ConocoPhillips

Sam Widmer
ConocoPhillips
SP2
925 N. Eldridge Parkway
Houston, Texas 77079
+1-281-206-5298

October 17, 2022

District Supervisor
Oil Conservation Division, District 2
506 W. Texas Ave.
Artesia, New Mexico 88210

Subject: **James E Upper Battery Load Line Release**
Unit Letter E, Section 12, Township 22 South, Range 30 East
Eddy County, New Mexico
Incident ID nAB1617331258
2RP-3748

Sir or Madam:

ConocoPhillips Company (COPC) entered into an Agreed Compliance Order (ACO) with the NMOCD on May 9, 2019 related to unresolved releases pursuant to 19.15.29.16(9) NMAC. The ACO required COPC to submit characterization and/or remediation plans with proposed timeframes for the ongoing corrective actions or remediations identified to the NMOCD no later than September 1, 2021.

As of April 19, 2021, COPC has submitted characterization and remediation plans for all of the properties identified and owned; for sites not owned, Asset Sold Letters have been submitted. These documents have been submitted to the NMOCD via CentreStack, a Secure Access & File Sharing platform, at the direction of Mr. Bradford Billings, Hydrologist, NMCOD.

The initial Release Characterization and Remediation Work Plan for the 2RP-3748 (Incident ID nAB1617331258) release was uploaded to the CentreStack platform on March 11, 2022. Upon review of the Work Plan, however, the remedial action proposed was based on the Site Characterization with the release footprint inadvertently characterized as within a high karst potential area. The release footprint is actually located within a medium karst area. To date, the NMOCD has not approved nor rejected the Workplan as written and submitted.

Thus, enclosed is a copy of the REVISED Release Characterization and Remediation Work Plan for the subject line incident as prepared by Tetra Tech on behalf of COPC. The attached revised Work Plan will be submitted via the NMOCD Fee Application portal.

If you have any questions, please contact me at 281-206-5298.

Sincerely,

DocuSigned by:
Sam Widmer
5454CA5BAD33498...

Sam Widmer
Program Manager – RMR

cc: Site Files

Attachments: REVISED Release Characterization and Remediation Work Plan, James E Upper Battery Load Line Release

TETRA TECH

October 19, 2022

District Supervisor
Oil Conservation Division, District 2
506 W. Texas Ave.
Artesia, New Mexico 88210

Re: REVISED Release Characterization and Remediation Work Plan
ConocoPhillips Company
James E Upper Battery Load Line Release
Unit Letter E, Section 12, Township 22 South, Range 30 East
Eddy County, New Mexico
2RP-3748
Incident ID nAB1617331258

Sir or Madam:

Tetra Tech, Inc. (Tetra Tech) was contacted by ConocoPhillips (COP) to assess a release that occurred from the load line associated with the James E Upper Battery, approximately 70 feet (ft) west-northwest of the adjacent wellhead. The release footprint is located in Public Land Survey System (PLSS) Unit Letter E, Section 12, Township 22 South, Range 30 East, in Eddy County, New Mexico (Site). The approximate release point occurred at coordinates 32.408644°, -103.840877°, 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 June 15, 2016. The release occurred when a storm blew over a catwalk, pulling out the load line from a fiberglass tank at the James E Upper Battery. This resulted in a release of 10 barrels (bbls) of produced water, of which none was recovered. The New Mexico Oil Conservation District (NMOCD) received the C-141 report form for the release on June 17, 2016 via email. The NMOCD subsequently assigned the release the Remediation Permit (RP) number 2RP-3748 and the Incident ID nAB1617331258.

The 2RP-3748 release is included in an Agreed Compliance Order-Releases (ACO-R) between COP and the NMOCD signed on May 7 and 9, 2019, respectively. As of March 11, 2022, COPC has submitted a characterization and remediation plan for the Site. All documentation was submitted in accordance with ACO terms. These documents have been submitted to the NMOCD via CentreStack, a Secure Access & File Sharing platform, at the direction of Mr. Bradford Billings, NMOCD. The Release Characterization and Remediation Work Plan previously completed by Tetra Tech was included as a portion of the ACO. This initial Work Plan is included in its entirety as Appendix B.

Based on a recent review of the above-mentioned report, it was discovered that the Site was inadvertently characterized as within a high karst potential area. According to the NMOCD Oil and Gas Map GIS database, the Site is not in a high karst area (Appendix B). Thus, the site characterization and, consequently, the recommended remedial action levels (RRALs) for Incident ID nAB1617331258 have been revised as detailed below. This Revised Work Plan presents the modified remedial action.

REVISED 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

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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 medium karst potential.

According to the New Mexico Office of the State Engineers (NMOSE) reporting system, there are no water wells within 800 meters (approximately ½ mile) of the Site. However, there is one (1) water well within 5,000 meters (approximately 3 miles) of the Site with a depth to groundwater of 262 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 use drilled boring data to verify depth to groundwater. A boring (BH-1) drilled at the release footprint as a portion of the assessment work was drilled to 55 feet bgs. The borehole was dry upon completion, and soils were dry from surface to total depth. The site characterization data, along with the boring log for the 55-foot boring, is included in Appendix C.

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 RRALs for benzene, toluene, ethylbenzene, and xylene (collectively referred to as BTEX), total petroleum hydrocarbons (TPH), and chloride in soil.

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

Constituent	Site RRAL
Chloride	10,000 mg/kg
TPH (GRO+DRO+ORO)	2,500 mg/kg
TPH (GRO+DRO)	1,000 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 feet bgs) outside of active oil and gas operations are as follows:

Constituent	Reclamation Requirement
Chloride	600 mg/kg
TPH (GRO+DRO+ORO)	100 mg/kg
BTEX	50 mg/kg

SITE ASSESSMENT

Photographs of the 2RP-3748 release dated June 17, 2016 demonstrate that the release was confined to the fiberglass tank's lined containment area. However, the initial C-141 reports that no free liquids were recovered during initial response activities. On behalf of COP, Tetra Tech conducted a visual Site inspection in June 2020 to evaluate current Site conditions. During this inspection, Tetra Tech personnel observed that the fiberglass tank had been removed and the earthen berm was left in place. Photographic documentation of the release event and the visual Site inspection is included as Appendix D.

Tetra Tech personnel conducted soil sampling on December 9, 2020 on behalf of COP. One hand auger (1) boring, AH-1, was advanced within the release extent to a depth of 7 feet bgs, and four (4) hand auger borings (AH-2 through AH-5) were advanced along the perimeter of the release extent to depths of 2 feet bgs. On January 12, 2021, Tetra Tech returned to the Site to complete horizontal and vertical delineation of the release extent. One (1) boring (BH-1) was installed inside the release footprint using an air rotary drilling rig to a depth of 55 feet bgs to achieve vertical delineation of the release. One (1) hand auger boring (AH-6) was advanced to the west of the release extent to a depth of 4 feet bgs to complete horizontal delineation of the release. Figure 3 depicts the release extent and the soil boring locations, and GPS

coordinates for the boring locations are presented in Table 1. The soil boring log for boring location BH-1 is included in Appendix C. Groundwater was not encountered during the soil assessment activities.

A total of twenty-eight (28) samples were collected from the seven (7) borings (BH-1 and AH-1 through AH-6) and submitted to Pace Analytical National Center for Testing & Innovation (Pace) in Nashville, Tennessee to be analyzed for chlorides via EPA Method 300.0, TPH via EPA Method 8015M, and BTEX via EPA Method 8021B. A copy of the laboratory analytical report and chain-of-custody documentation are included in Appendix F.

SUMMARY OF SAMPLING RESULTS

Results from the December 2020 and January 2021 soil sampling events are summarized in Table 2. The analytical results associated with the interior boring location AH-1 exceeded the Site chloride RRAL of 10,000 mg/kg in the 5-6 feet bgs sample depth interval. There were no other analytical results which exceeded the chloride RRAL (600 mg/kg) during the soil assessment. The analytical results associated with AH-1 exceeded the Site TPH RRAL of 2,500 mg/kg in the 0-1 feet bgs and 1-2 feet bgs sample intervals. The analytical results associated with the remainder of the samples analyzed were below the TPH Site RRAL. There were no analytical results that exceeded the Site BTEX RRAL of 50 mg/kg.

The chloride concentration in the 34-35 feet bgs interval at boring location BH-1 was below the delineation standard of 600 mg/kg, but vertical delineation of the release was not completed because chloride concentrations increased again in the 39-40 feet bgs (1,050 mg/kg) and 44-45 feet bgs (2,170 mg/kg) sample intervals. However, the Site is located in an area with abundant potash reserves, and so naturally occurring soluble mineral salts such as sylvite (KCl) would lead to natural variations of chloride in the soils of the region. Given the depth to groundwater at the site and the naturally occurring mineral salts in soil concentrations at depth, the release is considered vertically delineated.

REMEDIATION WORK PLAN

Based on the analytical results, COP proposes to remove the impacted material to a depth of 6 feet bgs as indicated in Table 2 and shown in Figure 4. Excavation in the area will be performed using heavy equipment (backhoes, hoe rams, and track hoes) within the release area footprint.

Excavated soils will be transported offsite and disposed of at an NMOCD-approved or permitted facility. Confirmation bottom and sidewall samples will be collected for verification of remedial activities, and analyzed for TPH, BTEX, and chlorides. Once results are received and the excavation will then be backfilled with clean material to surface grade. The estimated volume of material to be remediated is approximately 84 cubic yards.

ALTERNATIVE CONFIRMATION SAMPLING PLAN

In accordance with 19.15.29.12(D)(1)(b) NMAC, COP proposes the following alternative confirmation sampling plan to adhere with NMOCD requirements. The proposed confirmation sample locations are depicted in Figure 5. One (1) confirmation floor sample and four (4) confirmation sidewall samples are proposed for verification of remedial activities. The proposed excavation encompasses a surface area of approximately 378 square feet.

These confirmation sidewall and floor samples will be representative of no more than approximately 500 square feet of excavated area. Confirmation samples will be sent to an accredited laboratory for analysis of TPH (Method 8015 modified), BTEX (Method 8260B), and chloride (USEPA Method 300.0 or Method 4500). If the analytical results associated with these sample locations exceed the respective RRAL, additional excavation will be conducted at those locations until closure criteria are attained, or the excavation floor reaches 6 feet bgs.

SITE RECLAMATION AND RESTORATION PLAN

The area proposed for remediation at the Site is restricted to an active production caliche well pad; therefore, no Site reclamation is warranted at this time. At time of well plugging and abandonment, final reclamation shall take place in accordance with 19.15.29.13 NMAC. The portion of the former release footprint in the pasture supports uniform vegetative cover, indicating that the remedial actions indicated in historical aerial imagery were effective in this portion of the release extent.

CONCLUSION

ConocoPhillips proposes to begin remedial activities at the Site within 120 days of NMOCD plan approval. The James E Upper Battery Load Line Release (2RP-3748) is included in an Agreed Compliance Order-Releases (ACO-R) between COP and the NMOCD signed on May 7 and 9, 2019, respectively. COP is dedicated to addressing and closing all historical releases included in the ACO-R, and given the number of releases to be addressed, 120 days is anticipated to be a practicable timeline. Upon completion of the proposed work, a final closure report detailing the remediation activities and the results of the confirmation sampling will be submitted to NMOCD.

If you have any questions concerning the soil assessment or the proposed remediation activities for the Site, please call me at (512) 338-2861.

Sincerely,
Tetra Tech, Inc.

Christian M. Llull, P.G.
Program Manager

cc:
Mr. Sam Widmer, RMR – ConocoPhillips
Mr. Charles Beauvais, GPBU – ConocoPhillips

LIST OF ATTACHMENTS

Figures:

Figure 1 – Site Location Map
Figure 2 – Topographic Map
Figure 3 – Release Extent and Site Assessment
Figure 4 – Proposed Remediation Extent
Figure 5 – Alternative Confirmation Sampling Plan

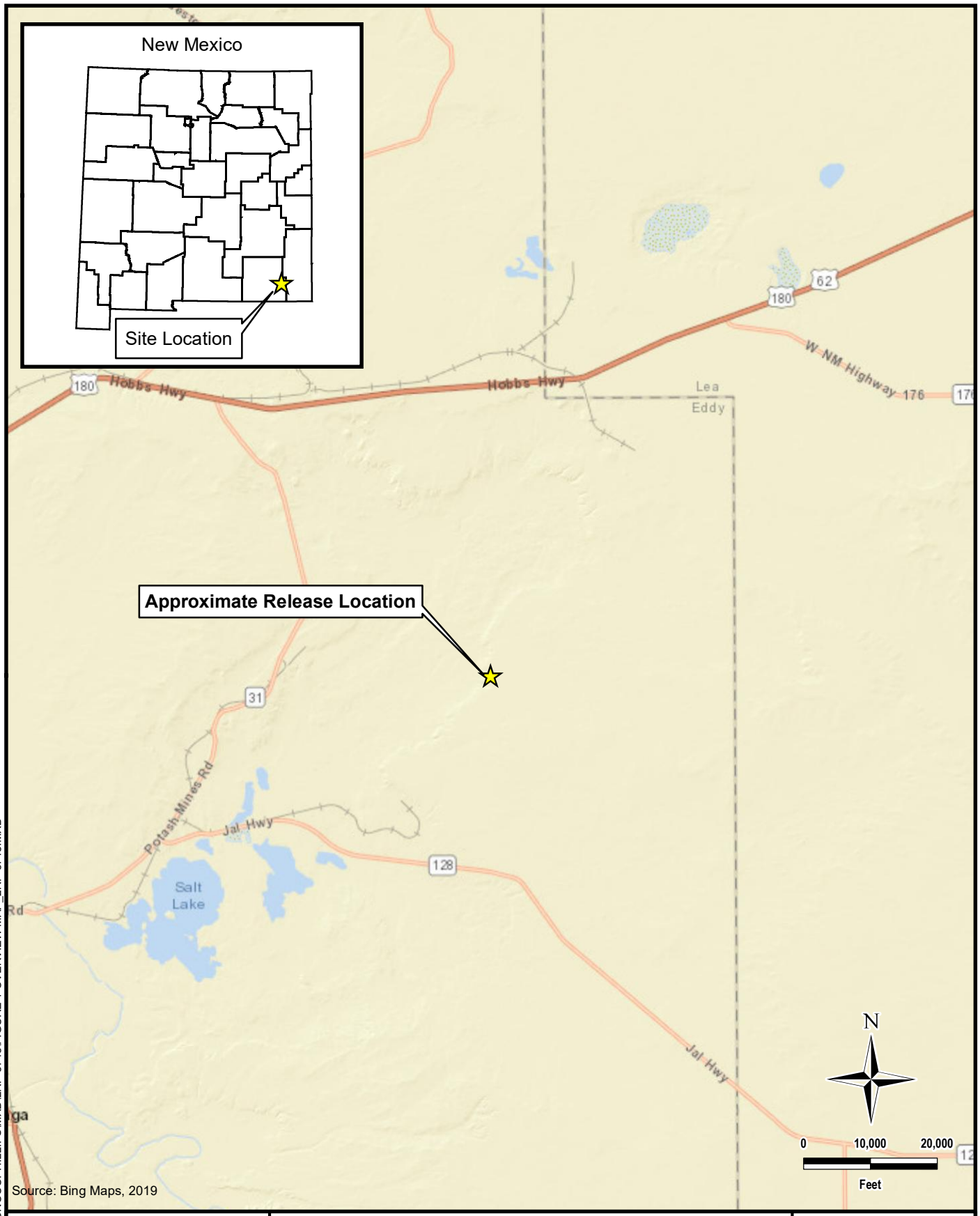
Tables:

Table 1 – Boring Location Coordinates
Table 2 – Summary of Analytical Results – Soil Assessment

Appendices:

Appendix A – C-141 Forms
Appendix B – Release Characterization and Remediation Work Plan (March 11, 2021)
Appendix C – Revised Site Characterization Data
Appendix D – Photographic Documentation
Appendix E – Laboratory Analytical Data

FIGURES



DOCUMENT PATH: D:\CONOCOPHILLIPS\MXD\2RP-3748\FIGURE 1 OVERVIEW MAP_2RP-3748.MXD

TETRA TECH

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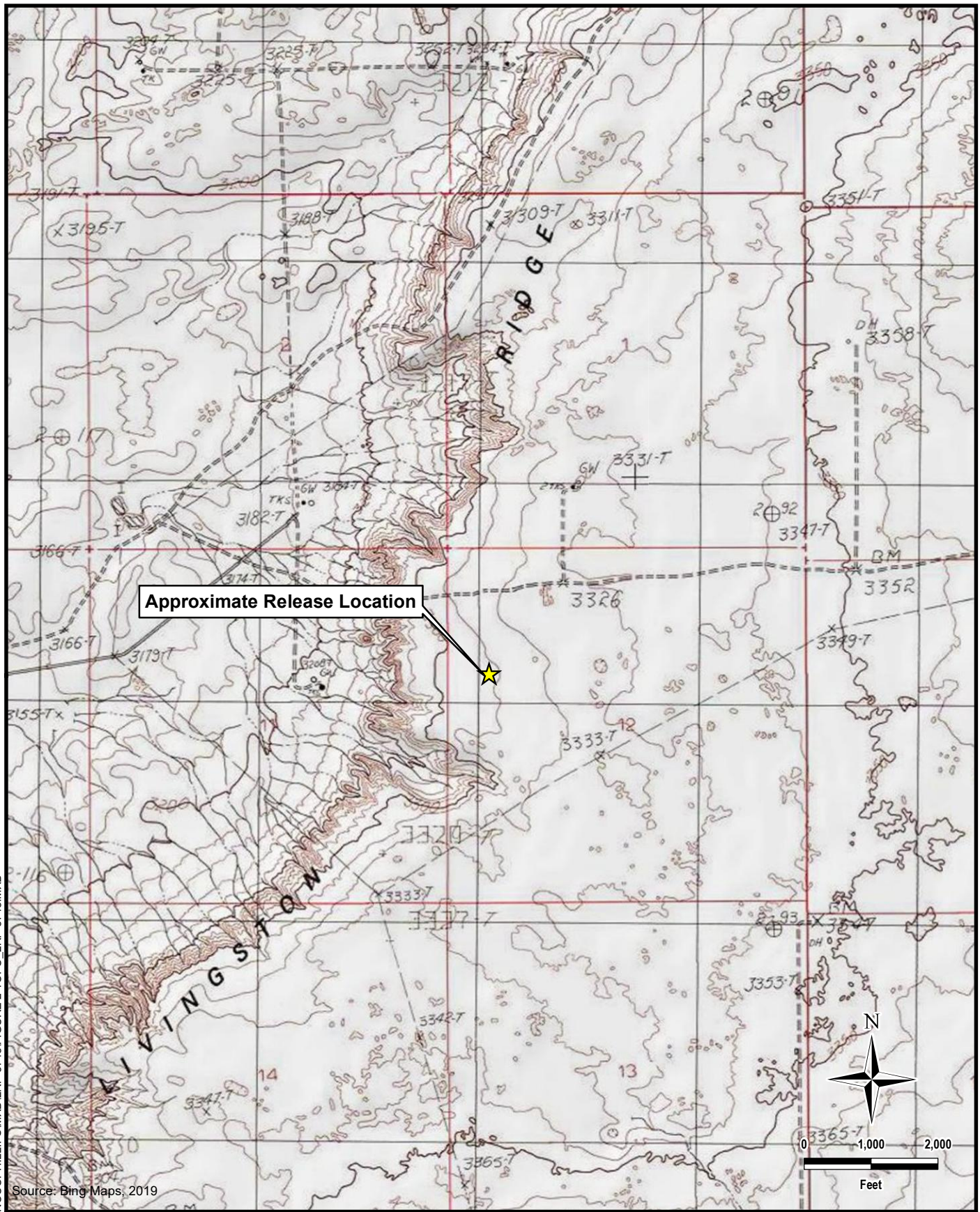
CONOCOPHILLIPS

1RP-3748
(32.408644°, -103.840877°)
LEA COUNTY, NEW MEXICO

JAMES E UPPER BATTERY LOAD LINE RELEASE
OVERVIEW MAP

PROJECT NO.:	212C-MD-02334
DATE:	FEBRUARY 16, 2021
DESIGNED BY:	AAM

Figure No.
1



DOCUMENT PATH: D:\CONOCOPHILLIPS\MXD\2RP-3748\FIGURE 2 TOPO_2RP-3748.MXD

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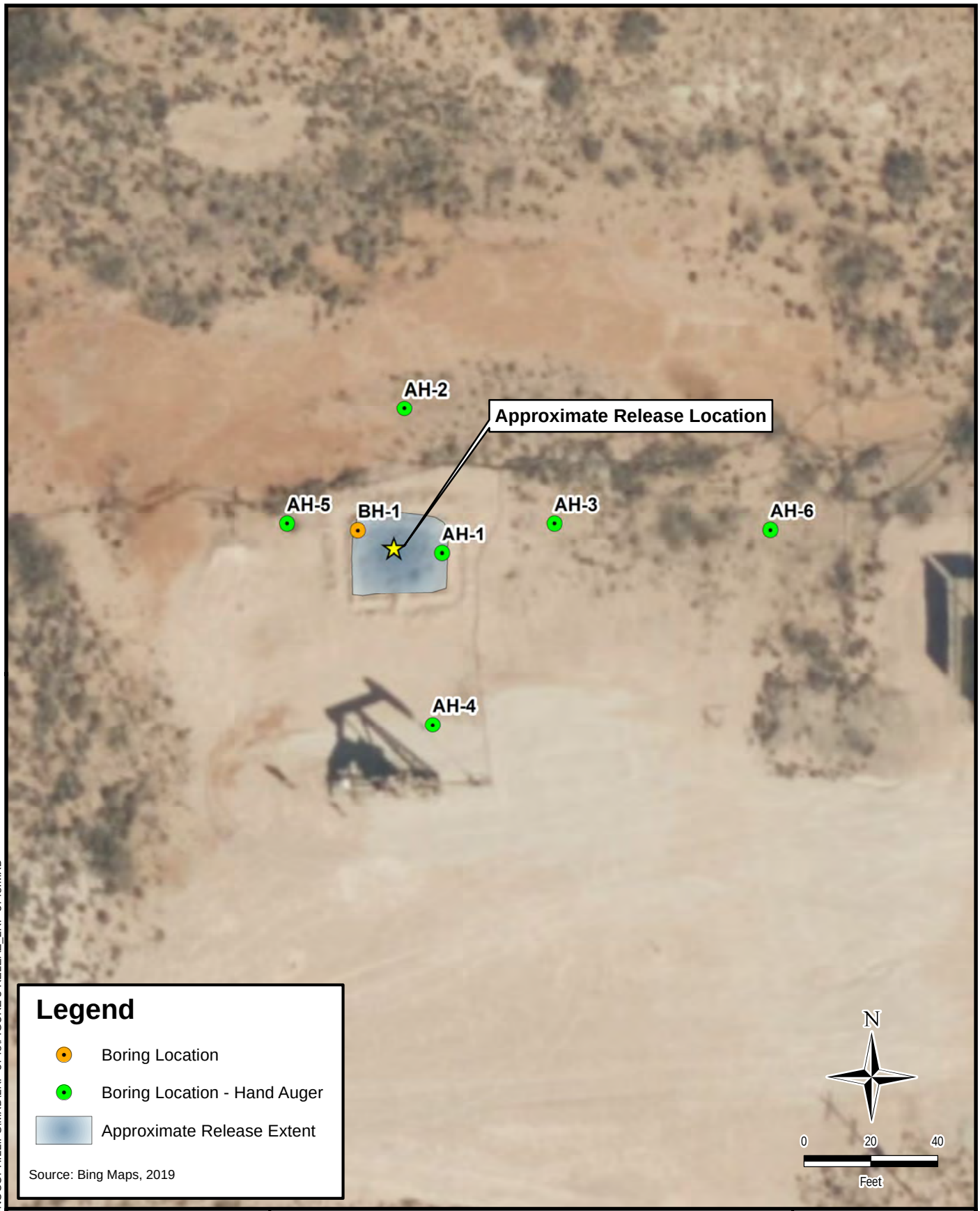
CONOCOPHILLIPS

1RP-3748
(32.408644°, -103.840877°)
LEA COUNTY, NEW MEXICO

JAMES E UPPER BATTERY LOAD LINE RELEASE
TOPOGRAPHIC MAP

PROJECT NO.:	212C-MD-02334
DATE:	FEBRUARY 16, 2021
DESIGNED BY:	AAM

Figure No.
2



DOCUMENT PATH: D:\CONOCOPHILLIPS\MXD\2RP-3748\FIGURE 3 RELEAE_2RP-3748.MXD

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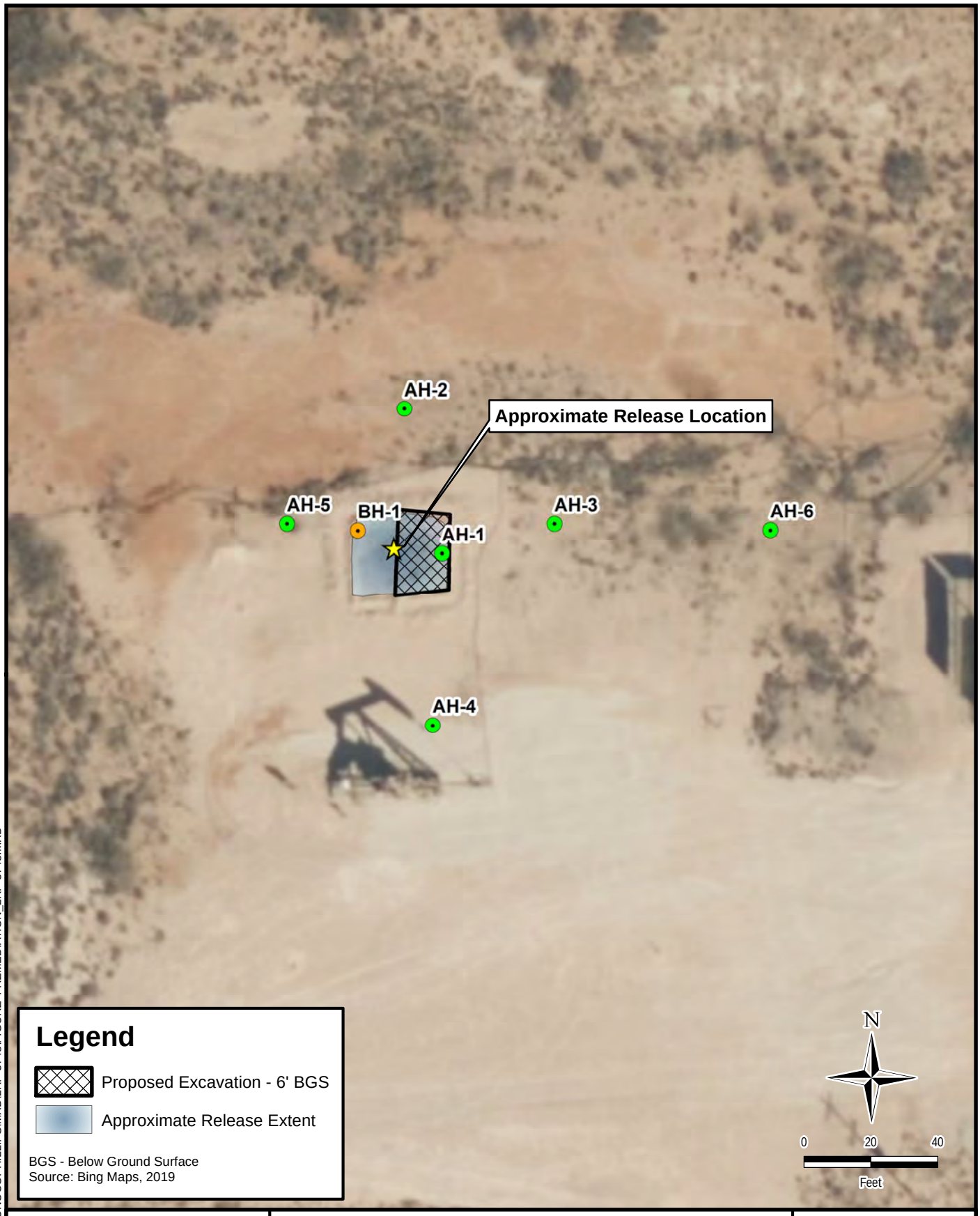
CONOCOPHILLIPS

2RP-3748
(32.408644°, -103.840877°)
LEA COUNTY, NEW MEXICO

JAMES E UPPER BATTERY LOAD LINE RELEASE
SITE ASSESSMENT MAP

PROJECT NO.:	212C-MD-02827
DATE:	SEPTEMBER 27, 2022
DESIGNED BY:	AAM

Figure No.
3



DOCUMENT PATH: D:\CONOCOPHILLIPS\MXD\2RP-3748\FIGURE 4 REMEDIATION_2RP-3748.MXD

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CONOCOPHILLIPS

2RP-3748
(32.408644°, -103.840877°)
LEA COUNTY, NEW MEXICO

JAMES E UPPER BATTERY LOAD LINE RELEASE
PROPOSED REMEDIATION EXTENT

PROJECT NO.:	212C-MD-02827
DATE:	SEPTEMBER 27, 2022
DESIGNED BY:	AAM

Figure No.
4

DOCUMENT PATH: D:\CONOCOPHILLIPS\MXD\2RP-3748\FIGURE 5 ACSP_2RP-3748.MXD

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CONOCOPHILLIPS

2RP-3748
(32.408644°, -103.840877°)
LEA COUNTY, NEW MEXICO

JAMES E UPPER BATTERY LOAD LINE RELEASE
ALTERNATIVE CONFIRMATION SAMPLING PLAN

PROJECT NO.:	212C-MD-02827
DATE:	SEPTEMBER 27, 2022
DESIGNED BY:	AAM

Figure No.
5

TABLES

TABLE 1
BORING LOCATION COORDINATES
SOIL ASSESSMENT - 2RP-3748
CONOCOPHILLIPS
JAMES E UPPER BATTERY LOAD LINE RELEASE
EDDY COUNTY, NM

Boring ID	Latitude	Longitude
AH-1	32.408640	-103.840830
AH-2	32.408759	-103.840866
AH-3	32.408664	-103.840721
AH-4	32.408499	-103.840840
AH-5	32.408665	-103.840980
AH-6	32.408658	-103.840512
BH-1	32.408659	-103.840912

TABLE 2
SUMMARY OF ANALYTICAL RESULTS
SOIL ASSESSMENT - 2RP-3748
CONOCOPHILLIPS
JAMES E UPPER BATTERY LOAD LINE RELEASE
EDDY COUNTY, NM

Sample ID	Sample Date	Sample Depth Interval	Field Screening Results		Chloride[1]		BTEX[2]										TPH[3]							
							Benzene		Toluene		Ethylbenzene		Total Xylenes		Total BTEX		GRO[4] C_3 - C_{10}		DRO C_{10} - C_{28}		ORO C_{28} - C_{40}		Total TPH (GRO+DRO+ORO)	
		ft. bgs	Chloride (ppm)	PID (ppm)	mg/kg	Q	mg/kg	Q	mg/kg	Q	mg/kg	Q	mg/kg	Q	mg/kg		mg/kg	Q	mg/kg	Q	mg/kg	Q	mg/kg	
AH-1	12/9/2020	0-1	-	-	1,650		< 0.00113		< 0.00566		< 0.00283		< 0.00736		-		8.79		4220		3060		***7,289***	
		1-2	-	-	1,190		< 0.00112		< 0.00562		< 0.00281		< 0.00730		-		31.8		2230		1320		***3,582***	
		2-3	-	-	1,900		< 0.00115		< 0.00574		< 0.00287		< 0.00746		-		< 0.107		3.08	J	5.39	B	8.47	
		3-4	-	-	3,100		< 0.00119		< 0.00596		< 0.00298		< 0.00775		-		< 0.110		< 4.38		1.04	B J	1.04	
		5-6	-	-	***10,100***		< 0.00125		< 0.00623		< 0.00312		< 0.00810		-		0.171	B	28.3		22.9	B	51.4	
		6-7	-	-	9,720		< 0.00123		< 0.00615		< 0.00307		< 0.00799		-		0.177	B	44.7		38.4		83.3	
AH-2	12/9/2020	0-1	-	-	9.46	J	< 0.00102		< 0.00509		< 0.00255		< 0.00662		-		0.139	B	14.0		45.7		59.8	
		1-2	-	-	186		< 0.00106		< 0.00531		< 0.00265		< 0.00690		-		< 0.103		25.4		45.9		71.3	
AH-3	12/9/2020	0-1	-	-	30.1		< 0.00102		< 0.00512		< 0.00256		< 0.00665		-		0.253	B	34.0		88.6		123	
		1-2	-	-	25.0		< 0.00105		< 0.00525		< 0.00262		< 0.00682		-		0.0421	B J	17.4		43.8		61.2	
AH-4	12/9/2020	0-1	-	-	< 20.5		< 0.00105		< 0.00527		< 0.00264		< 0.00685		-		0.0262	B J	< 4.11		1.41	B J	1.44	
		1-2	-	-	< 20.4		< 0.00104		< 0.00522		< 0.00261		< 0.00679		-		< 0.102		< 4.09		1.53	B J	1.53	
AH-5	12/9/2020	0-1	-	-	236		< 0.00107		< 0.00534		< 0.00267		< 0.00694		-		< 0.103		34.4		60.0		94.4	
		1-2	-	-	< 20.2		< 0.00102		< 0.00510		< 0.00255		< 0.00663		-		0.125	B	6.03		5.25	B	11.4	
AH-6	1/12/2021	0-1	391	0.4	54.4		< 0.00109		< 0.00545		< 0.00273		< 0.00709		-		< 0.105		138		506		644	
		3-4	437	0.7	88.1		< 0.00112		< 0.00558		< 0.00279		< 0.00726		-		< 0.106		64.5		236		301	
BH-1	1/12/2021	0-1			2,950		< 0.00113		< 0.00564		< 0.00282		< 0.00733		-		< 0.106		< 4.25		2.46	J	2.46	
		2-3			697		< 0.00110		< 0.00548		< 0.00274		< 0.00712		-		< 0.105		< 4.19		4.61		4.61	
		4-5			877		< 0.00108		< 0.00538		< 0.00269		< 0.00699		-		< 0.104		< 4.15		4.85		4.85	
		6-7			4,970		< 0.00119		< 0.00596		< 0.00298		< 0.00775		-		< 0.110		< 4.38		1.51	J	1.51	
		9-10			8,560		< 0.00123		< 0.00614		< 0.00307		< 0.00798		-		< 0.111		< 4.45		< 4.45		-	
		14-15			5,240		< 0.00112		< 0.00559		< 0.00279		< 0.00726		-		< 0.106		< 4.23		< 4.23		-	
		19-20			3,710		< 0.00110		< 0.00550		< 0.00275		< 0.00715		-		< 0.105		< 4.20		< 4.20		-	
		24-25			4,020		< 0.00126		< 0.00628		< 0.00314		< 0.00817		-		< 0.113		< 4.51		< 4.51		-	
		29-30			1,630		< 0.00119		< 0.00595		< 0.00298		< 0.00774		-		< 0.110		< 4.38		< 4.38		-	
		34-35			377		< 0.00111		< 0.00557		< 0.00278		< 0.00724		-		< 0.106		< 4.23		3.07	J	3.07	
		39-40			1,050		< 0.00117		< 0.00583		< 0.00291		< 0.00758		-		< 0.108		< 4.33		< 4.33		-	
		44-45			2,170		< 0.00136		< 0.00682		< 0.00341		< 0.00887		-		< 0.118		< 4.73		< 4.73		-	

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

Bold and italicized values indicate exceedance of proposed RRALs

Shaded rows indicate intervals proposed for excavation.

1 EPA Method 300.0

2 EPA Method 8260B

3 EPA Method 8015

4 EPA Method 8015D/GRO

QUALIFIERS:

B The same analyte is found in the associated blank.

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

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

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

NM OIL CONSERVATION
ARTESIA DISTRICT
JUN 20 2016
RECEIVED

Form C-141
Revised August 8, 2011
Submit 1 Copy to appropriate District Office in accordance with 19.15.29 NMAC.

fAB1617331053
NAB1617331258

Release Notification and Corrective Action

OPERATOR

☒ Initial Report ☐ Final Report

Name of Company: **ConocoPhillips** 219138	Contact: **Jose A Zepeda**
Address: **1410 N West County Road**	Telephone No. **575-391-3165**
Facility Name: **James E Upper Battery**	Facility Type: **Load Line**

Surface Owner:	Mineral Owner: N/A	API No.

LOCATION OF RELEASE

Unit Letter	Section	Township	Range	Feet from the	North/South Line	Feet from the	East/West Line	County
	12	22	30E					**Eddy**

Latitude 32.4123 **Longitude** -103.848

NATURE OF RELEASE

Type of Release: **Produce Water**	Volume of Release: 10	Volume Recovered: 0
Source of Release: **Load Line**	Date and Hour of Occurrence **06/15/2016 1730**	Date and Hour of Discovery **SAME**
Was Immediate Notice Given? ☐ Yes ☒ No ☐ Not Required	If YES, To Whom? Jamie Keyes	
By Whom? **Jose A Zepeda**	Date and Hour: **06/17/16 0650 via email**	
Was a Watercourse Reached? ☐ Yes ☒ No	If YES, Volume Impacting the Watercourse.	

If a Watercourse was Impacted, Describe Fully.*

N/A

Describe Cause of Problem and Remedial Action Taken.*
On June 15, 2016 at 1730 MDT at James E Upper Battery a release occurred when a storm blew over a catwalk pulling out a load line from a fiberglass tank, resulting in a release of 10 bbls of Produced Water with 0 bbls recovered. Immediate action was to shut in location. Spill site will be remediated according to COPC and NMOCD guidelines.

Describe Area Affected and Cleanup Action Taken.*

I hereby certify that the information given above is true and complete to the best of my knowledge and understand that pursuant to NMOCD 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 NMOCD marked as "Final Report" does not relieve the operator of liability should their operations have failed to adequately investigate and remediate contamination that pose a threat to ground water, surface water, human health or the environment. In addition, NMOCD 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.

Signature: JOSE A ZEPEDA	OIL CONSERVATION DIVISION
Printed Name: Jose A Zepeda	Approved by Environmental Specialist:
Title: LEAD HSE	Approval Date: 6/21/16 Expiration Date: N/A
E-mail Address: **Jose. A. Zepeda@conocophillips.com**	Conditions of Approval: **Remediation per O.C.D. Rules & Guidelines SUBMIT REMEDIATION PROPOSAL NO LATER THAN: 7/21/16** Attached ☐
Date: 06/17/2016 Phone:575-391-3165	

* Attach Additional Sheets If Necessary

2RP-3748

State of New Mexico
Oil Conservation Division

Incident ID	nAB1617331258
District RP	2RP-3748
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?	262 (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.

Form C-141
Page 4

State of New Mexico
Oil Conservation Division

Incident ID	nAB1617331258
District RP	2RP-3748
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: Sam Widmer Title: Principal Program Manager

Signature: DocuSigned by: Sam Widmer 5454CA5BAD33498... Date: Oct-17-2022

email: Sam.Widmer@conocophillips.com Telephone: 281-206-5298

OCD Only

Received by: Jocelyn Harimon Date: 10/19/2022

State of New Mexico
Oil Conservation Division

Incident ID	nAB1617331258
District RP	2RP-3748
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: Sam Widmer Title: Principal Program Manager

Signature: DocuSigned by: Sam Widmer 5454CA5BAD33498... Date: Oct-17-2022

email: Sam.Widmer@conocophillips.com Telephone: 281-206-5298

OCD Only

Received by: Jocelyn Harimon Date: 10/19/2022

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

Signature: Brittany Hall Date: 01/09/2023

Alternative sampling plan of confirmation samples representative of 500 square feet denied. OCD will approve confirmation samples representative of no more than 400 square feet.

APPENDIX B
Release Characterization and Remediation Work Plan (March 11, 2021)

TETRA TECH

March 11, 2021

Bradford Billings
Hydrologist
District 2 Artesia
Oil Conservation Division
Santa Fe, NM 87505

Re: Release Characterization and Remediation Work Plan
ConocoPhillips
James E Upper Battery Load Line Release
Unit Letter E, Section 12, Township 22 South, Range 30 East
Eddy County, New Mexico
2RP-3748
Incident ID nAB1617331258

Mr. Billings:

Tetra Tech, Inc. (Tetra Tech) was contacted by ConocoPhillips (COP) to assess a release that occurred from the load line associated with the James E Upper Battery, approximately 70 feet (ft) west-northwest of the adjacent wellhead. The release footprint is located in Public Land Survey System (PLSS) Unit Letter E, Section 12, Township 22 South, Range 30 East, in Eddy County, New Mexico (Site). The approximate release point occurred at coordinates 32.408644°, -103.840877°, 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 June 15, 2016. The release occurred when a storm blew over a catwalk, pulling out the load line from a fiberglass tank at the James E Upper Battery. This resulted in a release of 10 barrels (bbls) of produced water, of which none was recovered. The New Mexico Oil Conservation District (NMOCD) received the C-141 report form for the release on June 17, 2016 via email. The NMOCD subsequently assigned the release the Remediation Permit (RP) number 2RP-3748 and the Incident ID nAB1617331258. The 2RP-3748 release is included in an Agreed Compliance Order-Releases (ACO-R) between COP and the NMOCD signed on May 7 and 9, 2019, respectively.

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 high karst potential.

According to the New Mexico Office of the State Engineers (NMOSE) reporting system, there are no water wells within 800 meters (approximately ½ mile) of the Site. However, there is one (1) water well within 6,500 meters (approximately 4 miles) of the Site. The average depth to groundwater is 262 ft below ground surface (bgs). A boring drilled at the release footprint was dry at 55 ft bgs. The site characterization data is included in Appendix B.

Tetra Tech
901 West Wall St., Suite 100, Midland, TX 79701
Tel 432.682.4559 Fax 432.682.3946 www.tetratech.com

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 (high karst potential) and in accordance with Table I of 19.15.29.12 NMAC, the remediation RRALs for the Site are as follows:

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

SITE ASSESSMENT

Photographs of the 2RP-3748 release dated June 17, 2016 demonstrate that the release was confined to the fiberglass tank's lined containment area. However, the initial C-141 reports that no free liquids were recovered during initial response activities. On behalf of COP, Tetra Tech conducted a visual Site inspection in June 2020 to evaluate current Site conditions. During this inspection, Tetra Tech personnel observed that the fiberglass tank had been removed and the earthen berm was left in place. Photographic documentation of the release event and the visual Site inspection is included as Appendix C.

Tetra Tech personnel conducted soil sampling on December 9, 2020 on behalf of COP. One hand auger (1) boring, AH-1, was advanced within the release extent to a depth of 7 ft bgs, and four (4) hand auger borings (AH-2 through AH-5) were advanced along the perimeter of the release extent to depths of 2 ft bgs. On January 12, 2021, Tetra Tech returned to the Site to complete horizontal and vertical delineation of the release extent. One (1) boring (BH-1) was installed inside the release footprint using an air rotary drilling rig to a depth of 50 ft bgs to achieve vertical delineation of the release. One (1) hand auger boring (AH-6) was advanced to the west of the release extent to a depth of 4 ft bgs to complete horizontal delineation of the release. Figure 3 depicts the release extent and the soil boring locations, and GPS coordinates for the boring locations are presented in Table 1. The soil boring log for boring location BH-1 is presented in Appendix D. Groundwater was not encountered during the soil assessment activities.

A total of twenty-eight (28) samples were collected from the seven (7) borings (BH-1 and AH-1 through AH-6) and submitted to Pace Analytical National Center for Testing & Innovation (Pace) in Nashville, Tennessee to be analyzed for chlorides via EPA Method 300.0, TPH via EPA Method 8015M, and BTEX via EPA Method 8021B. A copy of the laboratory analytical report and chain-of-custody documentation are included in Appendix E.

SUMMARY OF SAMPLING RESULTS

Results from the December 2020 and January 2021 soil sampling events are summarized in Table 2. The analytical results associated with the interior boring location AH-1 exceeded the Site chloride RRAL of 600 mg/kg in all of the sample intervals collected from the ground surface down to 7 ft bgs. The analytical results associated with interior boring location BH-1 exceeded the Site chloride RRAL of 600 mg/kg in all sample intervals collected from 0 to 45 ft bgs, with the exception of the 34-35 ft bgs sample interval (377 mg/kg). There were no other analytical results which exceeded the chloride RRAL (600 mg/kg) during the soil assessment.

The analytical results associated with interior boring location AH-1 exceeded the Site TPH RRAL of 100 mg/kg in the 0-1 ft bgs and 1-2 ft bgs sample intervals. Additionally, the analytical results associated with the perimeter borings located east of the release area footprint exceeded the Site TPH RRAL of 100 mg/kg in the 0-1 ft bgs sample interval at AH-3 and in the 0-1 ft bgs and 3-4 ft bgs sample intervals at AH-6. The analytical results associated with the remainder of the samples analyzed were below the TPH Site RRAL.

Given that the 2RP-3748 release consisted of produced water only and no oil, the TPH exceedances observed in surface soils at the on-pad boring locations AH-1, AH-3, and AH-6 are attributed to historical contamination related to the James E Upper Battery. There were no analytical results that exceeded the Site BTEX RRAL of 50 mg/kg.

The chloride concentration in the 34-35 ft bgs interval at boring location BH-1 was below the Site RRAL of 600 mg/kg, but vertical delineation of the release was not completed because chloride concentrations increased again in the 39-40 ft bgs (1,050 mg/kg) and 44-45 ft bgs (2,170 mg/kg) sample intervals. However, the Site is located in an area with abundant potash reserves, and so naturally-occurring soluble mineral salts such as sylvite (KCl) would lead to natural variations of chloride in the soils of the region. Given the depth to groundwater at the site and the naturally-occurring mineral salts in soil concentrations at depth, the release is considered vertically delineated.

REMEDIATION WORK PLAN

Based on the analytical results, COP proposes to remove the impacted material to a depth of 4 ft bgs as indicated in Table 2 and shown in Figure 4. Excavation in the area will be performed using heavy equipment (backhoes, hoe rams, and track hoes) within the release area footprint.

Excavated soils will be transported offsite and disposed of at an NMOCD-approved or permitted facility. Confirmation bottom and sidewall samples will be collected for verification of remedial activities, and analyzed for TPH, BTEX, and chlorides. Once results are received, NMOCD will be notified and the excavation will then be backfilled with clean material to surface grade. The estimated volume of material to be remediated is approximately 230 cubic yards.

VARIANCE REQUEST

After characterization of this release, COP proposes to leave impacted soils in the release area footprint (with concentrations greater than those specified in Table I) located below 4 ft bgs in place. Groundwater in this area is below 200 ft bgs, and the release footprint is located at an active battery in areas immediately under or around oil and gas production equipment where any further excavation past 4 ft bgs could cause a major facility deconstruction, and/or additional unwanted impact to the environment.

Thus, in accordance with 19.15.29.14(A) NMAC, ConocoPhillips requests a variance for the placement of a liner within the excavated area. A 20-mil reinforced poly liner will be installed and properly seated throughout the base of the excavation (at 4 ft below surrounding grade). The liner will provide an engineering control that will serve as a barrier and inhibit the downward migration of residual constituents.

ALTERNATIVE CONFIRMATION SAMPLING PLAN

In accordance with 19.15.29.12(D)(1)(b) NMAC, ConocoPhillips proposes the following alternative confirmation sampling plan to adhere with NMOCD requirements. The proposed confirmation sample locations are depicted in Figure 5. Four (4) confirmation floor samples and six (6) confirmation sidewall samples are proposed for verification of remedial activities. The proposed excavation encompasses a surface area of approximately 1,535 square ft (sf).

These confirmation sidewall and floor samples will be representative of no more than approximately 500 sf of excavated area. Confirmation samples will be sent to Pace Laboratories for analysis of TPH (Method 8015 modified), BTEX (Method 8260B), and chloride (USEPA Method 300.0). If the analytical results associated with these sample locations exceed the respective RRAL, additional excavation will be conducted at those locations until closure criteria are attained, or the excavation floor reaches 4 ft bgs.

SITE RECLAMATION AND RESTORATION PLAN

The area proposed for remediation at the Site is restricted to an active production are on the caliche well pad, and therefore no Site reclamation is warranted at this time. At time of well plugging and abandonment, final reclamation shall take place in accordance with 19.15.29.13 NMAC. The portion of the former release

footprint in the pasture supports uniform vegetative cover, indicating that the remedial actions indicated in historical aerial imagery were effective in this portion of the release extent.

CONCLUSION

ConocoPhillips proposes to begin remediation activities at the Site within 1 year of NMOCD plan approval. The James E Upper Battery Load Line Release (2RP-3748) is included in an Agreed Compliance Order-Releases (ACO-R) between COP and the NMOCD signed on May 7 and 9, 2019, respectively. COP is dedicated to addressing and closing all historical releases included in the ACO-R, and given the number of releases to be addressed, 1 year is anticipated to be a practicable timeline. Upon completion of the proposed work, a final closure report detailing the remediation activities and the results of the confirmation sampling will be submitted to NMOCD.

If you have any questions concerning the soil assessment or the proposed remediation activities for the Site, please call me at (512) 739-7874 or Christian at (512) 338-2861.

Sincerely,
Tetra Tech, Inc.

Samantha K. Abbott, P.G.
Senior Staff Geologist

Christian M. Llull, P.G.
Project Manager

cc:
Mr. Marvin Soriwei, RMR – ConocoPhillips
Mr. Charles Beauvais, GPBU – ConocoPhillips

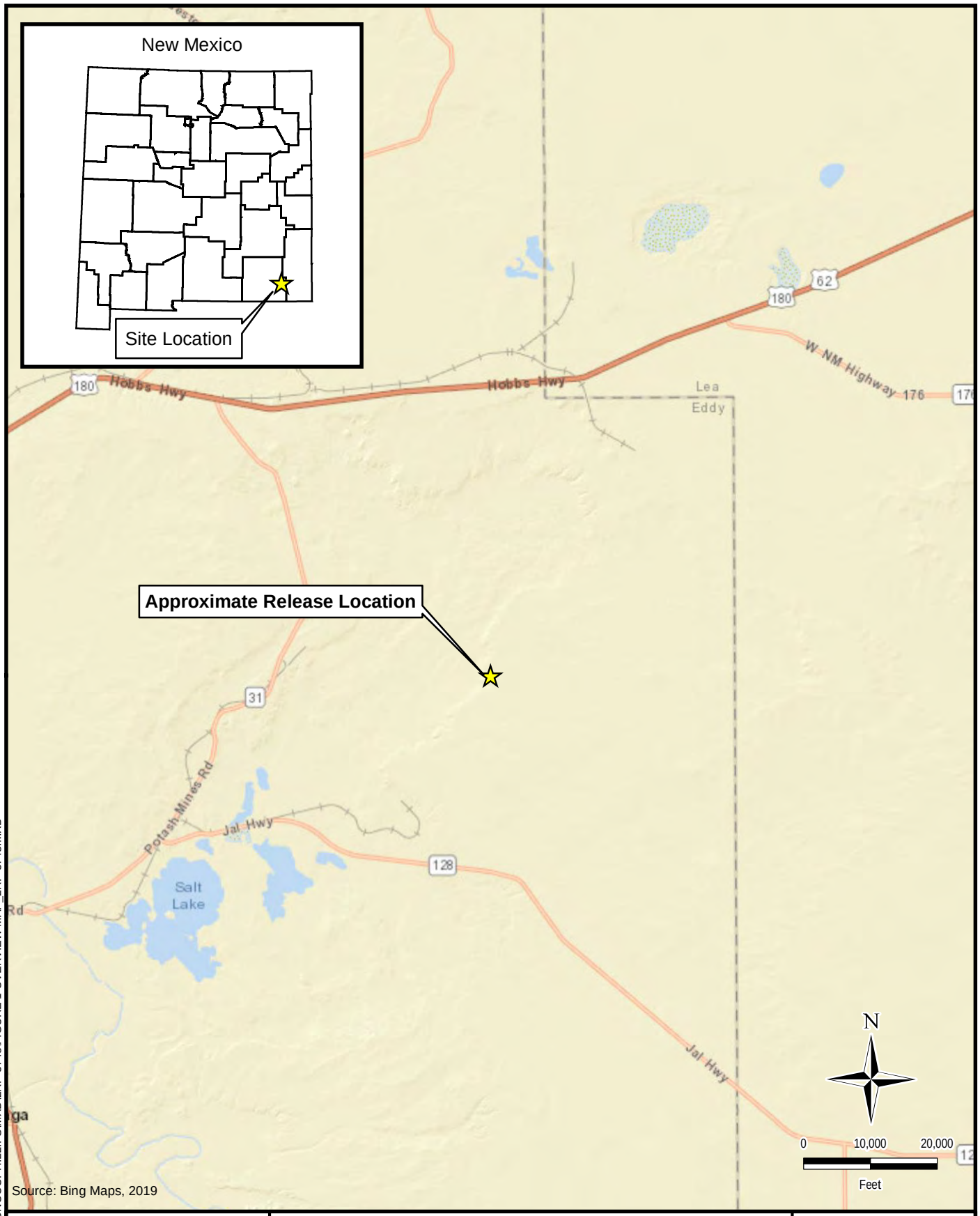
LIST OF ATTACHMENTS

Figures:

Tables:

Appendices:

FIGURES



DOCUMENT PATH: D:\CONOCOPHILLIPS\MXD\2RP-3748\FIGURE 1 OVERVIEW MAP_2RP-3748.MXD

TETRA TECH
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Midland, Texas 79701
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Fax: (432) 682-3946

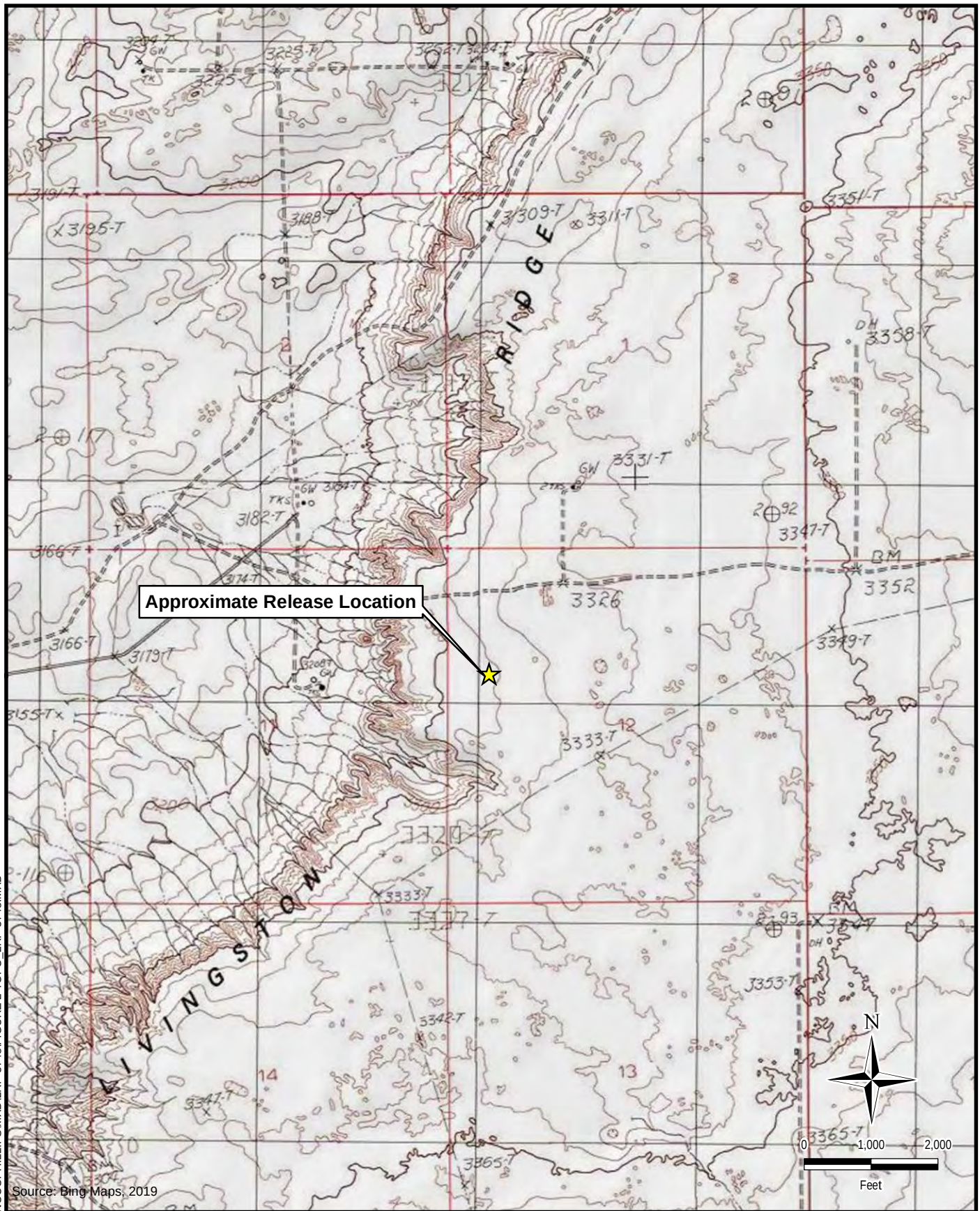
CONOCOPHILLIPS

2RP-3748
(32.408644°, -103.840877°)
LEA COUNTY, NEW MEXICO

JAMES E UPPER BATTERY LOAD LINE RELEASE
SITE LOCATION MAP

PROJECT NO.:	212C-MD-02334
DATE:	FEBRUARY 16, 2021
DESIGNED BY:	AAM

Figure No.
1



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CONOCOPHILLIPS

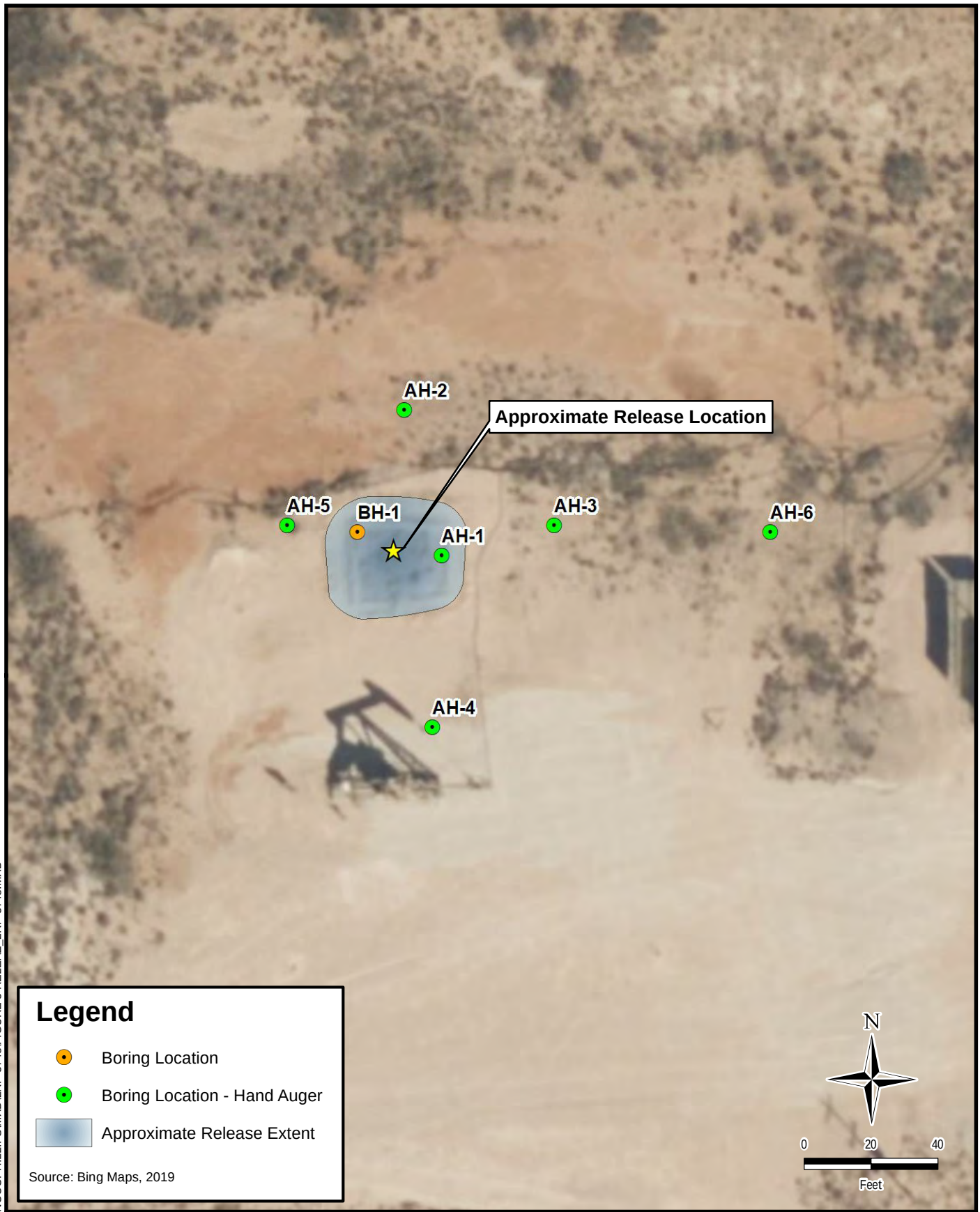
2RP-3748
(32.408644°, -103.840877°)
LEA COUNTY, NEW MEXICO

JAMES E UPPER BATTERY LOAD LINE RELEASE
TOPOGRAPHIC MAP

PROJECT NO.:	212C-MD-02334
DATE:	FEBRUARY 16, 2021
DESIGNED BY:	AAM

Figure No.

2



DOCUMENT PATH: D:\CONOCOPHILLIPS\MXD\2RP-3748\FIGURE 3 RELEAE_2RP-3748.MXD

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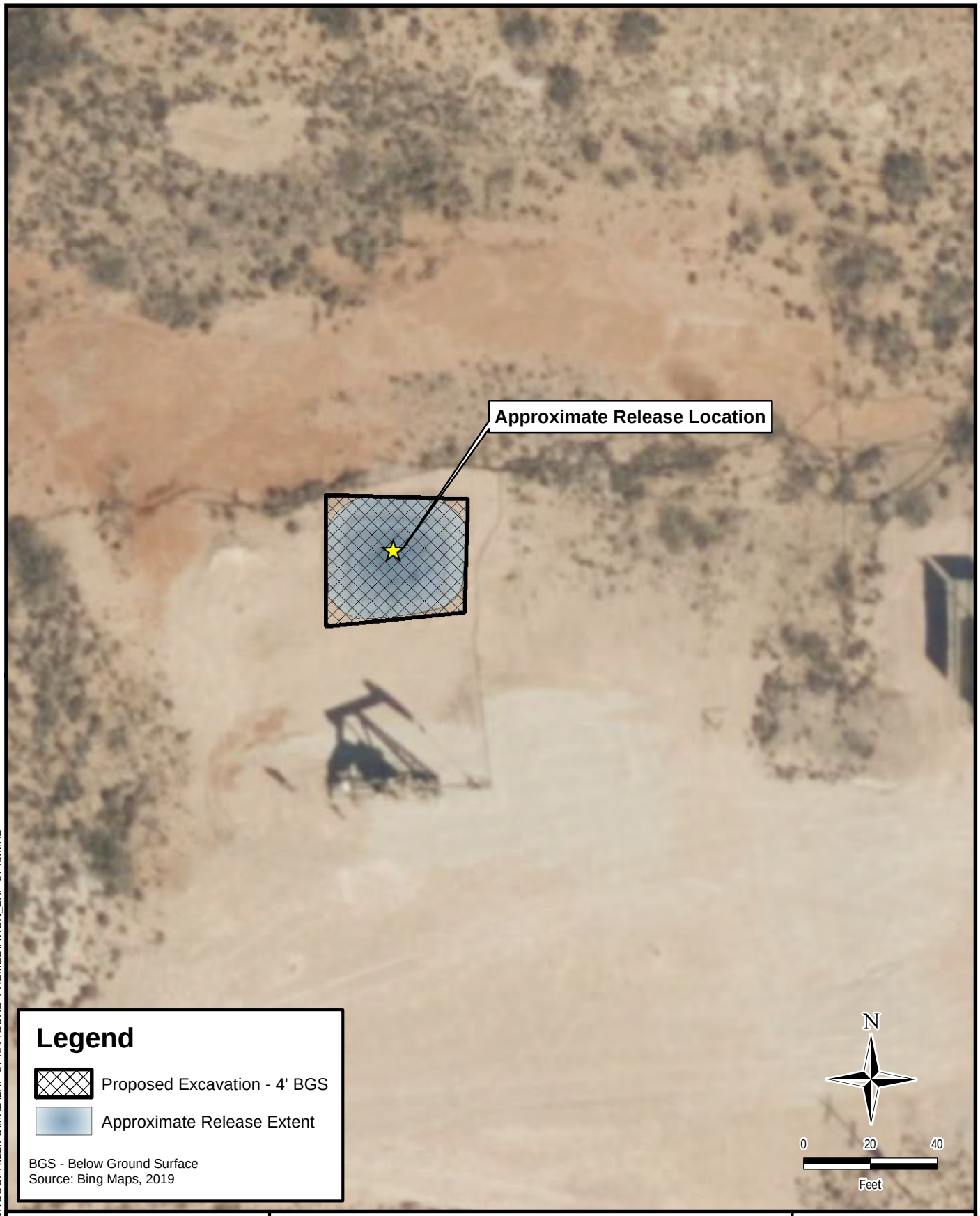
CONOCOPHILLIPS

2RP-3748
(32.408644°, -103.840877°)
LEA COUNTY, NEW MEXICO

JAMES E UPPER BATTERY LOAD LINE RELEASE
RELEASE EXTENT AND SITE ASSESSMENT

PROJECT NO.:	212C-MD-02334
DATE:	FEBRUARY 11, 2021
DESIGNED BY:	AAM

Figure No.
3



DOCUMENT PATH: D:\CONOCOPHILLIPS\MXD\2RP-3748\FIGURE 4 REMEDIATION_2RP-3748.MXD

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CONOCOPHILLIPS

2RP-3748
(32.408644°, -103.840877°)
LEA COUNTY, NEW MEXICO

JAMES E UPPER BATTERY LOAD LINE RELEASE
PROPOSED REMEDIATION EXTENT

PROJECT NO.:	212C-MD-02334
DATE:	FEBRUARY 11, 2021
DESIGNED BY:	AAM

Figure No.
4

DOCUMENT PATH: D:\CONOCOPHILLIPS\MXD\2RP-3748\FIGURE 5 ACSP_2RP-3748.MXD

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2RP-3748
(32.408644°, -103.840877°)
LEA COUNTY, NEW MEXICO

JAMES E UPPER BATTERY LOAD LINE RELEASE
ALTERNATIVE CONFIRMATION SAMPLING PLAN

PROJECT NO.:	212C-MD-02334
DATE:	FEBRUARY 16, 2021
DESIGNED BY:	AAM

Figure No.
5

TABLES

TABLE 1
BORING LOCATION COORDINATES
SOIL ASSESSMENT - 2RP-3748
CONOCOPHILLIPS
JAMES E UPPER BATTERY LOAD LINE RELEASE
EDDY COUNTY, NM

Boring ID	Latitude	Longitude
AH-1	32.408640	-103.840830
AH-2	32.408759	-103.840866
AH-3	32.408664	-103.840721
AH-4	32.408499	-103.840840
AH-5	32.408665	-103.840980
AH-6	32.408658	-103.840512
BH-1	32.408659	-103.840912

TABLE 2
SUMMARY OF ANALYTICAL RESULTS
SOIL ASSESSMENT - 2RP-3748
CONOCOPHILLIPS
JAMES E UPPER BATTERY LOAD LINE RELEASE
EDDY 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] C_3 - C_{10}		DRO C_{10} - C_{28}		ORO C_{28} - C_{40}		Total TPH (GRO+DRO+ORO)
		ft. bgs	ppm		mg/kg	Q	mg/kg	Q	mg/kg	Q	mg/kg	Q	mg/kg	Q	mg/kg	mg/kg	Q	mg/kg	Q	mg/kg	Q	mg/kg
AH-1	12/9/2020	0-1	-	-	***1,650***		< 0.00113		< 0.00566		< 0.00283		< 0.00736		-	8.79		4220		3060		***7,289***
		1-2	-	-	***1,190***		< 0.00112		< 0.00562		< 0.00281		< 0.00730		-	31.8		2230		1320		***3,582***
		2-3	-	-	***1,900***		< 0.00115		< 0.00574		< 0.00287		< 0.00746		-	< 0.107		3.08	J	5.39	B	8.47
		3-4	-	-	***3,100***		< 0.00119		< 0.00596		< 0.00298		< 0.00775		-	< 0.110		< 4.38		1.04	B J	1.04
		5-6	-	-	***10,100***		< 0.00125		< 0.00623		< 0.00312		< 0.00810		-	0.171	B	28.3		22.9	B	51.4
		6-7	-	-	***9,720***		< 0.00123		< 0.00615		< 0.00307		< 0.00799		-	0.177	B	44.7		38.4		83.3
AH-2	12/9/2020	0-1	-	-	9.46	J	< 0.00102		< 0.00509		< 0.00255		< 0.00662		-	0.139	B	14.0		45.7		59.8
		1-2	-	-	186		< 0.00106		< 0.00531		< 0.00265		< 0.00690		-	< 0.103		25.4		45.9		71.3
AH-3	12/9/2020	0-1	-	-	30.1		< 0.00102		< 0.00512		< 0.00256		< 0.00665		-	0.253	B	34.0		88.6		***123***
		1-2	-	-	25.0		< 0.00105		< 0.00525		< 0.00262		< 0.00682		-	0.0421	B J	17.4		43.8		61.2
AH-4	12/9/2020	0-1	-	-	< 20.5		< 0.00105		< 0.00527		< 0.00264		< 0.00685		-	0.0262	B J	< 4.11		1.41	B J	1.44
		1-2	-	-	< 20.4		< 0.00104		< 0.00522		< 0.00261		< 0.00679		-	< 0.102		< 4.09		1.53	B J	1.53
AH-5	12/9/2020	0-1	-	-	236		< 0.00107		< 0.00534		< 0.00267		< 0.00694		-	< 0.103		34.4		60.0		94.4
		1-2	-	-	< 20.2		< 0.00102		< 0.00510		< 0.00255		< 0.00663		-	0.125	B	6.03		5.25	B	11.4
AH-6	1/12/2021	0-1	391	0.4	54.4		< 0.00109		< 0.00545		< 0.00273		< 0.00709		-	< 0.105		138		506		***644***
		3-4	437	0.7	88.1		< 0.00112		< 0.00558		< 0.00279		< 0.00726		-	< 0.106		64.5		236		***301***
BH-1	1/12/2021	0-1			***2,950***		< 0.00113		< 0.00564		< 0.00282		< 0.00733		-	< 0.106		< 4.25		2.46	J	2.46
		2-3			***697***		< 0.00110		< 0.00548		< 0.00274		< 0.00712		-	< 0.105		< 4.19		4.61		4.61
		4-5			***877***		< 0.00108		< 0.00538		< 0.00269		< 0.00699		-	< 0.104		< 4.15		4.85		4.85
		6-7			***4,970***		< 0.00119		< 0.00596		< 0.00298		< 0.00775		-	< 0.110		< 4.38		1.51	J	1.51
		9-10			***8,560***		< 0.00123		< 0.00614		< 0.00307		< 0.00798		-	< 0.111		< 4.45		< 4.45		-
		14-15			***5,240***		< 0.00112		< 0.00559		< 0.00279		< 0.00726		-	< 0.106		< 4.23		< 4.23		-
		19-20			***3,710***		< 0.00110		< 0.00550		< 0.00275		< 0.00715		-	< 0.105		< 4.20		< 4.20		-
		24-25			***4,020***		< 0.00126		< 0.00628		< 0.00314		< 0.00817		-	< 0.113		< 4.51		< 4.51		-
		29-30			***1,630***		< 0.00119		< 0.00595		< 0.00298		< 0.00774		-	< 0.110		< 4.38		< 4.38		-
		34-35			377		< 0.00111		< 0.00557		< 0.00278		< 0.00724		-	< 0.106		< 4.23		3.07	J	3.07
		39-40			***1,050***		< 0.00117		< 0.00583		< 0.00291		< 0.00758		-	< 0.108		< 4.33		< 4.33		-
		44-45			***2,170***		< 0.00136		< 0.00682		< 0.00341		< 0.00887		-	< 0.118		< 4.73		< 4.73		-

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

Bold and italicized values indicate exceedance of proposed RRALs

Shaded rows indicate intervals proposed for excavation.

1 EPA Method 300.0

2 EPA Method 8260B

3 EPA Method 8015

4 EPA Method 8015D/GRO

QUALIFIERS:

B	The same analyte is found in the associated blank.
J	The identification of the analyte is acceptable; the reported value is an estimate.

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

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

NM OIL CONSERVATION
ARTESIA DISTRICT
JUN 20 2016
RECEIVED

Form C-141
Revised August 8, 2011
Submit 1 Copy to appropriate District Office in accordance with 19.15.29 NMAC.

fAB1617331053
NAB1617331258

Release Notification and Corrective Action

OPERATOR

☒ Initial Report ☐ Final Report

Name of Company: **ConocoPhillips** 219138	Contact: **Jose A Zepeda**
Address: **1410 N West County Road**	Telephone No. **575-391-3165**
Facility Name: **James E Upper Battery**	Facility Type: **Load Line**

Surface Owner:	Mineral Owner: N/A	API No.

LOCATION OF RELEASE

Unit Letter	Section	Township	Range	Feet from the	North/South Line	Feet from the	East/West Line	County
	12	22	30E					**Eddy**

Latitude 32.4123 **Longitude** -103.848

NATURE OF RELEASE

Type of Release: **Produce Water**	Volume of Release: 10	Volume Recovered: 0
Source of Release: **Load Line**	Date and Hour of Occurrence **06/15/2016 1730**	Date and Hour of Discovery **SAME**
Was Immediate Notice Given? ☐ Yes ☒ No ☐ Not Required	If YES, To Whom? Jamie Keyes	
By Whom? **Jose A Zepeda**	Date and Hour: **06/17/16 0650 via email**	
Was a Watercourse Reached? ☐ Yes ☒ No	If YES, Volume Impacting the Watercourse.	

If a Watercourse was Impacted, Describe Fully.*

N/A

Describe Cause of Problem and Remedial Action Taken.*
On June 15, 2016 at 1730 MDT at James E Upper Battery a release occurred when a storm blew over a catwalk pulling out a load line from a fiberglass tank, resulting in a release of 10 bbls of Produced Water with 0 bbls recovered. Immediate action was to shut in location. Spill site will be remediated according to COPC and NMOCD guidelines.

Describe Area Affected and Cleanup Action Taken.*

I hereby certify that the information given above is true and complete to the best of my knowledge and understand that pursuant to NMOCD 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 NMOCD marked as "Final Report" does not relieve the operator of liability should their operations have failed to adequately investigate and remediate contamination that pose a threat to ground water, surface water, human health or the environment. In addition, NMOCD 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.

Signature: JOSE A ZEPEDA	OIL CONSERVATION DIVISION
Printed Name: Jose A Zepeda	Approved by Environmental Specialist:
Title: LEAD HSE	Approval Date: 6/21/16 Expiration Date: N/A
E-mail Address: **Jose. A. Zepeda@conocophillips.com**	Conditions of Approval: **Remediation per O.C.D. Rules & Guidelines SUBMIT REMEDIATION PROPOSAL NO LATER THAN: 7/21/16** Attached ☐
Date: 06/17/2016 Phone:575-391-3165	

* Attach Additional Sheets If Necessary

2RP-3748

State of New Mexico
Oil Conservation Division

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.

Form C-141
Page 4

State of New Mexico
Oil Conservation Division

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: Charles R. Beauvais II Date: _____

email: _____ Telephone: _____

OCD Only

Received by: _____ Date: _____

State of New Mexico
Oil Conservation Division

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: Charles R. Beauvais II Date: _____

email: _____ Telephone: _____

OCD Only

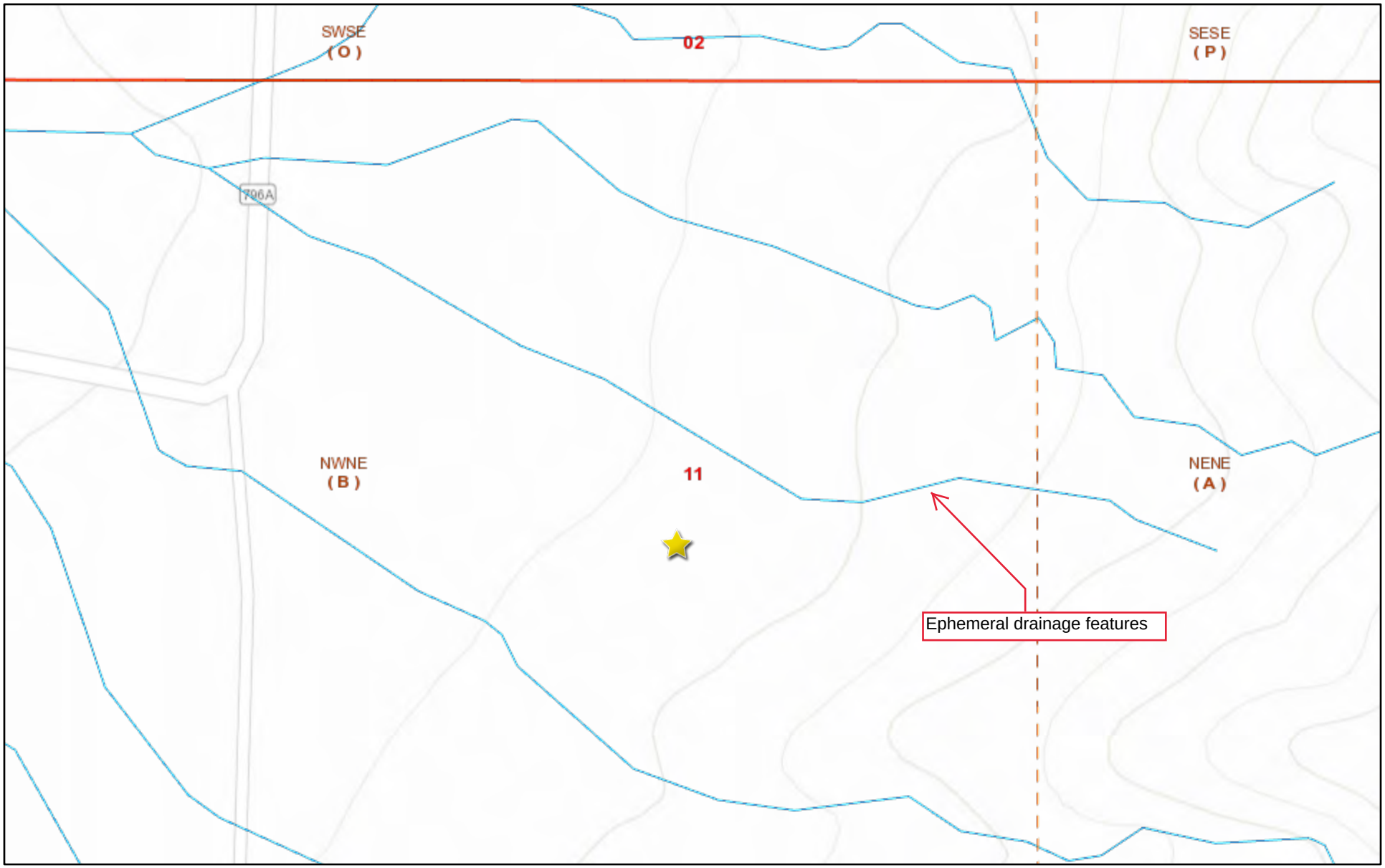
Received by: _____ Date: _____

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

Signature: _____ Date: _____

APPENDIX B
Site Characterization Data

2RP-3748



7/27/2020, 12:40:08 PM

1:2,257

0 0.01 0.03 0.06 mi

0 0.03 0.05 0.1 km

Override 1

OCD District Offices

PLSS First Division

PLSS Second Division

OSE Water-bodies

PLJV Probable Playas

OSE Streams

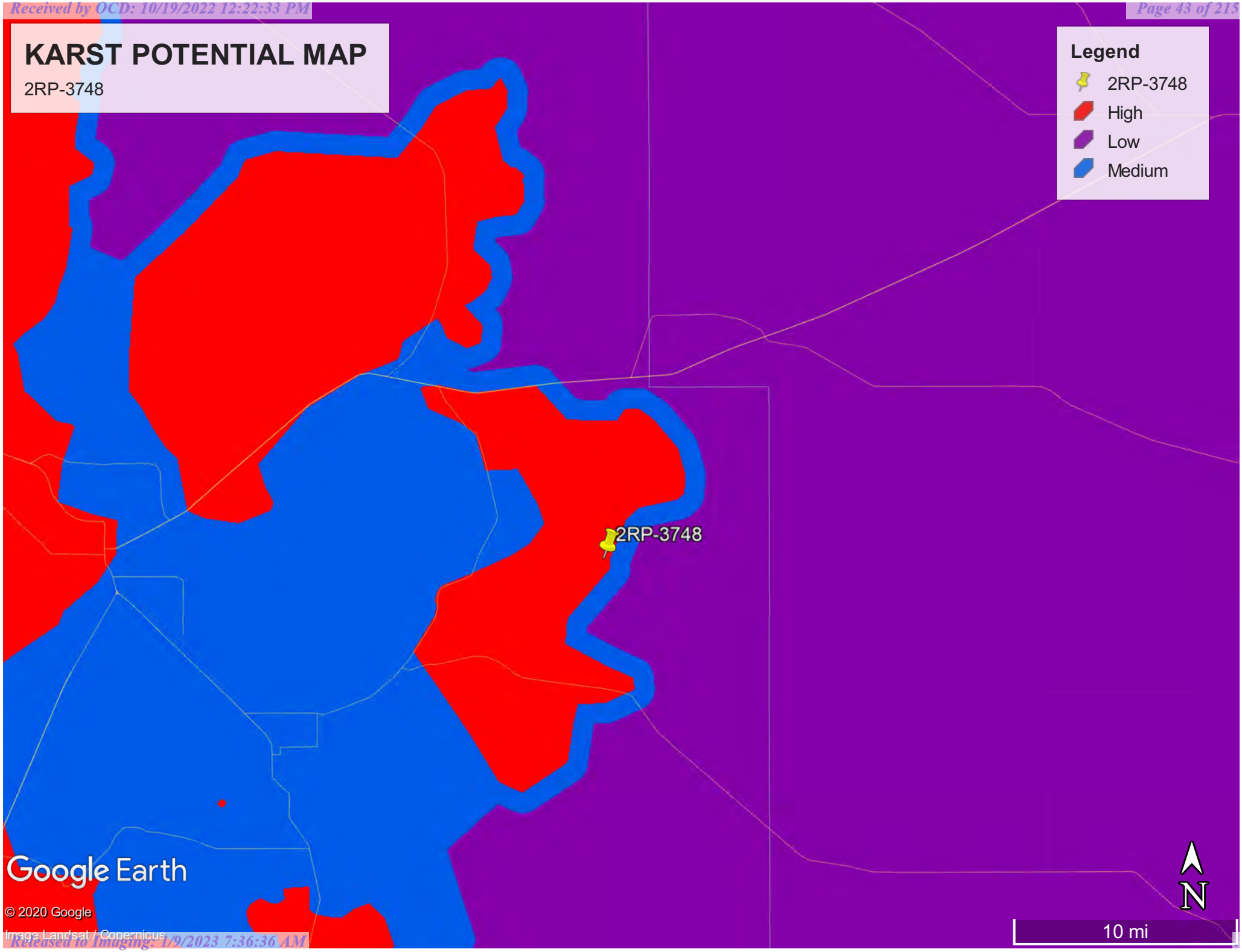
Sources: Esri, HERE, Garmin, Intermap, increment P Corp., GEBCO, USGS,

New Mexico Oil Conservation Division

NM OCD Oil and Gas Map. http://nm-emnrd.maps.arcgis.com/apps/webappviewer/index.html?id=4d017f2306164de29fd2fb9f8f35ca75: New Mexico Oil Conservation Division

KARST POTENTIAL MAP

2RP-3748



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
C 03234 EXPLORE		CUB	ED	1	2	3	35	21S	30E	607695	3589207*	2537	410		
C 02749		CUB	ED	1	1	1	18	22S	31E	610556	3585146*	2785	640		
C 02750		CUB	ED	1	1	1	18	22S	31E	610556	3585146*	2785	741		
C 02751		CUB	ED	1	1	1	18	22S	31E	610556	3585146*	2785	637		
C 02723		CUB	ED	2	2	3	15	22S	30E	606282	3584363*	3093	651		
C 03003		CUB	ED	3	1	3	31	21S	31E	610511	3588970*	3166	650		
C 03002		CUB	ED	4	2	4	06	22S	31E	611933	3587375*	3720	668		
C 02950 EXPL		CUB	ED	4	2	4	23	22S	30E	608740	3582576*	4185	845		
C 02637		CUB	ED	1	3	3	24	22S	30E	608950	3582377*	4410	759		
C 03015		CUB	ED	1	4	3	22	22S	30E	606099	3582353*	4889	1316	262	1054
C 02748		CUB	ED	1	2	3	17	22S	31E	612576	3584364*	4916	3856		
C 02683		CUB	ED	3	1	1	20	22S	31E	612184	3583356*	5171	840		
C 03773 POD1	C	CUB	ED	4	2	2	32	21S	30E	604039	3589799	5223	55		
C 03774 POD1	C	CUB	ED	2	4	2	32	21S	30E	604039	3589799	5223	32		
C 03772 POD1	C	CUB	ED	2	4	2	32	21S	30E	603859	3589714	5321	30		
C 03772 POD2	C	CUB	ED	4	2	2	32	21S	30E	603850	3589707	5325	30		
C 03772 POD3	C	CUB	ED	4	2	2	32	21S	30E	603840	3589699	5329	30		
C 03772 POD8	C	CUB	ED	4	2	2	32	21S	30E	603797	3589636	5330	30		
C 03772 POD6	C	CUB	ED	4	2	2	32	21S	30E	603814	3589666	5332	30		
C 03772 POD5	C	CUB	ED	4	2	2	32	21S	30E	603823	3589681	5333	30		
C 03772 POD7	C	CUB	ED	4	2	2	32	21S	30E	603805	3589655	5333	30		
C 03772 POD4	C	CUB	ED	4	2	2	32	21S	30E	603824	3589692	5338	30		
C 02413		CUB	ED	1	2	1	20	22S	31E	612586	3583560*	5359	737		
C 02682		CUB	ED	4	4	4	08	22S	31E	613566	3585379*	5468	4400		
C 03112 EXPLORE		CUB	ED	3	1	1	09	22S	31E	613753	3586590*	5486	3567		
C 03221 EXPLORE		CUB	ED	1	2	1	30	22S	31E	610995	3581935*	5520	651		

***UTM location was derived from PLSS - see Help**

(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-basin	County	Q 64	Q 16	Q 4	Sec	Tws	Rng	X	Y	Distance	Depth Well	Depth Water	Water Column
C 02414	CUB	ED	3	1	3	16	22S	31E	613782	3584176*	6078	846		
C 02639	CUB	ED	4	4	4	17	22S	31E	613585	3583770*	6087	3928		
C 02727	CUB	ED	3	1	1	33	21S	31E	613716	3589809*	6255	913		
C 02684	CUB	ED	4	2	2	20	22S	31E	613590	3583368*	6297	1060		
C 03976 POD1	CUB	ED	1	3	4	20	22S	31E	612967	3582387	6401	180		
C 03976 POD2	CUB	ED	1	3	4	20	22S	31E	612967	3582387	6401	70		
C 03976 POD3	CUB	ED	1	3	4	20	22S	31E	612967	3582387	6401	182		
C 03976 POD4	CUB	ED	1	3	4	20	22S	31E	612968	3582386	6402	71		
C 02759	CUB	ED	1	2	1	29	22S	31E	612604	3581952*	6455	795		

Average Depth to Water: **262 feet**

Minimum Depth: **262 feet**

Maximum Depth: **262 feet**

Record Count: 35

UTMNAD83 Radius Search (in meters):

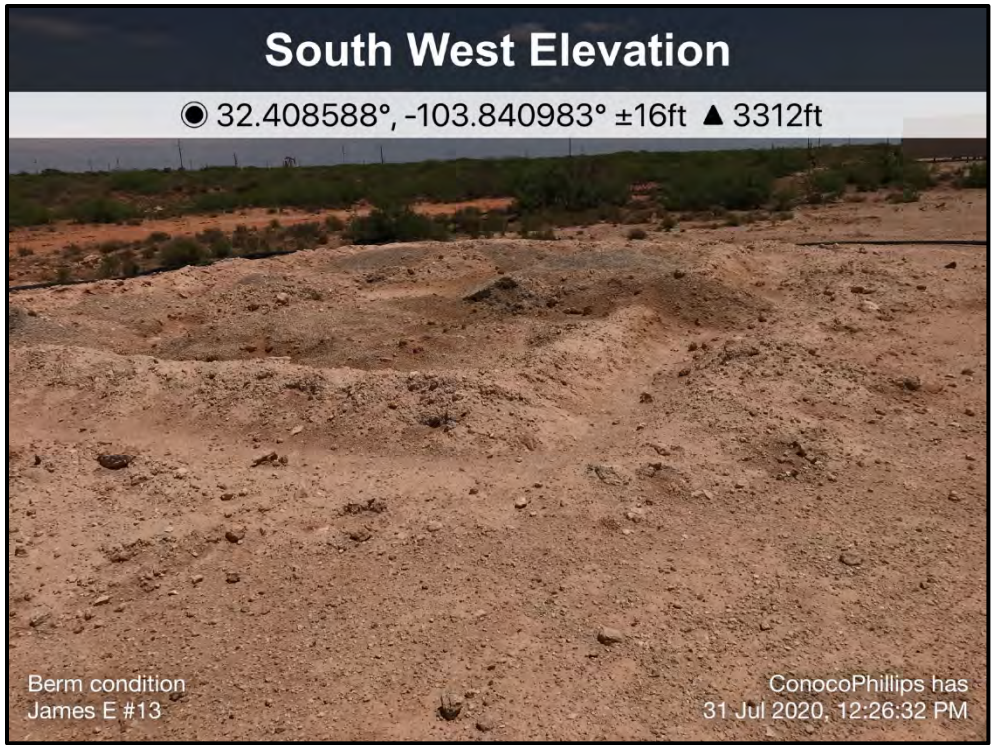
Easting (X): 608268.4 **Northing (Y):** 3586734.67 **Radius:** 6500

***UTM location was derived from PLSS - see Help**

APPENDIX C
Photographic Documentation

TETRA TECH, INC. PROJECT NO. 212C-MD-02152	DESCRIPTION	View facing east of release at the fiberglass tank. Release is confined to the lined containment.	1
	SITE NAME	James E Upper Battery Load Line Release	6/17/2016

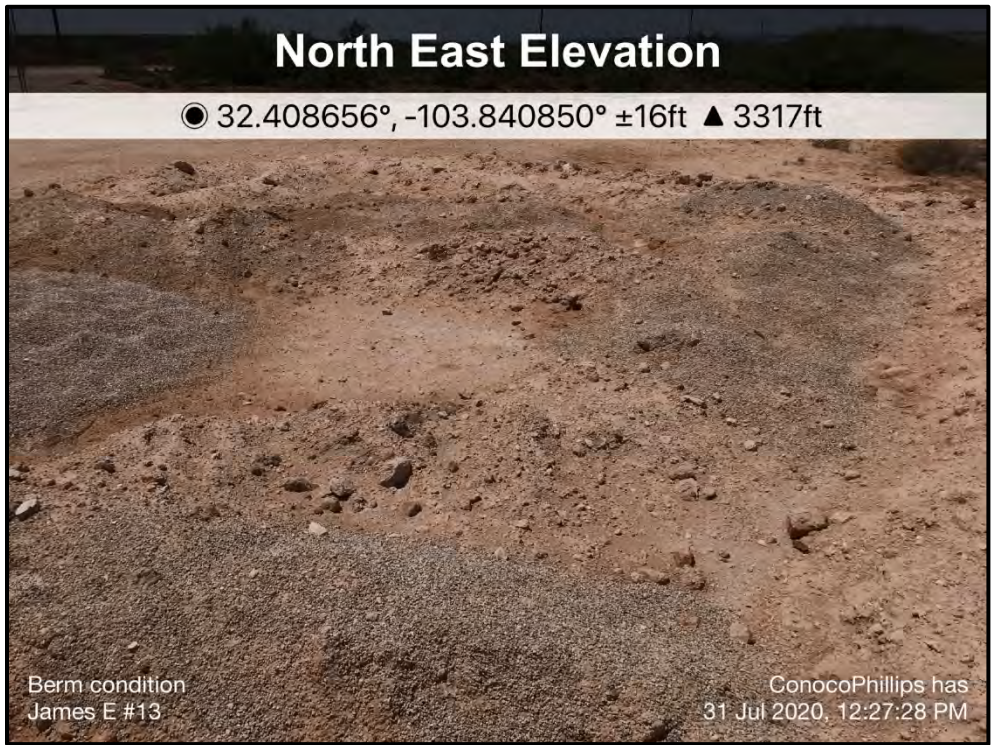
TETRA TECH, INC. PROJECT NO. 212C-MD-02152	DESCRIPTION	View facing northeast of release in lined containment at the fiberglass tank.	2
	SITE NAME	James E Upper Battery Load Line Release	6/17/2016



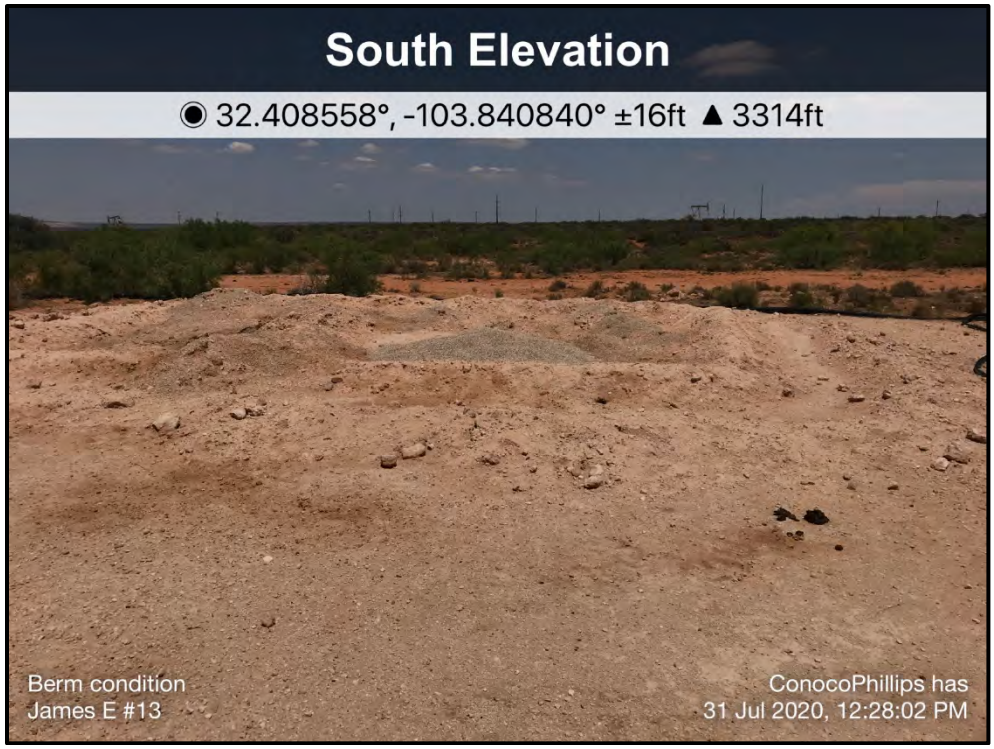
TETRA TECH, INC. PROJECT NO. 212C-MD-02152	DESCRIPTION	View facing northeast of former fiberglass tank location on well pad.	3
	SITE NAME	James E Upper Battery Load Line Release	7/31/2020

TETRA TECH, INC. PROJECT NO. 212C-MD-02152	DESCRIPTION	View facing east of flowlines adjacent to former fiberglass tank location.	4
	SITE NAME	James E Upper Battery Load Line Release	7/31/2020

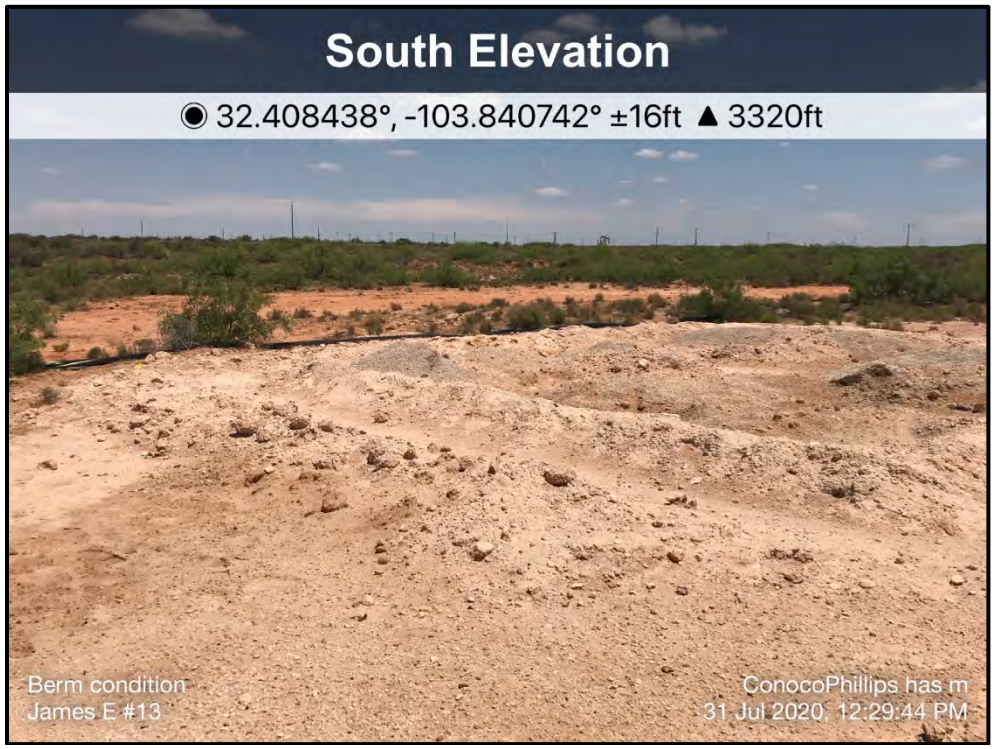
TETRA TECH, INC. PROJECT NO. 212C-MD-02152	DESCRIPTION	View facing southwest of former fiberglass tank location on well pad.	5
	SITE NAME	James E Upper Battery Load Line Release	7/31/2020



TETRA TECH, INC. PROJECT NO. 212C-MD-02152	DESCRIPTION	View of former fiberglass tank location on well pad.	6
	SITE NAME	James E Upper Battery Load Line Release	7/31/2020



TETRA TECH, INC. PROJECT NO. 212C-MD-02152	DESCRIPTION	View facing north of former fiberglass tank location on well pad.	7
	SITE NAME	James E Upper Battery Load Line Release	7/31/2020



TETRA TECH, INC. PROJECT NO. 212C-MD-02152	DESCRIPTION	View facing north of former fiberglass tank location on well pad.	8
	SITE NAME	James E Upper Battery Load Line Release	7/31/2020

TETRA TECH, INC. PROJECT NO. 212C-MD-02152	DESCRIPTION	View facing northwest of flowline and well head on well pad.	9
	SITE NAME	James E Upper Battery Load Line Release	7/31/2020

TETRA TECH, INC. PROJECT NO. 212C-MD-02152	DESCRIPTION	View facing west of well flowline on well pad.	10
	SITE NAME	James E Upper Battery Load Line Release	7/31/2020

APPENDIX D
Soil Boring Log

212C-MD-02334	TETRA TECH	**LOG OF BORING BH-1**	Page 1 of 3

Project Name: James E Upper Battery (2RP-3748)

Borehole Location: 32.408659, -103.840912 | Surface Elevation: 3313 ft

Borehole Number: BH-1 | Borehole Diameter (in.): 8 | Date Started: 1/12/2021 | Date Finished: 1/12/2021

WATER LEVEL OBSERVATIONS

While Drilling ▽ Dry ft Upon Completion of Drilling ▼ Dry ft

Remarks:

DEPTH (ft)	OPERATION TYPE	SAMPLE	CHLORIDE FIELD SCREENING (ppm) ExStik	VOC FIELD SCREENING (ppm) PID	SAMPLE RECOVERY (%)	MOISTURE CONTENT (%)	DRY DENSITY (pcf)	LIQUID LIMIT LL	PLASTICITY INDEX PI	MINUS NO. 200 (%)	GRAPHIC LOG	MATERIAL DESCRIPTION	DEPTH (ft)	REMARKS
			3140									**-SM-** SILTY SAND: Reddish-brown, medium dense, dry, with occasional caliche.	2	BH-1 (0-1')
			865									**-SM-** SILTY SAND: Reddish-brown, medium dense, dry.		
5			1320											BH-1 (4-5')
			3560										7	BH-1 (6-7')
												-SM- SILTY SAND: Reddish-brown, medium dense, dry, with occasional caliche.		
10			5770										10	BH-1 (9-10')
												-SP- SAND: Red, medium dense, dry, with occasional caliche pebbles.		
15			4760										15	BH-1 (14-15')
												-SP- SAND: Light-red, medium dense, dry, with occasional caliche.		
20			3480										20	BH-1 (19-20')
												-SW- SAND: Red, medium dense, dry.		
25			2240										25	BH-1 (24-25')

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 above. Surface elevations are estimated from Google Earth data.

Logger: John Thurston | Drilling Equipment: Air Rotary | Driller: Scarborough Drilling

212C-MD-02334 | TETRA TECH | **LOG OF BORING BH-1** | Page 2 of 3

Project Name: James E Upper Battery (2RP-3748)

Borehole Location: 32.408659, -103.840912 | Surface Elevation: 3313 ft

Borehole Number: BH-1 | Borehole Diameter (in.): 8 | Date Started: 1/12/2021 | Date Finished: 1/12/2021

WATER LEVEL OBSERVATIONS

While Drilling ▽ Dry ft Upon Completion of Drilling ▼ Dry ft

Remarks:

DEPTH (ft)	OPERATION TYPE	SAMPLE	CHLORIDE FIELD SCREENING (ppm) ExStik	VOC FIELD SCREENING (ppm) PID	SAMPLE RECOVERY (%)	MOISTURE CONTENT (%)	DRY DENSITY (pcf)	LIQUID LIMIT LL	PLASTICITY INDEX PI	MINUS NO. 200 (%)	GRAPHIC LOG	MATERIAL DESCRIPTION	DEPTH (ft)	REMARKS
												-ML- MUDSTONE: Reddish-brown, dense, dry.		
30			1060											BH-1 (29-30')
35			442										35	BH-1 (34-35')
												-SM- SILTY SAND: Dark-red, dense, dry.		
40			918										40	BH-1 (39-40')
												-CL- SILTY CLAY: Brick-red, dense, dry.		
45			449										45	BH-1 (44-45')
												-SM- SILTY SAND: Tan, dense, dry.		
50														

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 above.
Surface elevations are estimated from Google Earth data.

Logger: John Thurston | Drilling Equipment: Air Rotary | Driller: Scarborough Drilling

212C-MD-02334	TETRA TECH	**LOG OF BORING BH-1**	Page 3 of 3

Project Name: James E Upper Battery (2RP-3748)

Borehole Location: 32.408659, -103.840912 | Surface Elevation: 3313 ft

Borehole Number: BH-1 | Borehole Diameter (in.): 8 | Date Started: 1/12/2021 | Date Finished: 1/12/2021

WATER LEVEL OBSERVATIONS

While Drilling ▽ Dry ft Upon Completion of Drilling ▼ Dry ft

Remarks:

DEPTH (ft)	OPERATION TYPE	SAMPLE	CHLORIDE FIELD SCREENING (ppm) ExStik	VOC FIELD SCREENING (ppm) PID	SAMPLE RECOVERY (%)	MOISTURE CONTENT (%)	DRY DENSITY (pcf)	LIQUID LIMIT LL	PLASTICITY INDEX PI	MINUS NO. 200 (%)	GRAPHIC LOG	MATERIAL DESCRIPTION	DEPTH (ft)	REMARKS
55													55	

Bottom of borehole at 55.0 feet.

Sampler Types: Split Spoon, Acetate Liner, Shelby, Vane Shear, Bulk Sample, California, Grab Sample, Test Pit

Operation Types: Hand Auger, Mud Rotary, Air Rotary, Continuous Flight Auger, Direct Push, Wash Rotary, Core Barrel

Notes:
Analytical samples are shown in the remarks column above.
Surface elevations are estimated from Google Earth data.

Logger: John Thurston | Drilling Equipment: Air Rotary | Driller: Scarborough Drilling

APPENDIX E
Laboratory Analytical Report

Pace Analytical®
National Center for Testing & Innovation

ANALYTICAL REPORT

December 22, 2020

ConocoPhillips - Tetra Tech

Sample Delivery Group:	L1295413
Samples Received:	12/11/2020
Project Number:	212C-MD-02334 TASK29
Description:	James E Upper Battery Load Line Release(2 RP-3748)
Site:	EDDY COUNTY, NEW MEXICO
Report To:	Christian Llull 901 West Wall Suite 100 Midland, TX 79701

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.

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AH-1 (0-1) L1295413-01 Solid

Collected by: Adrian Garcia | Collected date/time: 12/09/20 10:00 | Received date/time: 12/11/20 08:00

Method	Batch	Dilution	Preparation date/time	Analysis date/time	Analyst	Location
Total Solids by Method 2540 G-2011	WG1593813	1	12/18/20 01:09	12/18/20 02:33	KBC	Mt. Juliet, TN
Wet Chemistry by Method 300.0	WG1593711	10	12/17/20 22:45	12/18/20 00:26	MCG	Mt. Juliet, TN
Volatile Organic Compounds (GC) by Method 8015D/GRO	WG1594007	1	12/12/20 16:22	12/18/20 09:21	TPR	Mt. Juliet, TN
Volatile Organic Compounds (GC/MS) by Method 8260B	WG1591261	1	12/12/20 16:22	12/14/20 02:31	DWR	Mt. Juliet, TN
Semi-Volatile Organic Compounds (GC) by Method 8015	WG1593305	20	12/18/20 09:22	12/18/20 21:27	JDG	Mt. Juliet, TN

AH-1 (1-2) L1295413-02 Solid

Collected by: Adrian Garcia | Collected date/time: 12/09/20 10:10 | Received date/time: 12/11/20 08:00

Method	Batch	Dilution	Preparation date/time	Analysis date/time	Analyst	Location
Total Solids by Method 2540 G-2011	WG1593813	1	12/18/20 01:09	12/18/20 02:33	KBC	Mt. Juliet, TN
Wet Chemistry by Method 300.0	WG1593711	10	12/17/20 22:45	12/18/20 00:35	MCG	Mt. Juliet, TN
Volatile Organic Compounds (GC) by Method 8015D/GRO	WG1594382	25	12/12/20 16:22	12/19/20 07:38	TPR	Mt. Juliet, TN
Volatile Organic Compounds (GC/MS) by Method 8260B	WG1591261	1	12/12/20 16:22	12/14/20 02:50	DWR	Mt. Juliet, TN
Semi-Volatile Organic Compounds (GC) by Method 8015	WG1593305	10	12/18/20 09:22	12/18/20 21:14	JDG	Mt. Juliet, TN

AH-1 (2-3) L1295413-03 Solid

Collected by: Adrian Garcia | Collected date/time: 12/09/20 10:20 | Received date/time: 12/11/20 08:00

Method	Batch	Dilution	Preparation date/time	Analysis date/time	Analyst	Location
Total Solids by Method 2540 G-2011	WG1593813	1	12/18/20 01:09	12/18/20 02:33	KBC	Mt. Juliet, TN
Wet Chemistry by Method 300.0	WG1593711	5	12/17/20 22:45	12/18/20 01:23	MCG	Mt. Juliet, TN
Volatile Organic Compounds (GC) by Method 8015D/GRO	WG1594382	1	12/12/20 16:22	12/19/20 06:36	TPR	Mt. Juliet, TN
Volatile Organic Compounds (GC/MS) by Method 8260B	WG1591261	1	12/12/20 16:22	12/14/20 03:10	DWR	Mt. Juliet, TN
Semi-Volatile Organic Compounds (GC) by Method 8015	WG1593305	1	12/18/20 09:22	12/18/20 18:43	JDG	Mt. Juliet, TN

AH-1 (3-4) L1295413-04 Solid

Collected by: Adrian Garcia | Collected date/time: 12/09/20 10:30 | Received date/time: 12/11/20 08:00

Method	Batch	Dilution	Preparation date/time	Analysis date/time	Analyst	Location
Total Solids by Method 2540 G-2011	WG1593814	1	12/18/20 16:16	12/18/20 16:30	KBC	Mt. Juliet, TN
Wet Chemistry by Method 300.0	WG1593711	10	12/17/20 22:45	12/18/20 01:32	MCG	Mt. Juliet, TN
Volatile Organic Compounds (GC) by Method 8015D/GRO	WG1594382	1	12/12/20 16:22	12/19/20 06:57	TPR	Mt. Juliet, TN
Volatile Organic Compounds (GC/MS) by Method 8260B	WG1591261	1	12/12/20 16:22	12/14/20 03:29	DWR	Mt. Juliet, TN
Semi-Volatile Organic Compounds (GC) by Method 8015	WG1593305	1	12/18/20 09:22	12/18/20 18:04	JDG	Mt. Juliet, TN

AH-1 (5-6) L1295413-05 Solid

Collected by: Adrian Garcia | Collected date/time: 12/09/20 10:40 | Received date/time: 12/11/20 08:00

Method	Batch	Dilution	Preparation date/time	Analysis date/time	Analyst	Location
Total Solids by Method 2540 G-2011	WG1593814	1	12/18/20 16:16	12/18/20 16:30	KBC	Mt. Juliet, TN
Wet Chemistry by Method 300.0	WG1593711	50	12/17/20 22:45	12/18/20 02:04	MCG	Mt. Juliet, TN
Volatile Organic Compounds (GC) by Method 8015D/GRO	WG1594007	1	12/12/20 16:22	12/18/20 11:47	TPR	Mt. Juliet, TN
Volatile Organic Compounds (GC/MS) by Method 8260B	WG1591261	1	12/12/20 16:22	12/14/20 03:48	DWR	Mt. Juliet, TN
Semi-Volatile Organic Compounds (GC) by Method 8015	WG1593305	1	12/18/20 09:22	12/18/20 19:08	JDG	Mt. Juliet, TN

AH-1 (6-7) L1295413-06 Solid

Collected by: Adrian Garcia | Collected date/time: 12/09/20 11:00 | Received date/time: 12/11/20 08:00

Method	Batch	Dilution	Preparation date/time	Analysis date/time	Analyst	Location
Total Solids by Method 2540 G-2011	WG1593814	1	12/18/20 16:16	12/18/20 16:30	KBC	Mt. Juliet, TN
Wet Chemistry by Method 300.0	WG1593711	50	12/17/20 22:45	12/18/20 02:14	MCG	Mt. Juliet, TN
Volatile Organic Compounds (GC) by Method 8015D/GRO	WG1594007	1	12/12/20 16:22	12/18/20 12:14	TPR	Mt. Juliet, TN
Volatile Organic Compounds (GC/MS) by Method 8260B	WG1591261	1	12/12/20 16:22	12/14/20 04:07	DWR	Mt. Juliet, TN
Semi-Volatile Organic Compounds (GC) by Method 8015	WG1593305	1	12/18/20 09:22	12/18/20 19:21	JDG	Mt. Juliet, TN

AH-2 (0-1) L1295413-07 Solid

Collected by: Adrian Garcia | Collected date/time: 12/09/20 11:30 | Received date/time: 12/11/20 08:00

Method	Batch	Dilution	Preparation date/time	Analysis date/time	Analyst	Location
Total Solids by Method 2540 G-2011	WG1593814	1	12/18/20 16:16	12/18/20 16:30	KBC	Mt. Juliet, TN
Wet Chemistry by Method 300.0	WG1593711	1	12/17/20 22:45	12/18/20 02:23	MCG	Mt. Juliet, TN
Volatile Organic Compounds (GC) by Method 8015D/GRO	WG1594007	1	12/12/20 16:22	12/18/20 12:37	TPR	Mt. Juliet, TN
Volatile Organic Compounds (GC/MS) by Method 8260B	WG1591261	1	12/12/20 16:22	12/14/20 04:26	DWR	Mt. Juliet, TN
Semi-Volatile Organic Compounds (GC) by Method 8015	WG1593305	1	12/18/20 09:22	12/18/20 19:33	JDG	Mt. Juliet, TN

AH-2 (1-2) L1295413-08 Solid

Collected by: Adrian Garcia | Collected date/time: 12/09/20 12:00 | Received date/time: 12/11/20 08:00

Method	Batch	Dilution	Preparation date/time	Analysis date/time	Analyst	Location
Total Solids by Method 2540 G-2011	WG1593814	1	12/18/20 16:16	12/18/20 16:30	KBC	Mt. Juliet, TN
Wet Chemistry by Method 300.0	WG1593711	1	12/17/20 22:45	12/18/20 02:33	MCG	Mt. Juliet, TN
Volatile Organic Compounds (GC) by Method 8015D/GRO	WG1594382	1	12/12/20 16:22	12/19/20 07:17	TPR	Mt. Juliet, TN
Volatile Organic Compounds (GC/MS) by Method 8260B	WG1591261	1	12/12/20 16:22	12/14/20 04:45	DWR	Mt. Juliet, TN
Semi-Volatile Organic Compounds (GC) by Method 8015	WG1593305	1	12/18/20 09:22	12/18/20 19:46	JDG	Mt. Juliet, TN

AH-5 (0-1) L1295413-09 Solid

Collected by: Adrian Garcia | Collected date/time: 12/09/20 12:10 | Received date/time: 12/11/20 08:00

Method	Batch	Dilution	Preparation date/time	Analysis date/time	Analyst	Location
Total Solids by Method 2540 G-2011	WG1593814	1	12/18/20 16:16	12/18/20 16:30	KBC	Mt. Juliet, TN
Wet Chemistry by Method 300.0	WG1593711	1	12/17/20 22:45	12/18/20 02:42	MCG	Mt. Juliet, TN
Volatile Organic Compounds (GC) by Method 8015D/GRO	WG1594541	1	12/12/20 16:22	12/19/20 07:44	DWR	Mt. Juliet, TN
Volatile Organic Compounds (GC/MS) by Method 8260B	WG1591261	1	12/12/20 16:22	12/14/20 05:04	DWR	Mt. Juliet, TN
Semi-Volatile Organic Compounds (GC) by Method 8015	WG1593305	1	12/18/20 09:22	12/18/20 19:59	JDG	Mt. Juliet, TN

AH-5 (1-2) L1295413-10 Solid

Collected by: Adrian Garcia | Collected date/time: 12/09/20 12:20 | Received date/time: 12/11/20 08:00

Method	Batch	Dilution	Preparation date/time	Analysis date/time	Analyst	Location
Total Solids by Method 2540 G-2011	WG1593814	1	12/18/20 16:16	12/18/20 16:30	KBC	Mt. Juliet, TN
Wet Chemistry by Method 300.0	WG1593711	1	12/17/20 22:45	12/18/20 02:52	MCG	Mt. Juliet, TN
Volatile Organic Compounds (GC) by Method 8015D/GRO	WG1594139	1	12/12/20 16:22	12/18/20 23:25	TPR	Mt. Juliet, TN
Volatile Organic Compounds (GC/MS) by Method 8260B	WG1591261	1	12/12/20 16:22	12/14/20 05:23	DWR	Mt. Juliet, TN
Semi-Volatile Organic Compounds (GC) by Method 8015	WG1593305	1	12/18/20 09:22	12/18/20 18:55	JDG	Mt. Juliet, TN

AH-3 (0-1) L1295413-11 Solid

Collected by: Adrian Garcia | Collected date/time: 12/09/20 12:30 | Received date/time: 12/11/20 08:00

Method	Batch	Dilution	Preparation date/time	Analysis date/time	Analyst	Location
Total Solids by Method 2540 G-2011	WG1593814	1	12/18/20 16:16	12/18/20 16:30	KBC	Mt. Juliet, TN
Wet Chemistry by Method 300.0	WG1593711	1	12/17/20 22:45	12/18/20 03:01	MCG	Mt. Juliet, TN
Volatile Organic Compounds (GC) by Method 8015D/GRO	WG1594139	1	12/12/20 16:22	12/18/20 23:46	TPR	Mt. Juliet, TN
Volatile Organic Compounds (GC/MS) by Method 8260B	WG1591261	1	12/12/20 16:22	12/14/20 05:42	DWR	Mt. Juliet, TN
Semi-Volatile Organic Compounds (GC) by Method 8015	WG1593305	1	12/18/20 09:22	12/18/20 20:24	JDG	Mt. Juliet, TN

AH-3 (1-2) L1295413-12 Solid

Collected by: Adrian Garcia | Collected date/time: 12/09/20 12:40 | Received date/time: 12/11/20 08:00

Method	Batch	Dilution	Preparation date/time	Analysis date/time	Analyst	Location
Total Solids by Method 2540 G-2011	WG1593814	1	12/18/20 16:16	12/18/20 16:30	KBC	Mt. Juliet, TN
Wet Chemistry by Method 300.0	WG1593711	1	12/17/20 22:45	12/18/20 03:11	MCG	Mt. Juliet, TN
Volatile Organic Compounds (GC) by Method 8015D/GRO	WG1594139	1	12/12/20 16:22	12/19/20 00:07	TPR	Mt. Juliet, TN
Volatile Organic Compounds (GC/MS) by Method 8260B	WG1591261	1	12/12/20 16:22	12/14/20 06:01	DWR	Mt. Juliet, TN
Semi-Volatile Organic Compounds (GC) by Method 8015	WG1593305	1	12/18/20 09:22	12/18/20 20:11	JDG	Mt. Juliet, TN

AH-4 (0-1) L1295413-13 Solid

Collected by: Adrian Garcia | Collected date/time: 12/09/20 13:00 | Received date/time: 12/11/20 08:00

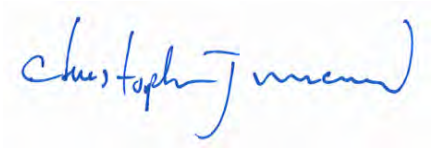
Method	Batch	Dilution	Preparation date/time	Analysis date/time	Analyst	Location
Total Solids by Method 2540 G-2011	WG1593814	1	12/18/20 16:16	12/18/20 16:30	KBC	Mt. Juliet, TN
Wet Chemistry by Method 300.0	WG1593711	1	12/17/20 22:45	12/18/20 03:20	MCG	Mt. Juliet, TN
Volatile Organic Compounds (GC) by Method 8015D/GRO	WG1594139	1	12/12/20 16:22	12/19/20 00:28	TPR	Mt. Juliet, TN
Volatile Organic Compounds (GC/MS) by Method 8260B	WG1591261	1	12/12/20 16:22	12/14/20 06:20	DWR	Mt. Juliet, TN
Semi-Volatile Organic Compounds (GC) by Method 8015	WG1593305	1	12/18/20 09:22	12/18/20 18:17	JDG	Mt. Juliet, TN

AH-4 (1-2) L1295413-14 Solid

Collected by: Adrian Garcia | Collected date/time: 12/09/20 13:30 | Received date/time: 12/11/20 08:00

Method	Batch	Dilution	Preparation date/time	Analysis date/time	Analyst	Location
Total Solids by Method 2540 G-2011	WG1593816	1	12/18/20 16:02	12/18/20 16:14	KBC	Mt. Juliet, TN
Wet Chemistry by Method 300.0	WG1593711	1	12/17/20 22:45	12/18/20 03:30	MCG	Mt. Juliet, TN
Volatile Organic Compounds (GC) by Method 8015D/GRO	WG1594139	1	12/12/20 16:22	12/19/20 00:48	TPR	Mt. Juliet, TN
Volatile Organic Compounds (GC/MS) by Method 8260B	WG1591261	1	12/12/20 16:22	12/14/20 06:39	DWR	Mt. Juliet, TN
Semi-Volatile Organic Compounds (GC) by Method 8015	WG1593305	1	12/18/20 09:22	12/18/20 18:30	JDG	Mt. Juliet, TN

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

Total Solids by Method 2540 G-2011

Analyte	Result	Qualifier	Dilution	Analysis	Batch
	%			date / time	
Total Solids	93.8		1	12/18/2020 02:33	WG1593813

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	1650		98.1	213	10	12/18/2020 00:26	WG1593711

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	8.79		0.0231	0.107	1	12/18/2020 09:21	WG1594007
(S) a,a,a-Trifluorotoluene(FID)	*84.8*			*77.0-120*		*12/18/2020 09:21*	WG1594007

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		0.000529	0.00113	1	12/14/2020 02:31	WG1591261
Toluene	U		0.00147	0.00566	1	12/14/2020 02:31	WG1591261
Ethylbenzene	U		0.000835	0.00283	1	12/14/2020 02:31	WG1591261
Total Xylenes	U		0.000996	0.00736	1	12/14/2020 02:31	WG1591261
(S) Toluene-d8	*113*			*75.0-131*		*12/14/2020 02:31*	WG1591261
(S) 4-Bromofluorobenzene	*149*	J1		*67.0-138*		*12/14/2020 02:31*	WG1591261
(S) 1,2-Dichloroethane-d4	*90.1*			*70.0-130*		*12/14/2020 02:31*	WG1591261

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	4220		34.3	85.3	20	12/18/2020 21:27	WG1593305
C28-C40 Oil Range	3060		5.84	85.3	20	12/18/2020 21:27	WG1593305
(S) o-Terphenyl	*215*	J7		*18.0-148*		*12/18/2020 21:27*	WG1593305

Total Solids by Method 2540 G-2011

Analyte	Result	Qualifier	Dilution	Analysis	Batch
	%			date / time	
Total Solids	94.2		1	12/18/2020 02:33	WG1593813

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	1190		97.7	212	10	12/18/2020 00:35	WG1593711

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	31.8		0.610	2.81	25	12/19/2020 07:38	WG1594382
(S) a,a,a-Trifluorotoluene(FID)	*95.1*			*77.0-120*		*12/19/2020 07:38*	WG1594382

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		0.000525	0.00112	1	12/14/2020 02:50	WG1591261
Toluene	U		0.00146	0.00562	1	12/14/2020 02:50	WG1591261
Ethylbenzene	U		0.000828	0.00281	1	12/14/2020 02:50	WG1591261
Total Xylenes	U		0.000989	0.00730	1	12/14/2020 02:50	WG1591261
(S) Toluene-d8	*113*			*75.0-131*		*12/14/2020 02:50*	WG1591261
(S) 4-Bromofluorobenzene	*129*			*67.0-138*		*12/14/2020 02:50*	WG1591261
(S) 1,2-Dichloroethane-d4	*87.3*			*70.0-130*		*12/14/2020 02:50*	WG1591261

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	2230		17.1	42.5	10	12/18/2020 21:14	WG1593305
C28-C40 Oil Range	1320		2.91	42.5	10	12/18/2020 21:14	WG1593305
(S) o-Terphenyl	*213*	J1		*18.0-148*		*12/18/2020 21:14*	WG1593305

Sample Narrative:

L1295413-02 WG1593305: Surrogate failure due to matrix interference

Total Solids by Method 2540 G-2011

Analyte	Result	Qualifier	Dilution	Analysis	Batch
	%			date / time	
Total Solids	93.2		1	12/18/2020 02:33	WG1593813

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	1900		49.4	107	5	12/18/2020 01:23	WG1593711

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	12/19/2020 06:36	WG1594382
(S) a,a,a-Trifluorotoluene(FID)	*91.4*			*77.0-120*		*12/19/2020 06:36*	WG1594382

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		0.000536	0.00115	1	12/14/2020 03:10	WG1591261
Toluene	U		0.00149	0.00574	1	12/14/2020 03:10	WG1591261
Ethylbenzene	U		0.000845	0.00287	1	12/14/2020 03:10	WG1591261
Total Xylenes	U		0.00101	0.00746	1	12/14/2020 03:10	WG1591261
(S) Toluene-d8	*117*			*75.0-131*		*12/14/2020 03:10*	WG1591261
(S) 4-Bromofluorobenzene	*105*			*67.0-138*		*12/14/2020 03:10*	WG1591261
(S) 1,2-Dichloroethane-d4	*85.9*			*70.0-130*		*12/14/2020 03:10*	WG1591261

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	3.08	J	1.73	4.29	1	12/18/2020 18:43	WG1593305
C28-C40 Oil Range	5.39	B	0.294	4.29	1	12/18/2020 18:43	WG1593305
(S) o-Terphenyl	*74.0*			*18.0-148*		*12/18/2020 18:43*	WG1593305

Total Solids by Method 2540 G-2011

Analyte	Result	Qualifier	Dilution	Analysis	Batch
	%			date / time	
Total Solids	91.2		1	12/18/2020 16:30	WG1593814

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	3100		101	219	10	12/18/2020 01:32	WG1593711

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		0.0238	0.110	1	12/19/2020 06:57	WG1594382
(S) a,a,a-Trifluorotoluene(FID)	*90.7*			*77.0-120*		*12/19/2020 06:57*	WG1594382

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		0.000557	0.00119	1	12/14/2020 03:29	WG1591261
Toluene	U		0.00155	0.00596	1	12/14/2020 03:29	WG1591261
Ethylbenzene	U		0.000879	0.00298	1	12/14/2020 03:29	WG1591261
Total Xylenes	U		0.00105	0.00775	1	12/14/2020 03:29	WG1591261
(S) Toluene-d8	*116*			*75.0-131*		*12/14/2020 03:29*	WG1591261
(S) 4-Bromofluorobenzene	*106*			*67.0-138*		*12/14/2020 03:29*	WG1591261
(S) 1,2-Dichloroethane-d4	*83.6*			*70.0-130*		*12/14/2020 03:29*	WG1591261

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		1.76	4.38	1	12/18/2020 18:04	WG1593305
C28-C40 Oil Range	1.04	B J	0.300	4.38	1	12/18/2020 18:04	WG1593305
(S) o-Terphenyl	*52.2*			*18.0-148*		*12/18/2020 18:04*	WG1593305

Total Solids by Method 2540 G-2011

Analyte	Result	Qualifier	Dilution	Analysis	Batch
	%			date / time	
Total Solids	89.0		1	12/18/2020 16:30	WG1593814

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	10100		517	1120	50	12/18/2020 02:04	WG1593711

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	0.171	B	0.0244	0.112	1	12/18/2020 11:47	WG1594007
(S) a,a,a-Trifluorotoluene(FID)	*94.0*			*77.0-120*		*12/18/2020 11:47*	WG1594007

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		0.000582	0.00125	1	12/14/2020 03:48	WG1591261
Toluene	U		0.00162	0.00623	1	12/14/2020 03:48	WG1591261
Ethylbenzene	U		0.000918	0.00312	1	12/14/2020 03:48	WG1591261
Total Xylenes	U		0.00110	0.00810	1	12/14/2020 03:48	WG1591261
(S) Toluene-d8	*117*			*75.0-131*		*12/14/2020 03:48*	WG1591261
(S) 4-Bromofluorobenzene	*101*			*67.0-138*		*12/14/2020 03:48*	WG1591261
(S) 1,2-Dichloroethane-d4	*83.2*			*70.0-130*		*12/14/2020 03:48*	WG1591261

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	28.3		1.81	4.49	1	12/18/2020 19:08	WG1593305
C28-C40 Oil Range	22.9	B	0.308	4.49	1	12/18/2020 19:08	WG1593305
(S) o-Terphenyl	*51.5*			*18.0-148*		*12/18/2020 19:08*	WG1593305

Total Solids by Method 2540 G-2011

Analyte	Result	Qualifier	Dilution	Analysis	Batch
	%			date / time	
Total Solids	89.7		1	12/18/2020 16:30	WG1593814

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	9720		513	1110	50	12/18/2020 02:14	WG1593711

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	0.177	B	0.0242	0.111	1	12/18/2020 12:14	WG1594007
(S) a,a,a-Trifluorotoluene(FID)	*92.4*			*77.0-120*		*12/18/2020 12:14*	WG1594007

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		0.000574	0.00123	1	12/14/2020 04:07	WG1591261
Toluene	U		0.00160	0.00615	1	12/14/2020 04:07	WG1591261
Ethylbenzene	U		0.000906	0.00307	1	12/14/2020 04:07	WG1591261
Total Xylenes	U		0.00108	0.00799	1	12/14/2020 04:07	WG1591261
(S) Toluene-d8	*116*			*75.0-131*		*12/14/2020 04:07*	WG1591261
(S) 4-Bromofluorobenzene	*102*			*67.0-138*		*12/14/2020 04:07*	WG1591261
(S) 1,2-Dichloroethane-d4	*80.4*			*70.0-130*		*12/14/2020 04:07*	WG1591261

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	44.7		1.79	4.46	1	12/18/2020 19:21	WG1593305
C28-C40 Oil Range	38.4		0.305	4.46	1	12/18/2020 19:21	WG1593305
(S) o-Terphenyl	*45.4*			*18.0-148*		*12/18/2020 19:21*	WG1593305

Total Solids by Method 2540 G-2011

Analyte	Result	Qualifier	Dilution	Analysis	Batch
	%			date / time	
Total Solids	99.1		1	12/18/2020 16:30	WG1593814

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	9.46	J	9.28	20.2	1	12/18/2020 02:23	WG1593711

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	0.139	B	0.0219	0.101	1	12/18/2020 12:37	WG1594007
(S) a,a,a-Trifluorotoluene(FID)	*92.4*			*77.0-120*		*12/18/2020 12:37*	WG1594007

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		0.000476	0.00102	1	12/14/2020 04:26	WG1591261
Toluene	U		0.00132	0.00509	1	12/14/2020 04:26	WG1591261
Ethylbenzene	U		0.000751	0.00255	1	12/14/2020 04:26	WG1591261
Total Xylenes	U		0.000896	0.00662	1	12/14/2020 04:26	WG1591261
(S) Toluene-d8	*116*			*75.0-131*		*12/14/2020 04:26*	WG1591261
(S) 4-Bromofluorobenzene	*104*			*67.0-138*		*12/14/2020 04:26*	WG1591261
(S) 1,2-Dichloroethane-d4	*85.1*			*70.0-130*		*12/14/2020 04:26*	WG1591261

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	14.0		1.62	4.04	1	12/18/2020 19:33	WG1593305
C28-C40 Oil Range	45.7		0.277	4.04	1	12/18/2020 19:33	WG1593305
(S) o-Terphenyl	*53.9*			*18.0-148*		*12/18/2020 19:33*	WG1593305

Total Solids by Method 2540 G-2011

Analyte	Result	Qualifier	Dilution	Analysis	Batch
	%			date / time	
Total Solids	97.0		1	12/18/2020 16:30	WG1593814

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	186		9.48	20.6	1	12/18/2020 02:33	WG1593711

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	12/19/2020 07:17	WG1594382
(S) a,a,a-Trifluorotoluene(FID)	*89.5*			*77.0-120*		*12/19/2020 07:17*	WG1594382

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		0.000496	0.00106	1	12/14/2020 04:45	WG1591261
Toluene	U		0.00138	0.00531	1	12/14/2020 04:45	WG1591261
Ethylbenzene	U		0.000783	0.00265	1	12/14/2020 04:45	WG1591261
Total Xylenes	U		0.000934	0.00690	1	12/14/2020 04:45	WG1591261
(S) Toluene-d8	*116*			*75.0-131*		*12/14/2020 04:45*	WG1591261
(S) 4-Bromofluorobenzene	*103*			*67.0-138*		*12/14/2020 04:45*	WG1591261
(S) 1,2-Dichloroethane-d4	*85.6*			*70.0-130*		*12/14/2020 04:45*	WG1591261

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	25.4		1.66	4.12	1	12/18/2020 19:46	WG1593305
C28-C40 Oil Range	45.9		0.282	4.12	1	12/18/2020 19:46	WG1593305
(S) o-Terphenyl	*61.6*			*18.0-148*		*12/18/2020 19:46*	WG1593305

Total Solids by Method 2540 G-2011

Analyte	Result	Qualifier	Dilution	Analysis	Batch
	%			date / time	
Total Solids	96.8		1	12/18/2020 16:30	WG1593814

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	236		9.51	20.7	1	12/18/2020 02:42	WG1593711

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	12/19/2020 07:44	WG1594541
(S) a,a,a-Trifluorotoluene(FID)	*108*			*77.0-120*		*12/19/2020 07:44*	WG1594541

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		0.000498	0.00107	1	12/14/2020 05:04	WG1591261
Toluene	U		0.00139	0.00534	1	12/14/2020 05:04	WG1591261
Ethylbenzene	U		0.000786	0.00267	1	12/14/2020 05:04	WG1591261
Total Xylenes	U		0.000939	0.00694	1	12/14/2020 05:04	WG1591261
(S) Toluene-d8	*116*			*75.0-131*		*12/14/2020 05:04*	WG1591261
(S) 4-Bromofluorobenzene	*101*			*67.0-138*		*12/14/2020 05:04*	WG1591261
(S) 1,2-Dichloroethane-d4	*83.9*			*70.0-130*		*12/14/2020 05:04*	WG1591261

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	34.4		1.66	4.13	1	12/18/2020 19:59	WG1593305
C28-C40 Oil Range	60.0		0.283	4.13	1	12/18/2020 19:59	WG1593305
(S) o-Terphenyl	*71.0*			*18.0-148*		*12/18/2020 19:59*	WG1593305

Total Solids by Method 2540 G-2011

Analyte	Result	Qualifier	Dilution	Analysis	Batch
	%			date / time	
Total Solids	99.0		1	12/18/2020 16:30	WG1593814

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	U		9.29	20.2	1	12/18/2020 02:52	WG1593711

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	0.125	B	0.0219	0.101	1	12/18/2020 23:25	WG1594139
(S) a,a,a-Trifluorotoluene(FID)	*105*			*77.0-120*		*12/18/2020 23:25*	WG1594139

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		0.000476	0.00102	1	12/14/2020 05:23	WG1591261
Toluene	U		0.00133	0.00510	1	12/14/2020 05:23	WG1591261
Ethylbenzene	U		0.000752	0.00255	1	12/14/2020 05:23	WG1591261
Total Xylenes	U		0.000898	0.00663	1	12/14/2020 05:23	WG1591261
(S) Toluene-d8	*118*			*75.0-131*		*12/14/2020 05:23*	WG1591261
(S) 4-Bromofluorobenzene	*104*			*67.0-138*		*12/14/2020 05:23*	WG1591261
(S) 1,2-Dichloroethane-d4	*85.5*			*70.0-130*		*12/14/2020 05:23*	WG1591261

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	6.03		1.63	4.04	1	12/18/2020 18:55	WG1593305
C28-C40 Oil Range	5.25	B	0.277	4.04	1	12/18/2020 18:55	WG1593305
(S) o-Terphenyl	*61.3*			*18.0-148*		*12/18/2020 18:55*	WG1593305

Total Solids by Method 2540 G-2011

Analyte	Result	Qualifier	Dilution	Analysis	Batch
	%			date / time	
Total Solids	98.9		1	12/18/2020 16:30	WG1593814

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	30.1		9.31	20.2	1	12/18/2020 03:01	WG1593711

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	0.253	B	0.0220	0.101	1	12/18/2020 23:46	WG1594139
(S) a,a,a-Trifluorotoluene(FID)	*108*			*77.0-120*		*12/18/2020 23:46*	WG1594139

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		0.000478	0.00102	1	12/14/2020 05:42	WG1591261
Toluene	U		0.00133	0.00512	1	12/14/2020 05:42	WG1591261
Ethylbenzene	U		0.000754	0.00256	1	12/14/2020 05:42	WG1591261
Total Xylenes	U		0.000900	0.00665	1	12/14/2020 05:42	WG1591261
(S) Toluene-d8	*118*			*75.0-131*		*12/14/2020 05:42*	WG1591261
(S) 4-Bromofluorobenzene	*102*			*67.0-138*		*12/14/2020 05:42*	WG1591261
(S) 1,2-Dichloroethane-d4	*84.7*			*70.0-130*		*12/14/2020 05:42*	WG1591261

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	34.0		1.63	4.05	1	12/18/2020 20:24	WG1593305
C28-C40 Oil Range	88.6		0.277	4.05	1	12/18/2020 20:24	WG1593305
(S) o-Terphenyl	*72.0*			*18.0-148*		*12/18/2020 20:24*	WG1593305

Total Solids by Method 2540 G-2011

Analyte	Result	Qualifier	Dilution	Analysis	Batch
	%			date / time	
Total Solids	97.6		1	12/18/2020 16:30	WG1593814

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	25.0		9.43	20.5	1	12/18/2020 03:11	WG1593711

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	0.0421	B J	0.0222	0.102	1	12/19/2020 00:07	WG1594139
(S) a,a,a-Trifluorotoluene(FID)	*108*			*77.0-120*		*12/19/2020 00:07*	WG1594139

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		0.000490	0.00105	1	12/14/2020 06:01	WG1591261
Toluene	U		0.00136	0.00525	1	12/14/2020 06:01	WG1591261
Ethylbenzene	U		0.000774	0.00262	1	12/14/2020 06:01	WG1591261
Total Xylenes	U		0.000924	0.00682	1	12/14/2020 06:01	WG1591261
(S) Toluene-d8	*117*			*75.0-131*		*12/14/2020 06:01*	WG1591261
(S) 4-Bromofluorobenzene	*102*			*67.0-138*		*12/14/2020 06:01*	WG1591261
(S) 1,2-Dichloroethane-d4	*85.1*			*70.0-130*		*12/14/2020 06:01*	WG1591261

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	17.4		1.65	4.10	1	12/18/2020 20:11	WG1593305
C28-C40 Oil Range	43.8		0.281	4.10	1	12/18/2020 20:11	WG1593305
(S) o-Terphenyl	*60.8*			*18.0-148*		*12/18/2020 20:11*	WG1593305

Total Solids by Method 2540 G-2011

Analyte	Result	Qualifier	Dilution	Analysis	Batch
	%			date / time	
Total Solids	97.4		1	12/18/2020 16:30	WG1593814

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	U		9.45	20.5	1	12/18/2020 03:20	WG1593711

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	0.0262	B J	0.0223	0.103	1	12/19/2020 00:28	WG1594139
(S) a,a,a-Trifluorotoluene(FID)	*109*			*77.0-120*		*12/19/2020 00:28*	WG1594139

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		0.000493	0.00105	1	12/14/2020 06:20	WG1591261
Toluene	U		0.00137	0.00527	1	12/14/2020 06:20	WG1591261
Ethylbenzene	U		0.000777	0.00264	1	12/14/2020 06:20	WG1591261
Total Xylenes	U		0.000928	0.00685	1	12/14/2020 06:20	WG1591261
(S) Toluene-d8	*115*			*75.0-131*		*12/14/2020 06:20*	WG1591261
(S) 4-Bromofluorobenzene	*102*			*67.0-138*		*12/14/2020 06:20*	WG1591261
(S) 1,2-Dichloroethane-d4	*84.7*			*70.0-130*		*12/14/2020 06:20*	WG1591261

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		1.65	4.11	1	12/18/2020 18:17	WG1593305
C28-C40 Oil Range	1.41	B J	0.281	4.11	1	12/18/2020 18:17	WG1593305
(S) o-Terphenyl	*67.0*			*18.0-148*		*12/18/2020 18:17*	WG1593305

Total Solids by Method 2540 G-2011

Analyte	Result	Qualifier	Dilution	Analysis	Batch
	%			date / time	
Total Solids	97.9		1	12/18/2020 16:14	WG1593816

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	U		9.40	20.4	1	12/18/2020 03:30	WG1593711

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		0.0222	0.102	1	12/19/2020 00:48	WG1594139
(S) a,a,a-Trifluorotoluene(FID)	*108*			*77.0-120*		*12/19/2020 00:48*	WG1594139

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		0.000488	0.00104	1	12/14/2020 06:39	WG1591261
Toluene	U		0.00136	0.00522	1	12/14/2020 06:39	WG1591261
Ethylbenzene	U		0.000769	0.00261	1	12/14/2020 06:39	WG1591261
Total Xylenes	U		0.000919	0.00679	1	12/14/2020 06:39	WG1591261
(S) Toluene-d8	*117*			*75.0-131*		*12/14/2020 06:39*	WG1591261
(S) 4-Bromofluorobenzene	*103*			*67.0-138*		*12/14/2020 06:39*	WG1591261
(S) 1,2-Dichloroethane-d4	*84.3*			*70.0-130*		*12/14/2020 06:39*	WG1591261

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		1.65	4.09	1	12/18/2020 18:30	WG1593305
C28-C40 Oil Range	1.53	B J	0.280	4.09	1	12/18/2020 18:30	WG1593305
(S) o-Terphenyl	*74.4*			*18.0-148*		*12/18/2020 18:30*	WG1593305

Method Blank (MB)

(MB) R3605131-1 12/18/20 02:33

Analyte	MB Result %	MB Qualifier	MB MDL %	MB RDL %
Total Solids	0.000			

L1295413-02 Original Sample (OS) • Duplicate (DUP)

(OS) L1295413-02 12/18/20 02:33 • (DUP) R3605131-3 12/18/20 02:33

Analyte	Original Result %	DUP Result %	Dilution	DUP RPD %	DUP Qualifier	DUP RPD Limits %
Total Solids	94.2	95.3	1	1.17		10

Laboratory Control Sample (LCS)

(LCS) R3605131-2 12/18/20 02:33

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

Method Blank (MB)

(MB) R3605753-1 12/18/20 16:30

Analyte	MB Result %	MB Qualifier	MB MDL %	MB RDL %
Total Solids	0.000			

L1295413-13 Original Sample (OS) • Duplicate (DUP)

(OS) L1295413-13 12/18/20 16:30 • (DUP) R3605753-3 12/18/20 16:30

Analyte	Original Result %	DUP Result %	Dilution	DUP RPD %	DUP Qualifier	DUP RPD Limits %
Total Solids	97.4	97.1	1	0.251		10

Laboratory Control Sample (LCS)

(LCS) R3605753-2 12/18/20 16:30

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

Method Blank (MB)

(MB) R3605750-1 12/18/20 16:14

Analyte	MB Result %	MB Qualifier	MB MDL %	MB RDL %
Total Solids	0.00100			

L1295609-01 Original Sample (OS) • Duplicate (DUP)

(OS) L1295609-01 12/18/20 16:14 • (DUP) R3605750-3 12/18/20 16:14

Analyte	Original Result %	DUP Result %	Dilution	DUP RPD %	DUP Qualifier	DUP RPD Limits %
Total Solids	73.8	74.0	1	0.286		10

Laboratory Control Sample (LCS)

(LCS) R3605750-2 12/18/20 16:14

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

Method Blank (MB)

(MB) R3605096-1 12/18/20 00:07

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

L1295413-02 Original Sample (OS) • Duplicate (DUP)

(OS) L1295413-02 12/18/20 00:35 • (DUP) R3605096-3 12/18/20 00:45

Analyte	Original Result (dry) mg/kg	DUP Result (dry) mg/kg	Dilution	DUP RPD %	DUP Qualifier	DUP RPD Limits %
Chloride	1190	1330	10	10.8		20

L1295413-14 Original Sample (OS) • Duplicate (DUP)

(OS) L1295413-14 12/18/20 03:30 • (DUP) R3605096-6 12/18/20 03:58

Analyte	Original Result (dry) mg/kg	DUP Result (dry) mg/kg	Dilution	DUP RPD %	DUP Qualifier	DUP RPD Limits %
Chloride	U	U	1	0.000		20

Laboratory Control Sample (LCS)

(LCS) R3605096-2 12/18/20 00:16

Analyte	Spike Amount mg/kg	LCS Result mg/kg	LCS Rec. %	Rec. Limits %	LCS Qualifier
Chloride	200	195	97.5	90.0-110	

L1295413-03 Original Sample (OS) • Matrix Spike (MS) • Matrix Spike Duplicate (MSD)

(OS) L1295413-03 12/18/20 00:54 • (MS) R3605096-4 12/18/20 01:04 • (MSD) R3605096-5 12/18/20 01:13

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 %
Chloride	537	1940	2590	2590	121	122	1	80.0-120	E J5	E J5	0.157	20

Method Blank (MB)

(MB) R3605178-2 12/18/20 03:22

Analyte	MB Result mg/kg	MB Qualifier	MB MDL mg/kg	MB RDL mg/kg
TPH (GC/FID) Low Fraction	0.0810	J	0.0217	0.100
(S) a,a,a-Trifluorotoluene(FID)	*98.4*			*77.0-120*

Laboratory Control Sample (LCS)

(LCS) R3605178-1 12/18/20 01:49

Analyte	Spike Amount mg/kg	LCS Result mg/kg	LCS Rec. %	Rec. Limits %	LCS Qualifier
TPH (GC/FID) Low Fraction	5.50	4.95	90.0	72.0-127	
(S) a,a,a-Trifluorotoluene(FID)			*101*	*77.0-120*	

L1294746-01 Original Sample (OS) • Matrix Spike (MS) • Matrix Spike Duplicate (MSD)

(OS) L1294746-01 12/18/20 07:35 • (MS) R3605178-3 12/18/20 13:47 • (MSD) R3605178-4 12/18/20 14:14

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	142	1.85	161	158	112	110	25	10.0-151			2.15	28
(S) a,a,a-Trifluorotoluene(FID)					*107*	*107*		*77.0-120*				

Method Blank (MB)

(MB) R3605437-3 12/18/20 21:11

Analyte	MB Result mg/kg	MB Qualifier	MB MDL mg/kg	MB RDL mg/kg
TPH (GC/FID) Low Fraction	0.0328	J	0.0217	0.100
(S) a,a,a-Trifluorotoluene(FID)	*112*			*77.0-120*

Laboratory Control Sample (LCS)

(LCS) R3605437-2 12/18/20 20:30

Analyte	Spike Amount mg/kg	LCS Result mg/kg	LCS Rec. %	Rec. Limits %	LCS Qualifier
TPH (GC/FID) Low Fraction	5.50	5.23	95.1	72.0-127	
(S) a,a,a-Trifluorotoluene(FID)			*104*	*77.0-120*	

L1295270-04 Original Sample (OS) • Matrix Spike (MS) • Matrix Spike Duplicate (MSD)

(OS) L1295270-04 12/18/20 22:02 • (MS) R3605437-4 12/19/20 04:58 • (MSD) R3605437-5 12/19/20 05:18

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	173	U	173	179	100	104	25	10.0-151			3.70	28
(S) a,a,a-Trifluorotoluene(FID)					*106*	*107*		*77.0-120*				

Method Blank (MB)

(MB) R3605430-2 12/18/20 22:14

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)	*93.0*			*77.0-120*

Laboratory Control Sample (LCS)

(LCS) R3605430-1 12/18/20 21:33

Analyte	Spike Amount mg/kg	LCS Result mg/kg	LCS Rec. %	Rec. Limits %	LCS Qualifier
TPH (GC/FID) Low Fraction	5.50	5.43	98.7	72.0-127	
(S) a,a,a-Trifluorotoluene(FID)			*108*	*77.0-120*	

Method Blank (MB)

(MB) R3606216-2 12/19/20 07:02

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)	*115*			*77.0-120*

Laboratory Control Sample (LCS)

(LCS) R3606216-1 12/19/20 06:21

Analyte	Spike Amount mg/kg	LCS Result mg/kg	LCS Rec. %	Rec. Limits %	LCS Qualifier
TPH (GC/FID) Low Fraction	5.50	6.34	115	72.0-127	
(S) a,a,a-Trifluorotoluene(FID)			*104*	*77.0-120*	

L1295736-05 Original Sample (OS) • Matrix Spike (MS) • Matrix Spike Duplicate (MSD)

(OS) L1295736-05 12/19/20 14:01 • (MS) R3606216-3 12/19/20 14:43 • (MSD) R3606216-4 12/19/20 15:04

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 %
TPH (GC/FID) Low Fraction	550	584	1170	841	107	46.7	100	10.0-151	E	J3	32.7	28
(S) a,a,a-Trifluorotoluene(FID)					*104*	*102*		*77.0-120*				

Method Blank (MB)

(MB) R3603478-2 12/14/20 00:54

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	*119*			*75.0-131*
(S) 4-Bromofluorobenzene	*96.9*			*67.0-138*
(S) 1,2-Dichloroethane-d4	*83.7*			*70.0-130*

Laboratory Control Sample (LCS)

(LCS) R3603478-1 12/13/20 23:56

Analyte	Spike Amount mg/kg	LCS Result mg/kg	LCS Rec. %	Rec. Limits %	LCS Qualifier
Benzene	0.125	0.124	99.2	70.0-123	
Ethylbenzene	0.125	0.137	110	74.0-126	
Toluene	0.125	0.120	96.0	75.0-121	
Xylenes, Total	0.375	0.414	110	72.0-127	
(S) Toluene-d8			*108*	*75.0-131*	
(S) 4-Bromofluorobenzene			*109*	*67.0-138*	
(S) 1,2-Dichloroethane-d4			*95.3*	*70.0-130*	

Method Blank (MB)

(MB) R3605404-1 12/18/20 17:01

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	2.25	J	0.274	4.00
(S) o-Terphenyl	*82.0*			*18.0-148*

Laboratory Control Sample (LCS)

(LCS) R3605404-2 12/18/20 17:14

Analyte	Spike Amount mg/kg	LCS Result mg/kg	LCS Rec. %	Rec. Limits %	LCS Qualifier
C10-C28 Diesel Range	50.0	44.3	88.6	50.0-150	
(S) o-Terphenyl			*83.6*	*18.0-148*	

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
B	The same analyte is found in the associated blank.
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.
J5	The sample matrix interfered with the ability to make any accurate determination; spike value is high.
J7	Surrogate recovery cannot be used for control limit evaluation due to dilution.

Pace National is the only environmental laboratory accredited/certified to support your work nationwide from one location. One phone call, one point of contact, one laboratory. No other lab is as accessible or prepared to handle your needs throughout the country. Our capacity and capability from our single location laboratory is comparable to the collective totals of the network laboratories in our industry. The most significant benefit to our one location design is the design of our laboratory campus. The model is conducive to accelerated productivity, decreasing turn-around time, and preventing cross contamination, thus protecting sample integrity. Our focus on premium quality and prompt service allows us to be YOUR LAB OF CHOICE.
* 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 National.

State Accreditations

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	LAO00356
Kentucky [1 6]	KY90010	South Carolina	84004
Kentucky [2]	16	South Dakota	n/a
Louisiana	AI30792	Tennessee [1 4]	2006
Louisiana [1]	LA180010	Texas	T104704245-20-18
Maine	TN00003	Texas [5]	LAB0152
Maryland	324	Utah	TN00003
Massachusetts	M-TN003	Vermont	VT2006
Michigan	9958	Virginia	460132
Minnesota	047-999-395	Washington	C847
Mississippi	TN00003	West Virginia	233
Missouri	340	Wisconsin	998093910
Montana	CERT0086	Wyoming	A2LA

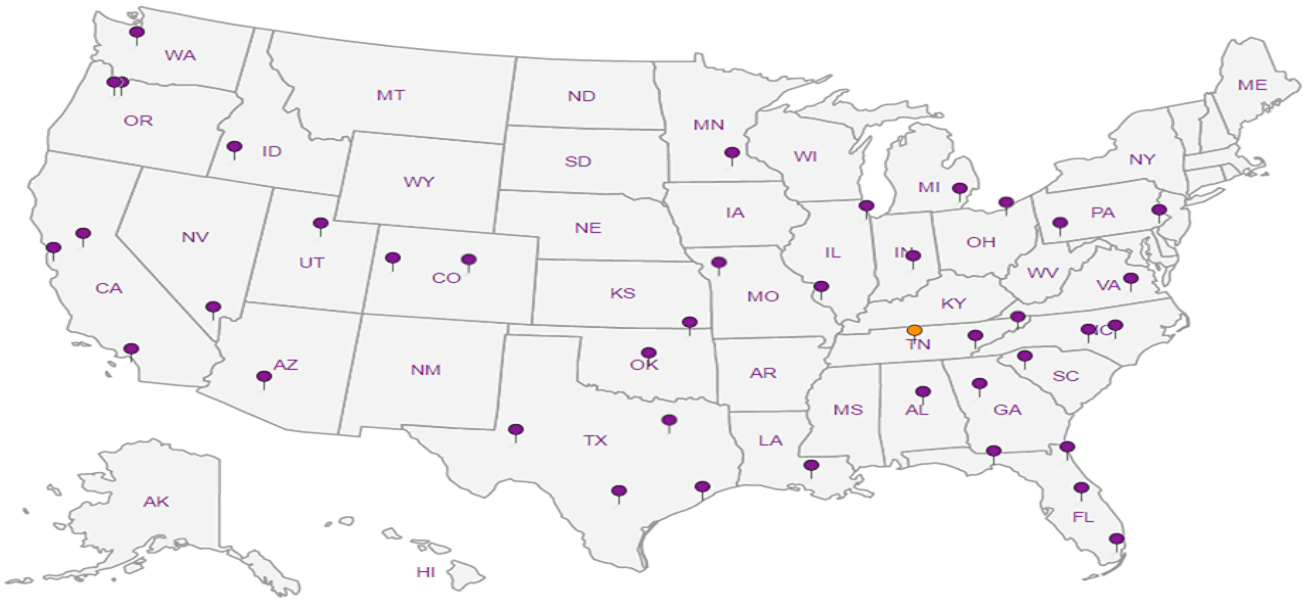
Third Party Federal Accreditations

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

Our Locations

Pace National has sixty-four client support centers that provide sample pickup and/or the delivery of sampling supplies. If you would like assistance from one of our support offices, please contact our main office. Pace National performs all testing at our central laboratory.



Analysis Request of Chain of Custody Record

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Midland, Texas 79701
Tel (432) 682-4559
Fax (432) 682-3946

I110

L1795413

Client Name:	Conoco Phillips	**Site Manager:**	Christian Llull
Project Name:	James E Upper Battery Load Line Release (2RP-3748)	**Contact Info:**	Email: christian.llull@tetratech.com Phone: (512) 338-1667
Project Location: (county, state)	Eddy County, New Mexico	**Project #:**	212C-MD-02334, Task No. 29
Invoice to:	Accounts Payable 901 West Wall Street, Suite 100 Midland, Texas 79701		
Receiving Laboratory:	Pace Analytical	**Sampler Signature:**	Adrian Garcia
Comments:	COPTETRA Acctnum		

ANALYSIS REQUEST (Circle or Specify Method No.)

LAB # (LAB USE ONLY)	SAMPLE IDENTIFICATION	SAMPLING DATE	SAMPLING TIME	MATRIX: WATER	MATRIX: SOIL	MATRIX:	PRESERVATIVE METHOD: HCL	PRESERVATIVE METHOD: HNO_3	PRESERVATIVE METHOD: ICE	PRESERVATIVE METHOD: NONE	PRESERVATIVE METHOD:	# CONTAINERS	FILTERED (Y/N)	BTEX 8021B BTEX 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 300.0	Chloride Sulfate TDS	General Water Chemistry (see attached list)	Anion/Cation Balance	TPH 8015R		HOLD
-01	AH-1 (0'-1')	12/09/20	1000		X				X			1	N	X		X												X						
-02	AH-1 (1'-2')	12/09/20	1010		X				X			1	N	X		X												X						
-03	AH-1 (2'-3')	12/09/20	1020		X				X			1	N	X		X												X						
-04	AH-1 (3'-4')	12/09/20	1030		X				X			1	N	X		X												X						
-05	AH-1 (5'-6')	12/09/20	1040		X				X			1	N	X		X												X						
-06	AH-1 (6'-7')	12/09/20	1100		X				X			1	N	X		X												X						
-07	AH-2 (0'-1')	12/09/20	1130		X				X			1	N	X		X												X						
-08	AH-2 (1'-2')	12/09/20	1200		X				X			1	N	X		X												X						
-09	AH-5 (0'-1')	12/09/20	1210		X				X			1	N	X		X												X						
-10	AH-5 (1'-2')	12/09/20	1220		X				X			1	N	X		X												X						

Relinquished by:	Date:	Time:	Received by:	Date:	Time:
Adrian Garcia	12.10.20	15:45		12.10.20	15:45
Relinquished by:	Date:	Time:	Received by:	Date:	Time:
	12.10.20	16:30	SCOA	12.10.20	16:30
Relinquished by:	Date:	Time:	Received by:	Date:	Time:
			Kailey Miller	12-11-20	800

ORIGINAL COPY

LAB USE ONLY

Sample Temperature

REMARKS:

- [X] 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 #: _____

Sample Receipt Checklist

COC Seal Present/Intact: Y N
COC Signed/Accurate: Y N
Bottles arrive intact: Y N
Correct bottles used: Y N
Sufficient volume sent: Y N
VOA Zero Headspace: Y N
Pres.Correct/Check: Y N

MPA3 1.4-5=9

RAD SCREEN: <0.5 mR/hr

Analysis Request of Chain of Custody Record

Page : 2 of 2

Tetra Tech, Inc.

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

L1295413

Client Name:	Conoco Phillips	**Site Manager:**	Christian Llull
Project Name:	James E Upper Battery Load Line Release (2RP-3748)	**Contact Info:**	Email: christian.llull@tetratech.com Phone: (512) 338-1667
Project Location: (county, state)	Eddy County, New Mexico	**Project #:**	212C-MD-02334, Task No. 29
Invoice to:	Accounts Payable 901 West Wall Street, Suite 100 Midland, Texas 79701		
Receiving Laboratory:	Pace Analytical	**Sampler Signature:**	Adrian Garcia

Comments: COPTETRA Acctnum

ANALYSIS REQUEST
(Circle or Specify Method No.)

LAB # (LAB USE ONLY)	SAMPLE IDENTIFICATION	SAMPLING YEAR: 2020 DATE	SAMPLING TIME	MATRIX: WATER	MATRIX: SOIL	MATRIX:	PRESERVATIVE METHOD: HCL	PRESERVATIVE METHOD: HNO_3	PRESERVATIVE METHOD: ICE	PRESERVATIVE METHOD: NONE	PRESERVATIVE METHOD:	# CONTAINERS	FILTERED (Y/N)	BTEX 8021B BTEX 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 300.0	Chloride Sulfate TDS	General Water Chemistry (see attached list)	Anion/Cation Balance	TPH 8015R		HOLD
-11	AH-3 (0'-1')	12/09/20	1230		X				X			1	N	X		X												X						
-12	AH-3 (1'-2')	12/09/20	1240		X				X			1	N	X		X												X						
-13	AH-4 (0'-1')	12/09/20	1300		X				X			1	N	X		X												X						
-14	AH-4 (1'-2')	12/09/20	1330		X				X			1	N	X		X												X						

Relinquished by:	Date: 12.10.20	Time: 15:45	Received by:	Date: 12.10.20	Time: 15:45
Relinquished by:	Date: 12.10.20	Time: 16:30	Received by:	Date: 12.10.20	Time: 16:30
Relinquished by:	Date:	Time:	Received by:	Date: 12/11/20	Time: 800

ORIGINAL COPY

LAB USE ONLY

Sample Temperature

REMARKS:

- [X] 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 #: _____

MP 13 14:5=9

RAD SCREEN: <0.5 mR/hr

Pace Analytical®
National Center for Testing & Innovation

ANALYTICAL REPORT

January 27, 2021

Revised Report

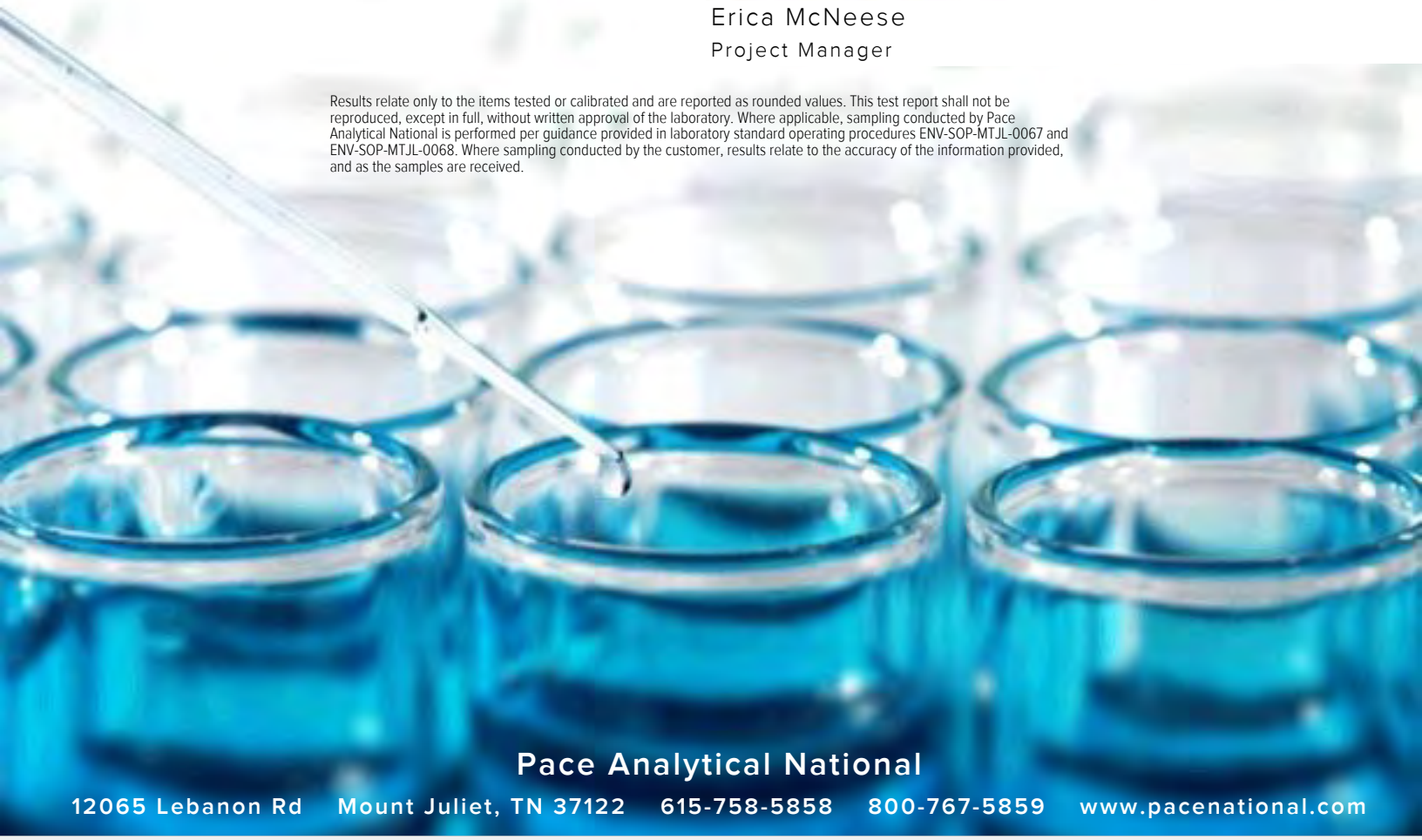
ConocoPhillips - Tetra Tech

Sample Delivery Group:	L1306499
Samples Received:	01/14/2021
Project Number:	212C-MD-02334 TASK29
Description:	James E Upper Battery Load Line Release (2RP-3748)
Site:	LEA COUNTRY, NEW MEXICO
Report To:	Christian Llull 901 West Wall Suite 100 Midland, TX 79701

Entire Report Reviewed By: Erica McNeese

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

TABLE OF CONTENTS

BH-1 (0'-1') L1306499-01 Solid

Collected by: John Thurston | Collected date/time: 01/12/21 09:00 | Received date/time: 01/14/21 09:00

Method	Batch	Dilution	Preparation date/time	Analysis date/time	Analyst	Location
Total Solids by Method 2540 G-2011	WG1607238	1	01/18/21 14:24	01/18/21 14:32	KDW	Mt. Juliet, TN
Wet Chemistry by Method 300.0	WG1605875	5	01/14/21 17:21	01/15/21 05:10	MCG	Mt. Juliet, TN
Volatile Organic Compounds (GC) by Method 8015D/GRO	WG1606868	1	01/16/21 16:16	01/17/21 00:37	TPR	Mt. Juliet, TN
Volatile Organic Compounds (GC/MS) by Method 8260B	WG1606832	1	01/16/21 16:16	01/16/21 20:41	BMB	Mt. Juliet, TN
Semi-Volatile Organic Compounds (GC) by Method 8015	WG1607053	1	01/19/21 22:39	01/20/21 12:16	CAG	Mt. Juliet, TN

BH-1 (2'-3') L1306499-02 Solid

Collected by: John Thurston | Collected date/time: 01/12/21 09:10 | Received date/time: 01/14/21 09:00

Method	Batch	Dilution	Preparation date/time	Analysis date/time	Analyst	Location
Total Solids by Method 2540 G-2011	WG1607238	1	01/18/21 14:24	01/18/21 14:32	KDW	Mt. Juliet, TN
Wet Chemistry by Method 300.0	WG1605875	1	01/14/21 17:21	01/15/21 05:20	MCG	Mt. Juliet, TN
Volatile Organic Compounds (GC) by Method 8015D/GRO	WG1606868	1	01/16/21 16:16	01/17/21 00:58	TPR	Mt. Juliet, TN
Volatile Organic Compounds (GC/MS) by Method 8260B	WG1606832	1	01/16/21 16:16	01/16/21 21:00	BMB	Mt. Juliet, TN
Semi-Volatile Organic Compounds (GC) by Method 8015	WG1607053	1	01/19/21 22:39	01/20/21 10:57	CAG	Mt. Juliet, TN

BH-1 (4'-5') L1306499-03 Solid

Collected by: John Thurston | Collected date/time: 01/12/21 09:20 | Received date/time: 01/14/21 09:00

Method	Batch	Dilution	Preparation date/time	Analysis date/time	Analyst	Location
Total Solids by Method 2540 G-2011	WG1607238	1	01/18/21 14:24	01/18/21 14:32	KDW	Mt. Juliet, TN
Wet Chemistry by Method 300.0	WG1605875	1	01/14/21 17:21	01/15/21 05:30	MCG	Mt. Juliet, TN
Volatile Organic Compounds (GC) by Method 8015D/GRO	WG1606868	1	01/16/21 16:16	01/17/21 01:19	TPR	Mt. Juliet, TN
Volatile Organic Compounds (GC/MS) by Method 8260B	WG1606832	1	01/16/21 16:16	01/16/21 21:19	BMB	Mt. Juliet, TN
Semi-Volatile Organic Compounds (GC) by Method 8015	WG1607053	1	01/19/21 22:39	01/20/21 12:42	CAG	Mt. Juliet, TN

BH-1 (6'-7') L1306499-04 Solid

Collected by: John Thurston | Collected date/time: 01/12/21 09:30 | Received date/time: 01/14/21 09:00

Method	Batch	Dilution	Preparation date/time	Analysis date/time	Analyst	Location
Total Solids by Method 2540 G-2011	WG1607239	1	01/19/21 08:46	01/19/21 09:04	CMK	Mt. Juliet, TN
Wet Chemistry by Method 300.0	WG1605875	10	01/14/21 17:21	01/15/21 05:58	MCG	Mt. Juliet, TN
Volatile Organic Compounds (GC) by Method 8015D/GRO	WG1608800	1	01/16/21 16:16	01/20/21 22:14	ACG	Mt. Juliet, TN
Volatile Organic Compounds (GC/MS) by Method 8260B	WG1606832	1	01/16/21 16:16	01/16/21 21:38	BMB	Mt. Juliet, TN
Semi-Volatile Organic Compounds (GC) by Method 8015	WG1607053	1	01/19/21 22:39	01/20/21 12:29	CAG	Mt. Juliet, TN

BH-1 (9'-10') L1306499-05 Solid

Collected by: John Thurston | Collected date/time: 01/12/21 09:40 | Received date/time: 01/14/21 09:00

Method	Batch	Dilution	Preparation date/time	Analysis date/time	Analyst	Location
Total Solids by Method 2540 G-2011	WG1607239	1	01/19/21 08:46	01/19/21 09:04	CMK	Mt. Juliet, TN
Wet Chemistry by Method 300.0	WG1605875	10	01/14/21 17:21	01/15/21 06:08	MCG	Mt. Juliet, TN
Volatile Organic Compounds (GC) by Method 8015D/GRO	WG1606868	1	01/16/21 16:16	01/17/21 02:00	TPR	Mt. Juliet, TN
Volatile Organic Compounds (GC/MS) by Method 8260B	WG1606832	1	01/16/21 16:16	01/16/21 21:57	BMB	Mt. Juliet, TN
Semi-Volatile Organic Compounds (GC) by Method 8015	WG1607958	1	01/19/21 22:35	01/20/21 14:37	JN	Mt. Juliet, TN

BH-1 (14'-15') L1306499-06 Solid

Collected by: John Thurston | Collected date/time: 01/12/21 09:50 | Received date/time: 01/14/21 09:00

Method	Batch	Dilution	Preparation date/time	Analysis date/time	Analyst	Location
Total Solids by Method 2540 G-2011	WG1607239	1	01/19/21 08:46	01/19/21 09:04	CMK	Mt. Juliet, TN
Wet Chemistry by Method 300.0	WG1605875	10	01/14/21 17:21	01/15/21 06:17	MCG	Mt. Juliet, TN
Volatile Organic Compounds (GC) by Method 8015D/GRO	WG1606868	1	01/16/21 16:16	01/17/21 02:21	TPR	Mt. Juliet, TN
Volatile Organic Compounds (GC/MS) by Method 8260B	WG1606832	1	01/16/21 16:16	01/16/21 22:16	BMB	Mt. Juliet, TN
Semi-Volatile Organic Compounds (GC) by Method 8015	WG1607053	1	01/19/21 22:39	01/20/21 11:23	CAG	Mt. Juliet, TN

BH-1 (19'-20') L1306499-07 Solid

Collected by: John Thurston | Collected date/time: 01/12/21 10:00 | Received date/time: 01/14/21 09:00

Method	Batch	Dilution	Preparation date/time	Analysis date/time	Analyst	Location
Total Solids by Method 2540 G-2011	WG1607239	1	01/19/21 08:46	01/19/21 09:04	CMK	Mt. Juliet, TN
Wet Chemistry by Method 300.0	WG1605875	5	01/14/21 17:21	01/15/21 06:27	MCG	Mt. Juliet, TN
Volatile Organic Compounds (GC) by Method 8015D/GRO	WG1606868	1	01/16/21 16:16	01/17/21 02:42	TPR	Mt. Juliet, TN
Volatile Organic Compounds (GC/MS) by Method 8260B	WG1606832	1	01/16/21 16:16	01/16/21 22:34	BMB	Mt. Juliet, TN
Semi-Volatile Organic Compounds (GC) by Method 8015	WG1607053	1	01/19/21 22:39	01/20/21 11:36	CAG	Mt. Juliet, TN

BH-1 (24'-25') L1306499-08 Solid

Collected by: John Thurston | Collected date/time: 01/12/21 10:20 | Received date/time: 01/14/21 09:00

Method	Batch	Dilution	Preparation date/time	Analysis date/time	Analyst	Location
Total Solids by Method 2540 G-2011	WG1607239	1	01/19/21 08:46	01/19/21 09:04	CMK	Mt. Juliet, TN
Wet Chemistry by Method 300.0	WG1605875	5	01/14/21 17:21	01/15/21 06:36	MCG	Mt. Juliet, TN
Volatile Organic Compounds (GC) by Method 8015D/GRO	WG1606868	1	01/16/21 16:16	01/17/21 03:03	TPR	Mt. Juliet, TN
Volatile Organic Compounds (GC/MS) by Method 8260B	WG1606832	1	01/16/21 16:16	01/16/21 22:53	BMB	Mt. Juliet, TN
Semi-Volatile Organic Compounds (GC) by Method 8015	WG1607053	1	01/19/21 22:39	01/20/21 11:50	CAG	Mt. Juliet, TN

BH-1 (29'-30') L1306499-09 Solid

Collected by: John Thurston | Collected date/time: 01/12/21 10:30 | Received date/time: 01/14/21 09:00

Method	Batch	Dilution	Preparation date/time	Analysis date/time	Analyst	Location
Total Solids by Method 2540 G-2011	WG1607239	1	01/19/21 08:46	01/19/21 09:04	CMK	Mt. Juliet, TN
Wet Chemistry by Method 300.0	WG1605874	5	01/14/21 17:27	01/16/21 09:21	ELN	Mt. Juliet, TN
Volatile Organic Compounds (GC) by Method 8015D/GRO	WG1606868	1	01/16/21 16:16	01/17/21 03:23	TPR	Mt. Juliet, TN
Volatile Organic Compounds (GC/MS) by Method 8260B	WG1606832	1	01/16/21 16:16	01/16/21 23:12	BMB	Mt. Juliet, TN
Semi-Volatile Organic Compounds (GC) by Method 8015	WG1607053	1	01/19/21 22:39	01/20/21 12:03	CAG	Mt. Juliet, TN

BH-1 (34'-35') L1306499-10 Solid

Collected by: John Thurston | Collected date/time: 01/12/21 10:50 | Received date/time: 01/14/21 09:00

Method	Batch	Dilution	Preparation date/time	Analysis date/time	Analyst	Location
Total Solids by Method 2540 G-2011	WG1607239	1	01/19/21 08:46	01/19/21 09:04	CMK	Mt. Juliet, TN
Wet Chemistry by Method 300.0	WG1605874	1	01/15/21 23:06	01/16/21 09:39	ELN	Mt. Juliet, TN
Volatile Organic Compounds (GC) by Method 8015D/GRO	WG1606868	1	01/16/21 16:16	01/17/21 03:44	TPR	Mt. Juliet, TN
Volatile Organic Compounds (GC/MS) by Method 8260B	WG1606832	1	01/16/21 16:16	01/16/21 23:31	BMB	Mt. Juliet, TN
Semi-Volatile Organic Compounds (GC) by Method 8015	WG1607198	1	01/19/21 00:20	01/19/21 11:47	CAG	Mt. Juliet, TN

Cp Tc Ss Cn Sr Qc Gl Al Sc

BH-1 (39'-40') L1306499-11 Solid

Collected by: John Thurston
Collected date/time: 01/12/21 11:00
Received date/time: 01/14/21 09:00

Method	Batch	Dilution	Preparation date/time	Analysis date/time	Analyst	Location
Total Solids by Method 2540 G-2011	WG1607239	1	01/19/21 08:46	01/19/21 09:04	CMK	Mt. Juliet, TN
Wet Chemistry by Method 300.0	WG1605874	5	01/15/21 23:06	01/16/21 09:56	ELN	Mt. Juliet, TN
Volatile Organic Compounds (GC) by Method 8015D/GRO	WG1606868	1	01/16/21 16:16	01/17/21 04:05	TPR	Mt. Juliet, TN
Volatile Organic Compounds (GC/MS) by Method 8260B	WG1606832	1	01/16/21 16:16	01/16/21 23:49	BMB	Mt. Juliet, TN
Semi-Volatile Organic Compounds (GC) by Method 8015	WG1607436	1	01/18/21 20:28	01/19/21 06:49	JN	Mt. Juliet, TN

BH-1 (44'-45') L1306499-12 Solid

Collected by: John Thurston
Collected date/time: 01/12/21 11:20
Received date/time: 01/14/21 09:00

Method	Batch	Dilution	Preparation date/time	Analysis date/time	Analyst	Location
Total Solids by Method 2540 G-2011	WG1607239	1	01/19/21 08:46	01/19/21 09:04	CMK	Mt. Juliet, TN
Wet Chemistry by Method 300.0	WG1605874	5	01/15/21 23:06	01/16/21 10:14	ELN	Mt. Juliet, TN
Volatile Organic Compounds (GC) by Method 8015D/GRO	WG1606868	1	01/16/21 16:16	01/17/21 04:25	TPR	Mt. Juliet, TN
Volatile Organic Compounds (GC/MS) by Method 8260B	WG1606832	1	01/16/21 16:16	01/17/21 00:08	BMB	Mt. Juliet, TN
Semi-Volatile Organic Compounds (GC) by Method 8015	WG1607436	1	01/18/21 20:28	01/19/21 07:02	JN	Mt. Juliet, TN

AH-6 (0'-1') L1306499-13 Solid

Collected by: John Thurston
Collected date/time: 01/12/21 11:30
Received date/time: 01/14/21 09:00

Method	Batch	Dilution	Preparation date/time	Analysis date/time	Analyst	Location
Total Solids by Method 2540 G-2011	WG1607239	1	01/19/21 08:46	01/19/21 09:04	CMK	Mt. Juliet, TN
Wet Chemistry by Method 300.0	WG1605874	1	01/14/21 17:27	01/16/21 10:31	ELN	Mt. Juliet, TN
Volatile Organic Compounds (GC) by Method 8015D/GRO	WG1606868	1	01/16/21 16:16	01/17/21 04:46	TPR	Mt. Juliet, TN
Volatile Organic Compounds (GC/MS) by Method 8260B	WG1606832	1	01/16/21 16:16	01/17/21 00:27	BMB	Mt. Juliet, TN
Semi-Volatile Organic Compounds (GC) by Method 8015	WG1607958	5	01/19/21 22:35	01/20/21 18:12	JN	Mt. Juliet, TN

AH-6 (3'-4') L1306499-14 Solid

Collected by: John Thurston
Collected date/time: 01/12/21 11:50
Received date/time: 01/14/21 09:00

Method	Batch	Dilution	Preparation date/time	Analysis date/time	Analyst	Location
Total Solids by Method 2540 G-2011	WG1607345	1	01/19/21 13:59	01/19/21 14:07	KDW	Mt. Juliet, TN
Wet Chemistry by Method 300.0	WG1605874	1	01/14/21 17:27	01/16/21 10:48	ELN	Mt. Juliet, TN
Volatile Organic Compounds (GC) by Method 8015D/GRO	WG1606868	1	01/16/21 16:16	01/17/21 05:07	TPR	Mt. Juliet, TN
Volatile Organic Compounds (GC/MS) by Method 8260B	WG1606832	1	01/16/21 16:16	01/17/21 00:46	BMB	Mt. Juliet, TN
Semi-Volatile Organic Compounds (GC) by Method 8015	WG1607958	5	01/19/21 22:35	01/20/21 17:59	JN	Mt. Juliet, TN

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.

Erica McNeese
Project Manager

Report Revision History

Level II Report - Version 1: 01/21/21 19:33

Total Solids by Method 2540 G-2011

Analyte	Result	Qualifier	Dilution	Analysis	Batch
	%			date / time	
Total Solids	94.0		1	01/18/2021 14:32	WG1607238

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	2950		48.9	106	5	01/15/2021 05:10	WG1605875

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		0.0231	0.106	1	01/17/2021 00:37	WG1606868
(S) a,a,a-Trifluorotoluene(FID)	*90.3*			*77.0-120*		*01/17/2021 00:37*	WG1606868

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		0.000527	0.00113	1	01/16/2021 20:41	WG1606832
Toluene	U		0.00147	0.00564	1	01/16/2021 20:41	WG1606832
Ethylbenzene	U		0.000831	0.00282	1	01/16/2021 20:41	WG1606832
Total Xylenes	U		0.000992	0.00733	1	01/16/2021 20:41	WG1606832
(S) Toluene-d8	*104*			*75.0-131*		*01/16/2021 20:41*	WG1606832
(S) 4-Bromofluorobenzene	*91.2*			*67.0-138*		*01/16/2021 20:41*	WG1606832
(S) 1,2-Dichloroethane-d4	*88.1*			*70.0-130*		*01/16/2021 20:41*	WG1606832

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		1.71	4.25	1	01/20/2021 12:16	WG1607053
C28-C40 Oil Range	2.46	J	0.291	4.25	1	01/20/2021 12:16	WG1607053
(S) o-Terphenyl	*67.4*			*18.0-148*		*01/20/2021 12:16*	WG1607053

Total Solids by Method 2540 G-2011

Analyte	Result	Qualifier	Dilution	Analysis	Batch
	%			date / time	
Total Solids	95.4		1	01/18/2021 14:32	WG1607238

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	697		9.64	21.0	1	01/15/2021 05:20	WG1605875

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		0.0227	0.105	1	01/17/2021 00:58	WG1606868
(S) a,a,a-Trifluorotoluene(FID)	*88.3*			*77.0-120*		*01/17/2021 00:58*	WG1606868

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		0.000512	0.00110	1	01/16/2021 21:00	WG1606832
Toluene	U		0.00142	0.00548	1	01/16/2021 21:00	WG1606832
Ethylbenzene	U		0.000808	0.00274	1	01/16/2021 21:00	WG1606832
Total Xylenes	U		0.000964	0.00712	1	01/16/2021 21:00	WG1606832
(S) Toluene-d8	*108*			*75.0-131*		*01/16/2021 21:00*	WG1606832
(S) 4-Bromofluorobenzene	*93.0*			*67.0-138*		*01/16/2021 21:00*	WG1606832
(S) 1,2-Dichloroethane-d4	*87.6*			*70.0-130*		*01/16/2021 21:00*	WG1606832

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		1.69	4.19	1	01/20/2021 10:57	WG1607053
C28-C40 Oil Range	4.61		0.287	4.19	1	01/20/2021 10:57	WG1607053
(S) o-Terphenyl	*74.2*			*18.0-148*		*01/20/2021 10:57*	WG1607053

Total Solids by Method 2540 G-2011

Analyte	Result	Qualifier	Dilution	Analysis	Batch
	%			date / time	
Total Solids	96.4		1	01/18/2021 14:32	WG1607238

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	877		9.55	20.8	1	01/15/2021 05:30	WG1605875

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	0.104	1	01/17/2021 01:19	WG1606868
(S) a,a,a-Trifluorotoluene(FID)	*94.8*			*77.0-120*		*01/17/2021 01:19*	WG1606868

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		0.000502	0.00108	1	01/16/2021 21:19	WG1606832
Toluene	U		0.00140	0.00538	1	01/16/2021 21:19	WG1606832
Ethylbenzene	U		0.000793	0.00269	1	01/16/2021 21:19	WG1606832
Total Xylenes	U		0.000946	0.00699	1	01/16/2021 21:19	WG1606832
(S) Toluene-d8	*108*			*75.0-131*		*01/16/2021 21:19*	WG1606832
(S) 4-Bromofluorobenzene	*91.9*			*67.0-138*		*01/16/2021 21:19*	WG1606832
(S) 1,2-Dichloroethane-d4	*86.4*			*70.0-130*		*01/16/2021 21:19*	WG1606832

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	4.15	1	01/20/2021 12:42	WG1607053
C28-C40 Oil Range	4.85		0.284	4.15	1	01/20/2021 12:42	WG1607053
(S) o-Terphenyl	*76.7*			*18.0-148*		*01/20/2021 12:42*	WG1607053

Total Solids by Method 2540 G-2011

Analyte	Result	Qualifier	Dilution	Analysis	Batch
	%			date / time	
Total Solids	91.3		1	01/19/2021 09:04	WG1607239

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	4970		101	219	10	01/15/2021 05:58	WG1605875

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		0.0238	0.110	1	01/20/2021 22:14	WG1608800
(S) a,a,a-Trifluorotoluene(FID)	*97.6*			*77.0-120*		*01/20/2021 22:14*	WG1608800

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		0.000556	0.00119	1	01/16/2021 21:38	WG1606832
Toluene	U		0.00155	0.00596	1	01/16/2021 21:38	WG1606832
Ethylbenzene	U		0.000878	0.00298	1	01/16/2021 21:38	WG1606832
Total Xylenes	U		0.00105	0.00775	1	01/16/2021 21:38	WG1606832
(S) Toluene-d8	*107*			*75.0-131*		*01/16/2021 21:38*	WG1606832
(S) 4-Bromofluorobenzene	*93.3*			*67.0-138*		*01/16/2021 21:38*	WG1606832
(S) 1,2-Dichloroethane-d4	*90.5*			*70.0-130*		*01/16/2021 21:38*	WG1606832

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		1.76	4.38	1	01/20/2021 12:29	WG1607053
C28-C40 Oil Range	1.51	J	0.300	4.38	1	01/20/2021 12:29	WG1607053
(S) o-Terphenyl	*60.5*			*18.0-148*		*01/20/2021 12:29*	WG1607053

Total Solids by Method 2540 G-2011

Analyte	Result	Qualifier	Dilution	Analysis	Batch
	%			date / time	
Total Solids	89.8		1	01/19/2021 09:04	WG1607239

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	8560		102	223	10	01/15/2021 06:08	WG1605875

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		0.0242	0.111	1	01/17/2021 02:00	WG1606868
(S) a,a,a-Trifluorotoluene(FID)	*90.1*			*77.0-120*		*01/17/2021 02:00*	WG1606868

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		0.000574	0.00123	1	01/16/2021 21:57	WG1606832
Toluene	U		0.00160	0.00614	1	01/16/2021 21:57	WG1606832
Ethylbenzene	U		0.000905	0.00307	1	01/16/2021 21:57	WG1606832
Total Xylenes	U		0.00108	0.00798	1	01/16/2021 21:57	WG1606832
(S) Toluene-d8	*105*			*75.0-131*		*01/16/2021 21:57*	WG1606832
(S) 4-Bromofluorobenzene	*89.9*			*67.0-138*		*01/16/2021 21:57*	WG1606832
(S) 1,2-Dichloroethane-d4	*89.9*			*70.0-130*		*01/16/2021 21:57*	WG1606832

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		1.79	4.45	1	01/20/2021 14:37	WG1607958
C28-C40 Oil Range	U		0.305	4.45	1	01/20/2021 14:37	WG1607958
(S) o-Terphenyl	*45.9*			*18.0-148*		*01/20/2021 14:37*	WG1607958

Total Solids by Method 2540 G-2011

Analyte	Result	Qualifier	Dilution	Analysis	Batch
	%			date / time	
Total Solids	94.5		1	01/19/2021 09:04	WG1607239

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	5240		97.4	212	10	01/15/2021 06:17	WG1605875

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		0.0230	0.106	1	01/17/2021 02:21	WG1606868
(S) a,a,a-Trifluorotoluene(FID)	*89.3*			*77.0-120*		*01/17/2021 02:21*	WG1606868

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		0.000522	0.00112	1	01/16/2021 22:16	WG1606832
Toluene	U		0.00145	0.00559	1	01/16/2021 22:16	WG1606832
Ethylbenzene	U		0.000823	0.00279	1	01/16/2021 22:16	WG1606832
Total Xylenes	U		0.000983	0.00726	1	01/16/2021 22:16	WG1606832
(S) Toluene-d8	*107*			*75.0-131*		*01/16/2021 22:16*	WG1606832
(S) 4-Bromofluorobenzene	*88.1*			*67.0-138*		*01/16/2021 22:16*	WG1606832
(S) 1,2-Dichloroethane-d4	*85.6*			*70.0-130*		*01/16/2021 22:16*	WG1606832

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		1.70	4.23	1	01/20/2021 11:23	WG1607053
C28-C40 Oil Range	U		0.290	4.23	1	01/20/2021 11:23	WG1607053
(S) o-Terphenyl	*64.7*			*18.0-148*		*01/20/2021 11:23*	WG1607053

Total Solids by Method 2540 G-2011

Analyte	Result	Qualifier	Dilution	Analysis	Batch
	%			date / time	
Total Solids	95.2		1	01/19/2021 09:04	WG1607239

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	3710		48.3	105	5	01/15/2021 06:27	WG1605875

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		0.0228	0.105	1	01/17/2021 02:42	WG1606868
(S) a,a,a-Trifluorotoluene(FID)	*89.7*			*77.0-120*		*01/17/2021 02:42*	WG1606868

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		0.000514	0.00110	1	01/16/2021 22:34	WG1606832
Toluene	U		0.00143	0.00550	1	01/16/2021 22:34	WG1606832
Ethylbenzene	U		0.000811	0.00275	1	01/16/2021 22:34	WG1606832
Total Xylenes	U		0.000968	0.00715	1	01/16/2021 22:34	WG1606832
(S) Toluene-d8	*106*			*75.0-131*		*01/16/2021 22:34*	WG1606832
(S) 4-Bromofluorobenzene	*88.3*			*67.0-138*		*01/16/2021 22:34*	WG1606832
(S) 1,2-Dichloroethane-d4	*90.4*			*70.0-130*		*01/16/2021 22:34*	WG1606832

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		1.69	4.20	1	01/20/2021 11:36	WG1607053
C28-C40 Oil Range	U		0.288	4.20	1	01/20/2021 11:36	WG1607053
(S) o-Terphenyl	*71.2*			*18.0-148*		*01/20/2021 11:36*	WG1607053

Total Solids by Method 2540 G-2011

Analyte	Result	Qualifier	Dilution	Analysis	Batch
	%			date / time	
Total Solids	88.6		1	01/19/2021 09:04	WG1607239

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	4020		51.9	113	5	01/15/2021 06:36	WG1605875

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		0.0245	0.113	1	01/17/2021 03:03	WG1606868
(S) a,a,a-Trifluorotoluene(FID)	*89.9*			*77.0-120*		*01/17/2021 03:03*	WG1606868

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		0.000587	0.00126	1	01/16/2021 22:53	WG1606832
Toluene	U		0.00163	0.00628	1	01/16/2021 22:53	WG1606832
Ethylbenzene	U		0.000926	0.00314	1	01/16/2021 22:53	WG1606832
Total Xylenes	U		0.00111	0.00817	1	01/16/2021 22:53	WG1606832
(S) Toluene-d8	*107*			*75.0-131*		*01/16/2021 22:53*	WG1606832
(S) 4-Bromofluorobenzene	*90.1*			*67.0-138*		*01/16/2021 22:53*	WG1606832
(S) 1,2-Dichloroethane-d4	*87.3*			*70.0-130*		*01/16/2021 22:53*	WG1606832

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		1.82	4.51	1	01/20/2021 11:50	WG1607053
C28-C40 Oil Range	U		0.309	4.51	1	01/20/2021 11:50	WG1607053
(S) o-Terphenyl	*55.4*			*18.0-148*		*01/20/2021 11:50*	WG1607053

Total Solids by Method 2540 G-2011

Analyte	Result	Qualifier	Dilution	Analysis	Batch
	%			date / time	
Total Solids	91.3		1	01/19/2021 09:04	WG1607239

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	1630		50.4	110	5	01/16/2021 09:21	WG1605874

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		0.0238	0.110	1	01/17/2021 03:23	WG1606868
(S) a,a,a-Trifluorotoluene(FID)	*89.9*			*77.0-120*		*01/17/2021 03:23*	WG1606868

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		0.000556	0.00119	1	01/16/2021 23:12	WG1606832
Toluene	U		0.00155	0.00595	1	01/16/2021 23:12	WG1606832
Ethylbenzene	U		0.000877	0.00298	1	01/16/2021 23:12	WG1606832
Total Xylenes	U		0.00105	0.00774	1	01/16/2021 23:12	WG1606832
(S) Toluene-d8	*107*			*75.0-131*		*01/16/2021 23:12*	WG1606832
(S) 4-Bromofluorobenzene	*91.9*			*67.0-138*		*01/16/2021 23:12*	WG1606832
(S) 1,2-Dichloroethane-d4	*90.4*			*70.0-130*		*01/16/2021 23:12*	WG1606832

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		1.76	4.38	1	01/20/2021 12:03	WG1607053
C28-C40 Oil Range	U		0.300	4.38	1	01/20/2021 12:03	WG1607053
(S) o-Terphenyl	*71.2*			*18.0-148*		*01/20/2021 12:03*	WG1607053

Total Solids by Method 2540 G-2011

Analyte	Result	Qualifier	Dilution	Analysis	Batch
	%			date / time	
Total Solids	94.6		1	01/19/2021 09:04	WG1607239

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	377		9.72	21.1	1	01/16/2021 09:39	WG1605874

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		0.0229	0.106	1	01/17/2021 03:44	WG1606868
(S) a,a,a-Trifluorotoluene(FID)	*88.9*			*77.0-120*		*01/17/2021 03:44*	WG1606868

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		0.000520	0.00111	1	01/16/2021 23:31	WG1606832
Toluene	U		0.00145	0.00557	1	01/16/2021 23:31	WG1606832
Ethylbenzene	U		0.000821	0.00278	1	01/16/2021 23:31	WG1606832
Total Xylenes	U		0.000980	0.00724	1	01/16/2021 23:31	WG1606832
(S) Toluene-d8	*107*			*75.0-131*		*01/16/2021 23:31*	WG1606832
(S) 4-Bromofluorobenzene	*91.9*			*67.0-138*		*01/16/2021 23:31*	WG1606832
(S) 1,2-Dichloroethane-d4	*91.7*			*70.0-130*		*01/16/2021 23:31*	WG1606832

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		1.70	4.23	1	01/19/2021 11:47	WG1607198
C28-C40 Oil Range	3.07	J	0.290	4.23	1	01/19/2021 11:47	WG1607198
(S) o-Terphenyl	*55.0*			*18.0-148*		*01/19/2021 11:47*	WG1607198

Total Solids by Method 2540 G-2011

Analyte	Result	Qualifier	Dilution	Analysis	Batch
	%			date / time	
Total Solids	92.4		1	01/19/2021 09:04	WG1607239

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	1050		49.8	108	5	01/16/2021 09:56	WG1605874

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		0.0235	0.108	1	01/17/2021 04:05	WG1606868
(S) a,a,a-Trifluorotoluene(FID)	*90.4*			*77.0-120*		*01/17/2021 04:05*	WG1606868

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		0.000544	0.00117	1	01/16/2021 23:49	WG1606832
Toluene	U		0.00152	0.00583	1	01/16/2021 23:49	WG1606832
Ethylbenzene	U		0.000859	0.00291	1	01/16/2021 23:49	WG1606832
Total Xylenes	U		0.00103	0.00758	1	01/16/2021 23:49	WG1606832
(S) Toluene-d8	*107*			*75.0-131*		*01/16/2021 23:49*	WG1606832
(S) 4-Bromofluorobenzene	*91.8*			*67.0-138*		*01/16/2021 23:49*	WG1606832
(S) 1,2-Dichloroethane-d4	*91.5*			*70.0-130*		*01/16/2021 23:49*	WG1606832

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		1.74	4.33	1	01/19/2021 06:49	WG1607436
C28-C40 Oil Range	U		0.297	4.33	1	01/19/2021 06:49	WG1607436
(S) o-Terphenyl	*67.6*			*18.0-148*		*01/19/2021 06:49*	WG1607436

Total Solids by Method 2540 G-2011

Analyte	Result	Qualifier	Dilution	Analysis	Batch
	%			date / time	
Total Solids	84.6		1	01/19/2021 09:04	WG1607239

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	2170		54.4	118	5	01/16/2021 10:14	WG1605874

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		0.0257	0.118	1	01/17/2021 04:25	WG1606868
(S) a,a,a-Trifluorotoluene(FID)	*89.6*			*77.0-120*		*01/17/2021 04:25*	WG1606868

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		0.000637	0.00136	1	01/17/2021 00:08	WG1606832
Toluene	U		0.00177	0.00682	1	01/17/2021 00:08	WG1606832
Ethylbenzene	U		0.00101	0.00341	1	01/17/2021 00:08	WG1606832
Total Xylenes	U		0.00120	0.00887	1	01/17/2021 00:08	WG1606832
(S) Toluene-d8	*106*			*75.0-131*		*01/17/2021 00:08*	WG1606832
(S) 4-Bromofluorobenzene	*91.1*			*67.0-138*		*01/17/2021 00:08*	WG1606832
(S) 1,2-Dichloroethane-d4	*90.8*			*70.0-130*		*01/17/2021 00:08*	WG1606832

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		1.90	4.73	1	01/19/2021 07:02	WG1607436
C28-C40 Oil Range	U		0.324	4.73	1	01/19/2021 07:02	WG1607436
(S) o-Terphenyl	*65.2*			*18.0-148*		*01/19/2021 07:02*	WG1607436

Total Solids by Method 2540 G-2011

Analyte	Result	Qualifier	Dilution	Analysis	Batch
	%			date / time	
Total Solids	95.7		1	01/19/2021 09:04	WG1607239

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	54.4		9.62	20.9	1	01/16/2021 10:31	WG1605874

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		0.0227	0.105	1	01/17/2021 04:46	WG1606868
(S) a,a,a-Trifluorotoluene(FID)	*89.1*			*77.0-120*		*01/17/2021 04:46*	WG1606868

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		0.000509	0.00109	1	01/17/2021 00:27	WG1606832
Toluene	U		0.00142	0.00545	1	01/17/2021 00:27	WG1606832
Ethylbenzene	U		0.000804	0.00273	1	01/17/2021 00:27	WG1606832
Total Xylenes	U		0.000959	0.00709	1	01/17/2021 00:27	WG1606832
(S) Toluene-d8	*106*			*75.0-131*		*01/17/2021 00:27*	WG1606832
(S) 4-Bromofluorobenzene	*90.6*			*67.0-138*		*01/17/2021 00:27*	WG1606832
(S) 1,2-Dichloroethane-d4	*88.8*			*70.0-130*		*01/17/2021 00:27*	WG1606832

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	138		8.41	20.9	5	01/20/2021 18:12	WG1607958
C28-C40 Oil Range	506		1.43	20.9	5	01/20/2021 18:12	WG1607958
(S) o-Terphenyl	*50.3*			*18.0-148*		*01/20/2021 18:12*	WG1607958

Total Solids by Method 2540 G-2011

Analyte	Result	Qualifier	Dilution	Analysis	Batch
	%			date / time	
Total Solids	94.5		1	01/19/2021 14:07	WG1607345

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	88.1		9.73	21.2	1	01/16/2021 10:48	WG1605874

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		0.0230	0.106	1	01/17/2021 05:07	WG1606868
(S) a,a,a-Trifluorotoluene(FID)	*88.2*			*77.0-120*		*01/17/2021 05:07*	WG1606868

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		0.000521	0.00112	1	01/17/2021 00:46	WG1606832
Toluene	U		0.00145	0.00558	1	01/17/2021 00:46	WG1606832
Ethylbenzene	U		0.000823	0.00279	1	01/17/2021 00:46	WG1606832
Total Xylenes	U		0.000982	0.00726	1	01/17/2021 00:46	WG1606832
(S) Toluene-d8	*106*			*75.0-131*		*01/17/2021 00:46*	WG1606832
(S) 4-Bromofluorobenzene	*89.9*			*67.0-138*		*01/17/2021 00:46*	WG1606832
(S) 1,2-Dichloroethane-d4	*89.3*			*70.0-130*		*01/17/2021 00:46*	WG1606832

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	64.5		8.52	21.2	5	01/20/2021 17:59	WG1607958
C28-C40 Oil Range	236		1.45	21.2	5	01/20/2021 17:59	WG1607958
(S) o-Terphenyl	*52.7*			*18.0-148*		*01/20/2021 17:59*	WG1607958

Method Blank (MB)

(MB) R3613855-1 01/18/21 14:32

Analyte	MB Result	MB Qualifier	MB MDL	MB RDL
	%		%	%
Total Solids	0.000			

L1306493-04 Original Sample (OS) • Duplicate (DUP)

(OS) L1306493-04 01/18/21 14:32 • (DUP) R3613855-3 01/18/21 14:32

Analyte	Original Result	DUP Result	Dilution	DUP RPD	DUP Qualifier	DUP RPD Limits
	%	%		%		%
Total Solids	80.5	75.6	1	6.25		10

Laboratory Control Sample (LCS)

(LCS) R3613855-2 01/18/21 14:32

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

Method Blank (MB)

(MB) R3614055-1 01/19/21 09:04

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

L1306499-09 Original Sample (OS) • Duplicate (DUP)

(OS) L1306499-09 01/19/21 09:04 • (DUP) R3614055-3 01/19/21 09:04

Analyte	Original Result %	DUP Result %	Dilution	DUP RPD %	DUP Qualifier	DUP RPD Limits %
Total Solids	91.3	90.5	1	0.846		10

Laboratory Control Sample (LCS)

(LCS) R3614055-2 01/19/21 09:04

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

Method Blank (MB)

(MB) R3614225-1 01/19/21 14:07

Analyte	MB Result %	MB Qualifier	MB MDL %	MB RDL %
Total Solids	0.000			

L1306511-01 Original Sample (OS) • Duplicate (DUP)

(OS) L1306511-01 01/19/21 14:07 • (DUP) R3614225-3 01/19/21 14:07

Analyte	Original Result %	DUP Result %	Dilution	DUP RPD %	DUP Qualifier	DUP RPD Limits %
Total Solids	95.3	95.8	1	0.472		10

Laboratory Control Sample (LCS)

(LCS) R3614225-2 01/19/21 14:07

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

Method Blank (MB)

(MB) R3613311-1 01/16/21 02:21

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

L1306313-01 Original Sample (OS) • Duplicate (DUP)

(OS) L1306313-01 01/16/21 05:18 • (DUP) R3613311-5 01/16/21 05:35

Analyte	Original Result (dry) mg/kg	DUP Result (dry) mg/kg	Dilution	DUP RPD %	DUP Qualifier	DUP RPD Limits %
Chloride	36.0	32.0	1	11.7		20

L1306499-14 Original Sample (OS) • Duplicate (DUP)

(OS) L1306499-14 01/16/21 10:48 • (DUP) R3613311-6 01/16/21 11:06

Analyte	Original Result (dry) mg/kg	DUP Result (dry) mg/kg	Dilution	DUP RPD %	DUP Qualifier	DUP RPD Limits %
Chloride	88.1	79.4	1	10.5		20

Laboratory Control Sample (LCS)

(LCS) R3613311-2 01/16/21 02:37

Analyte	Spike Amount mg/kg	LCS Result mg/kg	LCS Rec. %	Rec. Limits %	LCS Qualifier
Chloride	200	196	98.0	90.0-110	

L1305603-01 Original Sample (OS) • Matrix Spike (MS) • Matrix Spike Duplicate (MSD)

(OS) L1305603-01 01/17/21 11:17 • (MS) R3613334-1 01/17/21 11:34 • (MSD) R3613334-2 01/17/21 11:51

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 %
Chloride	502	162	647	627	96.7	92.8	1	80.0-120			3.07	20

Method Blank (MB)

(MB) R3613040-1 01/15/21 01:14

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

L1306492-02 Original Sample (OS) • Duplicate (DUP)

(OS) L1306492-02 01/15/21 03:07 • (DUP) R3613040-4 01/15/21 03:16

Analyte	Original Result (dry) mg/kg	DUP Result (dry) mg/kg	Dilution	DUP RPD %	DUP Qualifier	DUP RPD Limits %
Chloride	1190	1040	5	14.1		20

L1306499-08 Original Sample (OS) • Duplicate (DUP)

(OS) L1306499-08 01/15/21 06:36 • (DUP) R3613040-5 01/15/21 06:46

Analyte	Original Result (dry) mg/kg	DUP Result (dry) mg/kg	Dilution	DUP RPD %	DUP Qualifier	DUP RPD Limits %
Chloride	4020	4510	5	11.7		20

Laboratory Control Sample (LCS)

(LCS) R3613040-2 01/15/21 01:24

Analyte	Spike Amount mg/kg	LCS Result mg/kg	LCS Rec. %	Rec. Limits %	LCS Qualifier
Chloride	200	199	99.5	90.0-110	

L1306492-01 Original Sample (OS) • Matrix Spike (MS) • Matrix Spike Duplicate (MSD)

(OS) L1306492-01 01/15/21 02:38 • (MS) R3613040-3 01/15/21 02:48 • (MSD) R3613040-7 01/15/21 14:48

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 %
Chloride	56.1	5030	5470	5590	78.7	101	10	80.0-120	V		2.26	20

Method Blank (MB)

(MB) R3614451-2 01/16/21 23:56

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)	*93.8*			*77.0-120*

Laboratory Control Sample (LCS)

(LCS) R3614451-1 01/16/21 23:14

Analyte	Spike Amount mg/kg	LCS Result mg/kg	LCS Rec. %	Rec. Limits %	LCS Qualifier
TPH (GC/FID) Low Fraction	5.50	6.11	111	72.0-127	
(S) a,a,a-Trifluorotoluene(FID)			*111*	*77.0-120*	

Method Blank (MB)

(MB) R3614731-3 01/20/21 20:19

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)	*99.6*			*77.0-120*

Laboratory Control Sample (LCS)

(LCS) R3614731-1 01/20/21 18:45

Analyte	Spike Amount mg/kg	LCS Result mg/kg	LCS Rec. %	Rec. Limits %	LCS Qualifier
TPH (GC/FID) Low Fraction	5.50	5.83	106	72.0-127	
(S) a,a,a-Trifluorotoluene(FID)			*102*	*77.0-120*	

Method Blank (MB)

(MB) R3613641-2 01/16/21 17:01

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	*106*			*75.0-131*
(S) 4-Bromofluorobenzene	*90.8*			*67.0-138*
(S) 1,2-Dichloroethane-d4	*90.4*			*70.0-130*

Laboratory Control Sample (LCS)

(LCS) R3613641-1 01/16/21 16:04

Analyte	Spike Amount mg/kg	LCS Result mg/kg	LCS Rec. %	Rec. Limits %	LCS Qualifier
Benzene	0.125	0.113	90.4	70.0-123	
Ethylbenzene	0.125	0.122	97.6	74.0-126	
Toluene	0.125	0.129	103	75.0-121	
Xylenes, Total	0.375	0.379	101	72.0-127	
(S) Toluene-d8			*107*	*75.0-131*	
(S) 4-Bromofluorobenzene			*90.2*	*67.0-138*	
(S) 1,2-Dichloroethane-d4			*93.0*	*70.0-130*	

L1306499-01 Original Sample (OS) • Matrix Spike (MS) • Matrix Spike Duplicate (MSD)

(OS) L1306499-01 01/16/21 20:41 • (MS) R3613641-3 01/17/21 01:05 • (MSD) R3613641-4 01/17/21 01:24

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	0.140	U	0.151	0.161	108	115	1	10.0-149			6.50	37
Ethylbenzene	0.140	U	0.177	0.188	127	135	1	10.0-160			6.17	38
Toluene	0.140	U	0.168	0.178	120	127	1	10.0-156			5.86	38
Xylenes, Total	0.420	U	0.511	0.540	122	129	1	10.0-160			5.58	38
(S) Toluene-d8					*105*	*104*		*75.0-131*				
(S) 4-Bromofluorobenzene					*90.9*	*91.1*		*67.0-138*				
(S) 1,2-Dichloroethane-d4					*91.5*	*92.4*		*70.0-130*				

Method Blank (MB)

(MB) R3614517-1 01/20/21 04:26

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	*79.0*			*18.0-148*

Laboratory Control Sample (LCS)

(LCS) R3614517-2 01/20/21 04:39

Analyte	Spike Amount mg/kg	LCS Result mg/kg	LCS Rec. %	Rec. Limits %	LCS Qualifier
C10-C28 Diesel Range	50.0	34.1	68.2	50.0-150	
(S) o-Terphenyl			*66.4*	*18.0-148*	

L1306498-03 Original Sample (OS) • Matrix Spike (MS) • Matrix Spike Duplicate (MSD)

(OS) L1306498-03 01/20/21 10:18 • (MS) R3614517-3 01/20/21 10:31 • (MSD) R3614517-4 01/20/21 10:44

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	50.0	U	28.2	33.9	56.4	67.8	1	50.0-150			18.4	20
(S) o-Terphenyl					*49.4*	*64.1*		*18.0-148*				

Method Blank (MB)

(MB) R3613865-1 01/19/21 06:52

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	*49.2*			*18.0-148*

Laboratory Control Sample (LCS)

(LCS) R3613865-2 01/19/21 07:05

Analyte	Spike Amount mg/kg	LCS Result mg/kg	LCS Rec. %	Rec. Limits %	LCS Qualifier
C10-C28 Diesel Range	50.0	27.4	54.8	50.0-150	
(S) o-Terphenyl			*50.2*	*18.0-148*	

L1305229-03 Original Sample (OS) • Matrix Spike (MS) • Matrix Spike Duplicate (MSD)

(OS) L1305229-03 01/19/21 14:46 • (MS) R3613865-3 01/19/21 12:13 • (MSD) R3613865-4 01/19/21 12:25

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 %
C10-C28 Diesel Range	54.9	15.7	45.0	39.4	53.4	43.2	1	50.0-150		J6	13.3	20
(S) o-Terphenyl					*30.5*	*24.5*		*18.0-148*				

Sample Narrative:

OS: Surrogate failure due to matrix interference

Method Blank (MB)

(MB) R3613768-1 01/19/21 03:20

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	*93.4*			*18.0-148*

Laboratory Control Sample (LCS)

(LCS) R3613768-2 01/19/21 03:33

Analyte	Spike Amount mg/kg	LCS Result mg/kg	LCS Rec. %	Rec. Limits %	LCS Qualifier
C10-C28 Diesel Range	50.0	46.6	93.2	50.0-150	
(S) o-Terphenyl			*93.5*	*18.0-148*	

L1307416-01 Original Sample (OS) • Matrix Spike (MS) • Matrix Spike Duplicate (MSD)

(OS) L1307416-01 01/19/21 09:00 • (MS) R3613768-3 01/19/21 09:13 • (MSD) R3613768-4 01/19/21 09:27

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 %
C10-C28 Diesel Range	59.5	U	48.4	50.2	81.4	84.4	1	50.0-150			3.62	20
(S) o-Terphenyl					*76.7*	*79.9*		*18.0-148*				

Method Blank (MB)

(MB) R3614637-1 01/20/21 12:36

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	0.643	J	0.274	4.00
(S) o-Terphenyl	*60.1*			*18.0-148*

Laboratory Control Sample (LCS)

(LCS) R3614637-2 01/20/21 12:49

Analyte	Spike Amount mg/kg	LCS Result mg/kg	LCS Rec. %	Rec. Limits %	LCS Qualifier
C10-C28 Diesel Range	50.0	31.6	63.2	50.0-150	
(S) o-Terphenyl			*77.9*	*18.0-148*	

L1306511-13 Original Sample (OS) • Matrix Spike (MS) • Matrix Spike Duplicate (MSD)

(OS) L1306511-13 01/20/21 13:29 • (MS) R3614637-3 01/20/21 13:43 • (MSD) R3614637-4 01/20/21 13:56

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 %
C10-C28 Diesel Range	51.0	U	31.0	33.9	60.8	66.4	1	50.0-150			8.81	20
(S) o-Terphenyl					*72.2*	*77.5*		*18.0-148*				

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
J	The identification of the analyte is acceptable; the reported value is an estimate.
J6	The sample matrix interfered with the ability to make any accurate determination; spike value is low.
V	The sample concentration is too high to evaluate accurate spike recoveries.

Pace National is the only environmental laboratory accredited/certified to support your work nationwide from one location. One phone call, one point of contact, one laboratory. No other lab is as accessible or prepared to handle your needs throughout the country. Our capacity and capability from our single location laboratory is comparable to the collective totals of the network laboratories in our industry. The most significant benefit to our one location design is the design of our laboratory campus. The model is conducive to accelerated productivity, decreasing turn-around time, and preventing cross contamination, thus protecting sample integrity. Our focus on premium quality and prompt service allows us to be YOUR LAB OF CHOICE.
* 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 National.

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	LAO00356
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		

Pace Analytical National 1313 Point Mallard Parkway SE Suite B Decatur, AL, 35601

Alabama	40160
ANSI National Accreditation Board	L2239

Pace Analytical National 660 Bercut Dr. Ste. C Sacramento, CA, 95811

California	2961	Oregon	CA300002
Minnesota	006-999-465	Washington	C926
North Dakota	R-214		

Pace Analytical National 6000 South Eastern Avenue Ste 9A Las Vegas, NV, 89119

Nevada	NV009412021-1

Pace Analytical National 1606 E. Brazos Street Suite D Victoria, TX, 77901

Texas	T104704328-20-18

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

Analysis Request of Chain of Custody Record

Page : 1 of 2

Tetra Tech, Inc.

901 West Wall Street, Suite 100
s 79701
682-4559
Fax (432) 682-3946

E163

L1306499

Client Name:	Conoco Phillips	**Site Manager:**	Christian Llull
Project Name:	James E Upper Battery Load Line Release (2RP-3748)	**Contact Info:**	Email: christian.llull@tetratech.com Phone: (512) 338-1667
Project Location: (county, state)	Lea County, New Mexico	**Project #:**	212C-MD-02334, Task No. 29
Invoice to:	Accounts Payable 901 West Wall Street, Suite 100 Midland, Texas 79701		
Receiving Laboratory:	Pace Analytical	**Sampler Signature:**	John Thurston
Comments:	COPTETRA Acctnum		

ANALYSIS REQUEST (Circle or Specify Method No.)

LAB # (LAB USE ONLY)	SAMPLE IDENTIFICATION	SAMPLING YEAR: 2021 DATE	SAMPLING TIME	MATRIX WATER	MATRIX SOIL	MATRIX	PRESERVATIVE METHOD HCL	PRESERVATIVE METHOD HNO3	PRESERVATIVE METHOD ICE	PRESERVATIVE METHOD NONE	PRESERVATIVE METHOD	# CONTAINERS	FILTERED (Y/N)	BTEX 8021B BTEX 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 300.0	Chloride Sulfate TDS	General Water Chemistry (see attached list)	Anion/Cation Balance	TPH 8015R		HOLD
-01	BH-1 (0'-1')	01/12/21	900		X				X			1	N	X		X												X						
-02	BH-1 (1'-3')	01/12/21	910		X				X			1	N	X		X												X						
-03	BH-1 (3'-5')	01/12/21	920		X				X			1	N	X		X												X						
-04	BH-1 (5'-7')	01/12/21	930		X				X			1	N	X		X												X						
-05	BH-1 (7'-10')	01/12/21	940		X				X			1	N	X		X												X						
-06	BH-1 (10'-15')	01/12/21	950		X				X			1	N	X		X												X						
-07	BH-1 (15'-20')	01/12/21	1000		X				X			1	N	X		X												X						
-08	BH-1 (20'-25')	01/12/21	1020		X				X			1	N	X		X												X						
-09	BH-1 (25'-30')	01/12/21	1030		X				X			1	N	X		X												X						
-10	BH-1 (30'-35')	01/12/21	1050		X				X			1	N	X		X												X						

Relinquished by:	Date:	Time:	Received by:	Date:	Time:
[signature]	~~1/13~~ 1/13/21	1630			
Relinquished by:	Date:	Time:	Received by:	Date:	Time:
Relinquished by:	Date:	Time:	Received by:	Date:	Time:
			[signature]	1-14-21	9:00

ORIGINAL COPY

MPAS 1.1.3=8

LAB USE ONLY

Sample Temperature

REMARKS:

- [X] 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 #: _____

of Chain of Custody Record

Page : 2 of 2

Tetra Tech, Inc.

901 West Wall Street, Suite 100
Midland, TX 79701
(432) 682-4559
Fax (432) 682-3946

L 1306499

Conoco Phillips	Site Manager:	Christian Llull	
James E Upper Battery Load Line Release (2RP-3748)	Contact Info:	Email: christian.llull@tetratech.com Phone: (512) 338-1667	
Lea County, New Mexico	Project #:	212C-MD-02334, Task No. 29	
Accounts Payable 901 West Wall Street, Suite 100 Midland, Texas 79701			
ory: Pace Analytical	Sampler Signature:	John Thurston	

PTETRA Acctnum

ANALYSIS REQUEST
(Circle or Specify Method No.)

SAMPLE IDENTIFICATION	SAMPLING YEAR: 2021 DATE	TIME	MATRIX WATER	MATRIX SOIL	PRESERVATIVE METHOD HCL	HNO3	ICE	NONE	# CONTAINERS	FILTERED (Y/N)	BTEX 8021B BTEX 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 300.0	Chloride Sulfate TDS	General Water Chemistry (see attached list)	Anion/Cation Balance	TPH 8015R	HOLD
BH-1 (35'-40')	01/12/21	1100		X			X		1	N	X		X												X					
BH-1 (40'-45')	01/12/21	1120		X			X		1	N	X		X												X					
AH-1 (0'-1')	01/12/21	1130		X			X		1	N	X		X												X					
AH-1 (3'-4')	01/12/21	1150		X			X		1	N	X		X												X					

Sample Receipt Checklist

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

	Date:	Time:	Received by:	Date:	Time:
	1/13/21	1630			
	Date:	Time:	Received by:	Date:	Time:
	Date:	Time:	Received by:	Date:	Time:
				1-14-21	

ORIGINAL COPY

LAB USE ONLY

Sample Temperature

REMARKS:

- [X] 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 #: _____

MPTS 1.1-3=8

Erica McNeese

From: Abbott, Sam <Sam.Abbott@tetratech.com>
Sent: Tuesday, January 26, 2021 5:51 PM
To: Erica McNeese
Cc: Chris McCord
Subject: RE: Pace Analytical National Level II Report for 212C-MD-02334 TASK29 James E Upper Battery Load Line Release (2RP-3748) L1306499

CAUTION: This email originated from outside Pace Analytical. Do not click links or open attachments unless you recognize the sender and know the content is safe.

I'm sorry! I just noticed another issue with this one. I will need to revise the BH-1 sample intervals as well, as follows:

Change from:	Change to:
BH-1 (1'-3')	BH-1 (2'-3')
BH-1 (3'-5')	BH-1 (4'-5')
BH-1 (5'-7')	BH-1 (6'-7')
BH-1 (7'-10')	BH-1 (9'-10')
BH-1 (10'-15')	BH-1 (14'-15')
BH-1 (15'-20')	BH-1 (19'-20')
BH-1 (20'-25')	BH-1 (24'-25')
BH-1 (25'-30')	BH-1 (29'-30')
BH-1 (30'-35')	BH-1 (34'-35')
BH-1 (35'-40')	BH-1 (39'-40')
BH-1 (40'-45')	BH-1 (44'-45')

Sam

From: Erica McNeese <Erica.McNeese@pacelabs.com>
Sent: Tuesday, January 26, 2021 5:32 PM
To: Abbott, Sam <Sam.Abbott@tetratech.com>; Chris McCord <Chris.McCord@pacelabs.com>
Subject: RE: Pace Analytical National Level II Report for 212C-MD-02334 TASK29 James E Upper Battery Load Line Release (2RP-3748) L1306499

⚠ CAUTION: This email originated from an external sender. Verify the source before opening links or attachments. ⚠

Sam,

Will do. I will send you the revised reports once they are complete.

Thank you,

Please note that email addresses for staff at the Pace Analytical National Center for Testing & Innovation have changed. My new email address is Erica.McNeese@pacelabs.com. Please update your records accordingly.

Erica McNeese

Project Manager I | National
12065 Lebanon Road | Mt. Juliet, TN 37122
o.615.773.9749 | Erica.McNeese@pacelabs.com

From: Abbott, Sam <Sam.Abbott@tetratech.com>
Sent: Tuesday, January 26, 2021 5:30 PM
To: Chris McCord <Chris.McCord@pacelabs.com>; Erica McNeese <Erica.McNeese@pacelabs.com>
Subject: FW: Pace Analytical National Level II Report for 212C-MD-02334 TASK29 James E Upper Battery Load Line Release (2RP-3748) L1306499

For this one, BH-1 is fine, but can we change “AH-1 (0-1’)” and “AH-1 (3-4’)” to “AH-6 (0-1’)” and “AH-6 (3-4’)”?

Thanks!
Sam

Samantha Abbott, PG | Senior Staff Geoscientist
Direct **+1 (512) 338-2852** | Business **+1 (512) 338-1667** | Mobile **+1 (512) 739-7874** | Sam.Abbott@tetratech.com

Tetra Tech, Inc. | *Leading with Science®* | OGA
8911 N Capital of Texas Hwy #2310 | Austin, TX 78759 | tetratech.com

From: Llull, Christian <Christian.Llull@tetratech.com>
Sent: Thursday, January 21, 2021 8:03 PM
To: Abbott, Sam <Sam.Abbott@tetratech.com>
Subject: Fwd: Pace Analytical National Level II Report for 212C-MD-02334 TASK29 James E Upper Battery Load Line Release (2RP-3748) L1306499

Christian

Get Outlook for iOS

From: chris.mccord@pacelabs.com <chris.mccord@pacelabs.com>
Sent: Thursday, January 21, 2021 7:33:13 PM

APPENDIX C
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-basin	County	Q 64	Q 16	Q 4	Sec	Tws	Rng	X	Y	Distance	Depth Well	Depth Water	Water Column
C 04528 POD1	CUB	ED	1	3	3	12	22S	30E	608886	3585625	706			

Average Depth to Water: --

Minimum Depth: --

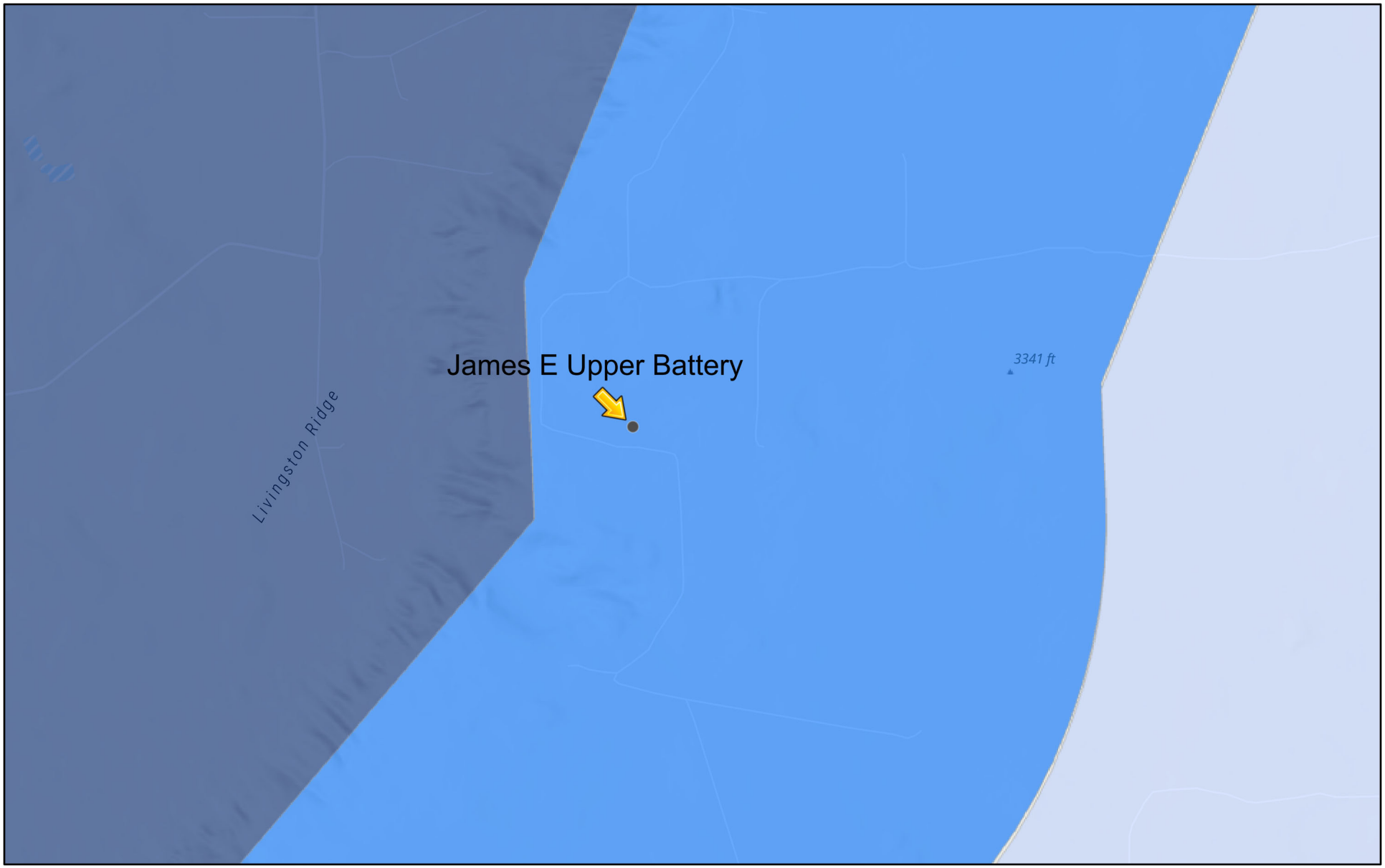
Maximum Depth: --

Record Count: 1

UTMNAD83 Radius Search (in meters):

Easting (X): 609001 **Northing (Y):** 3586322.65 **Radius:** 800

NMOCD Karst Potential Map



9/26/2022, 4:21:28 PM

Override 1

Karst Occurrence Potential

High

Medium

Low

1:18,056

0 0.13 0.25 0.5 mi

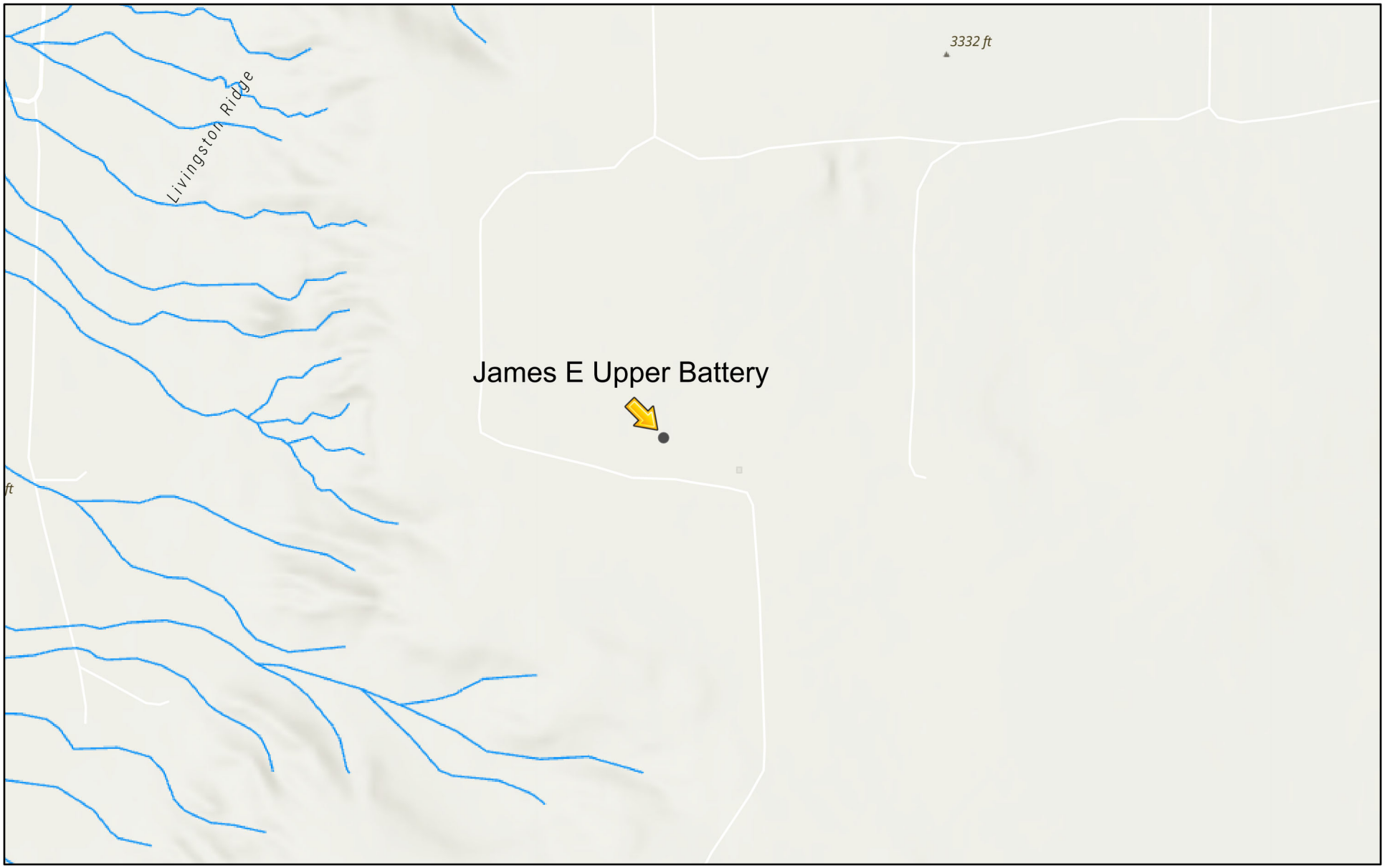
0 0.2 0.4 0.8 km

BLM, OCD, New Mexico Tech, Esri, NASA, NGA, USGS, FEMA, Esri Community Maps Contributors, New Mexico State University, Texas Parks &

New Mexico Oil Conservation Division

NM OCD Oil and Gas Map. http://nm-emnrd.maps.arcgis.com/apps/webappviewer/index.html?id=4d017f2306164de29fd2fb9f8f35ca75: New Mexico Oil Conservation Division

NMOCD Waterbody Map



9/26/2022, 4:26:44 PM

Override 1

OSE Streams

1:9,028

0 0.05 0.1 0.2 mi

0 0.1 0.2 0.4 km

Esri, NASA, NGA, USGS, FEMA, Esri Community Maps Contributors, New Mexico State University, Texas Parks & Wildlife, © OpenStreetMap,

New Mexico Oil Conservation Division

NM OCD Oil and Gas Map. http://nm-emnrd.maps.arcgis.com/apps/webappviewer/index.html?id=4d017f2306164de29fd2fb9f8f35ca75: New Mexico Oil Conservation Division

212C-MD-02334 | TETRA TECH | **LOG OF BORING BH-1** | Page 1 of 3

Project Name: James E Upper Battery (2RP-3748)

Borehole Location: 32.408659, -103.840912 | Surface Elevation: 3313 ft

Borehole Number: BH-1 | Borehole Diameter (in.): 8 | Date Started: 1/12/2021 | Date Finished: 1/12/2021

WATER LEVEL OBSERVATIONS

While Drilling ▽ Dry ft | Upon Completion of Drilling ▼ Dry ft

Remarks:

DEPTH (ft)	OPERATION TYPE	SAMPLE	CHLORIDE FIELD SCREENING (ppm) ExStik	VOC FIELD SCREENING (ppm) PID	SAMPLE RECOVERY (%)	MOISTURE CONTENT (%)	DRY DENSITY (pcf)	LIQUID LIMIT LL	PLASTICITY INDEX PI	MINUS NO. 200 (%)	GRAPHIC LOG	MATERIAL DESCRIPTION	DEPTH (ft)	REMARKS
			3140									**-SM-** SILTY SAND: Reddish-brown, medium dense, dry, with occasional caliche.	2	BH-1 (0-1')
			865									**-SM-** SILTY SAND: Reddish-brown, medium dense, dry.		
5			1320											BH-1 (4-5')
			3560										7	BH-1 (6-7')
												-SM- SILTY SAND: Reddish-brown, medium dense, dry, with occasional caliche.		
10			5770										10	BH-1 (9-10')
												-SP- SAND: Red, medium dense, dry, with occasional caliche pebbles.		
15			4760										15	BH-1 (14-15')
												-SP- SAND: Light-red, medium dense, dry, with occasional caliche.		
20			3480										20	BH-1 (19-20')
												-SW- SAND: Red, medium dense, dry.		
25			2240										25	BH-1 (24-25')

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 above. Surface elevations are estimated from Google Earth data.

Logger: John Thurston | Drilling Equipment: Air Rotary | Driller: Scarborough Drilling

212C-MD-02334	TETRA TECH	**LOG OF BORING BH-1**	Page 2 of 3

Project Name: James E Upper Battery (2RP-3748)

Borehole Location: 32.408659, -103.840912 | Surface Elevation: 3313 ft

Borehole Number: BH-1 | Borehole Diameter (in.): 8 | Date Started: 1/12/2021 | Date Finished: 1/12/2021

WATER LEVEL OBSERVATIONS

While Drilling ▽ Dry ft Upon Completion of Drilling ▼ Dry ft

Remarks:

DEPTH (ft)	OPERATION TYPE	SAMPLE	CHLORIDE FIELD SCREENING (ppm) ExStik	VOC FIELD SCREENING (ppm) PID	SAMPLE RECOVERY (%)	MOISTURE CONTENT (%)	DRY DENSITY (pcf)	LIQUID LIMIT LL	PLASTICITY INDEX PI	MINUS NO. 200 (%)	GRAPHIC LOG	MATERIAL DESCRIPTION	DEPTH (ft)	REMARKS
												-ML- MUDSTONE: Reddish-brown, dense, dry.		
30			1060											BH-1 (29-30')
35			442										35	BH-1 (34-35')
												-SM- SILTY SAND: Dark-red, dense, dry.		
40			918										40	BH-1 (39-40')
												-CL- SILTY CLAY: Brick-red, dense, dry.		
45			449										45	BH-1 (44-45')
												-SM- SILTY SAND: Tan, dense, dry.		
50														

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 above.
Surface elevations are estimated from Google Earth data.

Logger: John Thurston | Drilling Equipment: Air Rotary | Driller: Scarborough Drilling

212C-MD-02334	TETRA TECH	**LOG OF BORING BH-1**	Page 3 of 3

Project Name: James E Upper Battery (2RP-3748)

Borehole Location: 32.408659, -103.840912 | Surface Elevation: 3313 ft

Borehole Number: BH-1 | Borehole Diameter (in.): 8 | Date Started: 1/12/2021 | Date Finished: 1/12/2021

WATER LEVEL OBSERVATIONS

While Drilling ▽ Dry ft Upon Completion of Drilling ▼ Dry ft

Remarks:

DEPTH (ft)	OPERATION TYPE	SAMPLE	CHLORIDE FIELD SCREENING (ppm) ExStik	VOC FIELD SCREENING (ppm) PID	SAMPLE RECOVERY (%)	MOISTURE CONTENT (%)	DRY DENSITY (pcf)	LIQUID LIMIT LL	PLASTICITY INDEX PI	MINUS NO. 200 (%)	GRAPHIC LOG	MATERIAL DESCRIPTION	DEPTH (ft)	REMARKS
55													55	

Bottom of borehole at 55.0 feet.

Sampler Types: Split Spoon, Acetate Liner, Shelby, Vane Shear, Bulk Sample, California, Grab Sample, Test Pit

Operation Types: Hand Auger, Mud Rotary, Air Rotary, Continuous Flight Auger, Direct Push, Wash Rotary, Core Barrel

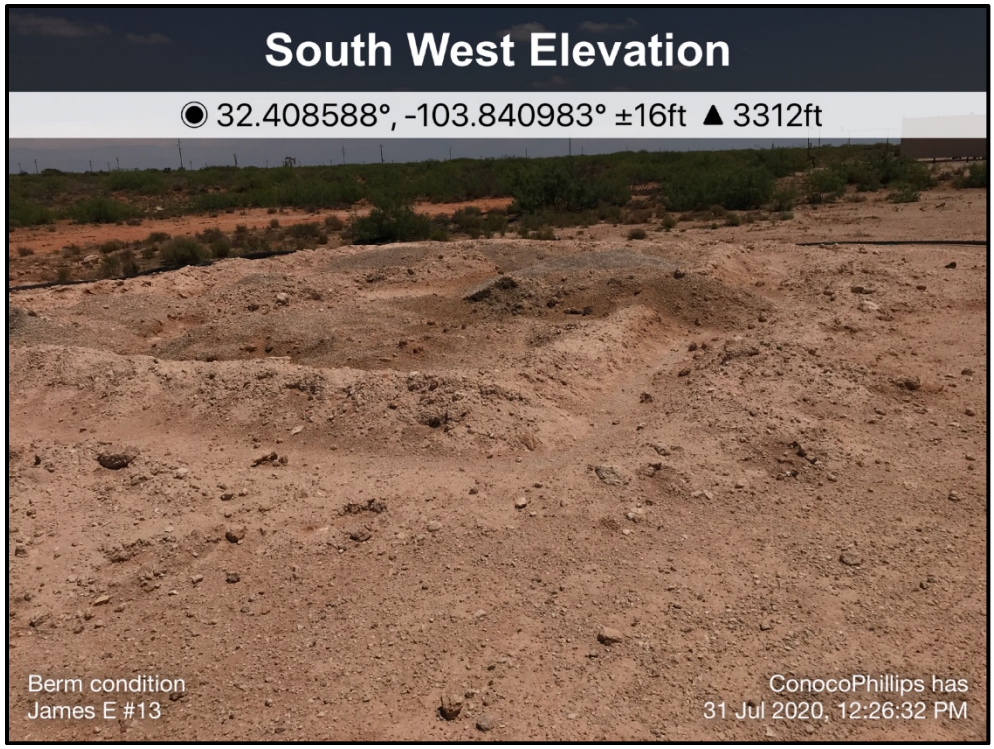
Notes:
Analytical samples are shown in the remarks column above.
Surface elevations are estimated from Google Earth data.

Logger: John Thurston | Drilling Equipment: Air Rotary | Driller: Scarborough Drilling

APPENDIX D
Photographic Documentation

TETRA TECH, INC. PROJECT NO. 212C-MD-02152	DESCRIPTION	View facing east of release at the fiberglass tank. Release is confined to the lined containment.	1
	SITE NAME	James E Upper Battery Load Line Release	6/17/2016

TETRA TECH, INC. PROJECT NO. 212C-MD-02152	DESCRIPTION	View facing northeast of release in lined containment at the fiberglass tank.	2
	SITE NAME	James E Upper Battery Load Line Release	6/17/2016

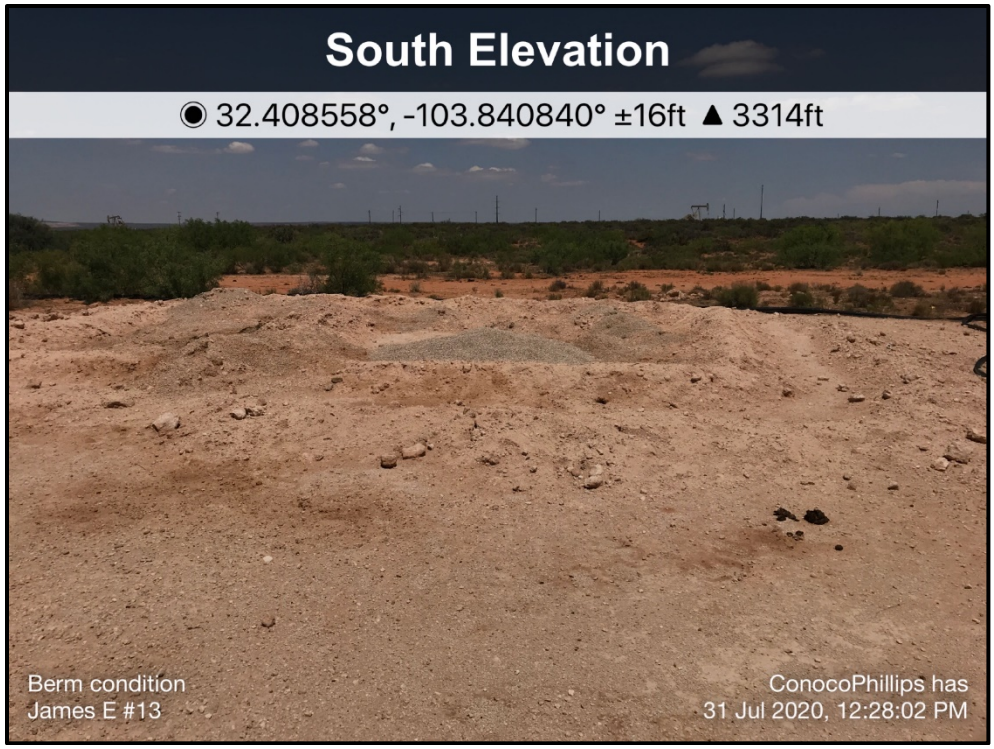


TETRA TECH, INC. PROJECT NO. 212C-MD-02152	DESCRIPTION	View facing northeast of former fiberglass tank location on well pad.	3
	SITE NAME	James E Upper Battery Load Line Release	7/31/2020

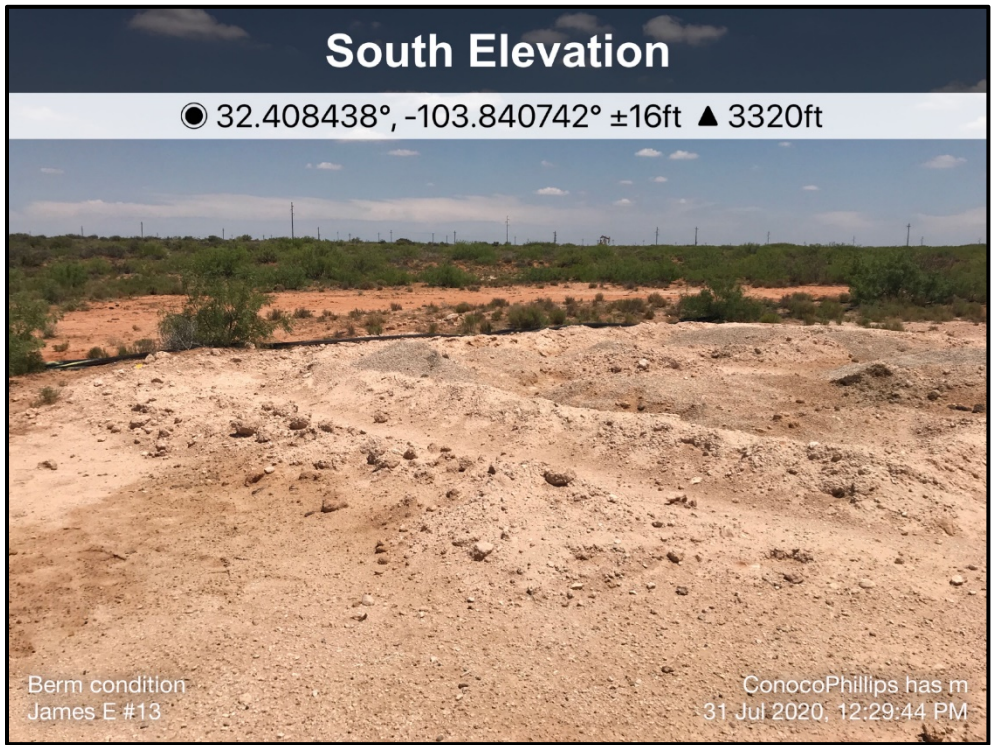
TETRA TECH, INC. PROJECT NO. 212C-MD-02152	DESCRIPTION	View facing east of flowlines adjacent to former fiberglass tank location.	4
	SITE NAME	James E Upper Battery Load Line Release	7/31/2020

TETRA TECH, INC. PROJECT NO. 212C-MD-02152	DESCRIPTION	View facing southwest of former fiberglass tank location on well pad.	5
	SITE NAME	James E Upper Battery Load Line Release	7/31/2020

TETRA TECH, INC. PROJECT NO. 212C-MD-02152	DESCRIPTION	View of former fiberglass tank location on well pad.	6
	SITE NAME	James E Upper Battery Load Line Release	7/31/2020



TETRA TECH, INC. PROJECT NO. 212C-MD-02152	DESCRIPTION	View facing north of former fiberglass tank location on well pad.	7
	SITE NAME	James E Upper Battery Load Line Release	7/31/2020



TETRA TECH, INC. PROJECT NO. 212C-MD-02152	DESCRIPTION	View facing north of former fiberglass tank location on well pad.	8
	SITE NAME	James E Upper Battery Load Line Release	7/31/2020

TETRA TECH, INC. PROJECT NO. 212C-MD-02152	DESCRIPTION	View facing northwest of flowline and well head on well pad.	9
	SITE NAME	James E Upper Battery Load Line Release	7/31/2020

TETRA TECH, INC. PROJECT NO. 212C-MD-02152	DESCRIPTION	View facing west of well flowline on well pad.	10
	SITE NAME	James E Upper Battery Load Line Release	7/31/2020

APPENDIX E
Laboratory Analytical Report

Pace Analytical®
National Center for Testing & Innovation

ANALYTICAL REPORT

December 22, 2020

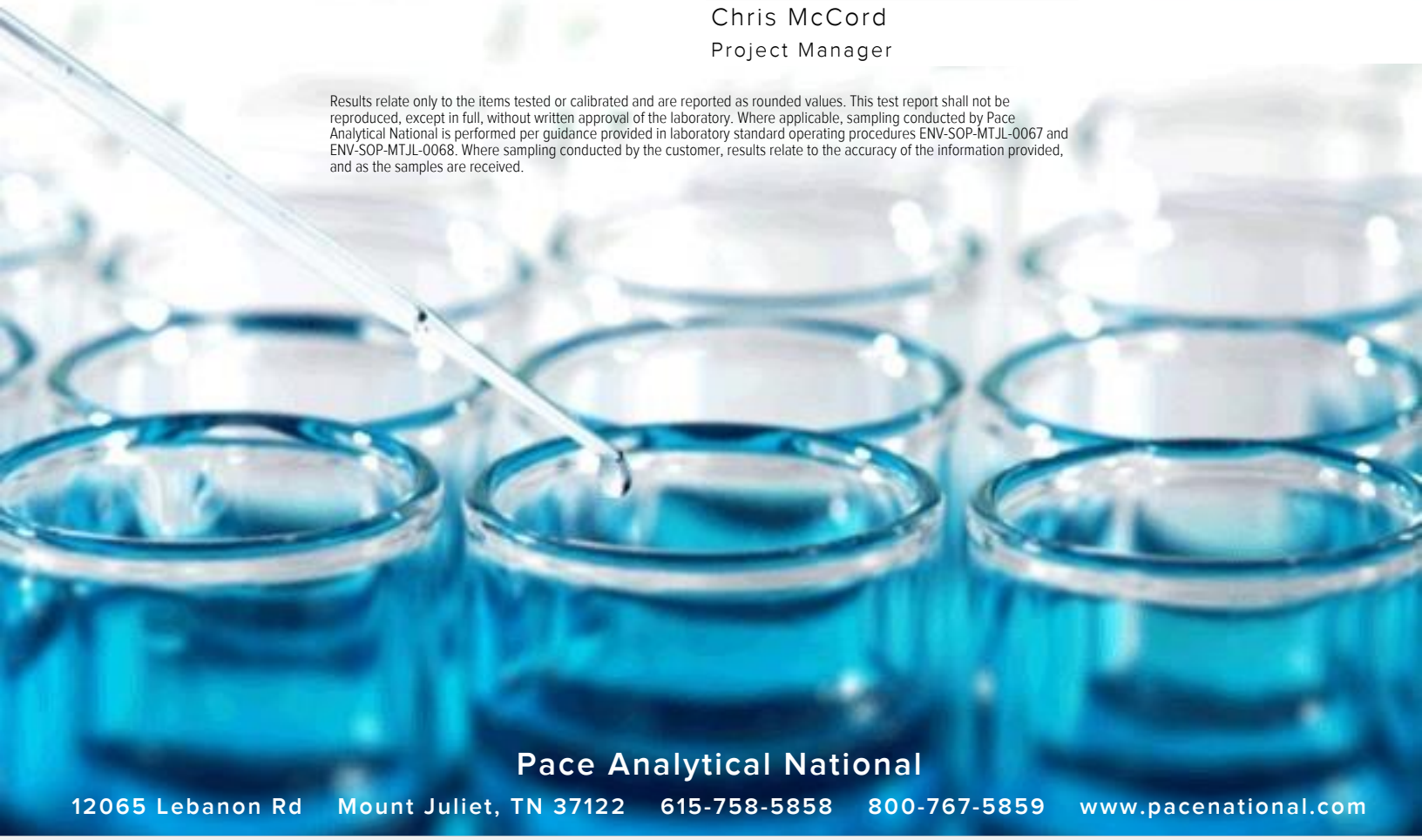
ConocoPhillips - Tetra Tech

Sample Delivery Group:	L1295413
Samples Received:	12/11/2020
Project Number:	212C-MD-02334 TASK29
Description:	James E Upper Battery Load Line Release(2 RP-3748)
Site:	EDDY COUNTY, NEW MEXICO
Report To:	Christian Llull 901 West Wall Suite 100 Midland, TX 79701

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

TABLE OF CONTENTS

AH-1 (0-1) L1295413-01 Solid

Collected by: Adrian Garcia | Collected date/time: 12/09/20 10:00 | Received date/time: 12/11/20 08:00

Method	Batch	Dilution	Preparation date/time	Analysis date/time	Analyst	Location
Total Solids by Method 2540 G-2011	WG1593813	1	12/18/20 01:09	12/18/20 02:33	KBC	Mt. Juliet, TN
Wet Chemistry by Method 300.0	WG1593711	10	12/17/20 22:45	12/18/20 00:26	MCG	Mt. Juliet, TN
Volatile Organic Compounds (GC) by Method 8015D/GRO	WG1594007	1	12/12/20 16:22	12/18/20 09:21	TPR	Mt. Juliet, TN
Volatile Organic Compounds (GC/MS) by Method 8260B	WG1591261	1	12/12/20 16:22	12/14/20 02:31	DWR	Mt. Juliet, TN
Semi-Volatile Organic Compounds (GC) by Method 8015	WG1593305	20	12/18/20 09:22	12/18/20 21:27	JDG	Mt. Juliet, TN

AH-1 (1-2) L1295413-02 Solid

Collected by: Adrian Garcia | Collected date/time: 12/09/20 10:10 | Received date/time: 12/11/20 08:00

Method	Batch	Dilution	Preparation date/time	Analysis date/time	Analyst	Location
Total Solids by Method 2540 G-2011	WG1593813	1	12/18/20 01:09	12/18/20 02:33	KBC	Mt. Juliet, TN
Wet Chemistry by Method 300.0	WG1593711	10	12/17/20 22:45	12/18/20 00:35	MCG	Mt. Juliet, TN
Volatile Organic Compounds (GC) by Method 8015D/GRO	WG1594382	25	12/12/20 16:22	12/19/20 07:38	TPR	Mt. Juliet, TN
Volatile Organic Compounds (GC/MS) by Method 8260B	WG1591261	1	12/12/20 16:22	12/14/20 02:50	DWR	Mt. Juliet, TN
Semi-Volatile Organic Compounds (GC) by Method 8015	WG1593305	10	12/18/20 09:22	12/18/20 21:14	JDG	Mt. Juliet, TN

AH-1 (2-3) L1295413-03 Solid

Collected by: Adrian Garcia | Collected date/time: 12/09/20 10:20 | Received date/time: 12/11/20 08:00

Method	Batch	Dilution	Preparation date/time	Analysis date/time	Analyst	Location
Total Solids by Method 2540 G-2011	WG1593813	1	12/18/20 01:09	12/18/20 02:33	KBC	Mt. Juliet, TN
Wet Chemistry by Method 300.0	WG1593711	5	12/17/20 22:45	12/18/20 01:23	MCG	Mt. Juliet, TN
Volatile Organic Compounds (GC) by Method 8015D/GRO	WG1594382	1	12/12/20 16:22	12/19/20 06:36	TPR	Mt. Juliet, TN
Volatile Organic Compounds (GC/MS) by Method 8260B	WG1591261	1	12/12/20 16:22	12/14/20 03:10	DWR	Mt. Juliet, TN
Semi-Volatile Organic Compounds (GC) by Method 8015	WG1593305	1	12/18/20 09:22	12/18/20 18:43	JDG	Mt. Juliet, TN

AH-1 (3-4) L1295413-04 Solid

Collected by: Adrian Garcia | Collected date/time: 12/09/20 10:30 | Received date/time: 12/11/20 08:00

Method	Batch	Dilution	Preparation date/time	Analysis date/time	Analyst	Location
Total Solids by Method 2540 G-2011	WG1593814	1	12/18/20 16:16	12/18/20 16:30	KBC	Mt. Juliet, TN
Wet Chemistry by Method 300.0	WG1593711	10	12/17/20 22:45	12/18/20 01:32	MCG	Mt. Juliet, TN
Volatile Organic Compounds (GC) by Method 8015D/GRO	WG1594382	1	12/12/20 16:22	12/19/20 06:57	TPR	Mt. Juliet, TN
Volatile Organic Compounds (GC/MS) by Method 8260B	WG1591261	1	12/12/20 16:22	12/14/20 03:29	DWR	Mt. Juliet, TN
Semi-Volatile Organic Compounds (GC) by Method 8015	WG1593305	1	12/18/20 09:22	12/18/20 18:04	JDG	Mt. Juliet, TN

AH-1 (5-6) L1295413-05 Solid

Collected by: Adrian Garcia | Collected date/time: 12/09/20 10:40 | Received date/time: 12/11/20 08:00

Method	Batch	Dilution	Preparation date/time	Analysis date/time	Analyst	Location
Total Solids by Method 2540 G-2011	WG1593814	1	12/18/20 16:16	12/18/20 16:30	KBC	Mt. Juliet, TN
Wet Chemistry by Method 300.0	WG1593711	50	12/17/20 22:45	12/18/20 02:04	MCG	Mt. Juliet, TN
Volatile Organic Compounds (GC) by Method 8015D/GRO	WG1594007	1	12/12/20 16:22	12/18/20 11:47	TPR	Mt. Juliet, TN
Volatile Organic Compounds (GC/MS) by Method 8260B	WG1591261	1	12/12/20 16:22	12/14/20 03:48	DWR	Mt. Juliet, TN
Semi-Volatile Organic Compounds (GC) by Method 8015	WG1593305	1	12/18/20 09:22	12/18/20 19:08	JDG	Mt. Juliet, TN

AH-1 (6-7) L1295413-06 Solid

Collected by: Adrian Garcia | Collected date/time: 12/09/20 11:00 | Received date/time: 12/11/20 08:00

Method	Batch	Dilution	Preparation date/time	Analysis date/time	Analyst	Location
Total Solids by Method 2540 G-2011	WG1593814	1	12/18/20 16:16	12/18/20 16:30	KBC	Mt. Juliet, TN
Wet Chemistry by Method 300.0	WG1593711	50	12/17/20 22:45	12/18/20 02:14	MCG	Mt. Juliet, TN
Volatile Organic Compounds (GC) by Method 8015D/GRO	WG1594007	1	12/12/20 16:22	12/18/20 12:14	TPR	Mt. Juliet, TN
Volatile Organic Compounds (GC/MS) by Method 8260B	WG1591261	1	12/12/20 16:22	12/14/20 04:07	DWR	Mt. Juliet, TN
Semi-Volatile Organic Compounds (GC) by Method 8015	WG1593305	1	12/18/20 09:22	12/18/20 19:21	JDG	Mt. Juliet, TN

AH-2 (0-1) L1295413-07 Solid

Collected by: Adrian Garcia | Collected date/time: 12/09/20 11:30 | Received date/time: 12/11/20 08:00

Method	Batch	Dilution	Preparation date/time	Analysis date/time	Analyst	Location
Total Solids by Method 2540 G-2011	WG1593814	1	12/18/20 16:16	12/18/20 16:30	KBC	Mt. Juliet, TN
Wet Chemistry by Method 300.0	WG1593711	1	12/17/20 22:45	12/18/20 02:23	MCG	Mt. Juliet, TN
Volatile Organic Compounds (GC) by Method 8015D/GRO	WG1594007	1	12/12/20 16:22	12/18/20 12:37	TPR	Mt. Juliet, TN
Volatile Organic Compounds (GC/MS) by Method 8260B	WG1591261	1	12/12/20 16:22	12/14/20 04:26	DWR	Mt. Juliet, TN
Semi-Volatile Organic Compounds (GC) by Method 8015	WG1593305	1	12/18/20 09:22	12/18/20 19:33	JDG	Mt. Juliet, TN

AH-2 (1-2) L1295413-08 Solid

Collected by: Adrian Garcia | Collected date/time: 12/09/20 12:00 | Received date/time: 12/11/20 08:00

Method	Batch	Dilution	Preparation date/time	Analysis date/time	Analyst	Location
Total Solids by Method 2540 G-2011	WG1593814	1	12/18/20 16:16	12/18/20 16:30	KBC	Mt. Juliet, TN
Wet Chemistry by Method 300.0	WG1593711	1	12/17/20 22:45	12/18/20 02:33	MCG	Mt. Juliet, TN
Volatile Organic Compounds (GC) by Method 8015D/GRO	WG1594382	1	12/12/20 16:22	12/19/20 07:17	TPR	Mt. Juliet, TN
Volatile Organic Compounds (GC/MS) by Method 8260B	WG1591261	1	12/12/20 16:22	12/14/20 04:45	DWR	Mt. Juliet, TN
Semi-Volatile Organic Compounds (GC) by Method 8015	WG1593305	1	12/18/20 09:22	12/18/20 19:46	JDG	Mt. Juliet, TN

AH-5 (0-1) L1295413-09 Solid

Collected by: Adrian Garcia | Collected date/time: 12/09/20 12:10 | Received date/time: 12/11/20 08:00

Method	Batch	Dilution	Preparation date/time	Analysis date/time	Analyst	Location
Total Solids by Method 2540 G-2011	WG1593814	1	12/18/20 16:16	12/18/20 16:30	KBC	Mt. Juliet, TN
Wet Chemistry by Method 300.0	WG1593711	1	12/17/20 22:45	12/18/20 02:42	MCG	Mt. Juliet, TN
Volatile Organic Compounds (GC) by Method 8015D/GRO	WG1594541	1	12/12/20 16:22	12/19/20 07:44	DWR	Mt. Juliet, TN
Volatile Organic Compounds (GC/MS) by Method 8260B	WG1591261	1	12/12/20 16:22	12/14/20 05:04	DWR	Mt. Juliet, TN
Semi-Volatile Organic Compounds (GC) by Method 8015	WG1593305	1	12/18/20 09:22	12/18/20 19:59	JDG	Mt. Juliet, TN

AH-5 (1-2) L1295413-10 Solid

Collected by: Adrian Garcia | Collected date/time: 12/09/20 12:20 | Received date/time: 12/11/20 08:00

Method	Batch	Dilution	Preparation date/time	Analysis date/time	Analyst	Location
Total Solids by Method 2540 G-2011	WG1593814	1	12/18/20 16:16	12/18/20 16:30	KBC	Mt. Juliet, TN
Wet Chemistry by Method 300.0	WG1593711	1	12/17/20 22:45	12/18/20 02:52	MCG	Mt. Juliet, TN
Volatile Organic Compounds (GC) by Method 8015D/GRO	WG1594139	1	12/12/20 16:22	12/18/20 23:25	TPR	Mt. Juliet, TN
Volatile Organic Compounds (GC/MS) by Method 8260B	WG1591261	1	12/12/20 16:22	12/14/20 05:23	DWR	Mt. Juliet, TN
Semi-Volatile Organic Compounds (GC) by Method 8015	WG1593305	1	12/18/20 09:22	12/18/20 18:55	JDG	Mt. Juliet, TN

AH-3 (0-1) L1295413-11 Solid

Collected by: Adrian Garcia | Collected date/time: 12/09/20 12:30 | Received date/time: 12/11/20 08:00

Method	Batch	Dilution	Preparation date/time	Analysis date/time	Analyst	Location
Total Solids by Method 2540 G-2011	WG1593814	1	12/18/20 16:16	12/18/20 16:30	KBC	Mt. Juliet, TN
Wet Chemistry by Method 300.0	WG1593711	1	12/17/20 22:45	12/18/20 03:01	MCG	Mt. Juliet, TN
Volatile Organic Compounds (GC) by Method 8015D/GRO	WG1594139	1	12/12/20 16:22	12/18/20 23:46	TPR	Mt. Juliet, TN
Volatile Organic Compounds (GC/MS) by Method 8260B	WG1591261	1	12/12/20 16:22	12/14/20 05:42	DWR	Mt. Juliet, TN
Semi-Volatile Organic Compounds (GC) by Method 8015	WG1593305	1	12/18/20 09:22	12/18/20 20:24	JDG	Mt. Juliet, TN

AH-3 (1-2) L1295413-12 Solid

Collected by: Adrian Garcia | Collected date/time: 12/09/20 12:40 | Received date/time: 12/11/20 08:00

Method	Batch	Dilution	Preparation date/time	Analysis date/time	Analyst	Location
Total Solids by Method 2540 G-2011	WG1593814	1	12/18/20 16:16	12/18/20 16:30	KBC	Mt. Juliet, TN
Wet Chemistry by Method 300.0	WG1593711	1	12/17/20 22:45	12/18/20 03:11	MCG	Mt. Juliet, TN
Volatile Organic Compounds (GC) by Method 8015D/GRO	WG1594139	1	12/12/20 16:22	12/19/20 00:07	TPR	Mt. Juliet, TN
Volatile Organic Compounds (GC/MS) by Method 8260B	WG1591261	1	12/12/20 16:22	12/14/20 06:01	DWR	Mt. Juliet, TN
Semi-Volatile Organic Compounds (GC) by Method 8015	WG1593305	1	12/18/20 09:22	12/18/20 20:11	JDG	Mt. Juliet, TN

AH-4 (0-1) L1295413-13 Solid

Collected by: Adrian Garcia | Collected date/time: 12/09/20 13:00 | Received date/time: 12/11/20 08:00

Method	Batch	Dilution	Preparation date/time	Analysis date/time	Analyst	Location
Total Solids by Method 2540 G-2011	WG1593814	1	12/18/20 16:16	12/18/20 16:30	KBC	Mt. Juliet, TN
Wet Chemistry by Method 300.0	WG1593711	1	12/17/20 22:45	12/18/20 03:20	MCG	Mt. Juliet, TN
Volatile Organic Compounds (GC) by Method 8015D/GRO	WG1594139	1	12/12/20 16:22	12/19/20 00:28	TPR	Mt. Juliet, TN
Volatile Organic Compounds (GC/MS) by Method 8260B	WG1591261	1	12/12/20 16:22	12/14/20 06:20	DWR	Mt. Juliet, TN
Semi-Volatile Organic Compounds (GC) by Method 8015	WG1593305	1	12/18/20 09:22	12/18/20 18:17	JDG	Mt. Juliet, TN

AH-4 (1-2) L1295413-14 Solid

Collected by: Adrian Garcia | Collected date/time: 12/09/20 13:30 | Received date/time: 12/11/20 08:00

Method	Batch	Dilution	Preparation date/time	Analysis date/time	Analyst	Location
Total Solids by Method 2540 G-2011	WG1593816	1	12/18/20 16:02	12/18/20 16:14	KBC	Mt. Juliet, TN
Wet Chemistry by Method 300.0	WG1593711	1	12/17/20 22:45	12/18/20 03:30	MCG	Mt. Juliet, TN
Volatile Organic Compounds (GC) by Method 8015D/GRO	WG1594139	1	12/12/20 16:22	12/19/20 00:48	TPR	Mt. Juliet, TN
Volatile Organic Compounds (GC/MS) by Method 8260B	WG1591261	1	12/12/20 16:22	12/14/20 06:39	DWR	Mt. Juliet, TN
Semi-Volatile Organic Compounds (GC) by Method 8015	WG1593305	1	12/18/20 09:22	12/18/20 18:30	JDG	Mt. Juliet, TN

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

Total Solids by Method 2540 G-2011

Analyte	Result	Qualifier	Dilution	Analysis	Batch
	%			date / time	
Total Solids	93.8		1	12/18/2020 02:33	WG1593813

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	1650		98.1	213	10	12/18/2020 00:26	WG1593711

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	8.79		0.0231	0.107	1	12/18/2020 09:21	WG1594007
(S) a,a,a-Trifluorotoluene(FID)	*84.8*			*77.0-120*		*12/18/2020 09:21*	WG1594007

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		0.000529	0.00113	1	12/14/2020 02:31	WG1591261
Toluene	U		0.00147	0.00566	1	12/14/2020 02:31	WG1591261
Ethylbenzene	U		0.000835	0.00283	1	12/14/2020 02:31	WG1591261
Total Xylenes	U		0.000996	0.00736	1	12/14/2020 02:31	WG1591261
(S) Toluene-d8	*113*			*75.0-131*		*12/14/2020 02:31*	WG1591261
(S) 4-Bromofluorobenzene	*149*	J1		*67.0-138*		*12/14/2020 02:31*	WG1591261
(S) 1,2-Dichloroethane-d4	*90.1*			*70.0-130*		*12/14/2020 02:31*	WG1591261

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	4220		34.3	85.3	20	12/18/2020 21:27	WG1593305
C28-C40 Oil Range	3060		5.84	85.3	20	12/18/2020 21:27	WG1593305
(S) o-Terphenyl	*215*	J7		*18.0-148*		*12/18/2020 21:27*	WG1593305

Total Solids by Method 2540 G-2011

Analyte	Result	Qualifier	Dilution	Analysis	Batch
	%			date / time	
Total Solids	94.2		1	12/18/2020 02:33	WG1593813

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	1190		97.7	212	10	12/18/2020 00:35	WG1593711

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	31.8		0.610	2.81	25	12/19/2020 07:38	WG1594382
(S) a,a,a-Trifluorotoluene(FID)	*95.1*			*77.0-120*		*12/19/2020 07:38*	WG1594382

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		0.000525	0.00112	1	12/14/2020 02:50	WG1591261
Toluene	U		0.00146	0.00562	1	12/14/2020 02:50	WG1591261
Ethylbenzene	U		0.000828	0.00281	1	12/14/2020 02:50	WG1591261
Total Xylenes	U		0.000989	0.00730	1	12/14/2020 02:50	WG1591261
(S) Toluene-d8	*113*			*75.0-131*		*12/14/2020 02:50*	WG1591261
(S) 4-Bromofluorobenzene	*129*			*67.0-138*		*12/14/2020 02:50*	WG1591261
(S) 1,2-Dichloroethane-d4	*87.3*			*70.0-130*		*12/14/2020 02:50*	WG1591261

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	2230		17.1	42.5	10	12/18/2020 21:14	WG1593305
C28-C40 Oil Range	1320		2.91	42.5	10	12/18/2020 21:14	WG1593305
(S) o-Terphenyl	*213*	J1		*18.0-148*		*12/18/2020 21:14*	WG1593305

Sample Narrative:

L1295413-02 WG1593305: Surrogate failure due to matrix interference

Total Solids by Method 2540 G-2011

Analyte	Result	Qualifier	Dilution	Analysis	Batch
	%			date / time	
Total Solids	93.2		1	12/18/2020 02:33	WG1593813

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	1900		49.4	107	5	12/18/2020 01:23	WG1593711

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	12/19/2020 06:36	WG1594382
(S) a,a,a-Trifluorotoluene(FID)	*91.4*			*77.0-120*		*12/19/2020 06:36*	WG1594382

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		0.000536	0.00115	1	12/14/2020 03:10	WG1591261
Toluene	U		0.00149	0.00574	1	12/14/2020 03:10	WG1591261
Ethylbenzene	U		0.000845	0.00287	1	12/14/2020 03:10	WG1591261
Total Xylenes	U		0.00101	0.00746	1	12/14/2020 03:10	WG1591261
(S) Toluene-d8	*117*			*75.0-131*		*12/14/2020 03:10*	WG1591261
(S) 4-Bromofluorobenzene	*105*			*67.0-138*		*12/14/2020 03:10*	WG1591261
(S) 1,2-Dichloroethane-d4	*85.9*			*70.0-130*		*12/14/2020 03:10*	WG1591261

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	3.08	J	1.73	4.29	1	12/18/2020 18:43	WG1593305
C28-C40 Oil Range	5.39	B	0.294	4.29	1	12/18/2020 18:43	WG1593305
(S) o-Terphenyl	*74.0*			*18.0-148*		*12/18/2020 18:43*	WG1593305

Total Solids by Method 2540 G-2011

Analyte	Result	Qualifier	Dilution	Analysis	Batch
	%			date / time	
Total Solids	91.2		1	12/18/2020 16:30	WG1593814

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	3100		101	219	10	12/18/2020 01:32	WG1593711

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		0.0238	0.110	1	12/19/2020 06:57	WG1594382
(S) a,a,a-Trifluorotoluene(FID)	*90.7*			*77.0-120*		*12/19/2020 06:57*	WG1594382

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		0.000557	0.00119	1	12/14/2020 03:29	WG1591261
Toluene	U		0.00155	0.00596	1	12/14/2020 03:29	WG1591261
Ethylbenzene	U		0.000879	0.00298	1	12/14/2020 03:29	WG1591261
Total Xylenes	U		0.00105	0.00775	1	12/14/2020 03:29	WG1591261
(S) Toluene-d8	*116*			*75.0-131*		*12/14/2020 03:29*	WG1591261
(S) 4-Bromofluorobenzene	*106*			*67.0-138*		*12/14/2020 03:29*	WG1591261
(S) 1,2-Dichloroethane-d4	*83.6*			*70.0-130*		*12/14/2020 03:29*	WG1591261

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		1.76	4.38	1	12/18/2020 18:04	WG1593305
C28-C40 Oil Range	1.04	B J	0.300	4.38	1	12/18/2020 18:04	WG1593305
(S) o-Terphenyl	*52.2*			*18.0-148*		*12/18/2020 18:04*	WG1593305

Total Solids by Method 2540 G-2011

Analyte	Result	Qualifier	Dilution	Analysis	Batch
	%			date / time	
Total Solids	89.0		1	12/18/2020 16:30	WG1593814

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	10100		517	1120	50	12/18/2020 02:04	WG1593711

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	0.171	B	0.0244	0.112	1	12/18/2020 11:47	WG1594007
(S) a,a,a-Trifluorotoluene(FID)	*94.0*			*77.0-120*		*12/18/2020 11:47*	WG1594007

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		0.000582	0.00125	1	12/14/2020 03:48	WG1591261
Toluene	U		0.00162	0.00623	1	12/14/2020 03:48	WG1591261
Ethylbenzene	U		0.000918	0.00312	1	12/14/2020 03:48	WG1591261
Total Xylenes	U		0.00110	0.00810	1	12/14/2020 03:48	WG1591261
(S) Toluene-d8	*117*			*75.0-131*		*12/14/2020 03:48*	WG1591261
(S) 4-Bromofluorobenzene	*101*			*67.0-138*		*12/14/2020 03:48*	WG1591261
(S) 1,2-Dichloroethane-d4	*83.2*			*70.0-130*		*12/14/2020 03:48*	WG1591261

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	28.3		1.81	4.49	1	12/18/2020 19:08	WG1593305
C28-C40 Oil Range	22.9	B	0.308	4.49	1	12/18/2020 19:08	WG1593305
(S) o-Terphenyl	*51.5*			*18.0-148*		*12/18/2020 19:08*	WG1593305

Total Solids by Method 2540 G-2011

Analyte	Result	Qualifier	Dilution	Analysis	Batch
	%			date / time	
Total Solids	89.7		1	12/18/2020 16:30	WG1593814

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	9720		513	1110	50	12/18/2020 02:14	WG1593711

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	0.177	B	0.0242	0.111	1	12/18/2020 12:14	WG1594007
(S) a,a,a-Trifluorotoluene(FID)	*92.4*			*77.0-120*		*12/18/2020 12:14*	WG1594007

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		0.000574	0.00123	1	12/14/2020 04:07	WG1591261
Toluene	U		0.00160	0.00615	1	12/14/2020 04:07	WG1591261
Ethylbenzene	U		0.000906	0.00307	1	12/14/2020 04:07	WG1591261
Total Xylenes	U		0.00108	0.00799	1	12/14/2020 04:07	WG1591261
(S) Toluene-d8	*116*			*75.0-131*		*12/14/2020 04:07*	WG1591261
(S) 4-Bromofluorobenzene	*102*			*67.0-138*		*12/14/2020 04:07*	WG1591261
(S) 1,2-Dichloroethane-d4	*80.4*			*70.0-130*		*12/14/2020 04:07*	WG1591261

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	44.7		1.79	4.46	1	12/18/2020 19:21	WG1593305
C28-C40 Oil Range	38.4		0.305	4.46	1	12/18/2020 19:21	WG1593305
(S) o-Terphenyl	*45.4*			*18.0-148*		*12/18/2020 19:21*	WG1593305

Total Solids by Method 2540 G-2011

Analyte	Result	Qualifier	Dilution	Analysis	Batch
	%			date / time	
Total Solids	99.1		1	12/18/2020 16:30	WG1593814

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	9.46	J	9.28	20.2	1	12/18/2020 02:23	WG1593711

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	0.139	B	0.0219	0.101	1	12/18/2020 12:37	WG1594007
(S) a,a,a-Trifluorotoluene(FID)	*92.4*			*77.0-120*		*12/18/2020 12:37*	WG1594007

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		0.000476	0.00102	1	12/14/2020 04:26	WG1591261
Toluene	U		0.00132	0.00509	1	12/14/2020 04:26	WG1591261
Ethylbenzene	U		0.000751	0.00255	1	12/14/2020 04:26	WG1591261
Total Xylenes	U		0.000896	0.00662	1	12/14/2020 04:26	WG1591261
(S) Toluene-d8	*116*			*75.0-131*		*12/14/2020 04:26*	WG1591261
(S) 4-Bromofluorobenzene	*104*			*67.0-138*		*12/14/2020 04:26*	WG1591261
(S) 1,2-Dichloroethane-d4	*85.1*			*70.0-130*		*12/14/2020 04:26*	WG1591261

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	14.0		1.62	4.04	1	12/18/2020 19:33	WG1593305
C28-C40 Oil Range	45.7		0.277	4.04	1	12/18/2020 19:33	WG1593305
(S) o-Terphenyl	*53.9*			*18.0-148*		*12/18/2020 19:33*	WG1593305

Total Solids by Method 2540 G-2011

Analyte	Result	Qualifier	Dilution	Analysis	Batch
	%			date / time	
Total Solids	97.0		1	12/18/2020 16:30	WG1593814

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	186		9.48	20.6	1	12/18/2020 02:33	WG1593711

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	12/19/2020 07:17	WG1594382
(S) a,a,a-Trifluorotoluene(FID)	*89.5*			*77.0-120*		*12/19/2020 07:17*	WG1594382

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		0.000496	0.00106	1	12/14/2020 04:45	WG1591261
Toluene	U		0.00138	0.00531	1	12/14/2020 04:45	WG1591261
Ethylbenzene	U		0.000783	0.00265	1	12/14/2020 04:45	WG1591261
Total Xylenes	U		0.000934	0.00690	1	12/14/2020 04:45	WG1591261
(S) Toluene-d8	*116*			*75.0-131*		*12/14/2020 04:45*	WG1591261
(S) 4-Bromofluorobenzene	*103*			*67.0-138*		*12/14/2020 04:45*	WG1591261
(S) 1,2-Dichloroethane-d4	*85.6*			*70.0-130*		*12/14/2020 04:45*	WG1591261

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	25.4		1.66	4.12	1	12/18/2020 19:46	WG1593305
C28-C40 Oil Range	45.9		0.282	4.12	1	12/18/2020 19:46	WG1593305
(S) o-Terphenyl	*61.6*			*18.0-148*		*12/18/2020 19:46*	WG1593305

Total Solids by Method 2540 G-2011

Analyte	Result	Qualifier	Dilution	Analysis	Batch
	%			date / time	
Total Solids	96.8		1	12/18/2020 16:30	WG1593814

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	236		9.51	20.7	1	12/18/2020 02:42	WG1593711

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	12/19/2020 07:44	WG1594541
(S) a,a,a-Trifluorotoluene(FID)	*108*			*77.0-120*		*12/19/2020 07:44*	WG1594541

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		0.000498	0.00107	1	12/14/2020 05:04	WG1591261
Toluene	U		0.00139	0.00534	1	12/14/2020 05:04	WG1591261
Ethylbenzene	U		0.000786	0.00267	1	12/14/2020 05:04	WG1591261
Total Xylenes	U		0.000939	0.00694	1	12/14/2020 05:04	WG1591261
(S) Toluene-d8	*116*			*75.0-131*		*12/14/2020 05:04*	WG1591261
(S) 4-Bromofluorobenzene	*101*			*67.0-138*		*12/14/2020 05:04*	WG1591261
(S) 1,2-Dichloroethane-d4	*83.9*			*70.0-130*		*12/14/2020 05:04*	WG1591261

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	34.4		1.66	4.13	1	12/18/2020 19:59	WG1593305
C28-C40 Oil Range	60.0		0.283	4.13	1	12/18/2020 19:59	WG1593305
(S) o-Terphenyl	*71.0*			*18.0-148*		*12/18/2020 19:59*	WG1593305

Total Solids by Method 2540 G-2011

Analyte	Result	Qualifier	Dilution	Analysis	Batch
	%			date / time	
Total Solids	99.0		1	12/18/2020 16:30	WG1593814

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	U		9.29	20.2	1	12/18/2020 02:52	WG1593711

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	0.125	B	0.0219	0.101	1	12/18/2020 23:25	WG1594139
(S) a,a,a-Trifluorotoluene(FID)	*105*			*77.0-120*		*12/18/2020 23:25*	WG1594139

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		0.000476	0.00102	1	12/14/2020 05:23	WG1591261
Toluene	U		0.00133	0.00510	1	12/14/2020 05:23	WG1591261
Ethylbenzene	U		0.000752	0.00255	1	12/14/2020 05:23	WG1591261
Total Xylenes	U		0.000898	0.00663	1	12/14/2020 05:23	WG1591261
(S) Toluene-d8	*118*			*75.0-131*		*12/14/2020 05:23*	WG1591261
(S) 4-Bromofluorobenzene	*104*			*67.0-138*		*12/14/2020 05:23*	WG1591261
(S) 1,2-Dichloroethane-d4	*85.5*			*70.0-130*		*12/14/2020 05:23*	WG1591261

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	6.03		1.63	4.04	1	12/18/2020 18:55	WG1593305
C28-C40 Oil Range	5.25	B	0.277	4.04	1	12/18/2020 18:55	WG1593305
(S) o-Terphenyl	*61.3*			*18.0-148*		*12/18/2020 18:55*	WG1593305

Total Solids by Method 2540 G-2011

Analyte	Result	Qualifier	Dilution	Analysis	Batch
	%			date / time	
Total Solids	98.9		1	12/18/2020 16:30	WG1593814

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	30.1		9.31	20.2	1	12/18/2020 03:01	WG1593711

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	0.253	B	0.0220	0.101	1	12/18/2020 23:46	WG1594139
(S) a,a,a-Trifluorotoluene(FID)	*108*			*77.0-120*		*12/18/2020 23:46*	WG1594139

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		0.000478	0.00102	1	12/14/2020 05:42	WG1591261
Toluene	U		0.00133	0.00512	1	12/14/2020 05:42	WG1591261
Ethylbenzene	U		0.000754	0.00256	1	12/14/2020 05:42	WG1591261
Total Xylenes	U		0.000900	0.00665	1	12/14/2020 05:42	WG1591261
(S) Toluene-d8	*118*			*75.0-131*		*12/14/2020 05:42*	WG1591261
(S) 4-Bromofluorobenzene	*102*			*67.0-138*		*12/14/2020 05:42*	WG1591261
(S) 1,2-Dichloroethane-d4	*84.7*			*70.0-130*		*12/14/2020 05:42*	WG1591261

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	34.0		1.63	4.05	1	12/18/2020 20:24	WG1593305
C28-C40 Oil Range	88.6		0.277	4.05	1	12/18/2020 20:24	WG1593305
(S) o-Terphenyl	*72.0*			*18.0-148*		*12/18/2020 20:24*	WG1593305

Total Solids by Method 2540 G-2011

Analyte	Result	Qualifier	Dilution	Analysis	Batch
	%			date / time	
Total Solids	97.6		1	12/18/2020 16:30	WG1593814

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	25.0		9.43	20.5	1	12/18/2020 03:11	WG1593711

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	0.0421	B J	0.0222	0.102	1	12/19/2020 00:07	WG1594139
(S) a,a,a-Trifluorotoluene(FID)	*108*			*77.0-120*		*12/19/2020 00:07*	WG1594139

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		0.000490	0.00105	1	12/14/2020 06:01	WG1591261
Toluene	U		0.00136	0.00525	1	12/14/2020 06:01	WG1591261
Ethylbenzene	U		0.000774	0.00262	1	12/14/2020 06:01	WG1591261
Total Xylenes	U		0.000924	0.00682	1	12/14/2020 06:01	WG1591261
(S) Toluene-d8	*117*			*75.0-131*		*12/14/2020 06:01*	WG1591261
(S) 4-Bromofluorobenzene	*102*			*67.0-138*		*12/14/2020 06:01*	WG1591261
(S) 1,2-Dichloroethane-d4	*85.1*			*70.0-130*		*12/14/2020 06:01*	WG1591261

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	17.4		1.65	4.10	1	12/18/2020 20:11	WG1593305
C28-C40 Oil Range	43.8		0.281	4.10	1	12/18/2020 20:11	WG1593305
(S) o-Terphenyl	*60.8*			*18.0-148*		*12/18/2020 20:11*	WG1593305

Total Solids by Method 2540 G-2011

Analyte	Result	Qualifier	Dilution	Analysis	Batch
	%			date / time	
Total Solids	97.4		1	12/18/2020 16:30	WG1593814

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	U		9.45	20.5	1	12/18/2020 03:20	WG1593711

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	0.0262	B J	0.0223	0.103	1	12/19/2020 00:28	WG1594139
(S) a,a,a-Trifluorotoluene(FID)	*109*			*77.0-120*		*12/19/2020 00:28*	WG1594139

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		0.000493	0.00105	1	12/14/2020 06:20	WG1591261
Toluene	U		0.00137	0.00527	1	12/14/2020 06:20	WG1591261
Ethylbenzene	U		0.000777	0.00264	1	12/14/2020 06:20	WG1591261
Total Xylenes	U		0.000928	0.00685	1	12/14/2020 06:20	WG1591261
(S) Toluene-d8	*115*			*75.0-131*		*12/14/2020 06:20*	WG1591261
(S) 4-Bromofluorobenzene	*102*			*67.0-138*		*12/14/2020 06:20*	WG1591261
(S) 1,2-Dichloroethane-d4	*84.7*			*70.0-130*		*12/14/2020 06:20*	WG1591261

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		1.65	4.11	1	12/18/2020 18:17	WG1593305
C28-C40 Oil Range	1.41	B J	0.281	4.11	1	12/18/2020 18:17	WG1593305
(S) o-Terphenyl	*67.0*			*18.0-148*		*12/18/2020 18:17*	WG1593305

Total Solids by Method 2540 G-2011

Analyte	Result	Qualifier	Dilution	Analysis	Batch
	%			date / time	
Total Solids	97.9		1	12/18/2020 16:14	WG1593816

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	U		9.40	20.4	1	12/18/2020 03:30	WG1593711

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		0.0222	0.102	1	12/19/2020 00:48	WG1594139
(S) a,a,a-Trifluorotoluene(FID)	*108*			*77.0-120*		*12/19/2020 00:48*	WG1594139

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		0.000488	0.00104	1	12/14/2020 06:39	WG1591261
Toluene	U		0.00136	0.00522	1	12/14/2020 06:39	WG1591261
Ethylbenzene	U		0.000769	0.00261	1	12/14/2020 06:39	WG1591261
Total Xylenes	U		0.000919	0.00679	1	12/14/2020 06:39	WG1591261
(S) Toluene-d8	*117*			*75.0-131*		*12/14/2020 06:39*	WG1591261
(S) 4-Bromofluorobenzene	*103*			*67.0-138*		*12/14/2020 06:39*	WG1591261
(S) 1,2-Dichloroethane-d4	*84.3*			*70.0-130*		*12/14/2020 06:39*	WG1591261

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		1.65	4.09	1	12/18/2020 18:30	WG1593305
C28-C40 Oil Range	1.53	B J	0.280	4.09	1	12/18/2020 18:30	WG1593305
(S) o-Terphenyl	*74.4*			*18.0-148*		*12/18/2020 18:30*	WG1593305

Method Blank (MB)

(MB) R3605131-1 12/18/20 02:33

Analyte	MB Result %	MB Qualifier	MB MDL %	MB RDL %
Total Solids	0.000			

L1295413-02 Original Sample (OS) • Duplicate (DUP)

(OS) L1295413-02 12/18/20 02:33 • (DUP) R3605131-3 12/18/20 02:33

Analyte	Original Result %	DUP Result %	Dilution	DUP RPD %	DUP Qualifier	DUP RPD Limits %
Total Solids	94.2	95.3	1	1.17		10

Laboratory Control Sample (LCS)

(LCS) R3605131-2 12/18/20 02:33

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

Method Blank (MB)

(MB) R3605753-1 12/18/20 16:30

Analyte	MB Result %	MB Qualifier	MB MDL %	MB RDL %
Total Solids	0.000			

L1295413-13 Original Sample (OS) • Duplicate (DUP)

(OS) L1295413-13 12/18/20 16:30 • (DUP) R3605753-3 12/18/20 16:30

Analyte	Original Result %	DUP Result %	Dilution	DUP RPD %	DUP Qualifier	DUP RPD Limits %
Total Solids	97.4	97.1	1	0.251		10

Laboratory Control Sample (LCS)

(LCS) R3605753-2 12/18/20 16:30

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

Method Blank (MB)

(MB) R3605750-1 12/18/20 16:14

Analyte	MB Result %	MB Qualifier	MB MDL %	MB RDL %
Total Solids	0.00100			

L1295609-01 Original Sample (OS) • Duplicate (DUP)

(OS) L1295609-01 12/18/20 16:14 • (DUP) R3605750-3 12/18/20 16:14

Analyte	Original Result %	DUP Result %	Dilution	DUP RPD %	DUP Qualifier	DUP RPD Limits %
Total Solids	73.8	74.0	1	0.286		10

Laboratory Control Sample (LCS)

(LCS) R3605750-2 12/18/20 16:14

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

Method Blank (MB)

(MB) R3605096-1 12/18/20 00:07

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

L1295413-02 Original Sample (OS) • Duplicate (DUP)

(OS) L1295413-02 12/18/20 00:35 • (DUP) R3605096-3 12/18/20 00:45

Analyte	Original Result (dry) mg/kg	DUP Result (dry) mg/kg	Dilution	DUP RPD %	DUP Qualifier	DUP RPD Limits %
Chloride	1190	1330	10	10.8		20

L1295413-14 Original Sample (OS) • Duplicate (DUP)

(OS) L1295413-14 12/18/20 03:30 • (DUP) R3605096-6 12/18/20 03:58

Analyte	Original Result (dry) mg/kg	DUP Result (dry) mg/kg	Dilution	DUP RPD %	DUP Qualifier	DUP RPD Limits %
Chloride	U	U	1	0.000		20

Laboratory Control Sample (LCS)

(LCS) R3605096-2 12/18/20 00:16

Analyte	Spike Amount mg/kg	LCS Result mg/kg	LCS Rec. %	Rec. Limits %	LCS Qualifier
Chloride	200	195	97.5	90.0-110	

L1295413-03 Original Sample (OS) • Matrix Spike (MS) • Matrix Spike Duplicate (MSD)

(OS) L1295413-03 12/18/20 00:54 • (MS) R3605096-4 12/18/20 01:04 • (MSD) R3605096-5 12/18/20 01:13

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 %
Chloride	537	1940	2590	2590	121	122	1	80.0-120	E J5	E J5	0.157	20

Method Blank (MB)

(MB) R3605178-2 12/18/20 03:22

Analyte	MB Result mg/kg	MB Qualifier	MB MDL mg/kg	MB RDL mg/kg
TPH (GC/FID) Low Fraction	0.0810	J	0.0217	0.100
(S) a,a,a-Trifluorotoluene(FID)	*98.4*			*77.0-120*

Laboratory Control Sample (LCS)

(LCS) R3605178-1 12/18/20 01:49

Analyte	Spike Amount mg/kg	LCS Result mg/kg	LCS Rec. %	Rec. Limits %	LCS Qualifier
TPH (GC/FID) Low Fraction	5.50	4.95	90.0	72.0-127	
(S) a,a,a-Trifluorotoluene(FID)			*101*	*77.0-120*	

L1294746-01 Original Sample (OS) • Matrix Spike (MS) • Matrix Spike Duplicate (MSD)

(OS) L1294746-01 12/18/20 07:35 • (MS) R3605178-3 12/18/20 13:47 • (MSD) R3605178-4 12/18/20 14:14

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	142	1.85	161	158	112	110	25	10.0-151			2.15	28
(S) a,a,a-Trifluorotoluene(FID)					*107*	*107*		*77.0-120*				

Method Blank (MB)

(MB) R3605437-3 12/18/20 21:11

Analyte	MB Result mg/kg	MB Qualifier	MB MDL mg/kg	MB RDL mg/kg
TPH (GC/FID) Low Fraction	0.0328	J	0.0217	0.100
(S) a,a,a-Trifluorotoluene(FID)	*112*			*77.0-120*

Laboratory Control Sample (LCS)

(LCS) R3605437-2 12/18/20 20:30

Analyte	Spike Amount mg/kg	LCS Result mg/kg	LCS Rec. %	Rec. Limits %	LCS Qualifier
TPH (GC/FID) Low Fraction	5.50	5.23	95.1	72.0-127	
(S) a,a,a-Trifluorotoluene(FID)			*104*	*77.0-120*	

L1295270-04 Original Sample (OS) • Matrix Spike (MS) • Matrix Spike Duplicate (MSD)

(OS) L1295270-04 12/18/20 22:02 • (MS) R3605437-4 12/19/20 04:58 • (MSD) R3605437-5 12/19/20 05:18

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	173	U	173	179	100	104	25	10.0-151			3.70	28
(S) a,a,a-Trifluorotoluene(FID)					*106*	*107*		*77.0-120*				

Method Blank (MB)

(MB) R3605430-2 12/18/20 22:14

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)	*93.0*			*77.0-120*

Laboratory Control Sample (LCS)

(LCS) R3605430-1 12/18/20 21:33

Analyte	Spike Amount mg/kg	LCS Result mg/kg	LCS Rec. %	Rec. Limits %	LCS Qualifier
TPH (GC/FID) Low Fraction	5.50	5.43	98.7	72.0-127	
(S) a,a,a-Trifluorotoluene(FID)			*108*	*77.0-120*	

Method Blank (MB)

(MB) R3606216-2 12/19/20 07:02

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)	*115*			*77.0-120*

Laboratory Control Sample (LCS)

(LCS) R3606216-1 12/19/20 06:21

Analyte	Spike Amount mg/kg	LCS Result mg/kg	LCS Rec. %	Rec. Limits %	LCS Qualifier
TPH (GC/FID) Low Fraction	5.50	6.34	115	72.0-127	
(S) a,a,a-Trifluorotoluene(FID)			*104*	*77.0-120*	

L1295736-05 Original Sample (OS) • Matrix Spike (MS) • Matrix Spike Duplicate (MSD)

(OS) L1295736-05 12/19/20 14:01 • (MS) R3606216-3 12/19/20 14:43 • (MSD) R3606216-4 12/19/20 15:04

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 %
TPH (GC/FID) Low Fraction	550	584	1170	841	107	46.7	100	10.0-151	E	J3	32.7	28
(S) a,a,a-Trifluorotoluene(FID)					*104*	*102*		*77.0-120*				

Method Blank (MB)

(MB) R3603478-2 12/14/20 00:54

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	*119*			*75.0-131*
(S) 4-Bromofluorobenzene	*96.9*			*67.0-138*
(S) 1,2-Dichloroethane-d4	*83.7*			*70.0-130*

Laboratory Control Sample (LCS)

(LCS) R3603478-1 12/13/20 23:56

Analyte	Spike Amount mg/kg	LCS Result mg/kg	LCS Rec. %	Rec. Limits %	LCS Qualifier
Benzene	0.125	0.124	99.2	70.0-123	
Ethylbenzene	0.125	0.137	110	74.0-126	
Toluene	0.125	0.120	96.0	75.0-121	
Xylenes, Total	0.375	0.414	110	72.0-127	
(S) Toluene-d8			*108*	*75.0-131*	
(S) 4-Bromofluorobenzene			*109*	*67.0-138*	
(S) 1,2-Dichloroethane-d4			*95.3*	*70.0-130*	

Method Blank (MB)

(MB) R3605404-1 12/18/20 17:01

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	2.25	J	0.274	4.00
(S) o-Terphenyl	*82.0*			*18.0-148*

Laboratory Control Sample (LCS)

(LCS) R3605404-2 12/18/20 17:14

Analyte	Spike Amount mg/kg	LCS Result mg/kg	LCS Rec. %	Rec. Limits %	LCS Qualifier
C10-C28 Diesel Range	50.0	44.3	88.6	50.0-150	
(S) o-Terphenyl			*83.6*	*18.0-148*	

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
B	The same analyte is found in the associated blank.
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.
J5	The sample matrix interfered with the ability to make any accurate determination; spike value is high.
J7	Surrogate recovery cannot be used for control limit evaluation due to dilution.

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* 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 National.

State Accreditations

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	LAO00356
Kentucky [1 6]	KY90010	South Carolina	84004
Kentucky [2]	16	South Dakota	n/a
Louisiana	AI30792	Tennessee [1 4]	2006
Louisiana [1]	LA180010	Texas	T104704245-20-18
Maine	TN00003	Texas [5]	LAB0152
Maryland	324	Utah	TN00003
Massachusetts	M-TN003	Vermont	VT2006
Michigan	9958	Virginia	460132
Minnesota	047-999-395	Washington	C847
Mississippi	TN00003	West Virginia	233
Missouri	340	Wisconsin	998093910
Montana	CERT0086	Wyoming	A2LA

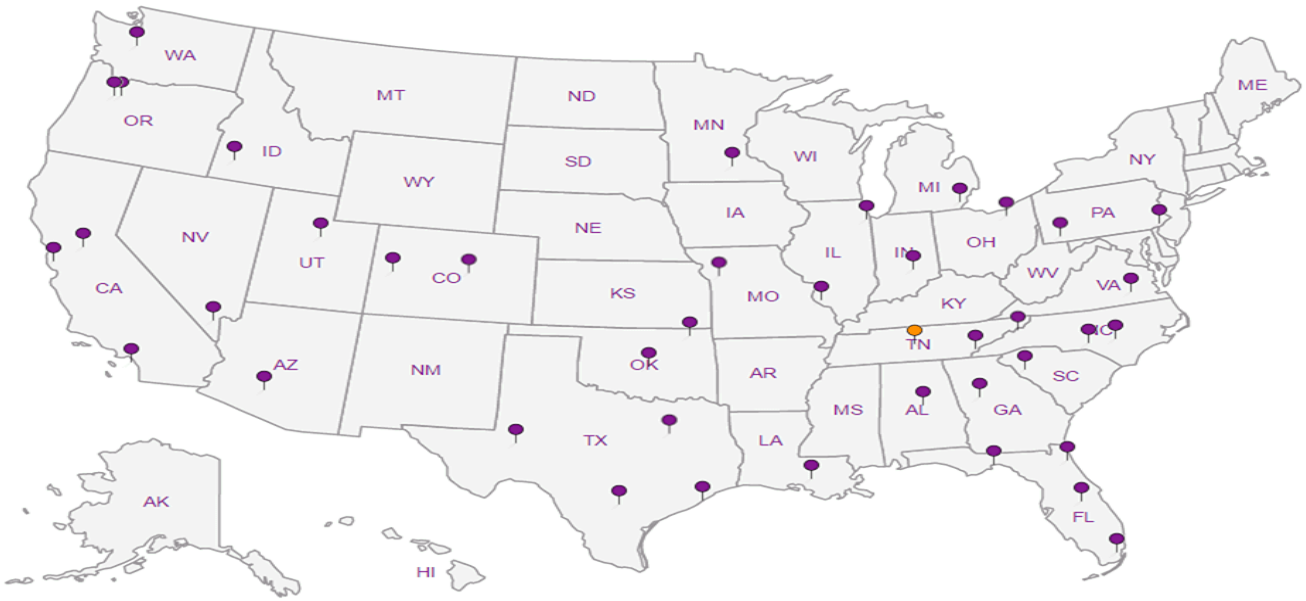
Third Party Federal Accreditations

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

Our Locations

Pace National has sixty-four client support centers that provide sample pickup and/or the delivery of sampling supplies. If you would like assistance from one of our support offices, please contact our main office. Pace National performs all testing at our central laboratory.



Analysis Request of Chain of Custody Record

Tetra Tech, Inc.

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

I110

L1795413

Client Name:	Conoco Phillips	**Site Manager:**	Christian Llull
Project Name:	James E Upper Battery Load Line Release (2RP-3748)	**Contact Info:**	Email: christian.llull@tetratech.com Phone: (512) 338-1667
Project Location: (county, state)	Eddy County, New Mexico	**Project #:**	212C-MD-02334, Task No. 29
Invoice to:	Accounts Payable 901 West Wall Street, Suite 100 Midland, Texas 79701		
Receiving Laboratory:	Pace Analytical	**Sampler Signature:**	Adrian Garcia
Comments:	COPTETRA Acctnum		

ANALYSIS REQUEST (Circle or Specify Method No.)

LAB # (LAB USE ONLY)	SAMPLE IDENTIFICATION	SAMPLING YEAR: 2020 DATE	SAMPLING TIME	MATRIX WATER	MATRIX SOIL	MATRIX	PRESERVATIVE METHOD HCL	PRESERVATIVE METHOD HNO_3	PRESERVATIVE METHOD ICE	PRESERVATIVE METHOD NONE	# CONTAINERS	FILTERED (Y/N)	BTEX 8021B BTEX 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 300.0	Chloride Sulfate TDS	General Water Chemistry (see attached list)	Anion/Cation Balance	TPH 8015R		HOLD
-01	AH-1 (0'-1')	12/09/20	1000		X				X		1	N	X		X												X						
-02	AH-1 (1'-2')	12/09/20	1010		X				X		1	N	X		X												X						
-03	AH-1 (2'-3')	12/09/20	1020		X				X		1	N	X		X												X						
-04	AH-1 (3'-4')	12/09/20	1030		X				X		1	N	X		X												X						
-05	AH-1 (5'-6')	12/09/20	1040		X				X		1	N	X		X												X						
-06	AH-1 (6'-7')	12/09/20	1100		X				X		1	N	X		X												X						
-07	AH-2 (0'-1')	12/09/20	1130		X				X		1	N	X		X												X						
-08	AH-2 (1'-2')	12/09/20	1200		X				X		1	N	X		X												X						
-09	AH-5 (0'-1')	12/09/20	1210		X				X		1	N	X		X												X						
-10	AH-5 (1'-2')	12/09/20	1220		X				X		1	N	X		X												X						

Relinquished by:	Date:	Time:	Received by:	Date:	Time:
Adrian Garcia	12.10.20	15:45		12.10.20	15:45
Relinquished by:	Date:	Time:	Received by:	Date:	Time:
	12.10.20	16:30	SCOA	12.10.20	16:30
Relinquished by:	Date:	Time:	Received by:	Date:	Time:
			Kailey Miller	12-11-20	800

ORIGINAL COPY

LAB USE ONLY

Sample Temperature

REMARKS:

- [X] 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 #: _____

Sample Receipt Checklist

COC Seal Present/Intact: __Y__N
COC Signed/Accurate: __Y__N
Bottles arrive intact: __Y__N
Correct bottles used: __Y__N
Sufficient Volume Sent: __Y__N
VOA Zero Headspace: __Y__N
Pres.Correct/Check: __Y__N

If Applicable

MP13 1.4-5=9

RAD SCREEN: <0.5 mR/hr

Analysis Request of Chain of Custody Record

Tetra Tech, Inc.

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

L1295413

Client Name:	Conoco Phillips	**Site Manager:**	Christian Llull
Project Name:	James E Upper Battery Load Line Release (2RP-3748)	**Contact Info:**	Email: christian.llull@tetratech.com Phone: (512) 338-1667
Project Location: (county, state)	Eddy County, New Mexico	**Project #:**	212C-MD-02334, Task No. 29
Invoice to:	Accounts Payable 901 West Wall Street, Suite 100 Midland, Texas 79701		
Receiving Laboratory:	Pace Analytical	**Sampler Signature:**	Adrian Garcia

Comments: COPTETRA Acctnum

ANALYSIS REQUEST
(Circle or Specify Method No.)

LAB # (LAB USE ONLY)	SAMPLE IDENTIFICATION	SAMPLING YEAR: 2020 DATE	SAMPLING TIME	MATRIX WATER	MATRIX SOIL	MATRIX	PRESERVATIVE METHOD HCL	PRESERVATIVE METHOD HNO_3	PRESERVATIVE METHOD ICE	PRESERVATIVE METHOD NONE		# CONTAINERS	FILTERED (Y/N)	BTEX 8021B BTEX 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 300.0 Chloride Sulfate TDS	General Water Chemistry (see attached list)	Anion/Cation Balance	TPH 8015R		HOLD
-11	AH-3 (0'-1')	12/09/20	1230		X				X			1	N	X		X												X				
-12	AH-3 (1'-2')	12/09/20	1240		X				X			1	N	X		X												X				
-13	AH-4 (0'-1')	12/09/20	1300		X				X			1	N	X		X												X				
-14	AH-4 (1'-2')	12/09/20	1330		X				X			1	N	X		X												X				

Relinquished by: Adrian Garcia	Date: 12.10.20	Time: 15:45	Received by:	Date: 12.10.20	Time: 15:45
Relinquished by:	Date: 12.10.20	Time: 16:30	Received by:	Date: 12.10.20	Time: 16:30
Relinquished by:	Date:	Time:	Received by:	Date: 12/11/20	Time: 800

ORIGINAL COPY

LAB USE ONLY

Sample Temperature

REMARKS:

- [X] 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 #: _____

MRB 14:5=9

RAD SCREEN: <0.5 mR/hr

Pace Analytical®
National Center for Testing & Innovation

ANALYTICAL REPORT

January 27, 2021

Revised Report

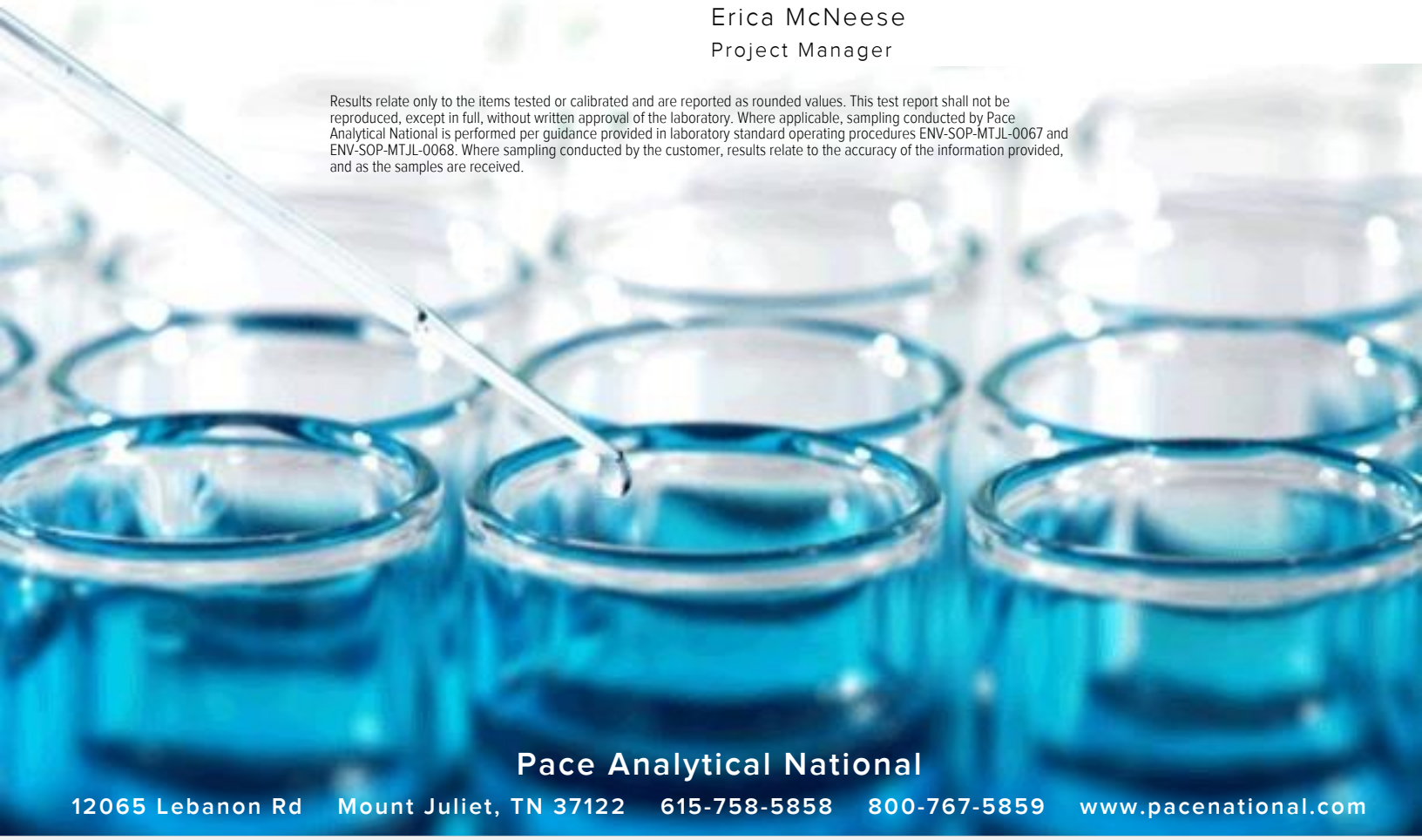
ConocoPhillips - Tetra Tech

Sample Delivery Group:	L1306499
Samples Received:	01/14/2021
Project Number:	212C-MD-02334 TASK29
Description:	James E Upper Battery Load Line Release (2RP-3748)
Site:	LEA COUNTRY, NEW MEXICO
Report To:	Christian Llull 901 West Wall Suite 100 Midland, TX 79701

Entire Report Reviewed By: Erica McNeese

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

TABLE OF CONTENTS

BH-1 (0'-1') L1306499-01 Solid

Collected by: John Thurston | Collected date/time: 01/12/21 09:00 | Received date/time: 01/14/21 09:00

Method	Batch	Dilution	Preparation date/time	Analysis date/time	Analyst	Location
Total Solids by Method 2540 G-2011	WG1607238	1	01/18/21 14:24	01/18/21 14:32	KDW	Mt. Juliet, TN
Wet Chemistry by Method 300.0	WG1605875	5	01/14/21 17:21	01/15/21 05:10	MCG	Mt. Juliet, TN
Volatile Organic Compounds (GC) by Method 8015D/GRO	WG1606868	1	01/16/21 16:16	01/17/21 00:37	TPR	Mt. Juliet, TN
Volatile Organic Compounds (GC/MS) by Method 8260B	WG1606832	1	01/16/21 16:16	01/16/21 20:41	BMB	Mt. Juliet, TN
Semi-Volatile Organic Compounds (GC) by Method 8015	WG1607053	1	01/19/21 22:39	01/20/21 12:16	CAG	Mt. Juliet, TN

BH-1 (2'-3') L1306499-02 Solid

Collected by: John Thurston | Collected date/time: 01/12/21 09:10 | Received date/time: 01/14/21 09:00

Method	Batch	Dilution	Preparation date/time	Analysis date/time	Analyst	Location
Total Solids by Method 2540 G-2011	WG1607238	1	01/18/21 14:24	01/18/21 14:32	KDW	Mt. Juliet, TN
Wet Chemistry by Method 300.0	WG1605875	1	01/14/21 17:21	01/15/21 05:20	MCG	Mt. Juliet, TN
Volatile Organic Compounds (GC) by Method 8015D/GRO	WG1606868	1	01/16/21 16:16	01/17/21 00:58	TPR	Mt. Juliet, TN
Volatile Organic Compounds (GC/MS) by Method 8260B	WG1606832	1	01/16/21 16:16	01/16/21 21:00	BMB	Mt. Juliet, TN
Semi-Volatile Organic Compounds (GC) by Method 8015	WG1607053	1	01/19/21 22:39	01/20/21 10:57	CAG	Mt. Juliet, TN

BH-1 (4'-5') L1306499-03 Solid

Collected by: John Thurston | Collected date/time: 01/12/21 09:20 | Received date/time: 01/14/21 09:00

Method	Batch	Dilution	Preparation date/time	Analysis date/time	Analyst	Location
Total Solids by Method 2540 G-2011	WG1607238	1	01/18/21 14:24	01/18/21 14:32	KDW	Mt. Juliet, TN
Wet Chemistry by Method 300.0	WG1605875	1	01/14/21 17:21	01/15/21 05:30	MCG	Mt. Juliet, TN
Volatile Organic Compounds (GC) by Method 8015D/GRO	WG1606868	1	01/16/21 16:16	01/17/21 01:19	TPR	Mt. Juliet, TN
Volatile Organic Compounds (GC/MS) by Method 8260B	WG1606832	1	01/16/21 16:16	01/16/21 21:19	BMB	Mt. Juliet, TN
Semi-Volatile Organic Compounds (GC) by Method 8015	WG1607053	1	01/19/21 22:39	01/20/21 12:42	CAG	Mt. Juliet, TN

BH-1 (6'-7') L1306499-04 Solid

Collected by: John Thurston | Collected date/time: 01/12/21 09:30 | Received date/time: 01/14/21 09:00

Method	Batch	Dilution	Preparation date/time	Analysis date/time	Analyst	Location
Total Solids by Method 2540 G-2011	WG1607239	1	01/19/21 08:46	01/19/21 09:04	CMK	Mt. Juliet, TN
Wet Chemistry by Method 300.0	WG1605875	10	01/14/21 17:21	01/15/21 05:58	MCG	Mt. Juliet, TN
Volatile Organic Compounds (GC) by Method 8015D/GRO	WG1608800	1	01/16/21 16:16	01/20/21 22:14	ACG	Mt. Juliet, TN
Volatile Organic Compounds (GC/MS) by Method 8260B	WG1606832	1	01/16/21 16:16	01/16/21 21:38	BMB	Mt. Juliet, TN
Semi-Volatile Organic Compounds (GC) by Method 8015	WG1607053	1	01/19/21 22:39	01/20/21 12:29	CAG	Mt. Juliet, TN

BH-1 (9'-10') L1306499-05 Solid

Collected by: John Thurston | Collected date/time: 01/12/21 09:40 | Received date/time: 01/14/21 09:00

Method	Batch	Dilution	Preparation date/time	Analysis date/time	Analyst	Location
Total Solids by Method 2540 G-2011	WG1607239	1	01/19/21 08:46	01/19/21 09:04	CMK	Mt. Juliet, TN
Wet Chemistry by Method 300.0	WG1605875	10	01/14/21 17:21	01/15/21 06:08	MCG	Mt. Juliet, TN
Volatile Organic Compounds (GC) by Method 8015D/GRO	WG1606868	1	01/16/21 16:16	01/17/21 02:00	TPR	Mt. Juliet, TN
Volatile Organic Compounds (GC/MS) by Method 8260B	WG1606832	1	01/16/21 16:16	01/16/21 21:57	BMB	Mt. Juliet, TN
Semi-Volatile Organic Compounds (GC) by Method 8015	WG1607958	1	01/19/21 22:35	01/20/21 14:37	JN	Mt. Juliet, TN

BH-1 (14'-15') L1306499-06 Solid

Collected by: John Thurston | Collected date/time: 01/12/21 09:50 | Received date/time: 01/14/21 09:00

Method	Batch	Dilution	Preparation date/time	Analysis date/time	Analyst	Location
Total Solids by Method 2540 G-2011	WG1607239	1	01/19/21 08:46	01/19/21 09:04	CMK	Mt. Juliet, TN
Wet Chemistry by Method 300.0	WG1605875	10	01/14/21 17:21	01/15/21 06:17	MCG	Mt. Juliet, TN
Volatile Organic Compounds (GC) by Method 8015D/GRO	WG1606868	1	01/16/21 16:16	01/17/21 02:21	TPR	Mt. Juliet, TN
Volatile Organic Compounds (GC/MS) by Method 8260B	WG1606832	1	01/16/21 16:16	01/16/21 22:16	BMB	Mt. Juliet, TN
Semi-Volatile Organic Compounds (GC) by Method 8015	WG1607053	1	01/19/21 22:39	01/20/21 11:23	CAG	Mt. Juliet, TN

BH-1 (19'-20') L1306499-07 Solid

Collected by: John Thurston | Collected date/time: 01/12/21 10:00 | Received date/time: 01/14/21 09:00

Method	Batch	Dilution	Preparation date/time	Analysis date/time	Analyst	Location
Total Solids by Method 2540 G-2011	WG1607239	1	01/19/21 08:46	01/19/21 09:04	CMK	Mt. Juliet, TN
Wet Chemistry by Method 300.0	WG1605875	5	01/14/21 17:21	01/15/21 06:27	MCG	Mt. Juliet, TN
Volatile Organic Compounds (GC) by Method 8015D/GRO	WG1606868	1	01/16/21 16:16	01/17/21 02:42	TPR	Mt. Juliet, TN
Volatile Organic Compounds (GC/MS) by Method 8260B	WG1606832	1	01/16/21 16:16	01/16/21 22:34	BMB	Mt. Juliet, TN
Semi-Volatile Organic Compounds (GC) by Method 8015	WG1607053	1	01/19/21 22:39	01/20/21 11:36	CAG	Mt. Juliet, TN

BH-1 (24'-25') L1306499-08 Solid

Collected by: John Thurston | Collected date/time: 01/12/21 10:20 | Received date/time: 01/14/21 09:00

Method	Batch	Dilution	Preparation date/time	Analysis date/time	Analyst	Location
Total Solids by Method 2540 G-2011	WG1607239	1	01/19/21 08:46	01/19/21 09:04	CMK	Mt. Juliet, TN
Wet Chemistry by Method 300.0	WG1605875	5	01/14/21 17:21	01/15/21 06:36	MCG	Mt. Juliet, TN
Volatile Organic Compounds (GC) by Method 8015D/GRO	WG1606868	1	01/16/21 16:16	01/17/21 03:03	TPR	Mt. Juliet, TN
Volatile Organic Compounds (GC/MS) by Method 8260B	WG1606832	1	01/16/21 16:16	01/16/21 22:53	BMB	Mt. Juliet, TN
Semi-Volatile Organic Compounds (GC) by Method 8015	WG1607053	1	01/19/21 22:39	01/20/21 11:50	CAG	Mt. Juliet, TN

BH-1 (29'-30') L1306499-09 Solid

Collected by: John Thurston | Collected date/time: 01/12/21 10:30 | Received date/time: 01/14/21 09:00

Method	Batch	Dilution	Preparation date/time	Analysis date/time	Analyst	Location
Total Solids by Method 2540 G-2011	WG1607239	1	01/19/21 08:46	01/19/21 09:04	CMK	Mt. Juliet, TN
Wet Chemistry by Method 300.0	WG1605874	5	01/14/21 17:27	01/16/21 09:21	ELN	Mt. Juliet, TN
Volatile Organic Compounds (GC) by Method 8015D/GRO	WG1606868	1	01/16/21 16:16	01/17/21 03:23	TPR	Mt. Juliet, TN
Volatile Organic Compounds (GC/MS) by Method 8260B	WG1606832	1	01/16/21 16:16	01/16/21 23:12	BMB	Mt. Juliet, TN
Semi-Volatile Organic Compounds (GC) by Method 8015	WG1607053	1	01/19/21 22:39	01/20/21 12:03	CAG	Mt. Juliet, TN

BH-1 (34'-35') L1306499-10 Solid

Collected by: John Thurston | Collected date/time: 01/12/21 10:50 | Received date/time: 01/14/21 09:00

Method	Batch	Dilution	Preparation date/time	Analysis date/time	Analyst	Location
Total Solids by Method 2540 G-2011	WG1607239	1	01/19/21 08:46	01/19/21 09:04	CMK	Mt. Juliet, TN
Wet Chemistry by Method 300.0	WG1605874	1	01/15/21 23:06	01/16/21 09:39	ELN	Mt. Juliet, TN
Volatile Organic Compounds (GC) by Method 8015D/GRO	WG1606868	1	01/16/21 16:16	01/17/21 03:44	TPR	Mt. Juliet, TN
Volatile Organic Compounds (GC/MS) by Method 8260B	WG1606832	1	01/16/21 16:16	01/16/21 23:31	BMB	Mt. Juliet, TN
Semi-Volatile Organic Compounds (GC) by Method 8015	WG1607198	1	01/19/21 00:20	01/19/21 11:47	CAG	Mt. Juliet, TN

BH-1 (39'-40') L1306499-11 Solid

Collected by: John Thurston
Collected date/time: 01/12/21 11:00
Received date/time: 01/14/21 09:00

Method	Batch	Dilution	Preparation date/time	Analysis date/time	Analyst	Location
Total Solids by Method 2540 G-2011	WG1607239	1	01/19/21 08:46	01/19/21 09:04	CMK	Mt. Juliet, TN
Wet Chemistry by Method 300.0	WG1605874	5	01/15/21 23:06	01/16/21 09:56	ELN	Mt. Juliet, TN
Volatile Organic Compounds (GC) by Method 8015D/GRO	WG1606868	1	01/16/21 16:16	01/17/21 04:05	TPR	Mt. Juliet, TN
Volatile Organic Compounds (GC/MS) by Method 8260B	WG1606832	1	01/16/21 16:16	01/16/21 23:49	BMB	Mt. Juliet, TN
Semi-Volatile Organic Compounds (GC) by Method 8015	WG1607436	1	01/18/21 20:28	01/19/21 06:49	JN	Mt. Juliet, TN

BH-1 (44'-45') L1306499-12 Solid

Collected by: John Thurston
Collected date/time: 01/12/21 11:20
Received date/time: 01/14/21 09:00

Method	Batch	Dilution	Preparation date/time	Analysis date/time	Analyst	Location
Total Solids by Method 2540 G-2011	WG1607239	1	01/19/21 08:46	01/19/21 09:04	CMK	Mt. Juliet, TN
Wet Chemistry by Method 300.0	WG1605874	5	01/15/21 23:06	01/16/21 10:14	ELN	Mt. Juliet, TN
Volatile Organic Compounds (GC) by Method 8015D/GRO	WG1606868	1	01/16/21 16:16	01/17/21 04:25	TPR	Mt. Juliet, TN
Volatile Organic Compounds (GC/MS) by Method 8260B	WG1606832	1	01/16/21 16:16	01/17/21 00:08	BMB	Mt. Juliet, TN
Semi-Volatile Organic Compounds (GC) by Method 8015	WG1607436	1	01/18/21 20:28	01/19/21 07:02	JN	Mt. Juliet, TN

AH-6 (0'-1') L1306499-13 Solid

Collected by: John Thurston
Collected date/time: 01/12/21 11:30
Received date/time: 01/14/21 09:00

Method	Batch	Dilution	Preparation date/time	Analysis date/time	Analyst	Location
Total Solids by Method 2540 G-2011	WG1607239	1	01/19/21 08:46	01/19/21 09:04	CMK	Mt. Juliet, TN
Wet Chemistry by Method 300.0	WG1605874	1	01/14/21 17:27	01/16/21 10:31	ELN	Mt. Juliet, TN
Volatile Organic Compounds (GC) by Method 8015D/GRO	WG1606868	1	01/16/21 16:16	01/17/21 04:46	TPR	Mt. Juliet, TN
Volatile Organic Compounds (GC/MS) by Method 8260B	WG1606832	1	01/16/21 16:16	01/17/21 00:27	BMB	Mt. Juliet, TN
Semi-Volatile Organic Compounds (GC) by Method 8015	WG1607958	5	01/19/21 22:35	01/20/21 18:12	JN	Mt. Juliet, TN

AH-6 (3'-4') L1306499-14 Solid

Collected by: John Thurston
Collected date/time: 01/12/21 11:50
Received date/time: 01/14/21 09:00

Method	Batch	Dilution	Preparation date/time	Analysis date/time	Analyst	Location
Total Solids by Method 2540 G-2011	WG1607345	1	01/19/21 13:59	01/19/21 14:07	KDW	Mt. Juliet, TN
Wet Chemistry by Method 300.0	WG1605874	1	01/14/21 17:27	01/16/21 10:48	ELN	Mt. Juliet, TN
Volatile Organic Compounds (GC) by Method 8015D/GRO	WG1606868	1	01/16/21 16:16	01/17/21 05:07	TPR	Mt. Juliet, TN
Volatile Organic Compounds (GC/MS) by Method 8260B	WG1606832	1	01/16/21 16:16	01/17/21 00:46	BMB	Mt. Juliet, TN
Semi-Volatile Organic Compounds (GC) by Method 8015	WG1607958	5	01/19/21 22:35	01/20/21 17:59	JN	Mt. Juliet, TN

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.

Erica McNeese
Project Manager

Report Revision History

Level II Report - Version 1: 01/21/21 19:33

Total Solids by Method 2540 G-2011

Analyte	Result	Qualifier	Dilution	Analysis	Batch
	%			date / time	
Total Solids	94.0		1	01/18/2021 14:32	WG1607238

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	2950		48.9	106	5	01/15/2021 05:10	WG1605875

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		0.0231	0.106	1	01/17/2021 00:37	WG1606868
(S) a,a,a-Trifluorotoluene(FID)	*90.3*			*77.0-120*		*01/17/2021 00:37*	WG1606868

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		0.000527	0.00113	1	01/16/2021 20:41	WG1606832
Toluene	U		0.00147	0.00564	1	01/16/2021 20:41	WG1606832
Ethylbenzene	U		0.000831	0.00282	1	01/16/2021 20:41	WG1606832
Total Xylenes	U		0.000992	0.00733	1	01/16/2021 20:41	WG1606832
(S) Toluene-d8	*104*			*75.0-131*		*01/16/2021 20:41*	WG1606832
(S) 4-Bromofluorobenzene	*91.2*			*67.0-138*		*01/16/2021 20:41*	WG1606832
(S) 1,2-Dichloroethane-d4	*88.1*			*70.0-130*		*01/16/2021 20:41*	WG1606832

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		1.71	4.25	1	01/20/2021 12:16	WG1607053
C28-C40 Oil Range	2.46	J	0.291	4.25	1	01/20/2021 12:16	WG1607053
(S) o-Terphenyl	*67.4*			*18.0-148*		*01/20/2021 12:16*	WG1607053

Total Solids by Method 2540 G-2011

Analyte	Result	Qualifier	Dilution	Analysis	Batch
	%			date / time	
Total Solids	95.4		1	01/18/2021 14:32	WG1607238

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	697		9.64	21.0	1	01/15/2021 05:20	WG1605875

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		0.0227	0.105	1	01/17/2021 00:58	WG1606868
(S) a,a,a-Trifluorotoluene(FID)	*88.3*			*77.0-120*		*01/17/2021 00:58*	WG1606868

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		0.000512	0.00110	1	01/16/2021 21:00	WG1606832
Toluene	U		0.00142	0.00548	1	01/16/2021 21:00	WG1606832
Ethylbenzene	U		0.000808	0.00274	1	01/16/2021 21:00	WG1606832
Total Xylenes	U		0.000964	0.00712	1	01/16/2021 21:00	WG1606832
(S) Toluene-d8	*108*			*75.0-131*		*01/16/2021 21:00*	WG1606832
(S) 4-Bromofluorobenzene	*93.0*			*67.0-138*		*01/16/2021 21:00*	WG1606832
(S) 1,2-Dichloroethane-d4	*87.6*			*70.0-130*		*01/16/2021 21:00*	WG1606832

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		1.69	4.19	1	01/20/2021 10:57	WG1607053
C28-C40 Oil Range	4.61		0.287	4.19	1	01/20/2021 10:57	WG1607053
(S) o-Terphenyl	*74.2*			*18.0-148*		*01/20/2021 10:57*	WG1607053

Total Solids by Method 2540 G-2011

Analyte	Result	Qualifier	Dilution	Analysis	Batch
	%			date / time	
Total Solids	96.4		1	01/18/2021 14:32	WG1607238

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	877		9.55	20.8	1	01/15/2021 05:30	WG1605875

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	0.104	1	01/17/2021 01:19	WG1606868
(S) a,a,a-Trifluorotoluene(FID)	*94.8*			*77.0-120*		*01/17/2021 01:19*	WG1606868

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		0.000502	0.00108	1	01/16/2021 21:19	WG1606832
Toluene	U		0.00140	0.00538	1	01/16/2021 21:19	WG1606832
Ethylbenzene	U		0.000793	0.00269	1	01/16/2021 21:19	WG1606832
Total Xylenes	U		0.000946	0.00699	1	01/16/2021 21:19	WG1606832
(S) Toluene-d8	*108*			*75.0-131*		*01/16/2021 21:19*	WG1606832
(S) 4-Bromofluorobenzene	*91.9*			*67.0-138*		*01/16/2021 21:19*	WG1606832
(S) 1,2-Dichloroethane-d4	*86.4*			*70.0-130*		*01/16/2021 21:19*	WG1606832

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	4.15	1	01/20/2021 12:42	WG1607053
C28-C40 Oil Range	4.85		0.284	4.15	1	01/20/2021 12:42	WG1607053
(S) o-Terphenyl	*76.7*			*18.0-148*		*01/20/2021 12:42*	WG1607053

Total Solids by Method 2540 G-2011

Analyte	Result	Qualifier	Dilution	Analysis	Batch
	%			date / time	
Total Solids	91.3		1	01/19/2021 09:04	WG1607239

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	4970		101	219	10	01/15/2021 05:58	WG1605875

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		0.0238	0.110	1	01/20/2021 22:14	WG1608800
(S) a,a,a-Trifluorotoluene(FID)	*97.6*			*77.0-120*		*01/20/2021 22:14*	WG1608800

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		0.000556	0.00119	1	01/16/2021 21:38	WG1606832
Toluene	U		0.00155	0.00596	1	01/16/2021 21:38	WG1606832
Ethylbenzene	U		0.000878	0.00298	1	01/16/2021 21:38	WG1606832
Total Xylenes	U		0.00105	0.00775	1	01/16/2021 21:38	WG1606832
(S) Toluene-d8	*107*			*75.0-131*		*01/16/2021 21:38*	WG1606832
(S) 4-Bromofluorobenzene	*93.3*			*67.0-138*		*01/16/2021 21:38*	WG1606832
(S) 1,2-Dichloroethane-d4	*90.5*			*70.0-130*		*01/16/2021 21:38*	WG1606832

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		1.76	4.38	1	01/20/2021 12:29	WG1607053
C28-C40 Oil Range	1.51	J	0.300	4.38	1	01/20/2021 12:29	WG1607053
(S) o-Terphenyl	*60.5*			*18.0-148*		*01/20/2021 12:29*	WG1607053

Total Solids by Method 2540 G-2011

Analyte	Result	Qualifier	Dilution	Analysis	Batch
	%			date / time	
Total Solids	89.8		1	01/19/2021 09:04	WG1607239

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	8560		102	223	10	01/15/2021 06:08	WG1605875

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		0.0242	0.111	1	01/17/2021 02:00	WG1606868
(S) a,a,a-Trifluorotoluene(FID)	*90.1*			*77.0-120*		*01/17/2021 02:00*	WG1606868

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		0.000574	0.00123	1	01/16/2021 21:57	WG1606832
Toluene	U		0.00160	0.00614	1	01/16/2021 21:57	WG1606832
Ethylbenzene	U		0.000905	0.00307	1	01/16/2021 21:57	WG1606832
Total Xylenes	U		0.00108	0.00798	1	01/16/2021 21:57	WG1606832
(S) Toluene-d8	*105*			*75.0-131*		*01/16/2021 21:57*	WG1606832
(S) 4-Bromofluorobenzene	*89.9*			*67.0-138*		*01/16/2021 21:57*	WG1606832
(S) 1,2-Dichloroethane-d4	*89.9*			*70.0-130*		*01/16/2021 21:57*	WG1606832

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		1.79	4.45	1	01/20/2021 14:37	WG1607958
C28-C40 Oil Range	U		0.305	4.45	1	01/20/2021 14:37	WG1607958
(S) o-Terphenyl	*45.9*			*18.0-148*		*01/20/2021 14:37*	WG1607958

Total Solids by Method 2540 G-2011

Analyte	Result	Qualifier	Dilution	Analysis	Batch
	%			date / time	
Total Solids	94.5		1	01/19/2021 09:04	WG1607239

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	5240		97.4	212	10	01/15/2021 06:17	WG1605875

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		0.0230	0.106	1	01/17/2021 02:21	WG1606868
(S) a,a,a-Trifluorotoluene(FID)	*89.3*			*77.0-120*		*01/17/2021 02:21*	WG1606868

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		0.000522	0.00112	1	01/16/2021 22:16	WG1606832
Toluene	U		0.00145	0.00559	1	01/16/2021 22:16	WG1606832
Ethylbenzene	U		0.000823	0.00279	1	01/16/2021 22:16	WG1606832
Total Xylenes	U		0.000983	0.00726	1	01/16/2021 22:16	WG1606832
(S) Toluene-d8	*107*			*75.0-131*		*01/16/2021 22:16*	WG1606832
(S) 4-Bromofluorobenzene	*88.1*			*67.0-138*		*01/16/2021 22:16*	WG1606832
(S) 1,2-Dichloroethane-d4	*85.6*			*70.0-130*		*01/16/2021 22:16*	WG1606832

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		1.70	4.23	1	01/20/2021 11:23	WG1607053
C28-C40 Oil Range	U		0.290	4.23	1	01/20/2021 11:23	WG1607053
(S) o-Terphenyl	*64.7*			*18.0-148*		*01/20/2021 11:23*	WG1607053

Total Solids by Method 2540 G-2011

Analyte	Result	Qualifier	Dilution	Analysis	Batch
	%			date / time	
Total Solids	95.2		1	01/19/2021 09:04	WG1607239

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	3710		48.3	105	5	01/15/2021 06:27	WG1605875

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		0.0228	0.105	1	01/17/2021 02:42	WG1606868
(S) a,a,a-Trifluorotoluene(FID)	*89.7*			*77.0-120*		*01/17/2021 02:42*	WG1606868

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		0.000514	0.00110	1	01/16/2021 22:34	WG1606832
Toluene	U		0.00143	0.00550	1	01/16/2021 22:34	WG1606832
Ethylbenzene	U		0.000811	0.00275	1	01/16/2021 22:34	WG1606832
Total Xylenes	U		0.000968	0.00715	1	01/16/2021 22:34	WG1606832
(S) Toluene-d8	*106*			*75.0-131*		*01/16/2021 22:34*	WG1606832
(S) 4-Bromofluorobenzene	*88.3*			*67.0-138*		*01/16/2021 22:34*	WG1606832
(S) 1,2-Dichloroethane-d4	*90.4*			*70.0-130*		*01/16/2021 22:34*	WG1606832

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		1.69	4.20	1	01/20/2021 11:36	WG1607053
C28-C40 Oil Range	U		0.288	4.20	1	01/20/2021 11:36	WG1607053
(S) o-Terphenyl	*71.2*			*18.0-148*		*01/20/2021 11:36*	WG1607053

Total Solids by Method 2540 G-2011

Analyte	Result	Qualifier	Dilution	Analysis	Batch
	%			date / time	
Total Solids	88.6		1	01/19/2021 09:04	WG1607239

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	4020		51.9	113	5	01/15/2021 06:36	WG1605875

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		0.0245	0.113	1	01/17/2021 03:03	WG1606868
(S) a,a,a-Trifluorotoluene(FID)	*89.9*			*77.0-120*		*01/17/2021 03:03*	WG1606868

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		0.000587	0.00126	1	01/16/2021 22:53	WG1606832
Toluene	U		0.00163	0.00628	1	01/16/2021 22:53	WG1606832
Ethylbenzene	U		0.000926	0.00314	1	01/16/2021 22:53	WG1606832
Total Xylenes	U		0.00111	0.00817	1	01/16/2021 22:53	WG1606832
(S) Toluene-d8	*107*			*75.0-131*		*01/16/2021 22:53*	WG1606832
(S) 4-Bromofluorobenzene	*90.1*			*67.0-138*		*01/16/2021 22:53*	WG1606832
(S) 1,2-Dichloroethane-d4	*87.3*			*70.0-130*		*01/16/2021 22:53*	WG1606832

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		1.82	4.51	1	01/20/2021 11:50	WG1607053
C28-C40 Oil Range	U		0.309	4.51	1	01/20/2021 11:50	WG1607053
(S) o-Terphenyl	*55.4*			*18.0-148*		*01/20/2021 11:50*	WG1607053

Total Solids by Method 2540 G-2011

Analyte	Result	Qualifier	Dilution	Analysis	Batch
	%			date / time	
Total Solids	91.3		1	01/19/2021 09:04	WG1607239

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	1630		50.4	110	5	01/16/2021 09:21	WG1605874

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		0.0238	0.110	1	01/17/2021 03:23	WG1606868
(S) a,a,a-Trifluorotoluene(FID)	*89.9*			*77.0-120*		*01/17/2021 03:23*	WG1606868

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		0.000556	0.00119	1	01/16/2021 23:12	WG1606832
Toluene	U		0.00155	0.00595	1	01/16/2021 23:12	WG1606832
Ethylbenzene	U		0.000877	0.00298	1	01/16/2021 23:12	WG1606832
Total Xylenes	U		0.00105	0.00774	1	01/16/2021 23:12	WG1606832
(S) Toluene-d8	*107*			*75.0-131*		*01/16/2021 23:12*	WG1606832
(S) 4-Bromofluorobenzene	*91.9*			*67.0-138*		*01/16/2021 23:12*	WG1606832
(S) 1,2-Dichloroethane-d4	*90.4*			*70.0-130*		*01/16/2021 23:12*	WG1606832

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		1.76	4.38	1	01/20/2021 12:03	WG1607053
C28-C40 Oil Range	U		0.300	4.38	1	01/20/2021 12:03	WG1607053
(S) o-Terphenyl	*71.2*			*18.0-148*		*01/20/2021 12:03*	WG1607053

Total Solids by Method 2540 G-2011

Analyte	Result	Qualifier	Dilution	Analysis	Batch
	%			date / time	
Total Solids	94.6		1	01/19/2021 09:04	WG1607239

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	377		9.72	21.1	1	01/16/2021 09:39	WG1605874

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		0.0229	0.106	1	01/17/2021 03:44	WG1606868
(S) a,a,a-Trifluorotoluene(FID)	*88.9*			*77.0-120*		*01/17/2021 03:44*	WG1606868

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		0.000520	0.00111	1	01/16/2021 23:31	WG1606832
Toluene	U		0.00145	0.00557	1	01/16/2021 23:31	WG1606832
Ethylbenzene	U		0.000821	0.00278	1	01/16/2021 23:31	WG1606832
Total Xylenes	U		0.000980	0.00724	1	01/16/2021 23:31	WG1606832
(S) Toluene-d8	*107*			*75.0-131*		*01/16/2021 23:31*	WG1606832
(S) 4-Bromofluorobenzene	*91.9*			*67.0-138*		*01/16/2021 23:31*	WG1606832
(S) 1,2-Dichloroethane-d4	*91.7*			*70.0-130*		*01/16/2021 23:31*	WG1606832

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		1.70	4.23	1	01/19/2021 11:47	WG1607198
C28-C40 Oil Range	3.07	J	0.290	4.23	1	01/19/2021 11:47	WG1607198
(S) o-Terphenyl	*55.0*			*18.0-148*		*01/19/2021 11:47*	WG1607198

Total Solids by Method 2540 G-2011

Analyte	Result	Qualifier	Dilution	Analysis	Batch
	%			date / time	
Total Solids	92.4		1	01/19/2021 09:04	WG1607239

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	1050		49.8	108	5	01/16/2021 09:56	WG1605874

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		0.0235	0.108	1	01/17/2021 04:05	WG1606868
(S) a,a,a-Trifluorotoluene(FID)	*90.4*			*77.0-120*		*01/17/2021 04:05*	WG1606868

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		0.000544	0.00117	1	01/16/2021 23:49	WG1606832
Toluene	U		0.00152	0.00583	1	01/16/2021 23:49	WG1606832
Ethylbenzene	U		0.000859	0.00291	1	01/16/2021 23:49	WG1606832
Total Xylenes	U		0.00103	0.00758	1	01/16/2021 23:49	WG1606832
(S) Toluene-d8	*107*			*75.0-131*		*01/16/2021 23:49*	WG1606832
(S) 4-Bromofluorobenzene	*91.8*			*67.0-138*		*01/16/2021 23:49*	WG1606832
(S) 1,2-Dichloroethane-d4	*91.5*			*70.0-130*		*01/16/2021 23:49*	WG1606832

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		1.74	4.33	1	01/19/2021 06:49	WG1607436
C28-C40 Oil Range	U		0.297	4.33	1	01/19/2021 06:49	WG1607436
(S) o-Terphenyl	*67.6*			*18.0-148*		*01/19/2021 06:49*	WG1607436

Total Solids by Method 2540 G-2011

Analyte	Result	Qualifier	Dilution	Analysis	Batch
	%			date / time	
Total Solids	84.6		1	01/19/2021 09:04	WG1607239

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	2170		54.4	118	5	01/16/2021 10:14	WG1605874

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		0.0257	0.118	1	01/17/2021 04:25	WG1606868
(S) a,a,a-Trifluorotoluene(FID)	*89.6*			*77.0-120*		*01/17/2021 04:25*	WG1606868

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		0.000637	0.00136	1	01/17/2021 00:08	WG1606832
Toluene	U		0.00177	0.00682	1	01/17/2021 00:08	WG1606832
Ethylbenzene	U		0.00101	0.00341	1	01/17/2021 00:08	WG1606832
Total Xylenes	U		0.00120	0.00887	1	01/17/2021 00:08	WG1606832
(S) Toluene-d8	*106*			*75.0-131*		*01/17/2021 00:08*	WG1606832
(S) 4-Bromofluorobenzene	*91.1*			*67.0-138*		*01/17/2021 00:08*	WG1606832
(S) 1,2-Dichloroethane-d4	*90.8*			*70.0-130*		*01/17/2021 00:08*	WG1606832

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		1.90	4.73	1	01/19/2021 07:02	WG1607436
C28-C40 Oil Range	U		0.324	4.73	1	01/19/2021 07:02	WG1607436
(S) o-Terphenyl	*65.2*			*18.0-148*		*01/19/2021 07:02*	WG1607436

Total Solids by Method 2540 G-2011

Analyte	Result	Qualifier	Dilution	Analysis	Batch
	%			date / time	
Total Solids	95.7		1	01/19/2021 09:04	WG1607239

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	54.4		9.62	20.9	1	01/16/2021 10:31	WG1605874

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		0.0227	0.105	1	01/17/2021 04:46	WG1606868
(S) a,a,a-Trifluorotoluene(FID)	*89.1*			*77.0-120*		*01/17/2021 04:46*	WG1606868

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		0.000509	0.00109	1	01/17/2021 00:27	WG1606832
Toluene	U		0.00142	0.00545	1	01/17/2021 00:27	WG1606832
Ethylbenzene	U		0.000804	0.00273	1	01/17/2021 00:27	WG1606832
Total Xylenes	U		0.000959	0.00709	1	01/17/2021 00:27	WG1606832
(S) Toluene-d8	*106*			*75.0-131*		*01/17/2021 00:27*	WG1606832
(S) 4-Bromofluorobenzene	*90.6*			*67.0-138*		*01/17/2021 00:27*	WG1606832
(S) 1,2-Dichloroethane-d4	*88.8*			*70.0-130*		*01/17/2021 00:27*	WG1606832

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	138		8.41	20.9	5	01/20/2021 18:12	WG1607958
C28-C40 Oil Range	506		1.43	20.9	5	01/20/2021 18:12	WG1607958
(S) o-Terphenyl	*50.3*			*18.0-148*		*01/20/2021 18:12*	WG1607958

Total Solids by Method 2540 G-2011

Analyte	Result	Qualifier	Dilution	Analysis	Batch
	%			date / time	
Total Solids	94.5		1	01/19/2021 14:07	WG1607345

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	88.1		9.73	21.2	1	01/16/2021 10:48	WG1605874

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		0.0230	0.106	1	01/17/2021 05:07	WG1606868
(S) a,a,a-Trifluorotoluene(FID)	*88.2*			*77.0-120*		*01/17/2021 05:07*	WG1606868

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		0.000521	0.00112	1	01/17/2021 00:46	WG1606832
Toluene	U		0.00145	0.00558	1	01/17/2021 00:46	WG1606832
Ethylbenzene	U		0.000823	0.00279	1	01/17/2021 00:46	WG1606832
Total Xylenes	U		0.000982	0.00726	1	01/17/2021 00:46	WG1606832
(S) Toluene-d8	*106*			*75.0-131*		*01/17/2021 00:46*	WG1606832
(S) 4-Bromofluorobenzene	*89.9*			*67.0-138*		*01/17/2021 00:46*	WG1606832
(S) 1,2-Dichloroethane-d4	*89.3*			*70.0-130*		*01/17/2021 00:46*	WG1606832

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	64.5		8.52	21.2	5	01/20/2021 17:59	WG1607958
C28-C40 Oil Range	236		1.45	21.2	5	01/20/2021 17:59	WG1607958
(S) o-Terphenyl	*52.7*			*18.0-148*		*01/20/2021 17:59*	WG1607958

Method Blank (MB)

(MB) R3613855-1 01/18/21 14:32

Analyte	MB Result %	MB Qualifier	MB MDL %	MB RDL %
Total Solids	0.000			

L1306493-04 Original Sample (OS) • Duplicate (DUP)

(OS) L1306493-04 01/18/21 14:32 • (DUP) R3613855-3 01/18/21 14:32

Analyte	Original Result %	DUP Result %	Dilution	DUP RPD %	DUP Qualifier	DUP RPD Limits %
Total Solids	80.5	75.6	1	6.25		10

Laboratory Control Sample (LCS)

(LCS) R3613855-2 01/18/21 14:32

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

Method Blank (MB)

(MB) R3614055-1 01/19/21 09:04

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

L1306499-09 Original Sample (OS) • Duplicate (DUP)

(OS) L1306499-09 01/19/21 09:04 • (DUP) R3614055-3 01/19/21 09:04

Analyte	Original Result %	DUP Result %	Dilution	DUP RPD %	DUP Qualifier	DUP RPD Limits %
Total Solids	91.3	90.5	1	0.846		10

Laboratory Control Sample (LCS)

(LCS) R3614055-2 01/19/21 09:04

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

Method Blank (MB)

(MB) R3614225-1 01/19/21 14:07

Analyte	MB Result %	MB Qualifier	MB MDL %	MB RDL %
Total Solids	0.000			

L1306511-01 Original Sample (OS) • Duplicate (DUP)

(OS) L1306511-01 01/19/21 14:07 • (DUP) R3614225-3 01/19/21 14:07

Analyte	Original Result %	DUP Result %	Dilution	DUP RPD %	DUP Qualifier	DUP RPD Limits %
Total Solids	95.3	95.8	1	0.472		10

Laboratory Control Sample (LCS)

(LCS) R3614225-2 01/19/21 14:07

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

Method Blank (MB)

(MB) R3613311-1 01/16/21 02:21

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

L1306313-01 Original Sample (OS) • Duplicate (DUP)

(OS) L1306313-01 01/16/21 05:18 • (DUP) R3613311-5 01/16/21 05:35

Analyte	Original Result (dry) mg/kg	DUP Result (dry) mg/kg	Dilution	DUP RPD %	DUP Qualifier	DUP RPD Limits %
Chloride	36.0	32.0	1	11.7		20

L1306499-14 Original Sample (OS) • Duplicate (DUP)

(OS) L1306499-14 01/16/21 10:48 • (DUP) R3613311-6 01/16/21 11:06

Analyte	Original Result (dry) mg/kg	DUP Result (dry) mg/kg	Dilution	DUP RPD %	DUP Qualifier	DUP RPD Limits %
Chloride	88.1	79.4	1	10.5		20

Laboratory Control Sample (LCS)

(LCS) R3613311-2 01/16/21 02:37

Analyte	Spike Amount mg/kg	LCS Result mg/kg	LCS Rec. %	Rec. Limits %	LCS Qualifier
Chloride	200	196	98.0	90.0-110	

L1305603-01 Original Sample (OS) • Matrix Spike (MS) • Matrix Spike Duplicate (MSD)

(OS) L1305603-01 01/17/21 11:17 • (MS) R3613334-1 01/17/21 11:34 • (MSD) R3613334-2 01/17/21 11:51

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 %
Chloride	502	162	647	627	96.7	92.8	1	80.0-120			3.07	20

Method Blank (MB)

(MB) R3613040-1 01/15/21 01:14

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

L1306492-02 Original Sample (OS) • Duplicate (DUP)

(OS) L1306492-02 01/15/21 03:07 • (DUP) R3613040-4 01/15/21 03:16

Analyte	Original Result (dry) mg/kg	DUP Result (dry) mg/kg	Dilution	DUP RPD %	DUP Qualifier	DUP RPD Limits %
Chloride	1190	1040	5	14.1		20

L1306499-08 Original Sample (OS) • Duplicate (DUP)

(OS) L1306499-08 01/15/21 06:36 • (DUP) R3613040-5 01/15/21 06:46

Analyte	Original Result (dry) mg/kg	DUP Result (dry) mg/kg	Dilution	DUP RPD %	DUP Qualifier	DUP RPD Limits %
Chloride	4020	4510	5	11.7		20

Laboratory Control Sample (LCS)

(LCS) R3613040-2 01/15/21 01:24

Analyte	Spike Amount mg/kg	LCS Result mg/kg	LCS Rec. %	Rec. Limits %	LCS Qualifier
Chloride	200	199	99.5	90.0-110	

L1306492-01 Original Sample (OS) • Matrix Spike (MS) • Matrix Spike Duplicate (MSD)

(OS) L1306492-01 01/15/21 02:38 • (MS) R3613040-3 01/15/21 02:48 • (MSD) R3613040-7 01/15/21 14:48

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 %
Chloride	56.1	5030	5470	5590	78.7	101	10	80.0-120	V		2.26	20

Method Blank (MB)

(MB) R3614451-2 01/16/21 23:56

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)	*93.8*			*77.0-120*

Laboratory Control Sample (LCS)

(LCS) R3614451-1 01/16/21 23:14

Analyte	Spike Amount mg/kg	LCS Result mg/kg	LCS Rec. %	Rec. Limits %	LCS Qualifier
TPH (GC/FID) Low Fraction	5.50	6.11	111	72.0-127	
(S) a,a,a-Trifluorotoluene(FID)			*111*	*77.0-120*	

Method Blank (MB)

(MB) R3614731-3 01/20/21 20:19

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)	*99.6*			*77.0-120*

Laboratory Control Sample (LCS)

(LCS) R3614731-1 01/20/21 18:45

Analyte	Spike Amount mg/kg	LCS Result mg/kg	LCS Rec. %	Rec. Limits %	LCS Qualifier
TPH (GC/FID) Low Fraction	5.50	5.83	106	72.0-127	
(S) a,a,a-Trifluorotoluene(FID)			*102*	*77.0-120*	

Method Blank (MB)

(MB) R3613641-2 01/16/21 17:01

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	*106*			*75.0-131*
(S) 4-Bromofluorobenzene	*90.8*			*67.0-138*
(S) 1,2-Dichloroethane-d4	*90.4*			*70.0-130*

Laboratory Control Sample (LCS)

(LCS) R3613641-1 01/16/21 16:04

Analyte	Spike Amount mg/kg	LCS Result mg/kg	LCS Rec. %	Rec. Limits %	LCS Qualifier
Benzene	0.125	0.113	90.4	70.0-123	
Ethylbenzene	0.125	0.122	97.6	74.0-126	
Toluene	0.125	0.129	103	75.0-121	
Xylenes, Total	0.375	0.379	101	72.0-127	
(S) Toluene-d8			*107*	*75.0-131*	
(S) 4-Bromofluorobenzene			*90.2*	*67.0-138*	
(S) 1,2-Dichloroethane-d4			*93.0*	*70.0-130*	

L1306499-01 Original Sample (OS) • Matrix Spike (MS) • Matrix Spike Duplicate (MSD)

(OS) L1306499-01 01/16/21 20:41 • (MS) R3613641-3 01/17/21 01:05 • (MSD) R3613641-4 01/17/21 01:24

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	0.140	U	0.151	0.161	108	115	1	10.0-149			6.50	37
Ethylbenzene	0.140	U	0.177	0.188	127	135	1	10.0-160			6.17	38
Toluene	0.140	U	0.168	0.178	120	127	1	10.0-156			5.86	38
Xylenes, Total	0.420	U	0.511	0.540	122	129	1	10.0-160			5.58	38
(S) Toluene-d8					*105*	*104*		*75.0-131*				
(S) 4-Bromofluorobenzene					*90.9*	*91.1*		*67.0-138*				
(S) 1,2-Dichloroethane-d4					*91.5*	*92.4*		*70.0-130*				

Method Blank (MB)

(MB) R3614517-1 01/20/21 04:26

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	*79.0*			*18.0-148*

Laboratory Control Sample (LCS)

(LCS) R3614517-2 01/20/21 04:39

Analyte	Spike Amount mg/kg	LCS Result mg/kg	LCS Rec. %	Rec. Limits %	LCS Qualifier
C10-C28 Diesel Range	50.0	34.1	68.2	50.0-150	
(S) o-Terphenyl			*66.4*	*18.0-148*	

L1306498-03 Original Sample (OS) • Matrix Spike (MS) • Matrix Spike Duplicate (MSD)

(OS) L1306498-03 01/20/21 10:18 • (MS) R3614517-3 01/20/21 10:31 • (MSD) R3614517-4 01/20/21 10:44

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	50.0	U	28.2	33.9	56.4	67.8	1	50.0-150			18.4	20
(S) o-Terphenyl					*49.4*	*64.1*		*18.0-148*				

Method Blank (MB)

(MB) R3613865-1 01/19/21 06:52

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	*49.2*			*18.0-148*

Laboratory Control Sample (LCS)

(LCS) R3613865-2 01/19/21 07:05

Analyte	Spike Amount mg/kg	LCS Result mg/kg	LCS Rec. %	Rec. Limits %	LCS Qualifier
C10-C28 Diesel Range	50.0	27.4	54.8	50.0-150	
(S) o-Terphenyl			*50.2*	*18.0-148*	

L1305229-03 Original Sample (OS) • Matrix Spike (MS) • Matrix Spike Duplicate (MSD)

(OS) L1305229-03 01/19/21 14:46 • (MS) R3613865-3 01/19/21 12:13 • (MSD) R3613865-4 01/19/21 12:25

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 %
C10-C28 Diesel Range	54.9	15.7	45.0	39.4	53.4	43.2	1	50.0-150		J6	13.3	20
(S) o-Terphenyl					*30.5*	*24.5*		*18.0-148*				

Sample Narrative:

OS: Surrogate failure due to matrix interference

Method Blank (MB)

(MB) R3613768-1 01/19/21 03:20

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	*93.4*			*18.0-148*

Laboratory Control Sample (LCS)

(LCS) R3613768-2 01/19/21 03:33

Analyte	Spike Amount mg/kg	LCS Result mg/kg	LCS Rec. %	Rec. Limits %	LCS Qualifier
C10-C28 Diesel Range	50.0	46.6	93.2	50.0-150	
(S) o-Terphenyl			*93.5*	*18.0-148*	

L1307416-01 Original Sample (OS) • Matrix Spike (MS) • Matrix Spike Duplicate (MSD)

(OS) L1307416-01 01/19/21 09:00 • (MS) R3613768-3 01/19/21 09:13 • (MSD) R3613768-4 01/19/21 09:27

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 %
C10-C28 Diesel Range	59.5	U	48.4	50.2	81.4	84.4	1	50.0-150			3.62	20
(S) o-Terphenyl					*76.7*	*79.9*		*18.0-148*				

Method Blank (MB)

(MB) R3614637-1 01/20/21 12:36

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	0.643	J	0.274	4.00
(S) o-Terphenyl	*60.1*			*18.0-148*

Laboratory Control Sample (LCS)

(LCS) R3614637-2 01/20/21 12:49

Analyte	Spike Amount mg/kg	LCS Result mg/kg	LCS Rec. %	Rec. Limits %	LCS Qualifier
C10-C28 Diesel Range	50.0	31.6	63.2	50.0-150	
(S) o-Terphenyl			*77.9*	*18.0-148*	

L1306511-13 Original Sample (OS) • Matrix Spike (MS) • Matrix Spike Duplicate (MSD)

(OS) L1306511-13 01/20/21 13:29 • (MS) R3614637-3 01/20/21 13:43 • (MSD) R3614637-4 01/20/21 13:56

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 %
C10-C28 Diesel Range	51.0	U	31.0	33.9	60.8	66.4	1	50.0-150			8.81	20
(S) o-Terphenyl					*72.2*	*77.5*		*18.0-148*				

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
J	The identification of the analyte is acceptable; the reported value is an estimate.
J6	The sample matrix interfered with the ability to make any accurate determination; spike value is low.
V	The sample concentration is too high to evaluate accurate spike recoveries.

Pace National is the only environmental laboratory accredited/certified to support your work nationwide from one location. One phone call, one point of contact, one laboratory. No other lab is as accessible or prepared to handle your needs throughout the country. Our capacity and capability from our single location laboratory is comparable to the collective totals of the network laboratories in our industry. The most significant benefit to our one location design is the design of our laboratory campus. The model is conducive to accelerated productivity, decreasing turn-around time, and preventing cross contamination, thus protecting sample integrity. Our focus on premium quality and prompt service allows us to be YOUR LAB OF CHOICE.
* 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 National.

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	LAO00356
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		

Pace Analytical National 1313 Point Mallard Parkway SE Suite B Decatur, AL, 35601

Alabama	40160
ANSI National Accreditation Board	L2239

Pace Analytical National 660 Bercut Dr. Ste. C Sacramento, CA, 95811

California	2961	Oregon	CA300002
Minnesota	006-999-465	Washington	C926
North Dakota	R-214		

Pace Analytical National 6000 South Eastern Avenue Ste 9A Las Vegas, NV, 89119

Nevada	NV009412021-1

Pace Analytical National 1606 E. Brazos Street Suite D Victoria, TX, 77901

Texas	T104704328-20-18

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

Analysis Request of Chain of Custody Record

Tetra Tech, Inc.

901 West Wall Street, Suite 100
s 79701
682-4559
Fax (432) 682-3946

E163

L1306499

Client Name:	Conoco Phillips	**Site Manager:**	Christian Llull
Project Name:	James E Upper Battery Load Line Release (2RP-3748)	**Contact Info:**	Email: christian.llull@tetratech.com Phone: (512) 338-1667
Project Location: (county, state)	Lea County, New Mexico	**Project #:**	212C-MD-02334, Task No. 29
Invoice to:	Accounts Payable 901 West Wall Street, Suite 100 Midland, Texas 79701		
Receiving Laboratory:	Pace Analytical	**Sampler Signature:**	John Thurston
Comments:	COPTETRA Acctnum		

ANALYSIS REQUEST (Circle or Specify Method No.)

LAB # (LAB USE ONLY)	SAMPLE IDENTIFICATION	SAMPLING YEAR: 2021 DATE	SAMPLING TIME	MATRIX: WATER	MATRIX: SOIL	MATRIX:	PRESERVATIVE METHOD: HCL	PRESERVATIVE METHOD: HNO3	PRESERVATIVE METHOD: ICE	PRESERVATIVE METHOD: NONE	PRESERVATIVE METHOD:	# CONTAINERS	FILTERED (Y/N)	BTEX 8021B BTEX 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 300.0	Chloride Sulfate TDS	General Water Chemistry (see attached list)	Anion/Cation Balance	TPH 8015R		HOLD
-01	BH-1 (0'-1')	01/12/21	900		X				X			1	N	X		X												X						
-02	BH-1 (1'-3')	01/12/21	910		X				X			1	N	X		X												X						
-03	BH-1 (3'-5')	01/12/21	920		X				X			1	N	X		X												X						
-04	BH-1 (5'-7')	01/12/21	930		X				X			1	N	X		X												X						
-05	BH-1 (7'-10')	01/12/21	940		X				X			1	N	X		X												X						
-06	BH-1 (10'-15')	01/12/21	950		X				X			1	N	X		X												X						
-07	BH-1 (15'-20')	01/12/21	1000		X				X			1	N	X		X												X						
-08	BH-1 (20'-25')	01/12/21	1020		X				X			1	N	X		X												X						
-09	BH-1 (25'-30')	01/12/21	1030		X				X			1	N	X		X												X						
-10	BH-1 (30'-35')	01/12/21	1050		X				X			1	N	X		X												X						

Relinquished by:	Date:	Time:	Received by:	Date:	Time:
[signature]	~~1630~~ 1/13/21	1630			
Relinquished by:	Date:	Time:	Received by:	Date:	Time:
Relinquished by:	Date:	Time:	Received by:	Date:	Time:
			[signature]	1-14-21	900

ORIGINAL COPY

MPAS 1.1.3=8

LAB USE ONLY

Sample Temperature

REMARKS:

- [X] 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 #: _____

L 130699

Chain of Custody Record

Tetra Tech, Inc.

901 West Wall Street, Suite 100
Midland, Texas 79701
(432) 682-4559
Fax (432) 682-3946

Conoco Phillips	Site Manager:	Christian Llull	
James E Upper Battery Load Line Release (2RP-3748)	Contact Info:	Email: christian.llull@tetratech.com Phone: (512) 338-1667	
Lea County, New Mexico	Project #:	212C-MD-02334, Task No. 29	
Accounts Payable 901 West Wall Street, Suite 100 Midland, Texas 79701			
Lab: Pace Analytical	Sampler Signature:	John Thurston	

PTETRA Acctnum

ANALYSIS REQUEST
(Circle or Specify Method No.)

SAMPLE IDENTIFICATION	SAMPLING YEAR: 2021 DATE	TIME	MATRIX WATER	MATRIX SOIL	PRESERVATIVE METHOD HCL	HNO3	ICE	NONE	# CONTAINERS	FILTERED (Y/N)	BTEX 8021B BTEX 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 300.0	Chloride Sulfate TDS	General Water Chemistry (see attached list)	Anion/Cation Balance	TPH 8015R	HOLD
BH-1 (35'-40')	01/12/21	1100		X			X		1	N	X		X												X					
BH-1 (40'-45')	01/12/21	1120		X			X		1	N	X		X												X					
AH-1 (0'-1')	01/12/21	1130		X			X		1	N	X		X												X					
AH-1 (3'-4')	01/12/21	1150		X			X		1	N	X		X												X					

Sample Receipt Checklist

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

	Date:	Time:	Received by:	Date:	Time:
Relinquished by:	1/13/21	1630			
Relinquished by:			Received by:	Date:	Time:
Relinquished by:			Received by:	Date:	Time:

ORIGINAL COPY

LAB USE ONLY

Sample Temperature

REMARKS:

- [X] 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 #: _____

MPTS 1.1-3=8

Erica McNeese

From: Abbott, Sam <Sam.Abbott@tetratech.com>
Sent: Tuesday, January 26, 2021 5:51 PM
To: Erica McNeese
Cc: Chris McCord
Subject: RE: Pace Analytical National Level II Report for 212C-MD-02334 TASK29 James E Upper Battery Load Line Release (2RP-3748) L1306499

CAUTION: This email originated from outside Pace Analytical. Do not click links or open attachments unless you recognize the sender and know the content is safe.

I'm sorry! I just noticed another issue with this one. I will need to revise the BH-1 sample intervals as well, as follows:

Change from:	Change to:
BH-1 (1'-3')	BH-1 (2'-3')
BH-1 (3'-5')	BH-1 (4'-5')
BH-1 (5'-7')	BH-1 (6'-7')
BH-1 (7'-10')	BH-1 (9'-10')
BH-1 (10'-15')	BH-1 (14'-15')
BH-1 (15'-20')	BH-1 (19'-20')
BH-1 (20'-25')	BH-1 (24'-25')
BH-1 (25'-30')	BH-1 (29'-30')
BH-1 (30'-35')	BH-1 (34'-35')
BH-1 (35'-40')	BH-1 (39'-40')
BH-1 (40'-45')	BH-1 (44'-45')

Sam

From: Erica McNeese <Erica.McNeese@pacelabs.com>
Sent: Tuesday, January 26, 2021 5:32 PM
To: Abbott, Sam <Sam.Abbott@tetratech.com>; Chris McCord <Chris.McCord@pacelabs.com>
Subject: RE: Pace Analytical National Level II Report for 212C-MD-02334 TASK29 James E Upper Battery Load Line Release (2RP-3748) L1306499

⚠ CAUTION: This email originated from an external sender. Verify the source before opening links or attachments. ⚠

Sam,

Will do. I will send you the revised reports once they are complete.

Thank you,

Please note that email addresses for staff at the Pace Analytical National Center for Testing & Innovation have changed. My new email address is Erica.McNeese@pacelabs.com. Please update your records accordingly.

Erica McNeese

Project Manager I | National
12065 Lebanon Road | Mt. Juliet, TN 37122
o.615.773.9749 | Erica.McNeese@pacelabs.com

From: Abbott, Sam <Sam.Abbott@tetratech.com>
Sent: Tuesday, January 26, 2021 5:30 PM
To: Chris McCord <Chris.McCord@pacelabs.com>; Erica McNeese <Erica.McNeese@pacelabs.com>
Subject: FW: Pace Analytical National Level II Report for 212C-MD-02334 TASK29 James E Upper Battery Load Line Release (2RP-3748) L1306499

For this one, BH-1 is fine, but can we change “AH-1 (0-1’)” and “AH-1 (3-4’)” to “AH-6 (0-1’)” and “AH-6 (3-4’)”?

Thanks!
Sam

Samantha Abbott, PG | Senior Staff Geoscientist
Direct **+1 (512) 338-2852** | Business **+1 (512) 338-1667** | Mobile **+1 (512) 739-7874** | Sam.Abbott@tetratech.com

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8911 N Capital of Texas Hwy #2310 | Austin, TX 78759 | tetratech.com

From: Llull, Christian <Christian.Llull@tetratech.com>
Sent: Thursday, January 21, 2021 8:03 PM
To: Abbott, Sam <Sam.Abbott@tetratech.com>
Subject: Fwd: Pace Analytical National Level II Report for 212C-MD-02334 TASK29 James E Upper Battery Load Line Release (2RP-3748) L1306499

Christian

Get Outlook for iOS

From: chris.mccord@pacelabs.com <chris.mccord@pacelabs.com>
Sent: Thursday, January 21, 2021 7:33:13 PM

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 151991

CONDITIONS

Operator: CONOCOPHILLIPS COMPANY 600 W. Illinois Avenue Midland, TX 79701	OGRID: 217817
	Action Number: 151991
	Action Type: [C-141] Release Corrective Action (C-141)

CONDITIONS

Created By	Condition	Condition Date
bhall	Remediation plan approved. Alternative sampling plan of confirmation samples representative of 500 square feet denied. OCD will approve confirmation samples representative of no more than 400 square feet.	1/9/2023
bhall	2RP-3748 closed. Refer to incident #nAB1617331258 for all future communication.	1/9/2023
bhall	Submit a complete report through the OCD Permitting website by 4/14/2023.	1/9/2023