TETRA TECH

July 19, 2024

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

Re: Remediation & Reclamation Report and Closure Request
Maverick Permian, LLC
VGEU 02-19 Flowline Release
Unit Letter C, Section 32, Township 17 South, Range 35 East
Lea County, New Mexico
Incident ID# nPAC0716534072

Dear Sir or Madam,

Tetra Tech, Inc. (Tetra Tech) was initially contracted by ConocoPhillips (COP) to assess a historical release that occurred from a flowline associated with the Vacuum Glorietta East Unit (VGEU) 02-19 well (API Number 30-025-37849). The release footprint is located approximately 1,300 feet west of the wellhead in Public Land Survey System (PLSS) Unit Letter C, Section 32, Township 17 South, Range 35 East, in Lea County, New Mexico at coordinates 32.79640°, -103.48054° (Site), as shown in **Figure 1** and **Figure 2**. Maverick Permian, LLC acquired the Site and responsibility for remediation and reclamation of this release in June 2022.

BACKGROUND

According to the State of New Mexico Oil Conservation Division (NMOCD) C-141 Initial Report, the release was discovered on June 3, 2007. The release occurred due to internal corrosion of a 2 ⅞-inch steel flowline leading to a release of approximately 31 barrels (bbls) spill of produced water and 6 bbls of oil into an approximately 75 feet by 75 feet area of pasture. Approximately 14 bbls of produced water and 3 bbls of crude oil were reported as recovered by vac-truck during the initial response. The NMOCD received the Initial C-141 on June 11, 2007, and subsequently assigned the release Incident ID nPAC0716534072. The initial C-141 Release notification form is available from the NMOCD Permitting portal under incident nPAC0716534072.

SITE CHARACTERIZATION

Tetra Tech performed a Site characterization that included the identification of sensitive receptors, a depth to groundwater determination, and assessment of site soils. Site Characterization data are included in **Attachment 1**

Receptors

Tetra Tech identified no watercourses, sinkholes, residences, schools, hospitals, institutions, churches, springs, private domestic water wells, playa lakes, wetlands, incorporated municipal boundaries, subsurface mines, or floodplains within the distances specified in 19.15.29 New Mexico Administrative Code (NMAC). According to the NMOCD Oil and Gas Map online, the Site is in an area of low karst potential.

Depth to Groundwater

According to the New Mexico Office of State Engineer's (NMOSE) Reporting System, there are no water wells within ½ miles of the Site. On August 25, 2021, Tetra Tech advanced depth to water boring DTGW-1 to 55 feet below ground surface at 32.793424, -103.482099, approximately 1,200 feet south-southwest of the Site. DTGW-1 confirmed that no groundwater is present within the upper 55 feet at the Site.

Tetra Tech, Inc.
1500 CityWest Boulevard, Suite 1000, Houston, Texas 77042
Tel +1.832.251.5160 | tetratech.com/oga | tetratech.com

Soils

According to the United States Department of Agriculture (USDA) Natural Resources Conservation Service (NRCS), the Site is mapped as Kimbrough-Lea Complex, dry, 0 to 3 percent slopes, which is classified as a loam soil. The typical soil profile for this soil type includes unconsolidated gravelly loam and loam in the upper 10 inches underlain by cemented material down to 80 inches.

REGULATORY FRAMEWORK

Based upon the release footprint location 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 Xylenes (BTEX), Total Petroleum Hydrocarbons (TPH), and chloride in soil.

Based on the depth to water and distances to potential receptors, and in accordance with Table I of 19.15.29.12 NMAC, the remediation RRALs for the Site for groundwater between 51 and 100 feet bgs are as follows:

Closure Criteria for Soils Impacted by a Release

Constituent	Remediation 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
Benzene	10 mg/kg

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

Reclamation Requirements

Constituent	Remediation RRAL
Chloride	600 mg/kg
TPH (GRO+DRO+ORO)	100 mg/kg
BTEX	50 mg/kg
Benzene	10 mg/kg

SITE ASSESSMENT

Desktop Review and Site Inspection

Tetra Tech performed a desktop review of available historical aerial imagery revealing evidence of apparent remediation in the vicinity of the reported release area footprint. Historical imagery from 2009 shows disturbed soils in the vicinity release area. However, distressed areas within this remediated extent reappeared in imagery from 2014 and 2017. During a visual Site inspection conducted by Tetra Tech in July 2020, sparse vegetation was

observed in portions of the release area footprint corresponding with these distressed areas. From the desktop review, it is apparent that remediation was conducted, however, it may not have been sufficient for full revegetation and reclamation. Photographic documentation of the visual Site inspection is included in **Attachment 2**.

Site Assessment Sampling

Based on the aerial review and the Site inspection observations, at the request of COP, Tetra Tech personnel were on site in October and November 2020 to conduct soil sampling to achieve vertical and horizontal delineation of the observed release extent. A total of five (5) borings (BH-1 through BH-5) were installed using an air rotary drilling rig. Two (2) borings (BH-1 and BH-2) were installed to depths of 30 feet bgs inside the release extent, and three (3) borings (BH-3 through BH-5) were installed to depths of 4 feet bgs along the perimeter of the release extent to the west, north, and east respectively. One (1) hand auger boring (AH-1) was advanced to a depth of 2 feet bgs on the southern perimeter of the release extent. Soils at the Site consist of approximately 1.5 feet of brown silty clay underlain by a caliche cap rock. **Figure 3** depicts the release extent and the 2020 soil boring locations, and GPS coordinates for the boring locations are presented in **Table 1**.

Soils were field screened for salinity using an ExTech EC400 ExStik and for volatile organics using a photoionization detector (PID) to determine sampling intervals. A total of 26 samples were collected from the six (6) borings (BH-1 through BH-5 and AH-1) and submitted to Pace Analytical National Center for Testing & Innovation (Pace) in Mount Juliet, Tennessee to be analyzed for chlorides by Method 300.0, TPH by Method 8015M, and BTEX by Method 8021B.

Summary of Assessment Sampling Results

Results from the October and November 2020 soil sampling events are summarized in **Table 2** screened against Reclamation Requirements. The analytical results associated with all samples collected from the six (6) borings (BH-1 through BH-5 and AH-1) reported concentrations of BTEX, TPH, and chloride as less than were below the most stringent Site Reclamation Requirements. Copies of the laboratory analytical data packages including chain-of-custody documentation are included in **Attachment 3**.

SITE RECLAMATION AND RESTORATION PLAN

Based on the results of the Site assessment, COP deemed that no soil remediation was necessary at the Site. However, as this is an off-pad release, Site reclamation and restoration activities are warranted in order to establish vegetative cover that reflects a life-form ratio of plus or minus fifty percent of pre-disturbance levels and a total percent plant cover of at least seventy percent of pre-disturbance levels. Bare soils in the former release footprint were proposed to be ripped, blended with clean topsoil, and contoured to promote drainage and root penetration. The mixing of topsoil with underlying subsoil will promote revegetation.

Unvegetated areas in the former release footprint were proposed to be seeded to aid in revegetation. Based on soils at the Site, the New Mexico State Land Office (NMSLO) Loamy (L) Sites Seed Mixture will be used for seeding and will be planted in the amount specified in the pounds pure live seed (PLS) per acre. The seed mixture would be spread by a drill equipped with a depth regulator or a hand-held broadcaster and raked. If a hand-held broadcaster is used for dispersal, the PLS seed per acre will be doubled.

Site inspections were proposed to be performed to assess the revegetation progress and evaluate the Site for the presence of primary or secondary noxious weeds. If noxious weeds are identified, the NMSLO will be contacted to determine an effective method for eradication. If the Site does not show revegetation after one growing season, the area will be reseeded as appropriate. The NMSLO seed mixture details and corresponding pounds pure live seed per acre are included in **Attachment 4**.

Site Reclamation and Restoration Plan Approval

On April 21, 2023, the NMOCD approved the Site Reclamation and Restoration Plan with the following conditions:

- *"The reclamation must contain a minimum of four feet of non-waste containing, uncontaminated, earthen material with chloride concentrations less than 600 mg/kg as analyzed by EPA Method 300.0, or other test methods approved by the division."*
- *"The soil cover must include a top layer, which is either the background thickness of topsoil or one foot of suitable material to establish vegetation at the site, whichever is greater."*
- *"Reclamation of all disturbed areas will be considered complete when uniform vegetative cover has been established that reflects a life-form ratio of plus or minus fifty percent of pre-disturbance levels and a total percent plant cover of at least seventy percent of pre-disturbance levels, excluding noxious weeds."*
- *"The responsible party must notify the division when reclamation and re-vegetation are complete."*

SITE RECLAMATION AND RESTORATION

Reclamation

Based on the Soil Assessment Sampling Results, the Site does not contain any waste containing, contaminated, earthen material with BTEX, TPH, or chloride concentrations greater than Reclamation Requirements, as demonstrated in **Table 2**.

Soil Cover

Based on the published soil profile for the Site, the Site is mapped with a soil profile of 10-inches including gravelly loam in the upper 0 to 3 inches and loam in the upper 0 to 10 inches, underlain by cemented material to a depth of greater than 6.5 feet bgs. This soil profile matches with the understood soil and caprock conditions in the vicinity of the Site and in the greater area surrounding Buckeye, New Mexico. Site Assessment sampling activities confirm that there is 1.5 feet of silty clay topsoil present at the Site, likely imported form the previously inferred remediation activities discussed above and is a greater thickness than one foot and the published background topsoil thickness at the Site.

Interseeding

On April 22, 2024, McNabb Partners mobilized to the Site prepared to rip and seed the unvegetated areas in the former release footprint at the Site. Upon arrival at the Site, it was apparent that the Site is currently undergoing revegetation and that there were no areas present at the site that were unvegetated and would require ripping. In lieu of ripping and seeding, the Site was interseeded with NMSLO Seed Mix for Loamy (L) soils via broadcasting methods at the corresponding pounds PLA per acre for broadcast seeding prescribed in the NMSLO Seed Mix data sheet provided in **Attachment 4**. Photographic documentation showing the open excavation is provided in **Attachment 2**.

Sampling Notification

Tetra Tech conducted Assessment sampling in October and November of 2020, demonstrating no remediation is required at the Site. Subsequent to the interseeding activities described above, Tetra Tech retroactively submitted C-141N sampling notifications for Site Assessment Sampling to the NMOCD for record-keeping purposes. Sample notifications are available in the NMOCD Portal under Incident ID nPAC0716534072.

Reclamation and Revegetation

Soil Assessment sampling shows surface areas in the pasture have 1.5 feet of clean topsoil and any disturbed areas are graded to match the surrounding topography to provide erosion control, long-term stability, prevent ponding of water, and preserve surface water flow patterns.

Disturbed pasture areas of the Site were observed undergoing revegetation and were subsequently interseeded with New Mexico State Land Office (NMSLO) Loamy (L) Sites Seed Mixture to assist in additional vegetation growth to complete reclamation in accordance with the Site soil profile detailed above in the Site Characterization Section. Seeding was broadcast per the specifications for broadcast application in pounds PLS per acre according to the NMSLO Seed Mix Loamy (L) data sheet provided in **Attachment 4**.

Site inspections will be performed periodically to assess the revegetation progress and evaluate the site for the presence of primary or secondary noxious weeds. If noxious weeds are identified, the NMSLO will be contacted to determine an effective method for eradication. If the site does not show revegetation after one growing season, the area will be reseeded as appropriate.

Revegetation will be considered complete once uniform vegetative cover has been established that reflects a life-form ratio of plus or minus fifty percent of pre-disturbance levels and a total percent plant cover of at least seventy percent of pre-disturbance levels or a vegetative cover approved by NMSLO. Upon completion of Revegetation, Tetra Tech will prepare and submit a Revegetation Report in accordance with the EMNRD Notice Process Updates re: Submissions of Form C-141 Release Notification and Corrective Actions requirements.

CONCLUSION

Based on Site Assessment Sampling results and the Site inspection conducted during Site interseeding, any impacted soil within the release footprint with BTEX, TPH, or chloride concentrations greater than Reclamation Requirements is not present at the Site. Approximately 1.5 feet of clean soil was observed at the site, in excess of the published soil profile for the surrounding area, which is graded to match the surrounding topography. Revegetation is underway and the Site has been interseeded with NMSLO approved seed mixture. Therefore, Site reclamation is complete at the Site. A Revegetation Report for the Site will be submitted to the NMOCD under separate cover containing the NMOCD required information upon completion of revegetation. If you have any questions concerning the remediation activities for the Site, please contact Charles Terhune by email at Chuck.Terhune@tetratech.com or by phone at (832) 252-2093.

Sincerely,

Chris Straub
Project Manager
Tetra Tech, Inc.

Charles H. Terhune IV, P.G.
Program Manager
Tetra Tech, Inc.

cc: Bryce Wagoner, Maverick Permian, LLC
New Mexico State Land Office

LIST OF ATTACHMENTS

Figures

Tables

Attachments

FIGURES

Image Source: Google Earth, November 2019.

DOCUMENT PATH: D:\CONOCOPHILLIPS\MXD\1RP-1408\FIGURE 1 SITE LOCATION_1RP-1408.MXD

TETRA TECH

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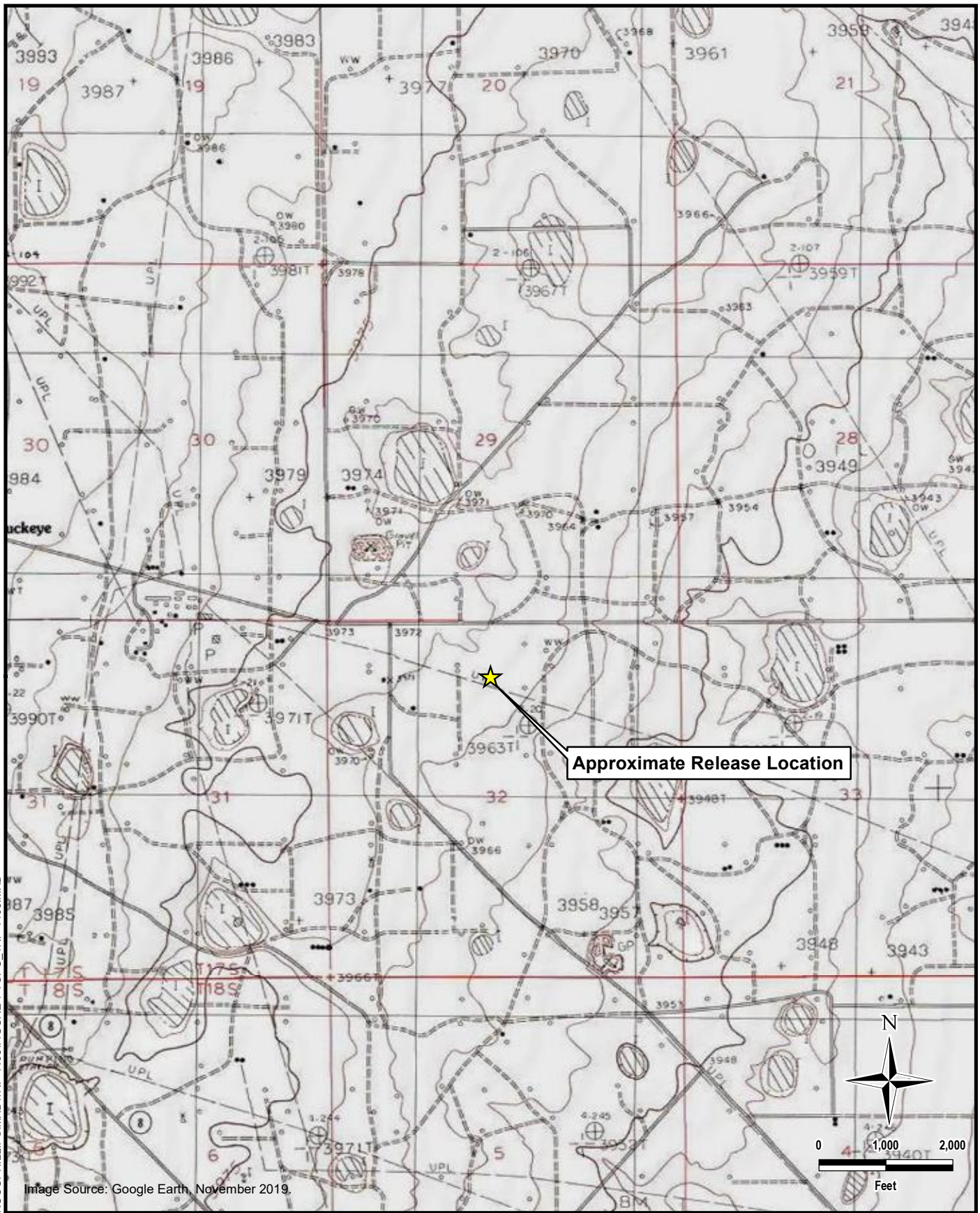
MAVERICK PEMIAN, LLC

nPAC0716534072
(32.796407°, -103.480549°)
LEA COUNTY, NEW MEXICO

VGEU 02-19 FLOWLINE RLEASE
SITE LOCATION MAP

PROJECT NO.:	212C-MD-03434
DATE:	DECEMBER 17, 2020
DESIGNED BY:	AAM

Figure No.
1



DOCUMENT PATH: D:\CONOCOPHILLIPS\MXD\1RP-1408\FIGURE 1 TOPO_1RP-1408.MXD

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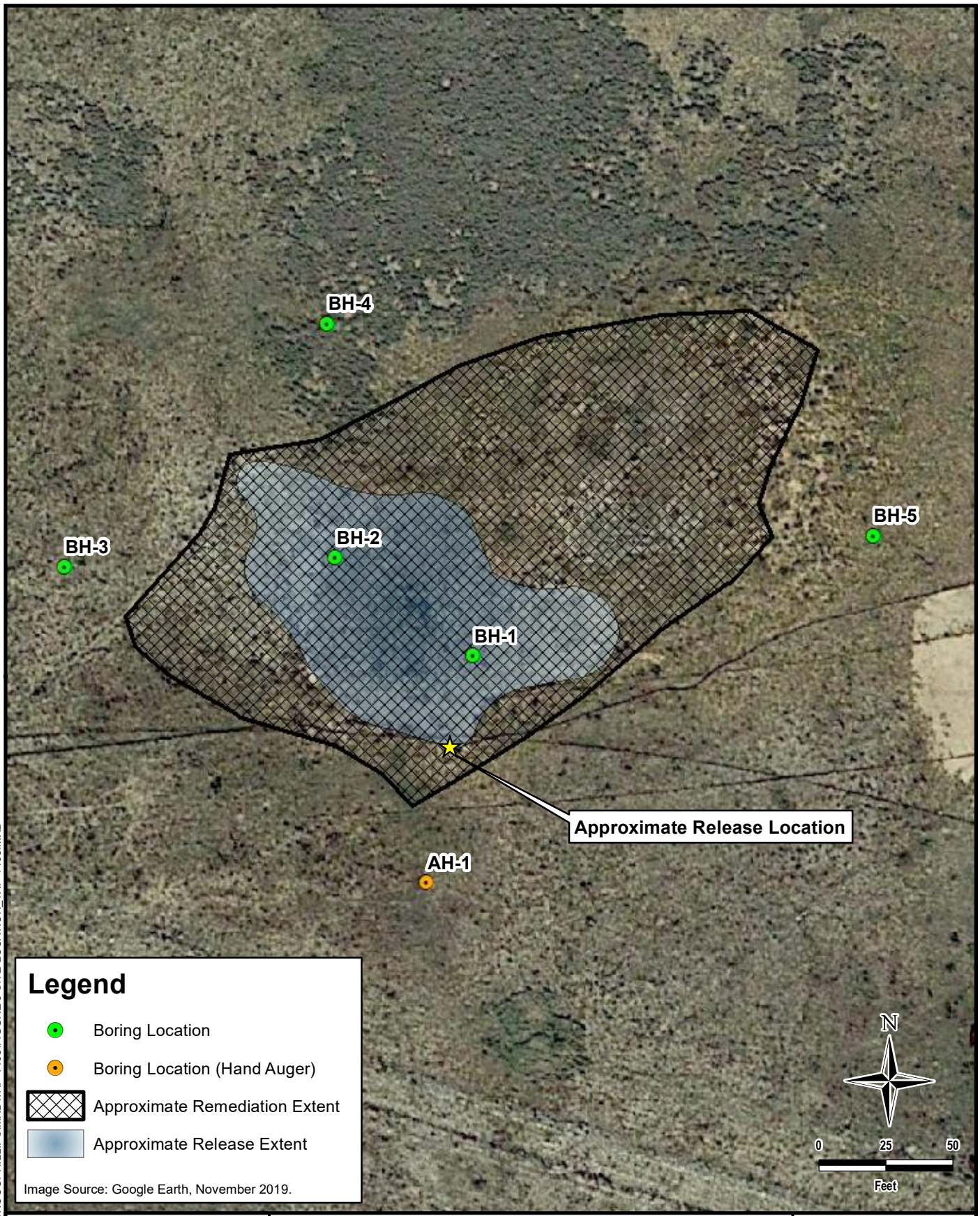
MAVERICK PERMIAN, LLC

nPAC0716534072
(32.796407°, -103.480549°)
LEA COUNTY, NEW MEXICO

VGEU 02-19 FLOWLINE RLEASE
TOPOGRAPHIC MAP

PROJECT NO.:	212C-MD-03434
DATE:	DECEMBER 17, 2020
DESIGNED BY:	AAM

Figure No.
2



DOCUMENT PATH: D:\CONOCOPHILLIPS\MXD\1RP-1408\FIGURE 3 SITE LOCATION_1RP-1408.MXD

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MAVERICK PERMIAN

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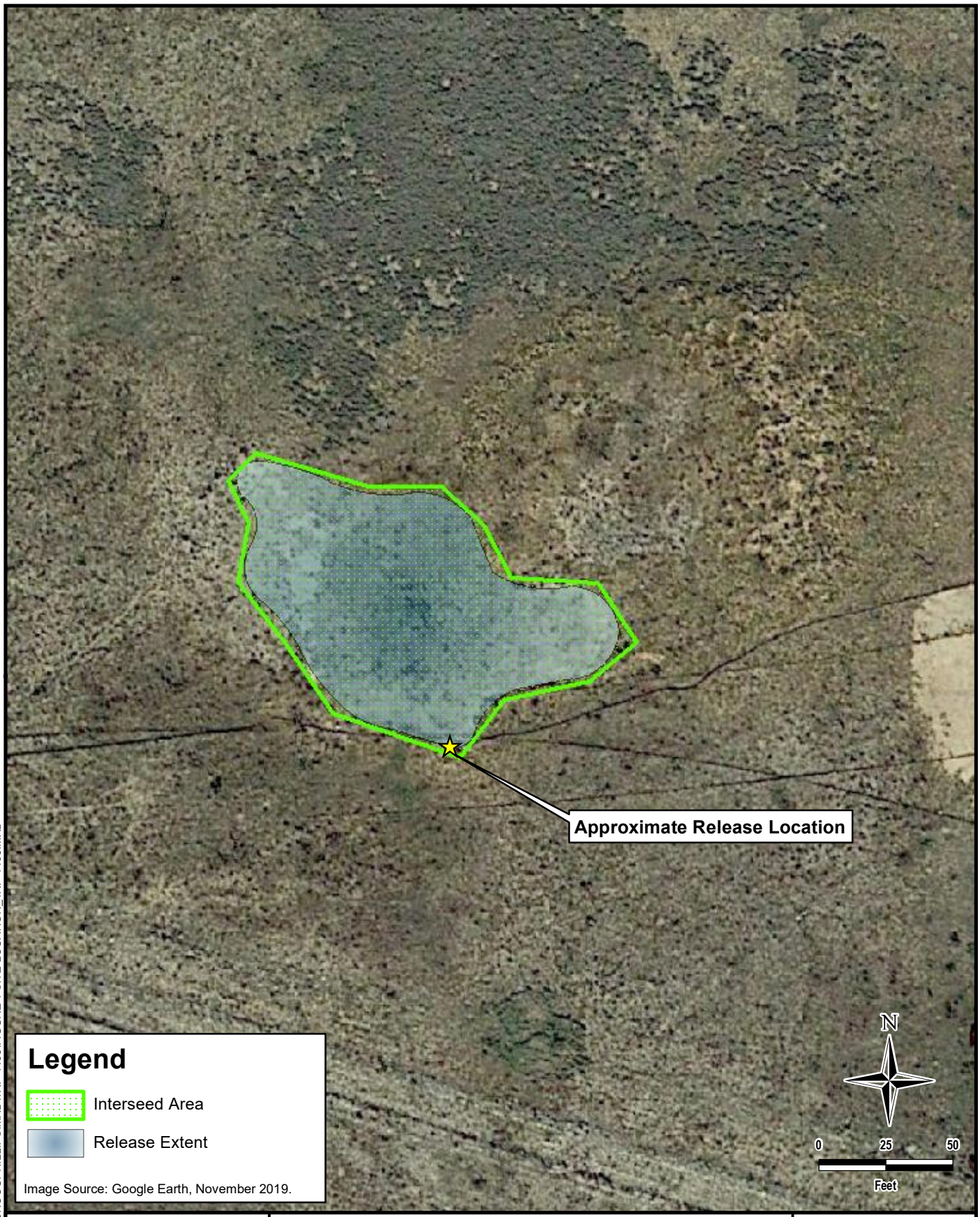
LEA COUNTY, NEW MEXICO

VGEU 02-19 FLOWLINE RLEASE
RELEASE EXTENT AND SITE ASSESSMENT

PROJECT NO.:	212C-MD-02334
DATE:	DECEMBER 17, 2020
DESIGNED BY:	AAM

Figure No.
3



DOCUMENT PATH: D:\CONOCOPHILLIPS\MXD\1RP-1408\FIGURE 4 SITE LOCATION_1RP-1408.MXD

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VGEU 02-19 FLOWLINE RLEASE
INTERSEEDING EXTENT

PROJECT NO.:	212C-MD-03434
DATE:	DECEMBER 17, 2020
DESIGNED BY:	AAM

Figure No.
4

TABLES

TETRA TECH

TABLE 1
SOIL ASSESSMENT LOCATIONS
INCIDENT ID NPAC0716534072
MAVERICK PERMIAN, LLC
VGEU 02-19 FLOWLINE RELEASE
LEA COUNTY, NEW MEXICO

Boring ID	Date	Latitude	Longitude
AH-1	11/9/2020	32.796269	-103.480578
BH-1	10/30/2020	32.796500	-103.480519
BH-2	10/30/2020	32.796602	-103.480685
BH-3	11/2/2020	32.796596	-103.481015
BH-4	11/2/2020	32.796842	-103.480693
BH-5	11/2/2020	32.796620	-103.480032

TETRA TECH

TABLE 2
SOIL ASSESSMENTS SAMPLING ANALYTICAL RESULTS
INCIDENT NPAC0716534072
MAVERICK PERMIAN, LLC
VGEU 02-19 FLOWLINE RELEASE
LEA COUNTY, NEW MEXICO

Sample ID	Sample Date	Sample Depth	Chloride[1]		BTEX[2]										TPH[3]						
					Benzene		Toluene		Ethylbenzene		Total Xylenes		Total BTEX		GRO C_6 - C_{10}		DRO > C_{10} - C_{28}		ORO > C_{28} - C_{36}		Total TPH (GRO+DRO+ORO)
		feet bgs	mg/kg	Q	mg/kg	Q	mg/kg	Q	mg/kg	Q	mg/kg	Q	mg/kg	Q	mg/kg	Q	mg/kg	Q	mg/kg	Q	mg/kg
Reclamation Requirements (19.15.29 NMAC)			**600**		**10**								**50**								**100**
AH-1	11/9/2020	0-1	< 20.5		< 0.000512		< 0.00512		< 0.000512		< 0.00154				0.0906	J	< 4.09		10.5		10.5906
		1-2	< 20.4		< 0.000509		< 0.00509		< 0.000509		0.0016		0.0016		0.108		< 4.07		8.6	B J	8.708
BH-1	10/30/2020	0-1	< 20.1		< 0.00101		< 0.00507		< 0.00253		< 0.00659		-		0.0323	B J	< 4.03		2.06	J	2.0923
		2-3	< 21.3		< 0.00113		< 0.00565		< 0.00283		< 0.00735		-		0.0265	B J	< 4.26		2.02	J	2.0465
		4-5	< 21.1		< 0.00111		< 0.00556		< 0.00278		< 0.00722		-		< 0.107		< 4.22		0.85	J	0.85
		6-7	< 21.2		< 0.00113		< 0.00564		< 0.00282		< 0.00732		-		0.0249	B J	< 4.23		< 4.23		0.0249
		9-10	< 21.1		< 0.00111		< 0.00554		< 0.00277		< 0.00720		-		0.0262	B J	< 4.21		0.605	J	0.6312
		14-15	< 22.2		< 0.00122		< 0.00611		< 0.00305		< 0.00794		-		0.027	B J	5.42		0.939	J	6.386
		19-20	< 21.5		< 0.00115		< 0.00575		< 0.00288		< 0.00748				0.0267	B J	< 4.30		1.56	J	1.5867
		24-25	< 21.4		< 0.00164		< 0.00818		< 0.00409		< 0.01060		-		0.0242	B J	9.11		25.4		34.5342
		29-30	< 21.3		< 0.00113		< 0.00565		< 0.00282		< 0.00734		-		0.0251	B J	< 4.26		0.441	J	0.4661
BH-2	10/30/2020	0-1	< 20.5		< 0.00105		< 0.00524		< 0.00262		< 0.00681		-		0.0255	B J	2.18	J	7.95		10.1555
		2-3	< 20.9		< 0.00109		< 0.00546		< 0.00273		0< .0071		-		0.0263	B J	< 4.18		1.28	J	1.3063
		4-5	< 21.2		0.000588	J	< 0.0056		< 0.00280		< 0.00728		0.000588		0.0298	B J	< 4.24		0.52	J	0.5498
		6-7	< 22.2		< 0.00122		< 0.00609		< 0.00305		< 0.00798		-		0.0266	B J	< 4.44		0.469	J	0.4956
		9-10	< 23.4		< 0.00135		< 0.00673		< 0.00336		< 0.00874		-		< 0.118		< 4.69		0.97	J	0.97
		14-15	< 21.9		< 0.00119		< 0.00594		< 0.00297		< 0.00773		-		0.0273	B J	< 4.38		0.407	J	0.4343
		19-20	< 21.8		< 0.00118		< 0.00591		< 0.00296		< 0.00768				0.0315	B J	< 4.36		0.77	J	0.8015
		24-25	< 21.1		< 0.00111		< 0.00557		< 0.00279		< 0.00725		-		< 0.106		5.36		0.775	J	6.135
		29-30	< 21.2		< 0.00112		< 0.0056		< 0.00280		< 0.00728		-		< 0.106		< 4.24		0.331	J	0.331
BH-3	11/2/2020	0-1	17.1	J	< 0.00103		< 0.00517		< 0.00259		< 0.00673				0.0273	B J	5.62	B	14.1	B	19.7473
		3-4	68		< 0.00104		< 0.00521		< 0.00261		< 0.00678		-		0.0251	B J	< 4.09		3.57	B J	3.5951
BH-4	11/2/2020	0-1	< 21.5		< 0.00115		< 0.00577		< 0.00288		< 0.00750				< 0.108		3.46	B J	9.37	B	12.83
		3-4	< 20.6		< 0.00106		< 0.00528		< 0.00264		< 0.00687		-		0.0524	B J	< 4.11		1.54	B J	1.5924
BH-5	11/2/2020	0-1	42		< 0.00107		< 0.00534		< 0.00267		< 0.00694				0.0317	B J	< 4.14		2.77	B J	2.8017
		3-4	14	J	< 0.00106		< 0.00528		< 0.00264		< 0.00686		-		0.0531	B J	< 4.11		0.811	B J	0.8641

NOTES:

bgs: Below ground surface
mg/kg: Milligrams per kilogram
TPH: Total Petroleum Hydrocarbons
GRO: Gasoline Range Organics
DRO: Diesel Range Organics
ORO: Oil Range Organics
1: Method SM4500Cl-B
2: Method 8260B
3: Method 8015M

Bold and highlighted values indicate exceedance of Reclamation Requirements (19.15.29 NMAC).
B: The same analyte is found in the associated blank.
J: The identification of the analyte is acceptable; the reported value is an estimate.

ATTACHMENT 1 – SITE CHARACTERIZATION DATA

New Mexico Office of the State Engineer
Water Column/Average Depth to Water

No records found.

UTMNAD83 Radius Search (in meters):

Easting (X): 642272 **Northing (Y):** 3629738 **Radius:** 800

212C-MD-02377 | TETRA TECH | **LOG OF BORING DTGW-1** | Page 1 of 2

Project Name: EVGSAU 3236-004 DTGW Determination Bore

Borehole Location: GPS: 32.793424°, -103.482099° | Surface Elevation: 3972 ft

Borehole Number: DTGW-1 | Borehole Diameter (in.): 8 | Date Started: 8/25/2021 | Date Finished: 8/25/2021

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
												-SM- SILTY SAND: Tan to light tan, loose to medium dense, dry, clayey in part.	1	
												-CALICHE- CALICHE: White, hard, heavily cemented with calcium carbonate, with abundant gravel, occ. boulders.		
5													6	
												-LS- LIMESTONE: Tan, hard, well-indurated, blocky, dry.	8	
												-CALICHE- CALICHE: White, hard, heavily cemented with calcium carbonate, with abundant gravel.		
10														
													14	
15												**-SM-** SILTY SAND: Tan, medium dense, moderately cemented, semi-consolidated, with trace gravel, dry.		
													18	
												-CALICHE- CALICHE: White, hard, heavily cemented with calcium carbonate, with abundant gravel.		
20														
													22	
												-LS- LIMESTONE: White, hard, well cemented, blocky, slabby, dry.		
25														
													26	
												-SM- SILTY SAND: Tan, dense, moderately cemented, grading to sandstone (SS), dry.		
30														

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

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

Notes:

Surface elevation is an estimated value based on Google Earth data.

Logger: Joe Tyler | Drilling Equipment: Air Rotary | Driller: Scarborough Drilling

212C-MD-02377 | TETRA TECH | **LOG OF BORING DTGW-1** | Page 2 of 2

Project Name: EVGSAU 3236-004 DTGW Determination Bore

Borehole Location: GPS: 32.793424°, -103.482099° | Surface Elevation: 3972 ft

Borehole Number: DTGW-1 | Borehole Diameter (in.): 8 | Date Started: 8/25/2021 | Date Finished: 8/25/2021

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
35													38	
40												**-SS-** SANDSTONE: White to tan, dense to very dense, semi-consolidated, moderately to well cemented, little to no gravel, dry.		
45														
50													52	
55												**-SS-** SANDSTONE: White to tan, dense to very dense, moderately cemented, with gravel, dry.	55	

Bottom of borehole at 55.0 feet.

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

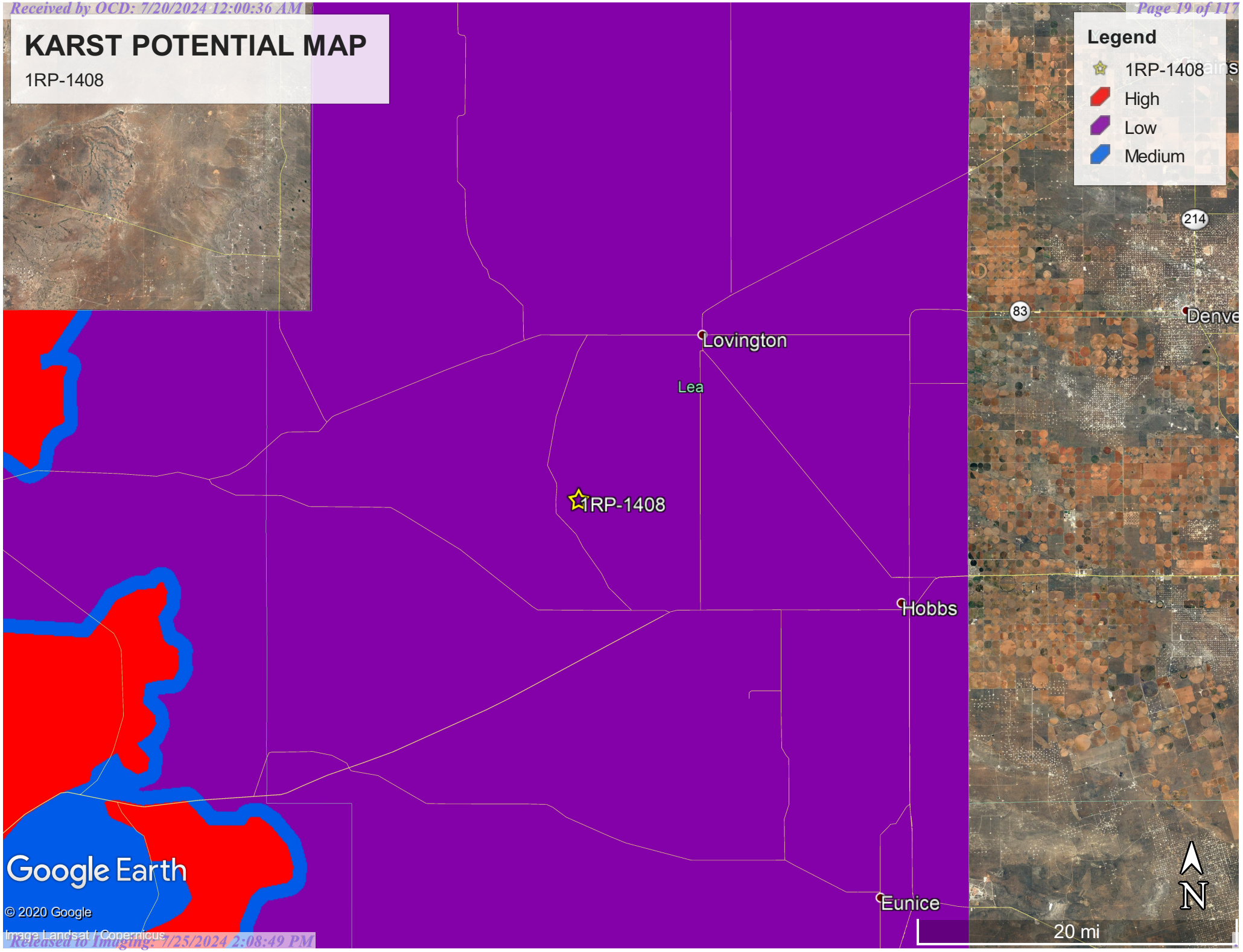
Operation Types: Hand Auger, Mud Rotary, Air Rotary, Continuous Flight Auger, Direct Push, Wash Rotary, Core Barrel

Notes: Surface elevation is an estimated value based on Google Earth data.

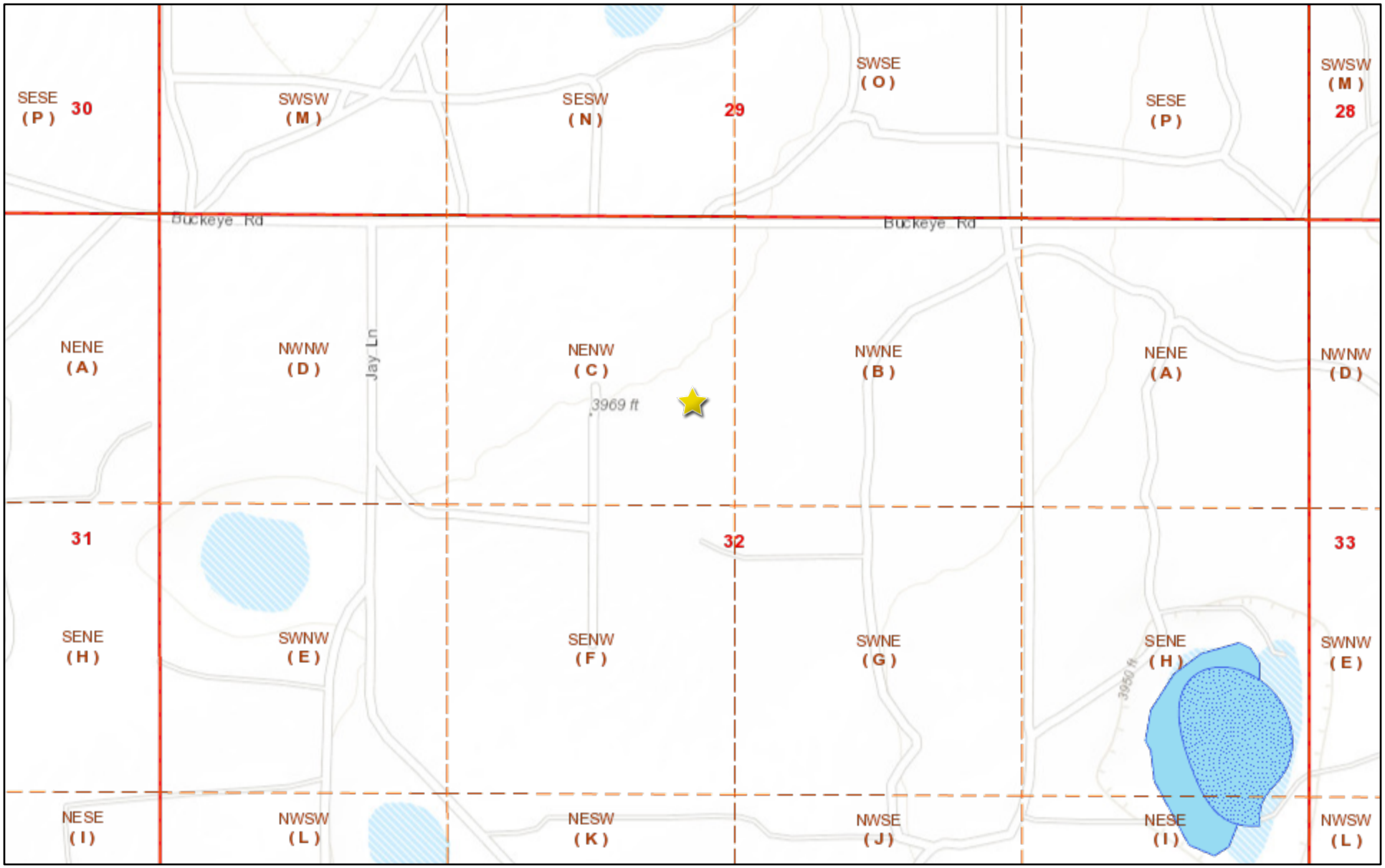
Logger: Joe Tyler | Drilling Equipment: Air Rotary | Driller: Scarborough Drilling

KARST POTENTIAL MAP

1RP-1408



1RP-1408



2/8/2021, 2:07:47 PM

1:9,028

0 0.05 0.1 0.2 mi

0 0.1 0.2 0.4 km

Override 1

OCD District Offices

PLSS First Division

PLSS Second Division

OSE Water-bodies

PLJV Probable Playas

OSE Streams

Bureau of Land Management, Texas Parks & Wildlife, Esri, HERE, Garmin,

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

National Flood Hazard Layer FIRMette

FEMA

103°29'9"W 32°48'2"N

0 250 500 1,000 1,500 2,000 Feet

1:6,000

103°28'31"W 32°47'32"N

Basemap Imagery Source: USGS National Map 2023

Legend

SEE FIS REPORT FOR DETAILED LEGEND AND INDEX MAP FOR FIRM PANEL LAYOUT

SPECIAL FLOOD HAZARD AREAS
- Without Base Flood Elevation (BFE) *Zone A, V, A99*
- With BFE or Depth *Zone AE, AO, AH, VE, AR*
- Regulatory Floodway

OTHER AREAS OF FLOOD HAZARD
- 0.2% Annual Chance Flood Hazard, Areas of 1% annual chance flood with average depth less than one foot or with drainage areas of less than one square mile *Zone X*
- Future Conditions 1% Annual Chance Flood Hazard *Zone X*
- Area with Reduced Flood Risk due to Levee. See Notes. *Zone X*
- Area with Flood Risk due to Levee *Zone D*

OTHER AREAS
- NO SCREEN Area of Minimal Flood Hazard *Zone X*
- Effective LOMRs
- Area of Undetermined Flood Hazard *Zone D*

GENERAL STRUCTURES
- Channel, Culvert, or Storm Sewer
- Levee, Dike, or Floodwall

OTHER FEATURES
- 20.2 Cross Sections with 1% Annual Chance
- 17.5 Water Surface Elevation
- Coastal Transect
- 513 Base Flood Elevation Line (BFE)
- Limit of Study
- Jurisdiction Boundary
- Coastal Transect Baseline
- Profile Baseline
- Hydrographic Feature

MAP PANELS
- Digital Data Available
- No Digital Data Available
- Unmapped

N

The pin displayed on the map is an approximate point selected by the user and does not represent an authoritative property location.

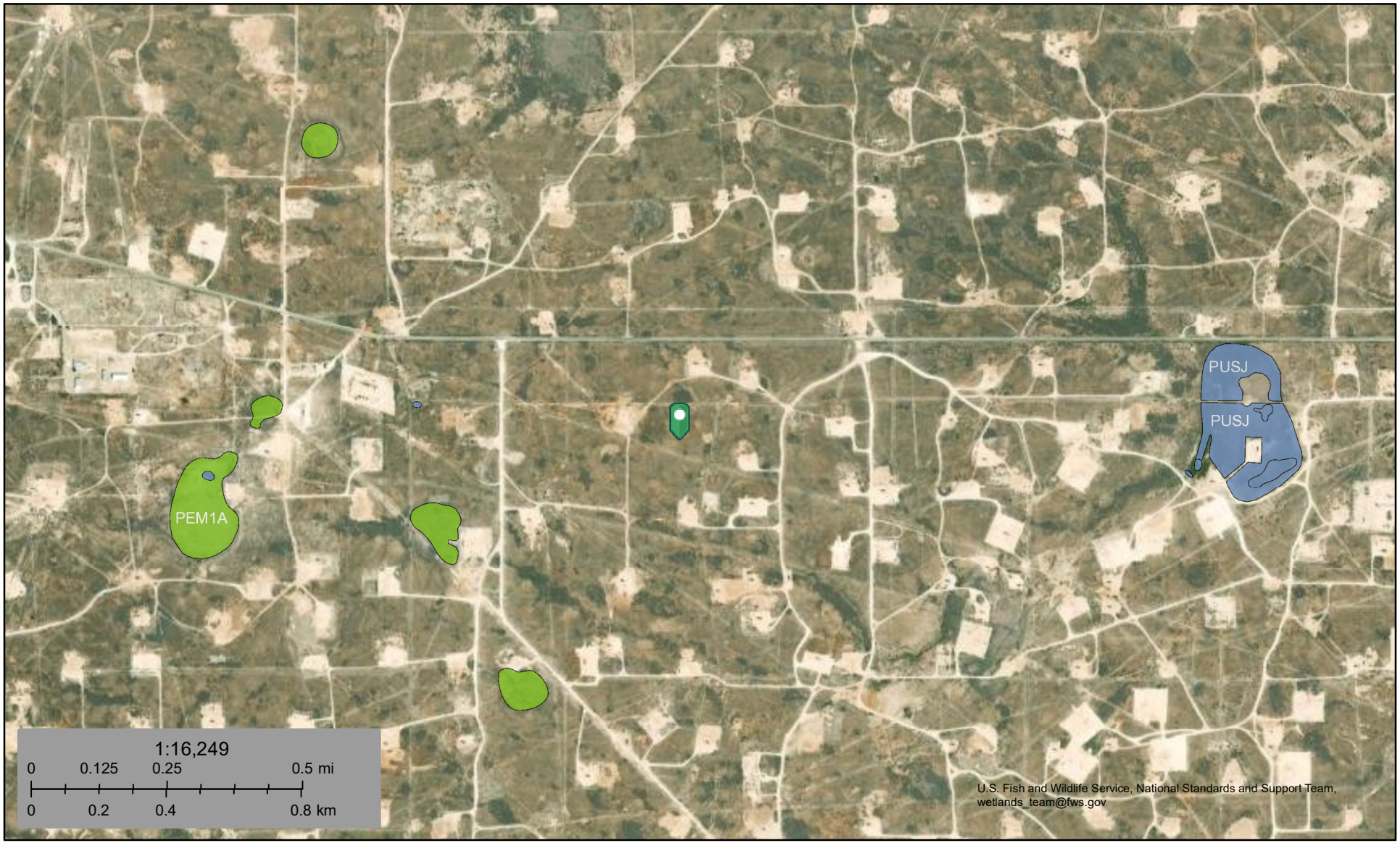
This map complies with FEMA's standards for the use of digital flood maps if it is not void as described below. The basemap shown complies with FEMA's basemap accuracy standards

The flood hazard information is derived directly from the authoritative NFHL web services provided by FEMA. This map was exported on 7/17/2024 at 10:53 AM and does not reflect changes or amendments subsequent to this date and time. The NFHL and effective information may change or become superseded by new data over time.

This map image is void if the one or more of the following map elements do not appear: basemap imagery, flood zone labels, legend, scale bar, map creation date, community identifiers, FIRM panel number, and FIRM effective date. Map images for unmapped and unmodernized areas cannot be used for regulatory purposes.

U.S. Fish and Wildlife Service
National Wetlands Inventory

VGEU 02-19 Wetlands



July 17, 2024

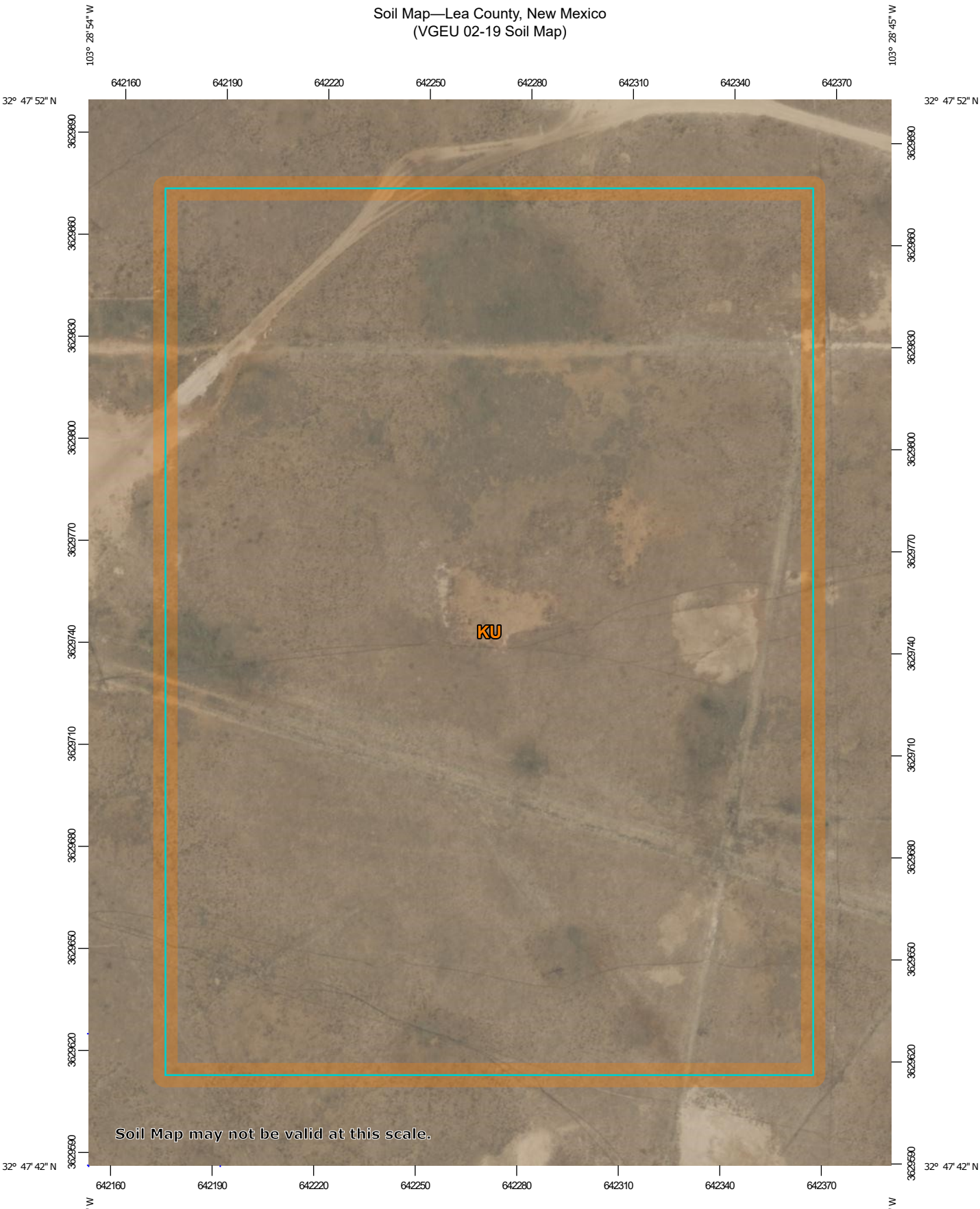
Wetlands

- Estuarine and Marine Deepwater
- Estuarine and Marine Wetland
- Freshwater Emergent Wetland
- Freshwater Forested/Shrub Wetland
- Freshwater Pond
- Lake
- Other
- Riverine

This map is for general reference only. The US Fish and Wildlife Service is not responsible for the accuracy or currentness of the base data shown on this map. All wetlands related data should be used in accordance with the layer metadata found on the Wetlands Mapper web site.

National Wetlands Inventory (NWI)
This page was produced by the NWI mapper

Soil Map—Lea County, New Mexico
(VGEU 02-19 Soil Map)



Map Scale: 1:1,530 if printed on A portrait (8.5" x 11") sheet.

N

Meters
0 20 40 80 120

Feet
0 50 100 200 300

Map projection: Web Mercator Corner coordinates: WGS84 Edge tics: UTM Zone 13N WGS84

Soil Map—Lea County, New Mexico
(VGEU 02-19 Soil Map)

MAP LEGEND

Area of Interest (AOI)
- Area of Interest (AOI)

Soils
- Soil Map Unit Polygons
- Soil Map Unit Lines
- Soil Map Unit Points

Special Point Features
- Blowout
- Borrow Pit
- Clay Spot
- Closed Depression
- Gravel Pit
- Gravelly Spot
- Landfill
- Lava Flow
- Marsh or swamp
- Mine or Quarry
- Miscellaneous Water
- Perennial Water
- Rock Outcrop
- Saline Spot
- Sandy Spot
- Severely Eroded Spot
- Sinkhole
- Slide or Slip
- Sodic Spot
- Spoil Area
- Stony Spot
- Very Stony Spot
- Wet Spot
- Other
- Special Line Features

Water Features
- Streams and Canals

Transportation
- Rails
- Interstate Highways
- US Routes
- Major Roads
- Local Roads

Background
- Aerial Photography

MAP INFORMATION

The soil surveys that comprise your AOI were mapped at 1:20,000.

Warning: Soil Map may not be valid at this scale.

Enlargement of maps beyond the scale of mapping can cause misunderstanding of the detail of mapping and accuracy of soil line placement. The maps do not show the small areas of contrasting soils that could have been shown at a more detailed scale.

Please rely on the bar scale on each map sheet for map measurements.

Source of Map: Natural Resources Conservation Service
Web Soil Survey URL:
Coordinate System: Web Mercator (EPSG:3857)

Maps from the Web Soil Survey are based on the Web Mercator projection, which preserves direction and shape but distorts distance and area. A projection that preserves area, such as the Albers equal-area conic projection, should be used if more accurate calculations of distance or area are required.

This product is generated from the USDA-NRCS certified data as of the version date(s) listed below.

Soil Survey Area: Lea County, New Mexico
Survey Area Data: Version 20, Sep 6, 2023

Soil map units are labeled (as space allows) for map scales 1:50,000 or larger.

Date(s) aerial images were photographed: Feb 7, 2020—May 12, 2020

The orthophoto or other base map on which the soil lines were compiled and digitized probably differs from the background imagery displayed on these maps. As a result, some minor shifting of map unit boundaries may be evident.

Map Unit Legend

Map Unit Symbol	Map Unit Name	Acres in AOI	Percent of AOI
KU	Kimbrough-Lea complex, dry, 0 to 3 percent slopes	12.4	100.0%
Totals for Area of Interest		**12.4**	**100.0%**

Lea County, New Mexico

KU—Kimbrough-Lea complex, dry, 0 to 3 percent slopes

Map Unit Setting

National map unit symbol: 2tw46
Elevation: 2,500 to 4,800 feet
Mean annual precipitation: 14 to 16 inches
Mean annual air temperature: 57 to 63 degrees F
Frost-free period: 180 to 220 days
Farmland classification: Not prime farmland

Map Unit Composition

Kimbrough and similar soils: 45 percent
Lea and similar soils: 25 percent
Minor components: 30 percent
Estimates are based on observations, descriptions, and transects of the mapunit.

Description of Kimbrough

Setting

Landform: Playa rims, plains
Down-slope shape: Convex, linear
Across-slope shape: Concave, linear
Parent material: Loamy eolian deposits derived from sedimentary rock

Typical profile

A - 0 to 3 inches: gravelly loam
Bw - 3 to 10 inches: loam
Bkkm1 - 10 to 16 inches: cemented material
Bkkm2 - 16 to 80 inches: cemented material

Properties and qualities

Slope: 0 to 3 percent
Depth to restrictive feature: 4 to 18 inches to petrocalcic
Drainage class: Well drained
Runoff class: Very high
Capacity of the most limiting layer to transmit water (Ksat): Very low to moderately low (0.00 to 0.01 in/hr)
Depth to water table: More than 80 inches
Frequency of flooding: None
Frequency of ponding: None
Calcium carbonate, maximum content: 95 percent
Maximum salinity: Nonsaline to very slightly saline (0.0 to 2.0 mmhos/cm)
Sodium adsorption ratio, maximum: 1.0
Available water supply, 0 to 60 inches: Very low (about 1.4 inches)

Interpretive groups

Land capability classification (irrigated): None specified

Land capability classification (nonirrigated): 7s
Hydrologic Soil Group: D
Ecological site: R077DY049TX - Very Shallow 12-17" PZ
Hydric soil rating: No

Description of Lea

Setting

Landform: Plains
Down-slope shape: Convex
Across-slope shape: Linear
Parent material: Calcareous, loamy eolian deposits from the blackwater draw formation of pleistocene age over indurated caliche of pliocene age

Typical profile

A - 0 to 10 inches: loam
Bk - 10 to 18 inches: loam
Bkk - 18 to 26 inches: gravelly fine sandy loam
Bkkm - 26 to 80 inches: cemented material

Properties and qualities

Slope: 0 to 3 percent
Depth to restrictive feature: 22 to 30 inches to petrocalcic
Drainage class: Well drained
Runoff class: High
Capacity of the most limiting layer to transmit water (Ksat): Very low to moderately low (0.00 to 0.06 in/hr)
Depth to water table: More than 80 inches
Frequency of flooding: None
Frequency of ponding: None
Calcium carbonate, maximum content: 90 percent
Maximum salinity: Nonsaline to very slightly saline (0.0 to 2.0 mmhos/cm)
Sodium adsorption ratio, maximum: 3.0
Available water supply, 0 to 60 inches: Very low (about 2.9 inches)

Interpretive groups

Land capability classification (irrigated): None specified
Land capability classification (nonirrigated): 7s
Hydrologic Soil Group: D
Ecological site: R077DY047TX - Sandy Loam 12-17" PZ
Hydric soil rating: No

Minor Components

Kenhill

Percent of map unit: 12 percent
Landform: Plains
Down-slope shape: Linear
Across-slope shape: Linear
Ecological site: R077DY038TX - Clay Loam 12-17" PZ
Hydric soil rating: No

Douro

Percent of map unit: 12 percent
Landform: Plains
Down-slope shape: Linear
Across-slope shape: Linear
Ecological site: R077DY047TX - Sandy Loam 12-17" PZ
Other vegetative classification: Unnamed (G077DH000TX)
Hydric soil rating: No

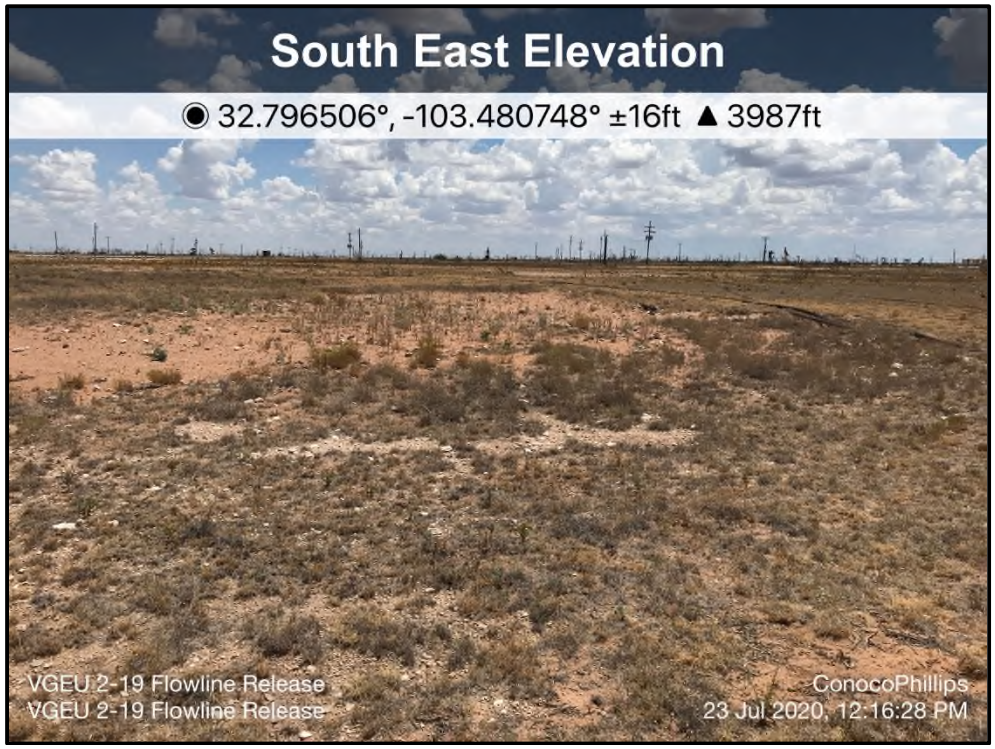
Spraberry

Percent of map unit: 6 percent
Landform: Playa rims, plains
Down-slope shape: Convex, linear
Across-slope shape: Linear
Ecological site: R077DY049TX - Very Shallow 12-17" PZ
Other vegetative classification: Unnamed (G077DH000TX)
Hydric soil rating: No

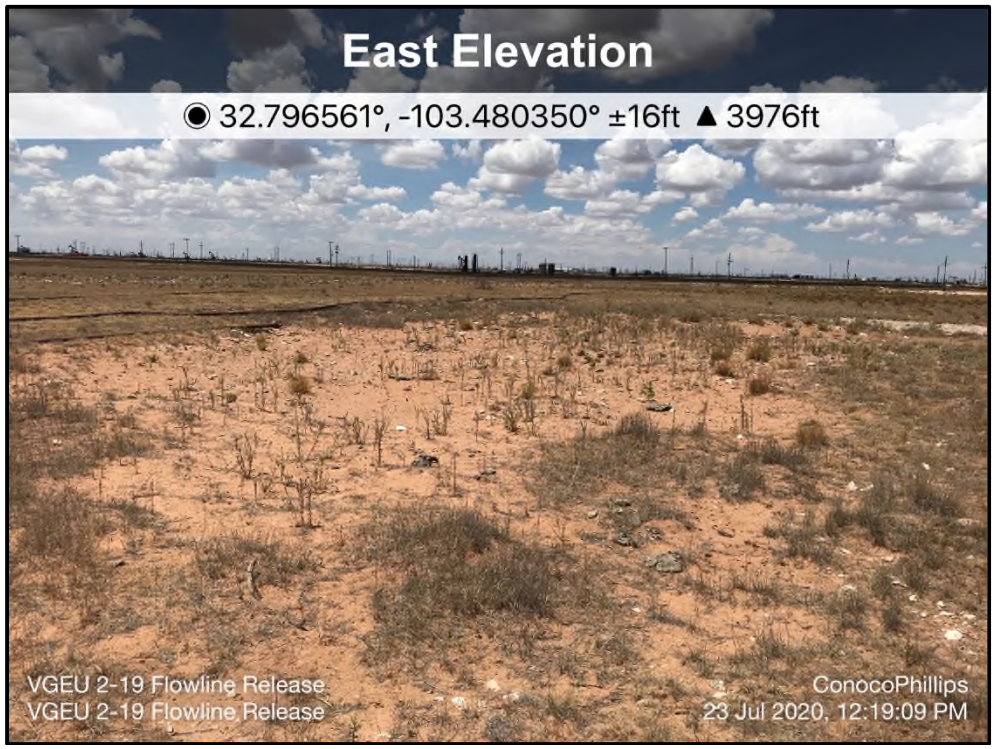
Data Source Information

Soil Survey Area: Lea County, New Mexico
Survey Area Data: Version 20, Sep 6, 2023

ATTACHMENT 2 – PHOTOGRAPHIC DOCUMENTATION

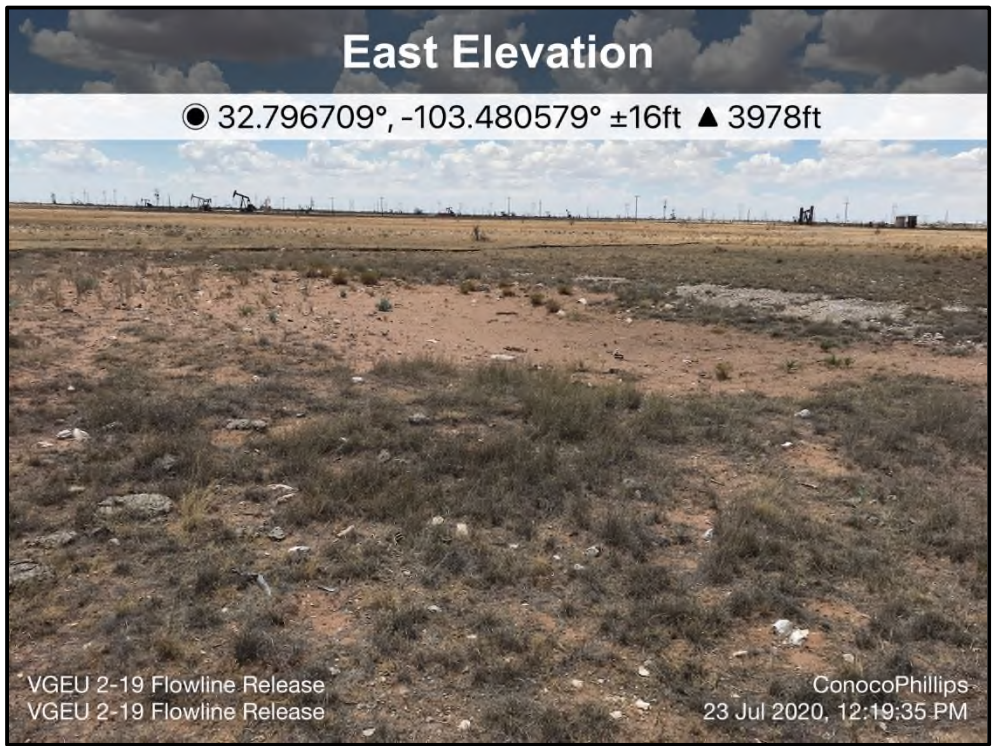


TETRA TECH, INC. PROJECT NO. 212C-MD-02152	DESCRIPTION	View facing north over release area.	1
	SITE NAME	VGEU 02-19 Flowline Release	7/23/2020

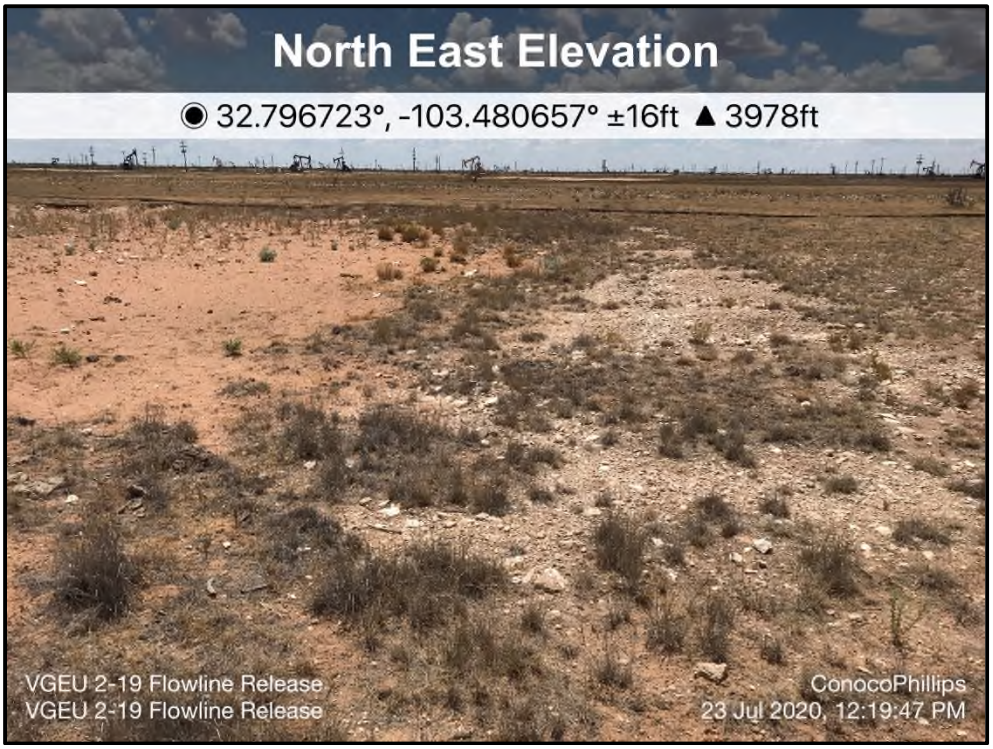


TETRA TECH, INC. PROJECT NO. 212C-MD-02152	DESCRIPTION	View facing west over release area.	2
	SITE NAME	VGEU 02-19 Flowline Release	7/23/2020

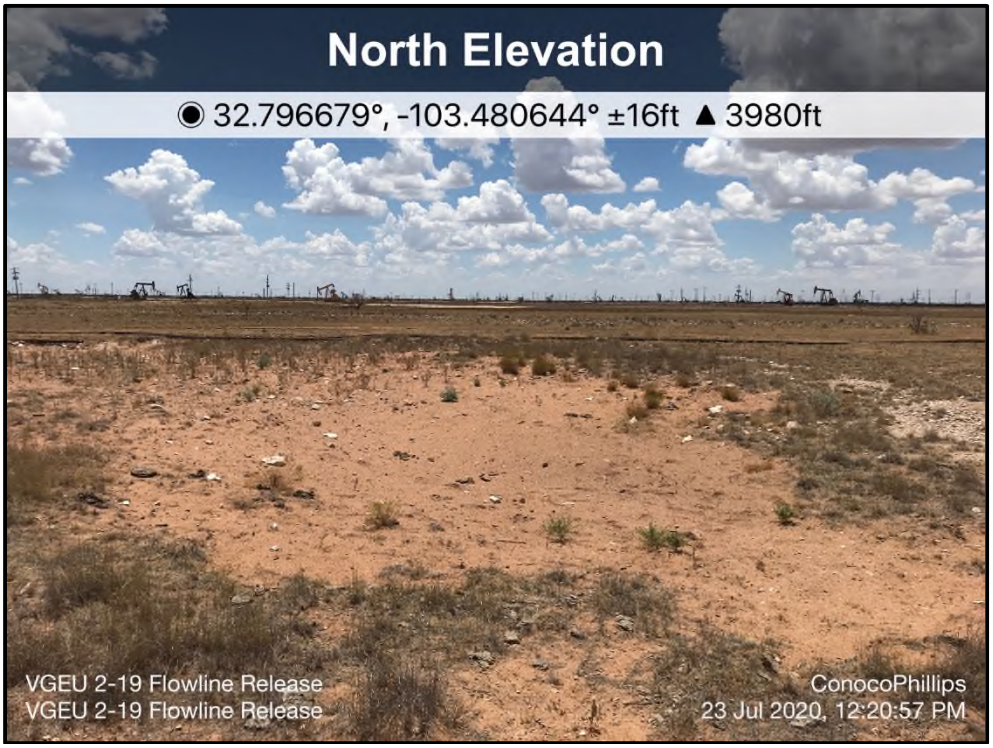
TETRA TECH, INC. PROJECT NO. 212C-MD-02152	DESCRIPTION	View facing southwest over release area.	3
	SITE NAME	VGEU 02-19 Flowline Release	7/23/2020



TETRA TECH, INC. PROJECT NO. 212C-MD-02152	DESCRIPTION	View facing west over release area.	4
	SITE NAME	VGEU 02-19 Flowline Release	7/23/2020



TETRA TECH, INC. PROJECT NO. 212C-MD-02152	DESCRIPTION	View facing southwest over release area.	5
	SITE NAME	VGEU 02-19 Flowline Release	7/23/2020



TETRA TECH, INC. PROJECT NO. 212C-MD-02152	DESCRIPTION	View facing south over release area.	6
	SITE NAME	VGEU 02-19 Flowline Release	7/23/2020

North East Elevation

227°SW (T) **LAT:** 32.796438 **LON:** -103.480635 ±9ft ▲ 3972ft

VGEU 02 19
22 Apr 2024, 09:20:21

North East Elevation

209°SW (T) **LAT:** 32.796438 **LON:** -103.480636 ±9ft ▲ 3971ft

North East Elevation

222°SW (T) **LAT:** 32.796526 **LON:** -103.480406 ±13ft ▲ 3974ft

West Elevation

74°E (T) **LAT:** 32.796587 **LON:** -103.480610 ±13ft ▲ 3974ft

ATTACHMENT 3 – LABORATORY ANALYTICAL DATA

Pace Analytical®
National Center for Testing & Innovation

ANALYTICAL REPORT

November 23, 2020

ConocoPhillips - Tetra Tech

Sample Delivery Group:	L1283245
Samples Received:	11/07/2020
Project Number:	212C-MD-02334
Description:	VGEU 02-19 Flowline Release (1RP-1408)

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

Entire Report Reviewed By: Erica McNeese

Erica McNeese
Project Manager

TABLE OF CONTENTS

BH-1 (0-1') L1283245-01 Solid

Collected by: Joe Tyler | Collected date/time: 10/30/20 12:00 | Received date/time: 11/07/20 10:30

Method	Batch	Dilution	Preparation date/time	Analysis date/time	Analyst	Location
Total Solids by Method 2540 G-2011	WG1575503	1	11/14/20 02:16	11/14/20 02:32	KDW	Mt. Juliet, TN
Wet Chemistry by Method 300.0	WG1576809	1	11/17/20 13:08	11/18/20 22:41	ELN	Mt. Juliet, TN
Volatile Organic Compounds (GC) by Method 8015D/GRO	WG1575360	1	11/11/20 17:52	11/12/20 19:04	BMB	Mt. Juliet, TN
Volatile Organic Compounds (GC/MS) by Method 8260B	WG1575927	1	11/11/20 17:52	11/13/20 13:09	ACG	Mt. Juliet, TN
Semi-Volatile Organic Compounds (GC) by Method 8015	WG1575792	1	11/12/20 23:10	11/14/20 02:05	JDG	Mt. Juliet, TN

BH-1 (2-3') L1283245-02 Solid

Collected by: Joe Tyler | Collected date/time: 10/30/20 12:10 | Received date/time: 11/07/20 10:30

Method	Batch	Dilution	Preparation date/time	Analysis date/time	Analyst	Location
Total Solids by Method 2540 G-2011	WG1575503	1	11/14/20 02:16	11/14/20 02:32	KDW	Mt. Juliet, TN
Wet Chemistry by Method 300.0	WG1576809	1	11/17/20 13:08	11/18/20 22:50	ELN	Mt. Juliet, TN
Volatile Organic Compounds (GC) by Method 8015D/GRO	WG1575360	1	11/11/20 17:52	11/12/20 19:25	BMB	Mt. Juliet, TN
Volatile Organic Compounds (GC/MS) by Method 8260B	WG1575927	1	11/11/20 17:52	11/13/20 13:28	ACG	Mt. Juliet, TN
Semi-Volatile Organic Compounds (GC) by Method 8015	WG1575792	1	11/12/20 23:10	11/14/20 02:18	JDG	Mt. Juliet, TN

BH-1 (4-5') L1283245-03 Solid

Collected by: Joe Tyler | Collected date/time: 10/30/20 12:20 | Received date/time: 11/07/20 10:30

Method	Batch	Dilution	Preparation date/time	Analysis date/time	Analyst	Location
Total Solids by Method 2540 G-2011	WG1575503	1	11/14/20 02:16	11/14/20 02:32	KDW	Mt. Juliet, TN
Wet Chemistry by Method 300.0	WG1576809	1	11/17/20 13:08	11/18/20 23:00	MCG	Mt. Juliet, TN
Volatile Organic Compounds (GC) by Method 8015D/GRO	WG1575360	1.01	11/11/20 17:52	11/12/20 19:45	BMB	Mt. Juliet, TN
Volatile Organic Compounds (GC/MS) by Method 8260B	WG1575927	1	11/11/20 17:52	11/13/20 13:46	ACG	Mt. Juliet, TN
Semi-Volatile Organic Compounds (GC) by Method 8015	WG1575792	1	11/12/20 23:10	11/14/20 02:31	JDG	Mt. Juliet, TN

BH-1 (6-7') L1283245-04 Solid

Collected by: Joe Tyler | Collected date/time: 10/30/20 12:30 | Received date/time: 11/07/20 10:30

Method	Batch	Dilution	Preparation date/time	Analysis date/time	Analyst	Location
Total Solids by Method 2540 G-2011	WG1575503	1	11/14/20 02:16	11/14/20 02:32	KDW	Mt. Juliet, TN
Wet Chemistry by Method 300.0	WG1576809	1	11/17/20 13:08	11/18/20 23:09	ELN	Mt. Juliet, TN
Volatile Organic Compounds (GC) by Method 8015D/GRO	WG1575360	1	11/11/20 17:52	11/12/20 20:17	BMB	Mt. Juliet, TN
Volatile Organic Compounds (GC/MS) by Method 8260B	WG1575927	1.01	11/11/20 17:52	11/13/20 14:05	ACG	Mt. Juliet, TN
Semi-Volatile Organic Compounds (GC) by Method 8015	WG1575792	1	11/12/20 23:10	11/14/20 02:43	JDG	Mt. Juliet, TN

BH-1 (9-10') L1283245-05 Solid

Collected by: Joe Tyler | Collected date/time: 10/30/20 12:40 | Received date/time: 11/07/20 10:30

Method	Batch	Dilution	Preparation date/time	Analysis date/time	Analyst	Location
Total Solids by Method 2540 G-2011	WG1575503	1	11/14/20 02:16	11/14/20 02:32	KDW	Mt. Juliet, TN
Wet Chemistry by Method 300.0	WG1576809	1	11/17/20 13:08	11/18/20 23:19	ELN	Mt. Juliet, TN
Volatile Organic Compounds (GC) by Method 8015D/GRO	WG1575360	1	11/11/20 17:52	11/12/20 20:38	BMB	Mt. Juliet, TN
Volatile Organic Compounds (GC/MS) by Method 8260B	WG1575927	1	11/11/20 17:52	11/13/20 14:24	ACG	Mt. Juliet, TN
Semi-Volatile Organic Compounds (GC) by Method 8015	WG1575792	1	11/12/20 23:10	11/14/20 05:28	JDG	Mt. Juliet, TN

BH-1 (14-15') L1283245-06 Solid

Collected by: Joe Tyler | Collected date/time: 10/30/20 12:50 | Received date/time: 11/07/20 10:30

Method	Batch	Dilution	Preparation date/time	Analysis date/time	Analyst	Location
Total Solids by Method 2540 G-2011	WG1575503	1	11/14/20 02:16	11/14/20 02:32	KDW	Mt. Juliet, TN
Wet Chemistry by Method 300.0	WG1576809	1	11/17/20 13:08	11/18/20 23:28	ELN	Mt. Juliet, TN
Volatile Organic Compounds (GC) by Method 8015D/GRO	WG1575360	1.01	11/11/20 17:52	11/12/20 20:58	BMB	Mt. Juliet, TN
Volatile Organic Compounds (GC/MS) by Method 8260B	WG1575927	1	11/11/20 17:52	11/13/20 14:43	ACG	Mt. Juliet, TN
Semi-Volatile Organic Compounds (GC) by Method 8015	WG1575792	1	11/12/20 23:10	11/14/20 02:56	JDG	Mt. Juliet, TN

BH-1 (19-20') L1283245-07 Solid

Collected by: Joe Tyler | Collected date/time: 10/30/20 13:00 | Received date/time: 11/07/20 10:30

Method	Batch	Dilution	Preparation date/time	Analysis date/time	Analyst	Location
Total Solids by Method 2540 G-2011	WG1575503	1	11/14/20 02:16	11/14/20 02:32	KDW	Mt. Juliet, TN
Wet Chemistry by Method 300.0	WG1576809	1	11/17/20 13:08	11/18/20 23:38	ELN	Mt. Juliet, TN
Volatile Organic Compounds (GC) by Method 8015D/GRO	WG1575360	1	11/11/20 17:52	11/12/20 21:19	BMB	Mt. Juliet, TN
Volatile Organic Compounds (GC/MS) by Method 8260B	WG1575927	1	11/11/20 17:52	11/13/20 15:02	ACG	Mt. Juliet, TN
Semi-Volatile Organic Compounds (GC) by Method 8015	WG1575792	1	11/12/20 23:10	11/14/20 03:09	JDG	Mt. Juliet, TN

BH-1 (24-25') L1283245-08 Solid

Collected by: Joe Tyler | Collected date/time: 10/30/20 13:30 | Received date/time: 11/07/20 10:30

Method	Batch	Dilution	Preparation date/time	Analysis date/time	Analyst	Location
Total Solids by Method 2540 G-2011	WG1575503	1	11/14/20 02:16	11/14/20 02:32	KDW	Mt. Juliet, TN
Wet Chemistry by Method 300.0	WG1576809	1	11/17/20 13:08	11/18/20 23:48	ELN	Mt. Juliet, TN
Volatile Organic Compounds (GC) by Method 8015D/GRO	WG1575360	1	11/11/20 17:52	11/12/20 21:40	BMB	Mt. Juliet, TN
Volatile Organic Compounds (GC/MS) by Method 8260B	WG1575927	1.46	11/11/20 17:52	11/13/20 15:20	ACG	Mt. Juliet, TN
Semi-Volatile Organic Compounds (GC) by Method 8015	WG1575792	1	11/12/20 23:10	11/14/20 03:21	JDG	Mt. Juliet, TN

BH-1 (29-30') L1283245-09 Solid

Collected by: Joe Tyler | Collected date/time: 10/30/20 14:00 | Received date/time: 11/07/20 10:30

Method	Batch	Dilution	Preparation date/time	Analysis date/time	Analyst	Location
Total Solids by Method 2540 G-2011	WG1575503	1	11/14/20 02:16	11/14/20 02:32	KDW	Mt. Juliet, TN
Wet Chemistry by Method 300.0	WG1576809	1	11/17/20 13:08	11/18/20 23:57	ELN	Mt. Juliet, TN
Volatile Organic Compounds (GC) by Method 8015D/GRO	WG1575360	1	11/11/20 17:52	11/12/20 22:00	BMB	Mt. Juliet, TN
Volatile Organic Compounds (GC/MS) by Method 8260B	WG1575927	1	11/11/20 17:52	11/13/20 15:39	ACG	Mt. Juliet, TN
Semi-Volatile Organic Compounds (GC) by Method 8015	WG1575792	1	11/12/20 23:10	11/14/20 03:34	JDG	Mt. Juliet, TN

BH-2 (0-1') L1283245-10 Solid

Collected by: Joe Tyler | Collected date/time: 10/30/20 15:00 | Received date/time: 11/07/20 10:30

Method	Batch	Dilution	Preparation date/time	Analysis date/time	Analyst	Location
Total Solids by Method 2540 G-2011	WG1575503	1	11/14/20 02:16	11/14/20 02:32	KDW	Mt. Juliet, TN
Wet Chemistry by Method 300.0	WG1576809	1	11/17/20 13:08	11/19/20 00:07	ELN	Mt. Juliet, TN
Volatile Organic Compounds (GC) by Method 8015D/GRO	WG1575360	1.01	11/11/20 17:52	11/12/20 22:21	BMB	Mt. Juliet, TN
Volatile Organic Compounds (GC/MS) by Method 8260B	WG1575927	1	11/11/20 17:52	11/13/20 15:58	ACG	Mt. Juliet, TN
Semi-Volatile Organic Compounds (GC) by Method 8015	WG1575792	1	11/12/20 23:10	11/14/20 06:06	JDG	Mt. Juliet, TN

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

BH-2 (2-3') L1283245-11 Solid

Collected by: Joe Tyler | Collected date/time: 10/30/20 15:10 | Received date/time: 11/07/20 10:30

Method	Batch	Dilution	Preparation date/time	Analysis date/time	Analyst	Location
Total Solids by Method 2540 G-2011	WG1575505	1	11/14/20 02:03	11/14/20 02:14	KDW	Mt. Juliet, TN
Wet Chemistry by Method 300.0	WG1576809	1	11/17/20 13:08	11/19/20 00:35	ELN	Mt. Juliet, TN
Volatile Organic Compounds (GC) by Method 8015D/GRO	WG1575360	1	11/11/20 17:52	11/12/20 22:42	BMB	Mt. Juliet, TN
Volatile Organic Compounds (GC/MS) by Method 8260B	WG1575927	1	11/11/20 17:52	11/13/20 16:17	ACG	Mt. Juliet, TN
Semi-Volatile Organic Compounds (GC) by Method 8015	WG1575792	1	11/12/20 23:10	11/14/20 03:47	JDG	Mt. Juliet, TN

BH-2 (4-5') L1283245-12 Solid

Collected by: Joe Tyler | Collected date/time: 10/30/20 15:20 | Received date/time: 11/07/20 10:30

Method	Batch	Dilution	Preparation date/time	Analysis date/time	Analyst	Location
Total Solids by Method 2540 G-2011	WG1575505	1	11/14/20 02:03	11/14/20 02:14	KDW	Mt. Juliet, TN
Wet Chemistry by Method 300.0	WG1576809	1	11/17/20 13:08	11/19/20 00:45	ELN	Mt. Juliet, TN
Volatile Organic Compounds (GC) by Method 8015D/GRO	WG1575360	1	11/11/20 17:52	11/12/20 23:02	BMB	Mt. Juliet, TN
Volatile Organic Compounds (GC/MS) by Method 8260B	WG1575946	1	11/11/20 17:52	11/13/20 09:48	AV	Mt. Juliet, TN
Semi-Volatile Organic Compounds (GC) by Method 8015	WG1575792	1	11/12/20 23:10	11/14/20 03:59	JDG	Mt. Juliet, TN

BH-2 (6-7') L1283245-13 Solid

Collected by: Joe Tyler | Collected date/time: 10/30/20 15:30 | Received date/time: 11/07/20 10:30

Method	Batch	Dilution	Preparation date/time	Analysis date/time	Analyst	Location
Total Solids by Method 2540 G-2011	WG1575505	1	11/14/20 02:03	11/14/20 02:14	KDW	Mt. Juliet, TN
Wet Chemistry by Method 300.0	WG1576809	1	11/17/20 13:08	11/19/20 00:54	ELN	Mt. Juliet, TN
Volatile Organic Compounds (GC) by Method 8015D/GRO	WG1575360	1	11/11/20 17:52	11/12/20 23:23	BMB	Mt. Juliet, TN
Volatile Organic Compounds (GC/MS) by Method 8260B	WG1575946	1	11/11/20 17:52	11/13/20 10:07	AV	Mt. Juliet, TN
Semi-Volatile Organic Compounds (GC) by Method 8015	WG1575792	1	11/12/20 23:10	11/14/20 04:12	JDG	Mt. Juliet, TN

BH-2 (9-10') L1283245-14 Solid

Collected by: Joe Tyler | Collected date/time: 10/30/20 15:40 | Received date/time: 11/07/20 10:30

Method	Batch	Dilution	Preparation date/time	Analysis date/time	Analyst	Location
Total Solids by Method 2540 G-2011	WG1575505	1	11/14/20 02:03	11/14/20 02:14	KDW	Mt. Juliet, TN
Wet Chemistry by Method 300.0	WG1576809	1	11/17/20 13:08	11/19/20 01:04	ELN	Mt. Juliet, TN
Volatile Organic Compounds (GC) by Method 8015D/GRO	WG1575360	1.01	11/11/20 17:52	11/12/20 23:44	BMB	Mt. Juliet, TN
Volatile Organic Compounds (GC/MS) by Method 8260B	WG1575946	1	11/11/20 17:52	11/13/20 10:26	AV	Mt. Juliet, TN
Semi-Volatile Organic Compounds (GC) by Method 8015	WG1575792	1	11/12/20 23:10	11/14/20 04:25	JDG	Mt. Juliet, TN

BH-2 (14-15') L1283245-15 Solid

Collected by: Joe Tyler | Collected date/time: 10/30/20 15:50 | Received date/time: 11/07/20 10:30

Method	Batch	Dilution	Preparation date/time	Analysis date/time	Analyst	Location
Total Solids by Method 2540 G-2011	WG1575505	1	11/14/20 02:03	11/14/20 02:14	KDW	Mt. Juliet, TN
Wet Chemistry by Method 300.0	WG1576809	1	11/17/20 13:08	11/19/20 01:13	ELN	Mt. Juliet, TN
Volatile Organic Compounds (GC) by Method 8015D/GRO	WG1575360	1	11/11/20 17:54	11/13/20 00:04	BMB	Mt. Juliet, TN
Volatile Organic Compounds (GC/MS) by Method 8260B	WG1575946	1	11/11/20 17:54	11/13/20 10:45	AV	Mt. Juliet, TN
Semi-Volatile Organic Compounds (GC) by Method 8015	WG1575792	1	11/12/20 23:10	11/14/20 04:37	JDG	Mt. Juliet, TN

BH-2 (19-20') L1283245-16 Solid

Collected by: Joe Tyler | Collected date/time: 10/30/20 16:00 | Received date/time: 11/07/20 10:30

Method	Batch	Dilution	Preparation date/time	Analysis date/time	Analyst	Location
Total Solids by Method 2540 G-2011	WG1575505	1	11/14/20 02:03	11/14/20 02:14	KDW	Mt. Juliet, TN
Wet Chemistry by Method 300.0	WG1577256	1	11/18/20 20:16	11/19/20 18:10	MCG	Mt. Juliet, TN
Volatile Organic Compounds (GC) by Method 8015D/GRO	WG1575360	1	11/11/20 17:52	11/13/20 00:25	BMB	Mt. Juliet, TN
Volatile Organic Compounds (GC/MS) by Method 8260B	WG1575946	1	11/11/20 17:52	11/13/20 11:04	AV	Mt. Juliet, TN
Semi-Volatile Organic Compounds (GC) by Method 8015	WG1575792	1	11/12/20 23:10	11/14/20 04:50	JDG	Mt. Juliet, TN

BH-2 (24-25') L1283245-17 Solid

Collected by: Joe Tyler | Collected date/time: 10/30/20 16:30 | Received date/time: 11/07/20 10:30

Method	Batch	Dilution	Preparation date/time	Analysis date/time	Analyst	Location
Total Solids by Method 2540 G-2011	WG1575505	1	11/14/20 02:03	11/14/20 02:14	KDW	Mt. Juliet, TN
Wet Chemistry by Method 300.0	WG1577256	1	11/18/20 20:16	11/19/20 18:46	MCG	Mt. Juliet, TN
Volatile Organic Compounds (GC) by Method 8015D/GRO	WG1575601	1	11/11/20 17:52	11/13/20 00:52	JAH	Mt. Juliet, TN
Volatile Organic Compounds (GC/MS) by Method 8260B	WG1575946	1	11/11/20 17:52	11/13/20 11:23	AV	Mt. Juliet, TN
Semi-Volatile Organic Compounds (GC) by Method 8015	WG1575792	1	11/12/20 23:10	11/14/20 05:03	JDG	Mt. Juliet, TN

BH-2 (29-30') L1283245-18 Solid

Collected by: Joe Tyler | Collected date/time: 10/30/20 17:00 | Received date/time: 11/07/20 10:30

Method	Batch	Dilution	Preparation date/time	Analysis date/time	Analyst	Location
Total Solids by Method 2540 G-2011	WG1575505	1	11/14/20 02:03	11/14/20 02:14	KDW	Mt. Juliet, TN
Wet Chemistry by Method 300.0	WG1577256	1	11/18/20 20:16	11/19/20 19:04	MCG	Mt. Juliet, TN
Volatile Organic Compounds (GC) by Method 8015D/GRO	WG1575601	1	11/11/20 17:52	11/13/20 01:13	JAH	Mt. Juliet, TN
Volatile Organic Compounds (GC/MS) by Method 8260B	WG1575946	1	11/11/20 17:52	11/13/20 11:42	AV	Mt. Juliet, TN
Semi-Volatile Organic Compounds (GC) by Method 8015	WG1575792	1	11/12/20 23:10	11/14/20 05:16	JDG	Mt. Juliet, TN

BH-3 (0-1') L1283245-19 Solid

Collected by: Joe Tyler | Collected date/time: 11/02/20 10:00 | Received date/time: 11/07/20 10:30

Method	Batch	Dilution	Preparation date/time	Analysis date/time	Analyst	Location
Total Solids by Method 2540 G-2011	WG1575505	1	11/14/20 02:03	11/14/20 02:14	KDW	Mt. Juliet, TN
Wet Chemistry by Method 300.0	WG1577256	1	11/18/20 20:16	11/19/20 20:00	MCG	Mt. Juliet, TN
Volatile Organic Compounds (GC) by Method 8015D/GRO	WG1575925	1	11/11/20 21:18	11/14/20 06:10	DWR	Mt. Juliet, TN
Volatile Organic Compounds (GC/MS) by Method 8260B	WG1575965	1	11/11/20 21:18	11/13/20 21:21	DWR	Mt. Juliet, TN
Semi-Volatile Organic Compounds (GC) by Method 8015	WG1576774	1	11/16/20 20:42	11/17/20 02:03	JN	Mt. Juliet, TN

BH-3 (3-4') L1283245-20 Solid

Collected by: Joe Tyler | Collected date/time: 11/02/20 10:10 | Received date/time: 11/07/20 10:30

Method	Batch	Dilution	Preparation date/time	Analysis date/time	Analyst	Location
Total Solids by Method 2540 G-2011	WG1575505	1	11/14/20 02:03	11/14/20 02:14	KDW	Mt. Juliet, TN
Wet Chemistry by Method 300.0	WG1577256	1	11/18/20 20:16	11/19/20 20:55	MCG	Mt. Juliet, TN
Volatile Organic Compounds (GC) by Method 8015D/GRO	WG1575925	1	11/11/20 21:18	11/14/20 06:31	DWR	Mt. Juliet, TN
Volatile Organic Compounds (GC/MS) by Method 8260B	WG1575965	1	11/11/20 21:18	11/13/20 21:40	DWR	Mt. Juliet, TN
Semi-Volatile Organic Compounds (GC) by Method 8015	WG1576774	1	11/16/20 20:42	11/17/20 02:16	JN	Mt. Juliet, TN

BH-4 (0-1') L1283245-21 Solid

Collected by: Joe Tyler | Collected date/time: 11/02/20 10:30 | Received date/time: 11/07/20 10:30

Method	Batch	Dilution	Preparation date/time	Analysis date/time	Analyst	Location
Total Solids by Method 2540 G-2011	WG1575506	1	11/14/20 01:47	11/14/20 01:59	KDW	Mt. Juliet, TN
Wet Chemistry by Method 300.0	WG1577256	1	11/18/20 20:16	11/19/20 21:13	MCG	Mt. Juliet, TN
Volatile Organic Compounds (GC) by Method 8015D/GRO	WG1575928	1	11/11/20 21:18	11/14/20 00:52	DWR	Mt. Juliet, TN
Volatile Organic Compounds (GC/MS) by Method 8260B	WG1575965	1	11/11/20 21:18	11/13/20 21:59	DWR	Mt. Juliet, TN
Semi-Volatile Organic Compounds (GC) by Method 8015	WG1576774	1	11/16/20 20:42	11/17/20 02:29	JN	Mt. Juliet, TN

BH-4 (3-4') L1283245-22 Solid

Collected by: Joe Tyler | Collected date/time: 11/02/20 10:40 | Received date/time: 11/07/20 10:30

Method	Batch	Dilution	Preparation date/time	Analysis date/time	Analyst	Location
Total Solids by Method 2540 G-2011	WG1575506	1	11/14/20 01:47	11/14/20 01:59	KDW	Mt. Juliet, TN
Wet Chemistry by Method 300.0	WG1577256	1	11/18/20 20:16	11/19/20 21:32	MCG	Mt. Juliet, TN
Volatile Organic Compounds (GC) by Method 8015D/GRO	WG1575928	1	11/11/20 21:18	11/14/20 01:13	DWR	Mt. Juliet, TN
Volatile Organic Compounds (GC/MS) by Method 8260B	WG1575965	1	11/11/20 21:18	11/13/20 22:18	DWR	Mt. Juliet, TN
Semi-Volatile Organic Compounds (GC) by Method 8015	WG1576774	1	11/16/20 20:42	11/17/20 02:41	JN	Mt. Juliet, TN

BH-5 (0-1') L1283245-23 Solid

Collected by: Joe Tyler | Collected date/time: 11/02/20 11:00 | Received date/time: 11/07/20 10:30

Method	Batch	Dilution	Preparation date/time	Analysis date/time	Analyst	Location
Total Solids by Method 2540 G-2011	WG1575506	1	11/14/20 01:47	11/14/20 01:59	KDW	Mt. Juliet, TN
Wet Chemistry by Method 300.0	WG1577256	1	11/18/20 20:16	11/19/20 21:50	MCG	Mt. Juliet, TN
Volatile Organic Compounds (GC) by Method 8015D/GRO	WG1575928	1	11/11/20 21:18	11/14/20 01:34	DWR	Mt. Juliet, TN
Volatile Organic Compounds (GC/MS) by Method 8260B	WG1575965	1	11/11/20 21:18	11/13/20 22:37	DWR	Mt. Juliet, TN
Semi-Volatile Organic Compounds (GC) by Method 8015	WG1576774	1	11/16/20 20:42	11/17/20 02:54	JN	Mt. Juliet, TN

BH-5 (3-4') L1283245-24 Solid

Collected by: Joe Tyler | Collected date/time: 11/02/20 11:10 | Received date/time: 11/07/20 10:30

Method	Batch	Dilution	Preparation date/time	Analysis date/time	Analyst	Location
Total Solids by Method 2540 G-2011	WG1575506	1	11/14/20 01:47	11/14/20 01:59	KDW	Mt. Juliet, TN
Wet Chemistry by Method 300.0	WG1577256	1	11/18/20 20:16	11/19/20 22:09	MCG	Mt. Juliet, TN
Volatile Organic Compounds (GC) by Method 8015D/GRO	WG1575928	1	11/11/20 21:18	11/14/20 01:55	DWR	Mt. Juliet, TN
Volatile Organic Compounds (GC/MS) by Method 8260B	WG1575965	1	11/11/20 21:18	11/13/20 22:56	DWR	Mt. Juliet, TN
Semi-Volatile Organic Compounds (GC) by Method 8015	WG1576774	1	11/16/20 20:42	11/17/20 03:07	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

Total Solids by Method 2540 G-2011

Analyte	Result	Qualifier	Dilution	Analysis	Batch
	%			date / time	
Total Solids	99.3		1	11/14/2020 02:32	WG1575503

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		9.26	20.1	1	11/18/2020 22:41	WG1576809

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	0.0323	B J	0.0218	0.101	1	11/12/2020 19:04	WG1575360
(S) a,a,a-Trifluorotoluene(FID)	*87.9*			*77.0-120*		*11/12/2020 19:04*	WG1575360

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		0.000473	0.00101	1	11/13/2020 13:09	WG1575927
Toluene	U		0.00132	0.00507	1	11/13/2020 13:09	WG1575927
Ethylbenzene	U		0.000747	0.00253	1	11/13/2020 13:09	WG1575927
Total Xylenes	U		0.000892	0.00659	1	11/13/2020 13:09	WG1575927
(S) Toluene-d8	*101*			*75.0-131*		*11/13/2020 13:09*	WG1575927
(S) 4-Bromofluorobenzene	*106*			*67.0-138*		*11/13/2020 13:09*	WG1575927
(S) 1,2-Dichloroethane-d4	*111*			*70.0-130*		*11/13/2020 13:09*	WG1575927

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		1.62	4.03	1	11/14/2020 02:05	WG1575792
C28-C40 Oil Range	2.06	J	0.276	4.03	1	11/14/2020 02:05	WG1575792
(S) o-Terphenyl	*88.4*			*18.0-148*		*11/14/2020 02:05*	WG1575792

Total Solids by Method 2540 G-2011

Analyte	Result	Qualifier	Dilution	Analysis	Batch
	%			date / time	
Total Solids	93.9		1	11/14/2020 02:32	WG1575503

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		9.80	21.3	1	11/18/2020 22:50	WG1576809

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	0.0265	B J	0.0231	0.107	1	11/12/2020 19:25	WG1575360
(S) a,a,a-Trifluorotoluene(FID)	*93.4*			*77.0-120*		*11/12/2020 19:25*	WG1575360

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		0.000528	0.00113	1	11/13/2020 13:28	WG1575927
Toluene	U		0.00147	0.00565	1	11/13/2020 13:28	WG1575927
Ethylbenzene	U		0.000833	0.00283	1	11/13/2020 13:28	WG1575927
Total Xylenes	U		0.000995	0.00735	1	11/13/2020 13:28	WG1575927
(S) Toluene-d8	*102*			*75.0-131*		*11/13/2020 13:28*	WG1575927
(S) 4-Bromofluorobenzene	*102*			*67.0-138*		*11/13/2020 13:28*	WG1575927
(S) 1,2-Dichloroethane-d4	*109*			*70.0-130*		*11/13/2020 13:28*	WG1575927

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		1.72	4.26	1	11/14/2020 02:18	WG1575792
C28-C40 Oil Range	2.02	J	0.292	4.26	1	11/14/2020 02:18	WG1575792
(S) o-Terphenyl	*84.7*			*18.0-148*		*11/14/2020 02:18*	WG1575792

Total Solids by Method 2540 G-2011

Analyte	Result	Qualifier	Dilution	Analysis	Batch
	%			date / time	
Total Solids	94.7		1	11/14/2020 02:32	WG1575503

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		9.71	21.1	1	11/18/2020 23:00	WG1576809

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	0.107	1.01	11/12/2020 19:45	WG1575360
(S) a,a,a-Trifluorotoluene(FID)	*92.3*			*77.0-120*		*11/12/2020 19:45*	WG1575360

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		0.000519	0.00111	1	11/13/2020 13:46	WG1575927
Toluene	U		0.00144	0.00556	1	11/13/2020 13:46	WG1575927
Ethylbenzene	U		0.000819	0.00278	1	11/13/2020 13:46	WG1575927
Total Xylenes	U		0.000978	0.00722	1	11/13/2020 13:46	WG1575927
(S) Toluene-d8	*102*			*75.0-131*		*11/13/2020 13:46*	WG1575927
(S) 4-Bromofluorobenzene	*105*			*67.0-138*		*11/13/2020 13:46*	WG1575927
(S) 1,2-Dichloroethane-d4	*114*			*70.0-130*		*11/13/2020 13:46*	WG1575927

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	4.22	1	11/14/2020 02:31	WG1575792
C28-C40 Oil Range	0.850	J	0.289	4.22	1	11/14/2020 02:31	WG1575792
(S) o-Terphenyl	*69.2*			*18.0-148*		*11/14/2020 02:31*	WG1575792

Total Solids by Method 2540 G-2011

Analyte	Result	Qualifier	Dilution	Analysis	Batch
	%			date / time	
Total Solids	94.5		1	11/14/2020 02:32	WG1575503

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		9.74	21.2	1	11/18/2020 23:09	WG1576809

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	0.0249	B J	0.0230	0.106	1	11/12/2020 20:17	WG1575360
(S) a,a,a-Trifluorotoluene(FID)	*92.0*			*77.0-120*		*11/12/2020 20:17*	WG1575360

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	11/13/2020 14:05	WG1575927
Toluene	U		0.00146	0.00564	1.01	11/13/2020 14:05	WG1575927
Ethylbenzene	U		0.000831	0.00282	1.01	11/13/2020 14:05	WG1575927
Total Xylenes	U		0.000993	0.00732	1.01	11/13/2020 14:05	WG1575927
(S) Toluene-d8	*99.1*			*75.0-131*		*11/13/2020 14:05*	WG1575927
(S) 4-Bromofluorobenzene	*103*			*67.0-138*		*11/13/2020 14:05*	WG1575927
(S) 1,2-Dichloroethane-d4	*114*			*70.0-130*		*11/13/2020 14:05*	WG1575927

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	11/14/2020 02:43	WG1575792
C28-C40 Oil Range	U		0.290	4.23	1	11/14/2020 02:43	WG1575792
(S) o-Terphenyl	*37.7*			*18.0-148*		*11/14/2020 02:43*	WG1575792

Total Solids by Method 2540 G-2011

Analyte	Result	Qualifier	Dilution	Analysis	Batch
	%			date / time	
Total Solids	94.9		1	11/14/2020 02:32	WG1575503

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		9.69	21.1	1	11/18/2020 23:19	WG1576809

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	0.0229	0.105	1	11/12/2020 20:38	WG1575360
(S) a,a,a-Trifluorotoluene(FID)	*93.5*			*77.0-120*		*11/12/2020 20:38*	WG1575360

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		0.000517	0.00111	1	11/13/2020 14:24	WG1575927
Toluene	U		0.00144	0.00554	1	11/13/2020 14:24	WG1575927
Ethylbenzene	U		0.000816	0.00277	1	11/13/2020 14:24	WG1575927
Total Xylenes	U		0.000974	0.00720	1	11/13/2020 14:24	WG1575927
(S) Toluene-d8	*101*			*75.0-131*		*11/13/2020 14:24*	WG1575927
(S) 4-Bromofluorobenzene	*102*			*67.0-138*		*11/13/2020 14:24*	WG1575927
(S) 1,2-Dichloroethane-d4	*110*			*70.0-130*		*11/13/2020 14:24*	WG1575927

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	4.21	1	11/14/2020 05:28	WG1575792
C28-C40 Oil Range	0.605	J	0.289	4.21	1	11/14/2020 05:28	WG1575792
(S) o-Terphenyl	*69.8*			*18.0-148*		*11/14/2020 05:28*	WG1575792

Total Solids by Method 2540 G-2011

Analyte	Result	Qualifier	Dilution	Analysis	Batch
	%			date / time	
Total Solids	90.1		1	11/14/2020 02:32	WG1575503

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		10.2	22.2	1	11/18/2020 23:28	WG1576809

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	0.0270	B J	0.0243	0.112	1.01	11/12/2020 20:58	WG1575360
(S) a,a,a-Trifluorotoluene(FID)	*92.5*			*77.0-120*		*11/12/2020 20:58*	WG1575360

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		0.000570	0.00122	1	11/13/2020 14:43	WG1575927
Toluene	U		0.00159	0.00611	1	11/13/2020 14:43	WG1575927
Ethylbenzene	U		0.000900	0.00305	1	11/13/2020 14:43	WG1575927
Total Xylenes	U		0.00107	0.00794	1	11/13/2020 14:43	WG1575927
(S) Toluene-d8	*98.3*			*75.0-131*		*11/13/2020 14:43*	WG1575927
(S) 4-Bromofluorobenzene	*99.1*			*67.0-138*		*11/13/2020 14:43*	WG1575927
(S) 1,2-Dichloroethane-d4	*111*			*70.0-130*		*11/13/2020 14:43*	WG1575927

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	5.42		1.79	4.44	1	11/14/2020 02:56	WG1575792
C28-C40 Oil Range	0.939	J	0.304	4.44	1	11/14/2020 02:56	WG1575792
(S) o-Terphenyl	*79.8*			*18.0-148*		*11/14/2020 02:56*	WG1575792

Total Solids by Method 2540 G-2011

Analyte	Result	Qualifier	Dilution	Analysis	Batch
	%			date / time	
Total Solids	93.0		1	11/14/2020 02:32	WG1575503

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		9.89	21.5	1	11/18/2020 23:38	WG1576809

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	0.0267	B J	0.0233	0.108	1	11/12/2020 21:19	WG1575360
(S) a,a,a-Trifluorotoluene(FID)	*92.7*			*77.0-120*		*11/12/2020 21:19*	WG1575360

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		0.000537	0.00115	1	11/13/2020 15:02	WG1575927
Toluene	U		0.00150	0.00575	1	11/13/2020 15:02	WG1575927
Ethylbenzene	U		0.000848	0.00288	1	11/13/2020 15:02	WG1575927
Total Xylenes	U		0.00101	0.00748	1	11/13/2020 15:02	WG1575927
(S) Toluene-d8	*101*			*75.0-131*		*11/13/2020 15:02*	WG1575927
(S) 4-Bromofluorobenzene	*103*			*67.0-138*		*11/13/2020 15:02*	WG1575927
(S) 1,2-Dichloroethane-d4	*114*			*70.0-130*		*11/13/2020 15:02*	WG1575927

Semi-Volatile Organic Compounds (GC) by Method 8015

Analyte	Result (dry)	Qualifier	MDL (dry)	RDL (dry)	Dilution	Analysis	Batch
	mg/kg		mg/kg	mg/kg		date / time	
C10-C28 Diesel Range	U		1.73	4.30	1	11/14/2020 03:09	WG1575792
C28-C40 Oil Range	1.56	J	0.295	4.30	1	11/14/2020 03:09	WG1575792
(S) o-Terphenyl	*88.6*			*18.0-148*		*11/14/2020 03:09*	WG1575792

Total Solids by Method 2540 G-2011

Analyte	Result	Qualifier	Dilution	Analysis	Batch
	%			date / time	
Total Solids	93.3		1	11/14/2020 02:32	WG1575503

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		9.86	21.4	1	11/18/2020 23:48	WG1576809

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	0.0242	B J	0.0233	0.107	1	11/12/2020 21:40	WG1575360
(S) a,a,a-Trifluorotoluene(FID)	*93.0*			*77.0-120*		*11/12/2020 21:40*	WG1575360

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		0.000764	0.00164	1.46	11/13/2020 15:20	WG1575927
Toluene	U		0.00213	0.00818	1.46	11/13/2020 15:20	WG1575927
Ethylbenzene	U		0.00121	0.00409	1.46	11/13/2020 15:20	WG1575927
Total Xylenes	U		0.00143	0.0106	1.46	11/13/2020 15:20	WG1575927
(S) Toluene-d8	*102*			*75.0-131*		*11/13/2020 15:20*	WG1575927
(S) 4-Bromofluorobenzene	*102*			*67.0-138*		*11/13/2020 15:20*	WG1575927
(S) 1,2-Dichloroethane-d4	*112*			*70.0-130*		*11/13/2020 15:20*	WG1575927

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	9.11		1.73	4.29	1	11/14/2020 03:21	WG1575792
C28-C40 Oil Range	25.4		0.294	4.29	1	11/14/2020 03:21	WG1575792
(S) o-Terphenyl	*83.7*			*18.0-148*		*11/14/2020 03:21*	WG1575792

Total Solids by Method 2540 G-2011

Analyte	Result	Qualifier	Dilution	Analysis	Batch
	%			date / time	
Total Solids	93.9		1	11/14/2020 02:32	WG1575503

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		9.79	21.3	1	11/18/2020 23:57	WG1576809

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	0.0251	B J	0.0231	0.106	1	11/12/2020 22:00	WG1575360
(S) a,a,a-Trifluorotoluene(FID)	*90.0*			*77.0-120*		*11/12/2020 22:00*	WG1575360

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	11/13/2020 15:39	WG1575927
Toluene	U		0.00147	0.00565	1	11/13/2020 15:39	WG1575927
Ethylbenzene	U		0.000832	0.00282	1	11/13/2020 15:39	WG1575927
Total Xylenes	U		0.000994	0.00734	1	11/13/2020 15:39	WG1575927
(S) Toluene-d8	*99.1*			*75.0-131*		*11/13/2020 15:39*	WG1575927
(S) 4-Bromofluorobenzene	*98.5*			*67.0-138*		*11/13/2020 15:39*	WG1575927
(S) 1,2-Dichloroethane-d4	*111*			*70.0-130*		*11/13/2020 15:39*	WG1575927

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	4.26	1	11/14/2020 03:34	WG1575792
C28-C40 Oil Range	0.441	J	0.292	4.26	1	11/14/2020 03:34	WG1575792
(S) o-Terphenyl	*83.9*			*18.0-148*		*11/14/2020 03:34*	WG1575792

Total Solids by Method 2540 G-2011

Analyte	Result	Qualifier	Dilution	Analysis	Batch
	%			date / time	
Total Solids	97.6		1	11/14/2020 02:32	WG1575503

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		9.42	20.5	1	11/19/2020 00:07	WG1576809

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	0.0255	B J	0.0224	0.103	1.01	11/12/2020 22:21	WG1575360
(S) a,a,a-Trifluorotoluene(FID)	*88.1*			*77.0-120*		*11/12/2020 22:21*	WG1575360

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		0.000489	0.00105	1	11/13/2020 15:58	WG1575927
Toluene	U		0.00136	0.00524	1	11/13/2020 15:58	WG1575927
Ethylbenzene	U		0.000772	0.00262	1	11/13/2020 15:58	WG1575927
Total Xylenes	U		0.000922	0.00681	1	11/13/2020 15:58	WG1575927
(S) Toluene-d8	*102*			*75.0-131*		*11/13/2020 15:58*	WG1575927
(S) 4-Bromofluorobenzene	*105*			*67.0-138*		*11/13/2020 15:58*	WG1575927
(S) 1,2-Dichloroethane-d4	*109*			*70.0-130*		*11/13/2020 15:58*	WG1575927

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	2.18	J	1.65	4.10	1	11/14/2020 06:06	WG1575792
C28-C40 Oil Range	7.95		0.281	4.10	1	11/14/2020 06:06	WG1575792
(S) o-Terphenyl	*87.2*			*18.0-148*		*11/14/2020 06:06*	WG1575792

Total Solids by Method 2540 G-2011

Analyte	Result	Qualifier	Dilution	Analysis	Batch
	%			date / time	
Total Solids	95.6		1	11/14/2020 02:14	WG1575505

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		9.63	20.9	1	11/19/2020 00:35	WG1576809

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	0.0263	B J	0.0227	0.105	1	11/12/2020 22:42	WG1575360
(S) a,a,a-Trifluorotoluene(FID)	*92.9*			*77.0-120*		*11/12/2020 22:42*	WG1575360

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		0.000510	0.00109	1	11/13/2020 16:17	WG1575927
Toluene	U		0.00142	0.00546	1	11/13/2020 16:17	WG1575927
Ethylbenzene	U		0.000805	0.00273	1	11/13/2020 16:17	WG1575927
Total Xylenes	U		0.000961	0.00710	1	11/13/2020 16:17	WG1575927
(S) Toluene-d8	*97.9*			*75.0-131*		*11/13/2020 16:17*	WG1575927
(S) 4-Bromofluorobenzene	*101*			*67.0-138*		*11/13/2020 16:17*	WG1575927
(S) 1,2-Dichloroethane-d4	*113*			*70.0-130*		*11/13/2020 16:17*	WG1575927

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		1.68	4.18	1	11/14/2020 03:47	WG1575792
C28-C40 Oil Range	1.28	J	0.287	4.18	1	11/14/2020 03:47	WG1575792
(S) o-Terphenyl	*80.9*			*18.0-148*		*11/14/2020 03:47*	WG1575792

Total Solids by Method 2540 G-2011

Analyte	Result	Qualifier	Dilution	Analysis	Batch
	%			date / time	
Total Solids	94.4		1	11/14/2020 02:14	WG1575505

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		9.75	21.2	1	11/19/2020 00:45	WG1576809

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	0.0298	B J	0.0230	0.106	1	11/12/2020 23:02	WG1575360
(S) a,a,a-Trifluorotoluene(FID)	*92.4*			*77.0-120*		*11/12/2020 23:02*	WG1575360

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	0.000588	J	0.000523	0.00112	1	11/13/2020 09:48	WG1575946
Toluene	U		0.00146	0.00560	1	11/13/2020 09:48	WG1575946
Ethylbenzene	U		0.000825	0.00280	1	11/13/2020 09:48	WG1575946
Total Xylenes	U		0.000985	0.00728	1	11/13/2020 09:48	WG1575946
(S) Toluene-d8	*105*			*75.0-131*		*11/13/2020 09:48*	WG1575946
(S) 4-Bromofluorobenzene	*90.8*			*67.0-138*		*11/13/2020 09:48*	WG1575946
(S) 1,2-Dichloroethane-d4	*101*			*70.0-130*		*11/13/2020 09:48*	WG1575946

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	4.24	1	11/14/2020 03:59	WG1575792
C28-C40 Oil Range	0.520	J	0.290	4.24	1	11/14/2020 03:59	WG1575792
(S) o-Terphenyl	*77.8*			*18.0-148*		*11/14/2020 03:59*	WG1575792

Total Solids by Method 2540 G-2011

Analyte	Result	Qualifier	Dilution	Analysis	Batch
	%			date / time	
Total Solids	90.2		1	11/14/2020 02:14	WG1575505

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		10.2	22.2	1	11/19/2020 00:54	WG1576809

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	0.0266	B J	0.0241	0.111	1	11/12/2020 23:23	WG1575360
(S) a,a,a-Trifluorotoluene(FID)	*92.5*			*77.0-120*		*11/12/2020 23:23*	WG1575360

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		0.000569	0.00122	1	11/13/2020 10:07	WG1575946
Toluene	U		0.00158	0.00609	1	11/13/2020 10:07	WG1575946
Ethylbenzene	U		0.000898	0.00305	1	11/13/2020 10:07	WG1575946
Total Xylenes	U		0.00107	0.00792	1	11/13/2020 10:07	WG1575946
(S) Toluene-d8	*124*			*75.0-131*		*11/13/2020 10:07*	WG1575946
(S) 4-Bromofluorobenzene	*107*			*67.0-138*		*11/13/2020 10:07*	WG1575946
(S) 1,2-Dichloroethane-d4	*95.9*			*70.0-130*		*11/13/2020 10:07*	WG1575946

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	4.44	1	11/14/2020 04:12	WG1575792
C28-C40 Oil Range	0.469	J	0.304	4.44	1	11/14/2020 04:12	WG1575792
(S) o-Terphenyl	*73.1*			*18.0-148*		*11/14/2020 04:12*	WG1575792

Total Solids by Method 2540 G-2011

Analyte	Result	Qualifier	Dilution	Analysis	Batch
	%			date / time	
Total Solids	85.3		1	11/14/2020 02:14	WG1575505

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		10.8	23.4	1	11/19/2020 01:04	WG1576809

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	11/12/2020 23:44	WG1575360
(S) a,a,a-Trifluorotoluene(FID)	*92.9*			*77.0-120*		*11/12/2020 23:44*	WG1575360

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		0.000628	0.00135	1	11/13/2020 10:26	WG1575946
Toluene	U		0.00175	0.00673	1	11/13/2020 10:26	WG1575946
Ethylbenzene	U		0.000991	0.00336	1	11/13/2020 10:26	WG1575946
Total Xylenes	U		0.00118	0.00874	1	11/13/2020 10:26	WG1575946
(S) Toluene-d8	*111*			*75.0-131*		*11/13/2020 10:26*	WG1575946
(S) 4-Bromofluorobenzene	*90.4*			*67.0-138*		*11/13/2020 10:26*	WG1575946
(S) 1,2-Dichloroethane-d4	*97.1*			*70.0-130*		*11/13/2020 10:26*	WG1575946

Semi-Volatile Organic Compounds (GC) by Method 8015

Analyte	Result (dry)	Qualifier	MDL (dry)	RDL (dry)	Dilution	Analysis	Batch
	mg/kg		mg/kg	mg/kg		date / time	
C10-C28 Diesel Range	U		1.89	4.69	1	11/14/2020 04:25	WG1575792
C28-C40 Oil Range	0.970	J	0.321	4.69	1	11/14/2020 04:25	WG1575792
(S) o-Terphenyl	*72.7*			*18.0-148*		*11/14/2020 04:25*	WG1575792

Total Solids by Method 2540 G-2011

Analyte	Result	Qualifier	Dilution	Analysis	Batch
	%			date / time	
Total Solids	91.4		1	11/14/2020 02:14	WG1575505

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		10.1	21.9	1	11/19/2020 01:13	WG1576809

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	0.0273	B J	0.0237	0.109	1	11/13/2020 00:04	WG1575360
(S) a,a,a-Trifluorotoluene(FID)	*91.6*			*77.0-120*		*11/13/2020 00:04*	WG1575360

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		0.000555	0.00119	1	11/13/2020 10:45	WG1575946
Toluene	U		0.00155	0.00594	1	11/13/2020 10:45	WG1575946
Ethylbenzene	U		0.000876	0.00297	1	11/13/2020 10:45	WG1575946
Total Xylenes	U		0.00105	0.00773	1	11/13/2020 10:45	WG1575946
(S) Toluene-d8	*111*			*75.0-131*		*11/13/2020 10:45*	WG1575946
(S) 4-Bromofluorobenzene	*87.6*			*67.0-138*		*11/13/2020 10:45*	WG1575946
(S) 1,2-Dichloroethane-d4	*93.2*			*70.0-130*		*11/13/2020 10:45*	WG1575946

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	11/14/2020 04:37	WG1575792
C28-C40 Oil Range	0.407	J	0.300	4.38	1	11/14/2020 04:37	WG1575792
(S) o-Terphenyl	*81.8*			*18.0-148*		*11/14/2020 04:37*	WG1575792

Total Solids by Method 2540 G-2011

Analyte	Result	Qualifier	Dilution	Analysis	Batch
	%			date / time	
Total Solids	91.7		1	11/14/2020 02:14	WG1575505

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		10.0	21.8	1	11/19/2020 18:10	WG1577256

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	0.0315	B J	0.0237	0.109	1	11/13/2020 00:25	WG1575360
(S) a,a,a-Trifluorotoluene(FID)	*92.6*			*77.0-120*		*11/13/2020 00:25*	WG1575360

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		0.000552	0.00118	1	11/13/2020 11:04	WG1575946
Toluene	U		0.00154	0.00591	1	11/13/2020 11:04	WG1575946
Ethylbenzene	U		0.000871	0.00296	1	11/13/2020 11:04	WG1575946
Total Xylenes	U		0.00104	0.00768	1	11/13/2020 11:04	WG1575946
(S) Toluene-d8	*138*	J1		*75.0-131*		*11/13/2020 11:04*	WG1575946
(S) 4-Bromofluorobenzene	*98.2*			*67.0-138*		*11/13/2020 11:04*	WG1575946
(S) 1,2-Dichloroethane-d4	*94.7*			*70.0-130*		*11/13/2020 11:04*	WG1575946

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	4.36	1	11/14/2020 04:50	WG1575792
C28-C40 Oil Range	0.770	J	0.299	4.36	1	11/14/2020 04:50	WG1575792
(S) o-Terphenyl	*80.4*			*18.0-148*		*11/14/2020 04:50*	WG1575792

Total Solids by Method 2540 G-2011

Analyte	Result	Qualifier	Dilution	Analysis	Batch
	%			date / time	
Total Solids	94.6		1	11/14/2020 02:14	WG1575505

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		9.73	21.1	1	11/19/2020 18:46	WG1577256

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	11/13/2020 00:52	WG1575601
(S) a,a,a-Trifluorotoluene(FID)	*107*			*77.0-120*		*11/13/2020 00:52*	WG1575601

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	0.00111	1	11/13/2020 11:23	WG1575946
Toluene	U		0.00145	0.00557	1	11/13/2020 11:23	WG1575946
Ethylbenzene	U		0.000822	0.00279	1	11/13/2020 11:23	WG1575946
Total Xylenes	U		0.000981	0.00725	1	11/13/2020 11:23	WG1575946
(S) Toluene-d8	*123*			*75.0-131*		*11/13/2020 11:23*	WG1575946
(S) 4-Bromofluorobenzene	*94.3*			*67.0-138*		*11/13/2020 11:23*	WG1575946
(S) 1,2-Dichloroethane-d4	*94.3*			*70.0-130*		*11/13/2020 11:23*	WG1575946

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	5.36		1.70	4.23	1	11/14/2020 05:03	WG1575792
C28-C40 Oil Range	0.775	J	0.290	4.23	1	11/14/2020 05:03	WG1575792
(S) o-Terphenyl	*83.7*			*18.0-148*		*11/14/2020 05:03*	WG1575792

Total Solids by Method 2540 G-2011

Analyte	Result	Qualifier	Dilution	Analysis	Batch
	%			date / time	
Total Solids	94.4		1	11/14/2020 02:14	WG1575505

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		9.75	21.2	1	11/19/2020 19:04	WG1577256

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	11/13/2020 01:13	WG1575601
(S) a,a,a-Trifluorotoluene(FID)	*109*			*77.0-120*		*11/13/2020 01:13*	WG1575601

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		0.000523	0.00112	1	11/13/2020 11:42	WG1575946
Toluene	U		0.00146	0.00560	1	11/13/2020 11:42	WG1575946
Ethylbenzene	U		0.000825	0.00280	1	11/13/2020 11:42	WG1575946
Total Xylenes	U		0.000985	0.00728	1	11/13/2020 11:42	WG1575946
(S) Toluene-d8	*110*			*75.0-131*		*11/13/2020 11:42*	WG1575946
(S) 4-Bromofluorobenzene	*92.1*			*67.0-138*		*11/13/2020 11:42*	WG1575946
(S) 1,2-Dichloroethane-d4	*93.9*			*70.0-130*		*11/13/2020 11:42*	WG1575946

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	4.24	1	11/14/2020 05:16	WG1575792
C28-C40 Oil Range	0.331	J	0.290	4.24	1	11/14/2020 05:16	WG1575792
(S) o-Terphenyl	*81.1*			*18.0-148*		*11/14/2020 05:16*	WG1575792

Total Solids by Method 2540 G-2011

Analyte	Result	Qualifier	Dilution	Analysis	Batch
	%			date / time	
Total Solids	98.3		1	11/14/2020 02:14	WG1575505

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	17.1	J	9.36	20.3	1	11/19/2020 20:00	WG1577256

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	0.0273	B J	0.0221	0.102	1	11/14/2020 06:10	WG1575925
(S) a,a,a-Trifluorotoluene(FID)	*92.6*			*77.0-120*		*11/14/2020 06:10*	WG1575925

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		0.000483	0.00103	1	11/13/2020 21:21	WG1575965
Toluene	U		0.00135	0.00517	1	11/13/2020 21:21	WG1575965
Ethylbenzene	U		0.000763	0.00259	1	11/13/2020 21:21	WG1575965
Total Xylenes	U		0.000911	0.00673	1	11/13/2020 21:21	WG1575965
(S) Toluene-d8	*113*			*75.0-131*		*11/13/2020 21:21*	WG1575965
(S) 4-Bromofluorobenzene	*94.4*			*67.0-138*		*11/13/2020 21:21*	WG1575965
(S) 1,2-Dichloroethane-d4	*93.1*			*70.0-130*		*11/13/2020 21:21*	WG1575965

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	5.62	B	1.64	4.07	1	11/17/2020 02:03	WG1576774
C28-C40 Oil Range	14.1	B	0.279	4.07	1	11/17/2020 02:03	WG1576774
(S) o-Terphenyl	*55.1*			*18.0-148*		*11/17/2020 02:03*	WG1576774

Total Solids by Method 2540 G-2011

Analyte	Result	Qualifier	Dilution	Analysis	Batch
	%			date / time	
Total Solids	97.9		1	11/14/2020 02:14	WG1575505

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	68.2		9.40	20.4	1	11/19/2020 20:55	WG1577256

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	0.0251	B J	0.0222	0.102	1	11/14/2020 06:31	WG1575925
(S) a,a,a-Trifluorotoluene(FID)	*93.4*			*77.0-120*		*11/14/2020 06:31*	WG1575925

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		0.000487	0.00104	1	11/13/2020 21:40	WG1575965
Toluene	U		0.00136	0.00521	1	11/13/2020 21:40	WG1575965
Ethylbenzene	U		0.000768	0.00261	1	11/13/2020 21:40	WG1575965
Total Xylenes	U		0.000918	0.00678	1	11/13/2020 21:40	WG1575965
(S) Toluene-d8	*115*			*75.0-131*		*11/13/2020 21:40*	WG1575965
(S) 4-Bromofluorobenzene	*90.9*			*67.0-138*		*11/13/2020 21:40*	WG1575965
(S) 1,2-Dichloroethane-d4	*92.6*			*70.0-130*		*11/13/2020 21:40*	WG1575965

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		1.64	4.09	1	11/17/2020 02:16	WG1576774
C28-C40 Oil Range	3.57	B J	0.280	4.09	1	11/17/2020 02:16	WG1576774
(S) o-Terphenyl	*69.1*			*18.0-148*		*11/17/2020 02:16*	WG1576774

Total Solids by Method 2540 G-2011

Analyte	Result	Qualifier	Dilution	Analysis	Batch
	%			date / time	
Total Solids	92.9		1	11/14/2020 01:59	WG1575506

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		9.91	21.5	1	11/19/2020 21:13	WG1577256

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		0.0234	0.108	1	11/14/2020 00:52	WG1575928
(S) a,a,a-Trifluorotoluene(FID)	*104*			*77.0-120*		*11/14/2020 00:52*	WG1575928

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		0.000539	0.00115	1	11/13/2020 21:59	WG1575965
Toluene	U		0.00150	0.00577	1	11/13/2020 21:59	WG1575965
Ethylbenzene	U		0.000850	0.00288	1	11/13/2020 21:59	WG1575965
Total Xylenes	U		0.00101	0.00750	1	11/13/2020 21:59	WG1575965
(S) Toluene-d8	*112*			*75.0-131*		*11/13/2020 21:59*	WG1575965
(S) 4-Bromofluorobenzene	*94.6*			*67.0-138*		*11/13/2020 21:59*	WG1575965
(S) 1,2-Dichloroethane-d4	*97.9*			*70.0-130*		*11/13/2020 21:59*	WG1575965

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	3.46	B J	1.73	4.31	1	11/17/2020 02:29	WG1576774
C28-C40 Oil Range	9.37	B	0.295	4.31	1	11/17/2020 02:29	WG1576774
(S) o-Terphenyl	*58.9*			*18.0-148*		*11/17/2020 02:29*	WG1576774

Total Solids by Method 2540 G-2011

Analyte	Result	Qualifier	Dilution	Analysis	Batch
	%			date / time	
Total Solids	97.2		1	11/14/2020 01:59	WG1575506

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		9.46	20.6	1	11/19/2020 21:32	WG1577256

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	0.0524	B J	0.0223	0.103	1	11/14/2020 01:13	WG1575928
(S) a,a,a-Trifluorotoluene(FID)	*110*			*77.0-120*		*11/14/2020 01:13*	WG1575928

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		0.000494	0.00106	1	11/13/2020 22:18	WG1575965
Toluene	U		0.00137	0.00528	1	11/13/2020 22:18	WG1575965
Ethylbenzene	U		0.000779	0.00264	1	11/13/2020 22:18	WG1575965
Total Xylenes	U		0.000930	0.00687	1	11/13/2020 22:18	WG1575965
(S) Toluene-d8	*114*			*75.0-131*		*11/13/2020 22:18*	WG1575965
(S) 4-Bromofluorobenzene	*91.2*			*67.0-138*		*11/13/2020 22:18*	WG1575965
(S) 1,2-Dichloroethane-d4	*95.3*			*70.0-130*		*11/13/2020 22:18*	WG1575965

Semi-Volatile Organic Compounds (GC) by Method 8015

Analyte	Result (dry)	Qualifier	MDL (dry)	RDL (dry)	Dilution	Analysis	Batch
	mg/kg		mg/kg	mg/kg		date / time	
C10-C28 Diesel Range	U		1.66	4.11	1	11/17/2020 02:41	WG1576774
C28-C40 Oil Range	1.54	B J	0.282	4.11	1	11/17/2020 02:41	WG1576774
(S) o-Terphenyl	*67.9*			*18.0-148*		*11/17/2020 02:41*	WG1576774

Total Solids by Method 2540 G-2011

Analyte	Result	Qualifier	Dilution	Analysis	Batch
	%			date / time	
Total Solids	96.7		1	11/14/2020 01:59	WG1575506

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	42.0		9.51	20.7	1	11/19/2020 21:50	WG1577256

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	0.0317	B J	0.0224	0.103	1	11/14/2020 01:34	WG1575928
(S) a,a,a-Trifluorotoluene(FID)	*111*			*77.0-120*		*11/14/2020 01:34*	WG1575928

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	11/13/2020 22:37	WG1575965
Toluene	U		0.00139	0.00534	1	11/13/2020 22:37	WG1575965
Ethylbenzene	U		0.000787	0.00267	1	11/13/2020 22:37	WG1575965
Total Xylenes	U		0.000939	0.00694	1	11/13/2020 22:37	WG1575965
(S) Toluene-d8	*116*			*75.0-131*		*11/13/2020 22:37*	WG1575965
(S) 4-Bromofluorobenzene	*92.9*			*67.0-138*		*11/13/2020 22:37*	WG1575965
(S) 1,2-Dichloroethane-d4	*93.2*			*70.0-130*		*11/13/2020 22:37*	WG1575965

Semi-Volatile Organic Compounds (GC) by Method 8015

Analyte	Result (dry)	Qualifier	MDL (dry)	RDL (dry)	Dilution	Analysis	Batch
	mg/kg		mg/kg	mg/kg		date / time	
C10-C28 Diesel Range	U		1.66	4.14	1	11/17/2020 02:54	WG1576774
C28-C40 Oil Range	2.77	B J	0.283	4.14	1	11/17/2020 02:54	WG1576774
(S) o-Terphenyl	*67.6*			*18.0-148*		*11/17/2020 02:54*	WG1576774

Total Solids by Method 2540 G-2011

Analyte	Result	Qualifier	Dilution	Analysis	Batch
	%			date / time	
Total Solids	97.3		1	11/14/2020 01:59	WG1575506

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	14.0	J	9.46	20.6	1	11/19/2020 22:09	WG1577256

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	0.0531	B J	0.0223	0.103	1	11/14/2020 01:55	WG1575928
(S) a,a,a-Trifluorotoluene(FID)	*109*			*77.0-120*		*11/14/2020 01:55*	WG1575928

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	0.00106	1	11/13/2020 22:56	WG1575965
Toluene	U		0.00137	0.00528	1	11/13/2020 22:56	WG1575965
Ethylbenzene	U		0.000778	0.00264	1	11/13/2020 22:56	WG1575965
Total Xylenes	U		0.000929	0.00686	1	11/13/2020 22:56	WG1575965
(S) Toluene-d8	*113*			*75.0-131*		*11/13/2020 22:56*	WG1575965
(S) 4-Bromofluorobenzene	*92.6*			*67.0-138*		*11/13/2020 22:56*	WG1575965
(S) 1,2-Dichloroethane-d4	*94.3*			*70.0-130*		*11/13/2020 22:56*	WG1575965

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	11/17/2020 03:07	WG1576774
C28-C40 Oil Range	0.811	B J	0.282	4.11	1	11/17/2020 03:07	WG1576774
(S) o-Terphenyl	*64.6*			*18.0-148*		*11/17/2020 03:07*	WG1576774

Method Blank (MB)

(MB) R3593045-1 11/14/20 02:32

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

L1283245-01 Original Sample (OS) • Duplicate (DUP)

(OS) L1283245-01 11/14/20 02:32 • (DUP) R3593045-3 11/14/20 02:32

Analyte	Original Result %	DUP Result %	Dilution	DUP RPD %	DUP Qualifier	DUP RPD Limits %
Total Solids	99.3	99.3	1	0.0468		10

Laboratory Control Sample (LCS)

(LCS) R3593045-2 11/14/20 02:32

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) R3593044-1 11/14/20 02:14

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

L1283245-12 Original Sample (OS) • Duplicate (DUP)

(OS) L1283245-12 11/14/20 02:14 • (DUP) R3593044-3 11/14/20 02:14

Analyte	Original Result %	DUP Result %	Dilution	DUP RPD %	DUP Qualifier	DUP RPD Limits %
Total Solids	94.4	94.2	1	0.195		10

Laboratory Control Sample (LCS)

(LCS) R3593044-2 11/14/20 02:14

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) R3593043-1 11/14/20 01:59

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

L1283245-23 Original Sample (OS) • Duplicate (DUP)

(OS) L1283245-23 11/14/20 01:59 • (DUP) R3593043-3 11/14/20 01:59

Analyte	Original Result %	DUP Result %	Dilution	DUP RPD %	DUP Qualifier	DUP RPD Limits %
Total Solids	96.7	96.9	1	0.181		10

Laboratory Control Sample (LCS)

(LCS) R3593043-2 11/14/20 01:59

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) R3594877-1 11/18/20 20:47

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

L1283239-21 Original Sample (OS) • Duplicate (DUP)

(OS) L1283239-21 11/18/20 21:34 • (DUP) R3594877-5 11/18/20 21:44

Analyte	Original Result (dry) mg/kg	DUP Result (dry) mg/kg	Dilution	DUP RPD %	DUP Qualifier	DUP RPD Limits %
Chloride	85.3	85.4	1	0.125		20

L1283245-15 Original Sample (OS) • Duplicate (DUP)

(OS) L1283245-15 11/19/20 01:13 • (DUP) R3594877-6 11/19/20 01:23

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) R3594877-2 11/18/20 20:56

Analyte	Spike Amount mg/kg	LCS Result mg/kg	LCS Rec. %	Rec. Limits %	LCS Qualifier
Chloride	200	206	103	90.0-110	

L1283239-20 Original Sample (OS) • Matrix Spike (MS) • Matrix Spike Duplicate (MSD)

(OS) L1283239-20 11/18/20 21:06 • (MS) R3594877-3 11/18/20 21:15 • (MSD) R3594877-4 11/18/20 21:25

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 %
Chloride	509	U	524	523	103	103	1	80.0-120			0.121	20

Method Blank (MB)

(MB) R3595395-3 11/19/20 17:28

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

L1283245-16 Original Sample (OS) • Duplicate (DUP)

(OS) L1283245-16 11/19/20 18:10 • (DUP) R3595395-4 11/19/20 18:28

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

L1284037-04 Original Sample (OS) • Duplicate (DUP)

(OS) L1284037-04 11/20/20 01:50 • (DUP) R3595395-7 11/20/20 02:08

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

Laboratory Control Sample (LCS)

(LCS) R3595395-2 11/19/20 17:09

Analyte	Spike Amount mg/kg	LCS Result mg/kg	LCS Rec. %	Rec. Limits %	LCS Qualifier
Chloride	200	205	102	90.0-110	

L1283245-18 Original Sample (OS) • Matrix Spike (MS) • Matrix Spike Duplicate (MSD)

(OS) L1283245-18 11/19/20 19:04 • (MS) R3595395-5 11/19/20 19:23 • (MSD) R3595395-6 11/19/20 19:41

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	530	U	554	560	105	106	1	80.0-120			1.12	20

Method Blank (MB)

(MB) R3592679-3 11/12/20 15:45

Analyte	MB Result mg/kg	MB Qualifier	MB MDL mg/kg	MB RDL mg/kg
TPH (GC/FID) Low Fraction	0.0223	J	0.0217	0.100
(S) a,a,a-Trifluorotoluene(FID)	*94.7*			*77.0-120*

Laboratory Control Sample (LCS) • Laboratory Control Sample Duplicate (LCSD)

(LCS) R3592679-1 11/12/20 14:25 • (LCSD) R3592679-2 11/12/20 15:04

Analyte	Spike Amount mg/kg	LCS Result mg/kg	LCSD Result mg/kg	LCS Rec. %	LCSD Rec. %	Rec. Limits %	LCS Qualifier	LCSD Qualifier	RPD %	RPD Limits %
TPH (GC/FID) Low Fraction	5.50	5.61	5.36	102	97.5	72.0-127			4.56	20
(S) a,a,a-Trifluorotoluene(FID)				*105*	*109*	*77.0-120*				

Method Blank (MB)

(MB) R3592707-2 11/12/20 17:48

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)	*111*			*77.0-120*

Laboratory Control Sample (LCS)

(LCS) R3592707-1 11/12/20 17:07

Analyte	Spike Amount mg/kg	LCS Result mg/kg	LCS Rec. %	Rec. Limits %	LCS Qualifier
TPH (GC/FID) Low Fraction	5.50	5.54	101	72.0-127	
(S) a,a,a-Trifluorotoluene(FID)			*101*	*77.0-120*	

L1283207-10 Original Sample (OS) • Matrix Spike (MS) • Matrix Spike Duplicate (MSD)

(OS) L1283207-10 11/13/20 08:34 • (MS) R3592707-3 11/13/20 09:16 • (MSD) R3592707-4 11/13/20 09:37

Analyte	Spike Amount (dry) mg/kg	Original Result (dry) mg/kg	MS Result (dry) mg/kg	MSD Result (dry) mg/kg	MS Rec. %	MSD Rec. %	Dilution	Rec. Limits %	MS Qualifier	MSD Qualifier	RPD %	RPD Limits %
TPH (GC/FID) Low Fraction	5.38	U	3.52	3.60	65.4	67.6	1	10.0-151			2.27	28
(S) a,a,a-Trifluorotoluene(FID)					*103*	*103*		*77.0-120*				

Method Blank (MB)

(MB) R3593169-2 11/13/20 22:15

Analyte	MB Result mg/kg	MB Qualifier	MB MDL mg/kg	MB RDL mg/kg
TPH (GC/FID) Low Fraction	0.0255	J	0.0217	0.100
(S) a,a,a-Trifluorotoluene(FID)	*96.5*			*77.0-120*

Laboratory Control Sample (LCS)

(LCS) R3593169-1 11/13/20 21:34

Analyte	Spike Amount mg/kg	LCS Result mg/kg	LCS Rec. %	Rec. Limits %	LCS Qualifier
TPH (GC/FID) Low Fraction	5.50	5.94	108	72.0-127	
(S) a,a,a-Trifluorotoluene(FID)			*107*	*77.0-120*	

L1283245-20 Original Sample (OS) • Matrix Spike (MS) • Matrix Spike Duplicate (MSD)

(OS) L1283245-20 11/14/20 06:31 • (MS) R3593169-3 11/14/20 06:52 • (MSD) R3593169-4 11/14/20 07:12

Analyte	Spike Amount (dry) mg/kg	Original Result (dry) mg/kg	MS Result (dry) mg/kg	MSD Result (dry) mg/kg	MS Rec. %	MSD Rec. %	Dilution	Rec. Limits %	MS Qualifier	MSD Qualifier	RPD %	RPD Limits %
TPH (GC/FID) Low Fraction	5.57	0.0251	4.25	4.19	75.9	77.2	1	10.0-151			1.45	28
(S) a,a,a-Trifluorotoluene(FID)					*105*	*104*		*77.0-120*				

Method Blank (MB)

(MB) R3593196-2 11/14/20 00:10

Analyte	MB Result mg/kg	MB Qualifier	MB MDL mg/kg	MB RDL mg/kg
TPH (GC/FID) Low Fraction	0.0511	J	0.0217	0.100
(S) a,a,a-Trifluorotoluene(FID)	*111*			*77.0-120*

Laboratory Control Sample (LCS)

(LCS) R3593196-1 11/13/20 23:28

Analyte	Spike Amount mg/kg	LCS Result mg/kg	LCS Rec. %	Rec. Limits %	LCS Qualifier
TPH (GC/FID) Low Fraction	5.50	4.90	89.1	72.0-127	
(S) a,a,a-Trifluorotoluene(FID)			*97.3*	*77.0-120*	

L1283249-16 Original Sample (OS) • Matrix Spike (MS) • Matrix Spike Duplicate (MSD)

(OS) L1283249-16 11/14/20 07:31 • (MS) R3593196-3 11/14/20 07:53 • (MSD) R3593196-4 11/14/20 08:14

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	5.50	0.0294	4.33	3.21	78.2	58.4	1	10.0-151		J3	29.7	28
(S) a,a,a-Trifluorotoluene(FID)					*102*	*103*		*77.0-120*				

Method Blank (MB)

(MB) R3592812-2 11/13/20 08:01

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	*101*			*75.0-131*
(S) 4-Bromofluorobenzene	*101*			*67.0-138*
(S) 1,2-Dichloroethane-d4	*110*			*70.0-130*

Laboratory Control Sample (LCS)

(LCS) R3592812-1 11/13/20 07:04

Analyte	Spike Amount mg/kg	LCS Result mg/kg	LCS Rec. %	Rec. Limits %	LCS Qualifier
Benzene	0.125	0.152	122	70.0-123	
Ethylbenzene	0.125	0.130	104	74.0-126	
Toluene	0.125	0.128	102	75.0-121	
Xylenes, Total	0.375	0.374	99.7	72.0-127	
(S) Toluene-d8			*98.6*	*75.0-131*	
(S) 4-Bromofluorobenzene			*104*	*67.0-138*	
(S) 1,2-Dichloroethane-d4			*115*	*70.0-130*	

Method Blank (MB)

(MB) R3592788-1 11/13/20 06:09

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	*113*			*75.0-131*
(S) 4-Bromofluorobenzene	*76.1*			*67.0-138*
(S) 1,2-Dichloroethane-d4	*92.6*			*70.0-130*

Laboratory Control Sample (LCS)

(LCS) R3592788-2 11/13/20 12:39

Analyte	Spike Amount mg/kg	LCS Result mg/kg	LCS Rec. %	Rec. Limits %	LCS Qualifier
Benzene	0.125	0.126	101	70.0-123	
Ethylbenzene	0.125	0.133	106	74.0-126	
Toluene	0.125	0.130	104	75.0-121	
Xylenes, Total	0.375	0.380	101	72.0-127	
(S) Toluene-d8			*104*	*75.0-131*	
(S) 4-Bromofluorobenzene			*92.6*	*67.0-138*	
(S) 1,2-Dichloroethane-d4			*107*	*70.0-130*	

Method Blank (MB)

(MB) R3593185-2 11/13/20 19:18

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	*113*			*75.0-131*
(S) 4-Bromofluorobenzene	*91.8*			*67.0-138*
(S) 1,2-Dichloroethane-d4	*97.2*			*70.0-130*

Laboratory Control Sample (LCS)

(LCS) R3593185-1 11/13/20 18:21

Analyte	Spike Amount mg/kg	LCS Result mg/kg	LCS Rec. %	Rec. Limits %	LCS Qualifier
Benzene	0.125	0.134	107	70.0-123	
Ethylbenzene	0.125	0.134	107	74.0-126	
Toluene	0.125	0.134	107	75.0-121	
Xylenes, Total	0.375	0.375	100	72.0-127	
(S) Toluene-d8			*107*	*75.0-131*	
(S) 4-Bromofluorobenzene			*96.5*	*67.0-138*	
(S) 1,2-Dichloroethane-d4			*103*	*70.0-130*	

L1283239-21 Original Sample (OS) • Matrix Spike (MS) • Matrix Spike Duplicate (MSD)

(OS) L1283239-21 11/13/20 20:05 • (MS) R3593185-3 11/14/20 02:24 • (MSD) R3593185-4 11/14/20 02:43

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	0.132	U	0.0979	0.122	74.0	92.0	1	10.0-149			21.7	37
Ethylbenzene	0.132	U	0.107	0.123	80.8	92.8	1	10.0-160			13.8	38
Toluene	0.132	U	0.105	0.128	79.2	96.8	1	10.0-156			20.0	38
Xylenes, Total	0.397	U	0.331	0.389	83.5	97.9	1	10.0-160			15.9	38
(S) Toluene-d8					*110*	*113*		*75.0-131*				
(S) 4-Bromofluorobenzene					*94.4*	*107*		*67.0-138*				
(S) 1,2-Dichloroethane-d4					*103*	*102*		*70.0-130*				

Method Blank (MB)

(MB) R3593097-1 11/14/20 01:15

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	*82.0*			*18.0-148*

Laboratory Control Sample (LCS)

(LCS) R3593097-2 11/14/20 01:27

Analyte	Spike Amount mg/kg	LCS Result mg/kg	LCS Rec. %	Rec. Limits %	LCS Qualifier
C10-C28 Diesel Range	50.0	44.9	89.8	50.0-150	
(S) o-Terphenyl			*90.8*	*18.0-148*	

L1283245-05 Original Sample (OS) • Matrix Spike (MS) • Matrix Spike Duplicate (MSD)

(OS) L1283245-05 11/14/20 05:28 • (MS) R3593097-3 11/14/20 05:41 • (MSD) R3593097-4 11/14/20 05:54

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	52.7	U	43.9	41.5	83.4	78.8	1	50.0-150			5.67	20
(S) o-Terphenyl					*75.4*	*74.6*		*18.0-148*				

Method Blank (MB)

(MB) R3593741-1 11/16/20 23:35

Analyte	MB Result mg/kg	MB Qualifier	MB MDL mg/kg	MB RDL mg/kg
C10-C28 Diesel Range	2.40	J	1.61	4.00
C28-C40 Oil Range	2.42	J	0.274	4.00
(S) o-Terphenyl	*72.2*			*18.0-148*

Laboratory Control Sample (LCS)

(LCS) R3593741-2 11/16/20 23:47

Analyte	Spike Amount mg/kg	LCS Result mg/kg	LCS Rec. %	Rec. Limits %	LCS Qualifier
C10-C28 Diesel Range	50.0	40.3	80.6	50.0-150	
(S) o-Terphenyl			*95.0*	*18.0-148*	

L1283249-01 Original Sample (OS) • Matrix Spike (MS) • Matrix Spike Duplicate (MSD)

(OS) L1283249-01 11/17/20 03:19 • (MS) R3593741-3 11/17/20 03:32 • (MSD) R3593741-4 11/17/20 03:45

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	55.2	4.39	40.9	37.8	66.2	60.8	1	50.0-150			7.98	20
(S) o-Terphenyl					*61.9*	*56.7*		*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.
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.

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	TN-03-2002-34
Arizona	AZ0612	New Hampshire	2975
Arkansas	88-0469	New Jersey–NELAP	TN002
California	2932	New Mexico [1]	n/a
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]	90010	South Carolina	84004
Kentucky [2]	16	South Dakota	n/a
Louisiana	AI30792	Tennessee [1 4]	2006
Louisiana [1]	LA180010	Texas	T104704245-18-15
Maine	TN0002	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	9980939910
Montana	CERT0086	Wyoming	A2LA

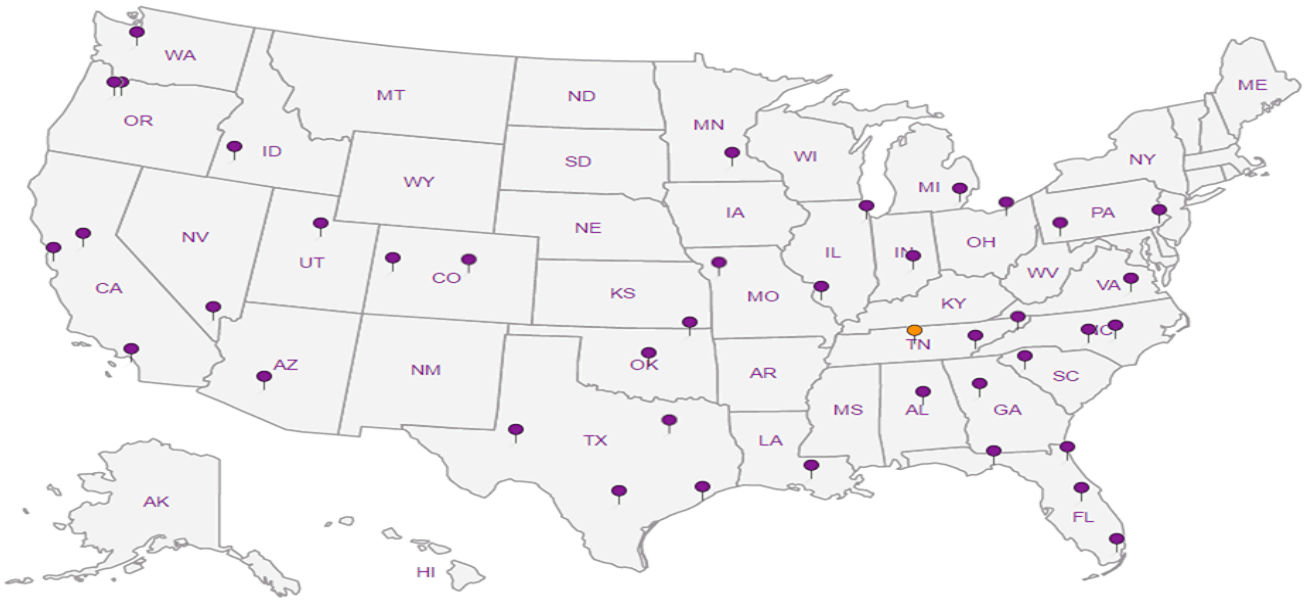
Third Party Federal Accreditations

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

L128245

Client Name:	Conoco Phillips	**Site Manager:**	Christian Llull
Project Name:	VGEU 02-19 Flowline Release (1RP-1408)	**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. 13
Invoice to:	Accounts Payable 901 West Wall Street, Suite 100 Midland, Texas 79701		
Receiving Laboratory:	Pace Analytical	**Sampler Signature:**	Joe Tyler

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	BH-1 (0'-1')	10/30/20	1200		X				X			1	N	X		X												X						
-02	BH-1 (2'-3')	10/30/20	1210		X				X			1	N	X		X												X						
-03	BH-1 (4'-5')	10/30/20	1220		X				X			1	N	X		X												X						
-04	BH-1 (6'-7')	10/30/20	1230		X				X			1	N	X		X												X						
-05	BH-1 (9'-10')	10/30/20	1240		X				X			1	N	X		X												X						
-06	BH-1 (14'-15')	10/30/20	1250		X				X			1	N	X		X												X						
-07	BH-1 (19'-20')	10/30/20	1300		X				X			1	N	X		X												X						
-08	BH-1 (24'-25')	10/30/20	1330		X				X			1	N	X		X												X						
-09	BH-1 (29'-30')	10/30/20	1400		X				X			1	N	X		X												X						
-10	BH-2 (0'-1')	10/30/20	1500		X				X			1	N	X		X												X						

Relinquished by: Joe Tyler	Date: 11-06-2020	Time: 14:40	Received by:	Date: 11-6-20	Time: 14:40
Relinquished by:	Date: 11-6-20	Time: 16:30	Received by: SwA	Date: 11-6-20	Time: 16:30
Relinquished by:	Date:	Time:	Received by: B. Barnes	Date: 4-7-20	Time: 1030

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 #: _____

ORIGINAL COPY

A121

MDA2
18+0=18

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

U283245

Client Name:	Conoco Phillips	**Site Manager:**	Christian Llull
Project Name:	VGEU 02-19 Flowline Release (1RP-1408)	**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. 13
Invoice to:	Accounts Payable 901 West Wall Street, Suite 100 Midland, Texas 79701		
Receiving Laboratory:	Pace Analytical	**Sampler Signature:**	Joe Tyler

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	BH-2 (2'-3')	10/30/20	1510		X				X			1	N	X		X												X						
-12	BH-2 (4'-5')	10/30/20	1520		X				X			1	N	X		X												X						
-13	BH-2 (6'-7')	10/30/20	1530		X				X			1	N	X		X												X						
-14	BH-2 (9'-10')	10/30/20	1540		X				X			1	N	X		X												X						
-15	BH-2 (14'-15')	10/30/20	1550		X				X			1	N	X		X												X						
-16	BH-2 (19'-20')	10/30/20	1600		X				X			1	N	X		X												X						
-17	BH-2 (24'-25')	10/30/20	1630		X				X			1	N	X		X												X						
-18	BH-2 (29'-30')	10/30/20	1700		X				X			1	N	X		X												X						
-19	BH-3 (0'-1')	11/02/20	1000		X				X			1	N	X		X												X						
-20	BH-3 (3'-4')	11/02/20	1010		X				X			1	N	X		X												X						

	Date:	Time:		Date:	Time:
Relinquished by: Joe Tyler	11-06-2020	14:00	Received by:	11-6-20	14:00
Relinquished by:	11-6-20	16:30	Received by: SLA	11-6-20	16:30
Relinquished by:	Date:	Time:	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 #: _____

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

L1283245

Client Name:	Conoco Phillips	**Site Manager:**	Christian Llull
Project Name:	VGEU 02-19 Flowline Release (1RP-1408)	**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. 13
Invoice to:	Accounts Payable 901 West Wall Street, Suite 100 Midland, Texas 79701		
Receiving Laboratory:	Pace Analytical	**Sampler Signature:**	Joe Tyler

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
-21	BH-4 (0'-1')	11/02/20	1030		X				X			1	N	X		X												X						
-22	BH-4 (3'-4')	11/02/20	1040		X				X			1	N	X		X												X						
-23	BH-5 (0'-1')	11/02/20	1100		X				X			1	N	X		X												X						
-24	BH-5 (3'-4')	11/02/20	1110		X				X			1	N	X		X												X						

Relinquished by: Joe Tyler	Date: 11-06-2020	Time: 14:00	Received by:	Date: 11-6-20	Time: 14:00
Relinquished by:	Date: 11-6-20	Time: 16:30	Received by:	Date: 11-6-20	Time: 16:30
Relinquished by:	Date:	Time:	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 #: _____

Pace Analytical National Center for Testing & Innovation
Cooler Receipt Form

Client: COPTETRA	L1203245	
Cooler Received/Opened On: 11 / 7 / 20 Temperature:	1.8	
Received By: Billy Barras		
Signature: B. Barras		

Receipt Check List	NP	Yes	No
COC Seal Present / Intact?	✓		
COC Signed / Accurate?		✓	
Bottles arrive intact?		✓	
Correct bottles used?		✓	
Sufficient volume sent?		✓	
If Applicable			
VOA Zero headspace?			
Preservation Correct / Checked?			

Pace Analytical®
National Center for Testing & Innovation

ANALYTICAL REPORT

January 18, 2021

Revised Report

ConocoPhillips - Tetra Tech

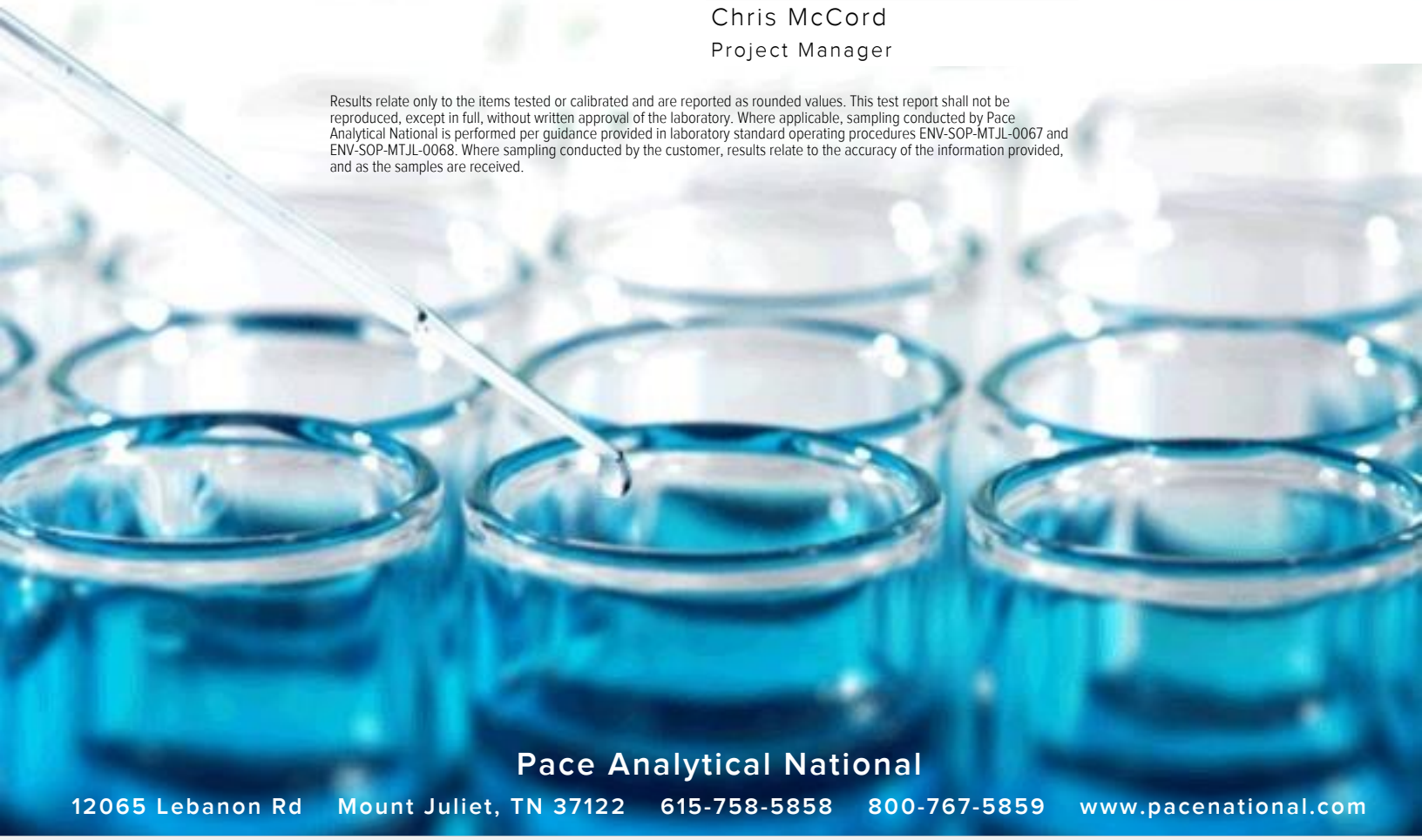
Sample Delivery Group:	L1285436
Samples Received:	11/13/2020
Project Number:	212C-MD-02334 TASK13
Description:	VGEU 02-19 (1RP-1408)

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') L1285436-01 Solid

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

Method	Batch	Dilution	Preparation date/time	Analysis date/time	Analyst	Location
Total Solids by Method 2540 G-2011	WG1579626	1	11/20/20 09:38	11/20/20 09:51	KDW	Mt. Juliet, TN
Wet Chemistry by Method 300.0	WG1580278	1	11/22/20 22:04	11/23/20 01:21	ELN	Mt. Juliet, TN
Volatile Organic Compounds (GC) by Method 8015/8021	WG1579384	1	11/18/20 13:53	11/19/20 22:36	ADM	Mt. Juliet, TN
Semi-Volatile Organic Compounds (GC) by Method 8015	WG1579244	1	11/20/20 01:54	11/20/20 15:06	DMG	Mt. Juliet, TN

AH-1 (1-2') L1285436-02 Solid

Collected by: Adrian Garcia
Collected date/time: 11/09/20 12:10
Received date/time: 11/13/20 09:00

Method	Batch	Dilution	Preparation date/time	Analysis date/time	Analyst	Location
Total Solids by Method 2540 G-2011	WG1579626	1	11/20/20 09:38	11/20/20 09:51	KDW	Mt. Juliet, TN
Wet Chemistry by Method 300.0	WG1580278	1	11/22/20 22:04	11/23/20 01:30	ELN	Mt. Juliet, TN
Volatile Organic Compounds (GC) by Method 8015/8021	WG1579384	1	11/18/20 13:53	11/19/20 22:57	ADM	Mt. Juliet, TN
Semi-Volatile Organic Compounds (GC) by Method 8015	WG1579244	1	11/20/20 01:54	11/20/20 14:53	DMG	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

Report Revision History

Level II Report - Version 1: 11/24/20 10:07

Total Solids by Method 2540 G-2011

Analyte	Result	Qualifier	Dilution	Analysis	Batch
	%			date / time	
Total Solids	97.7		1	11/20/2020 09:51	WG1579626

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		9.42	20.5	1	11/23/2020 01:21	WG1580278

Volatile Organic Compounds (GC) by Method 8015/8021

Analyte	Result (dry)	Qualifier	MDL (dry)	RDL (dry)	Dilution	Analysis	Batch
	mg/kg		mg/kg	mg/kg		date / time	
Benzene	U		0.000123	0.000512	1	11/19/2020 22:36	WG1579384
Toluene	U		0.000154	0.00512	1	11/19/2020 22:36	WG1579384
Ethylbenzene	U		0.000113	0.000512	1	11/19/2020 22:36	WG1579384
Total Xylene	U		0.000471	0.00154	1	11/19/2020 22:36	WG1579384
TPH (GC/FID) Low Fraction	0.0906	J	0.0222	0.102	1	11/19/2020 22:36	WG1579384
(S) a,a,a-Trifluorotoluene(FID)	*105*			*77.0-120*		*11/19/2020 22:36*	WG1579384
(S) a,a,a-Trifluorotoluene(PID)	*97.1*			*72.0-128*		*11/19/2020 22:36*	WG1579384

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	11/20/2020 15:06	WG1579244
C28-C40 Oil Range	10.5		0.280	4.09	1	11/20/2020 15:06	WG1579244
(S) o-Terphenyl	*72.9*			*18.0-148*		*11/20/2020 15:06*	WG1579244

Total Solids by Method 2540 G-2011

Analyte	Result	Qualifier	Dilution	Analysis	Batch
	%			date / time	
Total Solids	98.2		1	11/20/2020 09:51	WG1579626

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		9.37	20.4	1	11/23/2020 01:30	WG1580278

Volatile Organic Compounds (GC) by Method 8015/8021

Analyte	Result (dry)	Qualifier	MDL (dry)	RDL (dry)	Dilution	Analysis	Batch
	mg/kg		mg/kg	mg/kg		date / time	
Benzene	U		0.000122	0.000509	1	11/19/2020 22:57	WG1579384
Toluene	U		0.000153	0.00509	1	11/19/2020 22:57	WG1579384
Ethylbenzene	U		0.000112	0.000509	1	11/19/2020 22:57	WG1579384
Total Xylene	0.00160		0.000469	0.00153	1	11/19/2020 22:57	WG1579384
TPH (GC/FID) Low Fraction	0.108		0.0221	0.102	1	11/19/2020 22:57	WG1579384
(S) a,a,a-Trifluorotoluene(FID)	*107*			*77.0-120*		*11/19/2020 22:57*	WG1579384
(S) a,a,a-Trifluorotoluene(PID)	*97.7*			*72.0-128*		*11/19/2020 22:57*	WG1579384

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		1.64	4.07	1	11/20/2020 14:53	WG1579244
C28-C40 Oil Range	8.60		0.279	4.07	1	11/20/2020 14:53	WG1579244
(S) o-Terphenyl	*70.7*			*18.0-148*		*11/20/2020 14:53*	WG1579244

Method Blank (MB)

(MB) R3595766-1 11/20/20 09:51

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

L1285426-05 Original Sample (OS) • Duplicate (DUP)

(OS) L1285426-05 11/20/20 09:51 • (DUP) R3595766-3 11/20/20 09:51

Analyte	Original Result %	DUP Result %	Dilution	DUP RPD %	DUP Qualifier	DUP RPD Limits %
Total Solids	79.9	77.6	1	2.84		10

Laboratory Control Sample (LCS)

(LCS) R3595766-2 11/20/20 09:51

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) R3596338-1 11/22/20 23:33

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

L1285974-03 Original Sample (OS) • Duplicate (DUP)

(OS) L1285974-03 11/23/20 02:56 • (DUP) R3596338-3 11/23/20 03:05

Analyte	Original Result (dry) mg/kg	DUP Result (dry) mg/kg	Dilution	DUP RPD %	DUP Qualifier	DUP RPD Limits %
Chloride	94.8	94.5	1	0.375		20

L1285974-10 Original Sample (OS) • Duplicate (DUP)

(OS) L1285974-10 11/23/20 04:50 • (DUP) R3596338-6 11/23/20 05:00

Analyte	Original Result (dry) mg/kg	DUP Result (dry) mg/kg	Dilution	DUP RPD %	DUP Qualifier	DUP RPD Limits %
Chloride	1210	1250	5	3.10		20

Laboratory Control Sample (LCS)

(LCS) R3596338-2 11/22/20 23:42

Analyte	Spike Amount mg/kg	LCS Result mg/kg	LCS Rec. %	Rec. Limits %	LCS Qualifier
Chloride	200	218	109	90.0-110	

L1285974-05 Original Sample (OS) • Matrix Spike (MS) • Matrix Spike Duplicate (MSD)

(OS) L1285974-05 11/23/20 03:24 • (MS) R3596338-4 11/23/20 03:34 • (MSD) R3596338-5 11/23/20 03:43

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	521	22.7	572	576	106	106	1	80.0-120			0.736	20

Method Blank (MB)

(MB) R3595400-3 11/19/20 16:50

Analyte	MB Result mg/kg	MB Qualifier	MB MDL mg/kg	MB RDL mg/kg
Benzene	U		0.000120	0.000500
Toluene	U		0.000150	0.00500
Ethylbenzene	U		0.000110	0.000500
Total Xylene	U		0.000460	0.00150
TPH (GC/FID) Low Fraction	U		0.0217	0.100
(S) a,a,a-Trifluorotoluene(FID)	*107*			*77.0-120*
(S) a,a,a-Trifluorotoluene(PID)	*100*			*72.0-128*

Laboratory Control Sample (LCS)

(LCS) R3595400-1 11/19/20 15:48

Analyte	Spike Amount mg/kg	LCS Result mg/kg	LCS Rec. %	Rec. Limits %	LCS Qualifier
Benzene	0.0500	0.0473	94.6	76.0-121	
Toluene	0.0500	0.0475	95.0	80.0-120	
Ethylbenzene	0.0500	0.0483	96.6	80.0-124	
Total Xylene	0.150	0.152	101	37.0-160	
(S) a,a,a-Trifluorotoluene(FID)			*113*	*77.0-120*	
(S) a,a,a-Trifluorotoluene(PID)			*100*	*72.0-128*	

Laboratory Control Sample (LCS)

(LCS) R3595400-2 11/19/20 16:08

Analyte	Spike Amount mg/kg	LCS Result mg/kg	LCS Rec. %	Rec. Limits %	LCS Qualifier
TPH (GC/FID) Low Fraction	5.50	5.80	105	72.0-127	
(S) a,a,a-Trifluorotoluene(FID)			*99.8*	*77.0-120*	
(S) a,a,a-Trifluorotoluene(PID)			*104*	*72.0-128*	

L1287184-01 Original Sample (OS) • Matrix Spike (MS) • Matrix Spike Duplicate (MSD)

(OS) L1287184-01 11/19/20 19:50 • (MS) R3595400-4 11/20/20 00:00 • (MSD) R3595400-5 11/20/20 00:21

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	5.45	0.313	1.98	1.62	30.6	24.5	1	10.0-151			20.0	28
(S) a,a,a-Trifluorotoluene(FID)					*87.2*	*80.3*		*77.0-120*				
(S) a,a,a-Trifluorotoluene(PID)					*89.5*	*90.9*		*72.0-128*				

Method Blank (MB)

(MB) R3595607-1 11/20/20 11:51

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	*77.2*			*18.0-148*

Laboratory Control Sample (LCS)

(LCS) R3595607-2 11/20/20 12:04

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			*85.0*	*18.0-148*	

L1285600-01 Original Sample (OS) • Matrix Spike (MS) • Matrix Spike Duplicate (MSD)

(OS) L1285600-01 11/20/20 17:32 • (MS) R3595607-3 11/20/20 17:45 • (MSD) R3595607-4 11/20/20 17:58

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	5.60	40.9	43.4	69.3	74.1	1	50.0-150			5.84	20
(S) o-Terphenyl					*83.4*	*84.3*		*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.

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

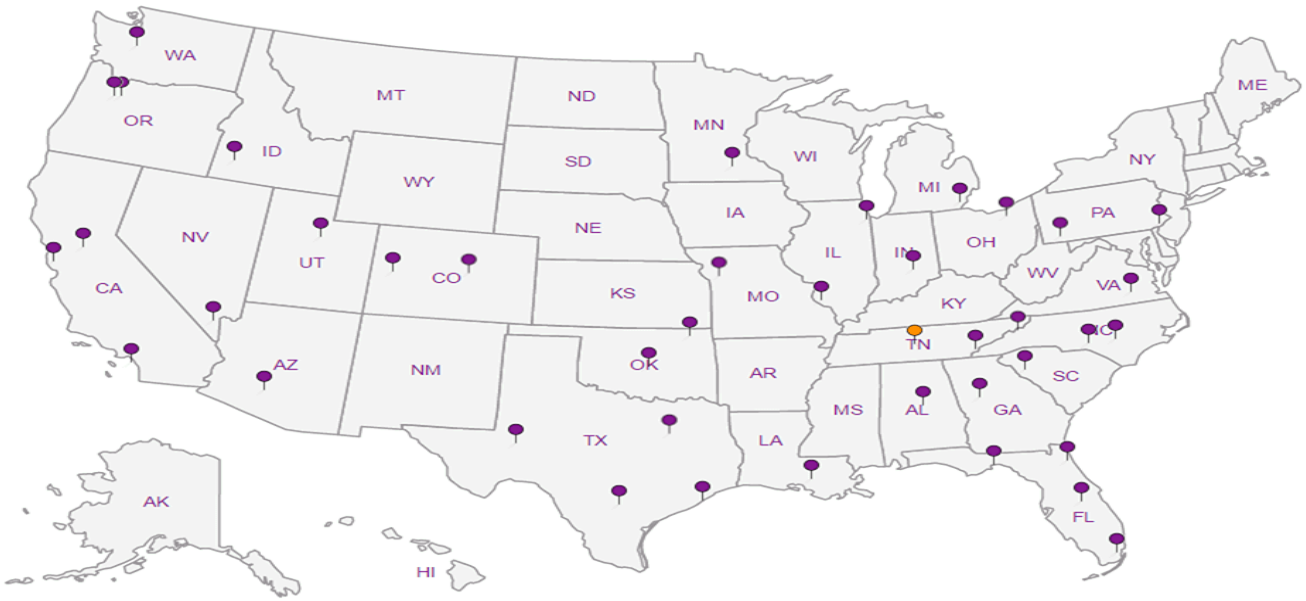
Third Party Federal Accreditations

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

L1285436

Page : 1 of 1

B045

Tetra Tech, Inc.

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

Client Name:	Conoco Phillips	**Site Manager:**	Christian Llull
Project Name:	VGEU 02-19 (1RP-1408)	**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. 13
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
		YEAR: 2020																															
-01	AH-1 (BH 5) (0'-1')	11/09/20	1200		X				X			1	N	X		X											X						
-02	AH-1 (BH-5) (1'-2')	11/09/20	1210		X				X			1	N	X		X											X						

Relinquished by:	Date:	Time:	Received by:	Date:	Time:
	11/11/20	1600		11/11/20	1600
	11/11/20	17:40	FedEx	11/11/20	1700
FedEx	11/12/20	1606		11/12/20	1606

Relq. Pace 11/12/20 1623

ORIGINAL COPY

Meredyne pack 11/12/20

11/13/20

LAB USE ONLY

Sample Temperature 2.6 to 2.6 CF

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 #: _____

RAD SCREEN: <0.5 mR/hr

Pace Analytical National Center for Testing & Innovation
Cooler Receipt Form

Client: COPTETRA		L1285436
Cooler Received/Opened On: 11 / 13 / 20	Temperature:	2.6 C
Received By: Monica Rifenberrick		
Signature: Monica Rifenberrick		

Receipt Check List	NP	Yes	No
COC Seal Present / Intact?			
COC Signed / Accurate?		✓	
Bottles arrive intact?		✓	
Correct bottles used?		✓	
Sufficient volume sent?		✓	
If Applicable			
VOA Zero headspace?			
Preservation Correct / Checked?			

Chris McCord

From: Abbott, Sam <Sam.Abbott@tetratech.com>
Sent: Monday, January 18, 2021 1:07 PM
To: Chris McCord
Subject: FW: Pace Analytical National Level II Report for 212C-MD-02334 TASK13 VGEU 02-19 (1RP-1408) L1285436
Attachments: L1285436.pdf

Importance: High

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.
Good afternoon Chris,

Could we have this lab report revised to remove "(BH-5)" from the sample IDs?

For example, instead of "AH-1 (BH-5) (0-1')" this sample ID would be "AH-1 (0-1')."

Additionally along this line, samples were recently submitted for four projects with separate COCs that will need to have the sample IDs revised. Would you prefer that I request those changes now, or wait for the analytical reports for these analyses?

Thank you,
Sam

From: Llull, Christian <Christian.Llull@tetratech.com>
Sent: Tuesday, November 24, 2020 10:34 AM
To: Abbott, Sam <Sam.Abbott@tetratech.com>
Subject: FW: Pace Analytical National Level II Report for 212C-MD-02334 TASK13 VGEU 02-19 (1RP-1408) L1285436
Importance: High

Christian

From: erica.mcneese@pacelabs.com <erica.mcneese@pacelabs.com>
Sent: Tuesday, November 24, 2020 10:07 AM
To: Llull, Christian <Christian.Llull@tetratech.com>
Subject: Pace Analytical National Level II Report for 212C-MD-02334 TASK13 VGEU 02-19 (1RP-1408) L1285436
Importance: High

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

"Privileged and Confidential"

Thank you for choosing Pace National!

Please find enclosed PDF report containing your laboratory analysis and chain of custody.

ATTACHMENT 4 – NMSLO SEED MIXTURE

NMSLO Seed Mix Loamy (L)

LOAMY (L) SITES SEED MIXTURE:

COMMON NAME	VARIETY	APPLICATION RATE (PLS/Acre)	DRILL BOX
Grasses:			
Black grama	**VNS, Southern**	**1.0**	**D**
Blue grama	**Lovington**	**1.0**	**D**
Sideoats grama	**Vaughn, El Reno**	**4.0**	**F**
Sand dropseed	**VNS, Southern**	**2.0**	**S**
Alkali sacaton	**VNS, Southern**	**1.0**	
Little bluestem	**Cimarron, Pastura**	**1.5**	**F**
Forbs:			
Firewheel (*Gaillardia*)	**VNS, Southern**	**1.0**	**D**
Shrubs:			
Fourwing saltbush	**Marana, Santa Rita**	**1.0**	**D**
Common winterfat	**VNS, Southern**	**0.5**	**F**
	Total PLS/acre	**18.0**	

S = Small seed drill box, D = Standard seed drill box, F = Fluffy seed drill box
VNS = Variety Not Stated, PLS = Pure Live Seed

- Seed mixes should be provided in bags separating seed types into the three categories: small (S), standard (D) and fluffy (F).
- VNS, Southern – Seed should be from a southern latitude collection of this species.
- Double seed application rate for broadcast or hydroseeding.
- If one species is not available, contact the SLO for an approved substitute; alternatively the SLO may require other species proportionately increased.
- Additional information on these seed species can be found on the USDA Plants Database website at http://plants.usda.gov.

3 REVEGETATION PLANS & SEEDING

The following Revegetation Plans were developed for revegetation of sites in southeastern New Mexico. To determine which revegetation plan is appropriate follow procedures in the section titled Determining the Revegetation Plan.

Revegetation Plans contain seed mixtures, as well as seed bed preparation and planting requirements. The detailed instructions for seedbed preparation and planting can be found in the section Revegetation Techniques.

Table 3 - Revegetation Plans, Codes, and Soil Types for Southeastern New Mexico

REVEGTATION PLANS	CODE	SOIL TEXTURES
Clay	C	Clay, Silty Clay, Stony Silty Clay, Clay Loam, Silty Clay Loam (including saline and sodic Clay soils)
Loam	L	Silty Loam, Cobbly Silt Loam, Stony Silt Loam, Silt, Loam, Sandy, Clay Loam
Sandy Loam	SL	Very Fine Sandy Loam, Fine Sandy Loam, Cobbly Fine Sandy Loam, Sandy Loam, Cobbly Sandy Loam, Gravelly Fine Sandy Loam, Very Gravelly Fine Sand Loam, Stony Fine Sandy Loam, Stony Sandy Loam
Gypsum	LG	
Shallow	SH	Rocky Loam, Cobbly Loam
Course	CS	Gravelly Loam, very Gravelly Loam, Gravelly Sandy Loam, Very Gravelly Sandy Loam, Stony Loam, Stony Sandy Loam
Sandy	S	Loamy Fine Sand, Loam Sand, Very Gravelly Loamy Fine Sand
Blow Sand	BS	Fine Sand, Sand, Coarse Sand
Mountain Meadow	MM	Clay, Loam
Mountain Upland	MU	Clay Loam, Loam

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

QUESTIONS

Action 365613

QUESTIONS

Operator: Maverick Permian LLC 1000 Main Street, Suite 2900 Houston, TX 77002	OGRID: 331199
	Action Number: 365613
	Action Type: [C-141] Reclamation Report C-141 (C-141-v-Reclamation)

QUESTIONS

Prerequisites	
Incident ID (n#)	**nPAC0716534072**
Incident Name	**NPAC0716534072 VACUUM GLORIETA EAST UNIT #019 @ 30-025-37849**
Incident Type	**Oil Release**
Incident Status	**Reclamation Report Received**
Incident Well	**[30-025-37849] VACUUM GLORIETA EAST UNIT #019**

Location of Release Source	
Please answer all the questions in this group.	
Site Name	VACUUM GLORIETA EAST UNIT #019
Date Release Discovered	06/04/2007
Surface Owner	State

Incident Details	
Please answer all the questions in this group.	
Incident Type	Oil Release
Did this release result in a fire or is the result of a fire	No
Did this release result in any injuries	No
Has this release reached or does it have a reasonable probability of reaching a watercourse	No
Has this release endangered or does it have a reasonable probability of endangering public health	No
Has this release substantially damaged or will it substantially damage property or the environment	No
Is this release of a volume that is or may with reasonable probability be detrimental to fresh water	No

Nature and Volume of Release	
Material(s) released, please answer all that apply below. Any calculations or specific justifications for the volumes provided should be attached to the follow-up C-141 submission.	
Crude Oil Released (bbls) Details	Cause: Corrosion | Flow Line - Production | Crude Oil | Released: 6 BBL | Recovered: 3 BBL | Lost: 3 BBL.
Produced Water Released (bbls) Details	Cause: Corrosion | Flow Line - Production | Produced Water | Released: 31 BBL | Recovered: 14 BBL | Lost: 17 BBL.
Is the concentration of chloride in the produced water >10,000 mg/l	Yes
Condensate Released (bbls) Details	*Not answered.*
Natural Gas Vented (Mcf) Details	*Not answered.*
Natural Gas Flared (Mcf) Details	*Not answered.*
Other Released Details	*Not answered.*
Are there additional details for the questions above (i.e. any answer containing Other, Specify, Unknown, and/or Fire, or any negative lost amounts)	*Not answered.*

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QUESTIONS (continued)

Operator: Maverick Permian LLC 1000 Main Street, Suite 2900 Houston, TX 77002	OGRID: 331199
	Action Number: 365613
	Action Type: [C-141] Reclamation Report C-141 (C-141-v-Reclamation)

QUESTIONS

Nature and Volume of Release (continued)	
Is this a gas only submission (i.e. only significant Mcf values reported)	**No, according to supplied volumes this does not appear to be a "gas only" report.**
Was this a major release as defined by Subsection A of 19.15.29.7 NMAC	**Yes**
Reasons why this would be considered a submission for a notification of a major release	**From paragraph A. "Major release" determine using:** **(1) an unauthorized release of a volume, excluding gases, of 25 barrels or more.**
With the implementation of the 19.15.27 NMAC (05/25/2021), venting and/or flaring of natural gas (i.e. gas only) are to be submitted on the C-129 form.	

Initial Response	
The responsible party must undertake the following actions immediately unless they could create a safety hazard that would result in injury.	
The source of the release has been stopped	True
The impacted area has been secured to protect human health and the environment	True
Released materials have been contained via the use of berms or dikes, absorbent pads, or other containment devices	True
All free liquids and recoverable materials have been removed and managed appropriately	True
If all the actions described above have not been undertaken, explain why	*Not answered.*
Per Paragraph (4) of Subsection B of 19.15.29.8 NMAC the responsible party may commence remediation immediately after discovery of a release. If remediation has begun, please prepare and attach a narrative of actions to date in the follow-up C-141 submission. If remedial efforts have been successfully completed or if the release occurred within a lined containment area (see Subparagraph (a) of Paragraph (5) of Subsection A of 19.15.29.11 NMAC), please prepare and attach all information needed for closure evaluation in the follow-up C-141 submission.	

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.

I hereby agree and sign off to the above statement	Name: Chuck Terhune Title: Program Manager Email: chuck.terhune@tetratech.com Date: 07/19/2024

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QUESTIONS (continued)

Operator: Maverick Permian LLC 1000 Main Street, Suite 2900 Houston, TX 77002	OGRID: 331199
	Action Number: 365613
	Action Type: [C-141] Reclamation Report C-141 (C-141-v-Reclamation)

QUESTIONS

Site Characterization	
Please answer all the questions in this group (only required when seeking remediation plan approval and beyond). 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 in feet below ground surface (ft bgs)	Between 51 and 75 (ft.)
What method was used to determine the depth to ground water	Direct Measurement
Did this release impact groundwater or surface water	No
What is the minimum distance, between the closest lateral extents of the release and the following surface areas:	
A continuously flowing watercourse or any other significant watercourse	Greater than 5 (mi.)
Any lakebed, sinkhole, or playa lake (measured from the ordinary high-water mark)	Between 1000 (ft.) and ½ (mi.)
An occupied permanent residence, school, hospital, institution, or church	Greater than 5 (mi.)
A spring or a private domestic fresh water well used by less than five households for domestic or stock watering purposes	Between 1 and 5 (mi.)
Any other fresh water well or spring	Between ½ and 1 (mi.)
Incorporated municipal boundaries or a defined municipal fresh water well field	Greater than 5 (mi.)
A wetland	Between 1000 (ft.) and ½ (mi.)
A subsurface mine	Greater than 5 (mi.)
An (non-karst) unstable area	Greater than 5 (mi.)
Categorize the risk of this well / site being in a karst geology	Low
A 100-year floodplain	Greater than 5 (mi.)
Did the release impact areas not on an exploration, development, production, or storage site	Yes

Remediation Plan	
Please answer all the questions that apply or are indicated. This information must be provided to the appropriate district office no later than 90 days after the release discovery date.	
Requesting a remediation plan approval with this submission	Yes
Attach a comprehensive report demonstrating the lateral and vertical extents of soil contamination associated with the release have been determined, pursuant to 19.15.29.11 NMAC and 19.15.29.13 NMAC.	
Have the lateral and vertical extents of contamination been fully delineated	Yes
Was this release entirely contained within a lined containment area	No
Soil Contamination Sampling: (Provide the highest observable value for each, in milligrams per kilograms.)	
Chloride (EPA 300.0 or SM4500 Cl B)	68
TPH (GRO+DRO+MRO) (EPA SW-846 Method 8015M)	34.5
GRO+DRO (EPA SW-846 Method 8015M)	9.1
BTEX (EPA SW-846 Method 8021B or 8260B)	0.1
Benzene (EPA SW-846 Method 8021B or 8260B)	0.1
Per Subsection B of 19.15.29.11 NMAC unless the site characterization report includes completed efforts at remediation, the report must include a proposed remediation plan in accordance with 19.15.29.12 NMAC, which includes the anticipated timelines for beginning and completing the remediation.	
On what estimated date will the remediation commence	04/22/2024
On what date will (or did) the final sampling or liner inspection occur	11/09/2020
On what date will (or was) the remediation complete(d)	04/22/2024
What is the estimated surface area (in square feet) that will be reclaimed	8621
What is the estimated volume (in cubic yards) that will be reclaimed	0
What is the estimated surface area (in square feet) that will be remediated	8621
What is the estimated volume (in cubic yards) that will be remediated	0
These estimated dates and measurements are recognized to be the best guess or calculation at the time of submission and may (be) change(d) over time as more remediation efforts are completed.	
The OCD recognizes that proposed remediation measures may have to be minimally adjusted in accordance with the physical realities encountered during remediation. If the responsible party has any need to significantly deviate from the remediation plan proposed, then it should consult with the division to determine if another remediation plan submission is required.	

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QUESTIONS (continued)

Operator: Maverick Permian LLC 1000 Main Street, Suite 2900 Houston, TX 77002	OGRID: 331199
	Action Number: 365613
	Action Type: [C-141] Reclamation Report C-141 (C-141-v-Reclamation)

QUESTIONS

Remediation Plan (continued)	
Please answer all the questions that apply or are indicated. This information must be provided to the appropriate district office no later than 90 days after the release discovery date.	
This remediation will (or is expected to) utilize the following processes to remediate / reduce contaminants:	
(Select all answers below that apply.)	
(Ex Situ) Excavation and **off-site** disposal (i.e. dig and haul, hydrovac, etc.)	*Not answered.*
(Ex Situ) Excavation and **on-site** remediation (i.e. On-Site Land Farms)	*Not answered.*
(In Situ) Soil Vapor Extraction	*Not answered.*
(In Situ) Chemical processing (i.e. Soil Shredding, Potassium Permanganate, etc.)	*Not answered.*
(In Situ) Biological processing (i.e. Microbes / Fertilizer, etc.)	*Not answered.*
(In Situ) Physical processing (i.e. Soil Washing, Gypsum, Disking, etc.)	*Not answered.*
Ground Water Abatement pursuant to 19.15.30 NMAC	*Not answered.*
OTHER (Non-listed remedial process)	Yes
Other Non-listed Remedial Process. Please specify	No soils present at the site requiring remediation or reclamation, all analytical shows release was previously remediated . Historical aerial photos show an apparent remediation in 2011 and 2012. NMOCD Approved Remediation/Reclamation Workplan requires seeding/revegetation only.
Per Subsection B of 19.15.29.11 NMAC unless the site characterization report includes completed efforts at remediation, the report must include a proposed remediation plan in accordance with 19.15.29.12 NMAC, which includes the anticipated timelines for beginning and completing the remediation.	

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.

I hereby agree and sign off to the above statement	Name: Chuck Terhune Title: Program Manager Email: chuck.terhune@tetratech.com Date: 07/19/2024

The OCD recognizes that proposed remediation measures may have to be minimally adjusted in accordance with the physical realities encountered during remediation. If the responsible party has any need to significantly deviate from the remediation plan proposed, then it should consult with the division to determine if another remediation plan submission is required.

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QUESTIONS (continued)

Operator: Maverick Permian LLC 1000 Main Street, Suite 2900 Houston, TX 77002	OGRID: 331199
	Action Number: 365613
	Action Type: [C-141] Reclamation Report C-141 (C-141-v-Reclamation)

QUESTIONS

Deferral Requests Only	
Only answer the questions in this group if seeking a deferral upon approval this submission. Each of the following items must be confirmed as part of any request for deferral of remediation.	
Requesting a deferral of the remediation closure due date with the approval of this submission	No

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QUESTIONS (continued)

Operator: Maverick Permian LLC 1000 Main Street, Suite 2900 Houston, TX 77002	OGRID: 331199
	Action Number: 365613
	Action Type: [C-141] Reclamation Report C-141 (C-141-v-Reclamation)

QUESTIONS

Sampling Event Information	
Last sampling notification (C-141N) recorded	**365635**
Sampling date pursuant to Subparagraph (a) of Paragraph (1) of Subsection D of 19.15.29.12 NMAC	**11/09/2024**
What was the (estimated) number of samples that were to be gathered	**8**
What was the sampling surface area in square feet	**20000**

Remediation Closure Request	
Only answer the questions in this group if seeking remediation closure for this release because all remediation steps have been completed.	
Requesting a remediation closure approval with this submission	Yes
Have the lateral and vertical extents of contamination been fully delineated	**Yes**
Was this release entirely contained within a lined containment area	**No**
All areas reasonably needed for production or subsequent drilling operations have been stabilized, returned to the sites existing grade, and have a soil cover that prevents ponding of water, minimizing dust and erosion	Yes
What was the total surface area (in square feet) remediated	0
What was the total volume (cubic yards) remediated	0
All areas not reasonably needed for production or subsequent drilling operations have been reclaimed to contain a minimum of four feet of non-waste contain earthen material with concentrations less than 600 mg/kg chlorides, 100 mg/kg TPH, 50 mg/kg BTEX, and 10 mg/kg Benzene	Yes
What was the total surface area (in square feet) reclaimed	0
What was the total volume (in cubic yards) reclaimed	0
Summarize any additional remediation activities not included by answers (above)	No soils were present containing concentrations of BTEX, TPH, or chloride above reclamation requirements, therefore, in accordance with the NMOCD-approved work plan, re-seeding and revegetation are the only remediation actions conducted at the site.

The responsible party must attach information demonstrating they have complied with all applicable closure requirements and any conditions or directives of the OCD. This demonstration should be in the form of a comprehensive report (in .pdf format) including a scaled site map, sampling diagrams, relevant field notes, photographs of any excavation prior to backfilling, laboratory data including chain of custody documents of final sampling, and a narrative of the remedial activities. Refer to 19.15.29.12 NMAC.

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I hereby agree and sign off to the above statement	Name: Chuck Terhune Title: Program Manager Email: chuck.terhune@tetratech.com Date: 07/19/2024

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QUESTIONS (continued)

Operator: Maverick Permian LLC 1000 Main Street, Suite 2900 Houston, TX 77002	OGRID: 331199
	Action Number: 365613
	Action Type: [C-141] Reclamation Report C-141 (C-141-v-Reclamation)

QUESTIONS

Reclamation Report	
Only answer the questions in this group if all reclamation steps have been completed.	
Requesting a reclamation approval with this submission	Yes
What was the total reclamation surface area (in square feet) for this site	8621
What was the total volume of replacement material (in cubic yards) for this site	0
Per Paragraph (1) of Subsection D of 19.15.29.13 NMAC the reclamation must contain a minimum of four feet of non-waste containing, uncontaminated, earthen material with chloride concentrations less than 600 mg/kg as analyzed by EPA Method 300.0, or other test methods approved by the division. The soil cover must include a top layer, which is either the background thickness of topsoil or one foot of suitable material to establish vegetation at the site, whichever is greater.	
Is the soil top layer complete and is it suitable material to establish vegetation	Yes
On what (estimated) date will (or was) the reseeding commence(d)	04/22/2024
Summarize any additional reclamation activities not included by answers (above)	NMOCD-approved work plan included rip and seed areas no undergoing revegetation. The site is revegetating, therefore no ripping was conducted and the site was interseeded with NMSLO seed mix.
The responsible party must attach information demonstrating they have complied with all applicable reclamation requirements and any conditions or directives of the OCD. This demonstration should be in the form of attachments (in .pdf format) including a scaled site map, any proposed reseeding plans or relevant field notes, photographs of reclaimed area, and a narrative of the reclamation activities. Refer to 19.15.29.13 NMAC.	
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. The responsible party acknowledges they must substantially restore, reclaim, and re-vegetate the impacted surface area to the conditions that existed prior to the release or their final land use in accordance with 19.15.29.13 NMAC including notification to the OCD when reclamation and re-vegetation are complete.	
I hereby agree and sign off to the above statement	Name: Chuck Terhune Title: Program Manager Email: chuck.terhune@tetratech.com Date: 07/19/2024

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QUESTIONS (continued)

Operator: Maverick Permian LLC 1000 Main Street, Suite 2900 Houston, TX 77002	OGRID: 331199
	Action Number: 365613
	Action Type: [C-141] Reclamation Report C-141 (C-141-v-Reclamation)

QUESTIONS

Revegetation Report	
Only answer the questions in this group if all surface restoration, reclamation and re-vegetation obligations have been satisfied.	
Requesting a restoration complete approval with this submission	No
Per Paragraph (4) of Subsection (D) of 19.15.29.13 NMAC for any major or minor release containing liquids, the responsible party must notify the division when reclamation and re-vegetation are complete.	

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CONDITIONS

Action 365613

CONDITIONS

Operator:	OGRID:
Maverick Permian LLC 1000 Main Street, Suite 2900 Houston, TX 77002	331199
	Action Number: 365613
	Action Type: [C-141] Reclamation Report C-141 (C-141-v-Reclamation)

CONDITIONS

Created By	Condition	Condition Date
amaxwell	The reclamation report has been approved pursuant to 19.15.29.13 E. NMAC. The acceptance of this 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; or if the location fails to revegetate properly. In addition, OCD approval does not relieve the responsible party of compliance with any other federal, state, or local laws and/or regulations.	7/25/2024
amaxwell	A revegetation report will not be accepted until revegetation of the release area, including areas reasonably needed for production or drilling activities, is complete and meet the requirements of 19.15.29.13 NMAC. Areas not reasonably needed for production or drilling activities will still need to be reclaimed and revegetated as early as practicable.	7/25/2024
amaxwell	All revegetation activities will need to be documented and included in the revegetation report. The revegetation report will need to include: An executive summary of the revegetation activities including: Seed mix, Method of seeding, dates of when the release area was reseeded, information pertinent to inspections, information about any amendments added to the soil, information on how the vegetative cover established meets the life-form ratio of plus or minus fifty percent of pre-disturbance levels and a total percent plant cover of at least seventy percent of pre-disturbance levels, excluding noxious weeds per 19.15.29.13 D.(3) NMAC, and any additional information; a scaled Site Map including area that was revegetated in square feet; and pictures of the revegetated areas during reseeding activities, inspections, and final pictures when revegetation is achieved.	7/25/2024