI30792	Tennessee [1 4]	2006
Louisiana	LA018	Texas	T104704245-20-18
Maine	TN00003	Texas [5]	LAB0152
Maryland	324	Utah	TN000032021-11
Massachusetts	M-TN003	Vermont	VT2006
Michigan	9958	Virginia	110033
Minnesota	047-999-395	Washington	C847
Mississippi	TN00003	West Virginia	233
Missouri	340	Wisconsin	998093910
Montana	CERT0086	Wyoming	A2LA
A2LA – ISO 17025	1461.01	AIHA-LAP,LLC EMLAP	100789
A2LA – ISO 17025 [5]	1461.02	DOD	1461.01
Canada	1461.01	USDA	P330-15-00234
EPA–Crypto	TN00003		

[1] Drinking Water [2] Underground Storage Tanks [3] Aquatic Toxicity [4] Chemical/Microbiological [5] Mold [6] Wastewater n/a Accreditation not applicable

* Not all certifications held by the laboratory are applicable to the results reported in the attached report.

* Accreditation is only applicable to the test methods specified on each scope of accreditation held by Pace Analytical.

CHAIN OF CUSTODY RECORD

PAGE: 1 OF: 1

HALL ENVIRONMENTAL ANALYSIS LABORATORY

Hall Environmental Analysis Laboratory
4901 Hawkins NE
Albuquerque, NM 87109
TEL: 505-345-3975
FAX: 505-345-4107
Website: clients.hallenvironmental.com

SUB CONTRATOR: **Pace TN**	COMPANY: **PACE TN**		PHONE: **(800) 767-5859**	FAX: **(615) 758-5859**	
ADDRESS: **12065 Lebanon Rd**			ACCOUNT #:	EMAIL:	
CITY, STATE, ZIP: **Mt. Juliet, TN 37122**					

LB41224

ITEM	SAMPLE	CLIENT SAMPLE ID	BOTTLE TYPE	MATRIX	COLLECTION DATE	# CONTAINERS	ANALYTICAL COMMENTS	
1	2104A25-001D	MW-6	500HDPEH2 SO4 -22	Aqueous	4/22/2021 9:50:00 AM	1	COD	-01
2	2104A25-002D	MW-8	500HDPEH2 SO4 -22	Aqueous	4/22/2021 10:30:00 AM	1	COD	-02
3	2104A25-003D	MW-9	500HDPEH2 SO4 -22	Aqueous	4/22/2021 11:30:00 AM	1	COD	-03
4	2104A25-004D	MW-11	500HDPEH2 SO4 -22	Aqueous	4/22/2021 12:00:00 PM	1	COD	-04
5	2104A25-005D	MW-12	500HDPEH2 SO4 -22	Aqueous	4/22/2021 11:00:00 AM	1	COD	-05

B038

Sample Receipt Checklist

COC Seal Present/Intact:	Y N	If Applicable	
COC Signed/Accurate:	Y N	VOA Zero Headspace:	Y N
Bottles arrive intact:	Y N	Pres.Correct/Check:	Y N
Correct bottles used:	Y N		
Sufficient volume sent:	Y N		
RAD Screen <0.5 mR/hr:	Y N		

SPECIAL INSTRUCTIONS / COMMENTS:

Please include the LAB ID and the CLIENT SAMPLE ID on all final reports. Please e-mail results to lab@hallenvironmental.com. Please return all coolers and blue ice. Thank you.

Relinquished By: SG	Date: 4/22/2021	Time: 3:59 PM	Received By:	Date:	Time:
Relinquished By:	Date:	Time:	Received By:	Date:	Time:
Relinquished By:	Date:	Time:	Received By:	Date: 04/23/21	Time: 09:15

TAT: Standard ☑ RUSH Next BD ☐ 2nd BD ☐ 3rd BD ☐

REPORT TRANSMITTAL DESIRED:

☐ HARDCOPY (extra cost) ☐ FAX ☐ EMAIL ☐ ONLINE

FOR LAB USE ONLY

Temp of samples 4.1-2=3.9 °C Attempt to Cool ? _____

Comments: _____

5016 1223 7790

QC SUMMARY REPORT
Hall Environmental Analysis Laboratory, Inc.

WO#: **2104A25**
05-May-21

Client: Souder Miller & Associates
Project: Chama Conoco

Sample ID: **MB**	SampType: **mblk**	TestCode: **EPA Method 300.0: Anions**
Client ID: **PBW**	Batch ID: **A76894**	RunNo: **76894**
Prep Date:	Analysis Date: **4/22/2021**	SeqNo: **2725218** Units: **mg/L**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Nitrogen, Nitrate (As N)	ND	0.10								
Sulfate	ND	0.50								

Sample ID: **LCS**	SampType: **lcs**	TestCode: **EPA Method 300.0: Anions**
Client ID: **LCSW**	Batch ID: **A76894**	RunNo: **76894**
Prep Date:	Analysis Date: **4/23/2021**	SeqNo: **2725219** Units: **mg/L**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Nitrogen, Nitrate (As N)	2.5	0.10	2.500	0	99.8	90	110			
Sulfate	9.7	0.50	10.00	0	97.0	90	110			

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 Quanitative 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 Limit

QC SUMMARY REPORT

Hall Environmental Analysis Laboratory, Inc.

WO#: **2104A25**

05-May-21

Client: Souder Miller & Associates

Project: Chama Conoco

Sample ID: **MB-59606**	SampType: **MBLK**	TestCode: **EPA Method 8015M/D: Diesel Range**
Client ID: **PBW**	Batch ID: **59606**	RunNo: **76951**
Prep Date: **4/23/2021**	Analysis Date: **4/26/2021**	SeqNo: **2727275** Units: **mg/L**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Diesel Range Organics (DRO)	ND	1.0								
Motor Oil Range Organics (MRO)	ND	5.0								
Surr: DNOP	0.89		1.000		89.0	63.7	164			

Sample ID: **LCS-59606**	SampType: **LCS**	TestCode: **EPA Method 8015M/D: Diesel Range**
Client ID: **LCSW**	Batch ID: **59606**	RunNo: **76951**
Prep Date: **4/23/2021**	Analysis Date: **4/26/2021**	SeqNo: **2727276** Units: **mg/L**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Diesel Range Organics (DRO)	4.8	1.0	5.000	0	96.6	70	130			
Surr: DNOP	0.43		0.5000		85.7	63.7	164			

Sample ID: **2104A25-001BMS**	SampType: **MS**	TestCode: **EPA Method 8015M/D: Diesel Range**
Client ID: **MW-6**	Batch ID: **59606**	RunNo: **76951**
Prep Date: **4/23/2021**	Analysis Date: **4/26/2021**	SeqNo: **2727277** Units: **mg/L**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Diesel Range Organics (DRO)	5.0	1.0	5.000	0	101	70	130			
Surr: DNOP	0.44		0.5000		88.4	63.7	164			

Sample ID: **2104A25-001BMSD**	SampType: **MSD**	TestCode: **EPA Method 8015M/D: Diesel Range**
Client ID: **MW-6**	Batch ID: **59606**	RunNo: **76951**
Prep Date: **4/23/2021**	Analysis Date: **4/26/2021**	SeqNo: **2727278** Units: **mg/L**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Diesel Range Organics (DRO)	6.0	1.0	5.000	0	120	70	130	17.1	20	
Surr: DNOP	0.54		0.5000		108	63.7	164	0	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 Quanitative 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 Limit

QC SUMMARY REPORT
Hall Environmental Analysis Laboratory, Inc.

WO#: **2104A25**
05-May-21

Client: Souder Miller & Associates
Project: Chama Conoco

Sample ID: **MB**	SampType: **MBLK**	TestCode: **EPA Method 8015D: Gasoline Range**
Client ID: **PBW**	Batch ID: **G76911**	RunNo: **76911**
Prep Date:	Analysis Date: **4/24/2021**	SeqNo: **2726009** Units: **mg/L**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Gasoline Range Organics (GRO)	ND	0.050								
Surr: BFB	21		20.00		105	68.5	136			

Qualifiers:

*	Value exceeds Maximum Contaminant Level.
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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 Limit

QC SUMMARY REPORT
Hall Environmental Analysis Laboratory, Inc.

WO#: **2104A25**
05-May-21

Client: Souder Miller & Associates
Project: Chama Conoco

Sample ID: **100ng lcs**	SampType: **LCS**	TestCode: **EPA Method 8260B: VOLATILES**
Client ID: **LCSW**	Batch ID: **B76961**	RunNo: **76961**
Prep Date:	Analysis Date: **4/26/2021**	SeqNo: **2727758** Units: **µg/L**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Benzene	21	1.0	20.00	0	105	70	130			
Toluene	19	1.0	20.00	0	96.4	70	130			
Chlorobenzene	18	1.0	20.00	0	91.6	70	130			
1,1-Dichloroethene	19	1.0	20.00	0	94.9	70	130			
Trichloroethene (TCE)	20	1.0	20.00	0	100	70	130			
Surr: 1,2-Dichloroethane-d4	10		10.00		105	70	130			
Surr: 4-Bromofluorobenzene	10		10.00		99.8	70	130			
Surr: Dibromofluoromethane	11		10.00		108	70	130			
Surr: Toluene-d8	9.7		10.00		97.3	70	130			

Sample ID: **mb**	SampType: **MBLK**	TestCode: **EPA Method 8260B: VOLATILES**
Client ID: **PBW**	Batch ID: **B76961**	RunNo: **76961**
Prep Date:	Analysis Date: **4/26/2021**	SeqNo: **2727777** Units: **µg/L**

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:

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H	Holding times for preparation or analysis exceeded
ND	Not Detected at the Reporting Limit
PQL	Practical Quanitative 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 Limit

QC SUMMARY REPORT
Hall Environmental Analysis Laboratory, Inc.

WO#: **2104A25**
05-May-21

Client: Souder Miller & Associates
Project: Chama Conoco

Sample ID: **mb**	SampType: **MBLK**	TestCode: **EPA Method 8260B: VOLATILES**
Client ID: **PBW**	Batch ID: **B76961**	RunNo: **76961**
Prep Date:	Analysis Date: **4/26/2021**	SeqNo: **2727777** 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 Quanitative 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 Limit

QC SUMMARY REPORT
Hall Environmental Analysis Laboratory, Inc.

WO#: **2104A25**
05-May-21

Client: Souder Miller & Associates
Project: Chama Conoco

Sample ID: **mb**	SampType: **MBLK**	TestCode: **EPA Method 8260B: VOLATILES**
Client ID: **PBW**	Batch ID: **B76961**	RunNo: **76961**
Prep Date:	Analysis Date: **4/26/2021**	SeqNo: **2727777** Units: **µg/L**

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	10		10.00		103	70	130			
Surr: 4-Bromofluorobenzene	11		10.00		105	70	130			
Surr: Dibromofluoromethane	11		10.00		108	70	130			
Surr: Toluene-d8	9.9		10.00		99.3	70	130			

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 Quanitative Limit	RL	Reporting Limit
S	% Recovery outside of range due to dilution or matrix		

QC SUMMARY REPORT
Hall Environmental Analysis Laboratory, Inc.

WO#: **2104A25**
05-May-21

Client: Souder Miller & Associates
Project: Chama Conoco

Sample ID: **MB-59650**	SampType: **MBLK**	TestCode: **SM2540C MOD: Total Dissolved Solids**
Client ID: **PBW**	Batch ID: **59650**	RunNo: **77034**
Prep Date: **4/27/2021**	Analysis Date: **4/29/2021**	SeqNo: **2730607** Units: **mg/L**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Total Dissolved Solids	ND	20.0								

Sample ID: **LCS-59650**	SampType: **LCS**	TestCode: **SM2540C MOD: Total Dissolved Solids**
Client ID: **LCSW**	Batch ID: **59650**	RunNo: **77034**
Prep Date: **4/27/2021**	Analysis Date: **4/29/2021**	SeqNo: **2730608** Units: **mg/L**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Total Dissolved Solids	1020	20.0	1000	0	102	80	120			

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 Quanitative 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 Limit

HALL ENVIRONMENTAL ANALYSIS LABORATORY

Hall Environmental Analysis Laboratory
4901 Hawkins NE
Albuquerque, NM 87109
TEL: 505-345-3975 FAX: 505-345-4107
Website: clients.hallenvironmental.com

Sample Log-In Check List

Client Name: **Souder Miller & Associates** Work Order Number: **2104A25** RcptNo: **1**

Received By: **Sean Livingston** **4/22/2021 3:44:00 PM** Sean Livingston

Completed By: **Sean Livingston** **4/22/2021 3:48:23 PM** Sean Livingston

Reviewed By: TO 4/22/21

Chain of Custody

1. Is Chain of Custody complete?	Yes ☑	No ☐	Not Present ☐
2. How was the sample delivered?	Client		

Log In

3. Was an attempt made to cool the samples?	Yes ☑	No ☐	NA ☐
4. Were all samples received at a temperature of >0° C to 6.0°C	Yes ☑	No ☐	NA ☐
5. Sample(s) in proper container(s)?	Yes ☑	No ☐	
6. Sufficient sample volume for indicated test(s)?	Yes ☑	No ☐	
7. Are samples (except VOA and ONG) properly preserved?	Yes ☑	No ☐	
8. Was preservative added to bottles?	Yes ☐	No ☑	NA ☐
9. Received at least 1 vial with headspace <1/4" for AQ VOA?	Yes ☑	No ☐	NA ☐
10. Were any sample containers received broken?	Yes ☐	No ☑	
11. Does paperwork match bottle labels? (Note discrepancies on chain of custody)	Yes ☑	No ☐	
12. Are matrices correctly identified on Chain of Custody?	Yes ☑	No ☐	
13. Is it clear what analyses were requested?	Yes ☑	No ☐	
14. Were all holding times able to be met? (If no, notify customer for authorization.)	Yes ☑	No ☐	

# of preserved bottles checked for pH: 10
(<2 or >12 unless noted)
Adjusted? No

Checked by: DAD 4.22.21

Special Handling (if applicable)

15. 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:

16. Additional remarks:

17. **Cooler Information**

Cooler No	Temp °C	Condition	Seal Intact	Seal No	Seal Date	Signed By
1	2.2	Good				
2	2.7	Good				

Chain-of-Custody Record

Client: SMA

Mailing Address: ABQ

Phone #: 505-299-0942

email or Fax#:

QA/QC Package:
☐ Standard ☐ Level 4 (Full Validation)

Accreditation: ☐ Az Compliance
☐ NELAC ☐ Other

☐ EDD (Type)

Turn-Around Time:
☒ Standard ☐ Rush

Project Name: Chevron Conoco

Project #: 32323555

Project Manager: Scott Mckinnell

Sampler: C. Parker

On Ice: ☑ Yes ☐ No

# of Coolers: 2

Cooler Temp (including CF): 2.3 -0.1 = 2.2 (°C) 2.8 -0.1 = 2.7

HALL ENVIRONMENTAL ANALYSIS LABORATORY

www.hallenvironmental.com

4901 Hawkins NE - Albuquerque, NM 87109

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

Analysis Request

Date	Time	Matrix	Sample Name	Container Type and #	Preservative Type	HEAL No. 2104425	BTEX / MTBE / TMB's (8021)	TPH:8015D(GRO / DRO / MRO)	8081 Pesticides/8082 PCB's	EDB (Method 504.1)	PAHs by 8310 or 8270SIMS	RCRA 8 Metals	Cl, F, Br, NO_3, NO_2, PO_4, SO_4	8260 (VOA)	8270 (Semi-VOA)	Total Coliform (Present/Absent)	8015B (Gro, Dro, Mro)	410.4 (COD)	2540C Mod (TDS)	300.0 (Nitrate, Nitrite, F)		
4/22/21	0950	H2O	MW-6	9 Ver		001								X			X	X	X	X		
			~~MW-7~~																			
	1030		MW-8	9 Ver		002								X			X	X	X	X		
	1130		MW-9			003								X			X	X	X	X		
	1200		MW-11			004								X			X	X	X	X		
	1100		MW-12			005								X			X	X	X	X		
			Trip			006								X								

Date:	Time:	Relinquished by:	Received by:	Via:	Date Time	Remarks:
4/22/21	1540		SG	COO	4/22/21 15:44	
Date:	Time:	Relinquished by:	Received by:	Via:	Date Time	

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.