

SITE INFORMATION

Report Type: Deferral Request NRM2013358062

General Site Information:

Site:	Elvis Battery West 2020 Release					
Company:	ConocoPhillips					
Section, Township and Range	Unit Letter F	Sec. 20	T 17S	R 32E		
Lease Number:	API No. 30-025-33584					
County:	Lea					
Release GPS:	32.822298°			-103.790923°		
Surface Owner:	Federal					
Mineral Owner:						
Directions:	From Maljamar, NM (Hwy 82/Maljamar Rd): Head south on Maljamar Rd. for 2.74 miles. Turn right on Conoco Rd. Head west for 1.62 miles. Turn right onto dirt road. Head north for 0.37 miles. Arrive at location.					

Release Data:

Date Released:	4/30/2020
Type Release:	Produced Water
Source of Contamination:	Flowline Failure
Fluid Released:	8.17 bbls
Fluids Recovered:	7 bbls

Official Communication:

Name:	Jenni Fortunato		Christian M. Llull, P.G.
Company:	ConocoPhillips		Tetra Tech
Address:	935 N. Eldridge Pkwy.		8911 North Capital of Texas Hwy.
			Building 2, Suite 2310
City:	Houston, TX 77079		Austin, Texas 78759
Phone number:	1-832-486-2477		(512) 338-2861
Fax:			
Email:	jenni.fortunato@conocophillips.com		christian.llull@tetrattech.com

Site Characterization

Depth to Groundwater:	>55' below surface
Impact to groundwater or surface water:	No
Extents within 300 feet of a watercourse:	No
Extents within 200 feet of lakebed, sinkhole, or playa lake:	No
Extents within 300 feet of an occupied structure:	No
Extents within 500 horizontal feet of a private water well:	No
Extents within 1000 feet of any water well or spring:	No
Extents within incorporated municipal well field:	No
Extents within 300 feet of a wetland:	No
Extents overlying a subsurface mine:	No
Karst Potential:	Low
Extents within a 100-year floodplain:	No
Impact to areas not on a production site:	No

Recommended Remedial Action Levels (RRALs)

Benzene	Total BTEX	TPH (GRO+DRO)	TPH (GRO+DRO+MRO)	Chlorides
10 mg/kg	50 mg/kg	1,000 mg/kg	2,500 mg/kg	10,000 mg/kg



December 13, 2021

District Supervisor
Oil Conservation Division, District 1
1625 North French Drive
Hobbs, New Mexico 88240

**Re: Release Characterization and Deferral Request
ConocoPhillips Company
Elvis Tank Battery (West) Release
Unit Letter F, Section 20, Township 17 South, Range 32 East
Lea County, New Mexico
Incident ID: NRM2013358062**

Sir or Madam:

Tetra Tech, Inc. (Tetra Tech) was contacted by ConocoPhillips Company (COP) to evaluate a release that occurred from a check valve at the Elvis Tank Battery. The release footprint is located in Public Land Survey System (PLSS) Unit Letter F, Section 20, Township 17 South, Range 32 East, in Lea County, New Mexico (Site). The approximate release point occurred at coordinates 32.822298°, -103.790923°, as shown on Figures 1 and 2.

BACKGROUND

According to the State of New Mexico C-141 Initial Report (Appendix A), the release was discovered on April 30, 2020. The release occurred as the result of a leak due to a corroded check valve and encompasses an estimated 2,903 square feet of lease pad. Approximately 8.17 barrels (bbls) of produced water were reported released, of which 7 bbls of fluid were recovered. The New Mexico Oil Conservation District (NMOCD) received the C-141 report form for the release on May 11, 2020. The NMOCD incident ID for this release is NRM2013358062.

SITE CHARACTERIZATION

A site characterization was performed and no watercourses, sinkholes, residences, schools, hospitals, institutions, churches, springs, private domestic water wells, springs, playa lakes, wetlands, incorporated municipal boundaries, subsurface mines, or floodplains are located within the distances specified in 19.15.29 New Mexico Administrative Code (NMAC). The Site is in an area of low karst potential.

According to the New Mexico Office of the State Engineers (NMOSE) reporting system, there are no water wells within ½ mile (800 meters) of the Site. The search radius was expanded and based on available data from three (3) water wells within 2,500 meters (approximately 1.55 miles) of the Site, the average depth to groundwater is 85 feet below ground surface (bgs).

As the available water level information is from wells farther than ½ mile away from the site, COP elected to drill a boring to verify depth to groundwater. On May 13, 2021, a licensed well drilling subcontractor was onsite to drill a groundwater determination borehole (BG-1) to 55 feet bgs along the edge of the Elvis lease pad. The borehole was temporarily set, screened using 2-inch PVC well materials; 35 feet of blank casing and 20 feet of 0.010" slotted screen. The borehole was left for 72 hours and checked for the

Tetra Tech

901 West Wall St., Suite 100, Midland, TX 79701

Tel 432.682.4559

Fax 432.682.3946

www.tetrattech.com

presence of groundwater. No water was present in the well, and the borehole was dry. The well screen and casing were removed, and the borehole was plugged with 3/8" bentonite chips on May 17, 2021. The borehole location is indicated on Figure 3. The Site characterization data, boring log, and temporary well diagram are included in Appendix B. The DTW boring location is indicated on Figure 3.

REGULATORY FRAMEWORK

Based upon the release footprint and in accordance with Subsection E of 19.15.29.12 NMAC, per 19.15.29.11 NMAC, the site characterization data was used to determine recommended remedial action levels (RRALs) for benzene, toluene, ethylbenzene, and xylene (collectively referred to as BTEX), total petroleum hydrocarbons (TPH), and chlorides in soil.

Based on the site characterization and in accordance with Table I of 19.15.29.12 NMAC, the RRALs for the Site are as follows:

Constituent	Site RRALs
Chloride	10,000 mg/kg
TPH	2,500 mg/kg
BTEX	50 mg/kg

Additionally, in accordance with the NMOCD guidance *Procedures for Implementation of the Spill Rule (19.15.29 NMAC)* (September 6, 2019), the following reclamation requirements for surface soils (0-4 ft bgs) outside of active oil and gas operations are as follows:

Constituent	Reclamation Requirements
Chloride	600 mg/kg
TPH	100 mg/kg
BTEX	50 mg/kg

SITE VISIT

Prior to the site visit to the Elvis CTB West, the approximate release extent was provided by COP. The release extent provided by COP encompassed an area of approximately 2,900 square feet. The release source was noted as being at a check valve located in the north central portion of the release area.

A Tetra Tech geologist, Joe Tyler, was onsite on October 7, 2020 to assess current site conditions and take photographs of the impacted area. Soil staining observed at the surface of the lease pad confirms the approximate release footprint provided by COP. It is presumed that the failed check valve was repaired or replaced as no corroded check valve was observed. The Elvis (West) release extent is shown on Figure 3. Photographic documentation from the site visit is included in Appendix C.

SITE ASSESSMENT ACTIVITIES

On May 17, 2021 Tetra Tech personnel conducted a soil assessment of the release area. A total of five (5) soil borings (BHW-1 through BHW-5) were installed using a hand auger to define the extents of the release and to assess the extent of impacted soil. BHW-1 was installed within the release footprint to depth of 8.5 feet bgs to assess the vertical extent of impacted soil. BHW-2 through BHW-5 were installed to depth of 1.5 feet bgs to assess the lateral extent of impacted soil. Due to the abundance of production equipment and subsurface lines in the vicinity of the release area, BHW-2 and BHW-5 were installed along the edge of the lease pad to the west and south, respectively.

A total of seventeen (17) soil samples were collected from the five (5) boring locations within and surrounding the release extent. These soil samples were sent to Pace Analytical (Pace) in Mount Juliet, Tennessee to be analyzed for TPH by EPA method 8015 modified, BTEX by EPA method 8260B, and chlorides by EPA method 300.0. Copies of analytical reports and chain-of-custody documentation are

Release Characterization and Deferral Request
December 13, 2021

ConocoPhillips

included in Appendix D. Soil boring logs, included as Appendix E, present soil descriptions, sample depths, and field screening data from the 2021 assessment activities.

SUMMARY OF SAMPLING RESULTS

Results from the May 2021 soil sampling event are summarized in Table 1. The boring locations are indicated in Figure 3. The analytical results associated with sample location BHW-1 exceeded the reclamation requirements for chloride of 600 mg/kg and TPH of 100 mg/kg in the upper 1-foot sample depth interval. All analytical results were below Site RRALs. Horizontal and vertical delineation was achieved during the assessment.

CONCLUSION

Based on the results of the site assessment, ConocoPhillips considers the current release footprint to be fully delineated. All analytical results associated with the site assessment were below Site RRALs; therefore, remediation of the release is not required in accordance with 19.15.29.12 NMAC. The contamination is located in areas immediately under and around production equipment and does not cause an imminent risk to human health, the environment, or groundwater.

Based on the above, ConocoPhillips respectfully requests that NMOCD will consider delaying reclamation activities at the Site until the end of life of the battery. Final reclamation shall take place in accordance with 19.15.29.13 NMAC once the site is no longer being used for oil and gas operations. The completed C-141 forms are enclosed in Appendix A. If you have any questions or comments concerning the assessment activities for this site, please call me at (512) 338-2861.

Sincerely,
Tetra Tech, Inc.



Christian M. Llull, P.G.
Project Manager

cc:
Ms. Jenni Fortunato, RMR – ConocoPhillips
Ms. Kelsy Waggaman, GPBU - ConocoPhillips

Release Characterization and Deferral Request
December 13, 2021

ConocoPhillips

LIST OF ATTACHMENTS

Figures:

- Figure 1 – Overview Map
- Figure 2 – Topographic Map
- Figure 3 – Approximate Release Extent and Site Assessment

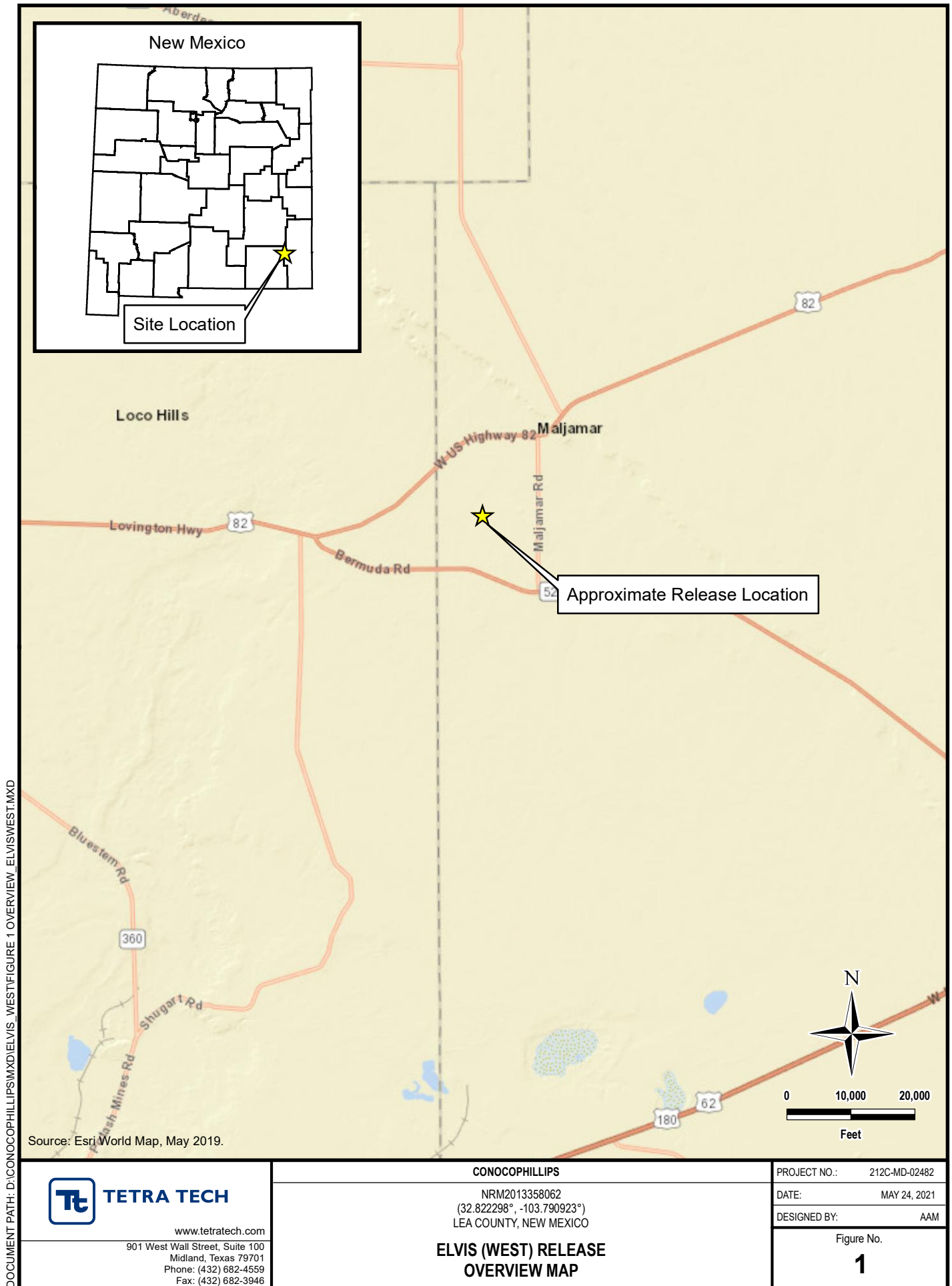
Tables:

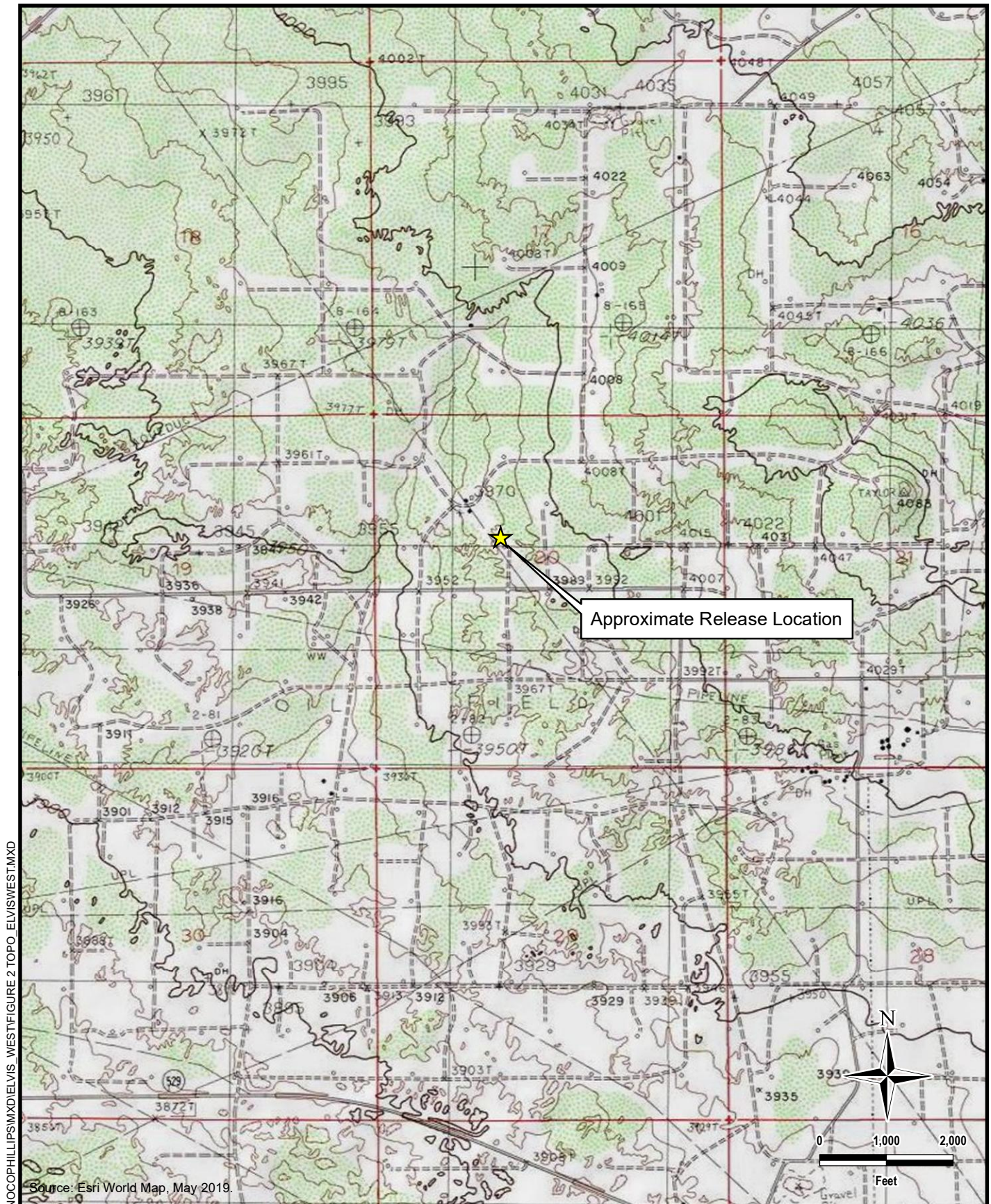
- Table 1 – Summary of Analytical Results – Soil Assessment

Appendices:

- Appendix A – C-141 Forms
- Appendix B – Site Characterization Data
- Appendix C – Photographic Documentation
- Appendix D – Laboratory Analytical Data
- Appendix E – Soil Boring Logs

FIGURES





DOCUMENT PATH: D:\CONOCOPHILLIPS\MXD\ELVIS WEST\FIGURE 2 TOPO ELVISWEST.MXD


TETRA TECH

www.tetrattech.com
 901 West Wall Street, Suite 100
 Midland, Texas 79701
 Phone: (432) 682-4559
 Fax: (432) 682-3946

CONOCOPHILLIPS

NRM2013358062
 (32.822298°, -103.790923°)
 LEA COUNTY, NEW MEXICO

ELVIS (WEST) RELEASE TOPOGRAPHIC MAP

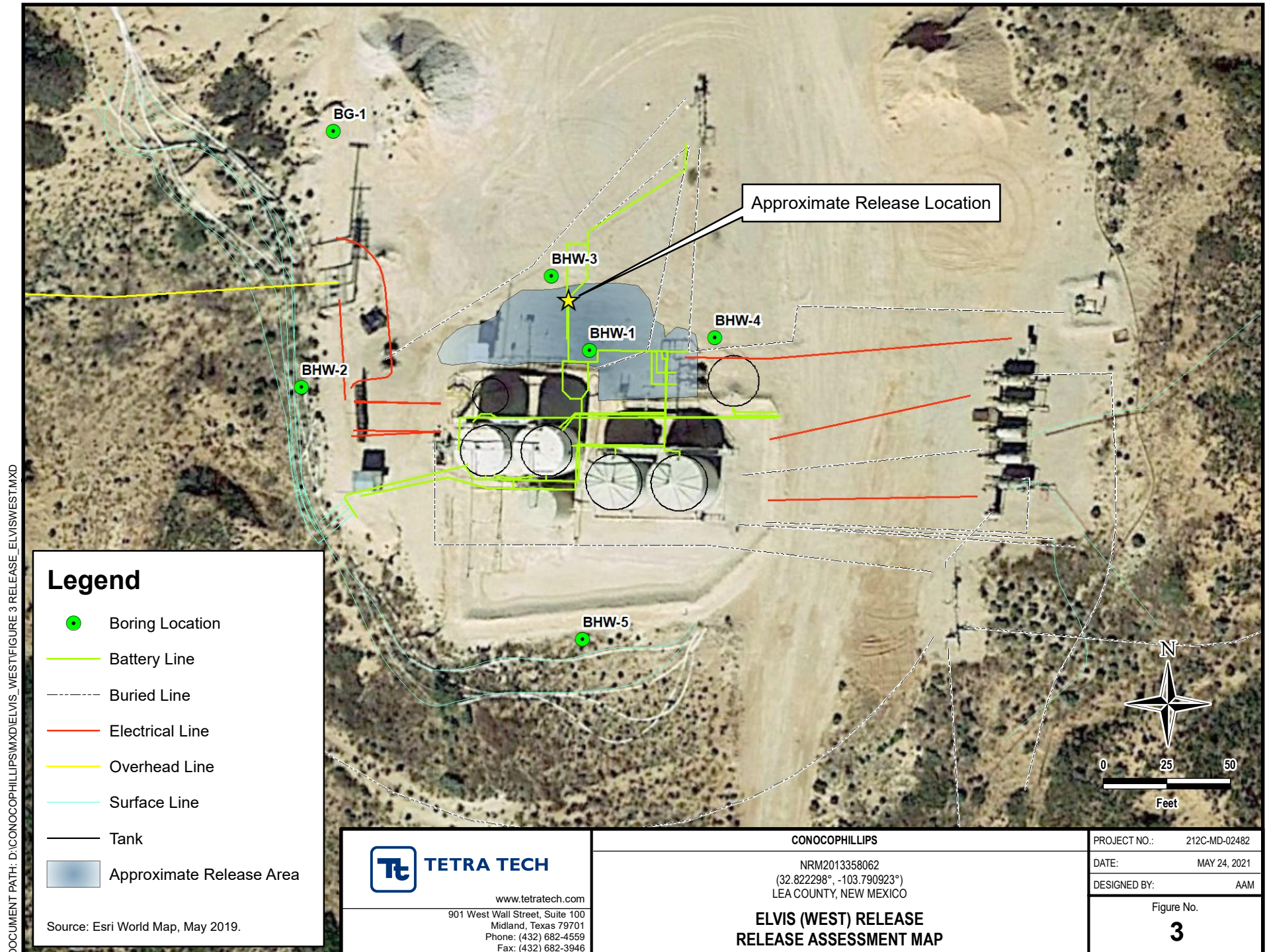
PROJECT NO.: 212C-MD-02482

DATE: MAY 24, 2021

DESIGNED BY: AAM

Figure No.

2



TABLES

TABLE 1
SUMMARY OF ANALYTICAL RESULTS
SOIL ASSESSMENT - nRM2013358062
CONOCOPHILLIPS
ELVIS (WEST) 2020 RELEASE
LEA COUNTY, NM

Sample ID	Sample Date	Sample Depth Interval	Field Screening Results		Chloride ¹		BTEX ²										TPH ³						
			Chloride	PID			Benzene		Toluene		Ethylbenzene		Total Xylenes		Total BTEX	GRO ⁴		DRO		ORO		Total TPH (GRO+DRO+ORO)	
							mg/kg	Q	mg/kg	Q	mg/kg	Q	mg/kg	Q		mg/kg	Q	mg/kg	Q	C ₃ - C ₁₀	Q		C ₁₀ - C ₂₈
BHW-1	5/17/2021	0-1	2130	0.02	2270		< 0.00118		< 0.00592		< 0.00296		< 0.00770		-		< 0.109		29.9		109		139
		1-1.5	93.3	0.08	19.5	J	< 0.00104		< 0.00518		< 0.00259		< 0.00673		-		< 0.102		4.47		23.2		27.7
		2-2.5	103	0.03	31.3		< 0.00105		< 0.00526		< 0.00263		< 0.00684		-		< 0.103		< 4.11		0.360	J	0.360
		3-3.5	158	0.02	50.4		< 0.00104		< 0.00521		< 0.00261		< 0.00678		-		< 0.102		4.95		26.7		31.7
		4-4.5	171	0.01	97.8		< 0.00105		< 0.00526		< 0.00263		< 0.00683		-		< 0.103		< 4.10		2.89	J	2.89
		5-5.5	338	0.02	166		< 0.00106		< 0.00532		< 0.00266		< 0.00691		-		< 0.103		1.97	J	1.04	J	3.01
		6-6.5	392	0.01	323		< 0.00138		< 0.00689		< 0.00345		< 0.00896		-		< 0.119		< 4.76		0.764	J	0.764
		7-7.5	132	0.01	54.2		< 0.00135		< 0.00673		< 0.00337		< 0.00875		-		< 0.117		< 4.69		0.989	J	0.989
		8-8.5	278	0.02	113		< 0.00130		< 0.00649		< 0.00325		< 0.00844		-		< 0.115		< 4.60		1.05	J	1.05
BHW-2	5/17/2021	0-1	193	0.01	87.4		< 0.00106		< 0.00532		< 0.00266		< 0.00692		-		< 0.103		< 4.13		3.22	J	3.22
		1-1.5	248	0.01	97.2		< 0.00107		< 0.00535		< 0.00267		< 0.00695		-		< 0.103		< 4.14		3.10	J	3.10
BHW-3	5/17/2021	0-1	123	0.1	21.0	J	< 0.00129		< 0.00647		< 0.00323		< 0.00841		-		< 0.115		< 4.59		0.384	J	0.384
		1-1.5	170	0.1	53.6		< 0.00129		< 0.00645		< 0.00323		< 0.00839		-		< 0.114		< 4.58		< 4.58		-
BHW-4	5/17/2021	0-1	119	0.01	88.8		< 0.00115		< 0.00573		< 0.00286		< 0.00744		-		< 0.107		< 4.29		4.23	J	4.23
		1-1.5	138	0.01	48.0		< 0.00114		< 0.00572		< 0.00286		< 0.00744		-		< 0.107	J3	3.60	J	11.2		14.8
BHW-5	5/17/2021	0-1	236	0.01	150		< 0.00132		< 0.00661		< 0.00330		< 0.00859		-		< 0.116		< 4.64		0.969	J	0.969
		1-1.5	225	0.01	32.7		< 0.00108		< 0.00541		< 0.00270		< 0.00703	J3	-		< 0.104		8.38		21.9		30.3

NOTES:

ft. Feet

bgs Below ground surface

ppm Parts per million

mg/kg Milligrams per kilogram

TPH Total Petroleum Hydrocarbons

GRO Gasoline range organics

DRO Diesel range organics

ORO Oil range organics

1 EPA Method 300.0

2 EPA Method 8260B

3 EPA Method 8015

4 EPA Method 8015D/GRO

Bold and italicized values indicate exceedance of reclamation requirements.

QUALIFIERS:

J The identification of the analyte is acceptable; the reported value is an estimate.

J3 The associated batch QC was outside the established quality control range for precision.

APPENDIX A C-141 Forms

District I
1625 N. French Dr., Hobbs, NM 88240
District II
811 S. First St., Artesia, NM 88210
District III
1000 Rio Brazos Road, Aztec, NM 87410
District IV
1220 S. St. Francis Dr., Santa Fe, NM 87505

State of New Mexico
Energy Minerals and Natural
Resources Department

Oil Conservation Division
1220 South St. Francis Dr.
Santa Fe, NM 87505

Form C-141
Revised August 24, 2018
Submit to appropriate OCD District office

Incident ID	NRM2013358062
District RP	
Facility ID	
Application ID	

Release Notification

Responsible Party

Responsible Party	ConocoPhillips	OGRID	217817
Contact Name	Kelsy Waggaman	Contact Telephone	(505) 577-9071
Contact email	Kelsy.Waggaman@ConocoPhillips.com	Incident #	(assigned by OCD)
Contact mailing address	29 Vacuum Complex Lane, Lovington, NM 8826		

Location of Release Source

Latitude 32.8224 Longitude -103.7903
(NAD 83 in decimal degrees to 5 decimal places)

Site Name	Elvis #1	Site Type	Battery
Date Release Discovered	4/30/20	API#	(if applicable)

Unit Letter	Section	Township	Range	County
F	20	T17S	R32E	Lea County, NM

Surface Owner: ☐ State ☒ Federal ☐ Tribal ☐ Private (Name: _____)

Nature and Volume of Release

Material(s) Released (Select all that apply and attach calculations or specific justification for the volumes provided below)

☐ Crude Oil	Volume Released (bbls)	Volume Recovered (bbls)
☒ Produced Water	Volume Released (bbls) 8.17	Volume Recovered (bbls) 7
	Is the concentration of dissolved chloride in the produced water >10,000 mg/l?	☐ Yes ☐ No
☐ Condensate	Volume Released (bbls)	Volume Recovered (bbls)
☐ Natural Gas	Volume Released (Mcf)	Volume Recovered (Mcf)
☐ Other (describe)	Volume/Weight Released (provide units)	Volume/Weight Recovered (provide units)

Cause of Release

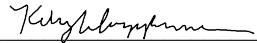
Check valve corrosion

Incident ID	NRM2013358062
District RP	
Facility ID	
Application ID	

Was this a major release as defined by 19.15.29.7(A) NMAC? ☐ Yes ☒ No	If YES, for what reason(s) does the responsible party consider this a major release?
If YES, was immediate notice given to the OCD? By whom? To whom? When and by what means (phone, email, etc)?	

Initial Response

The responsible party must undertake the following actions immediately unless they could create a safety hazard that would result in injury

☒ The source of the release has been stopped. ☒ The impacted area has been secured to protect human health and the environment. ☒ Released materials have been contained via the use of berms or dikes, absorbent pads, or other containment devices. ☐ All free liquids and recoverable materials have been removed and managed appropriately.
If all the actions described above have <u>not</u> been undertaken, explain why:
Per 19.15.29.8 B. (4) NMAC the responsible party may commence remediation immediately after discovery of a release. If remediation has begun, please attach a narrative of actions to date. If remedial efforts have been successfully completed or if the release occurred within a lined containment area (see 19.15.29.11(A)(5)(a) NMAC), please attach all information needed for closure evaluation.
I hereby certify that the information given above is true and complete to the best of my knowledge and understand that pursuant to OCD rules and regulations all operators are required to report and/or file certain release notifications and perform corrective actions for releases which may endanger public health or the environment. The acceptance of a C-141 report by the OCD does not relieve the operator of liability should their operations have failed to adequately investigate and remediate contamination that pose a threat to groundwater, surface water, human health or the environment. In addition, OCD acceptance of a C-141 report does not relieve the operator of responsibility for compliance with any other federal, state, or local laws and/or regulations.
Printed Name: <u>Kelsy Waggaman</u> Title: <u>Environmental Coordinator</u>
Signature: <u></u> Date: <u>5/5/20</u>
email: <u>Kelsy.Waggaman@gmail.com</u> Telephone: <u>(505) 577-9071</u>
<u>OCD Only</u>
Received by: <u>Ramona Marcus</u> Date: <u>5/12/2020</u>

Incident ID	
District RP	
Facility ID	
Application ID	

Site Assessment/Characterization

This information must be provided to the appropriate district office no later than 90 days after the release discovery date.

What is the shallowest depth to groundwater beneath the area affected by the release?	_____ (ft bgs)
Did this release impact groundwater or surface water?	☐ Yes ☐ No
Are the lateral extents of the release within 300 feet of a continuously flowing watercourse or any other significant watercourse?	☐ Yes ☐ No
Are the lateral extents of the release within 200 feet of any lakebed, sinkhole, or playa lake (measured from the ordinary high-water mark)?	☐ Yes ☐ No
Are the lateral extents of the release within 300 feet of an occupied permanent residence, school, hospital, institution, or church?	☐ Yes ☐ No
Are the lateral extents of the release within 500 horizontal feet of a spring or a private domestic fresh water well used by less than five households for domestic or stock watering purposes?	☐ Yes ☐ No
Are the lateral extents of the release within 1000 feet of any other fresh water well or spring?	☐ Yes ☐ No
Are the lateral extents of the release within incorporated municipal boundaries or within a defined municipal fresh water well field?	☐ Yes ☐ No
Are the lateral extents of the release within 300 feet of a wetland?	☐ Yes ☐ No
Are the lateral extents of the release overlying a subsurface mine?	☐ Yes ☐ No
Are the lateral extents of the release overlying an unstable area such as karst geology?	☐ Yes ☐ No
Are the lateral extents of the release within a 100-year floodplain?	☐ Yes ☐ No
Did the release impact areas not on an exploration, development, production, or storage site?	☐ Yes ☐ No

Attach a comprehensive report (electronic submittals in .pdf format are preferred) demonstrating the lateral and vertical extents of soil contamination associated with the release have been determined. Refer to 19.15.29.11 NMAC for specifics.

Characterization Report Checklist: Each of the following items must be included in the report.

- ☐ Scaled site map showing impacted area, surface features, subsurface features, delineation points, and monitoring wells.
- ☐ Field data
- ☐ Data table of soil contaminant concentration data
- ☐ Depth to water determination
- ☐ Determination of water sources and significant watercourses within ½-mile of the lateral extents of the release
- ☐ Boring or excavation logs
- ☐ Photographs including date and GIS information
- ☐ Topographic/Aerial maps
- ☐ Laboratory data including chain of custody

If the site characterization report does not include completed efforts at remediation of the release, the report must include a proposed remediation plan. That plan must include the estimated volume of material to be remediated, the proposed remediation technique, proposed sampling plan and methods, anticipated timelines for beginning and completing the remediation. The closure criteria for a release are contained in Table 1 of 19.15.29.12 NMAC, however, use of the table is modified by site- and release-specific parameters.

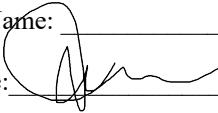
State of New Mexico
Oil Conservation Division

Page 4

Incident ID	
District RP	
Facility ID	
Application ID	

I hereby certify that the information given above is true and complete to the best of my knowledge and understand that pursuant to OCD rules and regulations all operators are required to report and/or file certain release notifications and perform corrective actions for releases which may endanger public health or the environment. The acceptance of a C-141 report by the OCD does not relieve the operator of liability should their operations have failed to adequately investigate and remediate contamination that pose a threat to groundwater, surface water, human health or the environment. In addition, OCD acceptance of a C-141 report does not relieve the operator of responsibility for compliance with any other federal, state, or local laws and/or regulations.

Printed Name: _____ Title: _____

Signature:  _____ Date: _____

email: _____ Telephone: _____

OCD Only

Received by: _____ Date: _____

Incident ID	
District RP	
Facility ID	
Application ID	

Remediation Plan

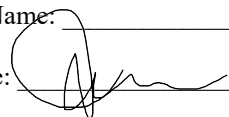
Remediation Plan Checklist: *Each of the following items must be included in the plan.*

- ☐ Detailed description of proposed remediation technique
- ☐ Scaled sitemap with GPS coordinates showing delineation points
- ☐ Estimated volume of material to be remediated
- ☐ Closure criteria is to Table 1 specifications subject to 19.15.29.12(C)(4) NMAC
- ☐ Proposed schedule for remediation (note if remediation plan timeline is more than 90 days OCD approval is required)

Deferral Requests Only: *Each of the following items must be confirmed as part of any request for deferral of remediation.*

- ☐ Contamination must be in areas immediately under or around production equipment where remediation could cause a major facility deconstruction.
- ☐ Extents of contamination must be fully delineated.
- ☐ Contamination does not cause an imminent risk to human health, the environment, or groundwater.

I hereby certify that the information given above is true and complete to the best of my knowledge and understand that pursuant to OCD rules and regulations all operators are required to report and/or file certain release notifications and perform corrective actions for releases which may endanger public health or the environment. The acceptance of a C-141 report by the OCD does not relieve the operator of liability should their operations have failed to adequately investigate and remediate contamination that pose a threat to groundwater, surface water, human health or the environment. In addition, OCD acceptance of a C-141 report does not relieve the operator of responsibility for compliance with any other federal, state, or local laws and/or regulations.

Printed Name: _____ Title: _____
Signature:  _____ Date: _____
email: _____ Telephone: _____

OCD Only

Received by: _____ Date: _____

☐ Approved ☐ Approved with Attached Conditions of Approval ☐ Denied ☐ Deferral Approved

Signature:  _____ Date: _____

APPENDIX B

Site Characterization Data



New Mexico Office of the State Engineer

Water Column/Average Depth to Water

(A CLW##### in the POD suffix indicates the POD has been replaced & no longer serves a water right file.)

(R=POD has been replaced,
O=orphaned,
C=the file is closed)

(quarters are 1=NW 2=NE 3=SW 4=SE)

(quarters are smallest to largest)

(NAD83 UTM in meters)

(In feet)

POD Number	POD Sub-Code	basin	County	Q 64	Q 16	Q 4	Sec	Tws	Rng	X	Y	Distance	Depth Well	Depth Water	Water Column
RA 12042 POD1	RA	LE		2	2	1	28	17S	32E	614891	3631181	2012	400		
RA 10175	RA	LE			2	1	28	17S	32E	614814	3631005*	2047	158		
RA 12522 POD1	RA	LE		3	3	4	21	17S	32E	614941	3631122	2085	100		
RA 12020 POD1	RA	LE		2	2	1	28	17S	32E	614828	3630954	2089	120	81	39
RA 12522 POD2	RA	LE		2	2	1	28	17S	32E	614949	3631098	2105	100		
RA 12522 POD3	RA	LE		4	4	3	28	17S	32E	614980	3631093	2134	100		
RA 12521 POD1	RA	LE		3	3	4	21	17S	32E	615127	3631271	2175	105	92	13
RA 12020 POD3	RA	LE		2	1	2	28	17S	32E	615152	3631019	2319	112	83	29

Average Depth to Water: **85 feet**

Minimum Depth: **81 feet**

Maximum Depth: **92 feet**

Record Count: 8

UTMNA83 Radius Search (in meters):

Easting (X): 613176.3

Northing (Y): 3632234.49

Radius: 2500

*UTM location was derived from PLSS - see Help

The data is furnished by the NMOSE/ISC and is accepted by the recipient with the expressed understanding that the OSE/ISC make no warranties, expressed or implied, concerning the accuracy, completeness, reliability, usability, or suitability for any particular purpose of the data.

6/4/21 9:52 AM

Page 1 of 1

WATER COLUMN/ AVERAGE
DEPTH TO WATER

Elvis (West) 2020 Release

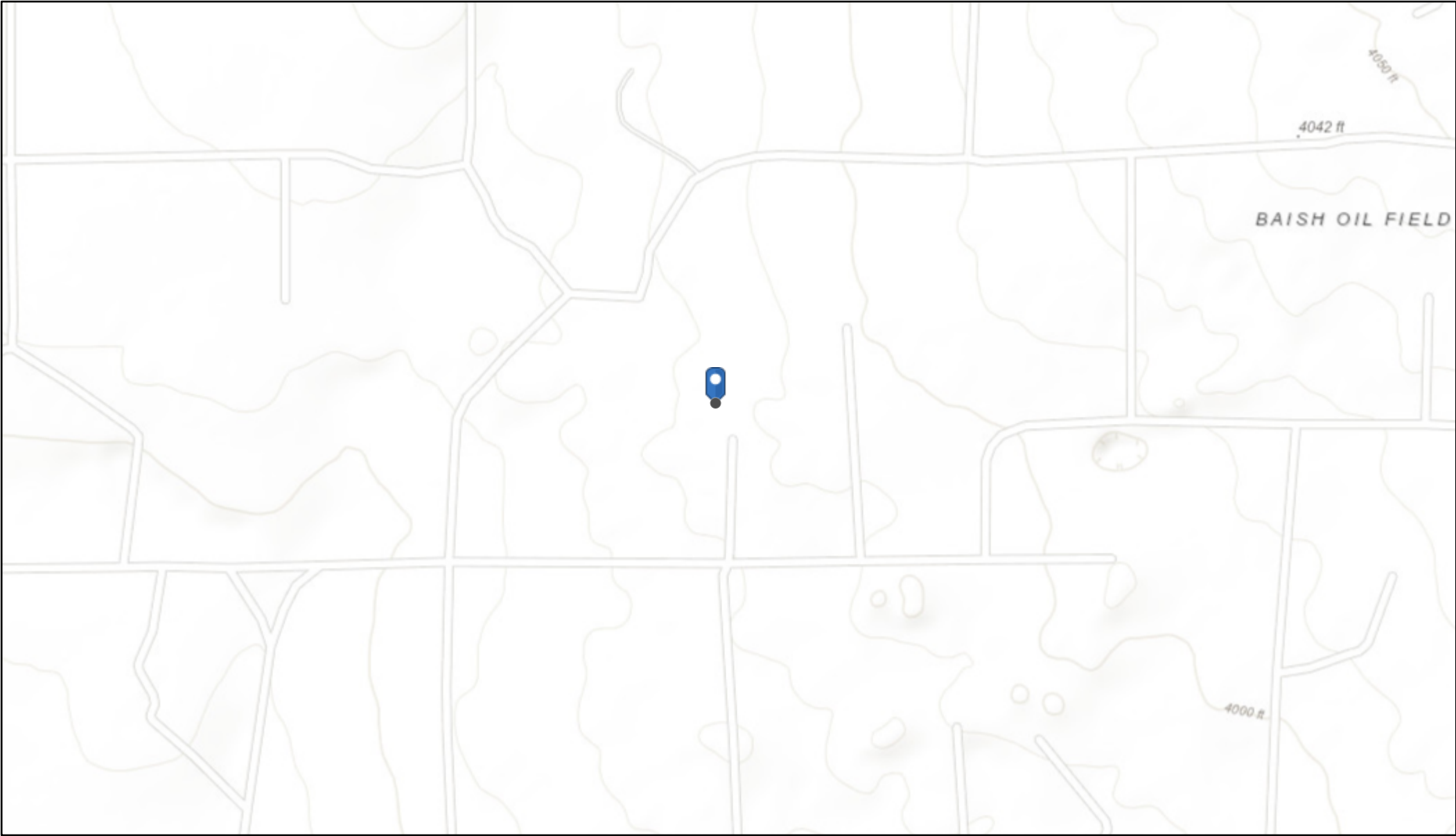
Karst Potential Map

Legend

-  Approximate Release Point
-  High
-  Low
-  Medium

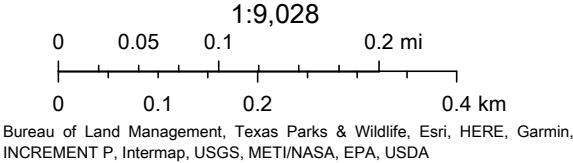


NMOCD Waterbodies Map



6/4/2021, 10:54:46 AM

-  OSE Water-bodies
-  PLJV Probable Plays
-  OSE Streams



212C-MD-02482		TETRA TECH		LOG OF BORING BG-1				Page 1 of 2	
Project Name: Elvis (West) Assessment									
Borehole Location: GPS: 32.822481°, -103.791223°					Surface Elevation (ft): 3991				
Borehole Number: BG-1				Borehole Diameter (in.): 8		Date Started: 5/13/2021		Date Finished: 5/13/2021	

DEPTH (ft)	OPERATION TYPES	SAMPLE	STANDARD PENETRATION TEST	PID (ppm)	SAMPLE RECOVERY (%)	MOISTURE CONTENT (%)	DRY DENSITY (pcf)	LIQUID LIMIT	PLASTICITY INDEX	MINUS NO. 200 (%)	GRAPHIC LOG	WATER LEVEL OBSERVATIONS			
												While Drilling <u>▽</u> Dry ft 24 Hours After Completion of Drilling <u>▽</u> Dry ft			
												Remarks:			
												MATERIAL DESCRIPTION	DEPTH (ft)	WELL DIAGRAM	
5												-SM- SILTY SAND: Light reddish-brown, fine to medium grained, weakly cemented, with trace calcareous gravel, no odor, no staining, dry.		4" Schedule 40 PVC Casing	
7												-ML- SILT: Brown, medium dense, with occasional SILTY CLAY, dry.			
8															
10												-SM- SILTY SAND: Brown, medium dense, with caliche gravel.			
13												-CL- SANDY CLAY: Reddish-brown, medium stiff, with no odor, no staining, dry.			
15															
18												-SC- CLAYEY SAND: Reddish-brown, fine to medium grained, weakly cemented, with no odor, no staining, dry.			
20															
25												-SP- SAND: Reddish-brown, fine to medium grained, moderately cemented, with trace gravel, no odor, no staining, dry.			
27															
30															

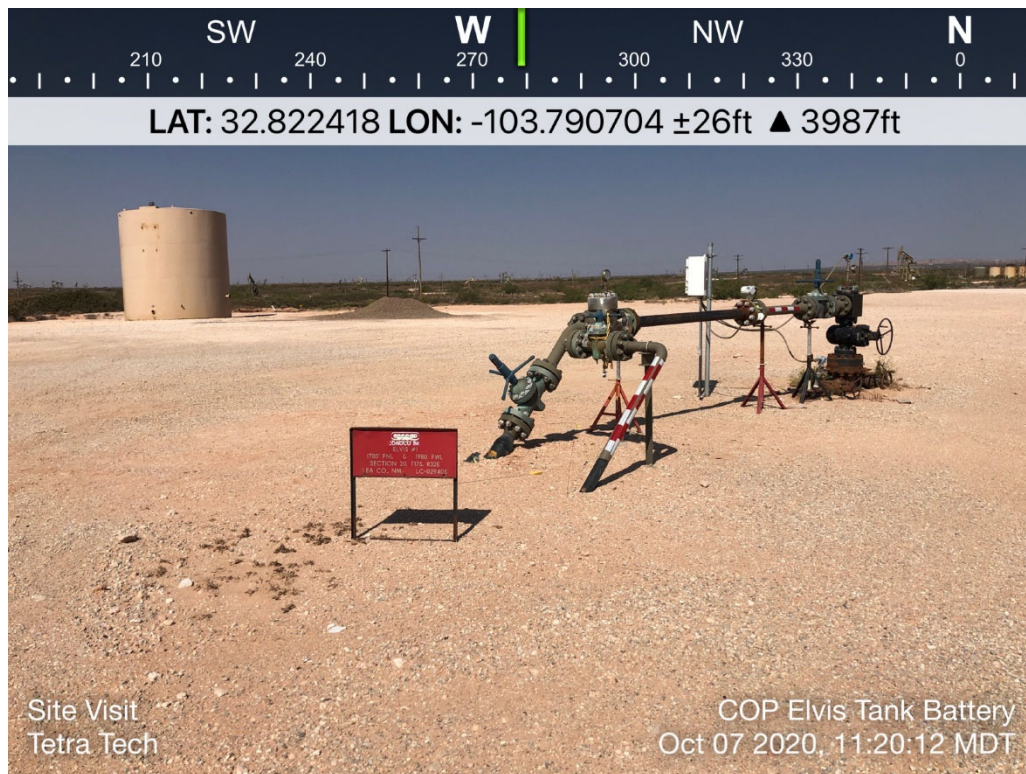
Sampler Types: ☒ Split Spoon ☐ Shelby ☐ Bulk Sample ☐ Grab Sample ☐ Acetate Liner ☐ Vane Shear ☐ California ☐ Sonic	Operation Types: ☐ Mud Rotary ☐ Continuous Flight Auger ☐ Hollow Stem Auger ☐ Auger ☐ Air Rotary ☐ Direct Push ☐ HSA	Notes: Surface elevation is an estimated value based on Google Earth data.
---	---	---

Logger: Devin Dominguez	Drilling Equipment: Air Rotary	Driller: Scarborough Drilling
-------------------------	--------------------------------	-------------------------------

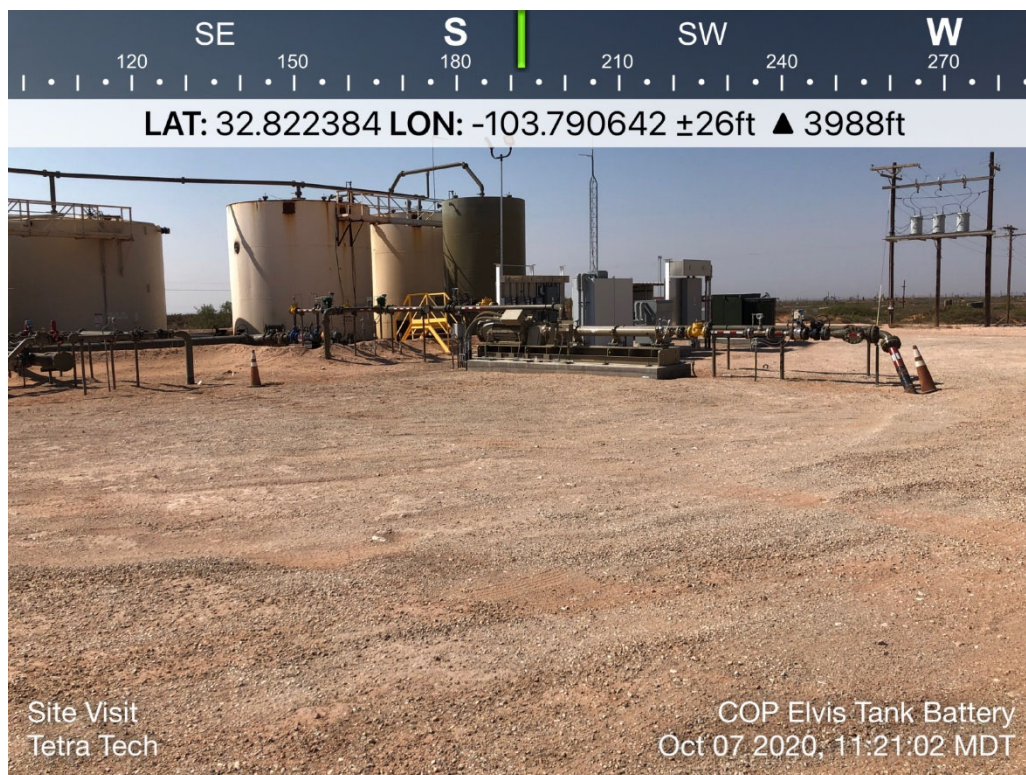
212C-MD-02482		TETRA TECH		LOG OF BORING BG-1				Page 2 of 2											
Project Name: Elvis (West) Assessment																			
Borehole Location: GPS: 32.822481°, -103.791223°				Surface Elevation (ft): 3991															
Borehole Number: BG-1				Borehole Diameter (in.): 8		Date Started: 5/13/2021		Date Finished: 5/13/2021											
DEPTH (ft)	OPERATION TYPES	SAMPLE	STANDARD PENETRATION TEST	PID (ppm)	SAMPLE RECOVERY (%)	MOISTURE CONTENT (%)	DRY DENSITY (pcf)	LIQUID LIMIT	PLASTICITY INDEX	MINUS NO. 200 (%)	GRAPHIC LOG	WATER LEVEL OBSERVATIONS While Drilling <u>▽</u> <u>Dry</u> ft 24 Hours After Completion of Drilling <u>▽</u> <u>Dry</u> ft Remarks:							
												MATERIAL DESCRIPTION	DEPTH (ft)	WELL DIAGRAM					
35																			
40													38	4" Schedule 40 PVC Slotted Screen (0.010")					
													43						
45																			
50																			
55													55						
Bottom of borehole at 55.0 feet.																			
Sampler Types:		☒ Split Spoon ☒ Shelby ☒ Bulk Sample ☒ Grab Sample	☒ Acetate Liner ☒ Vane Shear ☒ California ☒ Sonic	Operation Types:		☒ Auger ☒ Mud Rotary ☒ Continuous Flight Auger ☒ Hollow Stem Auger	☒ Air Rotary ☒ Direct Push ☒ HSA	Notes: Surface elevation is an estimated value based on Google Earth data.											
Logger: Devin Dominguez				Drilling Equipment: Air Rotary				Driller: Scarborough Drilling											

APPENDIX C

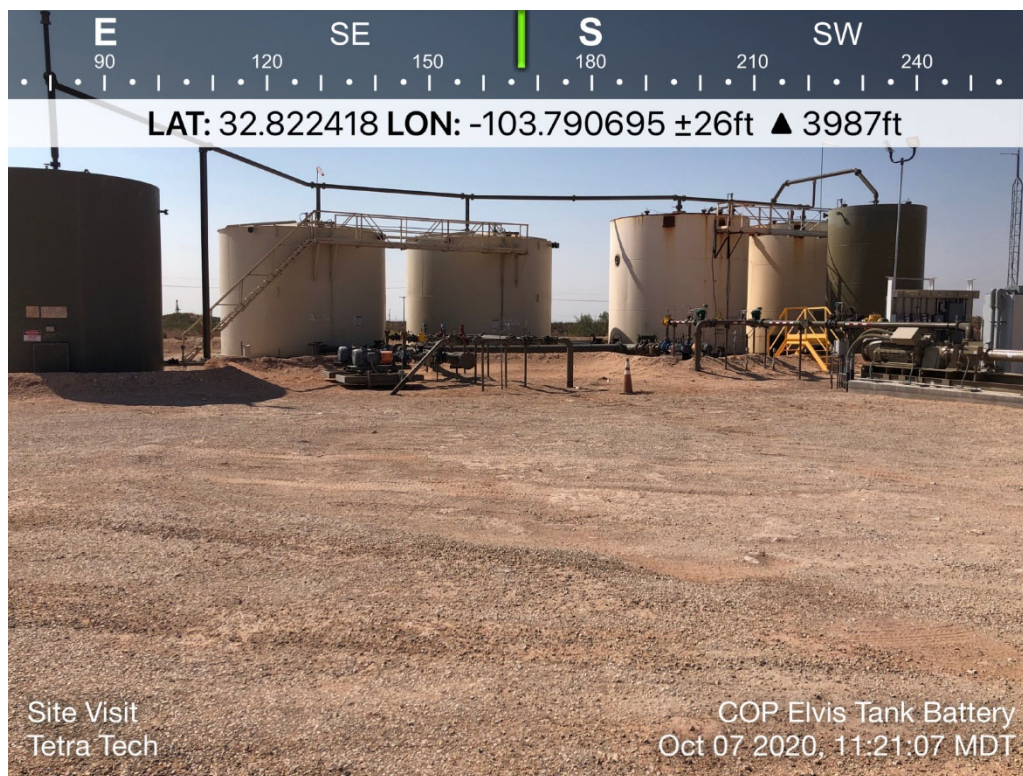
Photographic Documentation



TETRA TECH, INC. PROJECT NO. 212C-MD-02482	DESCRIPTION	View of the wellhead at the Elvis Tank Battery Site looking west.	1
	SITE NAME	Elvis Tank Battery (West) Release	10/07/2020



TETRA TECH, INC. PROJECT NO. 212C-MD-02482	DESCRIPTION	View of the Elvis Tank Battery Site looking south.	2
	SITE NAME	Elvis Tank Battery (West) Release	10/07/2020



TETRA TECH, INC. PROJECT NO. 212C-MD-02482	DESCRIPTION	View of the Elvis Tank Battery Site looking south.	3
	SITE NAME	Elvis Tank Battery (West) Release	10/07/2020



TETRA TECH, INC. PROJECT NO. 212C-MD-02482	DESCRIPTION	View of the Elvis Tank Battery Site looking southeast.	4
	SITE NAME	Elvis Tank Battery (West) Release	10/07/2020



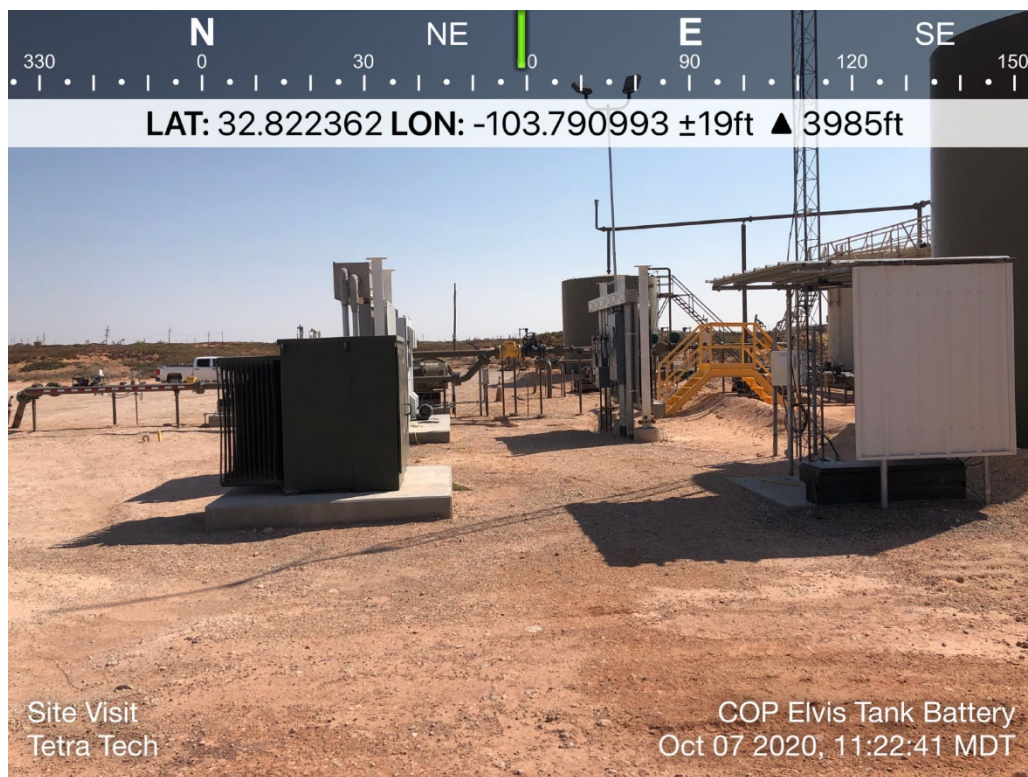
TETRA TECH, INC. PROJECT NO. 212C-MD-02482	DESCRIPTION	View of the Elvis Tank Battery Site looking southeast.	5
	SITE NAME	Elvis Tank Battery (West) Release	10/07/2020



TETRA TECH, INC. PROJECT NO. 212C-MD-02482	DESCRIPTION	View of the Elvis Tank Battery Site looking east.	6
	SITE NAME	Elvis Tank Battery (West) Release	10/07/2020



TETRA TECH, INC. PROJECT NO. 212C-MD-02482	DESCRIPTION	View of the Elvis Tank Battery Site looking southeast.	7
	SITE NAME	Elvis Tank Battery (West) Release	10/07/2020



TETRA TECH, INC. PROJECT NO. 212C-MD-02482	DESCRIPTION	View of the Elvis Tank Battery Site looking northeast.	8
	SITE NAME	Elvis Tank Battery (West) Release	10/07/2020



TETRA TECH, INC. PROJECT NO. 212C-MD-02482	DESCRIPTION	View of the wellhead at the Elvis Tank Battery Site looking northeast.	9
	SITE NAME	Elvis Tank Battery (West) Release	10/07/2020



TETRA TECH, INC. PROJECT NO. 212C-MD-02482	DESCRIPTION	View of the Elvis Tank Battery Site looking southeast.	10
	SITE NAME	Elvis Tank Battery (West) Release	10/07/2020

APPENDIX D

Laboratory Analytical Data



ANALYTICAL REPORT

June 03, 2021

ConocoPhillips - Tetra Tech

Sample Delivery Group: L1355882
Samples Received: 05/20/2021
Project Number: 212C-MD-02482
Description: Elvis (West) Release

Report To: Christian Llull
901 West Wall
Suite 100
Midland, TX 79701

¹Cp²Tc³Ss⁴Cn⁵Sr⁶Qc⁷Gl⁸Al⁹Sc

Entire Report Reviewed By:

Chris McCord
Project Manager

Results relate only to the items tested or calibrated and are reported as rounded values. This test report shall not be reproduced, except in full, without written approval of the laboratory. Where applicable, sampling conducted by Pace Analytical National is performed per guidance provided in laboratory standard operating procedures ENV-SOP-MTJL-0067 and ENV-SOP-MTJL-0068. Where sampling conducted by the customer, results relate to the accuracy of the information provided, and as the samples are received.

Pace Analytical National12065 Lebanon Rd Mount Juliet, TN 37122 615-758-5858 800-767-5859 www.pacenational.com

Cp: Cover Page	1
Tc: Table of Contents	2
Ss: Sample Summary	3
Cn: Case Narrative	7
Sr: Sample Results	8
BHW-1 (0-1) L1355882-01	8
BHW-1 (1-1.5) L1355882-02	9
BHW-1 (2-2.5) L1355882-03	10
BHW-1 (3-3.5) L1355882-04	11
BHW-1 (4-4.5) L1355882-05	12
BHW-1 (5-5.5) L1355882-06	13
BHW-1 (6-6.5) L1355882-07	14
BHW-1 (7-7.5) L1355882-08	15
BHW-1 (8-8.5) L1355882-09	16
BHW-2 (0-1) L1355882-10	17
BHW-2 (1-1.5) L1355882-11	18
BHW-3 (0-1) L1355882-12	19
BHW-3 (1-1.5) L1355882-13	20
BHW-4 (0-1) L1355882-14	21
BHW-4 (1-1.5) L1355882-15	22
BHW-5 (0-1) L1355882-16	23
BHW-5 (1-1.5) L1355882-17	24
Qc: Quality Control Summary	25
Total Solids by Method 2540 G-2011	25
Wet Chemistry by Method 300.0	28
Volatile Organic Compounds (GC) by Method 8015D/GRO	29
Volatile Organic Compounds (GC/MS) by Method 8260B	30
Semi-Volatile Organic Compounds (GC) by Method 8015	32
Gl: Glossary of Terms	35
Al: Accreditations & Locations	36
Sc: Sample Chain of Custody	37

¹ Cp
² Tc
³ Ss
⁴ Cn
⁵ Sr
⁶ Qc
⁷ Gl
⁸ Al
⁹ Sc

BHW-1 (0-1) L1355882-01 Solid

Collected by Devin Dominguez
Collected date/time 05/17/21 00:00
Received date/time 05/20/21 08:00

Method	Batch	Dilution	Preparation date/time	Analysis date/time	Analyst	Location
Total Solids by Method 2540 G-2011	WG1676981	1	05/26/21 13:36	05/26/21 13:42	KDW	Mt. Juliet, TN
Wet Chemistry by Method 300.0	WG1680538	5	06/02/21 18:49	06/03/21 01:31	ELN	Mt. Juliet, TN
Volatile Organic Compounds (GC) by Method 8015D/GRO	WG1676019	1	05/22/21 21:25	05/23/21 17:13	BMB	Mt. Juliet, TN
Volatile Organic Compounds (GC/MS) by Method 8260B	WG1676668	1	05/22/21 21:25	05/25/21 04:13	JAH	Mt. Juliet, TN
Semi-Volatile Organic Compounds (GC) by Method 8015	WG1677874	1	05/26/21 20:47	05/27/21 19:52	CAG	Mt. Juliet, TN

1 Cp

2 Tc

3 Ss

4 Cn

BHW-1 (1-1.5) L1355882-02 Solid

Collected by Devin Dominguez
Collected date/time 05/17/21 00:00
Received date/time 05/20/21 08:00

Method	Batch	Dilution	Preparation date/time	Analysis date/time	Analyst	Location
Total Solids by Method 2540 G-2011	WG1676981	1	05/26/21 13:36	05/26/21 13:42	KDW	Mt. Juliet, TN
Wet Chemistry by Method 300.0	WG1680538	1	06/02/21 18:49	06/03/21 01:41	ELN	Mt. Juliet, TN
Volatile Organic Compounds (GC) by Method 8015D/GRO	WG1676019	1	05/22/21 21:25	05/23/21 17:35	BMB	Mt. Juliet, TN
Volatile Organic Compounds (GC/MS) by Method 8260B	WG1676668	1	05/22/21 21:25	05/25/21 04:32	JAH	Mt. Juliet, TN
Semi-Volatile Organic Compounds (GC) by Method 8015	WG1677874	1	05/26/21 20:47	05/29/21 03:34	CAG	Mt. Juliet, TN

5 Sr

6 Qc

7 Gl

8 Al

BHW-1 (2-2.5) L1355882-03 Solid

Collected by Devin Dominguez
Collected date/time 05/17/21 00:00
Received date/time 05/20/21 08:00

Method	Batch	Dilution	Preparation date/time	Analysis date/time	Analyst	Location
Total Solids by Method 2540 G-2011	WG1676981	1	05/26/21 13:36	05/26/21 13:42	KDW	Mt. Juliet, TN
Wet Chemistry by Method 300.0	WG1680538	1	06/02/21 18:49	06/03/21 01:50	ELN	Mt. Juliet, TN
Volatile Organic Compounds (GC) by Method 8015D/GRO	WG1676019	1	05/22/21 21:25	05/23/21 17:57	BMB	Mt. Juliet, TN
Volatile Organic Compounds (GC/MS) by Method 8260B	WG1676668	1	05/22/21 21:25	05/25/21 04:52	JAH	Mt. Juliet, TN
Semi-Volatile Organic Compounds (GC) by Method 8015	WG1677874	1	05/26/21 20:47	05/27/21 05:40	CAG	Mt. Juliet, TN

9 Sc

BHW-1 (3-3.5) L1355882-04 Solid

Collected by Devin Dominguez
Collected date/time 05/17/21 00:00
Received date/time 05/20/21 08:00

Method	Batch	Dilution	Preparation date/time	Analysis date/time	Analyst	Location
Total Solids by Method 2540 G-2011	WG1676981	1	05/26/21 13:36	05/26/21 13:42	KDW	Mt. Juliet, TN
Wet Chemistry by Method 300.0	WG1680538	1	06/02/21 18:49	06/03/21 02:00	ELN	Mt. Juliet, TN
Volatile Organic Compounds (GC) by Method 8015D/GRO	WG1676019	1	05/22/21 21:25	05/23/21 18:19	BMB	Mt. Juliet, TN
Volatile Organic Compounds (GC/MS) by Method 8260B	WG1676668	1	05/22/21 21:25	05/25/21 05:11	JAH	Mt. Juliet, TN
Semi-Volatile Organic Compounds (GC) by Method 8015	WG1677874	1	05/26/21 20:47	05/27/21 20:19	CAG	Mt. Juliet, TN

BHW-1 (4-4.5) L1355882-05 Solid

Collected by Devin Dominguez
Collected date/time 05/17/21 00:00
Received date/time 05/20/21 08:00

Method	Batch	Dilution	Preparation date/time	Analysis date/time	Analyst	Location
Total Solids by Method 2540 G-2011	WG1676983	1	05/26/21 13:24	05/26/21 13:30	KDW	Mt. Juliet, TN
Wet Chemistry by Method 300.0	WG1680538	1	06/02/21 18:49	06/03/21 02:42	ELN	Mt. Juliet, TN
Volatile Organic Compounds (GC) by Method 8015D/GRO	WG1676019	1	05/22/21 21:25	05/23/21 18:41	BMB	Mt. Juliet, TN
Volatile Organic Compounds (GC/MS) by Method 8260B	WG1676668	1	05/22/21 21:25	05/25/21 05:30	JAH	Mt. Juliet, TN
Semi-Volatile Organic Compounds (GC) by Method 8015	WG1677884	1	05/26/21 15:47	05/27/21 05:08	CAG	Mt. Juliet, TN

BHW-1 (5-5.5) L1355882-06 Solid

Collected by Devin Dominguez
Collected date/time 05/17/21 00:00
Received date/time 05/20/21 08:00

Method	Batch	Dilution	Preparation date/time	Analysis date/time	Analyst	Location
Total Solids by Method 2540 G-2011	WG1676983	1	05/26/21 13:24	05/26/21 13:30	KDW	Mt. Juliet, TN
Wet Chemistry by Method 300.0	WG1680538	1	06/02/21 18:49	06/03/21 03:11	ELN	Mt. Juliet, TN
Volatile Organic Compounds (GC) by Method 8015D/GRO	WG1676019	1	05/22/21 21:25	05/23/21 19:03	BMB	Mt. Juliet, TN
Volatile Organic Compounds (GC/MS) by Method 8260B	WG1676668	1	05/22/21 21:25	05/25/21 05:49	JAH	Mt. Juliet, TN
Semi-Volatile Organic Compounds (GC) by Method 8015	WG1677884	1	05/26/21 15:47	05/27/21 02:31	CAG	Mt. Juliet, TN

¹ Cp² Tc³ Ss⁴ Cn

BHW-1 (6-6.5) L1355882-07 Solid

Collected by Devin Dominguez
Collected date/time 05/17/21 00:00
Received date/time 05/20/21 08:00

Method	Batch	Dilution	Preparation date/time	Analysis date/time	Analyst	Location
Total Solids by Method 2540 G-2011	WG1676983	1	05/26/21 13:24	05/26/21 13:30	KDW	Mt. Juliet, TN
Wet Chemistry by Method 300.0	WG1680538	1	06/02/21 18:49	06/03/21 03:20	ELN	Mt. Juliet, TN
Volatile Organic Compounds (GC) by Method 8015D/GRO	WG1676019	1	05/22/21 21:25	05/23/21 19:25	BMB	Mt. Juliet, TN
Volatile Organic Compounds (GC/MS) by Method 8260B	WG1676668	1	05/22/21 21:25	05/25/21 06:08	JAH	Mt. Juliet, TN
Semi-Volatile Organic Compounds (GC) by Method 8015	WG1677884	1	05/26/21 15:47	05/27/21 02:50	CAG	Mt. Juliet, TN

⁵ Sr⁶ Qc⁷ Gl⁸ Al

BHW-1 (7-7.5) L1355882-08 Solid

Collected by Devin Dominguez
Collected date/time 05/17/21 00:00
Received date/time 05/20/21 08:00

Method	Batch	Dilution	Preparation date/time	Analysis date/time	Analyst	Location
Total Solids by Method 2540 G-2011	WG1676983	1	05/26/21 13:24	05/26/21 13:30	KDW	Mt. Juliet, TN
Wet Chemistry by Method 300.0	WG1680538	1	06/02/21 18:49	06/03/21 03:30	ELN	Mt. Juliet, TN
Volatile Organic Compounds (GC) by Method 8015D/GRO	WG1676019	1	05/22/21 21:25	05/23/21 19:47	BMB	Mt. Juliet, TN
Volatile Organic Compounds (GC/MS) by Method 8260B	WG1676668	1	05/22/21 21:25	05/25/21 06:27	JAH	Mt. Juliet, TN
Semi-Volatile Organic Compounds (GC) by Method 8015	WG1677884	1	05/26/21 15:47	05/27/21 03:03	CAG	Mt. Juliet, TN

⁹ Sc

BHW-1 (8-8.5) L1355882-09 Solid

Collected by Devin Dominguez
Collected date/time 05/17/21 00:00
Received date/time 05/20/21 08:00

Method	Batch	Dilution	Preparation date/time	Analysis date/time	Analyst	Location
Total Solids by Method 2540 G-2011	WG1676983	1	05/26/21 13:24	05/26/21 13:30	KDW	Mt. Juliet, TN
Wet Chemistry by Method 300.0	WG1680538	1	06/02/21 18:49	06/03/21 03:39	ELN	Mt. Juliet, TN
Volatile Organic Compounds (GC) by Method 8015D/GRO	WG1676019	1	05/22/21 21:25	05/23/21 20:09	BMB	Mt. Juliet, TN
Volatile Organic Compounds (GC/MS) by Method 8260B	WG1676668	1	05/22/21 21:25	05/25/21 06:47	JAH	Mt. Juliet, TN
Semi-Volatile Organic Compounds (GC) by Method 8015	WG1677884	1	05/26/21 15:47	05/27/21 04:02	CAG	Mt. Juliet, TN

BHW-2 (0-1) L1355882-10 Solid

Collected by Devin Dominguez
Collected date/time 05/17/21 00:00
Received date/time 05/20/21 08:00

Method	Batch	Dilution	Preparation date/time	Analysis date/time	Analyst	Location
Total Solids by Method 2540 G-2011	WG1676983	1	05/26/21 13:24	05/26/21 13:30	KDW	Mt. Juliet, TN
Wet Chemistry by Method 300.0	WG1680538	1	06/02/21 18:49	06/03/21 03:49	ELN	Mt. Juliet, TN
Volatile Organic Compounds (GC) by Method 8015D/GRO	WG1676019	1	05/22/21 21:25	05/23/21 20:31	BMB	Mt. Juliet, TN
Volatile Organic Compounds (GC/MS) by Method 8260B	WG1676668	1	05/22/21 21:25	05/25/21 07:06	JAH	Mt. Juliet, TN
Semi-Volatile Organic Compounds (GC) by Method 8015	WG1677884	1	05/26/21 15:47	05/27/21 04:42	CAG	Mt. Juliet, TN

BHW-2 (1-1.5) L1355882-11 Solid

Collected by Devin Dominguez
 Collected date/time 05/17/21 00:00
 Received date/time 05/20/21 08:00

Method	Batch	Dilution	Preparation date/time	Analysis date/time	Analyst	Location
Total Solids by Method 2540 G-2011	WG1676983	1	05/26/21 13:24	05/26/21 13:30	KDW	Mt. Juliet, TN
Wet Chemistry by Method 300.0	WG1680538	1	06/02/21 18:49	06/03/21 03:58	ELN	Mt. Juliet, TN
Volatile Organic Compounds (GC) by Method 8015D/GRO	WG1676019	1	05/22/21 21:25	05/23/21 20:54	BMB	Mt. Juliet, TN
Volatile Organic Compounds (GC/MS) by Method 8260B	WG1677018	1	05/22/21 21:25	05/25/21 17:13	TPR	Mt. Juliet, TN
Semi-Volatile Organic Compounds (GC) by Method 8015	WG1677884	1	05/26/21 15:47	05/27/21 04:55	CAG	Mt. Juliet, TN

1 Cp

2 Tc

3 Ss

4 Cn

BHW-3 (0-1) L1355882-12 Solid

Collected by Devin Dominguez
 Collected date/time 05/17/21 00:00
 Received date/time 05/20/21 08:00

Method	Batch	Dilution	Preparation date/time	Analysis date/time	Analyst	Location
Total Solids by Method 2540 G-2011	WG1676983	1	05/26/21 13:24	05/26/21 13:30	KDW	Mt. Juliet, TN
Wet Chemistry by Method 300.0	WG1680538	1	06/02/21 18:49	06/03/21 04:08	ELN	Mt. Juliet, TN
Volatile Organic Compounds (GC) by Method 8015D/GRO	WG1676019	1	05/22/21 21:25	05/23/21 21:16	BMB	Mt. Juliet, TN
Volatile Organic Compounds (GC/MS) by Method 8260B	WG1677018	1	05/22/21 21:25	05/25/21 17:32	TPR	Mt. Juliet, TN
Semi-Volatile Organic Compounds (GC) by Method 8015	WG1677884	1	05/26/21 15:47	05/27/21 04:15	CAG	Mt. Juliet, TN

5 Sr

6 Qc

7 Gl

8 Al

BHW-3 (1-1.5) L1355882-13 Solid

Collected by Devin Dominguez
 Collected date/time 05/17/21 00:00
 Received date/time 05/20/21 08:00

Method	Batch	Dilution	Preparation date/time	Analysis date/time	Analyst	Location
Total Solids by Method 2540 G-2011	WG1676983	1	05/26/21 13:24	05/26/21 13:30	KDW	Mt. Juliet, TN
Wet Chemistry by Method 300.0	WG1680538	1	06/02/21 18:49	06/03/21 04:17	ELN	Mt. Juliet, TN
Volatile Organic Compounds (GC) by Method 8015D/GRO	WG1676019	1	05/22/21 21:25	05/23/21 21:39	BMB	Mt. Juliet, TN
Volatile Organic Compounds (GC/MS) by Method 8260B	WG1677018	1	05/22/21 21:25	05/25/21 17:51	TPR	Mt. Juliet, TN
Semi-Volatile Organic Compounds (GC) by Method 8015	WG1677884	1	05/26/21 15:47	05/27/21 04:28	CAG	Mt. Juliet, TN

9 Sc

BHW-4 (0-1) L1355882-14 Solid

Collected by Devin Dominguez
 Collected date/time 05/17/21 00:00
 Received date/time 05/20/21 08:00

Method	Batch	Dilution	Preparation date/time	Analysis date/time	Analyst	Location
Total Solids by Method 2540 G-2011	WG1676983	1	05/26/21 13:24	05/26/21 13:30	KDW	Mt. Juliet, TN
Wet Chemistry by Method 300.0	WG1680538	1	06/02/21 18:49	06/03/21 04:27	ELN	Mt. Juliet, TN
Volatile Organic Compounds (GC) by Method 8015D/GRO	WG1676019	1	05/22/21 21:25	05/23/21 22:01	BMB	Mt. Juliet, TN
Volatile Organic Compounds (GC/MS) by Method 8260B	WG1677018	1	05/22/21 21:25	05/25/21 18:10	TPR	Mt. Juliet, TN
Semi-Volatile Organic Compounds (GC) by Method 8015	WG1678260	1	05/27/21 07:53	05/27/21 19:56	CAG	Mt. Juliet, TN

BHW-4 (1-1.5) L1355882-15 Solid

Collected by Devin Dominguez
 Collected date/time 05/17/21 00:00
 Received date/time 05/20/21 08:00

Method	Batch	Dilution	Preparation date/time	Analysis date/time	Analyst	Location
Total Solids by Method 2540 G-2011	WG1676984	1	05/26/21 13:16	05/26/21 13:23	KDW	Mt. Juliet, TN
Wet Chemistry by Method 300.0	WG1680538	1	06/02/21 18:49	06/03/21 05:05	ELN	Mt. Juliet, TN
Volatile Organic Compounds (GC) by Method 8015D/GRO	WG1676019	1	05/22/21 21:25	05/23/21 22:22	BMB	Mt. Juliet, TN
Volatile Organic Compounds (GC/MS) by Method 8260B	WG1677018	1	05/22/21 21:25	05/25/21 18:29	TPR	Mt. Juliet, TN
Semi-Volatile Organic Compounds (GC) by Method 8015	WG1678260	1	05/27/21 07:53	05/27/21 20:08	CAG	Mt. Juliet, TN

BHW-5 (0-1) L1355882-16 Solid

Collected by Devin Dominguez
Collected date/time 05/17/21 00:00
Received date/time 05/20/21 08:00

Method	Batch	Dilution	Preparation date/time	Analysis date/time	Analyst	Location
Total Solids by Method 2540 G-2011	WG1676984	1	05/26/21 13:16	05/26/21 13:23	KDW	Mt. Juliet, TN
Wet Chemistry by Method 300.0	WG1680538	1	06/02/21 18:49	06/03/21 05:15	ELN	Mt. Juliet, TN
Volatile Organic Compounds (GC) by Method 8015D/GRO	WG1676019	1	05/22/21 21:25	05/23/21 22:44	BMB	Mt. Juliet, TN
Volatile Organic Compounds (GC/MS) by Method 8260B	WG1677018	1	05/22/21 21:25	05/25/21 18:47	TPR	Mt. Juliet, TN
Semi-Volatile Organic Compounds (GC) by Method 8015	WG1678260	1	05/27/21 07:53	05/27/21 19:30	CAG	Mt. Juliet, TN

¹ Cp² Tc³ Ss⁴ Cn

BHW-5 (1-1.5) L1355882-17 Solid

Collected by Devin Dominguez
Collected date/time 05/17/21 00:00
Received date/time 05/20/21 08:00

Method	Batch	Dilution	Preparation date/time	Analysis date/time	Analyst	Location
Total Solids by Method 2540 G-2011	WG1676984	1	05/26/21 13:16	05/26/21 13:23	KDW	Mt. Juliet, TN
Wet Chemistry by Method 300.0	WG1680538	1	06/02/21 18:49	06/03/21 05:24	ELN	Mt. Juliet, TN
Volatile Organic Compounds (GC) by Method 8015D/GRO	WG1676019	1	05/22/21 21:25	05/23/21 23:07	BMB	Mt. Juliet, TN
Volatile Organic Compounds (GC/MS) by Method 8260B	WG1677018	1	05/22/21 21:25	05/25/21 19:06	TPR	Mt. Juliet, TN
Semi-Volatile Organic Compounds (GC) by Method 8015	WG1678260	1	05/27/21 07:53	05/27/21 21:37	CAG	Mt. Juliet, TN

⁵ Sr⁶ Qc⁷ Gl⁸ Al⁹ Sc

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.



Chris McCord
Project Manager

¹ Cp² Tc³ Ss⁴ Cn⁵ Sr⁶ Qc⁷ Gl⁸ Al⁹ Sc

Collected date/time: 05/17/21 00:00

L1355882

Total Solids by Method 2540 G-2011

Analyte	Result	Qualifier	Dilution	Analysis	Batch
	%			date / time	
Total Solids	91.6		1	05/26/2021 13:42	WG1676981

1 Cp

2 Tc

3 Ss

4 Cn

5 Sr

6 Qc

7 Gl

8 Al

9 Sc

Wet Chemistry by Method 300.0

Analyte	Result (dry)	Qualifier	MDL (dry)	RDL (dry)	Dilution	Analysis	Batch
	mg/kg		mg/kg	mg/kg		date / time	
Chloride	2270		50.2	109	5	06/03/2021 01:31	WG1680538

Volatile Organic Compounds (GC) by Method 8015D/GRO

Analyte	Result (dry)	Qualifier	MDL (dry)	RDL (dry)	Dilution	Analysis	Batch
	mg/kg		mg/kg	mg/kg		date / time	
TPH (GC/FID) Low Fraction	U		0.0237	0.109	1	05/23/2021 17:13	WG1676019
(S) a,a,a-Trifluorotoluene(FID)	116			77.0-120		05/23/2021 17:13	WG1676019

Volatile Organic Compounds (GC/MS) by Method 8260B

Analyte	Result (dry)	Qualifier	MDL (dry)	RDL (dry)	Dilution	Analysis	Batch
	mg/kg		mg/kg	mg/kg		date / time	
Benzene	U		0.000553	0.00118	1	05/25/2021 04:13	WG1676668
Toluene	U		0.00154	0.00592	1	05/25/2021 04:13	WG1676668
Ethylbenzene	U		0.000873	0.00296	1	05/25/2021 04:13	WG1676668
Total Xylenes	U		0.00104	0.00770	1	05/25/2021 04:13	WG1676668
(S) Toluene-d8	132	J1		75.0-131		05/25/2021 04:13	WG1676668
(S) 4-Bromofluorobenzene	87.9			67.0-138		05/25/2021 04:13	WG1676668
(S) 1,2-Dichloroethane-d4	104			70.0-130		05/25/2021 04:13	WG1676668

Semi-Volatile Organic Compounds (GC) by Method 8015

Analyte	Result (dry)	Qualifier	MDL (dry)	RDL (dry)	Dilution	Analysis	Batch
	mg/kg		mg/kg	mg/kg		date / time	
C10-C28 Diesel Range	29.9		1.76	4.37	1	05/27/2021 19:52	WG1677874
C28-C40 Oil Range	109		0.299	4.37	1	05/27/2021 19:52	WG1677874
(S) o-Terphenyl	67.7			18.0-148		05/27/2021 19:52	WG1677874

Collected date/time: 05/17/21 00:00

L1355882

Total Solids by Method 2540 G-2011

Analyte	Result	Qualifier	Dilution	Analysis date / time	Batch
Total Solids	98.3		1	05/26/2021 13:42	WG1676981

Wet Chemistry by Method 300.0

Analyte	Result (dry) mg/kg	Qualifier	MDL (dry) mg/kg	RDL (dry) mg/kg	Dilution	Analysis date / time	Batch
Chloride	19.5	J	9.36	20.4	1	06/03/2021 01:41	WG1680538

Volatile Organic Compounds (GC) by Method 8015D/GRO

Analyte	Result (dry) mg/kg	Qualifier	MDL (dry) mg/kg	RDL (dry) mg/kg	Dilution	Analysis date / time	Batch
TPH (GC/FID) Low Fraction	U		0.0221	0.102	1	05/23/2021 17:35	WG1676019
(S) a,a,a-Trifluorotoluene(FID)	115			77.0-120		05/23/2021 17:35	WG1676019

Volatile Organic Compounds (GC/MS) by Method 8260B

Analyte	Result (dry) mg/kg	Qualifier	MDL (dry) mg/kg	RDL (dry) mg/kg	Dilution	Analysis date / time	Batch
Benzene	U		0.000483	0.00104	1	05/25/2021 04:32	WG1676668
Toluene	U		0.00135	0.00518	1	05/25/2021 04:32	WG1676668
Ethylbenzene	U		0.000763	0.00259	1	05/25/2021 04:32	WG1676668
Total Xylenes	U		0.000911	0.00673	1	05/25/2021 04:32	WG1676668
(S) Toluene-d8	130			75.0-131		05/25/2021 04:32	WG1676668
(S) 4-Bromofluorobenzene	85.4			67.0-138		05/25/2021 04:32	WG1676668
(S) 1,2-Dichloroethane-d4	104			70.0-130		05/25/2021 04:32	WG1676668

Semi-Volatile Organic Compounds (GC) by Method 8015

Analyte	Result (dry) mg/kg	Qualifier	MDL (dry) mg/kg	RDL (dry) mg/kg	Dilution	Analysis date / time	Batch
C10-C28 Diesel Range	4.47		1.64	4.07	1	05/29/2021 03:34	WG1677874
C28-C40 Oil Range	23.2		0.279	4.07	1	05/29/2021 03:34	WG1677874
(S) o-Terphenyl	85.0			18.0-148		05/29/2021 03:34	WG1677874

1 Cp
2 Tc
3 Ss
4 Cn
5 Sr
6 Qc
7 Gl
8 Al
9 Sc

Collected date/time: 05/17/21 00:00

L1355882

Total Solids by Method 2540 G-2011

Analyte	Result	Qualifier	Dilution	Analysis date / time	Batch
Total Solids	97.4		1	05/26/2021 13:42	WG1676981

1 Cp

2 Tc

3 Ss

4 Cn

5 Sr

6 Qc

7 Gl

8 Al

9 Sc

Wet Chemistry by Method 300.0

Analyte	Result (dry)	Qualifier	MDL (dry)	RDL (dry)	Dilution	Analysis date / time	Batch
Chloride	31.3		9.44	20.5	1	06/03/2021 01:50	WG1680538

Volatile Organic Compounds (GC) by Method 8015D/GRO

Analyte	Result (dry)	Qualifier	MDL (dry)	RDL (dry)	Dilution	Analysis date / time	Batch
TPH (GC/FID) Low Fraction	U		0.0223	0.103	1	05/23/2021 17:57	WG1676019
(S) a,a,a-Trifluorotoluene(FID)	116			77.0-120		05/23/2021 17:57	WG1676019

Volatile Organic Compounds (GC/MS) by Method 8260B

Analyte	Result (dry)	Qualifier	MDL (dry)	RDL (dry)	Dilution	Analysis date / time	Batch
Benzene	U		0.000492	0.00105	1	05/25/2021 04:52	WG1676668
Toluene	U		0.00137	0.00526	1	05/25/2021 04:52	WG1676668
Ethylbenzene	U		0.000776	0.00263	1	05/25/2021 04:52	WG1676668
Total Xylenes	U		0.000926	0.00684	1	05/25/2021 04:52	WG1676668
(S) Toluene-d8	130			75.0-131		05/25/2021 04:52	WG1676668
(S) 4-Bromofluorobenzene	87.9			67.0-138		05/25/2021 04:52	WG1676668
(S) 1,2-Dichloroethane-d4	106			70.0-130		05/25/2021 04:52	WG1676668

Semi-Volatile Organic Compounds (GC) by Method 8015

Analyte	Result (dry)	Qualifier	MDL (dry)	RDL (dry)	Dilution	Analysis date / time	Batch
C10-C28 Diesel Range	U		1.65	4.11	1	05/27/2021 05:40	WG1677874
C28-C40 Oil Range	0.360	J	0.281	4.11	1	05/27/2021 05:40	WG1677874
(S) o-Terphenyl	80.3			18.0-148		05/27/2021 05:40	WG1677874

Total Solids by Method 2540 G-2011

Analyte	Result	Qualifier	Dilution	Analysis date / time	Batch
Total Solids	97.9		1	05/26/2021 13:42	WG1676981

Wet Chemistry by Method 300.0

Analyte	Result (dry) mg/kg	Qualifier	MDL (dry) mg/kg	RDL (dry) mg/kg	Dilution	Analysis date / time	Batch
Chloride	50.4		9.40	20.4	1	06/03/2021 02:00	WG1680538

Volatile Organic Compounds (GC) by Method 8015D/GRO

Analyte	Result (dry) mg/kg	Qualifier	MDL (dry) mg/kg	RDL (dry) mg/kg	Dilution	Analysis date / time	Batch
TPH (GC/FID) Low Fraction	U		0.0222	0.102	1	05/23/2021 18:19	WG1676019
(S) a,a,a-Trifluorotoluene(FID)	115			77.0-120		05/23/2021 18:19	WG1676019

Volatile Organic Compounds (GC/MS) by Method 8260B

Analyte	Result (dry) mg/kg	Qualifier	MDL (dry) mg/kg	RDL (dry) mg/kg	Dilution	Analysis date / time	Batch
Benzene	U		0.000487	0.00104	1	05/25/2021 05:11	WG1676668
Toluene	U		0.00136	0.00521	1	05/25/2021 05:11	WG1676668
Ethylbenzene	U		0.000768	0.00261	1	05/25/2021 05:11	WG1676668
Total Xylenes	U		0.000917	0.00678	1	05/25/2021 05:11	WG1676668
(S) Toluene-d8	134	J1		75.0-131		05/25/2021 05:11	WG1676668
(S) 4-Bromofluorobenzene	88.6			67.0-138		05/25/2021 05:11	WG1676668
(S) 1,2-Dichloroethane-d4	103			70.0-130		05/25/2021 05:11	WG1676668

Semi-Volatile Organic Compounds (GC) by Method 8015

Analyte	Result (dry) mg/kg	Qualifier	MDL (dry) mg/kg	RDL (dry) mg/kg	Dilution	Analysis date / time	Batch
C10-C28 Diesel Range	4.95		1.64	4.08	1	05/27/2021 20:19	WG1677874
C28-C40 Oil Range	26.7		0.280	4.08	1	05/27/2021 20:19	WG1677874
(S) o-Terphenyl	66.6			18.0-148		05/27/2021 20:19	WG1677874

Collected date/time: 05/17/21 00:00

L1355882

Total Solids by Method 2540 G-2011

Analyte	Result	Qualifier	Dilution	Analysis date / time	Batch
Total Solids	97.5		1	05/26/2021 13:30	WG1676983

Wet Chemistry by Method 300.0

Analyte	Result (dry)	Qualifier	MDL (dry)	RDL (dry)	Dilution	Analysis date / time	Batch
Chloride	97.8		9.43	20.5	1	06/03/2021 02:42	WG1680538

Volatile Organic Compounds (GC) by Method 8015D/GRO

Analyte	Result (dry)	Qualifier	MDL (dry)	RDL (dry)	Dilution	Analysis date / time	Batch
TPH (GC/FID) Low Fraction	U		0.0223	0.103	1	05/23/2021 18:41	WG1676019
(S) a,a,a-Trifluorotoluene(FID)	116			77.0-120		05/23/2021 18:41	WG1676019

Volatile Organic Compounds (GC/MS) by Method 8260B

Analyte	Result (dry)	Qualifier	MDL (dry)	RDL (dry)	Dilution	Analysis date / time	Batch
Benzene	U		0.000491	0.00105	1	05/25/2021 05:30	WG1676668
Toluene	U		0.00137	0.00526	1	05/25/2021 05:30	WG1676668
Ethylbenzene	U		0.000775	0.00263	1	05/25/2021 05:30	WG1676668
Total Xylenes	U		0.000925	0.00683	1	05/25/2021 05:30	WG1676668
(S) Toluene-d8	134	J1		75.0-131		05/25/2021 05:30	WG1676668
(S) 4-Bromofluorobenzene	88.1			67.0-138		05/25/2021 05:30	WG1676668
(S) 1,2-Dichloroethane-d4	104			70.0-130		05/25/2021 05:30	WG1676668

Semi-Volatile Organic Compounds (GC) by Method 8015

Analyte	Result (dry)	Qualifier	MDL (dry)	RDL (dry)	Dilution	Analysis date / time	Batch
C10-C28 Diesel Range	U		1.65	4.10	1	05/27/2021 05:08	WG1677884
C28-C40 Oil Range	2.89	J	0.281	4.10	1	05/27/2021 05:08	WG1677884
(S) o-Terphenyl	69.7			18.0-148		05/27/2021 05:08	WG1677884

1	Cp
2	Tc
3	Ss
4	Cn
5	Sr
6	Qc
7	Gl
8	Al
9	Sc

Total Solids by Method 2540 G-2011

Analyte	Result	Qualifier	Dilution	Analysis date / time	Batch
Total Solids	96.9		1	05/26/2021 13:30	WG1676983

¹ Cp

² Tc

Wet Chemistry by Method 300.0

Analyte	Result (dry) mg/kg	Qualifier	MDL (dry) mg/kg	RDL (dry) mg/kg	Dilution	Analysis date / time	Batch
Chloride	166		9.49	20.6	1	06/03/2021 03:11	WG1680538

³ Ss

⁴ Cn

Volatile Organic Compounds (GC) by Method 8015D/GRO

Analyte	Result (dry) mg/kg	Qualifier	MDL (dry) mg/kg	RDL (dry) mg/kg	Dilution	Analysis date / time	Batch
TPH (GC/FID) Low Fraction	U		0.0224	0.103	1	05/23/2021 19:03	WG1676019
(S) a,a,a-Trifluorotoluene(FID)	116			77.0-120		05/23/2021 19:03	WG1676019

⁵ Sr

⁶ Qc

⁷ Gl

Volatile Organic Compounds (GC/MS) by Method 8260B

Analyte	Result (dry) mg/kg	Qualifier	MDL (dry) mg/kg	RDL (dry) mg/kg	Dilution	Analysis date / time	Batch
Benzene	U		0.000497	0.00106	1	05/25/2021 05:49	WG1676668
Toluene	U		0.00138	0.00532	1	05/25/2021 05:49	WG1676668
Ethylbenzene	U		0.000784	0.00266	1	05/25/2021 05:49	WG1676668
Total Xylenes	U		0.000936	0.00691	1	05/25/2021 05:49	WG1676668
(S) Toluene-d8	131			75.0-131		05/25/2021 05:49	WG1676668
(S) 4-Bromofluorobenzene	86.9			67.0-138		05/25/2021 05:49	WG1676668
(S) 1,2-Dichloroethane-d4	104			70.0-130		05/25/2021 05:49	WG1676668

⁸ Al

⁹ Sc

Semi-Volatile Organic Compounds (GC) by Method 8015

Analyte	Result (dry) mg/kg	Qualifier	MDL (dry) mg/kg	RDL (dry) mg/kg	Dilution	Analysis date / time	Batch
C10-C28 Diesel Range	1.97	J	1.66	4.13	1	05/27/2021 02:31	WG1677884
C28-C40 Oil Range	1.04	J	0.283	4.13	1	05/27/2021 02:31	WG1677884
(S) o-Terphenyl	72.1			18.0-148		05/27/2021 02:31	WG1677884

Collected date/time: 05/17/21 00:00

L1355882

Total Solids by Method 2540 G-2011

Analyte	Result	Qualifier	Dilution	Analysis date / time	Batch
Total Solids	84.1		1	05/26/2021 13:30	WG1676983

Wet Chemistry by Method 300.0

Analyte	Result (dry) mg/kg	Qualifier	MDL (dry) mg/kg	RDL (dry) mg/kg	Dilution	Analysis date / time	Batch
Chloride	323		10.9	23.8	1	06/03/2021 03:20	WG1680538

Volatile Organic Compounds (GC) by Method 8015D/GRO

Analyte	Result (dry) mg/kg	Qualifier	MDL (dry) mg/kg	RDL (dry) mg/kg	Dilution	Analysis date / time	Batch
TPH (GC/FID) Low Fraction	U		0.0258	0.119	1	05/23/2021 19:25	WG1676019
(S) a,a,a-Trifluorotoluene(FID)	116			77.0-120		05/23/2021 19:25	WG1676019

Volatile Organic Compounds (GC/MS) by Method 8260B

Analyte	Result (dry) mg/kg	Qualifier	MDL (dry) mg/kg	RDL (dry) mg/kg	Dilution	Analysis date / time	Batch
Benzene	U		0.000644	0.00138	1	05/25/2021 06:08	WG1676668
Toluene	U		0.00179	0.00689	1	05/25/2021 06:08	WG1676668
Ethylbenzene	U		0.00102	0.00345	1	05/25/2021 06:08	WG1676668
Total Xylenes	U		0.00121	0.00896	1	05/25/2021 06:08	WG1676668
(S) Toluene-d8	132	J1		75.0-131		05/25/2021 06:08	WG1676668
(S) 4-Bromofluorobenzene	85.9			67.0-138		05/25/2021 06:08	WG1676668
(S) 1,2-Dichloroethane-d4	103			70.0-130		05/25/2021 06:08	WG1676668

Semi-Volatile Organic Compounds (GC) by Method 8015

Analyte	Result (dry) mg/kg	Qualifier	MDL (dry) mg/kg	RDL (dry) mg/kg	Dilution	Analysis date / time	Batch
C10-C28 Diesel Range	U		1.91	4.76	1	05/27/2021 02:50	WG1677884
C28-C40 Oil Range	0.764	J	0.326	4.76	1	05/27/2021 02:50	WG1677884
(S) o-Terphenyl	71.0			18.0-148		05/27/2021 02:50	WG1677884

Total Solids by Method 2540 G-2011

Analyte	Result	Qualifier	Dilution	Analysis	Batch
	%			date / time	
Total Solids	85.2		1	05/26/2021 13:30	WG1676983

Wet Chemistry by Method 300.0

Analyte	Result (dry)	Qualifier	MDL (dry)	RDL (dry)	Dilution	Analysis	Batch
	mg/kg		mg/kg	mg/kg		date / time	
Chloride	54.2		10.8	23.5	1	06/03/2021 03:30	WG1680538

Volatile Organic Compounds (GC) by Method 8015D/GRO

Analyte	Result (dry)	Qualifier	MDL (dry)	RDL (dry)	Dilution	Analysis	Batch
	mg/kg		mg/kg	mg/kg		date / time	
TPH (GC/FID) Low Fraction	U		0.0255	0.117	1	05/23/2021 19:47	WG1676019
(S) a,a,a-Trifluorotoluene(FID)	116			77.0-120		05/23/2021 19:47	WG1676019

Volatile Organic Compounds (GC/MS) by Method 8260B

Analyte	Result (dry)	Qualifier	MDL (dry)	RDL (dry)	Dilution	Analysis	Batch
	mg/kg		mg/kg	mg/kg		date / time	
Benzene	U		0.000629	0.00135	1	05/25/2021 06:27	WG1676668
Toluene	U		0.00175	0.00673	1	05/25/2021 06:27	WG1676668
Ethylbenzene	U		0.000992	0.00337	1	05/25/2021 06:27	WG1676668
Total Xylenes	U		0.00118	0.00875	1	05/25/2021 06:27	WG1676668
(S) Toluene-d8	131			75.0-131		05/25/2021 06:27	WG1676668
(S) 4-Bromofluorobenzene	87.5			67.0-138		05/25/2021 06:27	WG1676668
(S) 1,2-Dichloroethane-d4	104			70.0-130		05/25/2021 06:27	WG1676668

Semi-Volatile Organic Compounds (GC) by Method 8015

Analyte	Result (dry)	Qualifier	MDL (dry)	RDL (dry)	Dilution	Analysis	Batch
	mg/kg		mg/kg	mg/kg		date / time	
C10-C28 Diesel Range	U		1.89	4.69	1	05/27/2021 03:03	WG1677884
C28-C40 Oil Range	0.989	J	0.321	4.69	1	05/27/2021 03:03	WG1677884
(S) o-Terphenyl	70.8			18.0-148		05/27/2021 03:03	WG1677884

1 Cp

2 Tc

3 Ss

4 Cn

5 Sr

6 Qc

7 Gl

8 Al

9 Sc

Total Solids by Method 2540 G-2011

Analyte	Result	Qualifier	Dilution	Analysis date / time	Batch
Total Solids	87.0		1	05/26/2021 13:30	WG1676983

Wet Chemistry by Method 300.0

Analyte	Result (dry) mg/kg	Qualifier	MDL (dry) mg/kg	RDL (dry) mg/kg	Dilution	Analysis date / time	Batch
Chloride	113		10.6	23.0	1	06/03/2021 03:39	WG1680538

Volatile Organic Compounds (GC) by Method 8015D/GRO

Analyte	Result (dry) mg/kg	Qualifier	MDL (dry) mg/kg	RDL (dry) mg/kg	Dilution	Analysis date / time	Batch
TPH (GC/FID) Low Fraction	U		0.0249	0.115	1	05/23/2021 20:09	WG1676019
(S) a,a,a-Trifluorotoluene(FID)	115			77.0-120		05/23/2021 20:09	WG1676019

Volatile Organic Compounds (GC/MS) by Method 8260B

Analyte	Result (dry) mg/kg	Qualifier	MDL (dry) mg/kg	RDL (dry) mg/kg	Dilution	Analysis date / time	Batch
Benzene	U		0.000607	0.00130	1	05/25/2021 06:47	WG1676668
Toluene	U		0.00169	0.00649	1	05/25/2021 06:47	WG1676668
Ethylbenzene	U		0.000957	0.00325	1	05/25/2021 06:47	WG1676668
Total Xylenes	U		0.00114	0.00844	1	05/25/2021 06:47	WG1676668
(S) Toluene-d8	131			75.0-131		05/25/2021 06:47	WG1676668
(S) 4-Bromofluorobenzene	88.4			67.0-138		05/25/2021 06:47	WG1676668
(S) 1,2-Dichloroethane-d4	106			70.0-130		05/25/2021 06:47	WG1676668

Semi-Volatile Organic Compounds (GC) by Method 8015

Analyte	Result (dry) mg/kg	Qualifier	MDL (dry) mg/kg	RDL (dry) mg/kg	Dilution	Analysis date / time	Batch
C10-C28 Diesel Range	U		1.85	4.60	1	05/27/2021 04:02	WG1677884
C28-C40 Oil Range	1.05	J	0.315	4.60	1	05/27/2021 04:02	WG1677884
(S) o-Terphenyl	66.6			18.0-148		05/27/2021 04:02	WG1677884

Collected date/time: 05/17/21 00:00

L1355882

Total Solids by Method 2540 G-2011

Analyte	Result	Qualifier	Dilution	Analysis	Batch
	%			date / time	
Total Solids	96.9		1	05/26/2021 13:30	WG1676983

Wet Chemistry by Method 300.0

Analyte	Result (dry)	Qualifier	MDL (dry)	RDL (dry)	Dilution	Analysis	Batch
	mg/kg		mg/kg	mg/kg		date / time	
Chloride	87.4		9.49	20.6	1	06/03/2021 03:49	WG1680538

Volatile Organic Compounds (GC) by Method 8015D/GRO

Analyte	Result (dry)	Qualifier	MDL (dry)	RDL (dry)	Dilution	Analysis	Batch
	mg/kg		mg/kg	mg/kg		date / time	
TPH (GC/FID) Low Fraction	U		0.0224	0.103	1	05/23/2021 20:31	WG1676019
(S) a,a,a-Trifluorotoluene(FID)	114			77.0-120		05/23/2021 20:31	WG1676019

Volatile Organic Compounds (GC/MS) by Method 8260B

Analyte	Result (dry)	Qualifier	MDL (dry)	RDL (dry)	Dilution	Analysis	Batch
	mg/kg		mg/kg	mg/kg		date / time	
Benzene	U		0.000497	0.00106	1	05/25/2021 07:06	WG1676668
Toluene	U		0.00138	0.00532	1	05/25/2021 07:06	WG1676668
Ethylbenzene	U		0.000784	0.00266	1	05/25/2021 07:06	WG1676668
Total Xylenes	U		0.000936	0.00692	1	05/25/2021 07:06	WG1676668
(S) Toluene-d8	131			75.0-131		05/25/2021 07:06	WG1676668
(S) 4-Bromofluorobenzene	89.6			67.0-138		05/25/2021 07:06	WG1676668
(S) 1,2-Dichloroethane-d4	105			70.0-130		05/25/2021 07:06	WG1676668

Semi-Volatile Organic Compounds (GC) by Method 8015

Analyte	Result (dry)	Qualifier	MDL (dry)	RDL (dry)	Dilution	Analysis	Batch
	mg/kg		mg/kg	mg/kg		date / time	
C10-C28 Diesel Range	U		1.66	4.13	1	05/27/2021 04:42	WG1677884
C28-C40 Oil Range	3.22	J	0.283	4.13	1	05/27/2021 04:42	WG1677884
(S) o-Terphenyl	65.8			18.0-148		05/27/2021 04:42	WG1677884

Collected date/time: 05/17/21 00:00

L1355882

Total Solids by Method 2540 G-2011

Analyte	Result	Qualifier	Dilution	Analysis	Batch
	%			date / time	
Total Solids	96.6		1	05/26/2021 13:30	WG1676983

Wet Chemistry by Method 300.0

Analyte	Result (dry)	Qualifier	MDL (dry)	RDL (dry)	Dilution	Analysis	Batch
	mg/kg		mg/kg	mg/kg		date / time	
Chloride	97.2		9.52	20.7	1	06/03/2021 03:58	WG1680538

Volatile Organic Compounds (GC) by Method 8015D/GRO

Analyte	Result (dry)	Qualifier	MDL (dry)	RDL (dry)	Dilution	Analysis	Batch
	mg/kg		mg/kg	mg/kg		date / time	
TPH (GC/FID) Low Fraction	U		0.0225	0.103	1	05/23/2021 20:54	WG1676019
(S) a,a,a-Trifluorotoluene(FID)	116			77.0-120		05/23/2021 20:54	WG1676019

Volatile Organic Compounds (GC/MS) by Method 8260B

Analyte	Result (dry)	Qualifier	MDL (dry)	RDL (dry)	Dilution	Analysis	Batch
	mg/kg		mg/kg	mg/kg		date / time	
Benzene	U		0.000500	0.00107	1	05/25/2021 17:13	WG1677018
Toluene	U		0.00139	0.00535	1	05/25/2021 17:13	WG1677018
Ethylbenzene	U		0.000789	0.00267	1	05/25/2021 17:13	WG1677018
Total Xylenes	U		0.000942	0.00695	1	05/25/2021 17:13	WG1677018
(S) Toluene-d8	101			75.0-131		05/25/2021 17:13	WG1677018
(S) 4-Bromofluorobenzene	103			67.0-138		05/25/2021 17:13	WG1677018
(S) 1,2-Dichloroethane-d4	74.5			70.0-130		05/25/2021 17:13	WG1677018

Semi-Volatile Organic Compounds (GC) by Method 8015

Analyte	Result (dry)	Qualifier	MDL (dry)	RDL (dry)	Dilution	Analysis	Batch
	mg/kg		mg/kg	mg/kg		date / time	
C10-C28 Diesel Range	U		1.67	4.14	1	05/27/2021 04:55	WG1677884
C28-C40 Oil Range	3.10	J	0.284	4.14	1	05/27/2021 04:55	WG1677884
(S) o-Terphenyl	68.8			18.0-148		05/27/2021 04:55	WG1677884

Collected date/time: 05/17/21 00:00

L1355882

Total Solids by Method 2540 G-2011

Analyte	Result	Qualifier	Dilution	Analysis date / time	Batch
Total Solids	87.2		1	05/26/2021 13:30	WG1676983

1 Cp

2 Tc

3 Ss

4 Cn

5 Sr

6 Qc

7 Gl

8 Al

9 Sc

Wet Chemistry by Method 300.0

Analyte	Result (dry)	Qualifier	MDL (dry)	RDL (dry)	Dilution	Analysis date / time	Batch
Chloride	21.0	J	10.6	22.9	1	06/03/2021 04:08	WG1680538

Volatile Organic Compounds (GC) by Method 8015D/GRO

Analyte	Result (dry)	Qualifier	MDL (dry)	RDL (dry)	Dilution	Analysis date / time	Batch
TPH (GC/FID) Low Fraction	U		0.0249	0.115	1	05/23/2021 21:16	WG1676019
(S) a,a,a-Trifluorotoluene(FID)	116			77.0-120		05/23/2021 21:16	WG1676019

Volatile Organic Compounds (GC/MS) by Method 8260B

Analyte	Result (dry)	Qualifier	MDL (dry)	RDL (dry)	Dilution	Analysis date / time	Batch
Benzene	U		0.000604	0.00129	1	05/25/2021 17:32	WG1677018
Toluene	U		0.00168	0.00647	1	05/25/2021 17:32	WG1677018
Ethylbenzene	U		0.000954	0.00323	1	05/25/2021 17:32	WG1677018
Total Xylenes	U		0.00114	0.00841	1	05/25/2021 17:32	WG1677018
(S) Toluene-d8	104			75.0-131		05/25/2021 17:32	WG1677018
(S) 4-Bromofluorobenzene	102			67.0-138		05/25/2021 17:32	WG1677018
(S) 1,2-Dichloroethane-d4	76.8			70.0-130		05/25/2021 17:32	WG1677018

Semi-Volatile Organic Compounds (GC) by Method 8015

Analyte	Result (dry)	Qualifier	MDL (dry)	RDL (dry)	Dilution	Analysis date / time	Batch
C10-C28 Diesel Range	U		1.85	4.59	1	05/27/2021 04:15	WG1677884
C28-C40 Oil Range	0.384	J	0.314	4.59	1	05/27/2021 04:15	WG1677884
(S) o-Terphenyl	60.3			18.0-148		05/27/2021 04:15	WG1677884

Collected date/time: 05/17/21 00:00

L1355882

Total Solids by Method 2540 G-2011

Analyte	Result	Qualifier	Dilution	Analysis	Batch
	%			date / time	
Total Solids	87.3		1	05/26/2021 13:30	WG1676983

1 Cp

2 Tc

3 Ss

4 Cn

5 Sr

6 Qc

7 Gl

8 Al

9 Sc

Wet Chemistry by Method 300.0

Analyte	Result (dry)	Qualifier	MDL (dry)	RDL (dry)	Dilution	Analysis	Batch
	mg/kg		mg/kg	mg/kg		date / time	
Chloride	53.6		10.5	22.9	1	06/03/2021 04:17	WG1680538

Volatile Organic Compounds (GC) by Method 8015D/GRO

Analyte	Result (dry)	Qualifier	MDL (dry)	RDL (dry)	Dilution	Analysis	Batch
	mg/kg		mg/kg	mg/kg		date / time	
TPH (GC/FID) Low Fraction	U		0.0248	0.114	1	05/23/2021 21:39	WG1676019
(S) a,a,a-Trifluorotoluene(FID)	114			77.0-120		05/23/2021 21:39	WG1676019

Volatile Organic Compounds (GC/MS) by Method 8260B

Analyte	Result (dry)	Qualifier	MDL (dry)	RDL (dry)	Dilution	Analysis	Batch
	mg/kg		mg/kg	mg/kg		date / time	
Benzene	U		0.000603	0.00129	1	05/25/2021 17:51	WG1677018
Toluene	U		0.00168	0.00645	1	05/25/2021 17:51	WG1677018
Ethylbenzene	U		0.000951	0.00323	1	05/25/2021 17:51	WG1677018
Total Xylenes	U		0.00114	0.00839	1	05/25/2021 17:51	WG1677018
(S) Toluene-d8	105			75.0-131		05/25/2021 17:51	WG1677018
(S) 4-Bromofluorobenzene	102			67.0-138		05/25/2021 17:51	WG1677018
(S) 1,2-Dichloroethane-d4	76.2			70.0-130		05/25/2021 17:51	WG1677018

Semi-Volatile Organic Compounds (GC) by Method 8015

Analyte	Result (dry)	Qualifier	MDL (dry)	RDL (dry)	Dilution	Analysis	Batch
	mg/kg		mg/kg	mg/kg		date / time	
C10-C28 Diesel Range	U		1.84	4.58	1	05/27/2021 04:28	WG1677884
C28-C40 Oil Range	U		0.314	4.58	1	05/27/2021 04:28	WG1677884
(S) o-Terphenyl	42.8			18.0-148		05/27/2021 04:28	WG1677884

Collected date/time: 05/17/21 00:00

L1355882

Total Solids by Method 2540 G-2011

Analyte	Result	Qualifier	Dilution	Analysis	Batch
	%			date / time	
Total Solids	93.2		1	05/26/2021 13:30	WG1676983

Wet Chemistry by Method 300.0

Analyte	Result (dry)	Qualifier	MDL (dry)	RDL (dry)	Dilution	Analysis	Batch
	mg/kg		mg/kg	mg/kg		date / time	
Chloride	88.8		9.87	21.5	1	06/03/2021 04:27	WG1680538

Volatile Organic Compounds (GC) by Method 8015D/GRO

Analyte	Result (dry)	Qualifier	MDL (dry)	RDL (dry)	Dilution	Analysis	Batch
	mg/kg		mg/kg	mg/kg		date / time	
TPH (GC/FID) Low Fraction	U		0.0233	0.107	1	05/23/2021 22:01	WG1676019
(S) a,a,a-Trifluorotoluene(FID)	117			77.0-120		05/23/2021 22:01	WG1676019

Volatile Organic Compounds (GC/MS) by Method 8260B

Analyte	Result (dry)	Qualifier	MDL (dry)	RDL (dry)	Dilution	Analysis	Batch
	mg/kg		mg/kg	mg/kg		date / time	
Benzene	U		0.000535	0.00115	1	05/25/2021 18:10	WG1677018
Toluene	U		0.00149	0.00573	1	05/25/2021 18:10	WG1677018
Ethylbenzene	U		0.000844	0.00286	1	05/25/2021 18:10	WG1677018
Total Xylenes	U		0.00101	0.00744	1	05/25/2021 18:10	WG1677018
(S) Toluene-d8	101			75.0-131		05/25/2021 18:10	WG1677018
(S) 4-Bromofluorobenzene	104			67.0-138		05/25/2021 18:10	WG1677018
(S) 1,2-Dichloroethane-d4	75.5			70.0-130		05/25/2021 18:10	WG1677018

Semi-Volatile Organic Compounds (GC) by Method 8015

Analyte	Result (dry)	Qualifier	MDL (dry)	RDL (dry)	Dilution	Analysis	Batch
	mg/kg		mg/kg	mg/kg		date / time	
C10-C28 Diesel Range	U		1.73	4.29	1	05/27/2021 19:56	WG1678260
C28-C40 Oil Range	4.23	J	0.294	4.29	1	05/27/2021 19:56	WG1678260
(S) o-Terphenyl	53.6			18.0-148		05/27/2021 19:56	WG1678260

Collected date/time: 05/17/21 00:00

L1355882

Total Solids by Method 2540 G-2011

Analyte	Result	Qualifier	Dilution	Analysis	Batch
	%			date / time	
Total Solids	93.3		1	05/26/2021 13:23	WG1676984

Wet Chemistry by Method 300.0

Analyte	Result (dry)	Qualifier	MDL (dry)	RDL (dry)	Dilution	Analysis	Batch
	mg/kg		mg/kg	mg/kg		date / time	
Chloride	48.0		9.86	21.4	1	06/03/2021 05:05	WG1680538

Volatile Organic Compounds (GC) by Method 8015D/GRO

Analyte	Result (dry)	Qualifier	MDL (dry)	RDL (dry)	Dilution	Analysis	Batch
	mg/kg		mg/kg	mg/kg		date / time	
TPH (GC/FID) Low Fraction	U	J3	0.0233	0.107	1	05/23/2021 22:22	WG1676019
(S) a,a,a-Trifluorotoluene(FID)	115			77.0-120		05/23/2021 22:22	WG1676019

Volatile Organic Compounds (GC/MS) by Method 8260B

Analyte	Result (dry)	Qualifier	MDL (dry)	RDL (dry)	Dilution	Analysis	Batch
	mg/kg		mg/kg	mg/kg		date / time	
Benzene	U		0.000535	0.00114	1	05/25/2021 18:29	WG1677018
Toluene	U		0.00149	0.00572	1	05/25/2021 18:29	WG1677018
Ethylbenzene	U		0.000844	0.00286	1	05/25/2021 18:29	WG1677018
Total Xylenes	U		0.00101	0.00744	1	05/25/2021 18:29	WG1677018
(S) Toluene-d8	102			75.0-131		05/25/2021 18:29	WG1677018
(S) 4-Bromofluorobenzene	101			67.0-138		05/25/2021 18:29	WG1677018
(S) 1,2-Dichloroethane-d4	74.3			70.0-130		05/25/2021 18:29	WG1677018

Semi-Volatile Organic Compounds (GC) by Method 8015

Analyte	Result (dry)	Qualifier	MDL (dry)	RDL (dry)	Dilution	Analysis	Batch
	mg/kg		mg/kg	mg/kg		date / time	
C10-C28 Diesel Range	3.60	J	1.73	4.29	1	05/27/2021 20:08	WG1678260
C28-C40 Oil Range	11.2		0.294	4.29	1	05/27/2021 20:08	WG1678260
(S) o-Terphenyl	63.7			18.0-148		05/27/2021 20:08	WG1678260

Collected date/time: 05/17/21 00:00

L1355882

Total Solids by Method 2540 G-2011

Analyte	Result	Qualifier	Dilution	Analysis date / time	Batch
Total Solids	86.2		1	05/26/2021 13:23	WG1676984

Wet Chemistry by Method 300.0

Analyte	Result (dry) mg/kg	Qualifier	MDL (dry) mg/kg	RDL (dry) mg/kg	Dilution	Analysis date / time	Batch
Chloride	150		10.7	23.2	1	06/03/2021 05:15	WG1680538

Volatile Organic Compounds (GC) by Method 8015D/GRO

Analyte	Result (dry) mg/kg	Qualifier	MDL (dry) mg/kg	RDL (dry) mg/kg	Dilution	Analysis date / time	Batch
TPH (GC/FID) Low Fraction	U		0.0252	0.116	1	05/23/2021 22:44	WG1676019
(S) a,a,a-Trifluorotoluene(FID)	116			77.0-120		05/23/2021 22:44	WG1676019

Volatile Organic Compounds (GC/MS) by Method 8260B

Analyte	Result (dry) mg/kg	Qualifier	MDL (dry) mg/kg	RDL (dry) mg/kg	Dilution	Analysis date / time	Batch
Benzene	U		0.000617	0.00132	1	05/25/2021 18:47	WG1677018
Toluene	U		0.00172	0.00661	1	05/25/2021 18:47	WG1677018
Ethylbenzene	U		0.000974	0.00330	1	05/25/2021 18:47	WG1677018
Total Xylenes	U		0.00116	0.00859	1	05/25/2021 18:47	WG1677018
(S) Toluene-d8	100			75.0-131		05/25/2021 18:47	WG1677018
(S) 4-Bromofluorobenzene	103			67.0-138		05/25/2021 18:47	WG1677018
(S) 1,2-Dichloroethane-d4	80.3			70.0-130		05/25/2021 18:47	WG1677018

Semi-Volatile Organic Compounds (GC) by Method 8015

Analyte	Result (dry) mg/kg	Qualifier	MDL (dry) mg/kg	RDL (dry) mg/kg	Dilution	Analysis date / time	Batch
C10-C28 Diesel Range	U		1.87	4.64	1	05/27/2021 19:30	WG1678260
C28-C40 Oil Range	0.969	J	0.318	4.64	1	05/27/2021 19:30	WG1678260
(S) o-Terphenyl	61.8			18.0-148		05/27/2021 19:30	WG1678260

1 Cp
2 Tc
3 Ss
4 Cn
5 Sr
6 Qc
7 Gl
8 Al
9 Sc

Total Solids by Method 2540 G-2011

Analyte	Result	Qualifier	Dilution	Analysis	Batch
	%			date / time	
Total Solids	96.1		1	05/26/2021 13:23	WG1676984

Wet Chemistry by Method 300.0

Analyte	Result (dry)	Qualifier	MDL (dry)	RDL (dry)	Dilution	Analysis	Batch
	mg/kg		mg/kg	mg/kg		date / time	
Chloride	32.7		9.57	20.8	1	06/03/2021 05:24	WG1680538

Volatile Organic Compounds (GC) by Method 8015D/GRO

Analyte	Result (dry)	Qualifier	MDL (dry)	RDL (dry)	Dilution	Analysis	Batch
	mg/kg		mg/kg	mg/kg		date / time	
TPH (GC/FID) Low Fraction	U		0.0226	0.104	1	05/23/2021 23:07	WG1676019
(S) a,a,a-Trifluorotoluene(FID)	114			77.0-120		05/23/2021 23:07	WG1676019

Volatile Organic Compounds (GC/MS) by Method 8260B

Analyte	Result (dry)	Qualifier	MDL (dry)	RDL (dry)	Dilution	Analysis	Batch
	mg/kg		mg/kg	mg/kg		date / time	
Benzene	U		0.000505	0.00108	1	05/25/2021 19:06	WG1677018
Toluene	U		0.00141	0.00541	1	05/25/2021 19:06	WG1677018
Ethylbenzene	U		0.000797	0.00270	1	05/25/2021 19:06	WG1677018
Total Xylenes	U	J3	0.000952	0.00703	1	05/25/2021 19:06	WG1677018
(S) Toluene-d8	102			75.0-131		05/25/2021 19:06	WG1677018
(S) 4-Bromofluorobenzene	103			67.0-138		05/25/2021 19:06	WG1677018
(S) 1,2-Dichloroethane-d4	76.9			70.0-130		05/25/2021 19:06	WG1677018

Semi-Volatile Organic Compounds (GC) by Method 8015

Analyte	Result (dry)	Qualifier	MDL (dry)	RDL (dry)	Dilution	Analysis	Batch
	mg/kg		mg/kg	mg/kg		date / time	
C10-C28 Diesel Range	8.38		1.68	4.16	1	05/27/2021 21:37	WG1678260
C28-C40 Oil Range	21.9		0.285	4.16	1	05/27/2021 21:37	WG1678260
(S) o-Terphenyl	66.0			18.0-148		05/27/2021 21:37	WG1678260

W01676981
Total Solids by Method 2540 G-2011 [L1355882-01,02,03,04](#)

Method Blank (MB)

(MB) R3659783-1 05/26/21 13:42

	MB Result	<u>MB Qualifier</u>	MB MDL	MB RDL
Analyte	%		%	%
Total Solids	0.000			

¹Cp

²Tc

³Ss

⁴Cn

⁵Sr

⁶Qc

L1355875-03 Original Sample (OS) • Duplicate (DUP)

(OS) L1355875-03 05/26/21 13:42 • (DUP) R3659783-3 05/26/21 13:42

	Original Result	DUP Result	Dilution	DUP RPD	<u>DUP Qualifier</u>	DUP RPD Limits
Analyte	%	%		%		%
Total Solids	83.9	83.1	1	0.976		10

⁷Gl

⁸Al

Laboratory Control Sample (LCS)

(LCS) R3659783-2 05/26/21 13:42

	Spike Amount	LCS Result	LCS Rec.	Rec. Limits	<u>LCS Qualifier</u>
Analyte	%	%	%	%	
Total Solids	50.0	50.0	100	85.0-115	

⁹Sc

W01676983
Total Solids by Method 2540 G-2011 [L1355882-05,06,07,08,09,10,11,12,13,14](#)

Method Blank (MB)

(MB) R3659782-1 05/26/21 13:30

	MB Result	<u>MB Qualifier</u>	MB MDL	MB RDL
Analyte	%		%	%
Total Solids	0.00200			

¹Cp

²Tc

³Ss

⁴Cn

⁵Sr

⁶Qc

L1355882-11 Original Sample (OS) • Duplicate (DUP)

(OS) L1355882-11 05/26/21 13:30 • (DUP) R3659782-3 05/26/21 13:30

	Original Result	DUP Result	Dilution	DUP RPD	<u>DUP Qualifier</u>	DUP RPD Limits
Analyte	%	%		%		%
Total Solids	96.6	96.5	1	0.160		10

Laboratory Control Sample (LCS)

(LCS) R3659782-2 05/26/21 13:30

	Spike Amount	LCS Result	LCS Rec.	Rec. Limits	<u>LCS Qualifier</u>
Analyte	%	%	%	%	
Total Solids	50.0	50.0	100	85.0-115	

⁷Gl

⁸Al

⁹Sc

W01676984
Total Solids by Method 2540 G-2011

[L1355882-15,16,17](#)

Method Blank (MB)

(MB) R3659781-1 05/26/21 13:23

Analyte	MB Result	MB Qualifier	MB MDL	MB RDL
Total Solids	0.00200			

¹Cp

²Tc

³Ss

⁴Cn

⁵Sr

⁶Qc

L1355884-06 Original Sample (OS) • Duplicate (DUP)

(OS) L1355884-06 05/26/21 13:23 • (DUP) R3659781-3 05/26/21 13:23

Analyte	Original Result	DUP Result	Dilution	DUP RPD	DUP Qualifier	DUP RPD Limits
Total Solids	72.2	72.3	1	0.0892		10

⁷Gl

⁸Al

Laboratory Control Sample (LCS)

(LCS) R3659781-2 05/26/21 13:23

Analyte	Spike Amount	LCS Result	LCS Rec.	Rec. Limits	LCS Qualifier
Total Solids	50.0	50.0	100	85.0-115	

⁹Sc

Method Blank (MB)

(MB) R3662826-1 06/03/21 01:12

	MB Result	MB Qualifier	MB MDL	MB RDL
Analyte	mg/kg		mg/kg	mg/kg
Chloride	U		9.20	20.0

L1355882-04 Original Sample (OS) • Duplicate (DUP)

(OS) L1355882-04 06/03/21 02:00 • (DUP) R3662826-3 06/03/21 02:09

	Original Result (dry)	DUP Result (dry)	Dilution	DUP RPD	DUP Qualifier	DUP RPD Limits
Analyte	mg/kg	mg/kg		%		%
Chloride	50.4	54.6	1	7.87		20

L1355882-14 Original Sample (OS) • Duplicate (DUP)

(OS) L1355882-14 06/03/21 04:27 • (DUP) R3662826-6 06/03/21 04:36

	Original Result (dry)	DUP Result (dry)	Dilution	DUP RPD	DUP Qualifier	DUP RPD Limits
Analyte	mg/kg	mg/kg		%		%
Chloride	88.8	82.0	1	7.88		20

Laboratory Control Sample (LCS)

(LCS) R3662826-2 06/03/21 01:22

	Spike Amount	LCS Result	LCS Rec.	Rec. Limits	LCS Qualifier
Analyte	mg/kg	mg/kg	%	%	
Chloride	200	191	95.6	90.0-110	

L1355882-04 Original Sample (OS) • Matrix Spike (MS) • Matrix Spike Duplicate (MSD)

(OS) L1355882-04 06/03/21 02:00 • (MS) R3662826-4 06/03/21 02:24 • (MSD) R3662826-5 06/03/21 02:33

	Spike Amount (dry)	Original Result (dry)	MS Result (dry)	MSD Result (dry)	MS Rec.	MSD Rec.	Dilution	Rec. Limits	MS Qualifier	MSD Qualifier	RPD	RPD Limits
Analyte	mg/kg	mg/kg	mg/kg	mg/kg	%	%		%			%	%
Chloride	511	50.4	489	523	85.9	92.5	1	80.0-120			6.66	20

1Cp

2Tc

3Ss

4Cn

5Sr

6Qc

7Gl

8Al

9Sc

Volatile Organic Compounds (GC) by Method 8015D/GRO

L1355882-01,02,03,04,05,06,07,08,09,10,11,12,13,14,15,16,17

Method Blank (MB)

(MB) R3660979-1 05/23/21 13:19

Analyte	MB Result mg/kg	MB Qualifier	MB MDL mg/kg	MB RDL mg/kg
TPH (GC/FID) Low Fraction	U		0.0217	0.100
(S) a,a,a-Trifluorotoluene(FID)	119			77.0-120

Laboratory Control Sample (LCS)

(LCS) R3660979-2 05/23/21 16:06

Analyte	Spike Amount mg/kg	LCS Result mg/kg	LCS Rec. %	Rec. Limits %	LCS Qualifier
TPH (GC/FID) Low Fraction	5.50	4.38	79.6	72.0-127	
(S) a,a,a-Trifluorotoluene(FID)			106	77.0-120	

L1355882-15 Original Sample (OS) • Matrix Spike (MS) • Matrix Spike Duplicate (MSD)

(OS) L1355882-15 05/23/21 22:22 • (MS) R3660979-3 05/23/21 23:29 • (MSD) R3660979-4 05/23/21 23:51

Analyte	Spike Amount (dry) mg/kg	Original Result (dry) mg/kg	MS Result (dry) mg/kg	MSD Result (dry) mg/kg	MS Rec. %	MSD Rec. %	Dilution	Rec. Limits %	MS Qualifier	MSD Qualifier	RPD %	RPD Limits %
TPH (GC/FID) Low Fraction	5.90	U	1.81	3.13	30.7	53.1	1	10.0-151		J3	53.4	28
(S) a,a,a-Trifluorotoluene(FID)					95.4	81.2		77.0-120				

1
Cp

2
Tc

3
Ss

4
Cn

5
Sr

6
Qc

7
Gl

8
Al

9
Sc

Volatile Organic Compounds (GC/MS) by Method 8260B

[L1355882-01,02,03,04,05,06,07,08,09,10](#)

Method Blank (MB)

(MB) R3658962-2 05/24/21 23:41

Analyte	MB Result mg/kg	MB Qualifier	MB MDL mg/kg	MB RDL mg/kg
Benzene	U		0.000467	0.00100
Ethylbenzene	U		0.000737	0.00250
Toluene	U		0.00130	0.00500
Xylenes, Total	U		0.000880	0.00650
(S) Toluene-d8	133	J1		75.0-131
(S) 4-Bromofluorobenzene	87.5			67.0-138
(S) 1,2-Dichloroethane-d4	99.8			70.0-130

¹ Cp

² Tc

³ Ss

⁴ Cn

⁵ Sr

⁶ Qc

⁷ Gl

⁸ Al

⁹ Sc

Laboratory Control Sample (LCS)

(LCS) R3658962-1 05/24/21 22:44

Analyte	Spike Amount mg/kg	LCS Result mg/kg	LCS Rec. %	Rec. Limits %	LCS Qualifier
Benzene	0.125	0.110	88.0	70.0-123	
Ethylbenzene	0.125	0.139	111	74.0-126	
Toluene	0.125	0.142	114	75.0-121	
Xylenes, Total	0.375	0.391	104	72.0-127	
(S) Toluene-d8			123	75.0-131	
(S) 4-Bromofluorobenzene			89.5	67.0-138	
(S) 1,2-Dichloroethane-d4			113	70.0-130	

Volatile Organic Compounds (GC/MS) by Method 8260B

L1355882-11,12,13,14,15,16,17

Method Blank (MB)

(MB) R3660834-2 05/25/21 11:07

Analyte	MB Result mg/kg	MB Qualifier	MB MDL mg/kg	MB RDL mg/kg
Benzene	U		0.000467	0.00100
Ethylbenzene	U		0.000737	0.00250
Toluene	U		0.00130	0.00500
Xylenes, Total	U		0.000880	0.00650
(S) Toluene-d8	104			75.0-131
(S) 4-Bromofluorobenzene	103			67.0-138
(S) 1,2-Dichloroethane-d4	77.8			70.0-130

Cp

Tc

Ss

Cn

Sr

Qc

Gl

Al

Sc

Laboratory Control Sample (LCS)

(LCS) R3660834-1 05/25/21 10:10

Analyte	Spike Amount mg/kg	LCS Result mg/kg	LCS Rec. %	Rec. Limits %	LCS Qualifier
Benzene	0.125	0.118	94.4	70.0-123	
Ethylbenzene	0.125	0.122	97.6	74.0-126	
Toluene	0.125	0.117	93.6	75.0-121	
Xylenes, Total	0.375	0.356	94.9	72.0-127	
(S) Toluene-d8			101	75.0-131	
(S) 4-Bromofluorobenzene			100	67.0-138	
(S) 1,2-Dichloroethane-d4			89.8	70.0-130	

L1355882-17 Original Sample (OS) • Matrix Spike (MS) • Matrix Spike Duplicate (MSD)

(OS) L1355882-17 05/25/21 19:06 • (MS) R3660834-3 05/25/21 19:25 • (MSD) R3660834-4 05/25/21 19:44

Analyte	Spike Amount (dry) mg/kg	Original Result (dry) mg/kg	MS Result (dry) mg/kg	MSD Result (dry) mg/kg	MS Rec. %	MSD Rec. %	Dilution	Rec. Limits %	MS Qualifier	MSD Qualifier	RPD %	RPD Limits %
Benzene	0.134	U	0.0937	0.135	69.8	101	1	10.0-149			36.3	37
Ethylbenzene	0.134	U	0.0958	0.140	71.5	104	1	10.0-160			37.1	38
Toluene	0.134	U	0.0987	0.142	73.5	106	1	10.0-156			35.8	38
Xylenes, Total	0.402	U	0.253	0.407	62.9	101	1	10.0-160		J3	46.6	38
(S) Toluene-d8					102	102		75.0-131				
(S) 4-Bromofluorobenzene					104	103		67.0-138				
(S) 1,2-Dichloroethane-d4					80.0	81.3		70.0-130				

Semi-Volatile Organic Compounds (GC) by Method 8015 [L1355882-01,02,03,04](#)

Method Blank (MB)

(MB) R3660009-1 05/27/21 01:59

Analyte	MB Result mg/kg	MB Qualifier	MB MDL mg/kg	MB RDL mg/kg
C10-C28 Diesel Range	U		1.61	4.00
C28-C40 Oil Range	U		0.274	4.00
(S) o-Terphenyl	76.0			18.0-148

Laboratory Control Sample (LCS)

(LCS) R3660009-2 05/27/21 02:18

Analyte	Spike Amount mg/kg	LCS Result mg/kg	LCS Rec. %	Rec. Limits %	LCS Qualifier
C10-C28 Diesel Range	50.0	45.1	90.2	50.0-150	
(S) o-Terphenyl			77.6	18.0-148	

¹Cp

²Tc

³Ss

⁴Cn

⁵Sr

⁶Qc

⁷Gl

⁸Al

⁹Sc

Semi-Volatile Organic Compounds (GC) by Method 8015

[L1355882-05,06,07,08,09,10,11,12,13](#)

Method Blank (MB)

(MB) R3660010-1 05/27/21 01:27

Analyte	MB Result mg/kg	MB Qualifier	MB MDL mg/kg	MB RDL mg/kg
C10-C28 Diesel Range	U		1.61	4.00
C28-C40 Oil Range	U		0.274	4.00
(S) o-Terphenyl	76.6			18.0-148

Laboratory Control Sample (LCS)

(LCS) R3660010-2 05/27/21 01:40

Analyte	Spike Amount mg/kg	LCS Result mg/kg	LCS Rec. %	Rec. Limits %	LCS Qualifier
C10-C28 Diesel Range	50.0	50.4	101	50.0-150	
(S) o-Terphenyl			85.7	18.0-148	

¹Cp

²Tc

³Ss

⁴Cn

⁵Sr

⁶Qc

⁷Gl

⁸Al

⁹Sc

Semi-Volatile Organic Compounds (GC) by Method 8015 [L1355882-14,15,16,17](#)

Method Blank (MB)

(MB) R3660358-1 05/27/21 19:05

Analyte	MB Result mg/kg	MB Qualifier	MB MDL mg/kg	MB RDL mg/kg
C10-C28 Diesel Range	U		1.61	4.00
C28-C40 Oil Range	U		0.274	4.00
(S) o-Terphenyl	65.3			18.0-148

Laboratory Control Sample (LCS)

(LCS) R3660358-2 05/27/21 19:18

Analyte	Spike Amount mg/kg	LCS Result mg/kg	LCS Rec. %	Rec. Limits %	LCS Qualifier
C10-C28 Diesel Range	50.0	34.7	69.4	50.0-150	
(S) o-Terphenyl			66.4	18.0-148	

L1356775-01 Original Sample (OS) • Matrix Spike (MS) • Matrix Spike Duplicate (MSD)

(OS) L1356775-01 05/27/21 20:46 • (MS) R3660358-3 05/27/21 20:59 • (MSD) R3660358-4 05/27/21 21:12

Analyte	Spike Amount mg/kg	Original Result mg/kg	MS Result mg/kg	MSD Result mg/kg	MS Rec. %	MSD Rec. %	Dilution	Rec. Limits %	MS Qualifier	MSD Qualifier	RPD %	RPD Limits %
C10-C28 Diesel Range	47.4	241	460	287	462	97.0	1	50.0-150	<u>E V</u>	<u>J3</u>	46.3	20
(S) o-Terphenyl					82.6	77.1		18.0-148				

¹Cp

²Tc

³Ss

⁴Cn

⁵Sr

⁶Qc

⁷Gl

⁸Al

⁹Sc

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

(dry)	Results are reported based on the dry weight of the sample. [this will only be present on a dry report basis for soils].
MDL	Method Detection Limit.
MDL (dry)	Method Detection Limit.
RDL	Reported Detection Limit.
RDL (dry)	Reported Detection Limit.
Rec.	Recovery.
RPD	Relative Percent Difference.
SDG	Sample Delivery Group.
(S)	Surrogate (Surrogate Standard) - Analytes added to every blank, sample, Laboratory Control Sample/Duplicate and Matrix Spike/Duplicate; used to evaluate analytical efficiency by measuring recovery. Surrogates are not expected to be detected in all environmental media.
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
E	The analyte concentration exceeds the upper limit of the calibration range of the instrument established by the initial calibration (ICAL).
J	The identification of the analyte is acceptable; the reported value is an estimate.
J1	Surrogate recovery limits have been exceeded; values are outside upper control limits.
J3	The associated batch QC was outside the established quality control range for precision.
V	The sample concentration is too high to evaluate accurate spike recoveries.

1	Cp
2	Tc
3	Ss
4	Cn
5	Sr
6	Qc
7	Gl
8	Al
9	Sc

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	LA000356
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.

¹ Cp² Tc³ Ss⁴ Cn⁵ Sr⁶ Qc⁷ Gl⁸ Al⁹ Sc

K-035

Analysis Request of Chain of Custody Record

Page 1 of 2



Tetra Tech, Inc.

900 West Wall Street, Ste 100
Midland, Texas 79701
Tel (432) 682-4559
Fax (432) 682-3946

Client Name:	ConocoPhillips	Site Manager:	Christian Lull
Project Name:	Elvis (West) Release		
Project Location: (county, state)	Lea County, New Mexico	Project #:	212C-MD-02482
Invoice to:	Accounts Payable 901 West Wall Street, Suite 100 Midland, Texas 79701		
Receiving Laboratory:	Pace Analytical	Sampler Signature:	Devin Dominguez
Comments:	COPTETRA Acctnum		

ANALYSIS REQUEST

(Circle or Specify Method No.)

LAB # (LAB USE ONLY)	SAMPLE IDENTIFICATION	SAMPLING		MATRIX			PRESERVATIVE METHOD				# CONTAINERS	FILTERED (Y/N)	BTEX 8021B	TPH TX1005 (Ext to TPH 8015M (GRO - PAH 8270C	Total Metals Ag As Ba Cd Cr Pb Se Hg	TCLP Metals Ag As B Cd Cr Pb Se Hg	TCLP Volatiles	TCLP Semi Volatiles	RCI	GC/MS Vol. 8260B / 8270C	GC/MS Semi. Vol. 8270C/625	PCB's 8082 / 608	NORM	PLM (Asbestos)	Chloride	Chloride Sulfate	General Water Chem	Anion/Cation Balanc	TPH 8015R				Hold	
		YEAR: 2021		WATER	SOIL		HCL	HNO ₃	ICE	None																								
		DATE	TIME																															
01	BHW-1 (0-1')	5/17/2021			X				X		1	N	X	X											X									
02	BHW-1 (1'-1.5')	5/17/2021			X				X		1	N	X	X											X									
03	BHW-1 (2'-2.5')	5/17/2021			X				X		1	N	X	X											X									
04	BHW-1 (3'-3.5')	5/17/2021			X				X		1	N	X	X											X									
05	BHW-1 (4'-4.5')	5/17/2021			X				X		1	N	X	X											X									
06	BHW-1 (5'-5.5')	5/17/2021			X				X		1	N	X	X											X									
07	BHW-1 (6'-6.5')	5/17/2021			X				X		1	N	X	X											X									
08	BHW-1 (7'-7.5')	5/17/2021			X				X		1	N	X	X											X									
09	BHW-1 (8'-8.5')	5/17/2021			X				X		1	N	X	X											X									
10	BHW-2 (0-1')	5/17/2021			X				X		1	N	X	X											X									

Relinquished by:	Date:	Time:	Received by:	Date:	Time:
	5/19/21	9:00		5-19-21	9:20
Relinquished by:	Date:	Time:	Received by:	Date:	Time:
	5-19-21	15:00		5-19-21	15:00
Relinquished by:	Date:	Time:	Received by:	Date:	Time:
				5/20/21	0800

LAB USE ONLY	REMARKS:
	☒ STANDARD
	☐ RUSH: Same Day 24 hr 48 hr 72 hr
	☐ Rush Charges Authorized
Sample Temperature	☐ Special Report Limits or TRRP Report
(Circle) HAND DELIVERED FEDEX UPS Tracking #: _____	

ORIGINAL COPY

-4h 1-5
#BOT

TC: 17=408

Analysis Request of Chain of Custody Record

Page 2 of 2



Tetra Tech, Inc.

900 West Wall Street, Ste 100
Midland, Texas 79701
Tel (432) 682-4559
Fax (432) 682-3946

Client Name:	ConocoPhillips	Site Manager:	Christian Llull
Project Name:	Elvis (West) Release		
Project Location: (county, state)	Lea County, New Mexico	Project #:	212C-MD-02482
Invoice to:	Accounts Payable 901 West Wall Street, Suite 100 Midland, Texas 79701		
Receiving Laboratory:	Pace Analytical	Sampler Signature:	Devin Dominguez
Comments:	COPTETRA Acctnum		

ANALYSIS REQUEST (Circle or Specify Method No.)

LAB # (LAB USE ONLY)	SAMPLE IDENTIFICATION	SAMPLING		MATRIX			PRESERVATIVE METHOD				# CONTAINERS	FILTERED (Y/N)	BTX 8201B	BTX 8260B	TPH TX1005 (Ext to C35)	TPH 8015M (GRO - DRO - ORO - MRO)	PAH 8270C	Total Metals Ag As Ba Cd Cr Pb Se Hg	TCLP Metals Ag As Ba Cd Cr Pb Se Hg	TCLP Volatiles	TCLP Semi Volatiles	RCI	GC/MS Vol. 8260B / 624	GC/MS Semi. Vol. 8270C/625	PCB's 8082 / 608	NORM	PLM (Asbestos)	Chloride	Sulfate	General Water Chemistry (see attached list)	Anion/Cation Balance	TPH 8015R				Hold	
		YEAR: 2021		WATER	SOIL	HCL	HNO ₃	ICE	None																												
		DATE	TIME																																		
11	BHW-2 (1'-1.5')	5/17/2021		X			X			1	N	X	X															X									
12	BHW-3 (0-1')	5/17/2021		X			X			1	N	X	X															X									
13	BHW-3 (1'-1.5')	5/17/2021		X			X			1	N	X	X															X									
14	BHW-4 (0-1')	5/17/2021		X			X			1	N	X	X															X									
15	BHW-4 (1'-1.5')	5/17/2021		X			X			1	N	X	X															X									
16	BHW-5 (0-1')	5/17/2021		X			X			1	N	X	X															X									
17	BHW-5 (1'-1.5')	5/17/2021		X			X			1	N	X	X															X									

Relinquished by:	Date:	Time:	Received by:	Date:	Time:
	5/19/21	9:00		5-19-21	9:20
Relinquished by:	Date:	Time:	Received by:	Date:	Time:
	5-19-21	15:00		5-19-21	15:00
Relinquished by:	Date:	Time:	Received by:	Date:	Time:
				5/20/21	0800

LAB USE ONLY	☒ STANDARD
	☐ RUSH: Same Day 24 hr 48 hr 72 hr
	☐ Rush Charges Authorized
	☐ Special Report Limits or TRRP Report

(Circle) HAND DELIVERED FEDEX UPS Tracking #: _____

ORIGINAL COPY

44.1.5
#30T

APPENDIX E

Boring Logs

212C-MD-02482		TETRA TECH		LOG OF BORING BHW-1				Page 1 of 1	
Project Name: Elvis (West) Assessment									
Borehole Location: GPS: 32.822242°, -103.790896°					Surface Elevation: 3990 ft				
Borehole Number: BHW-1				Borehole Diameter (in.): 4		Date Started: 5/17/2021		Date Finished: 5/17/2021	

DEPTH (ft)	OPERATION TYPE	SAMPLE	CHLORIDE FIELD SCREENING (ppm)	VOC FIELD SCREENING (ppm)	SAMPLE RECOVERY (%)	MOISTURE CONTENT (%)	DRY DENSITY (pcf)	LIQUID LIMIT	PLASTICITY INDEX	MINUS NO. 200 (%)	GRAPHIC LOG	WATER LEVEL OBSERVATIONS		
												While Drilling	Upon Completion of Drilling	
												Remarks:		
												MATERIAL DESCRIPTION	DEPTH (ft)	REMARKS
1			2130	0.02								-SM- SILTY SAND: Light tan, loose to medium dense, with gravel, slightly moist to dry.	1.5	BHW-1 (0-1')
2			93.3	0.08								-SM- SILTY SAND: Brown, loose, with gravel, slightly moist.		BHW-1 (1-1.5')
3			103	0.03									BHW-1 (2-2.5')	
4			158	0.02									BHW-1 (3-3.5')	
5			171	0.01									BHW-1 (4-4.5')	
6			338	0.02									BHW-1 (5-5.5')	
7			392	0.01									BHW-1 (6-6.5')	
8			132	0.01									BHW-1 (7-7.5')	
			278	0.02								-ML- SILT: Brown, medium dense, with occasional SILTY CLAY, moist.	8	BHW-1 (7-7.5')
												-SM- SILTY SAND: Brown, medium dense, with caliche gravel.	8.5	BHW-1 (8-8.5')
Bottom of borehole at 8.5 feet.														

Sampler Types:	☒ Split Spoon ☒ Shelby ☒ Bulk Sample ☒ Grab Sample	☒ Acetate Liner ☒ Vane Shear ☒ California ☒ Test Pit	Operation Types:	☒ Hand Auger ☒ Mud Rotary ☒ Continuous Flight Auger ☒ Wash Rotary	☒ Air Rotary ☒ Direct Push ☒ Core Barrel	Notes: Analytical samples are shown in the "Remarks" column. Surface elevation is an estimated value based on Google Earth data.
----------------	---	---	------------------	--	--	---

Logger: Devin Dominguez	Drilling Equipment: Hand Auger	Driller: Tetra Tech
-------------------------	--------------------------------	---------------------

212C-MD-02482		TETRA TECH		LOG OF BORING BHW-2				Page 1 of 1							
Project Name: Elvis (West) Assessment															
Borehole Location: GPS: 32.822204°, -103.791265°						Surface Elevation: 3987 ft									
Borehole Number: BHW-2						Borehole Diameter (in.): 4		Date Started: 5/17/2021		Date Finished: 5/17/2021					
DEPTH (ft)	OPERATION TYPE	SAMPLE	CHLORIDE FIELD SCREENING (ppm)	VOC FIELD SCREENING (ppm)	SAMPLE RECOVERY (%)	MOISTURE CONTENT (%)	DRY DENSITY (pcf)	LIQUID LIMIT	PLASTICITY INDEX	MINUS NO. 200 (%)	GRAPHIC LOG	WATER LEVEL OBSERVATIONS			
			ExStik	PID											While Drilling <u>▽</u> Dry ft Upon Completion of Drilling <u>▽</u> Dry ft Remarks:
MATERIAL DESCRIPTION												DEPTH (ft)	REMARKS		
1			193	0.01									-SM- SILTY SAND: Light tan, loose to medium dense, with gravel, slightly moist to dry.		
			248	0.01											
Bottom of borehole at 1.5 feet.															
Sampler Types:		☒ Split Spoon ☒ Shelby ☒ Bulk Sample ☒ Grab Sample		☒ Acetate Liner ☒ Vane Shear ☒ California ☒ Test Pit		Operation Types:		☒ Hand Auger ☒ Air Rotary ☒ Direct Push ☒ Core Barrel		☐ Mud Rotary ☐ Continuous Flight Auger ☐ Wash Rotary		Notes: Analytical samples are shown in the "Remarks" column. Surface elevation is an estimated value based on Google Earth data.			
Logger: Devin Dominguez						Drilling Equipment: Hand Auger						Driller: Tetra Tech			

212C-MD-02482		TETRA TECH		LOG OF BORING BHW-3				Page 1 of 1							
Project Name: Elvis (West) Assessment															
Borehole Location: GPS: 32.822323°, -103.790945°					Surface Elevation: 3988 ft										
Borehole Number: BHW-3				Borehole Diameter (in.): 4		Date Started: 5/17/2021		Date Finished: 5/17/2021							
DEPTH (ft)	OPERATION TYPE	SAMPLE	CHLORIDE FIELD SCREENING (ppm)	VOC FIELD SCREENING (ppm)	SAMPLE RECOVERY (%)	MOISTURE CONTENT (%)	DRY DENSITY (pcf)	LIQUID LIMIT	PLASTICITY INDEX	MINUS NO. 200 (%)	GRAPHIC LOG	WATER LEVEL OBSERVATIONS While Drilling <u>▽</u> Dry ft Upon Completion of Drilling <u>▽</u> Dry ft Remarks:			
			ExStik	PID					LL			PI	MATERIAL DESCRIPTION	DEPTH (ft)	REMARKS
1			123	0.01									-SM- SILTY SAND: Light tan, loose to medium dense, with gravel, slightly moist to dry.	1.5	BHW-3 (0-1') BHW-3 (1-1.5')
Bottom of borehole at 1.5 feet.															
Sampler Types:		☒ Split Spoon ☐ Shelby ☐ Bulk Sample ☐ Grab Sample		☐ Acetate Liner ☐ Vane Shear ☐ California ☐ Test Pit		Operation Types:		☐ Mud Rotary ☐ Continuous Flight Auger ☐ Wash Rotary		☐ Hand Auger ☐ Air Rotary ☐ Direct Push ☐ Core Barrel		Notes: Analytical samples are shown in the "Remarks" column. Surface elevation is an estimated value based on Google Earth data.			
Logger: Devin Dominguez						Drilling Equipment: Hand Auger				Driller: Tetra Tech					

212C-MD-02482		TETRA TECH		LOG OF BORING BHW-4				Page 1 of 1							
Project Name: Elvis (West) Assessment															
Borehole Location: GPS: 32.822255°, -103.790736°						Surface Elevation: 3991 ft									
Borehole Number: BHW-4						Borehole Diameter (in.): 4		Date Started: 5/17/2021		Date Finished: 5/17/2021					
DEPTH (ft)	OPERATION TYPE	SAMPLE	CHLORIDE FIELD SCREENING (ppm)	VOC FIELD SCREENING (ppm)	SAMPLE RECOVERY (%)	MOISTURE CONTENT (%)	DRY DENSITY (pcf)	LIQUID LIMIT	PLASTICITY INDEX	MINUS NO. 200 (%)	GRAPHIC LOG	WATER LEVEL OBSERVATIONS While Drilling <u>▽</u> Dry ft Upon Completion of Drilling <u>▽</u> Dry ft Remarks:			
			ExStik	PID					LL			PI	MATERIAL DESCRIPTION	DEPTH (ft)	REMARKS
1			119	0.01									-SM- SILTY SAND: Light tan, loose to medium dense, with gravel, slightly moist to dry.	1.5	BHW-4 (0-1')
			138	0.01										1.5	BHW-4 (1-1.5')
Bottom of borehole at 1.5 feet.															
Sampler Types: Split Spoon Shelby Bulk Sample Grab Sample			Acetate Liner Vane Shear California Test Pit			Operation Types: Mud Rotary Continuous Flight Auger Wash Rotary			Hand Auger Air Rotary Direct Push Core Barrel			Notes: Analytical samples are shown in the "Remarks" column. Surface elevation is an estimated value based on Google Earth data.			
Logger: Devin Dominguez						Drilling Equipment: Hand Auger				Driller: Tetra Tech					

212C-MD-02482		TETRA TECH		LOG OF BORING BHW-5				Page 1 of 1								
Project Name: Elvis (West) Assessment																
Borehole Location: GPS: 32.821930°, -103.790907°					Surface Elevation: 3987 ft											
Borehole Number: BHW-5					Borehole Diameter (in.): 4		Date Started: 5/17/2021		Date Finished: 5/17/2021							
DEPTH (ft)	OPERATION TYPE	SAMPLE	CHLORIDE FIELD SCREENING (ppm)	VOC FIELD SCREENING (ppm)	SAMPLE RECOVERY (%)	MOISTURE CONTENT (%)	DRY DENSITY (pcf)	LIQUID LIMIT	PLASTICITY INDEX	MINUS NO. 200 (%)	GRAPHIC LOG	WATER LEVEL OBSERVATIONS				
			ExStik	PID								While Drilling <u>▽</u> Dry ft Upon Completion of Drilling <u>▽</u> Dry ft Remarks:				
MATERIAL DESCRIPTION												DEPTH (ft)	REMARKS			
1			236	0.01									-SM- SILTY SAND: Light tan, loose to medium dense, with gravel, slightly moist to dry.			BHW-5 (0-1')
			225	0.01											1.5	BHW-5 (1-1.5')
Bottom of borehole at 1.5 feet.																
Sampler Types: Split Spoon Shelby Bulk Sample Grab Sample Acetate Liner Vane Shear California Test Pit			Operation Types: Mud Rotary Continuous Flight Auger Wash Rotary Hand Auger Air Rotary Direct Push Core Barrel			Notes: Analytical samples are shown in the "Remarks" column. Surface elevation is an estimated value based on Google Earth data.										
Logger: Devin Dominguez					Drilling Equipment: Hand Auger					Driller: Tetra Tech						

District I

1625 N. French Dr., Hobbs, NM 88240
Phone:(575) 393-6161 Fax:(575) 393-0720

District II

811 S. First St., Artesia, NM 88210
Phone:(575) 748-1283 Fax:(575) 748-9720

District III

1000 Rio Brazos Rd., Aztec, NM 87410
Phone:(505) 334-6178 Fax:(505) 334-6170

District IV

1220 S. St Francis Dr., Santa Fe, NM 87505
Phone:(505) 476-3470 Fax:(505) 476-3462

State of New Mexico
Energy, Minerals and Natural Resources
Oil Conservation Division
1220 S. St Francis Dr.
Santa Fe, NM 87505

CONDITIONS

Action 66773

CONDITIONS

Operator: CONOCOPHILLIPS COMPANY 600 W. Illinois Avenue Midland, TX 79701	OGRID: 217817
	Action Number: 66773
	Action Type: [C-141] Release Corrective Action (C-141)

CONDITIONS

Created By	Condition	Condition Date
jnobui	The deferral request to complete reclamation activities in and around boring BHW-1 during any future major deconstruction/alteration and/or abandonment has been approved by the OCD. The Deferral Request and C-141 will be accepted for the record and marked accordingly. The release will remain open in OCD database files and reflect an open environmental issue. This is a Federal site (surface) and will require like approval from BLM.	1/11/2022