SITE INFORMATION

Report Type: Work Plan NAB1924044206

General Site Information:						
Site:	**James A #011 Stuffing Box Release**					
Company:	**ConocoPhillips**					
Section, Township and Range	**Unit Letter L2**	**Sec. 2**	**T 22 S**	**R 30 E**		
Lease Number:	**Associated API No. 30-015-26510**					
County:	**Eddy**					
GPS:	**32.426625°**			**-103.849328°**		
Surface Owner:	**State**					
Mineral Owner:	**N/A**					
Directions:	From Loving (Potash Mines Rd./S Donaldson Farms Rd.): Head east/northeast on Potash Mines Rd. for 4.48 miles. Turn right onto Jal Hwy. Head east for 10.53 miles. Turn left onto Wipp Rd. Head north for 3.79 miles. Turn left onto Louis Whitlock Rd. Head north for 2.53 miles. Turn left onto lease road. Head north for 0.79 miles. Turn left onto lease road. Head west for 3.5 miles. Turn right onto lease road. Head north for 0.97 miles. Turn right. Head east for 400 feet. Arrive at James A #011 Well Pad.					

Release Data:		
Date Released:	8/13/2019	
Type Release:	Produced Water/Oil	
Source of Contamination:	Stuffing Box Leak	
Fluid Released:	26.5 bbls pw, 1 bbl oil	
Fluids Recovered:	26.5 bbls pw, 0 bbls oil	

Official Communication:			
Name:	Marvin Soriwei		Christian M. Llull
Company:	Conoco Phillips - RMR		Tetra Tech
Address:	935 N. Eldridge Pkwy.		8911 North Capital of Texas Highway
			Building 2, Suite 2310
City:	Houston, Texas 77079		Austin, Texas
Phone number:	(832) 486-2730		(512) 338-2861
Fax:			
Email:	marvin.soriwei@conocophillips.com		christian.llull@tetratech.com

Site Characterization	
Shallowest Depth to Groundwater:	*262' below surface*
Impact to groundwater or surface water:	*No*
Extents within 300 feet of a watercourse:	*Yes*
Extents within 200 feet of lakebed, sinkhole, or playa la	*No*
Extents within 300 feet of an occupied structure:	*No*
Extents within 500 horizontal feet of a private water wel	*No*
Extents within 1000 feet of any water well or spring:	*No*
Extents within incorporated municipal well field:	*No*
Extents within 300 feet of a wetland:	*No*
Extents overlying a subsurface mine:	*No*
Karst Potential:	*High*
Extents within a 100-year floodplain:	*No*
Impact to areas not on a production site:	*No*

Recommended Remedial Action Levels (RRALs)				
Benzene	***Total BTEX***	***TPH (GRO+DRO)***	***TPH (GRO+DRO+MRO)***	***Chlorides***
10 mg/kg	*50 mg/kg*	*N/A*	*100 mg/kg*	*600 mg/kg*

TETRA TECH

March 5, 2021

District Supervisor
Oil Conservation Division, District 2
811 South First Street
Artesia, New Mexico 88210

Re: Release Characterization and Remediation Work Plan
ConocoPhillips
James A #011 Stuffing Box Release
Unit Letter L2, Section 2, Township 22 South, Range 30 East
Eddy County, New Mexico
Incident ID NAB1924044206
2RP-5605

Sir or Madam:

Tetra Tech, Inc. (Tetra Tech) was contacted by ConocoPhillips (COP) to assess a release that occurred from the stuffing box of the James A #011 well (API No. 30-015-26510). The release footprint is located in Public Land Survey System (PLSS) Unit Letter L2, Section 2, Township 22 South, Range 30 East, in Eddy County, New Mexico (Site). The approximate release point occurred at coordinates 32.426625°, -103.849328°, as shown on Figures 1 and 2.

BACKGROUND

According to the State of New Mexico C-141 Initial Report (Appendix A), the release was discovered on August 13, 2019. The release occurred as the result of a stuffing box leak and consisted of approximately 26.5 barrels (bbls) of produced water and 1 bbl of oil, which affected an area of approximately 4,400 square feet. During initial response activities, a vacuum truck recovered approximately 26.5 bbls of produced water. The initial C-141 was dated August 19, 2019 and submitted to The New Mexico Oil Conservation District (NMOCD), who subsequently assigned the Incident ID NAB1924044206, and the Remediation Permit (RP) number 2RP-5605.

SITE CHARACTERIZATION

A site characterization was performed and no sinkholes, residences, schools, hospitals, institutions, churches, springs, private domestic water wells, springs, playa lakes, wetlands, incorporated municipal boundaries, subsurface mines, or floodplains are located within the distances specified in 19.15.0029 New Mexico Administrative Code (NMAC). The Site is in an area of high karst potential. An OSE stream body is located within 33 feet of the site.

The Site is within a New Mexico oil and gas production area. According to the New Mexico Office of the State Engineers (NMOSE) reporting system, there are no wells within a ½ mile (800 m) of the Site. There are twenty-seven (27) water wells within 4 miles (6,400 meters) of the Site. Only one of these wells has a depth to water which is documented at 262 feet below ground surface (bgs). The site characterization data is included in Appendix B.

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REGULATORY FRAMEWORK

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

Based on the site characterization, proximity to OSE stream body and the high karst potential, the RRALs for the Site are as follows:

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

INITIAL ASSESSMENT ACTIVITIES AND RESULTS

As a portion of the initial response and assessment, COP collected soil samples from twenty-seven (27) locations (SP-1 through SP-27) on October 19, 2019 to define the extent of impact. For all sample locations, samples were collected at the surface, at the 2-foot depth and at the 4-foot depth intervals. Twenty-two (22) locations were sampled within the release extent (SP-1 through SP-22). Samples from the remaining five sample locations (SP-23 through SP-27) were collected along the perimeter of the release to achieve horizontal delineation. The soil samples collected were sent to Cardinal Laboratories in Hobbs, New Mexico to be analyzed for chloride via EPA Method SM45000Cl-B, TPH via EPA Method 8015M, and BTEX via EPA Method 8021B. Sample locations are shown in Figure 3.

Results from the October 2019 soil sampling event are summarized in Table 1. Analytical results from the release interior exceeded the Site RRAL for chloride (600 mg/kg) from the surface down to the 2-foot interval at all locations except SP-8. Analytical results exceeded the chloride RRAL down to the 4-foot interval at locations SP-1 through SP-4, SP-9 through SP-16, SP-19 through SP-23, and SP-25. Additionally, analytical results from boring locations SP-3 through SP-9, SP-12, SP-13, and SP-15 through SP-21 exceeded the Site RRAL for TPH (100 mg/kg) at the surface. Analytical results from perimeter locations SP-23, SP-25, and SP-27 exceeded the chloride RRAL at the surface. There were no detections of BTEX above the Site RRAL of 50 mg/kg in any of the analyzed samples. A copy of the analytical laboratory report and chain-of-custody documentation are included in Appendix C. Based on the analytical data, neither horizontal nor vertical delineation of the release was achieved during this assessment.

CORRECTIVE ACTION PLAN

A Corrective Action Plan (CAP) was submitted to the NMOCD by COP Environmental Coordinator, Gustavo Fejervary, on November 7, 2019. The CAP (submitted under PO 9KRVD-191110-C-1410) was denied by the NMOCD on December 30, 2019, via email. The email response indicated that additional documentation was required for submittal as follows:

1. *Scaled site map diagram with sample points clearly marked*
2. *Site Photos*
3. *Site Assessment/Delineation summary (horizontal and vertical)*
4. *Delineation sample analytical results (lab tested)*
5. *Table containing analytical data*
6. *Description of proposed excavation depths corresponding to analytical table*
7. *Depth to groundwater evaluation, including fluid level data from New Mexico Office of the State Engineer or other documented evidence*
8. *Karst evaluation*
9. *FEMA National Flood map review.*

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10. *Signed and dated C-141 (Pages 3-5)*

The denial also added the following comment:

If a release occurs within an unstable area (high karst): the responsible party must treat the release as if it occurred less than 50 feet to ground water in Table I of 19.15.29.12 NMAC. Please, remediate/excavate until the samples are under 600 mg/kg for chlorides and 100 mg/kg for TPH.

It appears that the information requested was sent via email to the NMOCD by COP Environmental Coordinator, Gustavo Fejervary, on January 24, 2020. However, the information was not submitted to the portal as instructed on the email mentioned above. After this series of correspondence, COP requested that Tetra Tech assist in the release characterization and remediation work plan for the Site.

ADDITIONAL SITE ASSESSMENT

Tetra Tech personnel visited the Site on August 26, 2020 to conduct soil sampling to achieve horizontal and vertical delineation of the release extent. A total of ten (10) borings (BH-1 through BH-9 and BG-1) were installed using an air rotary drilling rig. Two (2) borings (BH-1 and BH-2) were installed within the release extent to depths of 20 and 25 feet bgs, respectively to achieve vertical delineation. Seven borings (BH-3 through BH-9) were installed along the perimeter of the release to a depth of 10 feet bgs to achieve horizontal delineation. One (1) boring (BG-1) was installed approximately 170 feet southwest of the release extent to a depth of 10 feet bgs in an attempt to serve as a background sample point. Boring logs, included as Appendix D, present soil descriptions, sample depths, and field screening data from the August 2020 assessment activities.

A total of forty-four (44) samples were collected from the ten borings and submitted to Pace Analytical National Center for Testing & Innovation in Nashville, Tennessee (Pace) to be analyzed for chlorides via EPA Method 300.0, TPH via EPA Method 8015M, and BTEX via EPA Method 8021B. A copy of the laboratory analytical report and chain-of-custody documentation are included in Appendix C. Sample locations are shown in Figure 4.

To complete horizontal delineation, Tetra Tech personnel returned to the Site on two separate occasions (September 4 and December 9, 2020) to install two (2) additional hand auger borings (BH-10 and BH-11) to a depth of 4 ft bgs and one (1) hand auger boring (BH-12) to a depth of 1 ft bgs. A total of five (5) samples were collected and submitted to Pace to analyzed for chlorides via EPA Method 300.0, TPH via EPA Method 8015M, and BTEX via EPA Method 8021B. All samples were below Site RRALs for chloride, TPH and BTEX. A copy of the laboratory analytical report and chain-of-custody documentation are included in Appendix C. Sample locations are shown in Figure 4. Photographic documentation is included in Appendix E.

SUMMARY OF SAMPLING RESULTS

Analytical results from the August 2020 soil sampling event are summarized in Table 2. Analytical results associated with BH-1 and BH-2 exceeded RRAL for chloride (600 mg/kg) down to 5 ft bgs. Analytical results for BH-4 and BH-8 exceeded the RRAL for chloride down to 1 ft bgs. Additionally, analytical results for BH-6 exceeded the Site RRAL for TPH (100 mg/kg) down to 1 ft bgs. All other analytical results were below Site RRALs, and there were no exceedances of the RRAL for BTEX (50 mg/kg).

All results from the September and December 2020 sampling events were below Site RRALs. The results are summarized in Table 2 along with the August 2020 analytical results. After the additional hand auger sampling activities in September and December 2020, the release is considered fully delineated.

REMEDIATION WORK PLAN

Based on the analytical results, ConocoPhillips proposes to remove the impacted material as shown in Figure 5. Impacted soils around BH-1 and BH-2 will be excavated using heavy equipment (backhoes, hoe

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rams, and track hoes) to a maximum depth of 5 ft bgs. The impacted soil in the vicinity of boring locations BH-4, BH-6 and BH-8 will be excavated to a depth of 1 ft bgs. Excavation will continue until a representative sample from the walls and bottom of the excavation is below the RRALs. Impacted soil around oil and gas equipment, structures or lines may not be feasible or practicable to be removed due to safety concerns for onsite personnel. As such, COP will excavate the impacted soils to the maximum extent possible.

Excavated soils will be transported offsite and disposed of at an NMOCD-approved or permitted facility. Confirmation bottom and sidewall samples will be collected for verification of remedial activities, and analyzed for TPH, BTEX, and chlorides. Once results are received, NMOCD will be notified and the excavation will then be backfilled with clean material to surface grade. The estimated volume of material to be remediated is approximately 1,350 cubic yards.

ALTERNATIVE CONFIRMATION SAMPLING PLAN

In accordance with 19.15.29.12(D)(1)(b) NMAC, ConocoPhillips proposes the following alternative confirmation sampling plan to adhere with NMOCD requirements. The proposed confirmation sample locations are depicted in Figure 6. Seventeen (17) confirmation floor samples and Twenty-one (21) confirmation sidewall samples are proposed for verification of remedial activities. The proposed excavation encompasses a surface area of approximately 8,400 square feet.

These confirmation sidewall and floor samples will be representative of no more than approximately 500 square feet of excavated area. Confirmation samples will be sent to Pace Laboratories for analysis of TPH (Method 8015 modified), BTEX (Method 8260B), and chloride (USEPA Method 300.0). Once results are received, NMOCD will be notified and the excavation will then be backfilled with clean material to surface grade.

SITE RECLAMATION AND RESTORATION PLAN

Excavated soils will be transported offsite and disposed of an NMOCD approved and permitted facility and the excavation will be backfilled with clean material to surface grade. The majority of the proposed remediation area is on the lease pad; however, a small portion of the proposed remediation is within a lease pad/pastureland transitional area. If any backfilled area is deemed to be primarily pastureland, it will be seeded in Spring 2021 (first favorable growing season) to aid in revegetation. Based on the soils at the site, the New Mexico State Land Office (NMSLO) Sandy Loam (SL) 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 will 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 pounds pure live seed per acre will be doubled.

If seeding is deemed necessary, site inspections will 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 Appendix F.

CONCLUSION

ConocoPhillips proposes to begin remediation activities at the Site within 90 days of NMOCD plan approval. Upon completion of the proposed work, a final closure report detailing the remediation activities and the results of the confirmation sampling will be submitted to NMOCD.

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If you have any questions concerning the soil assessment or the proposed remediation activities for the Site, please call me at (512) 338-2861 or Greg at (432) 682-4559.

Sincerely,
Tetra Tech, Inc.

Christian M. Llull, P.G.
Project Manager

Greg W. Pope, P.G.
Program Manager

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

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LIST OF ATTACHMENTS

Figures:

Figure 1 – Overview Map
Figure 2 – Site Location/Topographic Map
Figure 3 – Approximate Release Extent and Initial Assessment Map
Figure 4 – Additional Assessment Map
Figure 5 – Proposed Remediation Extent
Figure 6 – Alternative Confirmation Sampling Plan

Tables:

Table 1 – Summary of Analytical Results – Initial Soil Assessment
Table 2 – Summary of Analytical Results – Additional Soil Assessment

Appendices:

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

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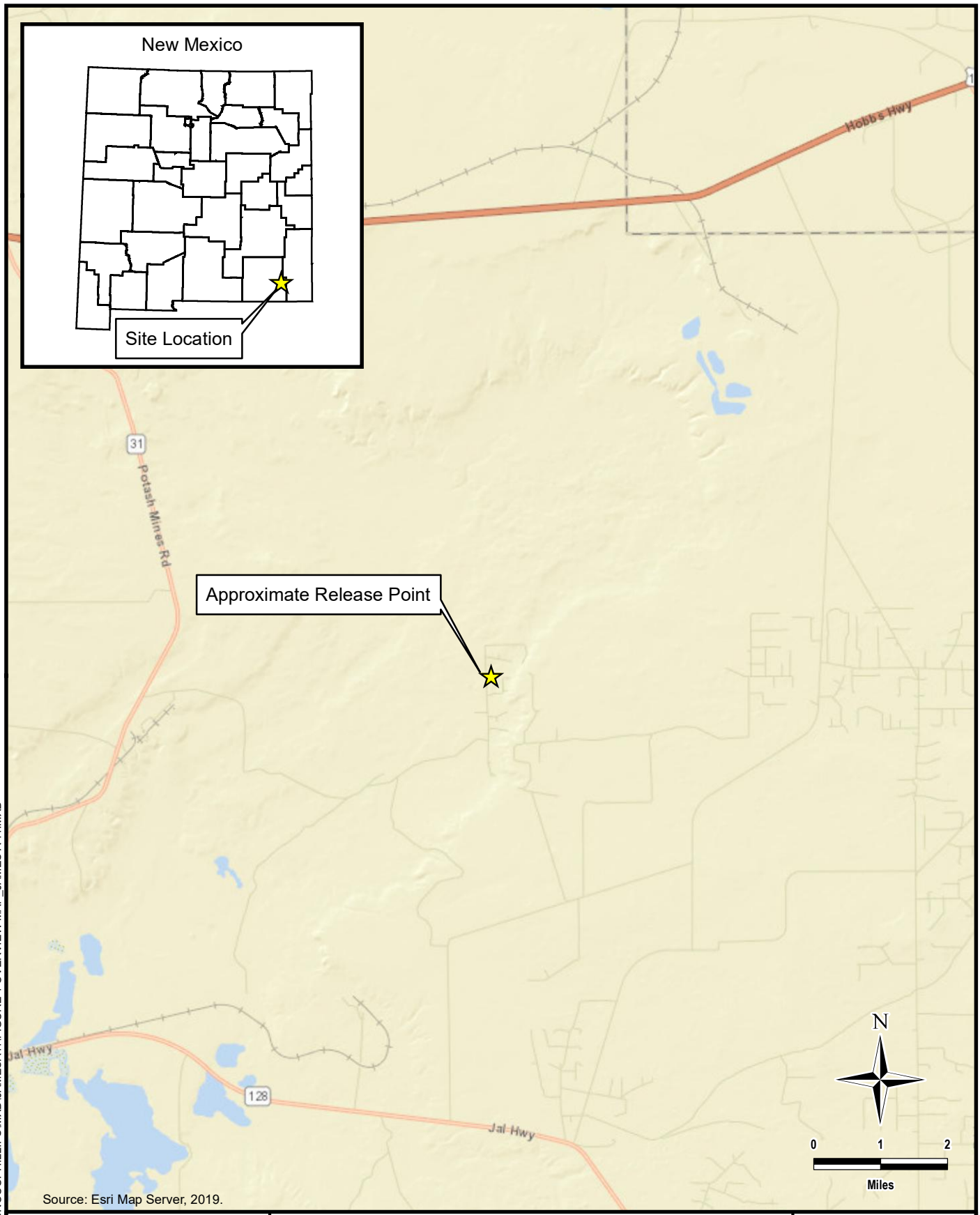
FIGURES



Source: Esri Map Server, 2019.

DOCUMENT PATH: D:\CONOCOPHILLIPS\MXD\JAMESA11\FIGURE 1 OVERVIEW MAP_JAMES A 11.MXD

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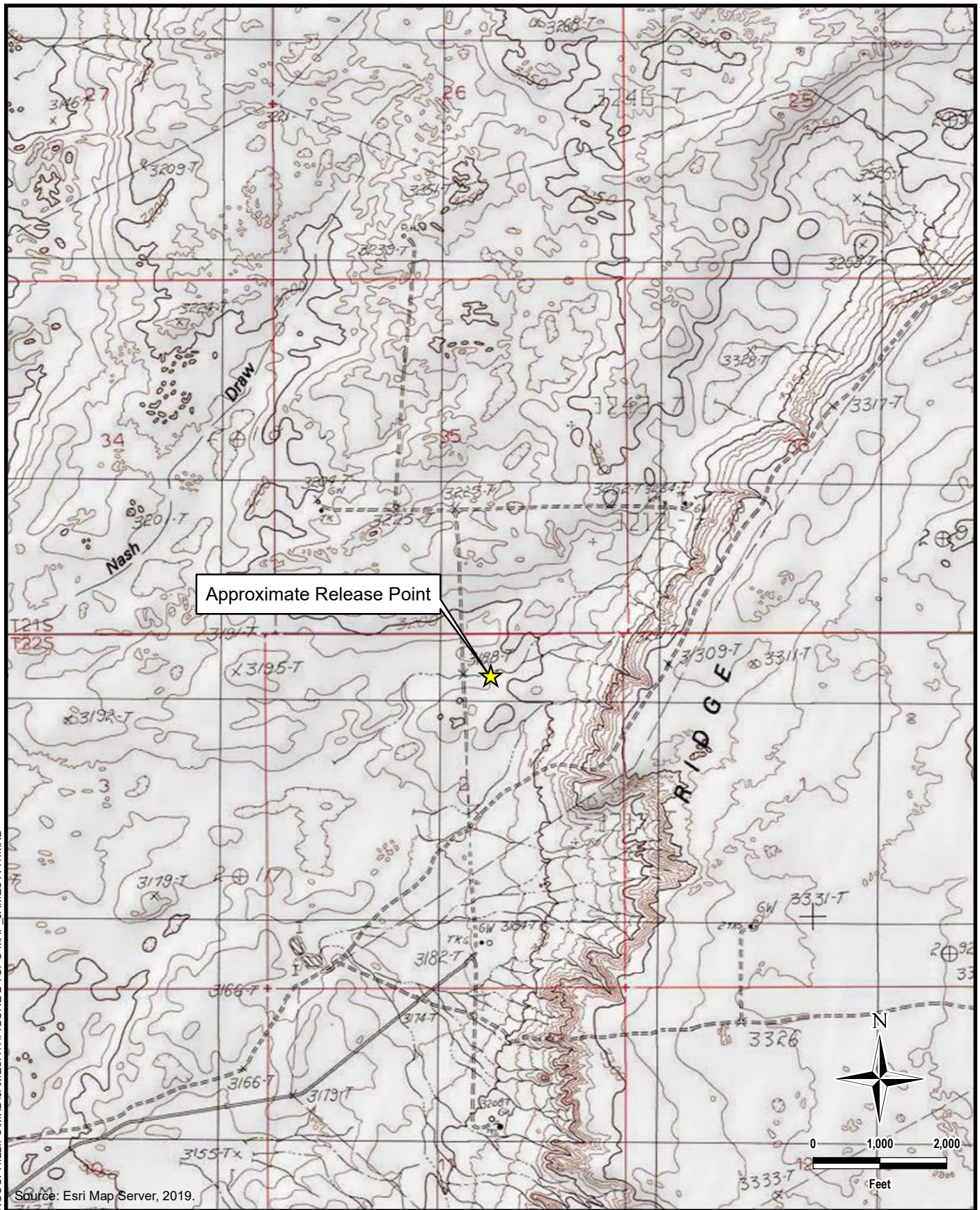
CONOCOPHILLIPS

INCIDENT ID NAB1924044206
(32.426625°, -103.849328°)
EDDY COUNTY, NEW MEXICO

JAMES A #11 STUFFING BOX RELEASE
OVERVIEW MAP

PROJECT NO.:	212C-MD-02250
DATE:	MARCH 05, 2021
DESIGNED BY:	AAM

Figure No.
1



Source: Esri Map Server, 2019.

DOCUMENT PATH: D:\CONOCOPHILLIPS\MXD\JAMESA11\FIGURE 2 TOPO MAP_JAMES A 11.MXD

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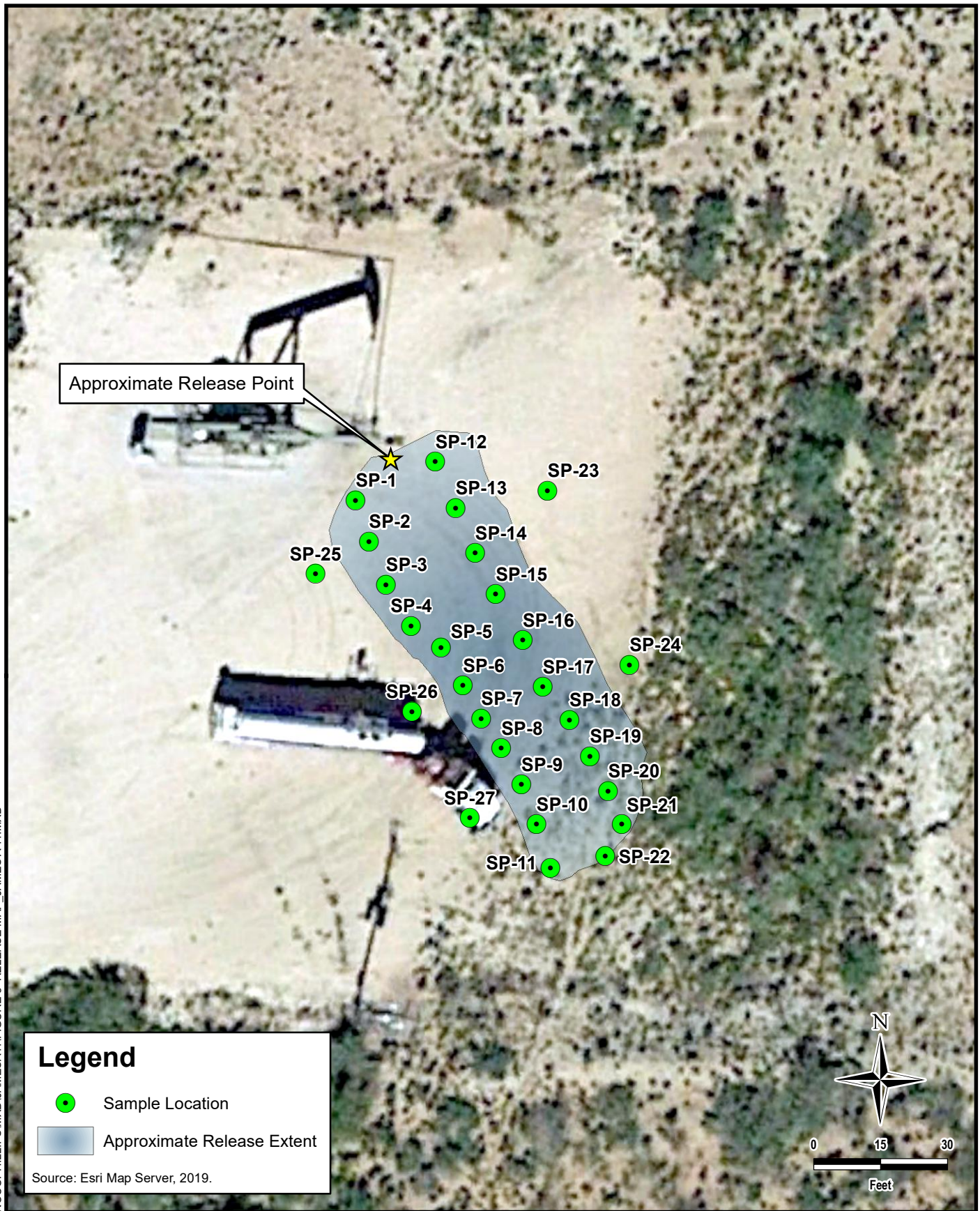
CONOCOPHILLIPS

INCIDENT ID NAB1924044206
(32.426625°, -103.849328°)
EDDY COUNTY, NEW MEXICO

JAMES A #11 STUFFING BOX RELEASE
TOPOGRAPHIC MAP

PROJECT NO.:	212C-MD-02250
DATE:	OCTOBER 13, 2020
DESIGNED BY:	AAM

Figure No.
2



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CONOCOPHILLIPS

INCIDENT ID NAB1924044206
(32.426625°, -103.849328°)
EDDY COUNTY, NEW MEXICO

JAMES A #11 STUFFING BOX RELEASE
APPROXIMATE RELEASE EXTENT AND INITIAL ASSESSMENT MAP

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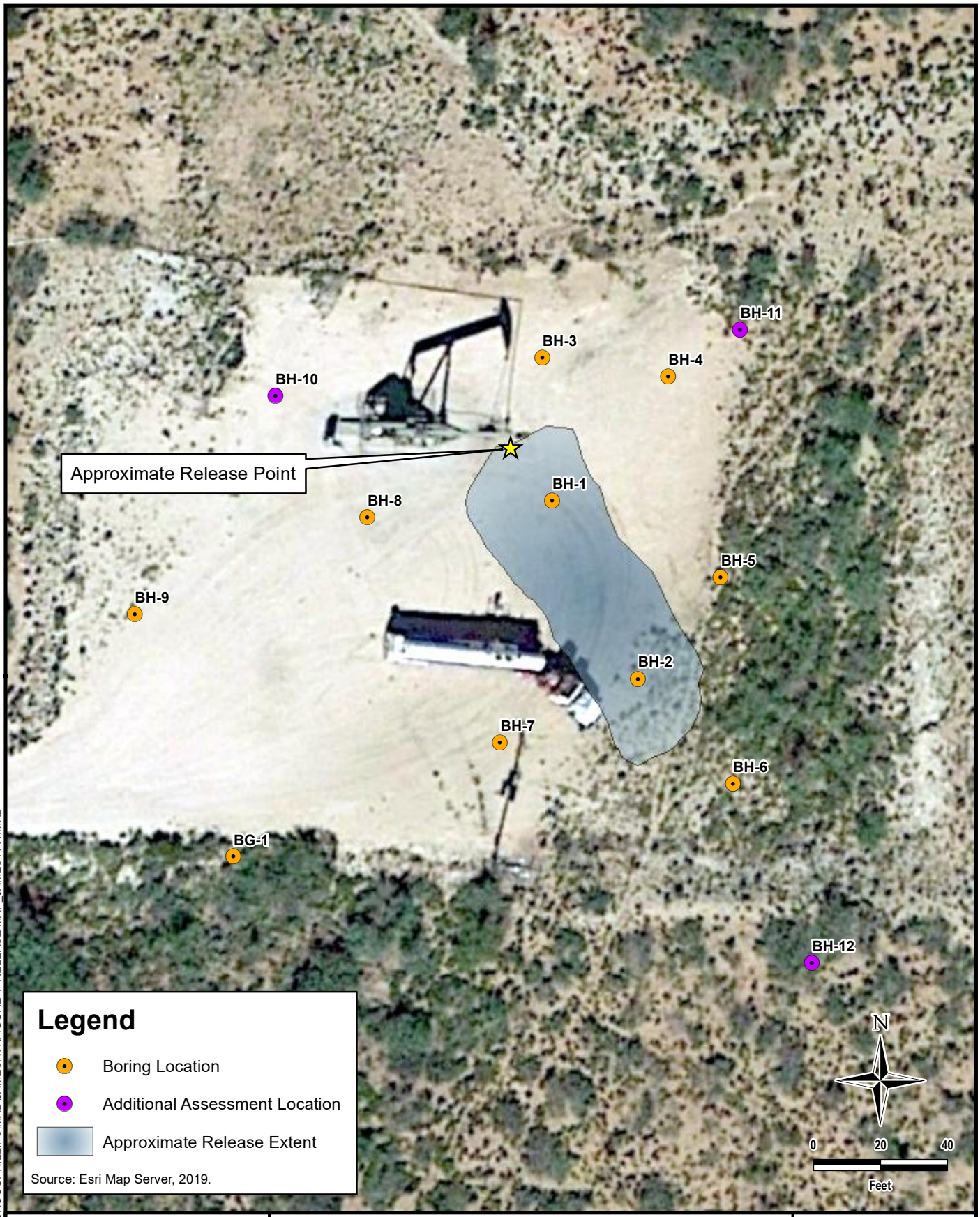
DATE:	MARCH 05, 2021
DESIGNED BY:	AAM

Figure No.
3



Legend

- Boring Location
- Additional Assessment Location
- Approximate Release Extent

Source: Esri Map Server, 2019.

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CONOCOPHILLIPS

INCIDENT ID NAB1924044206
(32.426625°, -103.849328°)
EDDY COUNTY, NEW MEXICO

JAMES A #11 STUFFING BOX RELEASE
ADDITIONAL ASSESSMENT MAP

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DATE:	DECEMBER 21, 2020
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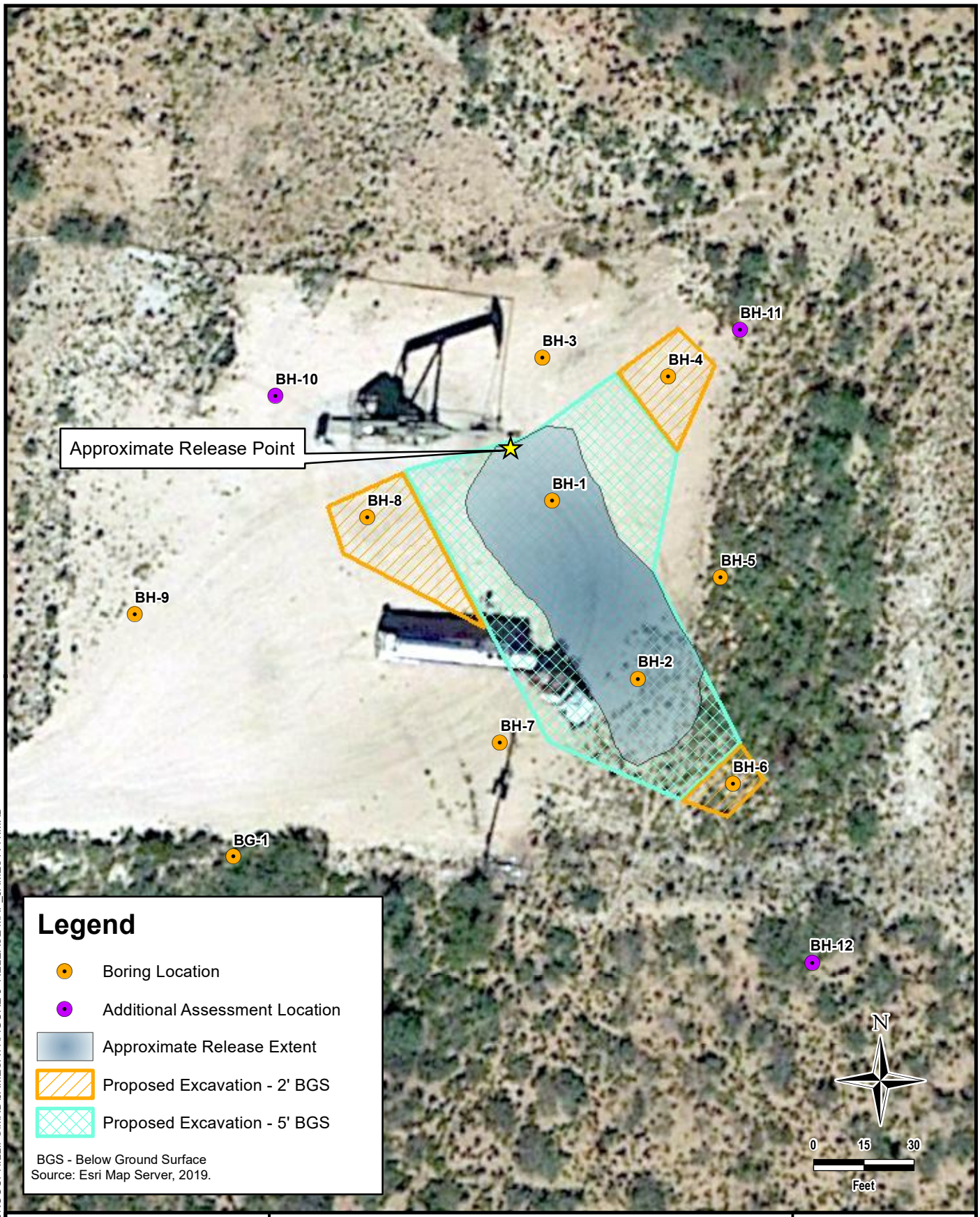
Figure No.
4



Legend

- Boring Location
- Additional Assessment Location
- Approximate Release Extent
- Proposed Excavation - 2' BGS
- Proposed Excavation - 5' BGS

BGS - Below Ground Surface
Source: Esri Map Server, 2019.

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CONOCOPHILLIPS

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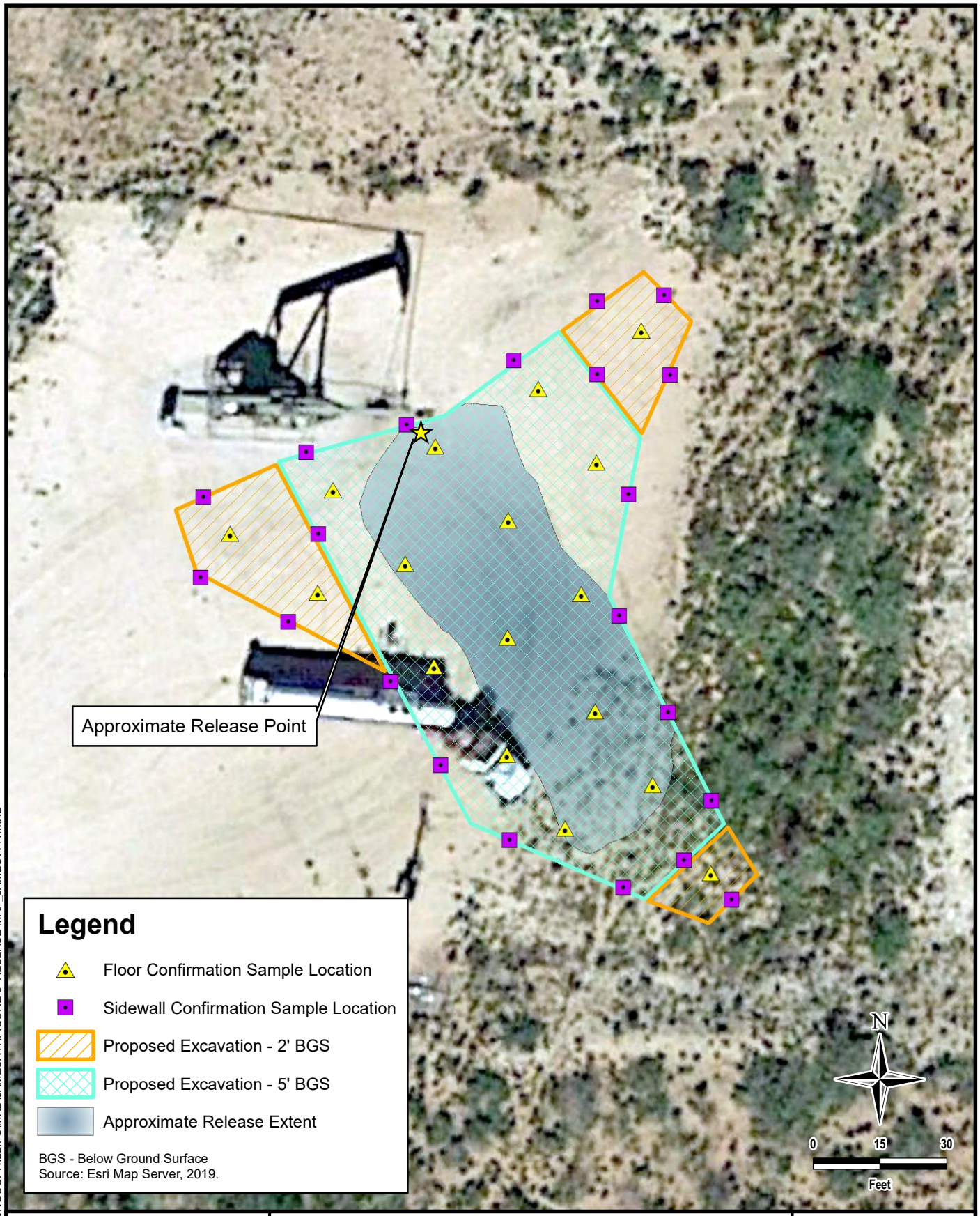
JAMES A #11 STUFFING BOX RELEASE
PROPOSED REMEDIATION EXTENT

PROJECT NO.:	212C-MD-02110
DATE:	DECEMBER 21, 2020
DESIGNED BY:	AAM

Figure No.
5



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CONOCOPHILLIPS

INCIDENT ID NAB1924044206
(32.426625°, -103.849328°)
EDDY COUNTY, NEW MEXICO

JAMES A #11 STUFFING BOX RELEASE
ALTERNATIVE CONFIRMATION SAMPLING PLAN

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DATE:	MARCH 05, 2021
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Figure No.
6

TABLES

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TABLE 1
SUMMARY OF ANALYTICAL RESULTS
INITIAL SOIL ASSESSMENT - NAB1924044206
CONOCOPHILLIPS
JAMES A #11 STUFFING BOX RELEASE
EDDY COUNTY, NM

Sample ID	Sample Date	Sample Depth	Chloride[1]		BTEX[2]										TPH[3]							
					Benzene		Toluene		Ethylbenzene		Total Xylenes		Total BTEX		GRO		DRO		EXT DRO		Total TPH	
															C_6 - C_{10}		>C_{10} - C_{28}		>C_{28} - C_{36}		(GRO+DRO+EXT DRO)	
		ft. 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	
SP 1	10/9/2019	SURFACE	***22800***		< 0.050		< 0.050		< 0.050		< 0.150		< 0.300		< 10.0		< 10.0		< 10.0		-	
		2	***4000***		NA		NA		NA		NA		NA		NA		NA		NA		-	
		4	***1540***		NA		NA		NA		NA		NA		NA		NA		NA		-	
SP 2	10/9/2019	SURFACE	***23200***	QM-07	< 0.050		< 0.050		< 0.050		< 0.150		< 0.300		< 10.0		< 10.0		< 10.0		-	
		2	***1710***		NA		NA		NA		NA		NA		NA		NA		NA		-	
		4	***1860***		NA		NA		NA		NA		NA		NA		NA		NA		-	
SP 3	10/9/2019	SURFACE	***20000***		< 0.050		< 0.050		< 0.050		< 0.150		< 0.300		< 50.0		2690	QR-03, QM-07	1140		***3830***	
		2	***1550***		NA		NA		NA		NA		NA		NA		NA		NA		-	
		4	***720***		NA		NA		NA		NA		NA		NA		NA		NA		-	
SP 4	10/9/2019	SURFACE	***11200***		< 0.050		< 0.050		< 0.050		< 0.150		< 0.300		< 50.0		3450		1790		***5240***	
		2	***1520***		NA		NA		NA		NA		NA		NA		NA		NA		-	
		4	***1150***		NA		NA		NA		NA		NA		NA		NA		NA		-	
SP 5	10/9/2019	SURFACE	***42000***		< 0.050		< 0.050		< 0.050		< 0.150		< 0.300		< 10.0		2620		959		3579	
		2	***2030***		NA		NA		NA		NA		NA		NA		NA		NA		-	
		4	512		NA		NA		NA		NA		NA		NA		NA		NA		-	
SP 6	10/9/2019	SURFACE	***11100***		< 0.050		< 0.050		< 0.050		< 0.150		< 0.300		< 10.0		1810		833		***2643***	
		2	***672***		NA		NA		NA		NA		NA		NA		NA		NA		-	
		4	224		NA		NA		NA		NA		NA		NA		NA		NA		-	
SP 7	10/9/2019	SURFACE	***26600***		< 0.050		< 0.050		< 0.050		< 0.150		< 0.300		< 50.0		5890		2330		***8220***	
		2	***720***		NA		NA		NA		NA		NA		NA		NA		NA		-	
		4	128		NA		NA		NA		NA		NA		NA		NA		NA		-	
SP 8	10/9/2019	SURFACE	***32400***		< 0.050		< 0.050		< 0.050		< 0.150		< 0.300		< 50.0		12500		3870		***16370***	
		2	496		NA		NA		NA		NA		NA		NA		NA		NA		-	
		4	64.0		NA		NA		NA		NA		NA		NA		NA		NA		-	
SP 9	10/9/2019	SURFACE	***13200***		< 0.050		< 0.050		< 0.050		0.461		0.461		< 50.0		3410		891		***4301***	
		2	***6800***		NA		NA		NA		NA		NA		NA		NA		NA		-	
		4	***720***		NA		NA		NA		NA		NA		NA		NA		NA		-	
SP 10	10/9/2019	SURFACE	160		< 0.000		< 0.500		< 0.050		0.171		< 0.300		< 10.0		< 10.0		< 10.0		-	
		2	***20800***		NA		NA		NA		NA		NA		NA		NA		NA		-	
		4	***832***		NA		NA		NA		NA		NA		NA		NA		NA		-	
SP 11	10/9/2019	SURFACE	***1260***		< 0.050		< 0.050		< 0.050		< 0.150		< 0.300		< 10.0		< 10.0		< 10.0		-	
		2	***7600***		NA		NA		NA		NA		NA		NA		NA		NA		-	
		4	***784***		NA		NA		NA		NA		NA		NA		NA		NA		-	
SP 12	10/9/2019	SURFACE	***7920***		< 0.050		< 0.050		< 0.050		< 0.150		< 0.300		< 10.0		1580		905		***2485***	
		2	***5200***		NA		NA		NA		NA		NA		NA		NA		NA		-	
		4	***3840***		NA		NA		NA		NA		NA		NA		NA		NA		-	

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TABLE 1
SUMMARY OF ANALYTICAL RESULTS
INITIAL SOIL ASSESSMENT - NAB1924044206
CONOCOPHILLIPS
JAMES A #11 STUFFING BOX RELEASE
EDDY COUNTY, NM

Sample ID	Sample Date	Sample Depth	Chloride[1]		BTEX[2]										TPH[3]							
					Benzene		Toluene		Ethylbenzene		Total Xylenes		Total BTEX		GRO		DRO		EXT DRO		Total TPH
															C_6 - C_{10}		>C_{10} - C_{28}		>C_{28} - C_{36}		(GRO+DRO+EXT DRO)
		ft. 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
SP 13	10/9/2019	SURFACE	***25400***		< 0.050		< 0.050		< 0.050		< 0.150		< 0.300		< 10.0		150		72.1		***222***
		2	***3560***		NA		NA		NA		NA		NA		NA		NA		NA		-
		4	***3200***		NA		NA		NA		NA		NA		NA		NA		NA		-
SP 14	10/9/2019	SURFACE	***23000***		< 0.050		< 0.050		< 0.050		< 0.150		< 0.300		< 10.0		1570		909		-
		2	***640***		NA		NA		NA		NA		NA		NA		NA		NA		-
		4	***1250***		NA		NA		NA		NA		NA		NA		NA		NA		-
SP 15	10/9/2019	SURFACE	***27400***		< 0.050		< 0.050		< 0.050		< 0.150		< 0.300		< 50.0		7840		3790		***11630***
		2	***2500***		NA		NA		NA		NA		NA		NA		NA		NA		-
		4	***768***		NA		NA		NA		NA		NA		NA		NA		NA		-
SP 16	10/9/2019	SURFACE	***34000***		< 0.050		< 0.050		< 0.050		< 0.150		< 0.300		< 50.0		9050		3190		***12240***
		2	***1660***		NA		NA		NA		NA		NA		NA		NA		NA		-
		4	***608***		NA		NA		NA		NA		NA		NA		NA		NA		-
SP 17	10/10/2019	SURFACE	***22600***		< 0.050		< 0.050		< 0.050		< 0.150		< 0.300		< 50.0		12000		4820		***16820***
		2	***3920***		NA		NA		NA		NA		NA		NA		NA		NA		-
		4	320		NA		NA		NA		NA		NA		NA		NA		NA		-
SP 18	10/10/2019	SURFACE	***20000***		< 0.050		< 0.050		< 0.050		< 0.150		< 0.300		< 50.0		7260		3280		***10540***
		2	***6480***		NA		NA		NA		NA		NA		NA		NA		NA		-
		4	448		NA		NA		NA		NA		NA		NA		NA		NA		-
SP 19	10/10/2019	SURFACE	***5840***		< 0.050		< 0.050		< 0.050		< 0.150		< 0.300		< 10.0		423		242		***665***
		2	***14400***		NA		NA		NA		NA		NA		NA		NA		NA		-
		4	***1300***		NA		NA		NA		NA		NA		NA		NA		NA		-
SP 20	10/10/2019	SURFACE	***34400***		< 0.050		< 0.050		< 0.050		< 0.150		< 0.300		< 50.0		13200		4740		***17940***
		2	***47200***		NA		NA		NA		NA		NA		NA		NA		NA		-
		4	***10300***		NA		NA		NA		NA		NA		NA		NA		NA		-
SP 21	10/10/2019	SURFACE	***15000***		< 0.050		< 0.050		< 0.050		< 0.150		< 0.300		< 50.0		5020		1570		***6590***
		2	***29200***		NA		NA		NA		NA		NA		NA		NA		NA		-
		4	***5760***		NA		NA		NA		NA		NA		NA		NA		NA		-
SP 22	10/10/2019	SURFACE	***832***	QM-07	< 0.050		< 0.050		< 0.050		< 0.150		< 0.300		< 10.0		< 10.0		< 10.0		-
		2	***12800***		NA		NA		NA		NA		NA		NA		NA		NA		-
		4	***19600***		NA		NA		NA		NA		NA		NA		NA		NA		-
SP 23	10/10/2019	SURFACE	***2760***		< 0.050		< 0.050		< 0.050		< 0.150		< 0.300		< 10.0		< 10.0		< 10.0		-
		2	***1020***		NA		NA		NA		NA		NA		NA		NA		NA		-
		4	***800***		NA		NA		NA		NA		NA		NA		NA		NA		-
SP 24	10/10/2019	SURFACE	160		< 0.050		< 0.050		< 0.050		< 0.150		< 0.300		< 10.0		< 10.0		< 10.0		-
		2	384		NA		NA		NA		NA		NA		NA		NA		NA		-
		4	560		NA		NA		NA		NA		NA		NA		NA		NA		-

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TABLE 1
SUMMARY OF ANALYTICAL RESULTS
INITIAL SOIL ASSESSMENT - NAB1924044206
CONOCOPHILLIPS
JAMES A #11 STUFFING BOX RELEASE
EDDY COUNTY, NM

Sample ID	Sample Date	Sample Depth	Chloride[1]		BTEX[2]										TPH[3]						
					Benzene		Toluene		Ethylbenzene		Total Xylenes		Total BTEX		GRO		DRO		EXT DRO		Total TPH
															C_6 - C_{10}		>C_{10} - C_{28}		>C_{28} - C_{36}		(GRO+DRO+EXT DRO)
		ft. 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
SP 25	10/10/2019	SURFACE	***976***		< 0.050		< 0.050		< 0.050		< 0.150		< 0.300		< 10.0		11.5		< 10.0		11.5
		2	192		NA		NA		NA		NA		NA		NA		NA		NA		-
		4	***736***		NA		NA		NA		NA		NA		NA		NA		NA		-
SP 26	10/10/2019	SURFACE	352		< 0.050		< 0.050		< 0.050		< 0.150		< 0.300		< 10.0		< 10.0		< 10.0		-
		2	***704***		NA		NA		NA		NA		NA		NA		NA		NA		-
		4	208		NA		NA		NA		NA		NA		NA		NA		NA		-
SP 27	10/10/2019	SURFACE	***848***		< 0.050		< 0.050		< 0.050		< 0.150		< 0.300		< 10.0		< 10.0		< 10.0		
		2	144		NA		NA		NA		NA		NA		NA		NA		NA		-
		4	96.0		NA		NA		NA		NA		NA		NA		NA		NA		-

NOTES:

ft. Feet

bgs Below ground surface

mg/kg Milligrams per kilogram

NA Sample not analyzed for constituent

TPH Total Petroleum Hydrocarbons

GRO Gasoline range organics

DRO Diesel range organics

1 Method SM4500Cl-B

2 Method 8021B

3 Method 8015M

Bold and italicized values indicate exceedance of proposed RRALs

QUALIFIERS:

QR-03 The RPD value for the sample duplicate or MS/MSD was outside of QC acceptance limits due to matrix interference. QC batch accepted based on LCS and/or LCSD recovery and/or RPD values.

QM-07 The spike recovery was outside acceptance limits for the MS and/or MSD. The batch was accepted based on acceptable LCS recovery

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TABLE 2
SUMMARY OF ANALYTICAL RESULTS
ADDITIONAL SOIL ASSESSMENT - NAB1924044206
CONOCOPHILLIPS
JAMES A #11 STUFFING BOX RELEASE
EDDY COUNTY, NM

Sample ID	Sample Date	Sample Depth Interval	Field Screening Results		Chloride[1]		BTEX[2]										TPH[3]									
							Benzene		Toluene		Ethylbenzene		Total Xylenes		Total BTEX		GRO[4] C_3 - C_{10}		DRO C_{10} - C_{28}		ORO C_{28} - C_{40}		Total TPH (GRO+DRO+ORO)			
			Chloride	PID																						
		ft. bgs	ppm		mg/kg	Q	mg/kg	Q	mg/kg	Q	mg/kg	Q	mg/kg	Q	mg/kg		mg/kg	Q	mg/kg	Q	mg/kg	Q	mg/kg			
BG-1	8/26/2020	0-1	95.0	0.0	27.8		< 0.00107		< 0.00536		< 0.00268		0.00106	J	0.00106		0.0230	J	5.13		23.0		28.2			
		2-3	68.1	0.0	NS		NS		NS		NS		NS		-		NS		NS		NS		-			
		4-5	62.5	0.0	10.6	J	< 0.00107		< 0.00537		< 0.00268		0.00150	J	0.00150		< 0.104		1.99	J	10.6	B	12.6			
		6-7	120	0.0	< 20.6		< 0.00106		< 0.00530		< 0.00265		0.00105	J	0.00105		< 0.103		< 4.12		3.34	B J	3.34			
		9-10	88.6	0.0	< 20.5		< 0.00105		< 0.00527		< 0.00264		0.00216	J	0.00216		< 0.103		< 4.11		3.19	B J	3.19			
BH-1	8/26/2020	0-1	-	0.0	***16500***		< 0.00120		< 0.00600		< 0.00300		< 0.00780		-		< 0.110		6.80		13.0		19.8			
		2-3	1760	0.0	***13700***		< 0.00127		< 0.00634		< 0.00317		< 0.00824		-		< 0.113		2.05	J	3.59	J	5.64			
		4-5	-	0.0	***1080***		< 0.00118		< 0.00588		< 0.00294		< 0.00764		-		< 0.109		< 4.35		< 4.35		-			
		6-7	-	0.0	385		< 0.00122		< 0.00609		< 0.00305		< 0.00792		-		< 0.111		< 4.44		< 4.44		-			
		9-10	305	0.0	263		< 0.00114		< 0.00570		< 0.00285		< 0.00741		-		< 0.108		< 4.28		< 4.28		-			
		14-15	342	0.0	339		< 0.00129		< 0.00645		< 0.00323		< 0.00839		-		< 0.115		< 4.58		< 4.58		-			
		19-20	-	0.0	405		< 0.00132		< 0.00659		< 0.00329		< 0.00857		-		< 0.116		< 4.64		< 4.64		-			
BH-2	8/26/2020	0-1	> 4000	0.0	***11200***		0.000547	J	< 0.00575		< 0.00288		< 0.00748		0.000547		< 0.108		8.84		14.2		23.0			
		2-3	> 4000	0.0	***18000***		< 0.00127		< 0.00637		< 0.00318		< 0.00828		-		< 0.114		< 4.55		1.94	J	1.94			
		4-5	900	0.0	***995***		< 0.00119		< 0.00597		< 0.00299		< 0.00776		-		< 0.110		< 4.39		< 4.39		-			
		6-7	140	0.0	88.9		< 0.00161		< 0.00806		< 0.00403		< 0.0105		-		< 0.131		< 5.23		< 5.23		-			
		9-10	250	0.0	292		< 0.00170		< 0.00850		< 0.00425		< 0.0111		-		< 0.135		< 5.40		< 5.40		-			
		14-15	112	0.0	80.1		0.000635	J	< 0.00669		< 0.00334		< 0.00870		0.000635		< 0.117		< 4.68		< 4.68		-			
		19-20	100	0.0	88.1		< 0.00138		< 0.00689		< 0.00345		< 0.00896		-		< 0.119		< 4.76		< 4.76		-			
		24-25	-	0.0	120		< 0.00125		< 0.00627		< 0.00314		< 0.00815		-		< 0.113		< 4.51		< 4.51		-			
BH-3	8/26/2020	0-1	243	0.0	172		< 0.00105		< 0.00527		< 0.00263		< 0.00685		-		< 0.103		< 4.11		1.39	J	1.39			
		2-3	451	0.0	148		< 0.00107		< 0.00535		< 0.00268		< 0.00696		-		< 0.104		< 4.14		3.98	B J	3.98			
		4-5	1080	0.0	NS		NS		NS		NS		NS		-		NS		NS		NS		-			
		6-7	948	0.0	NS		NS		NS		NS		NS		-		NS		NS		NS		-			
		9-10	641	0.0	NS		NS		NS		NS		NS		-		NS		NS		NS		-			
BH-4	8/26/2020	0-1	2450	0.0	***1200***		< 0.00110		< 0.00550		< 0.00275		< 0.00714		-		< 0.105		< 4.20		1.74	B J	1.74			
		2-3	530	0.0	585		< 0.00114		< 0.00569		< 0.00285		< 0.00740		-		< 0.107		< 4.28		0.916	B J	0.916			
		4-5	736	0.0	435		< 0.00114		< 0.00571		< 0.00285		< 0.00742		-		< 0.107		< 4.28		0.334	B J	0.334			
BH-5	8/26/2020	0-1	316	0.0	104		< 0.00104		< 0.00522		< 0.00261		< 0.00679		-		< 0.102		12.9*	Q	26.7*	Q	39.6			
		2-3	101	0.0	35.9		< 0.00115		< 0.00576		< 0.00288		< 0.00749		-		< 0.108		< 4.30		3.24	B J	3.24			
		4-5	126	0.0	86.4		< 0.00108		< 0.00540		< 0.00270		< 0.00702		-		< 0.104		1.75	J	3.43	B J	5.18			
		6-7	83	0.0	38.8		< 0.00111		< 0.00555		< 0.00278		< 0.00722		-		< 0.105		< 4.22		1.49	B J	1.49			
		9-10	48	0.0	22.3		< 0.00112		< 0.00559		< 0.00280		< 0.00727		-		< 0.106		2.28	J	2.38	B J	4.66			
BH-6	8/26/2020	0-1	170	0.0	90.4		< 0.00122		< 0.00608		< 0.00304		< 0.00790		-		< 0.111		171	J	675		***846***			
		2-3	170	0.0	30.1		< 0.00111		< 0.00556		< 0.00278		< 0.00723		-		< 0.106		3.26*	J Q	10.0*	Q	13.3			
		4-5	123	0.0	12.5	J	< 0.00114		< 0.00568		< 0.00284		0.00113	J	0.00113		< 0.107		2.97*	J Q	8.40*	Q	11.4			
		6-7	144	0.0	< 21.1		< 0.00111		< 0.00554		< 0.00277		0.00119	J	0.00119		< 0.105		< 4.22		1.05	B J	1.05			
		9-10	145	0.0	< 21.3		< 0.00113		< 0.00565		< 0.00283		< 0.00735		-		< 0.107		< 4.26		1.04	B J	1.04			
BH-7	8/26/2020	0-1	150	0.0	432		< 0.00106		< 0.00531		< 0.00265		< 0.00690		-		< 0.103		1.77	J	6.28	B	8.05			
		2-3	160	0.0	456		< 0.00108		< 0.00538		< 0.00269		< 0.00700		-		0.0257	J	< 4.15		1.39	B J	1.42			
		4-5	355	0.0	334		< 0.00106		< 0.00529		0.000785	J	0.00683	J	0.00762		< 0.103		< 4.11		1.76	B J	1.76			
		6-7	450	0.0	529		< 0.00118		< 0.00589		< 0.00294		0.00309	J	0.00309		< 0.109		< 4.35		1.11	B J	1.11			
		9-10	255	0.0	206		< 0.00112		< 0.00561		< 0.00281		0.00239	J	0.00239		< 0.106		< 4.25		1.14	B J	1.14			

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TABLE 2
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ADDITIONAL SOIL ASSESSMENT - NAB1924044206
CONOCOPHILLIPS
JAMES A #11 STUFFING BOX RELEASE
EDDY COUNTY, NM

Sample ID	Sample Date	Sample Depth Interval	Field Screening Results		Chloride[1]		BTEX[2]									TPH[3]							
							Benzene		Toluene		Ethylbenzene		Total Xylenes		Total BTEX	GRO[4]		DRO		ORO		Total TPH (GRO+DRO+ORO)
			Chloride	PID												C_3 - C_{10}		C_{10} - C_{28}		C_{28} - C_{40}		
		ft. bgs	ppm		mg/kg	Q	mg/kg	Q	mg/kg	Q	mg/kg	Q	mg/kg	Q	mg/kg	mg/kg	Q	mg/kg	Q	mg/kg	Q	mg/kg
BH-8	8/26/2020	0-1	4020	0.0	***5350***		< 0.00108		< 0.00538		< 0.00269		0.00211	J	0.00211	0.0253	J	2.38	J	4.77	B	7.18
		2-3	455	0.0	404		< 0.00105		< 0.00526		< 0.00263		0.00162	J	0.00162	< 0.103		< 4.10		4.56	B	4.56
		4-5	238	0.0	375		< 0.00107		< 0.00537		< 0.00268		0.00144	J	0.00144	< 0.104		< 4.15		1.20	B J	1.20
BH-9	8/26/2020	0-1	143	0.0	215		< 0.00103		< 0.00516		< 0.00258		0.00134	J	0.00134	< 0.102		< 4.06		2.78	B J	2.78
		2-3	460	0.0	254		< 0.00104		< 0.00521		< 0.00260		0.00122	J	0.00122	0.0242	J	3.45	J	19.9		23.4
		4-5	640	0.0	NS		NS		NS		NS		NS		-	NS		NS		NS		-
BH-10	9/4/2020	0-1	232	-	40.3		0.000609	J	0.00434	J	< 0.00290		0.00229	J	0.00724	0.670	J	7.18		33.2		41.1
		3-4	180	-	53.3		0.000690	J	0.00420	J	< 0.00288		0.00146	J	0.00635	0.672	J	5.21		24.5		30.4
BH-11	9/4/2020	0-1	201	-	< 20.2		< 0.00102		0.00340	J	< 0.00256		0.00150	J	0.00490	< 2.56		4.01	J	13.4		17.4
		3-4	134	-	< 21.6		< 0.00122		0.00265	J	< 0.00305		< 0.00794		0.00265	< 3.05		1.86	J	3.69	J	5.55
BH-12	12/9/2020	0-1	-	-	< 20.1		< 0.00101		< 0.00507		< 0.00254		< 0.00659		-	0.0488	B J	< 4.03		2.15	B J	2.20

NOTES:

ft. Feet
bgs Below ground surface
ppm Parts per million
mg/kg Milligrams per kilogram
NS Interval Not Sampled
TPH Total Petroleum Hydrocarbons
GRO Gasoline range organics
DRO Diesel range organics
ORO Oil range organics

Bold and italicized values indicate exceedance of proposed RRALs

1 EPA Method 300.0
2 EPA Method 8260B
3 EPA Method 8015
4 EPA Method 8015D/GRO
* Duplicate Analysis performed due to QC failure; duplicate analysis results reported in table.

QUALIFIERS:

B The same analyte is found in the associated blank.
J The identification of the analyte is acceptable; the reported value is an estimate.
Q Sample was prepared and/or analyzed past holding time as defined in the method. Concentrations should be considered minimum values.

APPENDIX A
C-141 Forms

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

State of New Mexico
Energy Minerals and Natural Resources Department

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

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

Incident ID	NAB1924044206
District RP	2RP-5605
Facility ID	
Application ID	pAB1924043309

Release Notification 3CUMI-190819-C-1410

Responsible Party

Responsible Party ConocoPhillips Company	OGRID 217817
Contact Name Gustavo Fejervary	Contact Telephone 432/210-7037
Contact email g.fejervary@cop.com	Incident # *(assigned by OCD)* NAB1924044206
Contact mailing address 3300 N A ST. Midland Texas 79705	

Location of Release Source

Latitude 32.426517 Longitude -103.849449
(NAD 83 in decimal degrees to 5 decimal places)

Site Name James A 11	Site Type Oil Well
Date Release Discovered 8/13/19	API# *(if applicable)* 30-015-26510

Unit Letter	Section	Township	Range	County
2	~~22~~ 2 AB	22S	30E	Eddy

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

Nature and Volume of Release

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

☑ Crude Oil	Volume Released (bbls) 1	Volume Recovered (bbls) 0
☑ Produced Water	Volume Released (bbls) 26.5	Volume Recovered (bbls) 26.5
	Is the concentration of total dissolved solids (TDS) in the produced water >10,000 mg/l?	☑ Yes ☐ No
☐ Condensate	Volume Released (bbls)	Volume Recovered (bbls)
☐ Natural Gas	Volume Released (Mcf)	Volume Recovered (Mcf)
☐ Other (describe)	Volume/Weight Released (provide units)	Volume/Weight Recovered (provide units)
Cause of Release leak from stuffing box		

Form C-141
Page 2

State of New Mexico
Oil Conservation Division

Incident ID	NAB1924044206
District RP	2RP-5605
Facility ID	
Application ID	pAB1924043309

Was this a major release as defined by 19.15.29.7(A) NMAC? ☑ Yes ☐ No	If YES, for what reason(s) does the responsible party consider this a major release? it was more than 25 bbls. (110'x40'x4"/5.61) x 0.105 (effective porosity for on pad spills) = 27.5 bbls. Based on production rates, only 1 of the 27.5 bbls is Oil, the rest is PW.

If YES, was immediate notice given to the OCD? By whom? To whom? When and by what means (phone, email, etc)?

Yes, email sent to Bradford Billings, Dylan Roes-Coss, Amalia Bustamante, Victoria Venegas, Robert Hamlet (8/13/2019 e mail) AB

Initial Response

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

☑ The source of the release has been stopped.
☑ The impacted area has been secured to protect human health and the environment.
☑ Released materials have been contained via the use of berms or dikes, absorbent pads, or other containment devices.
☑ All free liquids and recoverable materials have been removed and managed appropriately.

If all the actions described above have not been undertaken, explain why:

Per 19.15.29.8 B. (4) NMAC the responsible party may commence remediation immediately after discovery of a release. If remediation has begun, please attach a narrative of actions to date. If remedial efforts have been successfully completed or if the release occurred within a lined containment area (see 19.15.29.11(A)(5)(a) NMAC), please attach all information needed for closure evaluation.

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

Printed Name: Gustavo Fejervary Title: Environmental Coordinator

Signature: Date: 8/19/19

email: g.fejervary@cop.com Telephone: 432/210-7037

OCD Only

Received by: Amalia Bustamante Date: 8/28/2019

State of New Mexico
Oil Conservation Division

Incident ID	
District RP	
Facility ID	
Application ID	

Site Assessment/Characterization

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

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

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

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

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

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

Form C-141
Page 4

State of New Mexico
Oil Conservation Division

Incident ID	
District RP	
Facility ID	
Application ID	

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

Printed Name: _____ Title: _____

Signature: _____ Date: _____

email: _____ Telephone: _____

OCD Only

Received by: _____ Date: _____

State of New Mexico
Oil Conservation Division

Incident ID	
District RP	
Facility ID	
Application ID	

Remediation Plan

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

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

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

☐ Contamination must be in areas immediately under or around production equipment where remediation could cause a major facility deconstruction.

☐ Extents of contamination must be fully delineated.

☐ Contamination does not cause an imminent risk to human health, the environment, or groundwater.

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

Printed Name: _____ Title: _____

Signature: _____ Date: _____

email: _____ Telephone: _____

OCD Only

Received by: _____ Date: _____

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

Signature: _____ Date: _____

APPENDIX B
Site Characterization Data

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

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

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

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

(NAD83 UTM in meters)

(In feet)

POD Number	Code	POD Sub-basin	County	Q 64	Q 16	Q 4	Sec	Tws	Rng	X	Y	Distance	Depth Well	Depth Water	Water Column
C 03234 EXPLORE		CUB	ED	1	2	3	35	21S	30E	607695	3589207*	1022	410		
C 03003		CUB	ED	3	1	3	31	21S	31E	610511	3588970*	2419	650		
C 03002		CUB	ED	4	2	4	06	22S	31E	611933	3587375*	3864	668		
C 02749		CUB	ED	1	1	1	18	22S	31E	610556	3585146*	3953	640		
C 02750		CUB	ED	1	1	1	18	22S	31E	610556	3585146*	3953	741		
C 02751		CUB	ED	1	1	1	18	22S	31E	610556	3585146*	3953	637		
C 02723		CUB	ED	2	2	3	15	22S	30E	606282	3584363*	4379	651		
C 03773 POD1	C	CUB	ED	4	2	2	32	21S	30E	604039	3589799	4404	55		
C 03774 POD1	C	CUB	ED	2	4	2	32	21S	30E	604039	3589799	4404	32		
C 03772 POD1	C	CUB	ED	2	4	2	32	21S	30E	603859	3589714	4546	30		
C 03772 POD2	C	CUB	ED	4	2	2	32	21S	30E	603850	3589707	4553	30		
C 03772 POD3	C	CUB	ED	4	2	2	32	21S	30E	603840	3589699	4560	30		
C 03772 POD5	C	CUB	ED	4	2	2	32	21S	30E	603823	3589681	4571	30		
C 03772 POD4	C	CUB	ED	4	2	2	32	21S	30E	603824	3589692	4573	30		
C 03772 POD6	C	CUB	ED	4	2	2	32	21S	30E	603814	3589666	4575	30		
C 03772 POD7	C	CUB	ED	4	2	2	32	21S	30E	603805	3589655	4580	30		
C 03772 POD8	C	CUB	ED	4	2	2	32	21S	30E	603797	3589636	4583	30		
C 02727		CUB	ED	3	1	1	33	21S	31E	613716	3589809*	5732	913		
C 02950 EXPL		CUB	ED	4	2	4	23	22S	30E	608740	3582576*	5759	845		
C 03112 EXPLORE		CUB	ED	3	1	1	09	22S	31E	613753	3586590*	5828	3567		
C 02748		CUB	ED	1	2	3	17	22S	31E	612576	3584364*	5903	3856		
C 02637		CUB	ED	1	3	3	24	22S	30E	608950	3582377*	5981	759		
C 02682		CUB	ED	4	4	4	08	22S	31E	613566	3585379*	6128	4400		
C 02722		CUB	ED	1	2	1	21	21S	30E	604435	3593203*	6164	592		
C 03015		CUB	ED	1	4	3	22	22S	30E	606099	3582353*	6309	1316	262	1054
C 03233 EXPLORE		CUB	ED	4	4	4	20	21S	31E	613489	3591816*	6360	566		
C 02683		CUB	ED	3	1	1	20	22S	31E	612184	3583356*	6366	840		

Average Depth to Water: **262 feet**

Minimum Depth: **262 feet**

Maximum Depth: **262 feet**

Record Count: 27

UTMNAD83 Radius Search (in meters):

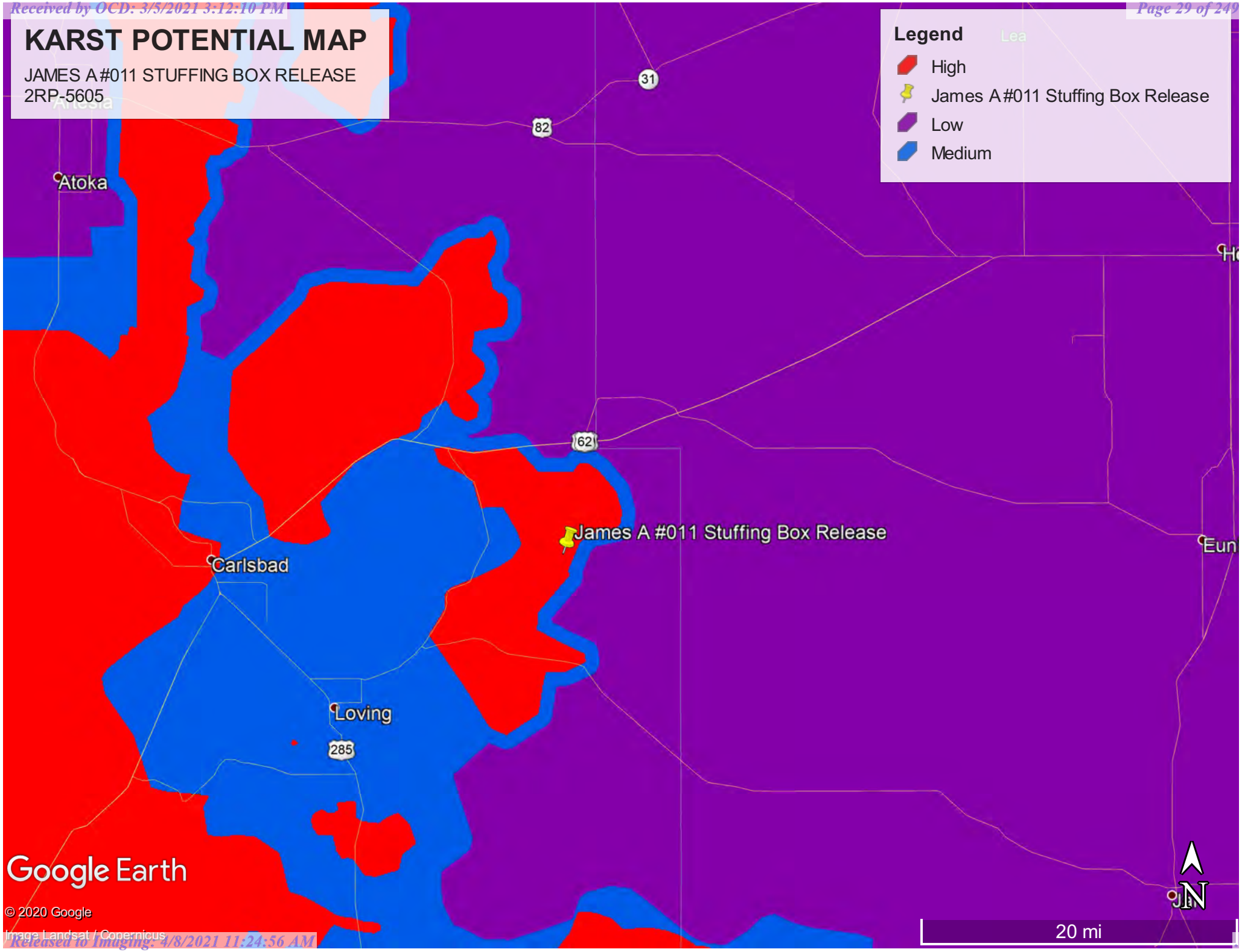
Easting (X): 608183.328 **Northing (Y):** 3588308.768 **Radius:** 6400

Released to Imaging: 4/8/2021 11:24:56 AM

Received by OCD: 3/5/2021 3:12:10 PM

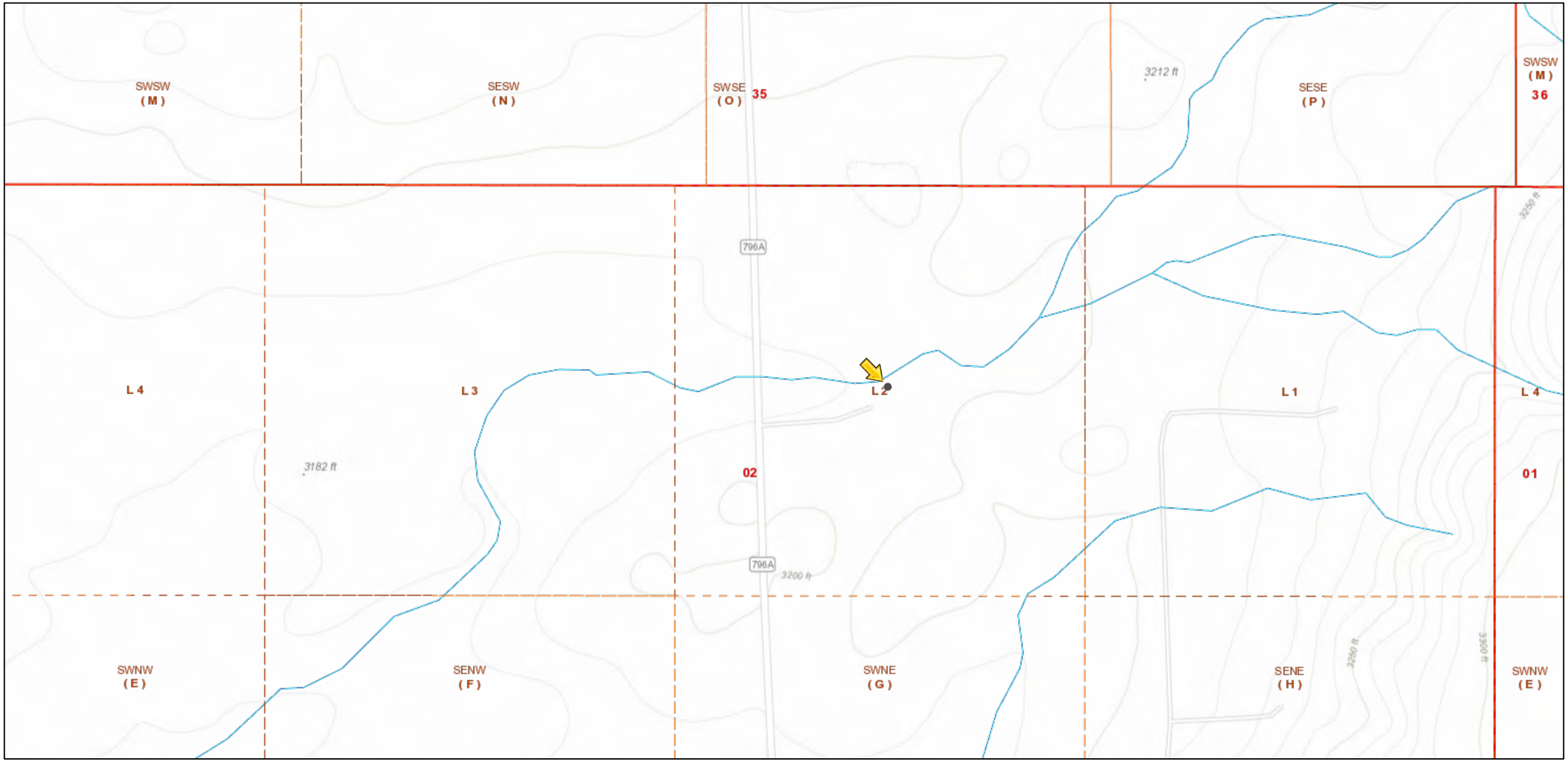
KARST POTENTIAL MAP

JAMES A #011 STUFFING BOX RELEASE
2RP-5605



Released to Imaging: 4/8/2021 11:24:56 AM

James A #11 Stuffing Box Release - NAB1924044206



8/7/2020, 11:50:04 AM

Override 1

PLSS First Division

PLSS Second Division

OSE Water-bodies

PLJV Probable Playas

OSE Streams

1:4,514

0 250 500 1,000 ft

0 75 150 300 m

Sources: Esri, HERE, Garmin, Intermap, increment P Corp., GEBCO, USGS, FAO, NPS, NRCAN, GeoBase, IGN, Kadaster NL, Ordnance Survey, Esri Japan, METI, Esri China (Hong Kong), (c) OpenStreetMap contributors, and the GIS User Community, BLM

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

APPENDIX C
Laboratory Analytical Data

CARDINAL Laboratories

PHONE (575) 393-2326 ° 101 E. MARLAND ° HOBBS, NM 88240

September 04, 2019

JUSTIN WRIGHT

Conoco Phillips - Hobbs

P. O. BOX 325

Hobbs, NM 88240

RE: JAMES A #11

Enclosed are the results of analyses for samples received by the laboratory on 08/28/19 12:15.

Cardinal Laboratories is accredited through Texas NELAP under certificate number T104704398-18-11. Accreditation applies to drinking water, non-potable water and solid and chemical materials. All accredited analytes are denoted by an asterisk (*). For a complete list of accredited analytes and matrices visit the TCEQ website at www.tceq.texas.gov/field/qa/lab_accred_certif.html.

Cardinal Laboratories is accreditated through the State of Colorado Department of Public Health and Environment for:

Method EPA 552.2	Haloacetic Acids (HAA-5)
Method EPA 524.2	Total Trihalomethanes (TTHM)
Method EPA 524.4	Regulated VOCs (V1, V2, V3)

Accreditation applies to public drinking water matrices.

This report meets NELAP requirements and is made up of a cover page, analytical results, and a copy of the original chain-of-custody. If you have any questions concerning this report, please feel free to contact me.

Sincerely,

Celey D. Keene

Lab Director/Quality Manager

CARDINAL Laboratories

PHONE (575) 393-2326 ° 101 E. MARLAND ° HOBBS, NM 88240

Analytical Results For:

Conoco Phillips - Hobbs
JUSTIN WRIGHT
P. O. BOX 325
Hobbs NM, 88240
Fax To: (575) 297-1477

Received:	08/28/2019	Sampling Date:	08/27/2019
Reported:	09/04/2019	Sampling Type:	Soil
Project Name:	JAMES A #11	Sampling Condition:	Cool & Intact
Project Number:	NONE GIVEN	Sample Received By:	Tamara Oldaker
Project Location:	COPC - EDDY CO NM		

Sample ID: SP # 1 - SURFACE (H902985-01)

BTEX 8021B mg/kg Analyzed By: BF

Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
Benzene*	<0.050	0.050	09/01/2019	ND	1.89	94.5	2.00	0.0227	
Toluene*	<0.050	0.050	09/01/2019	ND	1.88	94.1	2.00	1.35	
Ethylbenzene*	<0.050	0.050	09/01/2019	ND	1.91	95.5	2.00	0.0410	
Total Xylenes*	<0.150	0.150	09/01/2019	ND	5.71	95.2	6.00	1.11	
Total BTEX	<0.300	0.300	09/01/2019	ND					

Surrogate: 4-Bromofluorobenzene (PID *86.6 %* *73.3-129*

Chloride, SM4500Cl-B mg/kg Analyzed By: AC

Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
Chloride	**48000**	16.0	09/03/2019	ND	416	104	400	3.92	

TPH 8015M mg/kg Analyzed By: CK

Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
GRO C6-C10*	<10.0	10.0	08/31/2019	ND	190	95.0	200	0.234	
DRO >C10-C28*	**66.4**	10.0	08/31/2019	ND	183	91.7	200	3.75	
EXT DRO >C28-C36	**22.6**	10.0	08/31/2019	ND					

Surrogate: 1-Chlorooctane *83.3 %* *41-142*

Surrogate: 1-Chlorooctadecane *89.9 %* *37.6-147*

Cardinal Laboratories *=Accredited Analyte

PLEASE NOTE: Liability and Damages. Cardinal's liability and client's exclusive remedy for any claim arising, whether based in contract or tort, shall be limited to the amount paid by client for analyses. All claims, including those for negligence and any other cause whatsoever shall be deemed waived unless made in writing and received by Cardinal within thirty (30) days after completion of the applicable service. In no event shall Cardinal be liable for incidental or consequential damages, including, without limitation, business interruptions, loss of use, or loss of profits incurred by client, its subsidiaries, affiliates or successors arising out of or related to the performance of the services hereunder by Cardinal, regardless of whether such claim is based upon any of the above stated reasons or otherwise. Results relate only to the samples identified above. This report shall not be reproduced except in full with written approval of Cardinal Laboratories.

Celey D. Keene

Celey D. Keene, Lab Director/Quality Manager

CARDINAL Laboratories

PHONE (575) 393-2326 ° 101 E. MARLAND ° HOBBS, NM 88240

Analytical Results For:

Conoco Phillips - Hobbs
JUSTIN WRIGHT
P. O. BOX 325
Hobbs NM, 88240
Fax To: (575) 297-1477

Received:	08/28/2019	Sampling Date:	08/27/2019
Reported:	09/04/2019	Sampling Type:	Soil
Project Name:	JAMES A #11	Sampling Condition:	Cool & Intact
Project Number:	NONE GIVEN	Sample Received By:	Tamara Oldaker
Project Location:	COPC - EDDY CO NM		

Sample ID: SP # 1 - 1' (H902985-02)

Chloride, SM4500Cl-B **mg/kg** **Analyzed By: AC**

Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
Chloride	**11000**	16.0	09/03/2019	ND	416	104	400	3.92	

Cardinal Laboratories *=Accredited Analyte

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Celey D. Keene, Lab Director/Quality Manager

CARDINAL Laboratories

PHONE (575) 393-2326 ° 101 E. MARLAND ° HOBBS, NM 88240

Analytical Results For:

Conoco Phillips - Hobbs
JUSTIN WRIGHT
P. O. BOX 325
Hobbs NM, 88240
Fax To: (575) 297-1477

Received:	08/28/2019	Sampling Date:	08/27/2019
Reported:	09/04/2019	Sampling Type:	Soil
Project Name:	JAMES A #11	Sampling Condition:	Cool & Intact
Project Number:	NONE GIVEN	Sample Received By:	Tamara Oldaker
Project Location:	COPC - EDDY CO NM		

Sample ID: SP # 2 - SURFACE (H902985-03)

BTEX 8021B mg/kg Analyzed By: BF

Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
Benzene*	<0.050	0.050	09/01/2019	ND	1.89	94.5	2.00	0.0227	
Toluene*	<0.050	0.050	09/01/2019	ND	1.88	94.1	2.00	1.35	
Ethylbenzene*	<0.050	0.050	09/01/2019	ND	1.91	95.5	2.00	0.0410	
Total Xylenes*	<0.150	0.150	09/01/2019	ND	5.71	95.2	6.00	1.11	
Total BTEX	<0.300	0.300	09/01/2019	ND					

Surrogate: 4-Bromofluorobenzene (PID *84.9 %* *73.3-129*

Chloride, SM4500Cl-B mg/kg Analyzed By: AC

Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
Chloride	**32800**	16.0	09/03/2019	ND	400	100	400	0.00	QM-07

TPH 8015M mg/kg Analyzed By: CK

Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
GRO C6-C10*	<10.0	10.0	08/31/2019	ND	190	95.0	200	0.234	
DRO >C10-C28*	**531**	10.0	08/31/2019	ND	183	91.7	200	3.75	
EXT DRO >C28-C36	**208**	10.0	08/31/2019	ND					

Surrogate: 1-Chlorooctane *85.7 %* *41-142*

Surrogate: 1-Chlorooctadecane *107 %* *37.6-147*

Cardinal Laboratories *=Accredited Analyte

PLEASE NOTE: Liability and Damages. Cardinal's liability and client's exclusive remedy for any claim arising, whether based in contract or tort, shall be limited to the amount paid by client for analyses. All claims, including those for negligence and any other cause whatsoever shall be deemed waived unless made in writing and received by Cardinal within thirty (30) days after completion of the applicable service. In no event shall Cardinal be liable for incidental or consequential damages, including, without limitation, business interruptions, loss of use, or loss of profits incurred by client, its subsidiaries, affiliates or successors arising out of or related to the performance of the services hereunder by Cardinal, regardless of whether such claim is based upon any of the above stated reasons or otherwise. Results relate only to the samples identified above. This report shall not be reproduced except in full with written approval of Cardinal Laboratories.

Celey D. Keene, Lab Director/Quality Manager

CARDINAL Laboratories

PHONE (575) 393-2326 ° 101 E. MARLAND ° HOBBS, NM 88240

Analytical Results For:

Conoco Phillips - Hobbs
JUSTIN WRIGHT
P. O. BOX 325
Hobbs NM, 88240
Fax To: (575) 297-1477

Received:	08/28/2019	Sampling Date:	08/27/2019
Reported:	09/04/2019	Sampling Type:	Soil
Project Name:	JAMES A #11	Sampling Condition:	Cool & Intact
Project Number:	NONE GIVEN	Sample Received By:	Tamara Oldaker
Project Location:	COPC - EDDY CO NM		

Sample ID: SP # 2 - 1' (H902985-04)

Chloride, SM4500Cl-B **mg/kg** **Analyzed By: AC**

Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
Chloride	**15000**	16.0	09/03/2019	ND	400	100	400	0.00	

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Analytical Results For:

Conoco Phillips - Hobbs
JUSTIN WRIGHT
P. O. BOX 325
Hobbs NM, 88240
Fax To: (575) 297-1477

Received:	08/28/2019	Sampling Date:	08/27/2019
Reported:	09/04/2019	Sampling Type:	Soil
Project Name:	JAMES A #11	Sampling Condition:	Cool & Intact
Project Number:	NONE GIVEN	Sample Received By:	Tamara Oldaker
Project Location:	COPC - EDDY CO NM		

Sample ID: SP # 3 - SURFACE (H902985-05)

BTEX 8021B mg/kg Analyzed By: BF

Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
Benzene*	<0.050	0.050	09/01/2019	ND	1.89	94.5	2.00	0.0227	
Toluene*	<0.050	0.050	09/01/2019	ND	1.88	94.1	2.00	1.35	
Ethylbenzene*	<0.050	0.050	09/01/2019	ND	1.91	95.5	2.00	0.0410	
Total Xylenes*	<0.150	0.150	09/01/2019	ND	5.71	95.2	6.00	1.11	
Total BTEX	<0.300	0.300	09/01/2019	ND					

Surrogate: 4-Bromofluorobenzene (PID *86.8 %* *73.3-129*

Chloride, SM4500Cl-B mg/kg Analyzed By: AC

Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
Chloride	**68800**	16.0	09/03/2019	ND	400	100	400	0.00	

TPH 8015M mg/kg Analyzed By: CK S-04

Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
GRO C6-C10*	<10.0	10.0	08/31/2019	ND	190	95.0	200	0.234	
DRO >C10-C28*	**1720**	10.0	08/31/2019	ND	183	91.7	200	3.75	
EXT DRO >C28-C36	**648**	10.0	08/31/2019	ND					

Surrogate: 1-Chlorooctane *87.7 %* *41-142*

Surrogate: 1-Chlorooctadecane *177 %* *37.6-147*

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Analytical Results For:

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Received:	08/28/2019	Sampling Date:	08/27/2019
Reported:	09/04/2019	Sampling Type:	Soil
Project Name:	JAMES A #11	Sampling Condition:	Cool & Intact
Project Number:	NONE GIVEN	Sample Received By:	Tamara Oldaker
Project Location:	COPC - EDDY CO NM		

Sample ID: SP # 3 - 1' (H902985-06)

Chloride, SM4500Cl-B **mg/kg** **Analyzed By: AC**

Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
Chloride	**14400**	16.0	09/03/2019	ND	400	100	400	0.00	

Sample ID: SP # 3 - 2' (H902985-07)

Chloride, SM4500Cl-B **mg/kg** **Analyzed By: AC**

Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
Chloride	**3520**	16.0	09/03/2019	ND	400	100	400	0.00	

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Analytical Results For:

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Hobbs NM, 88240
Fax To: (575) 297-1477

Received:	08/28/2019	Sampling Date:	08/27/2019
Reported:	09/04/2019	Sampling Type:	Soil
Project Name:	JAMES A #11	Sampling Condition:	Cool & Intact
Project Number:	NONE GIVEN	Sample Received By:	Tamara Oldaker
Project Location:	COPC - EDDY CO NM		

Sample ID: SP # 4 - SURFACE (H902985-08)

BTEX 8021B mg/kg Analyzed By: BF

Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
Benzene*	<0.050	0.050	09/01/2019	ND	1.89	94.5	2.00	0.0227	
Toluene*	<0.050	0.050	09/01/2019	ND	1.88	94.1	2.00	1.35	
Ethylbenzene*	<0.050	0.050	09/01/2019	ND	1.91	95.5	2.00	0.0410	
Total Xylenes*	<0.150	0.150	09/01/2019	ND	5.71	95.2	6.00	1.11	
Total BTEX	<0.300	0.300	09/01/2019	ND					

Surrogate: 4-Bromofluorobenzene (PID *85.9 %* *73.3-129*

Chloride, SM4500Cl-B mg/kg Analyzed By: AC

Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
Chloride	**52000**	16.0	09/03/2019	ND	400	100	400	0.00	

TPH 8015M mg/kg Analyzed By: CK S-06

Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
GRO C6-C10*	<50.0	50.0	09/01/2019	ND	208	104	200	0.228	
DRO >C10-C28*	**5890**	50.0	09/01/2019	ND	215	107	200	1.93	
EXT DRO >C28-C36	**2510**	50.0	09/01/2019	ND					

Surrogate: 1-Chlorooctane *126 %* *41-142*

Surrogate: 1-Chlorooctadecane *475 %* *37.6-147*

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Analytical Results For:

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Fax To: (575) 297-1477

Received:	08/28/2019	Sampling Date:	08/27/2019
Reported:	09/04/2019	Sampling Type:	Soil
Project Name:	JAMES A #11	Sampling Condition:	Cool & Intact
Project Number:	NONE GIVEN	Sample Received By:	Tamara Oldaker
Project Location:	COPC - EDDY CO NM		

Sample ID: SP # 4 - 1' (H902985-09)

Chloride, SM4500Cl-B **mg/kg** **Analyzed By: AC**

Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
Chloride	**32000**	16.0	09/03/2019	ND	400	100	400	0.00	

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Analytical Results For:

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Hobbs NM, 88240
Fax To: (575) 297-1477

Received:	08/28/2019	Sampling Date:	08/27/2019
Reported:	09/04/2019	Sampling Type:	Soil
Project Name:	JAMES A #11	Sampling Condition:	Cool & Intact
Project Number:	NONE GIVEN	Sample Received By:	Tamara Oldaker
Project Location:	COPC - EDDY CO NM		

Sample ID: SP # 5 - SURFACE (H902985-10)

BTEX 8021B mg/kg Analyzed By: BF

Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
Benzene*	<0.050	0.050	09/01/2019	ND	1.89	94.5	2.00	0.0227	
Toluene*	<0.050	0.050	09/01/2019	ND	1.88	94.1	2.00	1.35	
Ethylbenzene*	<0.050	0.050	09/01/2019	ND	1.91	95.5	2.00	0.0410	
Total Xylenes*	<0.150	0.150	09/01/2019	ND	5.71	95.2	6.00	1.11	
Total BTEX	<0.300	0.300	09/01/2019	ND					

Surrogate: 4-Bromofluorobenzene (PID *84.6 %* *73.3-129*

Chloride, SM4500Cl-B mg/kg Analyzed By: AC

Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
Chloride	**60000**	16.0	09/03/2019	ND	400	100	400	0.00	

TPH 8015M mg/kg Analyzed By: CK S-06

Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
GRO C6-C10*	<50.0	50.0	09/01/2019	ND	208	104	200	0.228	
DRO >C10-C28*	**7590**	50.0	09/01/2019	ND	215	107	200	1.93	
EXT DRO >C28-C36	**3310**	50.0	09/01/2019	ND					

Surrogate: 1-Chlorooctane *116 %* *41-142*

Surrogate: 1-Chlorooctadecane *573 %* *37.6-147*

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Analytical Results For:

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JUSTIN WRIGHT
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Hobbs NM, 88240
Fax To: (575) 297-1477

Received:	08/28/2019	Sampling Date:	08/27/2019
Reported:	09/04/2019	Sampling Type:	Soil
Project Name:	JAMES A #11	Sampling Condition:	Cool & Intact
Project Number:	NONE GIVEN	Sample Received By:	Tamara Oldaker
Project Location:	COPC - EDDY CO NM		

Sample ID: SP # 5 - 1' (H902985-11)

Chloride, SM4500Cl-B **mg/kg** **Analyzed By: AC**

Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
Chloride	**22600**	16.0	09/03/2019	ND	400	100	400	0.00	

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Analytical Results For:

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JUSTIN WRIGHT
P. O. BOX 325
Hobbs NM, 88240
Fax To: (575) 297-1477

Received:	08/28/2019	Sampling Date:	08/27/2019
Reported:	09/04/2019	Sampling Type:	Soil
Project Name:	JAMES A #11	Sampling Condition:	Cool & Intact
Project Number:	NONE GIVEN	Sample Received By:	Tamara Oldaker
Project Location:	COPC - EDDY CO NM		

Sample ID: SP # 6 - SURFACE (H902985-12)

BTEX 8021B mg/kg Analyzed By: BF

Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
Benzene*	<0.050	0.050	09/01/2019	ND	1.89	94.5	2.00	0.0227	
Toluene*	<0.050	0.050	09/01/2019	ND	1.88	94.1	2.00	1.35	
Ethylbenzene*	<0.050	0.050	09/01/2019	ND	1.91	95.5	2.00	0.0410	
Total Xylenes*	<0.150	0.150	09/01/2019	ND	5.71	95.2	6.00	1.11	
Total BTEX	<0.300	0.300	09/01/2019	ND					

Surrogate: 4-Bromofluorobenzene (PID *84.3 %* *73.3-129*

Chloride, SM4500Cl-B mg/kg Analyzed By: AC

Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
Chloride	**76800**	16.0	09/03/2019	ND	400	100	400	0.00	

TPH 8015M mg/kg Analyzed By: CK S-04

Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
GRO C6-C10*	<10.0	10.0	09/01/2019	ND	208	104	200	0.228	
DRO >C10-C28*	**415**	10.0	09/01/2019	ND	215	107	200	1.93	
EXT DRO >C28-C36	**240**	10.0	09/01/2019	ND					

Surrogate: 1-Chlorooctane *118 %* *41-142*

Surrogate: 1-Chlorooctadecane *157 %* *37.6-147*

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Analytical Results For:

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JUSTIN WRIGHT
P. O. BOX 325
Hobbs NM, 88240
Fax To: (575) 297-1477

Received:	08/28/2019	Sampling Date:	08/27/2019
Reported:	09/04/2019	Sampling Type:	Soil
Project Name:	JAMES A #11	Sampling Condition:	Cool & Intact
Project Number:	NONE GIVEN	Sample Received By:	Tamara Oldaker
Project Location:	COPC - EDDY CO NM		

Sample ID: SP # 6 - 1' (H902985-13)

Chloride, SM4500Cl-B **mg/kg** **Analyzed By: AC**

Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
Chloride	**26400**	16.0	09/03/2019	ND	400	100	400	0.00	

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Analytical Results For:

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P. O. BOX 325
Hobbs NM, 88240
Fax To: (575) 297-1477

Received:	08/28/2019	Sampling Date:	08/27/2019
Reported:	09/04/2019	Sampling Type:	Soil
Project Name:	JAMES A #11	Sampling Condition:	Cool & Intact
Project Number:	NONE GIVEN	Sample Received By:	Tamara Oldaker
Project Location:	COPC - EDDY CO NM		

Sample ID: SP # 7 - SURFACE (H902985-14)

BTEX 8021B mg/kg Analyzed By: BF

Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
Benzene*	<0.050	0.050	09/01/2019	ND	1.89	94.5	2.00	0.0227	
Toluene*	<0.050	0.050	09/01/2019	ND	1.88	94.1	2.00	1.35	
Ethylbenzene*	<0.050	0.050	09/01/2019	ND	1.91	95.5	2.00	0.0410	
Total Xylenes*	<0.150	0.150	09/01/2019	ND	5.71	95.2	6.00	1.11	
Total BTEX	<0.300	0.300	09/01/2019	ND					

Surrogate: 4-Bromofluorobenzene (PID *81.6 %* *73.3-129*

Chloride, SM4500Cl-B mg/kg Analyzed By: AC

Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
Chloride	**79200**	16.0	09/03/2019	ND	400	100	400	0.00	

TPH 8015M mg/kg Analyzed By: CK S-06

Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
GRO C6-C10*	<100	100	09/01/2019	ND	208	104	200	0.228	
DRO >C10-C28*	**17900**	100	09/01/2019	ND	215	107	200	1.93	
EXT DRO >C28-C36	**6940**	100	09/01/2019	ND					

Surrogate: 1-Chlorooctane *114 %* *41-142*

Surrogate: 1-Chlorooctadecane *1070 %* *37.6-147*

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Analytical Results For:

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Hobbs NM, 88240
Fax To: (575) 297-1477

Received:	08/28/2019	Sampling Date:	08/27/2019
Reported:	09/04/2019	Sampling Type:	Soil
Project Name:	JAMES A #11	Sampling Condition:	Cool & Intact
Project Number:	NONE GIVEN	Sample Received By:	Tamara Oldaker
Project Location:	COPC - EDDY CO NM		

Sample ID: SP # 7 - 1' (H902985-15)

Chloride, SM4500Cl-B **mg/kg** **Analyzed By: AC**

Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
Chloride	**21000**	16.0	09/03/2019	ND	400	100	400	0.00	

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Analytical Results For:

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Fax To: (575) 297-1477

Received:	08/28/2019	Sampling Date:	08/27/2019
Reported:	09/04/2019	Sampling Type:	Soil
Project Name:	JAMES A #11	Sampling Condition:	Cool & Intact
Project Number:	NONE GIVEN	Sample Received By:	Tamara Oldaker
Project Location:	COPC - EDDY CO NM		

Sample ID: SP # 8 - SURFACE (H902985-16)

BTEX 8021B mg/kg Analyzed By: BF

Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
Benzene*	<0.050	0.050	09/01/2019	ND	1.89	94.5	2.00	0.0227	
Toluene*	<0.050	0.050	09/01/2019	ND	1.88	94.1	2.00	1.35	
Ethylbenzene*	<0.050	0.050	09/01/2019	ND	1.91	95.5	2.00	0.0410	
Total Xylenes*	<0.150	0.150	09/01/2019	ND	5.71	95.2	6.00	1.11	
Total BTEX	<0.300	0.300	09/01/2019	ND					

Surrogate: 4-Bromofluorobenzene (PID *84.0 %* *73.3-129*

Chloride, SM4500Cl-B mg/kg Analyzed By: AC

Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
Chloride	**93600**	16.0	09/03/2019	ND	400	100	400	0.00	

TPH 8015M mg/kg Analyzed By: CK S-06

Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
GRO C6-C10*	<100	100	09/01/2019	ND	208	104	200	0.228	
DRO >C10-C28*	**18600**	100	09/01/2019	ND	215	107	200	1.93	
EXT DRO >C28-C36	**5790**	100	09/01/2019	ND					

Surrogate: 1-Chlorooctane *117 %* *41-142*

Surrogate: 1-Chlorooctadecane *975 %* *37.6-147*

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Celey D. Keene, Lab Director/Quality Manager

CARDINAL Laboratories

PHONE (575) 393-2326 ° 101 E. MARLAND ° HOBBS, NM 88240

Analytical Results For:

Conoco Phillips - Hobbs
JUSTIN WRIGHT
P. O. BOX 325
Hobbs NM, 88240
Fax To: (575) 297-1477

Received:	08/28/2019	Sampling Date:	08/27/2019
Reported:	09/04/2019	Sampling Type:	Soil
Project Name:	JAMES A #11	Sampling Condition:	Cool & Intact
Project Number:	NONE GIVEN	Sample Received By:	Tamara Oldaker
Project Location:	COPC - EDDY CO NM		

Sample ID: SP # 8 - 1' (H902985-17)

Chloride, SM4500Cl-B **mg/kg** **Analyzed By: AC**

Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
Chloride	**32400**	16.0	09/03/2019	ND	400	100	400	0.00	

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Analytical Results For:

Conoco Phillips - Hobbs
JUSTIN WRIGHT
P. O. BOX 325
Hobbs NM, 88240
Fax To: (575) 297-1477

Received:	08/28/2019	Sampling Date:	08/27/2019
Reported:	09/04/2019	Sampling Type:	Soil
Project Name:	JAMES A #11	Sampling Condition:	Cool & Intact
Project Number:	NONE GIVEN	Sample Received By:	Tamara Oldaker
Project Location:	COPC - EDDY CO NM		

Sample ID: SP # 9 - SURFACE (H902985-18)

BTEX 8021B mg/kg Analyzed By: BF

Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
Benzene*	<0.050	0.050	09/01/2019	ND	1.89	94.5	2.00	0.0227	
Toluene*	**0.054**	0.050	09/01/2019	ND	1.88	94.1	2.00	1.35	
Ethylbenzene*	<0.050	0.050	09/01/2019	ND	1.91	95.5	2.00	0.0410	
Total Xylenes*	<0.150	0.150	09/01/2019	ND	5.71	95.2	6.00	1.11	
Total BTEX	<0.300	0.300	09/01/2019	ND					

Surrogate: 4-Bromofluorobenzene (PID *84.3 %* *73.3-129*

Chloride, SM4500Cl-B mg/kg Analyzed By: AC

Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
Chloride	**120000**	16.0	09/03/2019	ND	400	100	400	0.00	

TPH 8015M mg/kg Analyzed By: CK S-06

Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
GRO C6-C10*	<50.0	50.0	09/01/2019	ND	208	104	200	0.228	
DRO >C10-C28*	**4440**	50.0	09/01/2019	ND	215	107	200	1.93	
EXT DRO >C28-C36	**1320**	50.0	09/01/2019	ND					

Surrogate: 1-Chlorooctane *129 %* *41-142*

Surrogate: 1-Chlorooctadecane *340 %* *37.6-147*

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Celey D. Keene

Celey D. Keene, Lab Director/Quality Manager

CARDINAL Laboratories

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Analytical Results For:

Conoco Phillips - Hobbs
JUSTIN WRIGHT
P. O. BOX 325
Hobbs NM, 88240
Fax To: (575) 297-1477

Received:	08/28/2019	Sampling Date:	08/27/2019
Reported:	09/04/2019	Sampling Type:	Soil
Project Name:	JAMES A #11	Sampling Condition:	Cool & Intact
Project Number:	NONE GIVEN	Sample Received By:	Tamara Oldaker
Project Location:	COPC - EDDY CO NM		

Sample ID: SP # 9 - 1' (H902985-19)

Chloride, SM4500Cl-B **mg/kg** **Analyzed By: AC**

Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
Chloride	**33200**	16.0	09/03/2019	ND	400	100	400	0.00	

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Notes and Definitions

S-06	The recovery of this surrogate is outside control limits due to sample dilution required from high analyte concentration and/or matrix interference's.
S-04	The surrogate recovery for this sample is outside of established control limits due to a sample matrix effect.
QR-03	The RPD value for the sample duplicate or MS/MSD was outside of QC acceptance limits due to matrix interference. QC batch accepted based on LCS and/or LCSD recovery and/or RPD values.
QM-07	The spike recovery was outside acceptance limits for the MS and/or MSD. The batch was accepted based on acceptable LCS recovery.
ND	Analyte NOT DETECTED at or above the reporting limit
RPD	Relative Percent Difference
**	Samples not received at proper temperature of 6°C or below.
***	Insufficient time to reach temperature.
-	Chloride by SM4500Cl-B does not require samples be received at or below 6°C
	Samples reported on an as received basis (wet) unless otherwise noted on report

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Celey D. Keene, Lab Director/Quality Manager

Page 52 of 249

CARDINAL LABORATORIES

101 East Marland, Hobbs, NM 88240
(575) 393-2326 Fax (575) 393-2476

Page____ of ____

Company Name:	ConocoPhillips
Project Manager:	Justin Wright
Address:	
City:	Hobbs
State:	NM
Zip:	88240
Phone #:	575-631-9092
Fax #:	
Project #:	
Project Owner:	ConocoPhillips
Project Name:	James A #11
Project Location:	Eddy County, NM
Sampler Name:	Justin Wright

BILL TO

P.O. #:	
Company:	ConocoPhillips
Attn:	
Address:	
City:	
State:	Zip:
Phone #:	
Fax #:	

ANALYSIS REQUEST

FOR LAB USE ONLY Lab I.D.	Sample I.D.	(G)RAB OR (C)OMP.	# CONTAINERS	MATRIX: GROUNDWATER	WASTEWATER	SOIL	OIL	SLUDGE	OTHER:	PRESERV.: ACID/BASE:	ICE / COOL	OTHER:	SAMPLING: DATE	TIME	Chlorides	BTEX	TPH
H902985- 1	SP#1-surface	G				✓					✓		8-27	9:48 AM	✓	✓	✓
2	SP#1-1'	G				✓					✓		8-27	9:50 AM	✓		
3	SP#2-surface	G				✓					✓		8-27	9:53 AM	✓	✓	✓
4	SP#2-1'	G				✓					✓		8-27	9:56 AM	✓		
5	SP#3-surface	G				✓					✓		8-27	10:00 AM	✓	✓	✓
6	SP#3-1'	G				✓					✓		8-27	10:04 AM	✓		
7	SP#3-2'	G				✓					✓		8-27	10:07 AM	✓		
8	SP#4-surface	G				✓					✓		8-27	10:10 AM	✓	✓	✓
9	SP#4-1'	G				✓					✓		8-27	10:14 AM	✓		
10	SP#5-surface	G				✓					✓		8-27	10:15 AM	✓	✓	✓

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Terms and Conditions: Interest will be charged on all accounts more than 30 days past due at the rate of 24% per annum from the original date of invoice, and all costs of collections, including attorney's fees.

Sampler Relinquished:	Date: 8-28-19	Received By: Tamara Oldaker	
Relinquished By:	Time: 12:15	Received By:	
	Date:		
	Time:		

Phone Result:	☐	No	Add'l Phone #:
Fax Result:	☐	No	Add'l Fax #:
REMARKS:			

Delivered By: (Circle One)	Temp.	Sample Condition: Cool	Intact	CHECKED BY: (Initials)
Sampler - UPS - Bus - Other:	-7.4c #99	☐ Yes ☐ No	☐ Yes ☐ No	TO.
Corrected	-7.0c			

† Cardinal cannot accept verbal changes. Please fax written changes to 575-393-2476.

Received by OCD: 3/5/2021 3:12:10 PM

Released to Imaging: 4/8/2021 11:24:56 AM

Page 53 of 249

CARDINAL LABORATORIES

101 East Marland, Hobbs, NM 88240
(575) 393-2326 Fax (575) 393-2476

Page____ of ____

Company Name: ConocoPhillips	BILL TO
Project Manager: Justin Wright	P.O. #:
Address:	Company: ConocoPhillips
City: Hobbs State: NM Zip: 88240	Attn:
Phone #: 575-631-9092 Fax #:	Address:
Project #: Project Owner: ConocoPhillips	City:
Project Name: James A #11	State: Zip:
Project Location: Eddy County, NM	Phone #:
Sampler Name: Justin Wright	Fax #:

ANALYSIS REQUEST

FOR LAB USE ONLY Lab I.D.	Sample I.D.	(G)RAB OR (C)OMP.	# CONTAINERS	MATRIX: GROUNDWATER	WASTEWATER	SOIL	OIL	SLUDGE	OTHER:	PRESERV.: ACID/BASE:	ICE / COOL	OTHER:	SAMPLING: DATE	TIME	Chlorides	BTEX	TPH
H902985-11	SP#5-1'	G				✓					✓		8-27	10:18 AM	✓		
12	SP#6-surface	G				✓					✓		8-27	10:21 AM	✓	✓	✓
13	SP#6-1'	G				✓					✓		8-27	10:25 AM	✓		
14	SP#7-surface	G				✓					✓		8-27	10:28 AM	✓	✓	✓
15	SP#7-1'	G				✓					✓		8-27	10:31 AM	✓		
16	SP#8-surface	G				✓					✓		8-27	10:35 AM	✓	✓	✓
17	SP#8-1'	G				✓					✓		8-27	10:39 AM	✓		
18	SP#9-surface	G				✓					✓		8-27	10:42 AM	✓	✓	✓
19	SP#9-1'	G				✓					✓		8-27	10:45 AM	✓		

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Terms and Conditions: Interest will be charged on all accounts more than 30 days past due at the rate of 24% per annum from the original date of invoice, and all costs of collections, including attorney's fees.

Sampler Relinquished:	Date: 8-28-19	Received By:	Phone Result: ☐ No Add'l Phone #:
Relinquished By:	Time: 12:15	Received By:	Fax Result: ☐ No Add'l Fax #:
	Date:		REMARKS:
	Time:		

Delivered By: (Circle One) Sampler - UPS - Bus - Other:

Temp. -7.4°C #197 Corrected -7.0°C

Sample Condition: Cool ☑ Yes ☐ No; Intact ☑ Yes ☐ No

CHECKED BY: (Initials) TC

† Cardinal cannot accept verbal changes. Please fax written changes to 575-393-2476.

Received by OCD: 3/5/2021 3:12:10 PM

Released to Imaging: 4/8/2021 11:24:56 AM

CARDINAL Laboratories

PHONE (575) 393-2326 ° 101 E. MARLAND ° HOBBS, NM 88240

October 16, 2019

JUSTIN WRIGHT

Conoco Phillips - Hobbs

P. O. BOX 325

Hobbs, NM 88240

RE: JAMES A #11

Enclosed are the results of analyses for samples received by the laboratory on 10/11/19 9:25.

Cardinal Laboratories is accredited through Texas NELAP under certificate number T104704398-18-11. Accreditation applies to drinking water, non-potable water and solid and chemical materials. All accredited analytes are denoted by an asterisk (*). For a complete list of accredited analytes and matrices visit the TCEQ website at www.tceq.texas.gov/field/qa/lab_accred_certif.html.

Cardinal Laboratories is accreditated through the State of Colorado Department of Public Health and Environment for:

Method EPA 552.2	Haloacetic Acids (HAA-5)
Method EPA 524.2	Total Trihalomethanes (TTHM)
Method EPA 524.4	Regulated VOCs (V1, V2, V3)

Accreditation applies to public drinking water matrices.

This report meets NELAP requirements and is made up of a cover page, analytical results, and a copy of the original chain-of-custody. If you have any questions concerning this report, please feel free to contact me.

Sincerely,

Celey D. Keene

Lab Director/Quality Manager

CARDINAL Laboratories

PHONE (575) 393-2326 ° 101 E. MARLAND ° HOBBS, NM 88240

Analytical Results For:

Conoco Phillips - Hobbs
JUSTIN WRIGHT
P. O. BOX 325
Hobbs NM, 88240
Fax To: (575) 297-1477

Received:	10/11/2019	Sampling Date:	10/09/2019
Reported:	10/16/2019	Sampling Type:	Soil
Project Name:	JAMES A #11	Sampling Condition:	Cool & Intact
Project Number:	TEST HOLES	Sample Received By:	Jodi Henson
Project Location:	COPC - EDDY CO NM		

Sample ID: SAMPLE #1 SURFACE (H903457-01)

BTEX 8021B mg/kg Analyzed By: BF

Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
Benzene*	<0.050	0.050	10/11/2019	ND	1.90	95.1	2.00	5.04	
Toluene*	<0.050	0.050	10/11/2019	ND	1.95	97.5	2.00	5.04	
Ethylbenzene*	<0.050	0.050	10/11/2019	ND	1.98	99.1	2.00	4.82	
Total Xylenes*	<0.150	0.150	10/11/2019	ND	5.92	98.7	6.00	5.20	
Total BTEX	<0.300	0.300	10/11/2019	ND					

Surrogate: 4-Bromofluorobenzene (PID *97.6 %* *73.3-129*

Chloride, SM4500Cl-B mg/kg Analyzed By: AC

Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
Chloride	**22800**	16.0	10/14/2019	ND	432	108	400	0.00	

TPH 8015M mg/kg Analyzed By: MS

Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
GRO C6-C10*	<10.0	10.0	10/11/2019	ND	211	105	200	1.52	
DRO >C10-C28*	<10.0	10.0	10/11/2019	ND	189	94.5	200	5.01	
EXT DRO >C28-C36	<10.0	10.0	10/11/2019	ND					

Surrogate: 1-Chlorooctane *89.7 %* *41-142*

Surrogate: 1-Chlorooctadecane *92.0 %* *37.6-147*

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CARDINAL Laboratories

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Analytical Results For:

Conoco Phillips - Hobbs
JUSTIN WRIGHT
P. O. BOX 325
Hobbs NM, 88240
Fax To: (575) 297-1477

Received:	10/11/2019	Sampling Date:	10/09/2019
Reported:	10/16/2019	Sampling Type:	Soil
Project Name:	JAMES A #11	Sampling Condition:	Cool & Intact
Project Number:	TEST HOLES	Sample Received By:	Jodi Henson
Project Location:	COPC - EDDY CO NM		

Sample ID: SAMPLE #1 2' (H903457-02)

Chloride, SM4500Cl-B **mg/kg** **Analyzed By: AC**

Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
Chloride	**4000**	16.0	10/14/2019	ND	432	108	400	0.00	

Sample ID: SAMPLE #1 4' (H903457-03)

Chloride, SM4500Cl-B **mg/kg** **Analyzed By: AC**

Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
Chloride	**1540**	16.0	10/14/2019	ND	432	108	400	0.00	

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Analytical Results For:

Conoco Phillips - Hobbs
JUSTIN WRIGHT
P. O. BOX 325
Hobbs NM, 88240
Fax To: (575) 297-1477

Received:	10/11/2019	Sampling Date:	10/09/2019
Reported:	10/16/2019	Sampling Type:	Soil
Project Name:	JAMES A #11	Sampling Condition:	Cool & Intact
Project Number:	TEST HOLES	Sample Received By:	Jodi Henson
Project Location:	COPC - EDDY CO NM		

Sample ID: SAMPLE #2 SURFACE (H903457-04)

BTEX 8021B mg/kg Analyzed By: BF

Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
Benzene*	<0.050	0.050	10/11/2019	ND	1.90	95.1	2.00	5.04	
Toluene*	<0.050	0.050	10/11/2019	ND	1.95	97.5	2.00	5.04	
Ethylbenzene*	<0.050	0.050	10/11/2019	ND	1.98	99.1	2.00	4.82	
Total Xylenes*	<0.150	0.150	10/11/2019	ND	5.92	98.7	6.00	5.20	
Total BTEX	<0.300	0.300	10/11/2019	ND					

Surrogate: 4-Bromofluorobenzene (PID *97.1 %* *73.3-129*

Chloride, SM4500Cl-B mg/kg Analyzed By: AC

Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
Chloride	**23200**	16.0	10/14/2019	ND	432	108	400	0.00	QM-07

TPH 8015M mg/kg Analyzed By: MS

Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
GRO C6-C10*	<10.0	10.0	10/11/2019	ND	211	105	200	1.52	
DRO >C10-C28*	<10.0	10.0	10/11/2019	ND	189	94.5	200	5.01	
EXT DRO >C28-C36	<10.0	10.0	10/11/2019	ND					

Surrogate: 1-Chlorooctane *94.6 %* *41-142*

Surrogate: 1-Chlorooctadecane *99.2 %* *37.6-147*

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Celey D. Keene, Lab Director/Quality Manager

CARDINAL Laboratories

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Analytical Results For:

Conoco Phillips - Hobbs
JUSTIN WRIGHT
P. O. BOX 325
Hobbs NM, 88240
Fax To: (575) 297-1477

Received:	10/11/2019	Sampling Date:	10/09/2019
Reported:	10/16/2019	Sampling Type:	Soil
Project Name:	JAMES A #11	Sampling Condition:	Cool & Intact
Project Number:	TEST HOLES	Sample Received By:	Jodi Henson
Project Location:	COPC - EDDY CO NM		

Sample ID: SAMPLE #2 2' (H903457-05)

Chloride, SM4500Cl-B **mg/kg** **Analyzed By: AC**

Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
Chloride	**1710**	16.0	10/14/2019	ND	432	108	400	0.00	

Sample ID: SAMPLE #2 4' (H903457-06)

Chloride, SM4500Cl-B **mg/kg** **Analyzed By: AC**

Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
Chloride	**1860**	16.0	10/14/2019	ND	432	108	400	0.00	

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PHONE (575) 393-2326 ° 101 E. MARLAND ° HOBBS, NM 88240

Analytical Results For:

Conoco Phillips - Hobbs
JUSTIN WRIGHT
P. O. BOX 325
Hobbs NM, 88240
Fax To: (575) 297-1477

Received:	10/11/2019	Sampling Date:	10/09/2019
Reported:	10/16/2019	Sampling Type:	Soil
Project Name:	JAMES A #11	Sampling Condition:	Cool & Intact
Project Number:	TEST HOLES	Sample Received By:	Jodi Henson
Project Location:	COPC - EDDY CO NM		

Sample ID: SAMPLE #3 SURFACE (H903457-07)

BTEX 8021B mg/kg Analyzed By: BF

Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
Benzene*	<0.050	0.050	10/11/2019	ND	1.90	95.1	2.00	5.04	
Toluene*	<0.050	0.050	10/11/2019	ND	1.95	97.5	2.00	5.04	
Ethylbenzene*	<0.050	0.050	10/11/2019	ND	1.98	99.1	2.00	4.82	
Total Xylenes*	<0.150	0.150	10/11/2019	ND	5.92	98.7	6.00	5.20	
Total BTEX	<0.300	0.300	10/11/2019	ND					

Surrogate: 4-Bromofluorobenzene (PID *97.4 %* *73.3-129*

Chloride, SM4500Cl-B mg/kg Analyzed By: AC

Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
Chloride	**20000**	16.0	10/14/2019	ND	432	108	400	0.00	

TPH 8015M mg/kg Analyzed By: MS S-06

Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
GRO C6-C10*	<50.0	50.0	10/14/2019	ND	211	106	200	8.32	
DRO >C10-C28*	**2690**	50.0	10/14/2019	ND	183	91.3	200	5.44	QR-03, QM-07
EXT DRO >C28-C36	**1140**	50.0	10/14/2019	ND					

Surrogate: 1-Chlorooctane *102 %* *41-142*

Surrogate: 1-Chlorooctadecane *243 %* *37.6-147*

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Hobbs NM, 88240
Fax To: (575) 297-1477

Received:	10/11/2019	Sampling Date:	10/09/2019
Reported:	10/16/2019	Sampling Type:	Soil
Project Name:	JAMES A #11	Sampling Condition:	Cool & Intact
Project Number:	TEST HOLES	Sample Received By:	Jodi Henson
Project Location:	COPC - EDDY CO NM		

Sample ID: SAMPLE #3 2' (H903457-08)

Chloride, SM4500Cl-B **mg/kg** **Analyzed By: AC**

Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
Chloride	**1550**	16.0	10/14/2019	ND	432	108	400	0.00	

Sample ID: SAMPLE #3 4' (H903457-09)

Chloride, SM4500Cl-B **mg/kg** **Analyzed By: AC**

Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
Chloride	**720**	16.0	10/14/2019	ND	432	108	400	0.00	

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Fax To: (575) 297-1477

Received:	10/11/2019	Sampling Date:	10/09/2019
Reported:	10/16/2019	Sampling Type:	Soil
Project Name:	JAMES A #11	Sampling Condition:	Cool & Intact
Project Number:	TEST HOLES	Sample Received By:	Jodi Henson
Project Location:	COPC - EDDY CO NM		

Sample ID: SAMPLE #4 SURFACE (H903457-10)

BTEX 8021B mg/kg Analyzed By: BF

Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
Benzene*	<0.050	0.050	10/11/2019	ND	1.90	95.1	2.00	5.04	
Toluene*	<0.050	0.050	10/11/2019	ND	1.95	97.5	2.00	5.04	
Ethylbenzene*	<0.050	0.050	10/11/2019	ND	1.98	99.1	2.00	4.82	
Total Xylenes*	<0.150	0.150	10/11/2019	ND	5.92	98.7	6.00	5.20	
Total BTEX	<0.300	0.300	10/11/2019	ND					

Surrogate: 4-Bromofluorobenzene (PID *97.8 %* *73.3-129*

Chloride, SM4500Cl-B mg/kg Analyzed By: AC

Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
Chloride	**11200**	16.0	10/14/2019	ND	432	108	400	0.00	

TPH 8015M mg/kg Analyzed By: MS S-06

Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
GRO C6-C10*	<50.0	50.0	10/14/2019	ND	211	106	200	8.32	
DRO >C10-C28*	**3450**	50.0	10/14/2019	ND	183	91.3	200	5.44	
EXT DRO >C28-C36	**1790**	50.0	10/14/2019	ND					

Surrogate: 1-Chlorooctane *103 %* *41-142*

Surrogate: 1-Chlorooctadecane *292 %* *37.6-147*

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Fax To: (575) 297-1477

Received:	10/11/2019	Sampling Date:	10/09/2019
Reported:	10/16/2019	Sampling Type:	Soil
Project Name:	JAMES A #11	Sampling Condition:	Cool & Intact
Project Number:	TEST HOLES	Sample Received By:	Jodi Henson
Project Location:	COPC - EDDY CO NM		

Sample ID: SAMPLE #4 2' (H903457-11)

Chloride, SM4500Cl-B **mg/kg** **Analyzed By: AC**

Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
Chloride	**1520**	16.0	10/14/2019	ND	432	108	400	0.00	

Sample ID: SAMPLE #4 4' (H903457-12)

Chloride, SM4500Cl-B **mg/kg** **Analyzed By: AC**

Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
Chloride	**1150**	16.0	10/14/2019	ND	432	108	400	0.00	

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Received:	10/11/2019	Sampling Date:	10/09/2019
Reported:	10/16/2019	Sampling Type:	Soil
Project Name:	JAMES A #11	Sampling Condition:	Cool & Intact
Project Number:	TEST HOLES	Sample Received By:	Jodi Henson
Project Location:	COPC - EDDY CO NM		

Sample ID: SAMPLE #5 SURFACE (H903457-13)

BTEX 8021B mg/kg Analyzed By: BF

Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
Benzene*	<0.050	0.050	10/11/2019	ND	1.90	95.1	2.00	5.04	
Toluene*	<0.050	0.050	10/11/2019	ND	1.95	97.5	2.00	5.04	
Ethylbenzene*	<0.050	0.050	10/11/2019	ND	1.98	99.1	2.00	4.82	
Total Xylenes*	<0.150	0.150	10/11/2019	ND	5.92	98.7	6.00	5.20	
Total BTEX	<0.300	0.300	10/11/2019	ND					

Surrogate: 4-Bromofluorobenzene (PID *97.7 %* *73.3-129*

Chloride, SM4500Cl-B mg/kg Analyzed By: AC

Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
Chloride	**42000**	16.0	10/14/2019	ND	432	108	400	0.00	

TPH 8015M mg/kg Analyzed By: MS S-04

Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
GRO C6-C10*	<10.0	10.0	10/14/2019	ND	211	106	200	8.32	
DRO >C10-C28*	**2620**	10.0	10/14/2019	ND	183	91.3	200	5.44	
EXT DRO >C28-C36	**959**	10.0	10/14/2019	ND					

Surrogate: 1-Chlorooctane *93.0 %* *41-142*

Surrogate: 1-Chlorooctadecane *216 %* *37.6-147*

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Hobbs NM, 88240
Fax To: (575) 297-1477

Received:	10/11/2019	Sampling Date:	10/09/2019
Reported:	10/16/2019	Sampling Type:	Soil
Project Name:	JAMES A #11	Sampling Condition:	Cool & Intact
Project Number:	TEST HOLES	Sample Received By:	Jodi Henson
Project Location:	COPC - EDDY CO NM		

Sample ID: SAMPLE #5 2' (H903457-14)

Chloride, SM4500Cl-B **mg/kg** **Analyzed By: AC**

Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
Chloride	**2030**	16.0	10/14/2019	ND	432	108	400	0.00	

Sample ID: SAMPLE #5 4' (H903457-15)

Chloride, SM4500Cl-B **mg/kg** **Analyzed By: AC**

Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
Chloride	**512**	16.0	10/14/2019	ND	432	108	400	0.00	

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Analytical Results For:

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Hobbs NM, 88240
Fax To: (575) 297-1477

Received:	10/11/2019	Sampling Date:	10/09/2019
Reported:	10/16/2019	Sampling Type:	Soil
Project Name:	JAMES A #11	Sampling Condition:	Cool & Intact
Project Number:	TEST HOLES	Sample Received By:	Jodi Henson
Project Location:	COPC - EDDY CO NM		

Sample ID: SAMPLE #6 SURFACE (H903457-16)

BTEX 8021B mg/kg Analyzed By: BF

Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
Benzene*	<0.050	0.050	10/11/2019	ND	1.90	95.1	2.00	5.04	
Toluene*	<0.050	0.050	10/11/2019	ND	1.95	97.5	2.00	5.04	
Ethylbenzene*	<0.050	0.050	10/11/2019	ND	1.98	99.1	2.00	4.82	
Total Xylenes*	<0.150	0.150	10/11/2019	ND	5.92	98.7	6.00	5.20	
Total BTEX	<0.300	0.300	10/11/2019	ND					

Surrogate: 4-Bromofluorobenzene (PID *99.0 %* *73.3-129*

Chloride, SM4500Cl-B mg/kg Analyzed By: AC

Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
Chloride	**11100**	16.0	10/14/2019	ND	432	108	400	0.00	

TPH 8015M mg/kg Analyzed By: MS S-04

Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
GRO C6-C10*	<10.0	10.0	10/14/2019	ND	211	106	200	8.32	
DRO >C10-C28*	**1810**	10.0	10/14/2019	ND	183	91.3	200	5.44	
EXT DRO >C28-C36	**833**	10.0	10/14/2019	ND					

Surrogate: 1-Chlorooctane *87.8 %* *41-142*

Surrogate: 1-Chlorooctadecane *178 %* *37.6-147*

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Analytical Results For:

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Hobbs NM, 88240
Fax To: (575) 297-1477

Received:	10/11/2019	Sampling Date:	10/09/2019
Reported:	10/16/2019	Sampling Type:	Soil
Project Name:	JAMES A #11	Sampling Condition:	Cool & Intact
Project Number:	TEST HOLES	Sample Received By:	Jodi Henson
Project Location:	COPC - EDDY CO NM		

Sample ID: SAMPLE #6 2' (H903457-17)

Chloride, SM4500Cl-B **mg/kg** **Analyzed By: AC**

Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
Chloride	**672**	16.0	10/14/2019	ND	432	108	400	0.00	

Sample ID: SAMPLE #6 4' (H903457-18)

Chloride, SM4500Cl-B **mg/kg** **Analyzed By: AC**

Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
Chloride	**224**	16.0	10/14/2019	ND	432	108	400	0.00	

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Fax To: (575) 297-1477

Received:	10/11/2019	Sampling Date:	10/09/2019
Reported:	10/16/2019	Sampling Type:	Soil
Project Name:	JAMES A #11	Sampling Condition:	Cool & Intact
Project Number:	TEST HOLES	Sample Received By:	Jodi Henson
Project Location:	COPC - EDDY CO NM		

Sample ID: SAMPLE #7 SURFACE (H903457-19)

BTEX 8021B mg/kg Analyzed By: BF

Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
Benzene*	<0.050	0.050	10/11/2019	ND	1.90	95.1	2.00	5.04	
Toluene*	<0.050	0.050	10/11/2019	ND	1.95	97.5	2.00	5.04	
Ethylbenzene*	<0.050	0.050	10/11/2019	ND	1.98	99.1	2.00	4.82	
Total Xylenes*	<0.150	0.150	10/11/2019	ND	5.92	98.7	6.00	5.20	
Total BTEX	<0.300	0.300	10/11/2019	ND					

Surrogate: 4-Bromofluorobenzene (PID *97.3 %* *73.3-129*

Chloride, SM4500Cl-B mg/kg Analyzed By: AC

Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
Chloride	**26600**	16.0	10/14/2019	ND	432	108	400	0.00	

TPH 8015M mg/kg Analyzed By: MS S-06

Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
GRO C6-C10*	<50.0	50.0	10/14/2019	ND	211	106	200	8.32	
DRO >C10-C28*	**5890**	50.0	10/14/2019	ND	183	91.3	200	5.44	
EXT DRO >C28-C36	**2330**	50.0	10/14/2019	ND					

Surrogate: 1-Chlorooctane *99.9 %* *41-142*

Surrogate: 1-Chlorooctadecane *378 %* *37.6-147*

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Hobbs NM, 88240
Fax To: (575) 297-1477

Received:	10/11/2019	Sampling Date:	10/09/2019
Reported:	10/16/2019	Sampling Type:	Soil
Project Name:	JAMES A #11	Sampling Condition:	Cool & Intact
Project Number:	TEST HOLES	Sample Received By:	Jodi Henson
Project Location:	COPC - EDDY CO NM		

Sample ID: SAMPLE #7 2' (H903457-20)

Chloride, SM4500Cl-B **mg/kg** **Analyzed By: AC**

Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
Chloride	**720**	16.0	10/14/2019	ND	432	108	400	0.00	

Sample ID: SAMPLE #7 4' (H903457-21)

Chloride, SM4500Cl-B **mg/kg** **Analyzed By: AC**

Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
Chloride	**128**	16.0	10/14/2019	ND	432	108	400	0.00	

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Celey D. Keene, Lab Director/Quality Manager

CARDINAL Laboratories

PHONE (575) 393-2326 ° 101 E. MARLAND ° HOBBS, NM 88240

Analytical Results For:

Conoco Phillips - Hobbs
JUSTIN WRIGHT
P. O. BOX 325
Hobbs NM, 88240
Fax To: (575) 297-1477

Received:	10/11/2019	Sampling Date:	10/09/2019
Reported:	10/16/2019	Sampling Type:	Soil
Project Name:	JAMES A #11	Sampling Condition:	Cool & Intact
Project Number:	TEST HOLES	Sample Received By:	Jodi Henson
Project Location:	COPC - EDDY CO NM		

Sample ID: SAMPLE #8 SURFACE (H903457-22)

BTEX 8021B mg/kg Analyzed By: BF

Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
Benzene*	<0.050	0.050	10/11/2019	ND	1.90	95.1	2.00	5.04	
Toluene*	<0.050	0.050	10/11/2019	ND	1.95	97.5	2.00	5.04	
Ethylbenzene*	<0.050	0.050	10/11/2019	ND	1.98	99.1	2.00	4.82	
Total Xylenes*	<0.150	0.150	10/11/2019	ND	5.92	98.7	6.00	5.20	
Total BTEX	<0.300	0.300	10/11/2019	ND					

Surrogate: 4-Bromofluorobenzene (PID *98.9 %* *73.3-129*

Chloride, SM4500Cl-B mg/kg Analyzed By: AC

Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
Chloride	**32400**	16.0	10/14/2019	ND	432	108	400	0.00	

TPH 8015M mg/kg Analyzed By: MS S-06

Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
GRO C6-C10*	<50.0	50.0	10/14/2019	ND	211	106	200	8.32	
DRO >C10-C28*	**12500**	50.0	10/14/2019	ND	183	91.3	200	5.44	
EXT DRO >C28-C36	**3870**	50.0	10/14/2019	ND					

Surrogate: 1-Chlorooctane *90.9 %* *41-142*

Surrogate: 1-Chlorooctadecane *588 %* *37.6-147*

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Analytical Results For:

Conoco Phillips - Hobbs
JUSTIN WRIGHT
P. O. BOX 325
Hobbs NM, 88240
Fax To: (575) 297-1477

Received:	10/11/2019	Sampling Date:	10/09/2019
Reported:	10/16/2019	Sampling Type:	Soil
Project Name:	JAMES A #11	Sampling Condition:	Cool & Intact
Project Number:	TEST HOLES	Sample Received By:	Jodi Henson
Project Location:	COPC - EDDY CO NM		

Sample ID: SAMPLE #8 2' (H903457-23)

Chloride, SM4500Cl-B **mg/kg** **Analyzed By: AC**

Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
Chloride	**496**	16.0	10/14/2019	ND	432	108	400	0.00	

Sample ID: SAMPLE #8 4' (H903457-24)

Chloride, SM4500Cl-B **mg/kg** **Analyzed By: AC**

Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
Chloride	**64.0**	16.0	10/15/2019	ND	416	104	400	0.00	

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Analytical Results For:

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Hobbs NM, 88240
Fax To: (575) 297-1477

Received:	10/11/2019	Sampling Date:	10/09/2019
Reported:	10/16/2019	Sampling Type:	Soil
Project Name:	JAMES A #11	Sampling Condition:	Cool & Intact
Project Number:	TEST HOLES	Sample Received By:	Jodi Henson
Project Location:	COPC - EDDY CO NM		

Sample ID: SAMPLE #9 SURFACE (H903457-25)

BTEX 8021B mg/kg Analyzed By: BF

Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
Benzene*	<0.050	0.050	10/11/2019	ND	1.90	95.1	2.00	5.04	
Toluene*	<0.050	0.050	10/11/2019	ND	1.95	97.5	2.00	5.04	
Ethylbenzene*	<0.050	0.050	10/11/2019	ND	1.98	99.1	2.00	4.82	
Total Xylenes*	**0.461**	0.150	10/11/2019	ND	5.92	98.7	6.00	5.20	
Total BTEX	**0.461**	0.300	10/11/2019	ND					

Surrogate: 4-Bromofluorobenzene (PID *102 %* *73.3-129*

Chloride, SM4500Cl-B mg/kg Analyzed By: AC

Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
Chloride	**13200**	16.0	10/15/2019	ND	416	104	400	0.00	

TPH 8015M mg/kg Analyzed By: MS S-06

Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
GRO C6-C10*	<50.0	50.0	10/14/2019	ND	211	106	200	8.32	
DRO >C10-C28*	**3410**	50.0	10/14/2019	ND	183	91.3	200	5.44	
EXT DRO >C28-C36	**891**	50.0	10/14/2019	ND					

Surrogate: 1-Chlorooctane *98.2 %* *41-142*

Surrogate: 1-Chlorooctadecane *228 %* *37.6-147*

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Celey D. Keene, Lab Director/Quality Manager

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Analytical Results For:

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JUSTIN WRIGHT
P. O. BOX 325
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Fax To: (575) 297-1477

Received:	10/11/2019	Sampling Date:	10/09/2019
Reported:	10/16/2019	Sampling Type:	Soil
Project Name:	JAMES A #11	Sampling Condition:	Cool & Intact
Project Number:	TEST HOLES	Sample Received By:	Jodi Henson
Project Location:	COPC - EDDY CO NM		

Sample ID: SAMPLE #9 2' (H903457-26)

Chloride, SM4500Cl-B **mg/kg** **Analyzed By: AC**

Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
Chloride	**6800**	16.0	10/15/2019	ND	416	104	400	0.00	

Sample ID: SAMPLE #9 4' (H903457-27)

Chloride, SM4500Cl-B **mg/kg** **Analyzed By: AC**

Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
Chloride	**720**	16.0	10/15/2019	ND	416	104	400	0.00	

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Received:	10/11/2019	Sampling Date:	10/09/2019
Reported:	10/16/2019	Sampling Type:	Soil
Project Name:	JAMES A #11	Sampling Condition:	Cool & Intact
Project Number:	TEST HOLES	Sample Received By:	Jodi Henson
Project Location:	COPC - EDDY CO NM		

Sample ID: SAMPLE #10 SURFACE (H903457-28)

BTEX 8021B mg/kg Analyzed By: BF

Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
Benzene*	<0.050	0.050	10/11/2019	ND	1.90	95.1	2.00	5.04	
Toluene*	<0.050	0.050	10/11/2019	ND	1.95	97.5	2.00	5.04	
Ethylbenzene*	<0.050	0.050	10/11/2019	ND	1.98	99.1	2.00	4.82	
Total Xylenes*	**0.171**	0.150	10/11/2019	ND	5.92	98.7	6.00	5.20	
Total BTEX	<0.300	0.300	10/11/2019	ND					

Surrogate: 4-Bromofluorobenzene (PID *106 %* *73.3-129*

Chloride, SM4500Cl-B mg/kg Analyzed By: AC

Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
Chloride	**160**	16.0	10/15/2019	ND	416	104	400	0.00	

TPH 8015M mg/kg Analyzed By: MS

Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
GRO C6-C10*	<10.0	10.0	10/14/2019	ND	211	106	200	8.32	
DRO >C10-C28*	<10.0	10.0	10/14/2019	ND	183	91.3	200	5.44	
EXT DRO >C28-C36	<10.0	10.0	10/14/2019	ND					

Surrogate: 1-Chlorooctane *82.1 %* *41-142*

Surrogate: 1-Chlorooctadecane *77.9 %* *37.6-147*

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Celey D. Keene, Lab Director/Quality Manager

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Analytical Results For:

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JUSTIN WRIGHT
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Hobbs NM, 88240
Fax To: (575) 297-1477

Received:	10/11/2019	Sampling Date:	10/09/2019
Reported:	10/16/2019	Sampling Type:	Soil
Project Name:	JAMES A #11	Sampling Condition:	Cool & Intact
Project Number:	TEST HOLES	Sample Received By:	Jodi Henson
Project Location:	COPC - EDDY CO NM		

Sample ID: SAMPLE #10 2' (H903457-29)

Chloride, SM4500Cl-B **mg/kg** **Analyzed By: AC**

Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
Chloride	**20800**	16.0	10/15/2019	ND	416	104	400	0.00	

Sample ID: SAMPLE #10 4' (H903457-30)

Chloride, SM4500Cl-B **mg/kg** **Analyzed By: AC**

Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
Chloride	**832**	16.0	10/15/2019	ND	416	104	400	0.00	

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Analytical Results For:

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Hobbs NM, 88240
Fax To: (575) 297-1477

Received:	10/11/2019	Sampling Date:	10/09/2019
Reported:	10/16/2019	Sampling Type:	Soil
Project Name:	JAMES A #11	Sampling Condition:	Cool & Intact
Project Number:	TEST HOLES	Sample Received By:	Jodi Henson
Project Location:	COPC - EDDY CO NM		

Sample ID: SAMPLE #11 SURFACE (H903457-31)

BTEX 8021B mg/kg Analyzed By: BF

Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
Benzene*	<0.050	0.050	10/11/2019	ND	1.90	95.1	2.00	5.04	
Toluene*	<0.050	0.050	10/11/2019	ND	1.95	97.5	2.00	5.04	
Ethylbenzene*	<0.050	0.050	10/11/2019	ND	1.98	99.1	2.00	4.82	
Total Xylenes*	<0.150	0.150	10/11/2019	ND	5.92	98.7	6.00	5.20	
Total BTEX	<0.300	0.300	10/11/2019	ND					

Surrogate: 4-Bromofluorobenzene (PID *99.0 %* *73.3-129*

Chloride, SM4500Cl-B mg/kg Analyzed By: AC

Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
Chloride	**1260**	16.0	10/15/2019	ND	416	104	400	0.00	

TPH 8015M mg/kg Analyzed By: MS

Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
GRO C6-C10*	<10.0	10.0	10/14/2019	ND	211	106	200	8.32	
DRO >C10-C28*	<10.0	10.0	10/14/2019	ND	183	91.3	200	5.44	
EXT DRO >C28-C36	<10.0	10.0	10/14/2019	ND					

Surrogate: 1-Chlorooctane *84.0 %* *41-142*

Surrogate: 1-Chlorooctadecane *87.8 %* *37.6-147*

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Celey D. Keene, Lab Director/Quality Manager

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Analytical Results For:

Conoco Phillips - Hobbs
JUSTIN WRIGHT
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Hobbs NM, 88240
Fax To: (575) 297-1477

Received:	10/11/2019	Sampling Date:	10/09/2019
Reported:	10/16/2019	Sampling Type:	Soil
Project Name:	JAMES A #11	Sampling Condition:	Cool & Intact
Project Number:	TEST HOLES	Sample Received By:	Jodi Henson
Project Location:	COPC - EDDY CO NM		

Sample ID: SAMPLE #11 2' (H903457-32)

Chloride, SM4500Cl-B **mg/kg** **Analyzed By: AC**

Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
Chloride	**7600**	16.0	10/15/2019	ND	416	104	400	0.00	

Sample ID: SAMPLE #11 4' (H903457-33)

Chloride, SM4500Cl-B **mg/kg** **Analyzed By: AC**

Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
Chloride	**784**	16.0	10/15/2019	ND	416	104	400	0.00	

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Hobbs NM, 88240
Fax To: (575) 297-1477

Received:	10/11/2019	Sampling Date:	10/09/2019
Reported:	10/16/2019	Sampling Type:	Soil
Project Name:	JAMES A #11	Sampling Condition:	Cool & Intact
Project Number:	TEST HOLES	Sample Received By:	Jodi Henson
Project Location:	COPC - EDDY CO NM		

Sample ID: SAMPLE #12 SURFACE (H903457-34)

BTEX 8021B mg/kg Analyzed By: BF

Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
Benzene*	<0.050	0.050	10/11/2019	ND	1.90	95.1	2.00	5.04	
Toluene*	<0.050	0.050	10/11/2019	ND	1.95	97.5	2.00	5.04	
Ethylbenzene*	<0.050	0.050	10/11/2019	ND	1.98	99.1	2.00	4.82	
Total Xylenes*	<0.150	0.150	10/11/2019	ND	5.92	98.7	6.00	5.20	
Total BTEX	<0.300	0.300	10/11/2019	ND					

Surrogate: 4-Bromofluorobenzene (PID *96.8 %* *73.3-129*

Chloride, SM4500Cl-B mg/kg Analyzed By: AC

Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
Chloride	**7920**	16.0	10/15/2019	ND	416	104	400	0.00	

TPH 8015M mg/kg Analyzed By: MS S-04

Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
GRO C6-C10*	<10.0	10.0	10/14/2019	ND	211	106	200	8.32	
DRO >C10-C28*	**1580**	10.0	10/14/2019	ND	183	91.3	200	5.44	
EXT DRO >C28-C36	**905**	10.0	10/14/2019	ND					

Surrogate: 1-Chlorooctane *119 %* *41-142*

Surrogate: 1-Chlorooctadecane *205 %* *37.6-147*

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Hobbs NM, 88240
Fax To: (575) 297-1477

Received:	10/11/2019	Sampling Date:	10/09/2019
Reported:	10/16/2019	Sampling Type:	Soil
Project Name:	JAMES A #11	Sampling Condition:	Cool & Intact
Project Number:	TEST HOLES	Sample Received By:	Jodi Henson
Project Location:	COPC - EDDY CO NM		

Sample ID: SAMPLE #12 2' (H903457-35)

Chloride, SM4500Cl-B **mg/kg** **Analyzed By: AC**

Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
Chloride	**5200**	16.0	10/15/2019	ND	416	104	400	0.00	

Sample ID: SAMPLE #12 4' (H903457-36)

Chloride, SM4500Cl-B **mg/kg** **Analyzed By: AC**

Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
Chloride	**3840**	16.0	10/15/2019	ND	416	104	400	0.00	

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Analytical Results For:

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Hobbs NM, 88240
Fax To: (575) 297-1477

Received:	10/11/2019	Sampling Date:	10/09/2019
Reported:	10/16/2019	Sampling Type:	Soil
Project Name:	JAMES A #11	Sampling Condition:	Cool & Intact
Project Number:	TEST HOLES	Sample Received By:	Jodi Henson
Project Location:	COPC - EDDY CO NM		

Sample ID: SAMPLE #13 SURFACE (H903457-37)

BTEX 8021B mg/kg Analyzed By: BF

Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
Benzene*	<0.050	0.050	10/11/2019	ND	1.90	95.1	2.00	5.04	
Toluene*	<0.050	0.050	10/11/2019	ND	1.95	97.5	2.00	5.04	
Ethylbenzene*	<0.050	0.050	10/11/2019	ND	1.98	99.1	2.00	4.82	
Total Xylenes*	<0.150	0.150	10/11/2019	ND	5.92	98.7	6.00	5.20	
Total BTEX	<0.300	0.300	10/11/2019	ND					

Surrogate: 4-Bromofluorobenzene (PID *97.9 %* *73.3-129*

Chloride, SM4500Cl-B mg/kg Analyzed By: AC

Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
Chloride	**25400**	16.0	10/15/2019	ND	416	104	400	0.00	

TPH 8015M mg/kg Analyzed By: MS

Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
GRO C6-C10*	<10.0	10.0	10/14/2019	ND	211	106	200	8.32	
DRO >C10-C28*	**150**	10.0	10/14/2019	ND	183	91.3	200	5.44	
EXT DRO >C28-C36	**72.1**	10.0	10/14/2019	ND					

Surrogate: 1-Chlorooctane *84.7 %* *41-142*

Surrogate: 1-Chlorooctadecane *97.5 %* *37.6-147*

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Celey D. Keene

Celey D. Keene, Lab Director/Quality Manager

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Analytical Results For:

Conoco Phillips - Hobbs
JUSTIN WRIGHT
P. O. BOX 325
Hobbs NM, 88240
Fax To: (575) 297-1477

Received:	10/11/2019	Sampling Date:	10/09/2019
Reported:	10/16/2019	Sampling Type:	Soil
Project Name:	JAMES A #11	Sampling Condition:	Cool & Intact
Project Number:	TEST HOLES	Sample Received By:	Jodi Henson
Project Location:	COPC - EDDY CO NM		

Sample ID: SAMPLE #13 2' (H903457-38)

Chloride, SM4500Cl-B **mg/kg** **Analyzed By: AC**

Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
Chloride	**3560**	16.0	10/15/2019	ND	416	104	400	0.00	

Sample ID: SAMPLE #13 4' (H903457-39)

Chloride, SM4500Cl-B **mg/kg** **Analyzed By: AC**

Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
Chloride	**3200**	16.0	10/15/2019	ND	416	104	400	0.00	

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Analytical Results For:

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JUSTIN WRIGHT
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Hobbs NM, 88240
Fax To: (575) 297-1477

Received:	10/11/2019	Sampling Date:	10/09/2019
Reported:	10/16/2019	Sampling Type:	Soil
Project Name:	JAMES A #11	Sampling Condition:	Cool & Intact
Project Number:	TEST HOLES	Sample Received By:	Jodi Henson
Project Location:	COPC - EDDY CO NM		

Sample ID: SAMPLE #14 SURFACE (H903457-40)

BTEX 8021B mg/kg Analyzed By: BF

Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
Benzene*	<0.050	0.050	10/14/2019	ND	1.74	86.8	2.00	4.27	
Toluene*	<0.050	0.050	10/14/2019	ND	1.84	92.2	2.00	2.63	
Ethylbenzene*	<0.050	0.050	10/14/2019	ND	1.81	90.3	2.00	3.71	
Total Xylenes*	<0.150	0.150	10/14/2019	ND	5.59	93.2	6.00	3.56	
Total BTEX	<0.300	0.300	10/14/2019	ND					

Surrogate: 4-Bromofluorobenzene (PID *100 %* *73.3-129*

Chloride, SM4500Cl-B mg/kg Analyzed By: AC

Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
Chloride	**23000**	16.0	10/15/2019	ND	416	104	400	0.00	

TPH 8015M mg/kg Analyzed By: MS S-04

Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
GRO C6-C10*	<10.0	10.0	10/14/2019	ND	211	106	200	8.32	
DRO >C10-C28*	**1570**	10.0	10/14/2019	ND	183	91.3	200	5.44	
EXT DRO >C28-C36	**909**	10.0	10/14/2019	ND					

Surrogate: 1-Chlorooctane *86.3 %* *41-142*

Surrogate: 1-Chlorooctadecane *177 %* *37.6-147*

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Analytical Results For:

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JUSTIN WRIGHT
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Fax To: (575) 297-1477

Received:	10/11/2019	Sampling Date:	10/09/2019
Reported:	10/16/2019	Sampling Type:	Soil
Project Name:	JAMES A #11	Sampling Condition:	Cool & Intact
Project Number:	TEST HOLES	Sample Received By:	Jodi Henson
Project Location:	COPC - EDDY CO NM		

Sample ID: SAMPLE #14 2' (H903457-41)

Chloride, SM4500Cl-B **mg/kg** **Analyzed By: AC**

Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
Chloride	**640**	16.0	10/15/2019	ND	416	104	400	0.00	

Sample ID: SAMPLE #14 4' (H903457-42)

Chloride, SM4500Cl-B **mg/kg** **Analyzed By: AC**

Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
Chloride	**1250**	16.0	10/15/2019	ND	416	104	400	0.00	

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Received:	10/11/2019	Sampling Date:	10/09/2019
Reported:	10/16/2019	Sampling Type:	Soil
Project Name:	JAMES A #11	Sampling Condition:	Cool & Intact
Project Number:	TEST HOLES	Sample Received By:	Jodi Henson
Project Location:	COPC - EDDY CO NM		

Sample ID: SAMPLE #15 SURFACE (H903457-43)

BTEX 8021B mg/kg Analyzed By: BF

Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
Benzene*	<0.050	0.050	10/14/2019	ND	1.74	86.8	2.00	4.27	
Toluene*	<0.050	0.050	10/14/2019	ND	1.84	92.2	2.00	2.63	
Ethylbenzene*	<0.050	0.050	10/14/2019	ND	1.81	90.3	2.00	3.71	
Total Xylenes*	<0.150	0.150	10/14/2019	ND	5.59	93.2	6.00	3.56	
Total BTEX	<0.300	0.300	10/14/2019	ND					

Surrogate: 4-Bromofluorobenzene (PID *101 %* *73.3-129*

Chloride, SM4500Cl-B mg/kg Analyzed By: AC

Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
Chloride	**27400**	16.0	10/15/2019	ND	416	104	400	0.00	

TPH 8015M mg/kg Analyzed By: MS S-06

Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
GRO C6-C10*	<50.0	50.0	10/14/2019	ND	211	106	200	8.32	
DRO >C10-C28*	**7840**	50.0	10/14/2019	ND	183	91.3	200	5.44	
EXT DRO >C28-C36	**3790**	50.0	10/14/2019	ND					

Surrogate: 1-Chlorooctane *87.8 %* *41-142*

Surrogate: 1-Chlorooctadecane *474 %* *37.6-147*

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Hobbs NM, 88240
Fax To: (575) 297-1477

Received:	10/11/2019	Sampling Date:	10/09/2019
Reported:	10/16/2019	Sampling Type:	Soil
Project Name:	JAMES A #11	Sampling Condition:	Cool & Intact
Project Number:	TEST HOLES	Sample Received By:	Jodi Henson
Project Location:	COPC - EDDY CO NM		

Sample ID: SAMPLE #15 2' (H903457-44)

Chloride, SM4500Cl-B **mg/kg** **Analyzed By: AC**

Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
Chloride	**2500**	16.0	10/15/2019	ND	400	100	400	3.92	QM-07

Sample ID: SAMPLE #15 4' (H903457-45)

Chloride, SM4500Cl-B **mg/kg** **Analyzed By: AC**

Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
Chloride	**768**	16.0	10/15/2019	ND	400	100	400	3.92	

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Fax To: (575) 297-1477

Received:	10/11/2019	Sampling Date:	10/09/2019
Reported:	10/16/2019	Sampling Type:	Soil
Project Name:	JAMES A #11	Sampling Condition:	Cool & Intact
Project Number:	TEST HOLES	Sample Received By:	Jodi Henson
Project Location:	COPC - EDDY CO NM		

Sample ID: SAMPLE #16 SURFACE (H903457-46)

BTEX 8021B mg/kg Analyzed By: BF

Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
Benzene*	<0.050	0.050	10/14/2019	ND	1.74	86.8	2.00	4.27	
Toluene*	<0.050	0.050	10/14/2019	ND	1.84	92.2	2.00	2.63	
Ethylbenzene*	<0.050	0.050	10/14/2019	ND	1.81	90.3	2.00	3.71	
Total Xylenes*	<0.150	0.150	10/14/2019	ND	5.59	93.2	6.00	3.56	
Total BTEX	<0.300	0.300	10/14/2019	ND					

Surrogate: 4-Bromofluorobenzene (PID *100 %* *73.3-129*

Chloride, SM4500Cl-B mg/kg Analyzed By: AC

Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
Chloride	**34000**	16.0	10/15/2019	ND	400	100	400	3.92	

TPH 8015M mg/kg Analyzed By: MS S-06

Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
GRO C6-C10*	<50.0	50.0	10/14/2019	ND	211	106	200	8.32	
DRO >C10-C28*	**9050**	50.0	10/14/2019	ND	183	91.3	200	5.44	
EXT DRO >C28-C36	**3190**	50.0	10/14/2019	ND					

Surrogate: 1-Chlorooctane *90.6 %* *41-142*

Surrogate: 1-Chlorooctadecane *507 %* *37.6-147*

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JUSTIN WRIGHT
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Hobbs NM, 88240
Fax To: (575) 297-1477

Received:	10/11/2019	Sampling Date:	10/09/2019
Reported:	10/16/2019	Sampling Type:	Soil
Project Name:	JAMES A #11	Sampling Condition:	Cool & Intact
Project Number:	TEST HOLES	Sample Received By:	Jodi Henson
Project Location:	COPC - EDDY CO NM		

Sample ID: SAMPLE #16 2' (H903457-47)

Chloride, SM4500Cl-B **mg/kg** **Analyzed By: AC**

Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
Chloride	**1660**	16.0	10/15/2019	ND	400	100	400	3.92	

Sample ID: SAMPLE #16 4' (H903457-48)

Chloride, SM4500Cl-B **mg/kg** **Analyzed By: AC**

Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
Chloride	**608**	16.0	10/15/2019	ND	400	100	400	3.92	

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Hobbs NM, 88240
Fax To: (575) 297-1477

Received:	10/11/2019	Sampling Date:	10/10/2019
Reported:	10/16/2019	Sampling Type:	Soil
Project Name:	JAMES A #11	Sampling Condition:	Cool & Intact
Project Number:	TEST HOLES	Sample Received By:	Jodi Henson
Project Location:	COPC - EDDY CO NM		

Sample ID: SAMPLE #17 SURFACE (H903457-49)

BTEX 8021B mg/kg Analyzed By: BF

Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
Benzene*	<0.050	0.050	10/14/2019	ND	1.74	86.8	2.00	4.27	
Toluene*	<0.050	0.050	10/14/2019	ND	1.84	92.2	2.00	2.63	
Ethylbenzene*	<0.050	0.050	10/14/2019	ND	1.81	90.3	2.00	3.71	
Total Xylenes*	<0.150	0.150	10/14/2019	ND	5.59	93.2	6.00	3.56	
Total BTEX	<0.300	0.300	10/14/2019	ND					

Surrogate: 4-Bromofluorobenzene (PID *99.3 %* *73.3-129*

Chloride, SM4500Cl-B mg/kg Analyzed By: AC

Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
Chloride	**22600**	16.0	10/15/2019	ND	400	100	400	3.92	

TPH 8015M mg/kg Analyzed By: MS S-06

Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
GRO C6-C10*	<50.0	50.0	10/14/2019	ND	211	106	200	8.32	
DRO >C10-C28*	**12000**	50.0	10/14/2019	ND	183	91.3	200	5.44	
EXT DRO >C28-C36	**4820**	50.0	10/14/2019	ND					

Surrogate: 1-Chlorooctane *90.9 %* *41-142*

Surrogate: 1-Chlorooctadecane *646 %* *37.6-147*

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Hobbs NM, 88240
Fax To: (575) 297-1477

Received:	10/11/2019	Sampling Date:	10/10/2019
Reported:	10/16/2019	Sampling Type:	Soil
Project Name:	JAMES A #11	Sampling Condition:	Cool & Intact
Project Number:	TEST HOLES	Sample Received By:	Jodi Henson
Project Location:	COPC - EDDY CO NM		

Sample ID: SAMPLE #17 2' (H903457-50)

Chloride, SM4500Cl-B **mg/kg** **Analyzed By: AC**

Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
Chloride	**3920**	16.0	10/15/2019	ND	400	100	400	3.92	

Sample ID: SAMPLE #17 4' (H903457-51)

Chloride, SM4500Cl-B **mg/kg** **Analyzed By: AC**

Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
Chloride	**320**	16.0	10/15/2019	ND	400	100	400	3.92	

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Hobbs NM, 88240
Fax To: (575) 297-1477

Received:	10/11/2019	Sampling Date:	10/10/2019
Reported:	10/16/2019	Sampling Type:	Soil
Project Name:	JAMES A #11	Sampling Condition:	Cool & Intact
Project Number:	TEST HOLES	Sample Received By:	Jodi Henson
Project Location:	COPC - EDDY CO NM		

Sample ID: SAMPLE #18 SURFACE (H903457-52)

BTEX 8021B mg/kg Analyzed By: BF

Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
Benzene*	<0.050	0.050	10/14/2019	ND	1.74	86.8	2.00	4.27	
Toluene*	<0.050	0.050	10/14/2019	ND	1.84	92.2	2.00	2.63	
Ethylbenzene*	<0.050	0.050	10/14/2019	ND	1.81	90.3	2.00	3.71	
Total Xylenes*	<0.150	0.150	10/14/2019	ND	5.59	93.2	6.00	3.56	
Total BTEX	<0.300	0.300	10/14/2019	ND					

Surrogate: 4-Bromofluorobenzene (PID *100 %* *73.3-129*

Chloride, SM4500Cl-B mg/kg Analyzed By: AC

Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
Chloride	**20000**	16.0	10/15/2019	ND	400	100	400	3.92	

TPH 8015M mg/kg Analyzed By: MS S-06

Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
GRO C6-C10*	<50.0	50.0	10/14/2019	ND	211	106	200	8.32	
DRO >C10-C28*	**7260**	50.0	10/14/2019	ND	183	91.3	200	5.44	
EXT DRO >C28-C36	**3280**	50.0	10/14/2019	ND					

Surrogate: 1-Chlorooctane *89.0 %* *41-142*

Surrogate: 1-Chlorooctadecane *443 %* *37.6-147*

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Celey D. Keene, Lab Director/Quality Manager

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Analytical Results For:

Conoco Phillips - Hobbs
JUSTIN WRIGHT
P. O. BOX 325
Hobbs NM, 88240
Fax To: (575) 297-1477

Received:	10/11/2019	Sampling Date:	10/10/2019
Reported:	10/16/2019	Sampling Type:	Soil
Project Name:	JAMES A #11	Sampling Condition:	Cool & Intact
Project Number:	TEST HOLES	Sample Received By:	Jodi Henson
Project Location:	COPC - EDDY CO NM		

Sample ID: SAMPLE #18 2' (H903457-53)

Chloride, SM4500Cl-B **mg/kg** **Analyzed By: AC**

Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
Chloride	**6480**	16.0	10/15/2019	ND	400	100	400	3.92	

Sample ID: SAMPLE #18 4' (H903457-54)

Chloride, SM4500Cl-B **mg/kg** **Analyzed By: AC**

Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
Chloride	**448**	16.0	10/15/2019	ND	400	100	400	3.92	

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Fax To: (575) 297-1477

Received:	10/11/2019	Sampling Date:	10/10/2019
Reported:	10/16/2019	Sampling Type:	Soil
Project Name:	JAMES A #11	Sampling Condition:	Cool & Intact
Project Number:	TEST HOLES	Sample Received By:	Jodi Henson
Project Location:	COPC - EDDY CO NM		

Sample ID: SAMPLE #19 SURFACE (H903457-55)

BTEX 8021B mg/kg Analyzed By: BF

Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
Benzene*	<0.050	0.050	10/14/2019	ND	1.74	86.8	2.00	4.27	
Toluene*	<0.050	0.050	10/14/2019	ND	1.84	92.2	2.00	2.63	
Ethylbenzene*	<0.050	0.050	10/14/2019	ND	1.81	90.3	2.00	3.71	
Total Xylenes*	<0.150	0.150	10/14/2019	ND	5.59	93.2	6.00	3.56	
Total BTEX	<0.300	0.300	10/14/2019	ND					

Surrogate: 4-Bromofluorobenzene (PID *104 %* *73.3-129*

Chloride, SM4500Cl-B mg/kg Analyzed By: AC

Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
Chloride	**5840**	16.0	10/15/2019	ND	400	100	400	3.92	

TPH 8015M mg/kg Analyzed By: MS

Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
GRO C6-C10*	<10.0	10.0	10/14/2019	ND	211	106	200	8.32	
DRO >C10-C28*	**423**	10.0	10/14/2019	ND	183	91.3	200	5.44	
EXT DRO >C28-C36	**242**	10.0	10/14/2019	ND					

Surrogate: 1-Chlorooctane *83.6 %* *41-142*

Surrogate: 1-Chlorooctadecane *103 %* *37.6-147*

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Fax To: (575) 297-1477

Received:	10/11/2019	Sampling Date:	10/10/2019
Reported:	10/16/2019	Sampling Type:	Soil
Project Name:	JAMES A #11	Sampling Condition:	Cool & Intact
Project Number:	TEST HOLES	Sample Received By:	Jodi Henson
Project Location:	COPC - EDDY CO NM		

Sample ID: SAMPLE #19 2' (H903457-56)

Chloride, SM4500Cl-B **mg/kg** **Analyzed By: AC**

Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
Chloride	**14400**	16.0	10/15/2019	ND	400	100	400	3.92	

Sample ID: SAMPLE #19 4' (H903457-57)

Chloride, SM4500Cl-B **mg/kg** **Analyzed By: AC**

Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
Chloride	**1300**	16.0	10/15/2019	ND	400	100	400	3.92	

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Fax To: (575) 297-1477

Received:	10/11/2019	Sampling Date:	10/10/2019
Reported:	10/16/2019	Sampling Type:	Soil
Project Name:	JAMES A #11	Sampling Condition:	Cool & Intact
Project Number:	TEST HOLES	Sample Received By:	Jodi Henson
Project Location:	COPC - EDDY CO NM		

Sample ID: SAMPLE #20 SURFACE (H903457-58)

BTEX 8021B mg/kg Analyzed By: BF

Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
Benzene*	<0.050	0.050	10/14/2019	ND	1.74	86.8	2.00	4.27	
Toluene*	<0.050	0.050	10/14/2019	ND	1.84	92.2	2.00	2.63	
Ethylbenzene*	<0.050	0.050	10/14/2019	ND	1.81	90.3	2.00	3.71	
Total Xylenes*	<0.150	0.150	10/14/2019	ND	5.59	93.2	6.00	3.56	
Total BTEX	<0.300	0.300	10/14/2019	ND					

Surrogate: 4-Bromofluorobenzene (PID *103 %* *73.3-129*

Chloride, SM4500Cl-B mg/kg Analyzed By: AC

Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
Chloride	**34400**	16.0	10/15/2019	ND	400	100	400	3.92	

TPH 8015M mg/kg Analyzed By: MS S-06

Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
GRO C6-C10*	<50.0	50.0	10/14/2019	ND	211	106	200	8.32	
DRO >C10-C28*	**13200**	50.0	10/14/2019	ND	183	91.3	200	5.44	
EXT DRO >C28-C36	**4740**	50.0	10/14/2019	ND					

Surrogate: 1-Chlorooctane *87.1 %* *41-142*

Surrogate: 1-Chlorooctadecane *649 %* *37.6-147*

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Fax To: (575) 297-1477

Received:	10/11/2019	Sampling Date:	10/10/2019
Reported:	10/16/2019	Sampling Type:	Soil
Project Name:	JAMES A #11	Sampling Condition:	Cool & Intact
Project Number:	TEST HOLES	Sample Received By:	Jodi Henson
Project Location:	COPC - EDDY CO NM		

Sample ID: SAMPLE #20 2' (H903457-59)

Chloride, SM4500Cl-B **mg/kg** **Analyzed By: AC**

Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
Chloride	**47200**	16.0	10/15/2019	ND	400	100	400	3.92	

Sample ID: SAMPLE #20 4' (H903457-60)

Chloride, SM4500Cl-B **mg/kg** **Analyzed By: AC**

Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
Chloride	**10300**	16.0	10/15/2019	ND	400	100	400	3.92	

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Hobbs NM, 88240
Fax To: (575) 297-1477

Received:	10/11/2019	Sampling Date:	10/10/2019
Reported:	10/16/2019	Sampling Type:	Soil
Project Name:	JAMES A #11	Sampling Condition:	Cool & Intact
Project Number:	TEST HOLES	Sample Received By:	Jodi Henson
Project Location:	COPC - EDDY CO NM		

Sample ID: SAMPLE #21 SURFACE (H903457-61)

BTEX 8021B mg/kg Analyzed By: BF

Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
Benzene*	<0.050	0.050	10/14/2019	ND	1.74	86.8	2.00	4.27	
Toluene*	<0.050	0.050	10/14/2019	ND	1.84	92.2	2.00	2.63	
Ethylbenzene*	<0.050	0.050	10/14/2019	ND	1.81	90.3	2.00	3.71	
Total Xylenes*	<0.150	0.150	10/14/2019	ND	5.59	93.2	6.00	3.56	
Total BTEX	<0.300	0.300	10/14/2019	ND					

Surrogate: 4-Bromofluorobenzene (PID *102 %* *73.3-129*

Chloride, SM4500Cl-B mg/kg Analyzed By: AC

Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
Chloride	**15000**	16.0	10/15/2019	ND	400	100	400	3.92	

TPH 8015M mg/kg Analyzed By: MS S-06

Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
GRO C6-C10*	<50.0	50.0	10/14/2019	ND	211	106	200	8.32	
DRO >C10-C28*	**5020**	50.0	10/14/2019	ND	183	91.3	200	5.44	
EXT DRO >C28-C36	**1570**	50.0	10/14/2019	ND					

Surrogate: 1-Chlorooctane *91.7 %* *41-142*

Surrogate: 1-Chlorooctadecane *260 %* *37.6-147*

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JUSTIN WRIGHT
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Hobbs NM, 88240
Fax To: (575) 297-1477

Received:	10/11/2019	Sampling Date:	10/10/2019
Reported:	10/16/2019	Sampling Type:	Soil
Project Name:	JAMES A #11	Sampling Condition:	Cool & Intact
Project Number:	TEST HOLES	Sample Received By:	Jodi Henson
Project Location:	COPC - EDDY CO NM		

Sample ID: SAMPLE #21 2' (H903457-62)

Chloride, SM4500Cl-B **mg/kg** **Analyzed By: AC**

Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
Chloride	**29200**	16.0	10/15/2019	ND	400	100	400	3.92	

Sample ID: SAMPLE #21 4' (H903457-63)

Chloride, SM4500Cl-B **mg/kg** **Analyzed By: AC**

Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
Chloride	**5760**	16.0	10/15/2019	ND	400	100	400	3.92	

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Analytical Results For:

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Hobbs NM, 88240
Fax To: (575) 297-1477

Received:	10/11/2019	Sampling Date:	10/10/2019
Reported:	10/16/2019	Sampling Type:	Soil
Project Name:	JAMES A #11	Sampling Condition:	Cool & Intact
Project Number:	TEST HOLES	Sample Received By:	Jodi Henson
Project Location:	COPC - EDDY CO NM		

Sample ID: SAMPLE #22 SURFACE (H903457-64)

BTEX 8021B mg/kg Analyzed By: BF

Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
Benzene*	<0.050	0.050	10/14/2019	ND	1.74	86.8	2.00	4.27	
Toluene*	<0.050	0.050	10/14/2019	ND	1.84	92.2	2.00	2.63	
Ethylbenzene*	<0.050	0.050	10/14/2019	ND	1.81	90.3	2.00	3.71	
Total Xylenes*	<0.150	0.150	10/14/2019	ND	5.59	93.2	6.00	3.56	
Total BTEX	<0.300	0.300	10/14/2019	ND					

Surrogate: 4-Bromofluorobenzene (PID *102 %* *73.3-129*

Chloride, SM4500Cl-B mg/kg Analyzed By: AC

Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
Chloride	**832**	16.0	10/14/2019	ND	432	108	400	3.77	QM-07

TPH 8015M mg/kg Analyzed By: MS

Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
GRO C6-C10*	<10.0	10.0	10/14/2019	ND	211	106	200	8.32	
DRO >C10-C28*	<10.0	10.0	10/14/2019	ND	183	91.3	200	5.44	
EXT DRO >C28-C36	<10.0	10.0	10/14/2019	ND					

Surrogate: 1-Chlorooctane *76.0 %* *41-142*

Surrogate: 1-Chlorooctadecane *78.3 %* *37.6-147*

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Hobbs NM, 88240
Fax To: (575) 297-1477

Received:	10/11/2019	Sampling Date:	10/10/2019
Reported:	10/16/2019	Sampling Type:	Soil
Project Name:	JAMES A #11	Sampling Condition:	Cool & Intact
Project Number:	TEST HOLES	Sample Received By:	Jodi Henson
Project Location:	COPC - EDDY CO NM		

Sample ID: SAMPLE #22 2' (H903457-65)

Chloride, SM4500Cl-B **mg/kg** **Analyzed By: AC**

Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
Chloride	**12800**	16.0	10/15/2019	ND	432	108	400	3.77	

Sample ID: SAMPLE #22 4' (H903457-66)

Chloride, SM4500Cl-B **mg/kg** **Analyzed By: AC**

Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
Chloride	**19600**	16.0	10/15/2019	ND	432	108	400	3.77	

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Hobbs NM, 88240
Fax To: (575) 297-1477

Received:	10/11/2019	Sampling Date:	10/10/2019
Reported:	10/16/2019	Sampling Type:	Soil
Project Name:	JAMES A #11	Sampling Condition:	Cool & Intact
Project Number:	TEST HOLES	Sample Received By:	Jodi Henson
Project Location:	COPC - EDDY CO NM		

Sample ID: SAMPLE #23 SURFACE (H903457-67)

BTEX 8021B mg/kg Analyzed By: BF

Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
Benzene*	<0.050	0.050	10/14/2019	ND	1.74	86.8	2.00	4.27	
Toluene*	<0.050	0.050	10/14/2019	ND	1.84	92.2	2.00	2.63	
Ethylbenzene*	<0.050	0.050	10/14/2019	ND	1.81	90.3	2.00	3.71	
Total Xylenes*	<0.150	0.150	10/14/2019	ND	5.59	93.2	6.00	3.56	
Total BTEX	<0.300	0.300	10/14/2019	ND					

Surrogate: 4-Bromofluorobenzene (PID *105 %* *73.3-129*

Chloride, SM4500Cl-B mg/kg Analyzed By: AC

Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
Chloride	**2760**	16.0	10/15/2019	ND	432	108	400	3.77	

TPH 8015M mg/kg Analyzed By: MS

Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
GRO C6-C10*	<10.0	10.0	10/11/2019	ND	215	108	200	2.55	
DRO >C10-C28*	<10.0	10.0	10/11/2019	ND	211	106	200	1.24	
EXT DRO >C28-C36	<10.0	10.0	10/11/2019	ND					

Surrogate: 1-Chlorooctane *93.5 %* *41-142*

Surrogate: 1-Chlorooctadecane *93.7 %* *37.6-147*

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Celey D. Keene

Celey D. Keene, Lab Director/Quality Manager

CARDINAL Laboratories

PHONE (575) 393-2326 ° 101 E. MARLAND ° HOBBS, NM 88240

Analytical Results For:

Conoco Phillips - Hobbs
JUSTIN WRIGHT
P. O. BOX 325
Hobbs NM, 88240
Fax To: (575) 297-1477

Received:	10/11/2019	Sampling Date:	10/10/2019
Reported:	10/16/2019	Sampling Type:	Soil
Project Name:	JAMES A #11	Sampling Condition:	Cool & Intact
Project Number:	TEST HOLES	Sample Received By:	Jodi Henson
Project Location:	COPC - EDDY CO NM		

Sample ID: SAMPLE #23 2' (H903457-68)

Chloride, SM4500Cl-B **mg/kg** **Analyzed By: AC**

Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
Chloride	**1020**	16.0	10/15/2019	ND	432	108	400	3.77	

Sample ID: SAMPLE #23 4' (H903457-69)

Chloride, SM4500Cl-B **mg/kg** **Analyzed By: AC**

Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
Chloride	**800**	16.0	10/15/2019	ND	432	108	400	3.77	

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Analytical Results For:

Conoco Phillips - Hobbs
JUSTIN WRIGHT
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Hobbs NM, 88240
Fax To: (575) 297-1477

Received:	10/11/2019	Sampling Date:	10/10/2019
Reported:	10/16/2019	Sampling Type:	Soil
Project Name:	JAMES A #11	Sampling Condition:	Cool & Intact
Project Number:	TEST HOLES	Sample Received By:	Jodi Henson
Project Location:	COPC - EDDY CO NM		

Sample ID: SAMPLE #24 SURFACE (H903457-70)

BTEX 8021B mg/kg Analyzed By: BF

Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
Benzene*	<0.050	0.050	10/14/2019	ND	1.91	95.5	2.00	1.84	
Toluene*	<0.050	0.050	10/14/2019	ND	1.95	97.7	2.00	2.67	
Ethylbenzene*	<0.050	0.050	10/14/2019	ND	1.94	97.1	2.00	2.36	
Total Xylenes*	<0.150	0.150	10/14/2019	ND	5.84	97.3	6.00	2.20	
Total BTEX	<0.300	0.300	10/14/2019	ND					

Surrogate: 4-Bromofluorobenzene (PID *98.0 %* *73.3-129*

Chloride, SM4500Cl-B mg/kg Analyzed By: AC

Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
Chloride	**160**	16.0	10/15/2019	ND	432	108	400	3.77	

TPH 8015M mg/kg Analyzed By: MS

Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
GRO C6-C10*	<10.0	10.0	10/11/2019	ND	215	108	200	2.55	
DRO >C10-C28*	<10.0	10.0	10/11/2019	ND	211	106	200	1.24	
EXT DRO >C28-C36	<10.0	10.0	10/11/2019	ND					

Surrogate: 1-Chlorooctane *94.3 %* *41-142*

Surrogate: 1-Chlorooctadecane *93.2 %* *37.6-147*

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Analytical Results For:

Conoco Phillips - Hobbs
JUSTIN WRIGHT
P. O. BOX 325
Hobbs NM, 88240
Fax To: (575) 297-1477

Received:	10/11/2019	Sampling Date:	10/10/2019
Reported:	10/16/2019	Sampling Type:	Soil
Project Name:	JAMES A #11	Sampling Condition:	Cool & Intact
Project Number:	TEST HOLES	Sample Received By:	Jodi Henson
Project Location:	COPC - EDDY CO NM		

Sample ID: SAMPLE #24 2' (H903457-71)

Chloride, SM4500Cl-B **mg/kg** **Analyzed By: AC**

Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
Chloride	**384**	16.0	10/15/2019	ND	432	108	400	3.77	

Sample ID: SAMPLE #24 4' (H903457-72)

Chloride, SM4500Cl-B **mg/kg** **Analyzed By: AC**

Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
Chloride	**560**	16.0	10/15/2019	ND	432	108	400	3.77	

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Analytical Results For:

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JUSTIN WRIGHT
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Hobbs NM, 88240
Fax To: (575) 297-1477

Received:	10/11/2019	Sampling Date:	10/10/2019
Reported:	10/16/2019	Sampling Type:	Soil
Project Name:	JAMES A #11	Sampling Condition:	Cool & Intact
Project Number:	TEST HOLES	Sample Received By:	Jodi Henson
Project Location:	COPC - EDDY CO NM		

Sample ID: SAMPLE #25 SURFACE (H903457-73)

BTEX 8021B mg/kg Analyzed By: BF

Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
Benzene*	<0.050	0.050	10/14/2019	ND	1.91	95.5	2.00	1.84	
Toluene*	<0.050	0.050	10/14/2019	ND	1.95	97.7	2.00	2.67	
Ethylbenzene*	<0.050	0.050	10/14/2019	ND	1.94	97.1	2.00	2.36	
Total Xylenes*	<0.150	0.150	10/14/2019	ND	5.84	97.3	6.00	2.20	
Total BTEX	<0.300	0.300	10/14/2019	ND					

Surrogate: 4-Bromofluorobenzene (PID *97.7 %* *73.3-129*

Chloride, SM4500Cl-B mg/kg Analyzed By: AC

Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
Chloride	**976**	16.0	10/15/2019	ND	432	108	400	3.77	

TPH 8015M mg/kg Analyzed By: MS

Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
GRO C6-C10*	<10.0	10.0	10/11/2019	ND	215	108	200	2.55	
DRO >C10-C28*	**11.5**	10.0	10/11/2019	ND	211	106	200	1.24	
EXT DRO >C28-C36	<10.0	10.0	10/11/2019	ND					

Surrogate: 1-Chlorooctane *99.1 %* *41-142*

Surrogate: 1-Chlorooctadecane *98.0 %* *37.6-147*

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Analytical Results For:

Conoco Phillips - Hobbs
JUSTIN WRIGHT
P. O. BOX 325
Hobbs NM, 88240
Fax To: (575) 297-1477

Received:	10/11/2019	Sampling Date:	10/10/2019
Reported:	10/16/2019	Sampling Type:	Soil
Project Name:	JAMES A #11	Sampling Condition:	Cool & Intact
Project Number:	TEST HOLES	Sample Received By:	Jodi Henson
Project Location:	COPC - EDDY CO NM		

Sample ID: SAMPLE #25 2' (H903457-74)

Chloride, SM4500Cl-B **mg/kg** **Analyzed By: AC**

Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
Chloride	**192**	16.0	10/15/2019	ND	432	108	400	3.77	

Sample ID: SAMPLE #25 4' (H903457-75)

Chloride, SM4500Cl-B **mg/kg** **Analyzed By: AC**

Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
Chloride	**736**	16.0	10/15/2019	ND	432	108	400	3.77	

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Analytical Results For:

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Fax To: (575) 297-1477

Received:	10/11/2019	Sampling Date:	10/10/2019
Reported:	10/16/2019	Sampling Type:	Soil
Project Name:	JAMES A #11	Sampling Condition:	Cool & Intact
Project Number:	TEST HOLES	Sample Received By:	Jodi Henson
Project Location:	COPC - EDDY CO NM		

Sample ID: SAMPLE #26 SURFACE (H903457-76)

BTEX 8021B mg/kg Analyzed By: BF

Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
Benzene*	<0.050	0.050	10/14/2019	ND	1.91	95.5	2.00	1.84	
Toluene*	<0.050	0.050	10/14/2019	ND	1.95	97.7	2.00	2.67	
Ethylbenzene*	<0.050	0.050	10/14/2019	ND	1.94	97.1	2.00	2.36	
Total Xylenes*	<0.150	0.150	10/14/2019	ND	5.84	97.3	6.00	2.20	
Total BTEX	<0.300	0.300	10/14/2019	ND					

Surrogate: 4-Bromofluorobenzene (PID *98.6 %* *73.3-129*

Chloride, SM4500Cl-B mg/kg Analyzed By: AC

Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
Chloride	**352**	16.0	10/15/2019	ND	432	108	400	3.77	

TPH 8015M mg/kg Analyzed By: MS

Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
GRO C6-C10*	<10.0	10.0	10/12/2019	ND	219	109	200	2.67	
DRO >C10-C28*	<10.0	10.0	10/12/2019	ND	217	108	200	2.74	
EXT DRO >C28-C36	<10.0	10.0	10/12/2019	ND					

Surrogate: 1-Chlorooctane *101 %* *41-142*

Surrogate: 1-Chlorooctadecane *101 %* *37.6-147*

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Analytical Results For:

Conoco Phillips - Hobbs
JUSTIN WRIGHT
P. O. BOX 325
Hobbs NM, 88240
Fax To: (575) 297-1477

Received:	10/11/2019	Sampling Date:	10/10/2019
Reported:	10/16/2019	Sampling Type:	Soil
Project Name:	JAMES A #11	Sampling Condition:	Cool & Intact
Project Number:	TEST HOLES	Sample Received By:	Jodi Henson
Project Location:	COPC - EDDY CO NM		

Sample ID: SAMPLE #26 2' (H903457-77)

Chloride, SM4500Cl-B **mg/kg** **Analyzed By: AC**

Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
Chloride	**704**	16.0	10/15/2019	ND	432	108	400	3.77	

Sample ID: SAMPLE #26 4' (H903457-78)

Chloride, SM4500Cl-B **mg/kg** **Analyzed By: AC**

Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
Chloride	**208**	16.0	10/15/2019	ND	432	108	400	3.77	

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Analytical Results For:

Conoco Phillips - Hobbs
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Fax To: (575) 297-1477

Received:	10/11/2019	Sampling Date:	10/10/2019
Reported:	10/16/2019	Sampling Type:	Soil
Project Name:	JAMES A #11	Sampling Condition:	Cool & Intact
Project Number:	TEST HOLES	Sample Received By:	Jodi Henson
Project Location:	COPC - EDDY CO NM		

Sample ID: SAMPLE #27 SURFACE (H903457-79)

BTEX 8021B mg/kg Analyzed By: BF

Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
Benzene*	<0.050	0.050	10/14/2019	ND	1.91	95.5	2.00	1.84	
Toluene*	<0.050	0.050	10/14/2019	ND	1.95	97.7	2.00	2.67	
Ethylbenzene*	<0.050	0.050	10/14/2019	ND	1.94	97.1	2.00	2.36	
Total Xylenes*	<0.150	0.150	10/14/2019	ND	5.84	97.3	6.00	2.20	
Total BTEX	<0.300	0.300	10/14/2019	ND					

Surrogate: 4-Bromofluorobenzene (PID *97.9 %* *73.3-129*

Chloride, SM4500Cl-B mg/kg Analyzed By: AC

Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
Chloride	**848**	16.0	10/15/2019	ND	432	108	400	3.77	

TPH 8015M mg/kg Analyzed By: MS

Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
GRO C6-C10*	<10.0	10.0	10/12/2019	ND	219	109	200	2.67	
DRO >C10-C28*	<10.0	10.0	10/12/2019	ND	217	108	200	2.74	
EXT DRO >C28-C36	<10.0	10.0	10/12/2019	ND					

Surrogate: 1-Chlorooctane *103 %* *41-142*

Surrogate: 1-Chlorooctadecane *103 %* *37.6-147*

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Analytical Results For:

Conoco Phillips - Hobbs
JUSTIN WRIGHT
P. O. BOX 325
Hobbs NM, 88240
Fax To: (575) 297-1477

Received:	10/11/2019	Sampling Date:	10/10/2019
Reported:	10/16/2019	Sampling Type:	Soil
Project Name:	JAMES A #11	Sampling Condition:	Cool & Intact
Project Number:	TEST HOLES	Sample Received By:	Jodi Henson
Project Location:	COPC - EDDY CO NM		

Sample ID: SAMPLE #27 2' (H903457-80)

Chloride, SM4500Cl-B **mg/kg** **Analyzed By: AC**

Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
Chloride	**144**	16.0	10/15/2019	ND	432	108	400	3.77	

Sample ID: SAMPLE #27 4' (H903457-81)

Chloride, SM4500Cl-B **mg/kg** **Analyzed By: AC**

Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
Chloride	**96.0**	16.0	10/15/2019	ND	432	108	400	3.77	

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Notes and Definitions

S-06	The recovery of this surrogate is outside control limits due to sample dilution required from high analyte concentration and/or matrix interference's.
S-04	The surrogate recovery for this sample is outside of established control limits due to a sample matrix effect.
QR-03	The RPD value for the sample duplicate or MS/MSD was outside of QC acceptance limits due to matrix interference. QC batch accepted based on LCS and/or LCSD recovery and/or RPD values.
QM-07	The spike recovery was outside acceptance limits for the MS and/or MSD. The batch was accepted based on acceptable LCS recovery.
ND	Analyte NOT DETECTED at or above the reporting limit
RPD	Relative Percent Difference
**	Samples not received at proper temperature of 6°C or below.
***	Insufficient time to reach temperature.
-	Chloride by SM4500Cl-B does not require samples be received at or below 6°C
	Samples reported on an as received basis (wet) unless otherwise noted on report

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CARDINAL LABORATORIES

101 East Marland, Hobbs, NM 88240
(575) 393-2326 Fax (575) 393-2476

Page 1 of 9

Company Name: Conoco Phillips
Project Manager: Justin Wright
Address: Baker
City: Nitro State: NM Zip: 88240
Phone #: 575-631-9052 Fax #:
Project #: Jame A #11 Project Owner:
Project Name: Test Hole
Project Location: Cabin Lake
Sampler Name: Justin Wright Justin Wright

BILL TO

P.O. #:
Company:
Attn:
Address:
City:
State: Zip:
Phone #:
Fax #:

ANALYSIS REQUEST

FOR LAB USE ONLY Lab I.D.	Sample I.D.	(G)RAB OR (C)OMP.	# CONTAINERS	MATRIX: GROUNDWATER	WASTEWATER	SOIL	OIL	SLUDGE	OTHER:	PRESERV.: ACID/BASE:	ICE / COOL	OTHER:	SAMPLING DATE	TIME	Chloride	BTEX	TPH	TPH Extended
H903457-01	Sample #1 Surface				✓						✓		10/9		✓	✓	✓	✓
02	Sample #1 2ft				✓						✓		10/9		✓	✓	✓	✓
03	Sample 1 4ft				✓						✓		10/9		✓	✓	✓	✓
04	Sample 2 Surface				✓						✓		10/9		✓	✓	✓	✓
05	Sample 2 2ft				✓						✓		10/9		✓	✓	✓	✓
06	Sample 2 4ft				✓						✓		10/9		✓	✓	✓	✓
07	Sample 3 Surface				✓						✓		10/9		✓	✓	✓	✓
08	Sample 3 2ft				✓						✓		10/9		✓	✓	✓	✓
09	Sample 3 4ft				✓						✓		10/9		✓	✓	✓	✓
10	Sample 4 Surface				✓						✓		10/9		✓	✓	✓	✓

PLEASE NOTE: Liability and Damages. Cardinal's liability and client's exclusive remedy for any claim arising whether based in contract or tort, shall be limited to the amount paid by the client for the analyses. All claims including those for negligence and any other cause whatsoever shall be deemed waived unless made in writing and received by Cardinal within 30 days after completion of the applicable service. In no event shall Cardinal be liable for incidental or consequential damages, including without limitation, business interruptions, loss of use, or loss of profits incurred by client, its subsidiaries, affiliates or successors arising out of or related to the performance of services hereunder by Cardinal, regardless of whether such claim is based upon any of the above stated reasons or otherwise.

Terms and Conditions: Interest will be charged on all accounts more than 30 days past due at the rate of 24% per annum from the original date of invoice, and all costs of collections, including attorney's fees.

Sampler Relinquished: Date: 10/11/19 Received By: Jodi Henson
Time: 09:25
Relinquished By: Date: Received By:
Time:
Delivered By: (Circle One) +.4
Sampler - UPS - Bus - Other: -3.8°C -3.4°C 97
Temp.
Sample Condition: Cool ☑ Yes ☐ No; Intact ☑ Yes ☐ No
CHECKED BY: (Initials)

Phone Result: ☐ No Add'l Phone #:
Fax Result: ☐ No Add'l Fax #:
REMARKS:

Cardinal cannot accept verbal changes. Please fax written changes to 575-393-2476.

Received by OCD: 3/5/2021 3:12:10 PM

Released to Imaging: 4/8/2021 11:24:56 AM

Page 1N of 249

CARDINAL LABORATORIES

101 East Marland, Hobbs, NM 88240
(575) 393-2326 Fax (575) 393-2476

Company Name: Conoco Phillips
Project Manager: Justin Wright
Address: Baker
City: Hobbs State: NM Zip: 88240
Phone #: 575-631-9052 Fax #:
Project #: Jame A #11 Project Owner:
Project Name: Test Hole
Project Location: Cabin Lake
Sampler Name: Justin Wright Justin Wright

BILL TO

P.O. #:
Company:
Attn:
Address:
City:
State: Zip:
Phone #:
Fax #:

ANALYSIS REQUEST

FOR LAB USE ONLY Lab I.D.	Sample I.D.	(G)RAB OR (C)OMP.	# CONTAINERS	MATRIX: GROUNDWATER	WASTEWATER	SOIL	OIL	SLUDGE	OTHER :	PRESERV.: ACID/BASE:	ICE / COOL	OTHER :	SAMPLING: DATE	TIME	Chlorides	BTEX	TPH	TPH Extended
H903457																		
11	Sp. 4 2ft					✓					✓		10/9		✓	✓	✓	✓
12	Sp. 4 4ft					✓					✓		10/9		✓	✓	✓	✓
13	Sp. 5 Surface					✓					✓		10/9		✓	✓	✓	✓
14	Sp. 5 2ft					✓					✓		10/9		✓	✓	✓	✓
15	Sp. 5 4ft					✓					✓		10/9		✓	✓	✓	✓
16	Sp. 6 Surface					✓					✓		10/9		✓	✓	✓	✓
17	Sp. 6 2ft					✓					✓		10/9		✓	✓	✓	✓
18	Sp. 6 4ft					✓					✓		10/9		✓	✓	✓	✓
19	Sp. 7 Surface					✓					✓		10/9		✓	✓	✓	✓
20	Sp. 7 2ft					✓					✓		10/9		✓	✓	✓	✓

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Sampler Relinquished: Date: 10/11/19 Time: 09:25 Received By: Jodi Henson
Relinquished By: Date: Received By:
Time:
Delivered By: (Circle One) Temp. 1.4
Sampler - UPS - Bus - Other: -3.8°C -3.4°C #7
Sample Condition: Cool ☑ Yes ☐ No; Intact ☑ Yes ☐ No
CHECKED BY: (Initials)

Phone Result: ☐ No Add'l Phone #:
Fax Result: ☐ No Add'l Fax #:
REMARKS:

Cardinal cannot accept verbal changes. Please fax written changes to 575-393-2476.

Received by OCD: 3/5/2021 3:12:10 PM

Released to Imaging: 4/8/2021 11:24:56 AM

Page 112 of 249

CARDINAL LABORATORIES

101 East Marland, Hobbs, NM 88240
(575) 393-2326 Fax (575) 393-2476

Page 3 of 9

Company Name:	ConocoPhillips
Project Manager:	Justin Wright
Address:	Baker
City:	Natta State: NM Zip: 88240
Phone #:	575-631-9052 Fax #:
Project #:	Jame A 411 Project Owner:
Project Name:	Fast Hole
Project Location:	Cabin Lake
Sampler Name:	Justin Wright

BILL TO

P.O. #:	
Company:	
Attn:	
Address:	
City:	
State:	Zip:
Phone #:	
Fax #:	

ANALYSIS REQUEST

FOR LAB USE ONLY Lab I.D.	Sample I.D.	(G)RAB OR (C)OMP.	# CONTAINERS	MATRIX: GROUNDWATER, WASTEWATER, SOIL, OIL, SLUDGE, OTHER :	PRESERV.: ACID/BASE:, ICE / COOL, OTHER :	SAMPLING: DATE	SAMPLING: TIME	Chloride	BTEX	TPH	TPH Extended
H903457											
21	Sp. 7 4ft					10/9		✓	✓	✓	✓
22	Sp. 8 Surface					10/9		✓	✓	✓	✓
23	Sp. 8 2ft					10/9		✓	✓	✓	✓
24	Sp. 8 4ft					10/9		✓	✓	✓	✓
25	Sp. 9 Surface					10/9		✓	✓	✓	✓
26	Sp. 9 2ft					10/9		✓	✓	✓	✓
27	Sp. 9 4ft					10/9		✓	✓	✓	✓
28	Sp. 10 Surface					10/9		✓	✓	✓	✓
29	Sp. 10 2ft					10/9		✓	✓	✓	✓
30	Sp. 10 4ft					10/9		✓	✓	✓	✓

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Sampler Relinquished:	Date: 10/11/19	Received By: Jodi Henson	
	Time: 09:25		
Relinquished By:	Date:	Received By:	
	Time:		
Delivered By: (Circle One)	+.4	Sample Condition: Cool ☑ Yes ☐ No; Intact ☑ Yes ☐ No	CHECKED BY: (Initials)
Sampler - UPS - Bus - Other:	-3.8°C -3.4°C	Temp. #97	

Phone Result:	☐	No	Add'l Phone #:
Fax Result:	☐	No	Add'l Fax #:
REMARKS:			

Cardinal cannot accept verbal changes. Please fax written changes to 575-393-2476.

Received by OCD: 3/5/2021 3:12:10 PM

Released to Imaging: 4/8/2021 11:24:56 AM

Page 113 of 249

CARDINAL LABORATORIES

101 East Marland, Hobbs, NM 88240
(575) 393-2326 Fax (575) 393-2476

Page 4 of 9

Company Name:	Conoco Phillips
Project Manager:	Justin Wright
Address:	Baker
City:	Hobbs State: NM Zip: 88240
Phone #:	575-631-9052 Fax #:
Project #:	Jame A #11 Project Owner:
Project Name:	Test Hole
Project Location:	Cabin Lake
Sampler Name:	Justin Wright

BILL TO

P.O. #:	
Company:	
Attn:	
Address:	
City:	
State:	Zip:
Phone #:	
Fax #:	

ANALYSIS REQUEST

FOR LAB USE ONLY Lab I.D.	Sample I.D.	(G)RAB OR (C)OMP.	# CONTAINERS	MATRIX: GROUNDWATER	WASTEWATER	SOIL	OIL	SLUDGE	OTHER:	PRESERV.: ACID/BASE:	ICE / COOL	OTHER:	SAMPLING: DATE	TIME	Chloride	BTEX	TPH	TPH Extended
H903457																		
31	Sp. 11 Surface					X					X		10/9		✓	✓	✓	✓
32	Sp. 11 2 ft					X					X		10/9		✓	X	X	X
33	Sp. 11 4 ft					X					X		10/9		✓	X	X	X
34	Sp. 12 Surface					X					X		10/9		✓	✓	✓	✓
35	Sp 12 2 ft					X					X		10/9		✓	X	X	X
36	Sp 12 4 ft					X					X		10/9		✓	X	X	X
37	Sp 13 Surface					X					X		10/9		✓	✓	✓	✓
38	Sp 13 2 ft					X					X		10/9		✓	X	X	X
39	Sp 13 4 ft					X					X		10/9		✓	X	X	X
40	Sp 14 Surface					X					X		10/9		✓	✓	✓	✓

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Sampler Relinquished:	Date: 10/11/19	Received By: Jodi Henson	
	Time: 09:25		
Relinquished By:	Date:	Received By:	
	Time:		

Delivered By: (Circle One) Sampler - UPS - Bus - Other:

Temp. +.4 -3.8°C -3.4°C #97

Sample Condition: Cool: Yes / No; Intact: Yes / No

CHECKED BY: (Initials)

Phone Result: ☐ No Add'l Phone #:

Fax Result: ☐ No Add'l Fax #:

REMARKS:

Cardinal cannot accept verbal changes. Please fax written changes to 575-393-2476.

Received by OCD: 3/5/2021 3:12:10 PM

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Page 114 of 249

CARDINAL LABORATORIES

101 East Marland, Hobbs, NM 88240
(575) 393-2326 Fax (575) 393-2476

Page 5 of 9

Company Name: Conoco Phillips
Project Manager: Justin Wright
Address: Baker
City: Hobbs State: NM Zip: 88240
Phone #: 575-631-9052 Fax #:
Project #: Jame A #11 Project Owner:
Project Name: Test Hole
Project Location: Cabin Lake
Sampler Name: Justin Wright Justin Wright

BILL TO

P.O. #:
Company:
Attn:
Address:
City:
State: Zip:
Phone #:
Fax #:

ANALYSIS REQUEST

FOR LAB USE ONLY Lab I.D.	Sample I.D.	(G)RAB OR (C)OMP.	# CONTAINERS	MATRIX: GROUNDWATER	WASTEWATER	SOIL	OIL	SLUDGE	OTHER:	PRESERV.: ACID/BASE:	ICE / COOL	OTHER:	SAMPLING DATE	SAMPLING TIME	Chloride	BTEX	TPH	TPH Extended
H903457																		
41	SP 14 2ft					✓					✓		10/9		✓	✓	✓	✓
42	SP 14 4ft					✓					✓		10/9		✓	✓	✓	✓
43	SP 15 Surface					✓					✓		10/9		✓	✓	✓	✓
44	SP 15 2ft					✓					✓		10/9		✓	✓	✓	✓
45	SP 15 4ft					✓					✓		10/9		✓	✓	✓	✓
46	SP 16 Surface					✓					✓		10/9		✓	✓	✓	✓
47	SP 16 2ft					✓					✓		10/9		✓	✓	✓	✓
48	SP 16 4ft					✓					✓		10/9		✓	✓	✓	✓
49	SP 17 Surface					✓					✓		10/10		✓	✓	✓	✓
50	SP 17 2ft					✓					✓		10/10		✓	✓	✓	✓

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Sampler Relinquished: Date: 10/11/19 Received By: Jodi Henson
Time: 09:25
Relinquished By: Date: Received By:
Time:
Delivered By: (Circle One) +1.4 Temp. Sample Condition CHECKED BY:
Sampler - UPS - Bus - Other: -3.8°C -3.4°C #97 Cool: ☐ Yes ☐ No Intact: ☐ Yes ☐ No (Initials)

Phone Result: ☐ No Add'l Phone #:
Fax Result: ☐ No Add'l Fax #:
REMARKS:

Cardinal cannot accept verbal changes. Please fax written changes to 575-393-2476.

Received by OCD: 3/5/2021 3:12:10 PM

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Page 135 of 249

CARDINAL LABORATORIES

101 East Marland, Hobbs, NM 88240
(575) 393-2326 Fax (575) 393-2476

Page 6 of 9

Company Name:	Conoco Phillips
Project Manager:	Justin Wright
Address:	Barker
City:	Hobbs State: NM Zip: 88240
Phone #:	575-631-9052 Fax #:
Project #:	Jamie A #11 Project Owner:
Project Name:	Fast Hit-1
Project Location:	Cabin Lake
Sampler Name:	Justin Wright Justin Wright

BILL TO

P.O. #:	
Company:	
Attn:	
Address:	
City:	
State:	Zip:
Phone #:	
Fax #:	

ANALYSIS REQUEST

FOR LAB USE ONLY Lab I.D.	Sample I.D.	(G)RAB OR (C)OMP.	# CONTAINERS	MATRIX: GROUNDWATER	WASTEWATER	SOIL	OIL	SLUDGE	OTHER:	PRESERV.: ACID/BASE:	ICE / COOL	OTHER:	SAMPLING: DATE	TIME	Chloride	BTEX	TPH	TPH Extended
H903457-51	SP 17 4ft					X					X		10/10		X	X	X	X
52	SP 18 Surface					X					X		10/10		X	X	X	X
53	SP 18 2ft					X					X		10/10		X	X	X	X
54	SP 18 4ft					X					X		10/10		X	X	X	X
55	SP 19 Surface					X					X		10/10		X	X	X	X
56	SP 19 2ft					X					X		10/10		X	X	X	X
57	SP 19 4ft					X					X		10/10		X	X	X	X
58	SP 20 Surface					X					X		10/10		X	X	X	X
59	SP 20 2ft					X					X		10/10		X	X	X	X
60	SP 20 4ft					X					X		10/10		X	X	X	X

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Sampler Relinquished:	Date: 10/11/19	Received By:	
	Time: 09:25	Eddi Henson	
Relinquished By:	Date:	Received By:	
	Time:		

Delivered By: (Circle One) Sampler - UPS - Bus - Other:

Temp. +.4 -3.8°C -3.4°C #97

Sample Condition: Cool ☑ Yes ☐ No; Intact ☑ Yes ☐ No

CHECKED BY: (Initials)

Phone Result: ☐ No Add'l Phone #:
Fax Result: ☐ No Add'l Fax #:
REMARKS:

Cardinal cannot accept verbal changes. Please fax written changes to 575-393-2476.

Received by OCD: 3/5/2021 3:12:10 PM

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Page 136 of 249

CARDINAL LABORATORIES

101 East Marland, Hobbs, NM 88240
(575) 393-2326 Fax (575) 393-2476

Page 7 of 9

Company Name:	Conoco Phillips
Project Manager:	Justin Wright
Address:	Baker
City:	Hobbs State: NM Zip: 88240
Phone #:	575-631-9052 Fax #:
Project #:	Jame A 411 Project Owner:
Project Name:	Fast Hit-r
Project Location:	Cabin Lake
Sampler Name:	Justin Wright

BILL TO

P.O. #:	
Company:	
Attn:	
Address:	
City:	
State:	Zip:
Phone #:	
Fax #:	

ANALYSIS REQUEST

FOR LAB USE ONLY Lab I.D.	Sample I.D.	(G)RAB OR (C)OMP.	# CONTAINERS	MATRIX: GROUNDWATER	WASTEWATER	SOIL	OIL	SLUDGE	OTHER:	PRESERV.: ACID/BASE	ICE / COOL	OTHER:	SAMPLING: DATE	TIME	Chloride	BTEX	TPH	TPH Extended
H903457																		
61	SP 21	Surface				✓					✓		10/10		✓	✓	✓	✓
62	SP 21	2ft				✓					✓		10/10		✓	"	"	"
63	SP 21	4ft				✓					✓		10/10		✓	✓	✓	✓
64	SP 22	Surface				✓					✓		10/10		✓	"	"	"
65	SP 22	2ft				✓					✓		10/10		✓	"	"	"
66	SP 22	4ft				✓					✓		10/10		✓	✓	✓	✓
67	SP 23	Surface				✓					✓		10/10		✓	"	"	"
68	SP 23	2ft				✓					✓		10/10		✓	"	"	"
69	SP 23	4ft				✓					✓		10/10		✓	"	"	"
70	SP 24	Surface				✓					✓		10/10		✓	✓	✓	✓

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Sampler Relinquished:	Date: 10/11/19	Received By: Jodi Henson	
Relinquished By:	Time: 09:25	Received By:	
Delivered By: (Circle One)	Date:	Time:	
Sampler - UPS - Bus - Other:	Temp. +1.4 3.8°C -3.4°C #97	Sample Condition: Cool ☑ Yes ☐ No; Intact ☑ Yes ☐ No	CHECKED BY: (Initials)

Phone Result: ☐ No Add'l Phone #:
Fax Result: ☐ No Add'l Fax #:
REMARKS:

Cardinal cannot accept verbal changes. Please fax written changes to 575-393-2476.

Received by OCD: 3/5/2021 3:12:10 PM

Released to Imaging: 4/8/2021 11:24:56 AM

Page 117 of 249

CARDINAL LABORATORIES

101 East Marland, Hobbs, NM 88240
(575) 393-2326 Fax (575) 393-2476

Page 8 of 9

Company Name: Conoco Phillips
Project Manager: Justin Wright
Address: Baker
City: Hobbs State: NM Zip: 88240
Phone #: 575-631-9052 Fax #:
Project #: Jane A #11 Project Owner:
Project Name: Test Hole
Project Location: Cabin Lake
Sampler Name: Justin Wright Justin Wright

BILL TO

P.O. #:
Company:
Attn:
Address:
City:
State: Zip:
Phone #:
Fax #:

ANALYSIS REQUEST

FOR LAB USE ONLY Lab I.D.	Sample I.D.	(G)RAB OR (C)OMP.	# CONTAINERS	MATRIX: GROUNDWATER	WASTEWATER	SOIL	OIL	SLUDGE	OTHER:	PRESERV.: ACID/BASE:	ICE / COOL	OTHER:	SAMPLING: DATE	TIME	Chlorides	BTEX	TPH	TPH Extended
H903457																		
71	SP 24					X					X		10/10		X	X	X	X
72	SP 24					X					X		10/10		X	X	X	X
73	SP 25					X					X		10/10		X	X	X	
74	SP 25					X					X		10/10		X	X	X	X
75	SP 25					X					X		10/10		X	X	X	X
76	SP 26					X					X		10/10		X	X	X	
77	SP 26					X					X		10/10		X	X	X	X
78	SP 26					X					X		10/10		X	X	X	X
79	SP 27					X					X		10/10		X	X	X	X
80	SP 27					X					X		10/10		X	X	X	X

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Sampler Relinquished: Date: 10/11/19 Received By:
Time: 09:25 Jodi Henson
Relinquished By: Date: Received By:
Time:
Delivered By: (Circle One) +.4
Sampler - UPS - Bus - Other: -3.8°C -3.4°C #97 Temp.
Sample Condition: Cool ☑ Yes ☐ No Intact ☑ Yes ☐ No
CHECKED BY: (Initials)

Phone Result: ☐ No Add'l Phone #:
Fax Result: ☐ No Add'l Fax #:
REMARKS:

Cardinal cannot accept verbal changes. Please fax written changes to 575-393-2476.

Received by OCD: 3/5/2021 3:12:10 PM

Released to Imaging: 4/8/2021 11:24:56 AM

CARDINAL LABORATORIES

101 East Marland, Hobbs, NM 88240
(575) 393-2326 Fax (575) 393-2476

Page 9 of 9

Company Name: ConocoPhillips
Project Manager: Justin Wright
Address: Barker
City: Hobbs State: NM Zip: 88240
Phone #: 575-631-9052 Fax #:
Project #: Jame A 11 Project Owner:
Project Name: Test Hole
Project Location: Cabin Lake
Sampler Name: Justin Wright

BILL TO
P.O. #:
Company:
Attn:
Address:
City:
State: Zip:
Phone #:
Fax #:

ANALYSIS REQUEST

FOR LAB USE ONLY Lab I.D.	Sample I.D.	(G)RAB OR (C)OMP.	# CONTAINERS	GROUNDWATER	WASTEWATER	SOIL	OIL	SLUDGE	OTHER:	ACID/BASE:	ICE / COOL	OTHER:	DATE	TIME	Chloride	BTEX	TPH	TPH Extended
H903457 81	SP 27 4ft					/					/		10/10		/	✓	✓	✓

PLEASE NOTE: Liability and Damages. Cardinal's liability and client's exclusive remedy for any claim arising whether based in contract or tort, shall be limited to the amount paid by the client for the analyses. All claims including those for negligence and any other cause whatsoever shall be deemed waived unless made in writing and received by Cardinal within 30 days after completion of the applicable service. In no event shall Cardinal be liable for incidental or consequential damages, including without limitation, business interruptions, loss of use, or loss of profits incurred by client, its subsidiaries, affiliates or successors arising out of or related to the performance of services hereunder by Cardinal, regardless of whether such claim is based upon any of the above stated reasons or otherwise.

Terms and Conditions: Interest will be charged on all accounts more than 30 days past due at the rate of 24% per annum from the original date of invoice, and all costs of collections, including attorney's fees.

Sampler Relinquished: [signature] Date: Time:
Received By: Jodi Henson
Relinquished By: Date: Time:
Received By:

Phone Result: ☐ No Add'l Phone #:
Fax Result: ☐ No Add'l Fax #:
REMARKS:

Delivered By: (Circle One) 4.4
Sampler - UPS - Bus - Other: -3.8°c -3.4°c #97
Temp.
Sample Condition: Cool ☑ Yes ☐ No; Intact ☑ Yes ☐ No
CHECKED BY: (Initials) [initials]

Cardinal cannot accept verbal changes. Please fax written changes to 575-393-2476.

Pace Analytical®
National Center for Testing & Innovation

ANALYTICAL REPORT

September 15, 2020

ConocoPhillips - Tetra Tech

Sample Delivery Group:	L1256173
Samples Received:	08/29/2020
Project Number:	212C-MD-02250
Description:	James A #011 Release

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

Entire Report Reviewed By:

Chris McCord
Project Manager

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

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BH-1 (0-1) L1256173-01 Solid

Collected by: John Thurston | Collected date/time: 08/26/20 00:00 | Received date/time: 08/29/20 10:00

Method	Batch	Dilution	Preparation date/time	Analysis date/time	Analyst	Location
Total Solids by Method 2540 G-2011	WG1538110	1	09/06/20 18:25	09/06/20 19:12	KBC	Mt. Juliet, TN
Wet Chemistry by Method 300.0	WG1535090	100	08/31/20 17:24	08/31/20 19:05	ELN	Mt. Juliet, TN
Volatile Organic Compounds (GC) by Method 8015D/GRO	WG1536466	1	09/01/20 17:40	09/01/20 23:08	ACG	Mt. Juliet, TN
Volatile Organic Compounds (GC/MS) by Method 8260B	WG1536450	1	09/01/20 17:40	09/02/20 02:27	DWR	Mt. Juliet, TN
Semi-Volatile Organic Compounds (GC) by Method 8015	WG1537627	1	09/04/20 11:03	09/05/20 00:47	JDG	Mt. Juliet, TN

BH-1 (2-3) L1256173-02 Solid

Collected by: John Thurston | Collected date/time: 08/26/20 00:00 | Received date/time: 08/29/20 10:00

Method	Batch	Dilution	Preparation date/time	Analysis date/time	Analyst	Location
Total Solids by Method 2540 G-2011	WG1538110	1	09/06/20 18:25	09/06/20 19:12	KBC	Mt. Juliet, TN
Wet Chemistry by Method 300.0	WG1535090	100	08/31/20 17:24	08/31/20 19:16	ELN	Mt. Juliet, TN
Volatile Organic Compounds (GC) by Method 8015D/GRO	WG1536466	1	09/01/20 17:40	09/01/20 23:29	ACG	Mt. Juliet, TN
Volatile Organic Compounds (GC/MS) by Method 8260B	WG1536450	1	09/01/20 17:40	09/02/20 02:46	DWR	Mt. Juliet, TN
Semi-Volatile Organic Compounds (GC) by Method 8015	WG1537627	1	09/04/20 11:03	09/05/20 00:21	JDG	Mt. Juliet, TN

BH-1 (4-5) L1256173-03 Solid

Collected by: John Thurston | Collected date/time: 08/26/20 00:00 | Received date/time: 08/29/20 10:00

Method	Batch	Dilution	Preparation date/time	Analysis date/time	Analyst	Location
Total Solids by Method 2540 G-2011	WG1538110	1	09/06/20 18:25	09/06/20 19:12	KBC	Mt. Juliet, TN
Wet Chemistry by Method 300.0	WG1535090	5	08/31/20 17:24	08/31/20 19:38	ELN	Mt. Juliet, TN
Volatile Organic Compounds (GC) by Method 8015D/GRO	WG1536466	1	09/01/20 17:40	09/01/20 23:49	ACG	Mt. Juliet, TN
Volatile Organic Compounds (GC/MS) by Method 8260B	WG1536450	1	09/01/20 17:40	09/02/20 03:05	DWR	Mt. Juliet, TN
Semi-Volatile Organic Compounds (GC) by Method 8015	WG1539086	1	09/07/20 02:10	09/07/20 18:01	AEG	Mt. Juliet, TN
Semi-Volatile Organic Compounds (GC) by Method 8015	WG1539086	1	09/07/20 02:10	09/08/20 10:30	AEG	Mt. Juliet, TN

BH-1 (6-7) L1256173-04 Solid

Collected by: John Thurston | Collected date/time: 08/26/20 00:00 | Received date/time: 08/29/20 10:00

Method	Batch	Dilution	Preparation date/time	Analysis date/time	Analyst	Location
Total Solids by Method 2540 G-2011	WG1538110	1	09/06/20 18:25	09/06/20 19:12	KBC	Mt. Juliet, TN
Wet Chemistry by Method 300.0	WG1535090	1	08/31/20 17:24	08/31/20 19:49	ELN	Mt. Juliet, TN
Volatile Organic Compounds (GC) by Method 8015D/GRO	WG1536466	1	09/01/20 17:40	09/02/20 00:10	ACG	Mt. Juliet, TN
Volatile Organic Compounds (GC/MS) by Method 8260B	WG1536450	1	09/01/20 17:40	09/02/20 03:24	DWR	Mt. Juliet, TN
Semi-Volatile Organic Compounds (GC) by Method 8015	WG1539086	1	09/07/20 02:10	09/07/20 18:15	AEG	Mt. Juliet, TN
Semi-Volatile Organic Compounds (GC) by Method 8015	WG1539086	1	09/07/20 02:10	09/08/20 10:43	AEG	Mt. Juliet, TN

BH-1 (9-10) L1256173-05 Solid

Collected by: John Thurston | Collected date/time: 08/26/20 00:00 | Received date/time: 08/29/20 10:00

Method	Batch	Dilution	Preparation date/time	Analysis date/time	Analyst	Location
Total Solids by Method 2540 G-2011	WG1538113	1	09/06/20 01:01	09/06/20 01:18	KBC	Mt. Juliet, TN
Wet Chemistry by Method 300.0	WG1535090	1	08/31/20 17:24	08/31/20 19:59	ELN	Mt. Juliet, TN
Volatile Organic Compounds (GC) by Method 8015D/GRO	WG1536466	1.01	09/01/20 17:40	09/02/20 00:34	ACG	Mt. Juliet, TN
Volatile Organic Compounds (GC/MS) by Method 8260B	WG1536450	1	09/01/20 17:40	09/02/20 03:43	DWR	Mt. Juliet, TN
Semi-Volatile Organic Compounds (GC) by Method 8015	WG1539086	1	09/07/20 02:10	09/07/20 18:28	AEG	Mt. Juliet, TN
Semi-Volatile Organic Compounds (GC) by Method 8015	WG1539086	1	09/07/20 02:10	09/08/20 10:56	AEG	Mt. Juliet, TN

BH-1 (14-15) L1256173-06 Solid

Collected by: John Thurston
Collected date/time: 08/26/20 00:00
Received date/time: 08/29/20 10:00

Method	Batch	Dilution	Preparation date/time	Analysis date/time	Analyst	Location
Total Solids by Method 2540 G-2011	WG1538113	1	09/06/20 01:01	09/06/20 01:18	KBC	Mt. Juliet, TN
Wet Chemistry by Method 300.0	WG1535090	1	08/31/20 17:24	08/31/20 20:11	ELN	Mt. Juliet, TN
Volatile Organic Compounds (GC) by Method 8015D/GRO	WG1536466	1	09/01/20 17:40	09/02/20 00:55	ACG	Mt. Juliet, TN
Volatile Organic Compounds (GC/MS) by Method 8260B	WG1536450	1	09/01/20 17:40	09/02/20 04:02	DWR	Mt. Juliet, TN
Semi-Volatile Organic Compounds (GC) by Method 8015	WG1539086	1	09/07/20 02:10	09/07/20 18:41	AEG	Mt. Juliet, TN
Semi-Volatile Organic Compounds (GC) by Method 8015	WG1539086	1	09/07/20 02:10	09/08/20 11:09	AEG	Mt. Juliet, TN

BH-1 (19-20) L1256173-07 Solid

Collected by: John Thurston
Collected date/time: 08/26/20 00:00
Received date/time: 08/29/20 10:00

Method	Batch	Dilution	Preparation date/time	Analysis date/time	Analyst	Location
Total Solids by Method 2540 G-2011	WG1538113	1	09/06/20 01:01	09/06/20 01:18	KBC	Mt. Juliet, TN
Wet Chemistry by Method 300.0	WG1535090	1	08/31/20 17:24	08/31/20 20:20	ELN	Mt. Juliet, TN
Volatile Organic Compounds (GC) by Method 8015D/GRO	WG1536466	1	09/01/20 17:40	09/02/20 01:21	ACG	Mt. Juliet, TN
Volatile Organic Compounds (GC/MS) by Method 8260B	WG1536450	1	09/01/20 17:40	09/02/20 04:22	DWR	Mt. Juliet, TN
Semi-Volatile Organic Compounds (GC) by Method 8015	WG1539086	1	09/07/20 02:10	09/07/20 18:54	AEG	Mt. Juliet, TN
Semi-Volatile Organic Compounds (GC) by Method 8015	WG1539086	1	09/07/20 02:10	09/08/20 11:22	AEG	Mt. Juliet, TN

BH-2 (0-1) L1256173-08 Solid

Collected by: John Thurston
Collected date/time: 08/26/20 00:00
Received date/time: 08/29/20 10:00

Method	Batch	Dilution	Preparation date/time	Analysis date/time	Analyst	Location
Total Solids by Method 2540 G-2011	WG1538113	1	09/06/20 01:01	09/06/20 01:18	KBC	Mt. Juliet, TN
Wet Chemistry by Method 300.0	WG1535090	100	08/31/20 17:24	08/31/20 20:51	ELN	Mt. Juliet, TN
Volatile Organic Compounds (GC) by Method 8015D/GRO	WG1536466	1	09/01/20 17:40	09/02/20 02:06	ACG	Mt. Juliet, TN
Volatile Organic Compounds (GC/MS) by Method 8260B	WG1536449	1	09/01/20 17:40	09/01/20 22:27	DWR	Mt. Juliet, TN
Semi-Volatile Organic Compounds (GC) by Method 8015	WG1539086	1	09/07/20 02:10	09/07/20 19:07	AEG	Mt. Juliet, TN
Semi-Volatile Organic Compounds (GC) by Method 8015	WG1539086	1	09/07/20 02:10	09/08/20 18:00	TJD	Mt. Juliet, TN

BH-2 (2-3) L1256173-09 Solid

Collected by: John Thurston
Collected date/time: 08/26/20 00:00
Received date/time: 08/29/20 10:00

Method	Batch	Dilution	Preparation date/time	Analysis date/time	Analyst	Location
Total Solids by Method 2540 G-2011	WG1538113	1	09/06/20 01:01	09/06/20 01:18	KBC	Mt. Juliet, TN
Wet Chemistry by Method 300.0	WG1535090	100	08/31/20 17:24	08/31/20 21:01	ELN	Mt. Juliet, TN
Volatile Organic Compounds (GC) by Method 8015D/GRO	WG1536466	1	09/01/20 17:40	09/02/20 02:27	ACG	Mt. Juliet, TN
Volatile Organic Compounds (GC/MS) by Method 8260B	WG1536449	1	09/01/20 17:40	09/01/20 22:46	DWR	Mt. Juliet, TN
Semi-Volatile Organic Compounds (GC) by Method 8015	WG1539086	1	09/07/20 02:10	09/07/20 19:20	AEG	Mt. Juliet, TN
Semi-Volatile Organic Compounds (GC) by Method 8015	WG1539086	1	09/07/20 02:10	09/08/20 11:48	AEG	Mt. Juliet, TN

BH-2 (4-5) L1256173-10 Solid

Collected by: John Thurston
Collected date/time: 08/26/20 00:00
Received date/time: 08/29/20 10:00

Method	Batch	Dilution	Preparation date/time	Analysis date/time	Analyst	Location
Total Solids by Method 2540 G-2011	WG1538113	1	09/06/20 01:01	09/06/20 01:18	KBC	Mt. Juliet, TN
Wet Chemistry by Method 300.0	WG1535090	1	08/31/20 17:24	08/31/20 21:10	ELN	Mt. Juliet, TN
Volatile Organic Compounds (GC) by Method 8015D/GRO	WG1536466	1	09/01/20 17:40	09/02/20 02:47	ACG	Mt. Juliet, TN
Volatile Organic Compounds (GC/MS) by Method 8260B	WG1536449	1	09/01/20 17:40	09/01/20 23:05	DWR	Mt. Juliet, TN
Semi-Volatile Organic Compounds (GC) by Method 8015	WG1539086	1	09/07/20 02:10	09/07/20 19:33	AEG	Mt. Juliet, TN
Semi-Volatile Organic Compounds (GC) by Method 8015	WG1539086	1	09/07/20 02:10	09/08/20 12:01	AEG	Mt. Juliet, TN

BH-2 (6-7) L1256173-11 Solid

Collected by: John Thurston
Collected date/time: 08/26/20 00:00
Received date/time: 08/29/20 10:00

Method	Batch	Dilution	Preparation date/time	Analysis date/time	Analyst	Location
Total Solids by Method 2540 G-2011	WG1538113	1	09/06/20 01:01	09/06/20 01:18	KBC	Mt. Juliet, TN
Wet Chemistry by Method 300.0	WG1535090	1	08/31/20 17:24	08/31/20 21:19	ELN	Mt. Juliet, TN
Volatile Organic Compounds (GC) by Method 8015D/GRO	WG1536466	1	09/01/20 17:40	09/02/20 03:08	ACG	Mt. Juliet, TN
Volatile Organic Compounds (GC/MS) by Method 8260B	WG1536449	1	09/01/20 17:40	09/01/20 23:24	DWR	Mt. Juliet, TN
Semi-Volatile Organic Compounds (GC) by Method 8015	WG1539086	1	09/07/20 02:10	09/07/20 19:46	AEG	Mt. Juliet, TN
Semi-Volatile Organic Compounds (GC) by Method 8015	WG1539086	1	09/07/20 02:10	09/08/20 12:14	AEG	Mt. Juliet, TN

BH-2 (9-10) L1256173-12 Solid

Collected by: John Thurston
Collected date/time: 08/26/20 00:00
Received date/time: 08/29/20 10:00

Method	Batch	Dilution	Preparation date/time	Analysis date/time	Analyst	Location
Total Solids by Method 2540 G-2011	WG1538113	1	09/06/20 01:01	09/06/20 01:18	KBC	Mt. Juliet, TN
Wet Chemistry by Method 300.0	WG1535090	1	08/31/20 17:24	08/31/20 21:29	ELN	Mt. Juliet, TN
Volatile Organic Compounds (GC) by Method 8015D/GRO	WG1536466	1	09/01/20 17:40	09/02/20 03:29	ACG	Mt. Juliet, TN
Volatile Organic Compounds (GC/MS) by Method 8260B	WG1536449	1	09/01/20 17:40	09/01/20 23:42	DWR	Mt. Juliet, TN
Semi-Volatile Organic Compounds (GC) by Method 8015	WG1539086	1	09/07/20 02:10	09/07/20 19:59	AEG	Mt. Juliet, TN
Semi-Volatile Organic Compounds (GC) by Method 8015	WG1539086	1	09/07/20 02:10	09/08/20 12:28	AEG	Mt. Juliet, TN

BH-2 (14-15) L1256173-13 Solid

Collected by: John Thurston
Collected date/time: 08/26/20 00:00
Received date/time: 08/29/20 10:00

Method	Batch	Dilution	Preparation date/time	Analysis date/time	Analyst	Location
Total Solids by Method 2540 G-2011	WG1538113	1	09/06/20 01:01	09/06/20 01:18	KBC	Mt. Juliet, TN
Wet Chemistry by Method 300.0	WG1535090	1	08/31/20 17:24	08/31/20 21:57	ELN	Mt. Juliet, TN
Volatile Organic Compounds (GC) by Method 8015D/GRO	WG1536466	1	09/01/20 17:40	09/02/20 03:49	ACG	Mt. Juliet, TN
Volatile Organic Compounds (GC/MS) by Method 8260B	WG1536449	1	09/01/20 17:40	09/02/20 00:01	DWR	Mt. Juliet, TN
Semi-Volatile Organic Compounds (GC) by Method 8015	WG1539086	1	09/07/20 02:10	09/07/20 20:12	AEG	Mt. Juliet, TN
Semi-Volatile Organic Compounds (GC) by Method 8015	WG1539086	1	09/07/20 02:10	09/08/20 12:41	AEG	Mt. Juliet, TN

BH-2 (19-20) L1256173-14 Solid

Collected by: John Thurston
Collected date/time: 08/26/20 00:00
Received date/time: 08/29/20 10:00

Method	Batch	Dilution	Preparation date/time	Analysis date/time	Analyst	Location
Total Solids by Method 2540 G-2011	WG1538113	1	09/06/20 01:01	09/06/20 01:18	KBC	Mt. Juliet, TN
Wet Chemistry by Method 300.0	WG1535090	1	08/31/20 17:24	08/31/20 22:06	ELN	Mt. Juliet, TN
Volatile Organic Compounds (GC) by Method 8015D/GRO	WG1536466	1	09/01/20 17:40	09/02/20 04:10	ACG	Mt. Juliet, TN
Volatile Organic Compounds (GC/MS) by Method 8260B	WG1536449	1	09/01/20 17:40	09/02/20 00:19	DWR	Mt. Juliet, TN
Semi-Volatile Organic Compounds (GC) by Method 8015	WG1539086	1	09/07/20 02:10	09/07/20 20:25	AEG	Mt. Juliet, TN
Semi-Volatile Organic Compounds (GC) by Method 8015	WG1539086	1	09/07/20 02:10	09/08/20 12:53	AEG	Mt. Juliet, TN

BH-2 (24-25) L1256173-15 Solid

Collected by: John Thurston
Collected date/time: 08/26/20 00:00
Received date/time: 08/29/20 10:00

Method	Batch	Dilution	Preparation date/time	Analysis date/time	Analyst	Location
Total Solids by Method 2540 G-2011	WG1538114	1	09/06/20 00:42	09/06/20 00:42	KBC	Mt. Juliet, TN
Wet Chemistry by Method 300.0	WG1535090	1	08/31/20 17:24	08/31/20 22:16	ELN	Mt. Juliet, TN
Volatile Organic Compounds (GC) by Method 8015D/GRO	WG1536466	1	09/01/20 17:40	09/02/20 04:31	ACG	Mt. Juliet, TN
Volatile Organic Compounds (GC/MS) by Method 8260B	WG1536449	1	09/01/20 17:40	09/02/20 00:38	DWR	Mt. Juliet, TN
Semi-Volatile Organic Compounds (GC) by Method 8015	WG1539086	1	09/07/20 02:10	09/07/20 20:38	AEG	Mt. Juliet, TN
Semi-Volatile Organic Compounds (GC) by Method 8015	WG1539086	1	09/07/20 02:10	09/08/20 13:06	AEG	Mt. Juliet, TN

BH-3 (0-1) L1256173-16 Solid

Collected by: John Thurston
Collected date/time: 08/26/20 00:00
Received date/time: 08/29/20 10:00

Method	Batch	Dilution	Preparation date/time	Analysis date/time	Analyst	Location
Total Solids by Method 2540 G-2011	WG1538114	1	09/06/20 00:42	09/06/20 00:42	KBC	Mt. Juliet, TN
Wet Chemistry by Method 300.0	WG1535090	1	08/31/20 17:24	08/31/20 22:47	ELN	Mt. Juliet, TN
Volatile Organic Compounds (GC) by Method 8015D/GRO	WG1536466	1	09/01/20 17:40	09/02/20 05:25	ACG	Mt. Juliet, TN
Volatile Organic Compounds (GC/MS) by Method 8260B	WG1536449	1	09/01/20 17:40	09/02/20 00:57	DWR	Mt. Juliet, TN
Semi-Volatile Organic Compounds (GC) by Method 8015	WG1539086	1	09/07/20 02:10	09/07/20 20:51	AEG	Mt. Juliet, TN
Semi-Volatile Organic Compounds (GC) by Method 8015	WG1539086	1	09/07/20 02:10	09/08/20 13:19	AEG	Mt. Juliet, TN

BH-3 (2-3) L1256173-17 Solid

Collected by: John Thurston
Collected date/time: 08/26/20 00:00
Received date/time: 08/29/20 10:00

Method	Batch	Dilution	Preparation date/time	Analysis date/time	Analyst	Location
Total Solids by Method 2540 G-2011	WG1538114	1	09/06/20 00:42	09/06/20 00:42	KBC	Mt. Juliet, TN
Wet Chemistry by Method 300.0	WG1535090	1	08/31/20 17:24	08/31/20 22:56	ELN	Mt. Juliet, TN
Volatile Organic Compounds (GC) by Method 8015D/GRO	WG1536466	1	09/01/20 17:40	09/02/20 05:46	ACG	Mt. Juliet, TN
Volatile Organic Compounds (GC/MS) by Method 8260B	WG1536449	1	09/01/20 17:40	09/02/20 01:15	DWR	Mt. Juliet, TN
Semi-Volatile Organic Compounds (GC) by Method 8015	WG1539272	1	09/08/20 23:52	09/09/20 11:00	AEG	Mt. Juliet, TN

BH-4 (0-1) L1256173-18 Solid

Collected by: John Thurston
Collected date/time: 08/26/20 00:00
Received date/time: 08/29/20 10:00

Method	Batch	Dilution	Preparation date/time	Analysis date/time	Analyst	Location
Total Solids by Method 2540 G-2011	WG1538114	1	09/06/20 00:42	09/06/20 00:42	KBC	Mt. Juliet, TN
Wet Chemistry by Method 300.0	WG1535090	5	08/31/20 17:24	08/31/20 23:19	ELN	Mt. Juliet, TN
Volatile Organic Compounds (GC) by Method 8015D/GRO	WG1536466	1	09/01/20 17:40	09/02/20 06:07	ACG	Mt. Juliet, TN
Volatile Organic Compounds (GC/MS) by Method 8260B	WG1536449	1	09/01/20 17:40	09/02/20 01:34	DWR	Mt. Juliet, TN
Semi-Volatile Organic Compounds (GC) by Method 8015	WG1539272	1	09/08/20 23:52	09/09/20 08:51	JN	Mt. Juliet, TN

BH-4 (2-3) L1256173-19 Solid

Collected by: John Thurston
Collected date/time: 08/26/20 00:00
Received date/time: 08/29/20 10:00

Method	Batch	Dilution	Preparation date/time	Analysis date/time	Analyst	Location
Total Solids by Method 2540 G-2011	WG1538114	1	09/06/20 00:42	09/06/20 00:42	KBC	Mt. Juliet, TN
Wet Chemistry by Method 300.0	WG1535090	1	08/31/20 17:24	08/31/20 23:29	ELN	Mt. Juliet, TN
Volatile Organic Compounds (GC) by Method 8015D/GRO	WG1536466	1	09/01/20 17:40	09/02/20 06:27	ACG	Mt. Juliet, TN
Volatile Organic Compounds (GC/MS) by Method 8260B	WG1536449	1	09/01/20 17:40	09/02/20 01:53	DWR	Mt. Juliet, TN
Semi-Volatile Organic Compounds (GC) by Method 8015	WG1539272	1	09/08/20 23:52	09/09/20 09:32	JN	Mt. Juliet, TN

BH-4 (4-5) L1256173-20 Solid

Collected by: John Thurston
Collected date/time: 08/26/20 00:00
Received date/time: 08/29/20 10:00

Method	Batch	Dilution	Preparation date/time	Analysis date/time	Analyst	Location
Total Solids by Method 2540 G-2011	WG1538114	1	09/06/20 00:42	09/06/20 00:42	KBC	Mt. Juliet, TN
Wet Chemistry by Method 300.0	WG1535090	1	08/31/20 17:24	08/31/20 23:40	ELN	Mt. Juliet, TN
Volatile Organic Compounds (GC) by Method 8015D/GRO	WG1536466	1	09/01/20 17:40	09/02/20 06:53	ACG	Mt. Juliet, TN
Volatile Organic Compounds (GC/MS) by Method 8260B	WG1536449	1	09/01/20 17:40	09/02/20 02:12	DWR	Mt. Juliet, TN
Semi-Volatile Organic Compounds (GC) by Method 8015	WG1539272	1	09/08/20 23:52	09/09/20 09:48	JN	Mt. Juliet, TN

BH-5 (0-1) L1256173-21 Solid

Collected by: John Thurston
Collected date/time: 08/26/20 00:00
Received date/time: 08/29/20 10:00

Method	Batch	Dilution	Preparation date/time	Analysis date/time	Analyst	Location
Total Solids by Method 2540 G-2011	WG1538114	1	09/06/20 00:42	09/06/20 00:42	KBC	Mt. Juliet, TN
Wet Chemistry by Method 300.0	WG1535091	1	08/31/20 15:43	08/31/20 22:07	ELN	Mt. Juliet, TN
Volatile Organic Compounds (GC) by Method 8015D/GRO	WG1536522	1	09/01/20 17:29	09/02/20 06:44	DWR	Mt. Juliet, TN
Volatile Organic Compounds (GC/MS) by Method 8260B	WG1536449	1	09/01/20 17:29	09/02/20 02:31	DWR	Mt. Juliet, TN
Semi-Volatile Organic Compounds (GC) by Method 8015	WG1539272	1	09/08/20 23:52	09/09/20 13:03	AEG	Mt. Juliet, TN
Semi-Volatile Organic Compounds (GC) by Method 8015	WG1540114	1	09/10/20 21:06	09/11/20 02:24	AEG	Mt. Juliet, TN

BH-5 (2-3) L1256173-22 Solid

Collected by: John Thurston
Collected date/time: 08/26/20 00:00
Received date/time: 08/29/20 10:00

Method	Batch	Dilution	Preparation date/time	Analysis date/time	Analyst	Location
Total Solids by Method 2540 G-2011	WG1538114	1	09/06/20 00:42	09/06/20 00:42	KBC	Mt. Juliet, TN
Wet Chemistry by Method 300.0	WG1535091	1	08/31/20 15:43	08/31/20 22:41	ELN	Mt. Juliet, TN
Volatile Organic Compounds (GC) by Method 8015D/GRO	WG1536522	1	09/01/20 17:29	09/02/20 07:07	DWR	Mt. Juliet, TN
Volatile Organic Compounds (GC/MS) by Method 8260B	WG1536449	1	09/01/20 17:29	09/02/20 02:49	DWR	Mt. Juliet, TN
Semi-Volatile Organic Compounds (GC) by Method 8015	WG1539272	1	09/08/20 23:52	09/09/20 10:02	JN	Mt. Juliet, TN

BH-5 (4-5) L1256173-23 Solid

Collected by: John Thurston
Collected date/time: 08/26/20 00:00
Received date/time: 08/29/20 10:00

Method	Batch	Dilution	Preparation date/time	Analysis date/time	Analyst	Location
Total Solids by Method 2540 G-2011	WG1538114	1	09/06/20 00:42	09/06/20 00:42	KBC	Mt. Juliet, TN
Wet Chemistry by Method 300.0	WG1535091	1	08/31/20 15:43	08/31/20 22:59	ELN	Mt. Juliet, TN
Volatile Organic Compounds (GC) by Method 8015D/GRO	WG1536522	1	09/01/20 17:29	09/02/20 08:39	DWR	Mt. Juliet, TN
Volatile Organic Compounds (GC/MS) by Method 8260B	WG1536449	1	09/01/20 17:29	09/02/20 03:08	DWR	Mt. Juliet, TN
Semi-Volatile Organic Compounds (GC) by Method 8015	WG1539272	1	09/08/20 23:52	09/09/20 10:15	JN	Mt. Juliet, TN

BH-5 (6-7) L1256173-24 Solid

Collected by: John Thurston
Collected date/time: 08/26/20 00:00
Received date/time: 08/29/20 10:00

Method	Batch	Dilution	Preparation date/time	Analysis date/time	Analyst	Location
Total Solids by Method 2540 G-2011	WG1538114	1	09/06/20 00:42	09/06/20 00:42	KBC	Mt. Juliet, TN
Wet Chemistry by Method 300.0	WG1535091	1	08/31/20 15:43	08/31/20 23:16	ELN	Mt. Juliet, TN
Volatile Organic Compounds (GC) by Method 8015D/GRO	WG1536522	1	09/01/20 17:29	09/02/20 09:22	DWR	Mt. Juliet, TN
Volatile Organic Compounds (GC/MS) by Method 8260B	WG1536449	1	09/01/20 17:29	09/02/20 03:27	DWR	Mt. Juliet, TN
Semi-Volatile Organic Compounds (GC) by Method 8015	WG1539272	1	09/08/20 23:52	09/09/20 10:28	JN	Mt. Juliet, TN

BH-5 (9-10) L1256173-25 Solid

Collected by: John Thurston
Collected date/time: 08/26/20 00:00
Received date/time: 08/29/20 10:00

Method	Batch	Dilution	Preparation date/time	Analysis date/time	Analyst	Location
Total Solids by Method 2540 G-2011	WG1538116	1	09/05/20 23:55	09/06/20 00:41	KBC	Mt. Juliet, TN
Wet Chemistry by Method 300.0	WG1535091	1	08/31/20 15:43	08/31/20 23:34	ELN	Mt. Juliet, TN
Volatile Organic Compounds (GC) by Method 8015D/GRO	WG1536522	1	09/01/20 17:29	09/02/20 09:57	DWR	Mt. Juliet, TN
Volatile Organic Compounds (GC/MS) by Method 8260B	WG1536449	1	09/01/20 17:29	09/02/20 03:46	DWR	Mt. Juliet, TN
Semi-Volatile Organic Compounds (GC) by Method 8015	WG1539272	1	09/08/20 23:52	09/09/20 10:42	JN	Mt. Juliet, TN

BH-6 (0-1) L1256173-26 Solid

Collected by: John Thurston
Collected date/time: 08/26/20 00:00
Received date/time: 08/29/20 10:00

Method	Batch	Dilution	Preparation date/time	Analysis date/time	Analyst	Location
Total Solids by Method 2540 G-2011	WG1538116	1	09/05/20 23:55	09/06/20 00:41	KBC	Mt. Juliet, TN
Wet Chemistry by Method 300.0	WG1535091	1	08/31/20 15:43	08/31/20 23:51	ELN	Mt. Juliet, TN
Volatile Organic Compounds (GC) by Method 8015D/GRO	WG1536522	1	09/01/20 17:29	09/02/20 10:20	DWR	Mt. Juliet, TN
Volatile Organic Compounds (GC/MS) by Method 8260B	WG1536449	1	09/01/20 17:29	09/02/20 04:04	DWR	Mt. Juliet, TN
Semi-Volatile Organic Compounds (GC) by Method 8015	WG1539272	50	09/08/20 23:52	09/09/20 15:16	JN	Mt. Juliet, TN

BH-6 (2-3) L1256173-27 Solid

Collected by: John Thurston
Collected date/time: 08/26/20 00:00
Received date/time: 08/29/20 10:00

Method	Batch	Dilution	Preparation date/time	Analysis date/time	Analyst	Location
Total Solids by Method 2540 G-2011	WG1538116	1	09/05/20 23:55	09/06/20 00:41	KBC	Mt. Juliet, TN
Wet Chemistry by Method 300.0	WG1535091	1	08/31/20 15:43	09/01/20 00:08	ELN	Mt. Juliet, TN
Volatile Organic Compounds (GC) by Method 8015D/GRO	WG1536522	1	09/01/20 17:29	09/02/20 10:43	DWR	Mt. Juliet, TN
Volatile Organic Compounds (GC/MS) by Method 8260B	WG1536449	1	09/01/20 17:29	09/02/20 04:23	DWR	Mt. Juliet, TN
Semi-Volatile Organic Compounds (GC) by Method 8015	WG1539272	1	09/08/20 23:52	09/09/20 13:32	AEG	Mt. Juliet, TN
Semi-Volatile Organic Compounds (GC) by Method 8015	WG1540114	1	09/10/20 21:06	09/11/20 02:37	AEG	Mt. Juliet, TN

BH-6 (4-5) L1256173-28 Solid

Collected by: John Thurston
Collected date/time: 08/26/20 00:00
Received date/time: 08/29/20 10:00

Method	Batch	Dilution	Preparation date/time	Analysis date/time	Analyst	Location
Total Solids by Method 2540 G-2011	WG1538116	1	09/05/20 23:55	09/06/20 00:41	KBC	Mt. Juliet, TN
Wet Chemistry by Method 300.0	WG1535091	1	08/31/20 15:43	09/01/20 01:01	ELN	Mt. Juliet, TN
Volatile Organic Compounds (GC) by Method 8015D/GRO	WG1536522	1	09/01/20 17:29	09/02/20 11:06	DWR	Mt. Juliet, TN
Volatile Organic Compounds (GC/MS) by Method 8260B	WG1536422	1	09/01/20 17:29	09/02/20 11:02	JHH	Mt. Juliet, TN
Semi-Volatile Organic Compounds (GC) by Method 8015	WG1539272	1	09/08/20 23:52	09/09/20 13:46	AEG	Mt. Juliet, TN
Semi-Volatile Organic Compounds (GC) by Method 8015	WG1540114	1	09/10/20 21:06	09/11/20 02:50	AEG	Mt. Juliet, TN

BH-6 (6-7) L1256173-29 Solid

Collected by: John Thurston
Collected date/time: 08/26/20 00:00
Received date/time: 08/29/20 10:00

Method	Batch	Dilution	Preparation date/time	Analysis date/time	Analyst	Location
Total Solids by Method 2540 G-2011	WG1538116	1	09/05/20 23:55	09/06/20 00:41	KBC	Mt. Juliet, TN
Wet Chemistry by Method 300.0	WG1535091	1	08/31/20 15:43	09/01/20 01:18	ELN	Mt. Juliet, TN
Volatile Organic Compounds (GC) by Method 8015D/GRO	WG1536522	1	09/01/20 17:29	09/02/20 11:29	DWR	Mt. Juliet, TN
Volatile Organic Compounds (GC/MS) by Method 8260B	WG1536422	1	09/01/20 17:29	09/02/20 11:22	JHH	Mt. Juliet, TN
Semi-Volatile Organic Compounds (GC) by Method 8015	WG1539272	1	09/08/20 23:52	09/09/20 11:36	JN	Mt. Juliet, TN

BH-6 (9-10) L1256173-30 Solid

Collected by: John Thurston
Collected date/time: 08/26/20 00:00
Received date/time: 08/29/20 10:00

Method	Batch	Dilution	Preparation date/time	Analysis date/time	Analyst	Location
Total Solids by Method 2540 G-2011	WG1538116	1	09/05/20 23:55	09/06/20 00:41	KBC	Mt. Juliet, TN
Wet Chemistry by Method 300.0	WG1535091	1	08/31/20 15:43	09/01/20 01:36	ELN	Mt. Juliet, TN
Volatile Organic Compounds (GC) by Method 8015D/GRO	WG1536522	1	09/01/20 17:29	09/02/20 11:52	DWR	Mt. Juliet, TN
Volatile Organic Compounds (GC/MS) by Method 8260B	WG1536450	1	09/01/20 17:29	09/02/20 04:41	DWR	Mt. Juliet, TN
Semi-Volatile Organic Compounds (GC) by Method 8015	WG1539272	1	09/08/20 23:52	09/09/20 11:17	JN	Mt. Juliet, TN

BH-7 (0-1) L1256173-31 Solid

Collected by: John Thurston
Collected date/time: 08/26/20 00:00
Received date/time: 08/29/20 10:00

Method	Batch	Dilution	Preparation date/time	Analysis date/time	Analyst	Location
Total Solids by Method 2540 G-2011	WG1538116	1	09/05/20 23:55	09/06/20 00:41	KBC	Mt. Juliet, TN
Wet Chemistry by Method 300.0	WG1535091	1	08/31/20 15:43	09/01/20 02:28	ELN	Mt. Juliet, TN
Volatile Organic Compounds (GC) by Method 8015D/GRO	WG1536522	1	09/01/20 17:29	09/02/20 12:15	DWR	Mt. Juliet, TN
Volatile Organic Compounds (GC/MS) by Method 8260B	WG1536450	1	09/01/20 17:29	09/02/20 05:00	DWR	Mt. Juliet, TN
Semi-Volatile Organic Compounds (GC) by Method 8015	WG1539272	1	09/08/20 23:52	09/14/20 08:44	JN	Mt. Juliet, TN

BH-7 (2-3) L1256173-32 Solid

Collected by: John Thurston
Collected date/time: 08/26/20 00:00
Received date/time: 08/29/20 10:00

Method	Batch	Dilution	Preparation date/time	Analysis date/time	Analyst	Location
Total Solids by Method 2540 G-2011	WG1538116	1	09/05/20 23:55	09/06/20 00:41	KBC	Mt. Juliet, TN
Wet Chemistry by Method 300.0	WG1535091	1	08/31/20 15:43	09/01/20 02:45	ELN	Mt. Juliet, TN
Volatile Organic Compounds (GC) by Method 8015D/GRO	WG1536524	1	09/01/20 17:29	09/02/20 06:50	ACG	Mt. Juliet, TN
Volatile Organic Compounds (GC/MS) by Method 8260B	WG1536450	1	09/01/20 17:29	09/02/20 05:19	DWR	Mt. Juliet, TN
Semi-Volatile Organic Compounds (GC) by Method 8015	WG1539272	1	09/08/20 23:52	09/09/20 12:10	JN	Mt. Juliet, TN

BH-7 (4-5) L1256173-33 Solid

Collected by: John Thurston
Collected date/time: 08/26/20 00:00
Received date/time: 08/29/20 10:00

Method	Batch	Dilution	Preparation date/time	Analysis date/time	Analyst	Location
Total Solids by Method 2540 G-2011	WG1538116	1	09/05/20 23:55	09/06/20 00:41	KBC	Mt. Juliet, TN
Wet Chemistry by Method 300.0	WG1535091	1	08/31/20 15:43	09/01/20 03:03	ELN	Mt. Juliet, TN
Volatile Organic Compounds (GC) by Method 8015D/GRO	WG1536524	1	09/01/20 17:29	09/02/20 07:11	ACG	Mt. Juliet, TN
Volatile Organic Compounds (GC/MS) by Method 8260B	WG1536658	1	09/01/20 17:29	09/02/20 09:10	JHH	Mt. Juliet, TN
Semi-Volatile Organic Compounds (GC) by Method 8015	WG1539272	1	09/08/20 23:52	09/09/20 12:23	JN	Mt. Juliet, TN

BH-7 (6-7) L1256173-34 Solid

Collected by: John Thurston
Collected date/time: 08/26/20 00:00
Received date/time: 08/29/20 10:00

Method	Batch	Dilution	Preparation date/time	Analysis date/time	Analyst	Location
Total Solids by Method 2540 G-2011	WG1538116	1	09/05/20 23:55	09/06/20 00:41	KBC	Mt. Juliet, TN
Wet Chemistry by Method 300.0	WG1535091	1	08/31/20 15:43	09/01/20 03:20	ELN	Mt. Juliet, TN
Volatile Organic Compounds (GC) by Method 8015D/GRO	WG1536524	1	09/01/20 17:29	09/02/20 07:32	ACG	Mt. Juliet, TN
Volatile Organic Compounds (GC/MS) by Method 8260B	WG1536658	1	09/01/20 17:29	09/02/20 09:29	JHH	Mt. Juliet, TN
Semi-Volatile Organic Compounds (GC) by Method 8015	WG1539272	1	09/08/20 23:52	09/09/20 12:36	JN	Mt. Juliet, TN

BH-7 (9-10) L1256173-35 Solid

Collected by: John Thurston
Collected date/time: 08/26/20 00:00
Received date/time: 08/29/20 10:00

Method	Batch	Dilution	Preparation date/time	Analysis date/time	Analyst	Location
Total Solids by Method 2540 G-2011	WG1538139	1	09/05/20 22:58	09/05/20 23:34	KBC	Mt. Juliet, TN
Wet Chemistry by Method 300.0	WG1535091	1	08/31/20 15:43	09/01/20 03:37	ELN	Mt. Juliet, TN
Volatile Organic Compounds (GC) by Method 8015D/GRO	WG1536524	1	09/01/20 17:29	09/02/20 07:52	ACG	Mt. Juliet, TN
Volatile Organic Compounds (GC/MS) by Method 8260B	WG1536658	1	09/01/20 17:29	09/02/20 09:49	JHH	Mt. Juliet, TN
Semi-Volatile Organic Compounds (GC) by Method 8015	WG1539272	1	09/08/20 23:52	09/09/20 12:50	JN	Mt. Juliet, TN

BH-8 (0-1) L1256173-36 Solid

Collected by: John Thurston | Collected date/time: 08/26/20 00:00 | Received date/time: 08/29/20 10:00

Method	Batch	Dilution	Preparation date/time	Analysis date/time	Analyst	Location
Total Solids by Method 2540 G-2011	WG1538139	1	09/05/20 22:58	09/05/20 23:34	KBC	Mt. Juliet, TN
Wet Chemistry by Method 300.0	WG1535091	10	08/31/20 15:43	09/01/20 04:30	ELN	Mt. Juliet, TN
Volatile Organic Compounds (GC) by Method 8015D/GRO	WG1536524	1	09/01/20 17:29	09/02/20 08:13	ACG	Mt. Juliet, TN
Volatile Organic Compounds (GC/MS) by Method 8260B	WG1536658	1	09/01/20 17:29	09/02/20 10:08	JHH	Mt. Juliet, TN
Semi-Volatile Organic Compounds (GC) by Method 8015	WG1539272	1	09/08/20 23:52	09/09/20 13:19	AEG	Mt. Juliet, TN

BH-8 (2-3) L1256173-37 Solid

Collected by: John Thurston | Collected date/time: 08/26/20 00:00 | Received date/time: 08/29/20 10:00

Method	Batch	Dilution	Preparation date/time	Analysis date/time	Analyst	Location
Total Solids by Method 2540 G-2011	WG1538139	1	09/05/20 22:58	09/05/20 23:34	KBC	Mt. Juliet, TN
Wet Chemistry by Method 300.0	WG1535091	1	08/31/20 15:43	09/01/20 04:47	ELN	Mt. Juliet, TN
Volatile Organic Compounds (GC) by Method 8015D/GRO	WG1536524	1	09/01/20 17:29	09/02/20 08:34	ACG	Mt. Juliet, TN
Volatile Organic Compounds (GC/MS) by Method 8260B	WG1536658	1	09/01/20 17:29	09/02/20 10:26	JHH	Mt. Juliet, TN
Semi-Volatile Organic Compounds (GC) by Method 8015	WG1539273	1	09/09/20 06:42	09/09/20 16:15	TJD	Mt. Juliet, TN

BH-8 (4-5) L1256173-38 Solid

Collected by: John Thurston | Collected date/time: 08/26/20 00:00 | Received date/time: 08/29/20 10:00

Method	Batch	Dilution	Preparation date/time	Analysis date/time	Analyst	Location
Total Solids by Method 2540 G-2011	WG1538139	1	09/05/20 22:58	09/05/20 23:34	KBC	Mt. Juliet, TN
Wet Chemistry by Method 300.0	WG1535091	1	08/31/20 15:43	09/01/20 05:22	ELN	Mt. Juliet, TN
Volatile Organic Compounds (GC) by Method 8015D/GRO	WG1536524	1	09/01/20 17:29	09/02/20 08:54	ACG	Mt. Juliet, TN
Volatile Organic Compounds (GC/MS) by Method 8260B	WG1536658	1	09/01/20 17:29	09/02/20 10:45	JHH	Mt. Juliet, TN
Semi-Volatile Organic Compounds (GC) by Method 8015	WG1539273	1	09/09/20 06:42	09/09/20 14:20	TJD	Mt. Juliet, TN

BH-9 (0-1) L1256173-39 Solid

Collected by: John Thurston | Collected date/time: 08/26/20 00:00 | Received date/time: 08/29/20 10:00

Method	Batch	Dilution	Preparation date/time	Analysis date/time	Analyst	Location
Total Solids by Method 2540 G-2011	WG1538139	1	09/05/20 22:58	09/05/20 23:34	KBC	Mt. Juliet, TN
Wet Chemistry by Method 300.0	WG1535091	1	08/31/20 15:43	09/01/20 05:39	ELN	Mt. Juliet, TN
Volatile Organic Compounds (GC) by Method 8015D/GRO	WG1536524	1	09/01/20 17:29	09/02/20 09:15	ACG	Mt. Juliet, TN
Volatile Organic Compounds (GC/MS) by Method 8260B	WG1536658	1	09/01/20 17:29	09/02/20 11:04	JHH	Mt. Juliet, TN
Semi-Volatile Organic Compounds (GC) by Method 8015	WG1539273	1	09/09/20 06:42	09/09/20 14:33	TJD	Mt. Juliet, TN

BH-9 (2-3) L1256173-40 Solid

Collected by: John Thurston | Collected date/time: 08/26/20 00:00 | Received date/time: 08/29/20 10:00

Method	Batch	Dilution	Preparation date/time	Analysis date/time	Analyst	Location
Total Solids by Method 2540 G-2011	WG1538139	1	09/05/20 22:58	09/05/20 23:34	KBC	Mt. Juliet, TN
Wet Chemistry by Method 300.0	WG1535091	1	08/31/20 15:43	09/01/20 05:57	ELN	Mt. Juliet, TN
Volatile Organic Compounds (GC) by Method 8015D/GRO	WG1536524	1	09/01/20 17:29	09/02/20 09:36	ACG	Mt. Juliet, TN
Volatile Organic Compounds (GC/MS) by Method 8260B	WG1536658	1	09/01/20 17:29	09/02/20 11:23	JHH	Mt. Juliet, TN
Semi-Volatile Organic Compounds (GC) by Method 8015	WG1539273	1	09/09/20 06:42	09/09/20 16:28	TJD	Mt. Juliet, TN

BG-1 (0-1) L1256173-41 Solid

Collected by: John Thurston
Collected date/time: 08/26/20 00:00
Received date/time: 08/29/20 10:00

Method	Batch	Dilution	Preparation date/time	Analysis date/time	Analyst	Location
Total Solids by Method 2540 G-2011	WG1538139	1	09/05/20 22:58	09/05/20 23:34	KBC	Mt. Juliet, TN
Wet Chemistry by Method 300.0	WG1535329	1	08/31/20 15:39	08/31/20 23:11	ELN	Mt. Juliet, TN
Volatile Organic Compounds (GC) by Method 8015D/GRO	WG1536524	1	09/01/20 17:29	09/02/20 09:56	ACG	Mt. Juliet, TN
Volatile Organic Compounds (GC/MS) by Method 8260B	WG1536658	1	09/01/20 17:29	09/02/20 11:42	JHH	Mt. Juliet, TN
Semi-Volatile Organic Compounds (GC) by Method 8015	WG1539273	1	09/09/20 06:42	09/09/20 16:41	TJD	Mt. Juliet, TN

BG-1 (4-5) L1256173-42 Solid

Collected by: John Thurston
Collected date/time: 08/26/20 00:00
Received date/time: 08/29/20 10:00

Method	Batch	Dilution	Preparation date/time	Analysis date/time	Analyst	Location
Total Solids by Method 2540 G-2011	WG1538139	1	09/05/20 22:58	09/05/20 23:34	KBC	Mt. Juliet, TN
Wet Chemistry by Method 300.0	WG1535329	1	08/31/20 15:39	08/31/20 23:29	ELN	Mt. Juliet, TN
Volatile Organic Compounds (GC) by Method 8015D/GRO	WG1536524	1	09/01/20 17:29	09/02/20 10:17	ACG	Mt. Juliet, TN
Volatile Organic Compounds (GC/MS) by Method 8260B	WG1536658	1	09/01/20 17:29	09/02/20 12:01	JHH	Mt. Juliet, TN
Semi-Volatile Organic Compounds (GC) by Method 8015	WG1539273	1	09/09/20 06:42	09/09/20 14:46	TJD	Mt. Juliet, TN

BG-1 (6-7) L1256173-43 Solid

Collected by: John Thurston
Collected date/time: 08/26/20 00:00
Received date/time: 08/29/20 10:00

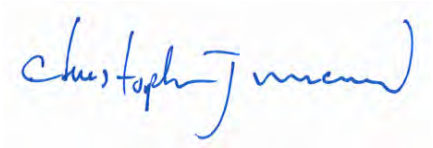
Method	Batch	Dilution	Preparation date/time	Analysis date/time	Analyst	Location
Total Solids by Method 2540 G-2011	WG1538139	1	09/05/20 22:58	09/05/20 23:34	KBC	Mt. Juliet, TN
Wet Chemistry by Method 300.0	WG1535329	1	08/31/20 15:39	08/31/20 23:48	ELN	Mt. Juliet, TN
Volatile Organic Compounds (GC) by Method 8015D/GRO	WG1536524	1	09/01/20 17:29	09/02/20 10:38	ACG	Mt. Juliet, TN
Volatile Organic Compounds (GC/MS) by Method 8260B	WG1536658	1	09/01/20 17:29	09/02/20 12:20	JHH	Mt. Juliet, TN
Semi-Volatile Organic Compounds (GC) by Method 8015	WG1539273	1	09/09/20 06:42	09/09/20 14:59	TJD	Mt. Juliet, TN

BG-1 (9-10) L1256173-44 Solid

Collected by: John Thurston
Collected date/time: 08/26/20 00:00
Received date/time: 08/29/20 10:00

Method	Batch	Dilution	Preparation date/time	Analysis date/time	Analyst	Location
Total Solids by Method 2540 G-2011	WG1538139	1	09/05/20 22:58	09/05/20 23:34	KBC	Mt. Juliet, TN
Wet Chemistry by Method 300.0	WG1535329	1	08/31/20 15:39	09/01/20 00:06	ELN	Mt. Juliet, TN
Volatile Organic Compounds (GC) by Method 8015D/GRO	WG1536524	1	09/01/20 17:29	09/02/20 10:59	ACG	Mt. Juliet, TN
Volatile Organic Compounds (GC/MS) by Method 8260B	WG1536658	1	09/01/20 17:29	09/02/20 12:39	JHH	Mt. Juliet, TN
Semi-Volatile Organic Compounds (GC) by Method 8015	WG1539273	1	09/09/20 06:42	09/09/20 15:11	TJD	Mt. Juliet, TN

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



Chris McCord
Project Manager

Total Solids by Method 2540 G-2011

Analyte	Result	Qualifier	Dilution	Analysis	Batch
	%			date / time	
Total Solids	90.9		1	09/06/2020 19:12	WG1538110

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	16500		1010	2200	100	08/31/2020 19:05	WG1535090

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		0.0239	0.110	1	09/01/2020 23:08	WG1536466
(S) a,a,a-Trifluorotoluene(FID)	*102*			*77.0-120*		*09/01/2020 23:08*	WG1536466

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		0.000560	0.00120	1	09/02/2020 02:27	WG1536450
Toluene	U		0.00156	0.00600	1	09/02/2020 02:27	WG1536450
Ethylbenzene	U		0.000884	0.00300	1	09/02/2020 02:27	WG1536450
Total Xylenes	U		0.00106	0.00780	1	09/02/2020 02:27	WG1536450
(S) Toluene-d8	*105*			*75.0-131*		*09/02/2020 02:27*	WG1536450
(S) 4-Bromofluorobenzene	*95.0*			*67.0-138*		*09/02/2020 02:27*	WG1536450
(S) 1,2-Dichloroethane-d4	*99.7*			*70.0-130*		*09/02/2020 02:27*	WG1536450

Semi-Volatile Organic Compounds (GC) by Method 8015

Analyte	Result (dry)	Qualifier	MDL (dry)	RDL (dry)	Dilution	Analysis	Batch
	mg/kg		mg/kg	mg/kg		date / time	
C10-C28 Diesel Range	6.80		1.77	4.40	1	09/05/2020 00:47	WG1537627
C28-C40 Oil Range	13.0		0.301	4.40	1	09/05/2020 00:47	WG1537627
(S) o-Terphenyl	*75.4*			*18.0-148*		*09/05/2020 00:47*	WG1537627

Total Solids by Method 2540 G-2011

Analyte	Result	Qualifier	Dilution	Analysis	Batch
	%			date / time	
Total Solids	88.2		1	09/06/2020 19:12	WG1538110

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	13700		1040	2270	100	08/31/2020 19:16	WG1535090

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		0.0246	0.113	1	09/01/2020 23:29	WG1536466
(S) a,a,a-Trifluorotoluene(FID)	*102*			*77.0-120*		*09/01/2020 23:29*	WG1536466

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		0.000592	0.00127	1	09/02/2020 02:46	WG1536450
Toluene	U		0.00165	0.00634	1	09/02/2020 02:46	WG1536450
Ethylbenzene	U		0.000934	0.00317	1	09/02/2020 02:46	WG1536450
Total Xylenes	U		0.00112	0.00824	1	09/02/2020 02:46	WG1536450
(S) Toluene-d8	*103*			*75.0-131*		*09/02/2020 02:46*	WG1536450
(S) 4-Bromofluorobenzene	*92.8*			*67.0-138*		*09/02/2020 02:46*	WG1536450
(S) 1,2-Dichloroethane-d4	*100*			*70.0-130*		*09/02/2020 02:46*	WG1536450

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	2.05	J	1.82	4.53	1	09/05/2020 00:21	WG1537627
C28-C40 Oil Range	3.59	J	0.311	4.53	1	09/05/2020 00:21	WG1537627
(S) o-Terphenyl	*65.1*			*18.0-148*		*09/05/2020 00:21*	WG1537627

Total Solids by Method 2540 G-2011

Analyte	Result	Qualifier	Dilution	Analysis	Batch
	%			date / time	
Total Solids	91.9		1	09/06/2020 19:12	WG1538110

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	1080		50.0	109	5	08/31/2020 19:38	WG1535090

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		0.0236	0.109	1	09/01/2020 23:49	WG1536466
(S) a,a,a-Trifluorotoluene(FID)	*106*			*77.0-120*		*09/01/2020 23:49*	WG1536466

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		0.000549	0.00118	1	09/02/2020 03:05	WG1536450
Toluene	U		0.00153	0.00588	1	09/02/2020 03:05	WG1536450
Ethylbenzene	U		0.000866	0.00294	1	09/02/2020 03:05	WG1536450
Total Xylenes	U		0.00103	0.00764	1	09/02/2020 03:05	WG1536450
(S) Toluene-d8	*104*			*75.0-131*		*09/02/2020 03:05*	WG1536450
(S) 4-Bromofluorobenzene	*92.4*			*67.0-138*		*09/02/2020 03:05*	WG1536450
(S) 1,2-Dichloroethane-d4	*100*			*70.0-130*		*09/02/2020 03:05*	WG1536450

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		1.75	4.35	1	09/07/2020 18:01	WG1539086
C28-C40 Oil Range	U		0.298	4.35	1	09/08/2020 10:30	WG1539086
(S) o-Terphenyl	*70.6*			*18.0-148*		*09/07/2020 18:01*	WG1539086
(S) o-Terphenyl	*53.6*			*18.0-148*		*09/08/2020 10:30*	WG1539086

Total Solids by Method 2540 G-2011

Analyte	Result	Qualifier	Dilution	Analysis	Batch
	%			date / time	
Total Solids	90.1		1	09/06/2020 19:12	WG1538110

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	385		10.2	22.2	1	08/31/2020 19:49	WG1535090

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		0.0241	0.111	1	09/02/2020 00:10	WG1536466
(S) a,a,a-Trifluorotoluene(FID)	*108*			*77.0-120*		*09/02/2020 00:10*	WG1536466

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	09/02/2020 03:24	WG1536450
Toluene	U		0.00158	0.00609	1	09/02/2020 03:24	WG1536450
Ethylbenzene	U		0.000898	0.00305	1	09/02/2020 03:24	WG1536450
Total Xylenes	U		0.00107	0.00792	1	09/02/2020 03:24	WG1536450
(S) Toluene-d8	*103*			*75.0-131*		*09/02/2020 03:24*	WG1536450
(S) 4-Bromofluorobenzene	*94.2*			*67.0-138*		*09/02/2020 03:24*	WG1536450
(S) 1,2-Dichloroethane-d4	*100*			*70.0-130*		*09/02/2020 03:24*	WG1536450

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	09/07/2020 18:15	WG1539086
C28-C40 Oil Range	U		0.304	4.44	1	09/08/2020 10:43	WG1539086
(S) o-Terphenyl	*68.3*			*18.0-148*		*09/07/2020 18:15*	WG1539086
(S) o-Terphenyl	*50.9*			*18.0-148*		*09/08/2020 10:43*	WG1539086

Total Solids by Method 2540 G-2011

Analyte	Result	Qualifier	Dilution	Analysis	Batch
	%			date / time	
Total Solids	93.5		1	09/06/2020 01:18	WG1538113

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	263		9.84	21.4	1	08/31/2020 19:59	WG1535090

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	1.01	09/02/2020 00:34	WG1536466
(S) a,a,a-Trifluorotoluene(FID)	*106*			*77.0-120*		*09/02/2020 00:34*	WG1536466

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		0.000532	0.00114	1	09/02/2020 03:43	WG1536450
Toluene	U		0.00148	0.00570	1	09/02/2020 03:43	WG1536450
Ethylbenzene	U		0.000840	0.00285	1	09/02/2020 03:43	WG1536450
Total Xylenes	U		0.00100	0.00741	1	09/02/2020 03:43	WG1536450
(S) Toluene-d8	*104*			*75.0-131*		*09/02/2020 03:43*	WG1536450
(S) 4-Bromofluorobenzene	*94.0*			*67.0-138*		*09/02/2020 03:43*	WG1536450
(S) 1,2-Dichloroethane-d4	*98.5*			*70.0-130*		*09/02/2020 03:43*	WG1536450

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	4.28	1	09/07/2020 18:28	WG1539086
C28-C40 Oil Range	U		0.293	4.28	1	09/08/2020 10:56	WG1539086
(S) o-Terphenyl	*134*			*18.0-148*		*09/07/2020 18:28*	WG1539086
(S) o-Terphenyl	*94.0*			*18.0-148*		*09/08/2020 10:56*	WG1539086

Total Solids by Method 2540 G-2011

Analyte	Result	Qualifier	Dilution	Analysis	Batch
	%			date / time	
Total Solids	87.3		1	09/06/2020 01:18	WG1538113

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	339		10.5	22.9	1	08/31/2020 20:11	WG1535090

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		0.0249	0.115	1	09/02/2020 00:55	WG1536466
(S) a,a,a-Trifluorotoluene(FID)	*108*			*77.0-120*		*09/02/2020 00:55*	WG1536466

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

Analyte	Result (dry)	Qualifier	MDL (dry)	RDL (dry)	Dilution	Analysis	Batch
	mg/kg		mg/kg	mg/kg		date / time	
Benzene	U		0.000603	0.00129	1	09/02/2020 04:02	WG1536450
Toluene	U		0.00168	0.00645	1	09/02/2020 04:02	WG1536450
Ethylbenzene	U		0.000951	0.00323	1	09/02/2020 04:02	WG1536450
Total Xylenes	U		0.00114	0.00839	1	09/02/2020 04:02	WG1536450
(S) Toluene-d8	*103*			*75.0-131*		*09/02/2020 04:02*	WG1536450
(S) 4-Bromofluorobenzene	*94.0*			*67.0-138*		*09/02/2020 04:02*	WG1536450
(S) 1,2-Dichloroethane-d4	*102*			*70.0-130*		*09/02/2020 04:02*	WG1536450

Semi-Volatile Organic Compounds (GC) by Method 8015

Analyte	Result (dry)	Qualifier	MDL (dry)	RDL (dry)	Dilution	Analysis	Batch
	mg/kg		mg/kg	mg/kg		date / time	
C10-C28 Diesel Range	U		1.84	4.58	1	09/07/2020 18:41	WG1539086
C28-C40 Oil Range	U		0.314	4.58	1	09/08/2020 11:09	WG1539086
(S) o-Terphenyl	*74.1*			*18.0-148*		*09/07/2020 18:41*	WG1539086
(S) o-Terphenyl	*53.5*			*18.0-148*		*09/08/2020 11:09*	WG1539086

Total Solids by Method 2540 G-2011

Analyte	Result	Qualifier	Dilution	Analysis	Batch
	%			date / time	
Total Solids	86.3		1	09/06/2020 01:18	WG1538113

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	405		10.7	23.2	1	08/31/2020 20:20	WG1535090

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		0.0251	0.116	1	09/02/2020 01:21	WG1536466
(S) a,a,a-Trifluorotoluene(FID)	*104*			*77.0-120*		*09/02/2020 01:21*	WG1536466

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		0.000615	0.00132	1	09/02/2020 04:22	WG1536450
Toluene	U		0.00171	0.00659	1	09/02/2020 04:22	WG1536450
Ethylbenzene	U		0.000971	0.00329	1	09/02/2020 04:22	WG1536450
Total Xylenes	U		0.00116	0.00857	1	09/02/2020 04:22	WG1536450
(S) Toluene-d8	*102*			*75.0-131*		*09/02/2020 04:22*	WG1536450
(S) 4-Bromofluorobenzene	*96.6*			*67.0-138*		*09/02/2020 04:22*	WG1536450
(S) 1,2-Dichloroethane-d4	*109*			*70.0-130*		*09/02/2020 04:22*	WG1536450

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		1.87	4.64	1	09/07/2020 18:54	WG1539086
C28-C40 Oil Range	U		0.318	4.64	1	09/08/2020 11:22	WG1539086
(S) o-Terphenyl	*77.3*			*18.0-148*		*09/07/2020 18:54*	WG1539086
(S) o-Terphenyl	*60.4*			*18.0-148*		*09/08/2020 11:22*	WG1539086

Total Solids by Method 2540 G-2011

Analyte	Result	Qualifier	Dilution	Analysis	Batch
	%			date / time	
Total Solids	93.0		1	09/06/2020 01:18	WG1538113

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	11200		989	2150	100	08/31/2020 20:51	WG1535090

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

Analyte	Result (dry)	Qualifier	MDL (dry)	RDL (dry)	Dilution	Analysis	Batch
	mg/kg		mg/kg	mg/kg		date / time	
TPH (GC/FID) Low Fraction	U		0.0233	0.108	1	09/02/2020 02:06	WG1536466
(S) a,a,a-Trifluorotoluene(FID)	*106*			*77.0-120*		*09/02/2020 02:06*	WG1536466

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	0.000547	J	0.000537	0.00115	1	09/01/2020 22:27	WG1536449
Toluene	U		0.00150	0.00575	1	09/01/2020 22:27	WG1536449
Ethylbenzene	U		0.000848	0.00288	1	09/01/2020 22:27	WG1536449
Total Xylenes	U		0.00101	0.00748	1	09/01/2020 22:27	WG1536449
(S) Toluene-d8	*102*			*75.0-131*		*09/01/2020 22:27*	WG1536449
(S) 4-Bromofluorobenzene	*109*			*67.0-138*		*09/01/2020 22:27*	WG1536449
(S) 1,2-Dichloroethane-d4	*113*			*70.0-130*		*09/01/2020 22:27*	WG1536449

Semi-Volatile Organic Compounds (GC) by Method 8015

Analyte	Result (dry)	Qualifier	MDL (dry)	RDL (dry)	Dilution	Analysis	Batch
	mg/kg		mg/kg	mg/kg		date / time	
C10-C28 Diesel Range	8.84		1.73	4.30	1	09/07/2020 19:07	WG1539086
C28-C40 Oil Range	14.2		0.295	4.30	1	09/08/2020 18:00	WG1539086
(S) o-Terphenyl	*79.5*			*18.0-148*		*09/07/2020 19:07*	WG1539086
(S) o-Terphenyl	*62.1*			*18.0-148*		*09/08/2020 18:00*	WG1539086

Total Solids by Method 2540 G-2011

Analyte	Result	Qualifier	Dilution	Analysis	Batch
	%			date / time	
Total Solids	88.0		1	09/06/2020 01:18	WG1538113

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	18000		1050	2270	100	08/31/2020 21:01	WG1535090

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		0.0247	0.114	1	09/02/2020 02:27	WG1536466
(S) a,a,a-Trifluorotoluene(FID)	*105*			*77.0-120*		*09/02/2020 02:27*	WG1536466

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		0.000595	0.00127	1	09/01/2020 22:46	WG1536449
Toluene	U		0.00166	0.00637	1	09/01/2020 22:46	WG1536449
Ethylbenzene	U		0.000939	0.00318	1	09/01/2020 22:46	WG1536449
Total Xylenes	U		0.00112	0.00828	1	09/01/2020 22:46	WG1536449
(S) Toluene-d8	*104*			*75.0-131*		*09/01/2020 22:46*	WG1536449
(S) 4-Bromofluorobenzene	*109*			*67.0-138*		*09/01/2020 22:46*	WG1536449
(S) 1,2-Dichloroethane-d4	*109*			*70.0-130*		*09/01/2020 22:46*	WG1536449

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		1.83	4.55	1	09/07/2020 19:20	WG1539086
C28-C40 Oil Range	1.94	J	0.311	4.55	1	09/08/2020 11:48	WG1539086
(S) o-Terphenyl	*65.2*			*18.0-148*		*09/07/2020 19:20*	WG1539086
(S) o-Terphenyl	*47.4*			*18.0-148*		*09/08/2020 11:48*	WG1539086

Total Solids by Method 2540 G-2011

Analyte	Result	Qualifier	Dilution	Analysis	Batch
	%			date / time	
Total Solids	91.1		1	09/06/2020 01:18	WG1538113

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	995		10.1	21.9	1	08/31/2020 21:10	WG1535090

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

Analyte	Result (dry)	Qualifier	MDL (dry)	RDL (dry)	Dilution	Analysis	Batch
	mg/kg		mg/kg	mg/kg		date / time	
TPH (GC/FID) Low Fraction	U		0.0238	0.110	1	09/02/2020 02:47	WG1536466
(S) a,a,a-Trifluorotoluene(FID)	*107*			*77.0-120*		*09/02/2020 02:47*	WG1536466

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		0.000558	0.00119	1	09/01/2020 23:05	WG1536449
Toluene	U		0.00155	0.00597	1	09/01/2020 23:05	WG1536449
Ethylbenzene	U		0.000880	0.00299	1	09/01/2020 23:05	WG1536449
Total Xylenes	U		0.00105	0.00776	1	09/01/2020 23:05	WG1536449
(S) Toluene-d8	*100*			*75.0-131*		*09/01/2020 23:05*	WG1536449
(S) 4-Bromofluorobenzene	*109*			*67.0-138*		*09/01/2020 23:05*	WG1536449
(S) 1,2-Dichloroethane-d4	*109*			*70.0-130*		*09/01/2020 23:05*	WG1536449

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		1.77	4.39	1	09/07/2020 19:33	WG1539086
C28-C40 Oil Range	U		0.301	4.39	1	09/08/2020 12:01	WG1539086
(S) o-Terphenyl	*67.8*			*18.0-148*		*09/07/2020 19:33*	WG1539086
(S) o-Terphenyl	*47.3*			*18.0-148*		*09/08/2020 12:01*	WG1539086

Total Solids by Method 2540 G-2011

Analyte	Result	Qualifier	Dilution	Analysis	Batch
	%			date / time	
Total Solids	76.6		1	09/06/2020 01:18	WG1538113

Wet Chemistry by Method 300.0

Analyte	Result (dry)	Qualifier	MDL (dry)	RDL (dry)	Dilution	Analysis	Batch
	mg/kg		mg/kg	mg/kg		date / time	
Chloride	88.9		12.0	26.1	1	08/31/2020 21:19	WG1535090

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		0.0283	0.131	1	09/02/2020 03:08	WG1536466
(S) a,a,a-Trifluorotoluene(FID)	*106*			*77.0-120*		*09/02/2020 03:08*	WG1536466

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		0.000753	0.00161	1	09/01/2020 23:24	WG1536449
Toluene	U		0.00210	0.00806	1	09/01/2020 23:24	WG1536449
Ethylbenzene	U		0.00119	0.00403	1	09/01/2020 23:24	WG1536449
Total Xylenes	U		0.00142	0.0105	1	09/01/2020 23:24	WG1536449
(S) Toluene-d8	*103*			*75.0-131*		*09/01/2020 23:24*	WG1536449
(S) 4-Bromofluorobenzene	*107*			*67.0-138*		*09/01/2020 23:24*	WG1536449
(S) 1,2-Dichloroethane-d4	*109*			*70.0-130*		*09/01/2020 23:24*	WG1536449

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		2.10	5.23	1	09/07/2020 19:46	WG1539086
C28-C40 Oil Range	U		0.358	5.23	1	09/08/2020 12:14	WG1539086
(S) o-Terphenyl	*68.8*			*18.0-148*		*09/07/2020 19:46*	WG1539086
(S) o-Terphenyl	*50.6*			*18.0-148*		*09/08/2020 12:14*	WG1539086

Total Solids by Method 2540 G-2011

Analyte	Result	Qualifier	Dilution	Analysis	Batch
	%			date / time	
Total Solids	74.0		1	09/06/2020 01:18	WG1538113

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	292		12.4	27.0	1	08/31/2020 21:29	WG1535090

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		0.0293	0.135	1	09/02/2020 03:29	WG1536466
(S) a,a,a-Trifluorotoluene(FID)	*105*			*77.0-120*		*09/02/2020 03:29*	WG1536466

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		0.000794	0.00170	1	09/01/2020 23:42	WG1536449
Toluene	U		0.00221	0.00850	1	09/01/2020 23:42	WG1536449
Ethylbenzene	U		0.00125	0.00425	1	09/01/2020 23:42	WG1536449
Total Xylenes	U		0.00150	0.0111	1	09/01/2020 23:42	WG1536449
(S) Toluene-d8	*102*			*75.0-131*		*09/01/2020 23:42*	WG1536449
(S) 4-Bromofluorobenzene	*106*			*67.0-138*		*09/01/2020 23:42*	WG1536449
(S) 1,2-Dichloroethane-d4	*109*			*70.0-130*		*09/01/2020 23:42*	WG1536449

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		2.17	5.40	1	09/07/2020 19:59	WG1539086
C28-C40 Oil Range	U		0.370	5.40	1	09/08/2020 12:28	WG1539086
(S) o-Terphenyl	*42.0*			*18.0-148*		*09/07/2020 19:59*	WG1539086
(S) o-Terphenyl	*31.3*			*18.0-148*		*09/08/2020 12:28*	WG1539086

Total Solids by Method 2540 G-2011

Analyte	Result	Qualifier	Dilution	Analysis	Batch
	%			date / time	
Total Solids	85.5		1	09/06/2020 01:18	WG1538113

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	80.1		10.8	23.4	1	08/31/2020 21:57	WG1535090

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		0.0254	0.117	1	09/02/2020 03:49	WG1536466
(S) a,a,a-Trifluorotoluene(FID)	*108*			*77.0-120*		*09/02/2020 03:49*	WG1536466

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	0.000635	J	0.000625	0.00134	1	09/02/2020 00:01	WG1536449
Toluene	U		0.00174	0.00669	1	09/02/2020 00:01	WG1536449
Ethylbenzene	U		0.000986	0.00334	1	09/02/2020 00:01	WG1536449
Total Xylenes	U		0.00118	0.00870	1	09/02/2020 00:01	WG1536449
(S) Toluene-d8	*99.7*			*75.0-131*		*09/02/2020 00:01*	WG1536449
(S) 4-Bromofluorobenzene	*109*			*67.0-138*		*09/02/2020 00:01*	WG1536449
(S) 1,2-Dichloroethane-d4	*110*			*70.0-130*		*09/02/2020 00:01*	WG1536449

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		1.88	4.68	1	09/07/2020 20:12	WG1539086
C28-C40 Oil Range	U		0.320	4.68	1	09/08/2020 12:41	WG1539086
(S) o-Terphenyl	*63.7*			*18.0-148*		*09/07/2020 20:12*	WG1539086
(S) o-Terphenyl	*47.2*			*18.0-148*		*09/08/2020 12:41*	WG1539086

Total Solids by Method 2540 G-2011

Analyte	Result	Qualifier	Dilution	Analysis	Batch
	%			date / time	
Total Solids	84.1		1	09/06/2020 01:18	WG1538113

Wet Chemistry by Method 300.0

Analyte	Result (dry)	Qualifier	MDL (dry)	RDL (dry)	Dilution	Analysis	Batch
	mg/kg		mg/kg	mg/kg		date / time	
Chloride	88.1		10.9	23.8	1	08/31/2020 22:06	WG1535090

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		0.0258	0.119	1	09/02/2020 04:10	WG1536466
(S) a,a,a-Trifluorotoluene(FID)	*106*			*77.0-120*		*09/02/2020 04:10*	WG1536466

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		0.000644	0.00138	1	09/02/2020 00:19	WG1536449
Toluene	U		0.00179	0.00689	1	09/02/2020 00:19	WG1536449
Ethylbenzene	U		0.00102	0.00345	1	09/02/2020 00:19	WG1536449
Total Xylenes	U		0.00121	0.00896	1	09/02/2020 00:19	WG1536449
(S) Toluene-d8	*101*			*75.0-131*		*09/02/2020 00:19*	WG1536449
(S) 4-Bromofluorobenzene	*108*			*67.0-138*		*09/02/2020 00:19*	WG1536449
(S) 1,2-Dichloroethane-d4	*108*			*70.0-130*		*09/02/2020 00:19*	WG1536449

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		1.91	4.76	1	09/07/2020 20:25	WG1539086
C28-C40 Oil Range	U		0.326	4.76	1	09/08/2020 12:53	WG1539086
(S) o-Terphenyl	*68.1*			*18.0-148*		*09/07/2020 20:25*	WG1539086
(S) o-Terphenyl	*50.9*			*18.0-148*		*09/08/2020 12:53*	WG1539086

BH-2 (24-25)
Collected date/time: 08/26/20 00:00

Total Solids by Method 2540 G-2011

Analyte	Result	Qualifier	Dilution	Analysis	Batch
	%			date / time	
Total Solids	88.7		1	09/06/2020 00:42	WG1538114

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	120		10.4	22.5	1	08/31/2020 22:16	WG1535090

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

Analyte	Result (dry)	Qualifier	MDL (dry)	RDL (dry)	Dilution	Analysis	Batch
	mg/kg		mg/kg	mg/kg		date / time	
TPH (GC/FID) Low Fraction	U		0.0245	0.113	1	09/02/2020 04:31	WG1536466
(S) a,a,a-Trifluorotoluene(FID)	*107*			*77.0-120*		*09/02/2020 04:31*	WG1536466

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		0.000586	0.00125	1	09/02/2020 00:38	WG1536449
Toluene	U		0.00163	0.00627	1	09/02/2020 00:38	WG1536449
Ethylbenzene	U		0.000924	0.00314	1	09/02/2020 00:38	WG1536449
Total Xylenes	U		0.00110	0.00815	1	09/02/2020 00:38	WG1536449
(S) Toluene-d8	*102*			*75.0-131*		*09/02/2020 00:38*	WG1536449
(S) 4-Bromofluorobenzene	*107*			*67.0-138*		*09/02/2020 00:38*	WG1536449
(S) 1,2-Dichloroethane-d4	*106*			*70.0-130*		*09/02/2020 00:38*	WG1536449

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		1.81	4.51	1	09/07/2020 20:38	WG1539086
C28-C40 Oil Range	U		0.309	4.51	1	09/08/2020 13:06	WG1539086
(S) o-Terphenyl	*76.4*			*18.0-148*		*09/07/2020 20:38*	WG1539086
(S) o-Terphenyl	*58.0*			*18.0-148*		*09/08/2020 13:06*	WG1539086

Total Solids by Method 2540 G-2011

Analyte	Result	Qualifier	Dilution	Analysis	Batch
	%			date / time	
Total Solids	97.4		1	09/06/2020 00:42	WG1538114

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	172		9.45	20.5	1	08/31/2020 22:47	WG1535090

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		0.0223	0.103	1	09/02/2020 05:25	WG1536466
(S) a,a,a-Trifluorotoluene(FID)	*105*			*77.0-120*		*09/02/2020 05:25*	WG1536466

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		0.000492	0.00105	1	09/02/2020 00:57	WG1536449
Toluene	U		0.00137	0.00527	1	09/02/2020 00:57	WG1536449
Ethylbenzene	U		0.000776	0.00263	1	09/02/2020 00:57	WG1536449
Total Xylenes	U		0.000927	0.00685	1	09/02/2020 00:57	WG1536449
(S) Toluene-d8	*102*			*75.0-131*		*09/02/2020 00:57*	WG1536449
(S) 4-Bromofluorobenzene	*113*			*67.0-138*		*09/02/2020 00:57*	WG1536449
(S) 1,2-Dichloroethane-d4	*109*			*70.0-130*		*09/02/2020 00:57*	WG1536449

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	09/07/2020 20:51	WG1539086
C28-C40 Oil Range	1.39	J	0.281	4.11	1	09/08/2020 13:19	WG1539086
(S) o-Terphenyl	*70.2*			*18.0-148*		*09/07/2020 20:51*	WG1539086
(S) o-Terphenyl	*52.2*			*18.0-148*		*09/08/2020 13:19*	WG1539086

Total Solids by Method 2540 G-2011

Analyte	Result	Qualifier	Dilution	Analysis	Batch
	%			date / time	
Total Solids	96.6		1	09/06/2020 00:42	WG1538114

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	148		9.53	20.7	1	08/31/2020 22:56	WG1535090

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

Analyte	Result (dry)	Qualifier	MDL (dry)	RDL (dry)	Dilution	Analysis	Batch
	mg/kg		mg/kg	mg/kg		date / time	
TPH (GC/FID) Low Fraction	U		0.0225	0.104	1	09/02/2020 05:46	WG1536466
(S) a,a,a-Trifluorotoluene(FID)	*107*			*77.0-120*		*09/02/2020 05:46*	WG1536466

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

Analyte	Result (dry)	Qualifier	MDL (dry)	RDL (dry)	Dilution	Analysis	Batch
	mg/kg		mg/kg	mg/kg		date / time	
Benzene	U		0.000500	0.00107	1	09/02/2020 01:15	WG1536449
Toluene	U		0.00139	0.00535	1	09/02/2020 01:15	WG1536449
Ethylbenzene	U		0.000789	0.00268	1	09/02/2020 01:15	WG1536449
Total Xylenes	U		0.000942	0.00696	1	09/02/2020 01:15	WG1536449
(S) Toluene-d8	*99.7*			*75.0-131*		*09/02/2020 01:15*	WG1536449
(S) 4-Bromofluorobenzene	*107*			*67.0-138*		*09/02/2020 01:15*	WG1536449
(S) 1,2-Dichloroethane-d4	*110*			*70.0-130*		*09/02/2020 01:15*	WG1536449

Semi-Volatile Organic Compounds (GC) by Method 8015

Analyte	Result (dry)	Qualifier	MDL (dry)	RDL (dry)	Dilution	Analysis	Batch
	mg/kg		mg/kg	mg/kg		date / time	
C10-C28 Diesel Range	U		1.67	4.14	1	09/09/2020 11:00	WG1539272
C28-C40 Oil Range	3.98	B J	0.284	4.14	1	09/09/2020 11:00	WG1539272
(S) o-Terphenyl	*68.7*			*18.0-148*		*09/09/2020 11:00*	WG1539272

Sample Narrative:

L1256173-17 WG1539272: Duplicate Analysis performed due to QC failure. Results confirm; reporting in hold data

Total Solids by Method 2540 G-2011

Analyte	Result	Qualifier	Dilution	Analysis	Batch
	%			date / time	
Total Solids	95.3		1	09/06/2020 00:42	WG1538114

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	1200		48.3	105	5	08/31/2020 23:19	WG1535090

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

Analyte	Result (dry)	Qualifier	MDL (dry)	RDL (dry)	Dilution	Analysis	Batch
	mg/kg		mg/kg	mg/kg		date / time	
TPH (GC/FID) Low Fraction	U		0.0228	0.105	1	09/02/2020 06:07	WG1536466
(S) a,a,a-Trifluorotoluene(FID)	*108*			*77.0-120*		*09/02/2020 06:07*	WG1536466

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		0.000513	0.00110	1	09/02/2020 01:34	WG1536449
Toluene	U		0.00143	0.00550	1	09/02/2020 01:34	WG1536449
Ethylbenzene	U		0.000810	0.00275	1	09/02/2020 01:34	WG1536449
Total Xylenes	U		0.000967	0.00714	1	09/02/2020 01:34	WG1536449
(S) Toluene-d8	*103*			*75.0-131*		*09/02/2020 01:34*	WG1536449
(S) 4-Bromofluorobenzene	*107*			*67.0-138*		*09/02/2020 01:34*	WG1536449
(S) 1,2-Dichloroethane-d4	*107*			*70.0-130*		*09/02/2020 01:34*	WG1536449

Semi-Volatile Organic Compounds (GC) by Method 8015

Analyte	Result (dry)	Qualifier	MDL (dry)	RDL (dry)	Dilution	Analysis	Batch
	mg/kg		mg/kg	mg/kg		date / time	
C10-C28 Diesel Range	U		1.69	4.20	1	09/09/2020 08:51	WG1539272
C28-C40 Oil Range	1.74	B J	0.288	4.20	1	09/09/2020 08:51	WG1539272
(S) o-Terphenyl	*62.2*			*18.0-148*		*09/09/2020 08:51*	WG1539272

Total Solids by Method 2540 G-2011

Analyte	Result	Qualifier	Dilution	Analysis	Batch
	%			date / time	
Total Solids	93.5		1	09/06/2020 00:42	WG1538114

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	585		9.84	21.4	1	08/31/2020 23:29	WG1535090

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		0.0232	0.107	1	09/02/2020 06:27	WG1536466
(S) a,a,a-Trifluorotoluene(FID)	*107*			*77.0-120*		*09/02/2020 06:27*	WG1536466

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		0.000532	0.00114	1	09/02/2020 01:53	WG1536449
Toluene	U		0.00148	0.00569	1	09/02/2020 01:53	WG1536449
Ethylbenzene	U		0.000839	0.00285	1	09/02/2020 01:53	WG1536449
Total Xylenes	U		0.00100	0.00740	1	09/02/2020 01:53	WG1536449
(S) Toluene-d8	*103*			*75.0-131*		*09/02/2020 01:53*	WG1536449
(S) 4-Bromofluorobenzene	*108*			*67.0-138*		*09/02/2020 01:53*	WG1536449
(S) 1,2-Dichloroethane-d4	*110*			*70.0-130*		*09/02/2020 01:53*	WG1536449

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	4.28	1	09/09/2020 09:32	WG1539272
C28-C40 Oil Range	0.916	B J	0.293	4.28	1	09/09/2020 09:32	WG1539272
(S) o-Terphenyl	*71.1*			*18.0-148*		*09/09/2020 09:32*	WG1539272

Total Solids by Method 2540 G-2011

Analyte	Result	Qualifier	Dilution	Analysis	Batch
	%			date / time	
Total Solids	93.4		1	09/06/2020 00:42	WG1538114

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	435		9.85	21.4	1	08/31/2020 23:40	WG1535090

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		0.0232	0.107	1	09/02/2020 06:53	WG1536466
(S) a,a,a-Trifluorotoluene(FID)	*104*			*77.0-120*		*09/02/2020 06:53*	WG1536466

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		0.000533	0.00114	1	09/02/2020 02:12	WG1536449
Toluene	U		0.00148	0.00571	1	09/02/2020 02:12	WG1536449
Ethylbenzene	U		0.000842	0.00285	1	09/02/2020 02:12	WG1536449
Total Xylenes	U		0.00100	0.00742	1	09/02/2020 02:12	WG1536449
(S) Toluene-d8	*100*			*75.0-131*		*09/02/2020 02:12*	WG1536449
(S) 4-Bromofluorobenzene	*109*			*67.0-138*		*09/02/2020 02:12*	WG1536449
(S) 1,2-Dichloroethane-d4	*109*			*70.0-130*		*09/02/2020 02:12*	WG1536449

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	4.28	1	09/09/2020 09:48	WG1539272
C28-C40 Oil Range	0.334	B J	0.293	4.28	1	09/09/2020 09:48	WG1539272
(S) o-Terphenyl	*61.1*			*18.0-148*		*09/09/2020 09:48*	WG1539272

Total Solids by Method 2540 G-2011

Analyte	Result	Qualifier	Dilution	Analysis	Batch
	%			date / time	
Total Solids	97.9		1	09/06/2020 00:42	WG1538114

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	104		9.40	20.4	1	08/31/2020 22:07	WG1535091

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

Analyte	Result (dry)	Qualifier	MDL (dry)	RDL (dry)	Dilution	Analysis	Batch
	mg/kg		mg/kg	mg/kg		date / time	
TPH (GC/FID) Low Fraction	U		0.0222	0.102	1	09/02/2020 06:44	WG1536522
(S) a,a,a-Trifluorotoluene(FID)	*94.5*			*77.0-120*		*09/02/2020 06:44*	WG1536522

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	09/02/2020 02:31	WG1536449
Toluene	U		0.00136	0.00522	1	09/02/2020 02:31	WG1536449
Ethylbenzene	U		0.000769	0.00261	1	09/02/2020 02:31	WG1536449
Total Xylenes	U		0.000919	0.00679	1	09/02/2020 02:31	WG1536449
(S) Toluene-d8	*102*			*75.0-131*		*09/02/2020 02:31*	WG1536449
(S) 4-Bromofluorobenzene	*110*			*67.0-138*		*09/02/2020 02:31*	WG1536449
(S) 1,2-Dichloroethane-d4	*108*			*70.0-130*		*09/02/2020 02:31*	WG1536449

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	23.8		1.65	4.09	1	09/09/2020 13:03	WG1539272
C10-C28 Diesel Range	12.9	Q	1.65	4.09	1	09/11/2020 02:24	WG1540114
C28-C40 Oil Range	51.1	B	0.280	4.09	1	09/09/2020 13:03	WG1539272
C28-C40 Oil Range	26.7	Q	0.280	4.09	1	09/11/2020 02:24	WG1540114
(S) o-Terphenyl	*84.3*			*18.0-148*		*09/09/2020 13:03*	WG1539272
(S) o-Terphenyl	*89.3*			*18.0-148*		*09/11/2020 02:24*	WG1540114

Sample Narrative:

L1256173-21 WG1539272, WG1540114: Duplicate Analysis performed due to QC failure. Results don't confirm; both analyses reported

Total Solids by Method 2540 G-2011

Analyte	Result	Qualifier	Dilution	Analysis	Batch
	%			date / time	
Total Solids	93.0		1	09/06/2020 00:42	WG1538114

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	35.9		9.90	21.5	1	08/31/2020 22:41	WG1535091

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

Analyte	Result (dry)	Qualifier	MDL (dry)	RDL (dry)	Dilution	Analysis	Batch
	mg/kg		mg/kg	mg/kg		date / time	
TPH (GC/FID) Low Fraction	U		0.0233	0.108	1	09/02/2020 07:07	WG1536522
(S) a,a,a-Trifluorotoluene(FID)	*94.9*			*77.0-120*		*09/02/2020 07:07*	WG1536522

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		0.000538	0.00115	1	09/02/2020 02:49	WG1536449
Toluene	U		0.00150	0.00576	1	09/02/2020 02:49	WG1536449
Ethylbenzene	U		0.000849	0.00288	1	09/02/2020 02:49	WG1536449
Total Xylenes	U		0.00101	0.00749	1	09/02/2020 02:49	WG1536449
(S) Toluene-d8	*102*			*75.0-131*		*09/02/2020 02:49*	WG1536449
(S) 4-Bromofluorobenzene	*107*			*67.0-138*		*09/02/2020 02:49*	WG1536449
(S) 1,2-Dichloroethane-d4	*108*			*70.0-130*		*09/02/2020 02:49*	WG1536449

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	09/09/2020 10:02	WG1539272
C28-C40 Oil Range	3.24	B J	0.295	4.30	1	09/09/2020 10:02	WG1539272
(S) o-Terphenyl	*65.7*			*18.0-148*		*09/09/2020 10:02*	WG1539272

Total Solids by Method 2540 G-2011

Analyte	Result	Qualifier	Dilution	Analysis	Batch
	%			date / time	
Total Solids	96.2		1	09/06/2020 00:42	WG1538114

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	86.4		9.56	20.8	1	08/31/2020 22:59	WG1535091

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

Analyte	Result (dry)	Qualifier	MDL (dry)	RDL (dry)	Dilution	Analysis	Batch
	mg/kg		mg/kg	mg/kg		date / time	
TPH (GC/FID) Low Fraction	U		0.0226	0.104	1	09/02/2020 08:39	WG1536522
(S) a,a,a-Trifluorotoluene(FID)	*94.7*			*77.0-120*		*09/02/2020 08:39*	WG1536522

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		0.000504	0.00108	1	09/02/2020 03:08	WG1536449
Toluene	U		0.00140	0.00540	1	09/02/2020 03:08	WG1536449
Ethylbenzene	U		0.000796	0.00270	1	09/02/2020 03:08	WG1536449
Total Xylenes	U		0.000950	0.00702	1	09/02/2020 03:08	WG1536449
(S) Toluene-d8	*101*			*75.0-131*		*09/02/2020 03:08*	WG1536449
(S) 4-Bromofluorobenzene	*110*			*67.0-138*		*09/02/2020 03:08*	WG1536449
(S) 1,2-Dichloroethane-d4	*108*			*70.0-130*		*09/02/2020 03:08*	WG1536449

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	1.75	J	1.67	4.16	1	09/09/2020 10:15	WG1539272
C28-C40 Oil Range	3.43	B J	0.285	4.16	1	09/09/2020 10:15	WG1539272
(S) o-Terphenyl	*67.0*			*18.0-148*		*09/09/2020 10:15*	WG1539272

Total Solids by Method 2540 G-2011

Analyte	Result	Qualifier	Dilution	Analysis	Batch
	%			date / time	
Total Solids	94.8		1	09/06/2020 00:42	WG1538114

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	38.8		9.70	21.1	1	08/31/2020 23:16	WG1535091

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	0.105	1	09/02/2020 09:22	WG1536522
(S) a,a,a-Trifluorotoluene(FID)	*94.7*			*77.0-120*		*09/02/2020 09:22*	WG1536522

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		0.000518	0.00111	1	09/02/2020 03:27	WG1536449
Toluene	U		0.00144	0.00555	1	09/02/2020 03:27	WG1536449
Ethylbenzene	U		0.000818	0.00278	1	09/02/2020 03:27	WG1536449
Total Xylenes	U		0.000977	0.00722	1	09/02/2020 03:27	WG1536449
(S) Toluene-d8	*102*			*75.0-131*		*09/02/2020 03:27*	WG1536449
(S) 4-Bromofluorobenzene	*110*			*67.0-138*		*09/02/2020 03:27*	WG1536449
(S) 1,2-Dichloroethane-d4	*106*			*70.0-130*		*09/02/2020 03:27*	WG1536449

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	09/09/2020 10:28	WG1539272
C28-C40 Oil Range	1.49	B J	0.289	4.22	1	09/09/2020 10:28	WG1539272
(S) o-Terphenyl	*67.3*			*18.0-148*		*09/09/2020 10:28*	WG1539272

Total Solids by Method 2540 G-2011

Analyte	Result	Qualifier	Dilution	Analysis	Batch
	%			date / time	
Total Solids	94.4		1	09/06/2020 00:41	WG1538116

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	22.3		9.75	21.2	1	08/31/2020 23:34	WG1535091

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	09/02/2020 09:57	WG1536522
(S) a,a,a-Trifluorotoluene(FID)	*95.4*			*77.0-120*		*09/02/2020 09:57*	WG1536522

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	09/02/2020 03:46	WG1536449
Toluene	U		0.00145	0.00559	1	09/02/2020 03:46	WG1536449
Ethylbenzene	U		0.000825	0.00280	1	09/02/2020 03:46	WG1536449
Total Xylenes	U		0.000985	0.00727	1	09/02/2020 03:46	WG1536449
(S) Toluene-d8	*103*			*75.0-131*		*09/02/2020 03:46*	WG1536449
(S) 4-Bromofluorobenzene	*106*			*67.0-138*		*09/02/2020 03:46*	WG1536449
(S) 1,2-Dichloroethane-d4	*109*			*70.0-130*		*09/02/2020 03:46*	WG1536449

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	2.28	J	1.71	4.24	1	09/09/2020 10:42	WG1539272
C28-C40 Oil Range	2.38	B J	0.290	4.24	1	09/09/2020 10:42	WG1539272
(S) o-Terphenyl	*70.3*			*18.0-148*		*09/09/2020 10:42*	WG1539272

Total Solids by Method 2540 G-2011

Analyte	Result	Qualifier	Dilution	Analysis	Batch
	%			date / time	
Total Solids	90.3		1	09/06/2020 00:41	WG1538116

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	90.4		10.2	22.2	1	08/31/2020 23:51	WG1535091

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		0.0240	0.111	1	09/02/2020 10:20	WG1536522
(S) a,a,a-Trifluorotoluene(FID)	*93.7*			*77.0-120*		*09/02/2020 10:20*	WG1536522

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		0.000568	0.00122	1	09/02/2020 04:04	WG1536449
Toluene	U		0.00158	0.00608	1	09/02/2020 04:04	WG1536449
Ethylbenzene	U		0.000896	0.00304	1	09/02/2020 04:04	WG1536449
Total Xylenes	U		0.00107	0.00790	1	09/02/2020 04:04	WG1536449
(S) Toluene-d8	*104*			*75.0-131*		*09/02/2020 04:04*	WG1536449
(S) 4-Bromofluorobenzene	*110*			*67.0-138*		*09/02/2020 04:04*	WG1536449
(S) 1,2-Dichloroethane-d4	*107*			*70.0-130*		*09/02/2020 04:04*	WG1536449

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	171	J	89.2	222	50	09/09/2020 15:16	WG1539272
C28-C40 Oil Range	675		15.2	222	50	09/09/2020 15:16	WG1539272
(S) o-Terphenyl	*95.6*	J7		*18.0-148*		*09/09/2020 15:16*	WG1539272

Sample Narrative:

L1256173-26 WG1539272: Dilution due to matrix.

Total Solids by Method 2540 G-2011

Analyte	Result	Qualifier	Dilution	Analysis	Batch
	%			date / time	
Total Solids	94.7		1	09/06/2020 00:41	WG1538116

Wet Chemistry by Method 300.0

Analyte	Result (dry)	Qualifier	MDL (dry)	RDL (dry)	Dilution	Analysis	Batch
	mg/kg		mg/kg	mg/kg		date / time	
Chloride	30.1		9.71	21.1	1	09/01/2020 00:08	WG1535091

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	09/02/2020 10:43	WG1536522
(S) a,a,a-Trifluorotoluene(FID)	*95.0*			*77.0-120*		*09/02/2020 10:43*	WG1536522

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	09/02/2020 04:23	WG1536449
Toluene	U		0.00145	0.00556	1	09/02/2020 04:23	WG1536449
Ethylbenzene	U		0.000820	0.00278	1	09/02/2020 04:23	WG1536449
Total Xylenes	U		0.000979	0.00723	1	09/02/2020 04:23	WG1536449
(S) Toluene-d8	*99.8*			*75.0-131*		*09/02/2020 04:23*	WG1536449
(S) 4-Bromofluorobenzene	*110*			*67.0-138*		*09/02/2020 04:23*	WG1536449
(S) 1,2-Dichloroethane-d4	*109*			*70.0-130*		*09/02/2020 04:23*	WG1536449

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	4.41		1.70	4.22	1	09/09/2020 13:32	WG1539272
C10-C28 Diesel Range	3.26	J Q	1.70	4.22	1	09/11/2020 02:37	WG1540114
C28-C40 Oil Range	17.7	B	0.289	4.22	1	09/09/2020 13:32	WG1539272
C28-C40 Oil Range	10.0	Q	0.289	4.22	1	09/11/2020 02:37	WG1540114
(S) o-Terphenyl	*70.5*			*18.0-148*		*09/09/2020 13:32*	WG1539272
(S) o-Terphenyl	*77.3*			*18.0-148*		*09/11/2020 02:37*	WG1540114

Sample Narrative:

L1256173-27 WG1539272, WG1540114: Duplicate Analysis performed due to QC failure. Results don't confirm; both analyses reported

Total Solids by Method 2540 G-2011

Analyte	Result	Qualifier	Dilution	Analysis	Batch
	%			date / time	
Total Solids	93.7		1	09/06/2020 00:41	WG1538116

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	12.5	J	9.82	21.3	1	09/01/2020 01:01	WG1535091

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		0.0232	0.107	1	09/02/2020 11:06	WG1536522
(S) a,a,a-Trifluorotoluene(FID)	*94.8*			*77.0-120*		*09/02/2020 11:06*	WG1536522

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		0.000530	0.00114	1	09/02/2020 11:02	WG1536422
Toluene	U		0.00148	0.00568	1	09/02/2020 11:02	WG1536422
Ethylbenzene	U		0.000837	0.00284	1	09/02/2020 11:02	WG1536422
Total Xylenes	0.00113	J	0.000999	0.00738	1	09/02/2020 11:02	WG1536422
(S) Toluene-d8	*97.3*			*75.0-131*		*09/02/2020 11:02*	WG1536422
(S) 4-Bromofluorobenzene	*98.1*			*67.0-138*		*09/02/2020 11:02*	WG1536422
(S) 1,2-Dichloroethane-d4	*89.4*			*70.0-130*		*09/02/2020 11:02*	WG1536422

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	21.5		1.72	4.27	1	09/09/2020 13:46	WG1539272
C10-C28 Diesel Range	2.97	J Q	1.72	4.27	1	09/11/2020 02:50	WG1540114
C28-C40 Oil Range	75.9	B	0.292	4.27	1	09/09/2020 13:46	WG1539272
C28-C40 Oil Range	8.40	Q	0.292	4.27	1	09/11/2020 02:50	WG1540114
(S) o-Terphenyl	*66.6*			*18.0-148*		*09/09/2020 13:46*	WG1539272
(S) o-Terphenyl	*76.4*			*18.0-148*		*09/11/2020 02:50*	WG1540114

Sample Narrative:

L1256173-28 WG1539272, WG1540114: Duplicate Analysis performed due to QC failure. Results don't confirm; both analyses reported

Total Solids by Method 2540 G-2011

Analyte	Result	Qualifier	Dilution	Analysis	Batch
	%			date / time	
Total Solids	94.9		1	09/06/2020 00:41	WG1538116

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		9.70	21.1	1	09/01/2020 01:18	WG1535091

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	0.105	1	09/02/2020 11:29	WG1536522
(S) a,a,a-Trifluorotoluene(FID)	*95.0*			*77.0-120*		*09/02/2020 11:29*	WG1536522

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		0.000518	0.00111	1	09/02/2020 11:22	WG1536422
Toluene	U		0.00144	0.00554	1	09/02/2020 11:22	WG1536422
Ethylbenzene	U		0.000817	0.00277	1	09/02/2020 11:22	WG1536422
Total Xylenes	0.00119	J	0.000975	0.00720	1	09/02/2020 11:22	WG1536422
(S) Toluene-d8	*99.5*			*75.0-131*		*09/02/2020 11:22*	WG1536422
(S) 4-Bromofluorobenzene	*98.4*			*67.0-138*		*09/02/2020 11:22*	WG1536422
(S) 1,2-Dichloroethane-d4	*94.9*			*70.0-130*		*09/02/2020 11:22*	WG1536422

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	09/09/2020 11:36	WG1539272
C28-C40 Oil Range	1.05	B J	0.289	4.22	1	09/09/2020 11:36	WG1539272
(S) o-Terphenyl	*69.4*			*18.0-148*		*09/09/2020 11:36*	WG1539272

Total Solids by Method 2540 G-2011

Analyte	Result	Qualifier	Dilution	Analysis	Batch
	%			date / time	
Total Solids	93.9		1	09/06/2020 00:41	WG1538116

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	09/01/2020 01:36	WG1535091

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	09/02/2020 11:52	WG1536522
(S) a,a,a-Trifluorotoluene(FID)	*95.0*			*77.0-120*		*09/02/2020 11:52*	WG1536522

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	09/02/2020 04:41	WG1536450
Toluene	U		0.00147	0.00565	1	09/02/2020 04:41	WG1536450
Ethylbenzene	U		0.000833	0.00283	1	09/02/2020 04:41	WG1536450
Total Xylenes	U		0.000995	0.00735	1	09/02/2020 04:41	WG1536450
(S) Toluene-d8	*105*			*75.0-131*		*09/02/2020 04:41*	WG1536450
(S) 4-Bromofluorobenzene	*93.6*			*67.0-138*		*09/02/2020 04:41*	WG1536450
(S) 1,2-Dichloroethane-d4	*100*			*70.0-130*		*09/02/2020 04:41*	WG1536450

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	09/09/2020 11:17	WG1539272
C28-C40 Oil Range	1.04	B J	0.292	4.26	1	09/09/2020 11:17	WG1539272
(S) o-Terphenyl	*64.3*			*18.0-148*		*09/09/2020 11:17*	WG1539272

Total Solids by Method 2540 G-2011

Analyte	Result	Qualifier	Dilution	Analysis	Batch
	%			date / time	
Total Solids	97.0		1	09/06/2020 00:41	WG1538116

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	432		9.48	20.6	1	09/01/2020 02:28	WG1535091

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

Analyte	Result (dry)	Qualifier	MDL (dry)	RDL (dry)	Dilution	Analysis	Batch
	mg/kg		mg/kg	mg/kg		date / time	
TPH (GC/FID) Low Fraction	U		0.0224	0.103	1	09/02/2020 12:15	WG1536522
(S) a,a,a-Trifluorotoluene(FID)	*94.0*			*77.0-120*		*09/02/2020 12:15*	WG1536522

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

Analyte	Result (dry)	Qualifier	MDL (dry)	RDL (dry)	Dilution	Analysis	Batch
	mg/kg		mg/kg	mg/kg		date / time	
Benzene	U		0.000496	0.00106	1	09/02/2020 05:00	WG1536450
Toluene	U		0.00138	0.00531	1	09/02/2020 05:00	WG1536450
Ethylbenzene	U		0.000782	0.00265	1	09/02/2020 05:00	WG1536450
Total Xylenes	U		0.000934	0.00690	1	09/02/2020 05:00	WG1536450
(S) Toluene-d8	*103*			*75.0-131*		*09/02/2020 05:00*	WG1536450
(S) 4-Bromofluorobenzene	*94.4*			*67.0-138*		*09/02/2020 05:00*	WG1536450
(S) 1,2-Dichloroethane-d4	*97.8*			*70.0-130*		*09/02/2020 05:00*	WG1536450

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	1.77	J	1.66	4.12	1	09/14/2020 08:44	WG1539272
C28-C40 Oil Range	6.28	B	0.282	4.12	1	09/14/2020 08:44	WG1539272
(S) o-Terphenyl	*83.5*			*18.0-148*		*09/14/2020 08:44*	WG1539272

Sample Narrative:

L1256173-31 WG1539272: Duplicate Analysis performed due to QC failure. Results confirm; reporting in hold data

Total Solids by Method 2540 G-2011

Analyte	Result	Qualifier	Dilution	Analysis	Batch
	%			date / time	
Total Solids	96.3		1	09/06/2020 00:41	WG1538116

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	456		9.55	20.8	1	09/01/2020 02:45	WG1535091

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	0.0257	J	0.0225	0.104	1	09/02/2020 06:50	WG1536524
(S) a,a,a-Trifluorotoluene(FID)	*89.9*			*77.0-120*		*09/02/2020 06:50*	WG1536524

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		0.000503	0.00108	1	09/02/2020 05:19	WG1536450
Toluene	U		0.00140	0.00538	1	09/02/2020 05:19	WG1536450
Ethylbenzene	U		0.000793	0.00269	1	09/02/2020 05:19	WG1536450
Total Xylenes	U		0.000947	0.00700	1	09/02/2020 05:19	WG1536450
(S) Toluene-d8	*105*			*75.0-131*		*09/02/2020 05:19*	WG1536450
(S) 4-Bromofluorobenzene	*94.4*			*67.0-138*		*09/02/2020 05:19*	WG1536450
(S) 1,2-Dichloroethane-d4	*102*			*70.0-130*		*09/02/2020 05:19*	WG1536450

Semi-Volatile Organic Compounds (GC) by Method 8015

Analyte	Result (dry)	Qualifier	MDL (dry)	RDL (dry)	Dilution	Analysis	Batch
	mg/kg		mg/kg	mg/kg		date / time	
C10-C28 Diesel Range	U		1.67	4.15	1	09/09/2020 12:10	WG1539272
C28-C40 Oil Range	1.39	B J	0.284	4.15	1	09/09/2020 12:10	WG1539272
(S) o-Terphenyl	*71.5*			*18.0-148*		*09/09/2020 12:10*	WG1539272

Total Solids by Method 2540 G-2011

Analyte	Result	Qualifier	Dilution	Analysis	Batch
	%			date / time	
Total Solids	97.2		1	09/06/2020 00:41	WG1538116

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	334		9.46	20.6	1	09/01/2020 03:03	WG1535091

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		0.0223	0.103	1	09/02/2020 07:11	WG1536524
(S) a,a,a-Trifluorotoluene(FID)	*89.9*			*77.0-120*		*09/02/2020 07:11*	WG1536524

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	09/02/2020 09:10	WG1536658
Toluene	U		0.00137	0.00529	1	09/02/2020 09:10	WG1536658
Ethylbenzene	0.000785	J	0.000779	0.00264	1	09/02/2020 09:10	WG1536658
Total Xylenes	0.00683	J	0.000930	0.00687	1	09/02/2020 09:10	WG1536658
(S) Toluene-d8	*98.6*			*75.0-131*		*09/02/2020 09:10*	WG1536658
(S) 4-Bromofluorobenzene	*99.4*			*67.0-138*		*09/02/2020 09:10*	WG1536658
(S) 1,2-Dichloroethane-d4	*90.8*			*70.0-130*		*09/02/2020 09:10*	WG1536658

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	09/09/2020 12:23	WG1539272
C28-C40 Oil Range	1.76	B J	0.282	4.11	1	09/09/2020 12:23	WG1539272
(S) o-Terphenyl	*69.2*			*18.0-148*		*09/09/2020 12:23*	WG1539272

Total Solids by Method 2540 G-2011

Analyte	Result	Qualifier	Dilution	Analysis	Batch
	%			date / time	
Total Solids	91.9		1	09/06/2020 00:41	WG1538116

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	529		10.0	21.8	1	09/01/2020 03:20	WG1535091

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		0.0236	0.109	1	09/02/2020 07:32	WG1536524
(S) a,a,a-Trifluorotoluene(FID)	*89.8*			*77.0-120*		*09/02/2020 07:32*	WG1536524

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		0.000550	0.00118	1	09/02/2020 09:29	WG1536658
Toluene	U		0.00153	0.00589	1	09/02/2020 09:29	WG1536658
Ethylbenzene	U		0.000868	0.00294	1	09/02/2020 09:29	WG1536658
Total Xylenes	0.00309	J	0.00104	0.00765	1	09/02/2020 09:29	WG1536658
(S) Toluene-d8	*106*			*75.0-131*		*09/02/2020 09:29*	WG1536658
(S) 4-Bromofluorobenzene	*93.6*			*67.0-138*		*09/02/2020 09:29*	WG1536658
(S) 1,2-Dichloroethane-d4	*91.7*			*70.0-130*		*09/02/2020 09:29*	WG1536658

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		1.75	4.35	1	09/09/2020 12:36	WG1539272
C28-C40 Oil Range	1.11	B J	0.298	4.35	1	09/09/2020 12:36	WG1539272
(S) o-Terphenyl	*63.5*			*18.0-148*		*09/09/2020 12:36*	WG1539272

Total Solids by Method 2540 G-2011

Analyte	Result	Qualifier	Dilution	Analysis	Batch
	%			date / time	
Total Solids	94.2		1	09/05/2020 23:34	WG1538139

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	206		9.76	21.2	1	09/01/2020 03:37	WG1535091

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	09/02/2020 07:52	WG1536524
(S) a,a,a-Trifluorotoluene(FID)	*89.7*			*77.0-120*		*09/02/2020 07:52*	WG1536524

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		0.000524	0.00112	1	09/02/2020 09:49	WG1536658
Toluene	U		0.00146	0.00561	1	09/02/2020 09:49	WG1536658
Ethylbenzene	U		0.000827	0.00281	1	09/02/2020 09:49	WG1536658
Total Xylenes	0.00239	J	0.000988	0.00730	1	09/02/2020 09:49	WG1536658
(S) Toluene-d8	*108*			*75.0-131*		*09/02/2020 09:49*	WG1536658
(S) 4-Bromofluorobenzene	*91.9*			*67.0-138*		*09/02/2020 09:49*	WG1536658
(S) 1,2-Dichloroethane-d4	*88.9*			*70.0-130*		*09/02/2020 09:49*	WG1536658

Semi-Volatile Organic Compounds (GC) by Method 8015

Analyte	Result (dry)	Qualifier	MDL (dry)	RDL (dry)	Dilution	Analysis	Batch
	mg/kg		mg/kg	mg/kg		date / time	
C10-C28 Diesel Range	U		1.71	4.25	1	09/09/2020 12:50	WG1539272
C28-C40 Oil Range	1.14	B J	0.291	4.25	1	09/09/2020 12:50	WG1539272
(S) o-Terphenyl	*74.2*			*18.0-148*		*09/09/2020 12:50*	WG1539272

Total Solids by Method 2540 G-2011

Analyte	Result	Qualifier	Dilution	Analysis	Batch
	%			date / time	
Total Solids	96.4		1	09/05/2020 23:34	WG1538139

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	5350		95.5	208	10	09/01/2020 04:30	WG1535091

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	0.0253	J	0.0225	0.104	1	09/02/2020 08:13	WG1536524
(S) a,a,a-Trifluorotoluene(FID)	*89.1*			*77.0-120*		*09/02/2020 08:13*	WG1536524

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

Analyte	Result (dry)	Qualifier	MDL (dry)	RDL (dry)	Dilution	Analysis	Batch
	mg/kg		mg/kg	mg/kg		date / time	
Benzene	U		0.000502	0.00108	1	09/02/2020 10:08	WG1536658
Toluene	U		0.00140	0.00538	1	09/02/2020 10:08	WG1536658
Ethylbenzene	U		0.000793	0.00269	1	09/02/2020 10:08	WG1536658
Total Xylenes	0.00211	J	0.000946	0.00699	1	09/02/2020 10:08	WG1536658
(S) Toluene-d8	*104*			*75.0-131*		*09/02/2020 10:08*	WG1536658
(S) 4-Bromofluorobenzene	*96.2*			*67.0-138*		*09/02/2020 10:08*	WG1536658
(S) 1,2-Dichloroethane-d4	*89.6*			*70.0-130*		*09/02/2020 10:08*	WG1536658

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	2.38	J	1.67	4.15	1	09/09/2020 13:19	WG1539272
C28-C40 Oil Range	4.77	B	0.284	4.15	1	09/09/2020 13:19	WG1539272
(S) o-Terphenyl	*68.2*			*18.0-148*		*09/09/2020 13:19*	WG1539272

Sample Narrative:

L1256173-36 WG1539272: Duplicate Analysis performed due to QC failure. Results confirm; reporting in hold data

Total Solids by Method 2540 G-2011

Analyte	Result	Qualifier	Dilution	Analysis	Batch
	%			date / time	
Total Solids	97.5		1	09/05/2020 23:34	WG1538139

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	404		9.44	20.5	1	09/01/2020 04:47	WG1535091

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		0.0223	0.103	1	09/02/2020 08:34	WG1536524
(S) a,a,a-Trifluorotoluene(FID)	*90.6*			*77.0-120*		*09/02/2020 08:34*	WG1536524

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		0.000491	0.00105	1	09/02/2020 10:26	WG1536658
Toluene	U		0.00137	0.00526	1	09/02/2020 10:26	WG1536658
Ethylbenzene	U		0.000775	0.00263	1	09/02/2020 10:26	WG1536658
Total Xylenes	0.00162	J	0.000925	0.00684	1	09/02/2020 10:26	WG1536658
(S) Toluene-d8	*107*			*75.0-131*		*09/02/2020 10:26*	WG1536658
(S) 4-Bromofluorobenzene	*93.6*			*67.0-138*		*09/02/2020 10:26*	WG1536658
(S) 1,2-Dichloroethane-d4	*91.1*			*70.0-130*		*09/02/2020 10:26*	WG1536658

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	4.10	1	09/09/2020 16:15	WG1539273
C28-C40 Oil Range	4.56	B	0.281	4.10	1	09/09/2020 16:15	WG1539273
(S) o-Terphenyl	*74.0*			*18.0-148*		*09/09/2020 16:15*	WG1539273

Total Solids by Method 2540 G-2011

Analyte	Result	Qualifier	Dilution	Analysis	Batch
	%			date / time	
Total Solids	96.5		1	09/05/2020 23:34	WG1538139

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	375		9.54	20.7	1	09/01/2020 05:22	WG1535091

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

Analyte	Result (dry)	Qualifier	MDL (dry)	RDL (dry)	Dilution	Analysis	Batch
	mg/kg		mg/kg	mg/kg		date / time	
TPH (GC/FID) Low Fraction	U		0.0225	0.104	1	09/02/2020 08:54	WG1536524
(S) a,a,a-Trifluorotoluene(FID)	*90.1*			*77.0-120*		*09/02/2020 08:54*	WG1536524

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		0.000501	0.00107	1	09/02/2020 10:45	WG1536658
Toluene	U		0.00140	0.00537	1	09/02/2020 10:45	WG1536658
Ethylbenzene	U		0.000791	0.00268	1	09/02/2020 10:45	WG1536658
Total Xylenes	0.00144	J	0.000945	0.00698	1	09/02/2020 10:45	WG1536658
(S) Toluene-d8	*107*			*75.0-131*		*09/02/2020 10:45*	WG1536658
(S) 4-Bromofluorobenzene	*95.5*			*67.0-138*		*09/02/2020 10:45*	WG1536658
(S) 1,2-Dichloroethane-d4	*89.1*			*70.0-130*		*09/02/2020 10:45*	WG1536658

Semi-Volatile Organic Compounds (GC) by Method 8015

Analyte	Result (dry)	Qualifier	MDL (dry)	RDL (dry)	Dilution	Analysis	Batch
	mg/kg		mg/kg	mg/kg		date / time	
C10-C28 Diesel Range	U		1.67	4.15	1	09/09/2020 14:20	WG1539273
C28-C40 Oil Range	1.20	B J	0.284	4.15	1	09/09/2020 14:20	WG1539273
(S) o-Terphenyl	*86.7*			*18.0-148*		*09/09/2020 14:20*	WG1539273

BH-3 (0-1)
Collected date/time: 08/26/20 00:00

Total Solids by Method 2540 G-2011

Analyte	Result	Qualifier	Dilution	Analysis	Batch
	%			date / time	
Total Solids	98.4		1	09/05/2020 23:34	WG1538139

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	215		9.35	20.3	1	09/01/2020 05:39	WG1535091

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		0.0221	0.102	1	09/02/2020 09:15	WG1536524
(S) a,a,a-Trifluorotoluene(FID)	*89.8*			*77.0-120*		*09/02/2020 09:15*	WG1536524

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		0.000482	0.00103	1	09/02/2020 11:04	WG1536658
Toluene	U		0.00134	0.00516	1	09/02/2020 11:04	WG1536658
Ethylbenzene	U		0.000761	0.00258	1	09/02/2020 11:04	WG1536658
Total Xylenes	0.00134	J	0.000908	0.00671	1	09/02/2020 11:04	WG1536658
(S) Toluene-d8	*108*			*75.0-131*		*09/02/2020 11:04*	WG1536658
(S) 4-Bromofluorobenzene	*94.8*			*67.0-138*		*09/02/2020 11:04*	WG1536658
(S) 1,2-Dichloroethane-d4	*89.6*			*70.0-130*		*09/02/2020 11:04*	WG1536658

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	4.06	1	09/09/2020 14:33	WG1539273
C28-C40 Oil Range	2.78	B J	0.278	4.06	1	09/09/2020 14:33	WG1539273
(S) o-Terphenyl	*75.2*			*18.0-148*		*09/09/2020 14:33*	WG1539273

Total Solids by Method 2540 G-2011

Analyte	Result	Qualifier	Dilution	Analysis	Batch
	%			date / time	
Total Solids	98.0		1	09/05/2020 23:34	WG1538139

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	254		9.39	20.4	1	09/01/2020 05:57	WG1535091

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	J	0.0222	0.102	1	09/02/2020 09:36	WG1536524
(S) a,a,a-Trifluorotoluene(FID)	*89.7*			*77.0-120*		*09/02/2020 09:36*	WG1536524

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		0.000486	0.00104	1	09/02/2020 11:23	WG1536658
Toluene	U		0.00135	0.00521	1	09/02/2020 11:23	WG1536658
Ethylbenzene	U		0.000768	0.00260	1	09/02/2020 11:23	WG1536658
Total Xylenes	0.00122	J	0.000917	0.00677	1	09/02/2020 11:23	WG1536658
(S) Toluene-d8	*106*			*75.0-131*		*09/02/2020 11:23*	WG1536658
(S) 4-Bromofluorobenzene	*96.3*			*67.0-138*		*09/02/2020 11:23*	WG1536658
(S) 1,2-Dichloroethane-d4	*92.2*			*70.0-130*		*09/02/2020 11:23*	WG1536658

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	3.45	J	1.64	4.08	1	09/09/2020 16:28	WG1539273
C28-C40 Oil Range	19.9		0.280	4.08	1	09/09/2020 16:28	WG1539273
(S) o-Terphenyl	*88.1*			*18.0-148*		*09/09/2020 16:28*	WG1539273

Total Solids by Method 2540 G-2011

Analyte	Result	Qualifier	Dilution	Analysis	Batch
	%			date / time	
Total Solids	96.5		1	09/05/2020 23:34	WG1538139

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	27.8		9.53	20.7	1	08/31/2020 23:11	WG1535329

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	0.0230	J	0.0225	0.104	1	09/02/2020 09:56	WG1536524
(S) a,a,a-Trifluorotoluene(FID)	*90.0*			*77.0-120*		*09/02/2020 09:56*	WG1536524

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		0.000501	0.00107	1	09/02/2020 11:42	WG1536658
Toluene	U		0.00139	0.00536	1	09/02/2020 11:42	WG1536658
Ethylbenzene	U		0.000790	0.00268	1	09/02/2020 11:42	WG1536658
Total Xylenes	0.00106	J	0.000944	0.00697	1	09/02/2020 11:42	WG1536658
(S) Toluene-d8	*106*			*75.0-131*		*09/02/2020 11:42*	WG1536658
(S) 4-Bromofluorobenzene	*96.3*			*67.0-138*		*09/02/2020 11:42*	WG1536658
(S) 1,2-Dichloroethane-d4	*93.9*			*70.0-130*		*09/02/2020 11:42*	WG1536658

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	5.13		1.67	4.14	1	09/09/2020 16:41	WG1539273
C28-C40 Oil Range	23.0		0.284	4.14	1	09/09/2020 16:41	WG1539273
(S) o-Terphenyl	*90.6*			*18.0-148*		*09/09/2020 16:41*	WG1539273

Total Solids by Method 2540 G-2011

Analyte	Result	Qualifier	Dilution	Analysis	Batch
	%			date / time	
Total Solids	96.5		1	09/05/2020 23:34	WG1538139

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	10.6	J	9.54	20.7	1	08/31/2020 23:29	WG1535329

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

Analyte	Result (dry)	Qualifier	MDL (dry)	RDL (dry)	Dilution	Analysis	Batch
	mg/kg		mg/kg	mg/kg		date / time	
TPH (GC/FID) Low Fraction	U		0.0225	0.104	1	09/02/2020 10:17	WG1536524
(S) a,a,a-Trifluorotoluene(FID)	*89.5*			*77.0-120*		*09/02/2020 10:17*	WG1536524

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		0.000501	0.00107	1	09/02/2020 12:01	WG1536658
Toluene	U		0.00140	0.00537	1	09/02/2020 12:01	WG1536658
Ethylbenzene	U		0.000791	0.00268	1	09/02/2020 12:01	WG1536658
Total Xylenes	0.00150	J	0.000945	0.00698	1	09/02/2020 12:01	WG1536658
(S) Toluene-d8	*103*			*75.0-131*		*09/02/2020 12:01*	WG1536658
(S) 4-Bromofluorobenzene	*94.8*			*67.0-138*		*09/02/2020 12:01*	WG1536658
(S) 1,2-Dichloroethane-d4	*91.5*			*70.0-130*		*09/02/2020 12:01*	WG1536658

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	1.99	J	1.67	4.15	1	09/09/2020 14:46	WG1539273
C28-C40 Oil Range	10.6	B	0.284	4.15	1	09/09/2020 14:46	WG1539273
(S) o-Terphenyl	*81.3*			*18.0-148*		*09/09/2020 14:46*	WG1539273

Total Solids by Method 2540 G-2011

Analyte	Result	Qualifier	Dilution	Analysis	Batch
	%			date / time	
Total Solids	97.1		1	09/05/2020 23:34	WG1538139

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		9.48	20.6	1	08/31/2020 23:48	WG1535329

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

Analyte	Result (dry)	Qualifier	MDL (dry)	RDL (dry)	Dilution	Analysis	Batch
	mg/kg		mg/kg	mg/kg		date / time	
TPH (GC/FID) Low Fraction	U		0.0224	0.103	1	09/02/2020 10:38	WG1536524
(S) a,a,a-Trifluorotoluene(FID)	*89.0*			*77.0-120*		*09/02/2020 10:38*	WG1536524

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		0.000495	0.00106	1	09/02/2020 12:20	WG1536658
Toluene	U		0.00138	0.00530	1	09/02/2020 12:20	WG1536658
Ethylbenzene	U		0.000782	0.00265	1	09/02/2020 12:20	WG1536658
Total Xylenes	0.00105	J	0.000933	0.00689	1	09/02/2020 12:20	WG1536658
(S) Toluene-d8	*104*			*75.0-131*		*09/02/2020 12:20*	WG1536658
(S) 4-Bromofluorobenzene	*90.6*			*67.0-138*		*09/02/2020 12:20*	WG1536658
(S) 1,2-Dichloroethane-d4	*89.6*			*70.0-130*		*09/02/2020 12:20*	WG1536658

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	4.12	1	09/09/2020 14:59	WG1539273
C28-C40 Oil Range	3.34	B J	0.282	4.12	1	09/09/2020 14:59	WG1539273
(S) o-Terphenyl	*82.5*			*18.0-148*		*09/09/2020 14:59*	WG1539273

Total Solids by Method 2540 G-2011

Analyte	Result	Qualifier	Dilution	Analysis	Batch
	%			date / time	
Total Solids	97.4		1	09/05/2020 23:34	WG1538139

Wet Chemistry by Method 300.0

Analyte	Result (dry)	Qualifier	MDL (dry)	RDL (dry)	Dilution	Analysis	Batch
	mg/kg		mg/kg	mg/kg		date / time	
Chloride	U		9.45	20.5	1	09/01/2020 00:06	WG1535329

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		0.0223	0.103	1	09/02/2020 10:59	WG1536524
(S) a,a,a-Trifluorotoluene(FID)	*89.3*			*77.0-120*		*09/02/2020 10:59*	WG1536524

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		0.000492	0.00105	1	09/02/2020 12:39	WG1536658
Toluene	U		0.00137	0.00527	1	09/02/2020 12:39	WG1536658
Ethylbenzene	U		0.000777	0.00264	1	09/02/2020 12:39	WG1536658
Total Xylenes	0.00216	J	0.000928	0.00685	1	09/02/2020 12:39	WG1536658
(S) Toluene-d8	*105*			*75.0-131*		*09/02/2020 12:39*	WG1536658
(S) 4-Bromofluorobenzene	*96.9*			*67.0-138*		*09/02/2020 12:39*	WG1536658
(S) 1,2-Dichloroethane-d4	*91.5*			*70.0-130*		*09/02/2020 12:39*	WG1536658

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	09/09/2020 15:11	WG1539273
C28-C40 Oil Range	3.19	B J	0.281	4.11	1	09/09/2020 15:11	WG1539273
(S) o-Terphenyl	*79.2*			*18.0-148*		*09/09/2020 15:11*	WG1539273

Method Blank (MB)

(MB) R3568439-1 09/06/20 19:12

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

L1256171-01 Original Sample (OS) • Duplicate (DUP)

(OS) L1256171-01 09/06/20 19:12 • (DUP) R3568439-3 09/06/20 19:12

Analyte	Original Result %	DUP Result %	Dilution	DUP RPD %	DUP Qualifier	DUP RPD Limits %
Total Solids	82.8	83.2	1	0.517		10

Laboratory Control Sample (LCS)

(LCS) R3568439-2 09/06/20 19:12

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) R3568438-1 09/06/20 01:18

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

L1256173-09 Original Sample (OS) • Duplicate (DUP)

(OS) L1256173-09 09/06/20 01:18 • (DUP) R3568438-3 09/06/20 01:18

Analyte	Original Result %	DUP Result %	Dilution	DUP RPD %	DUP Qualifier	DUP RPD Limits %
Total Solids	88.0	89.1	1	1.24		10

Laboratory Control Sample (LCS)

(LCS) R3568438-2 09/06/20 01:18

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) R3568436-1 09/06/20 00:42

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

L1256173-20 Original Sample (OS) • Duplicate (DUP)

(OS) L1256173-20 09/06/20 00:42 • (DUP) R3568436-3 09/06/20 00:42

Analyte	Original Result %	DUP Result %	Dilution	DUP RPD %	DUP Qualifier	DUP RPD Limits %
Total Solids	93.4	93.3	1	0.115		10

Laboratory Control Sample (LCS)

(LCS) R3568436-2 09/06/20 00:42

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) R3568431-1 09/06/20 00:41

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

L1256173-30 Original Sample (OS) • Duplicate (DUP)

(OS) L1256173-30 09/06/20 00:41 • (DUP) R3568431-3 09/06/20 00:41

Analyte	Original Result %	DUP Result %	Dilution	DUP RPD %	DUP Qualifier	DUP RPD Limits %
Total Solids	93.9	94.9	1	1.04		10

Laboratory Control Sample (LCS)

(LCS) R3568431-2 09/06/20 00:41

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

Received by OCD: 3/5/2021 3:12:10 PM

Method Blank (MB)

(MB) R3568427-1 09/05/20 23:34

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

L1256173-35 Original Sample (OS) • Duplicate (DUP)

(OS) L1256173-35 09/05/20 23:34 • (DUP) R3568427-3 09/05/20 23:34

Analyte	Original Result %	DUP Result %	Dilution	DUP RPD %	DUP Qualifier	DUP RPD Limits %
Total Solids	94.2	94.5	1	0.337		10

Laboratory Control Sample (LCS)

(LCS) R3568427-2 09/05/20 23:34

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

Released to Imaging: 4/8/2021 11:24:56 AM

Method Blank (MB)

(MB) R3565946-1 08/31/20 18:31

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

L1256173-02 Original Sample (OS) • Duplicate (DUP)

(OS) L1256173-02 08/31/20 19:16 • (DUP) R3565946-3 08/31/20 19:27

Analyte	Original Result (dry) mg/kg	DUP Result (dry) mg/kg	Dilution	DUP RPD %	DUP Qualifier	DUP RPD Limits %
Chloride	13700	12900	100	6.40		20

L1256173-17 Original Sample (OS) • Duplicate (DUP)

(OS) L1256173-17 08/31/20 22:56 • (DUP) R3565946-6 08/31/20 23:08

Analyte	Original Result (dry) mg/kg	DUP Result (dry) mg/kg	Dilution	DUP RPD %	DUP Qualifier	DUP RPD Limits %
Chloride	148	169	1	13.5		20

Laboratory Control Sample (LCS)

(LCS) R3565946-2 08/31/20 18:42

Analyte	Spike Amount mg/kg	LCS Result mg/kg	LCS Rec. %	Rec. Limits %	LCS Qualifier
Chloride	200	198	99.0	90.0-110	

L1256173-12 Original Sample (OS) • Matrix Spike (MS) • Matrix Spike Duplicate (MSD)

(OS) L1256173-12 08/31/20 21:29 • (MS) R3565946-4 08/31/20 21:38 • (MSD) R3565946-5 08/31/20 21:48

Analyte	Spike Amount (dry) mg/kg	Original Result (dry) mg/kg	MS Result (dry) mg/kg	MSD Result (dry) mg/kg	MS Rec. %	MSD Rec. %	Dilution	Rec. Limits %	MS Qualifier	MSD Qualifier	RPD %	RPD Limits %
Chloride	675	292	966	941	99.8	96.1	1	80.0-120			2.64	20

Method Blank (MB)

(MB) R3566144-1 08/31/20 20:39

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

L1256173-21 Original Sample (OS) • Duplicate (DUP)

(OS) L1256173-21 08/31/20 22:07 • (DUP) R3566144-3 08/31/20 22:24

Analyte	Original Result (dry) mg/kg	DUP Result (dry) mg/kg	Dilution	DUP RPD %	DUP Qualifier	DUP RPD Limits %
Chloride	104	104	1	0.259		20

L1256173-37 Original Sample (OS) • Duplicate (DUP)

(OS) L1256173-37 09/01/20 04:47 • (DUP) R3566144-6 09/01/20 05:05

Analyte	Original Result (dry) mg/kg	DUP Result (dry) mg/kg	Dilution	DUP RPD %	DUP Qualifier	DUP RPD Limits %
Chloride	404	355	1	13.0		20

Laboratory Control Sample (LCS)

(LCS) R3566144-2 08/31/20 20:57

Analyte	Spike Amount mg/kg	LCS Result mg/kg	LCS Rec. %	Rec. Limits %	LCS Qualifier
Chloride	200	209	104	90.0-110	

L1256173-30 Original Sample (OS) • Matrix Spike (MS) • Matrix Spike Duplicate (MSD)

(OS) L1256173-30 09/01/20 01:36 • (MS) R3566144-4 09/01/20 01:53 • (MSD) R3566144-5 09/01/20 02:10

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	533	U	539	538	101	101	1	80.0-120			0.121	20

Method Blank (MB)

(MB) R3565928-1 08/31/20 20:43

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

L1256203-41 Original Sample (OS) • Duplicate (DUP)

(OS) L1256203-41 09/01/20 00:24 • (DUP) R3565928-3 09/01/20 00:42

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

L1256291-06 Original Sample (OS) • Duplicate (DUP)

(OS) L1256291-06 09/01/20 06:26 • (DUP) R3565928-6 09/01/20 06:42

Analyte	Original Result (dry) mg/kg	DUP Result (dry) mg/kg	Dilution	DUP RPD %	DUP Qualifier	DUP RPD Limits %
Chloride	46.6	48.7	1	4.33		20

Laboratory Control Sample (LCS)

(LCS) R3565928-2 08/31/20 21:11

Analyte	Spike Amount mg/kg	LCS Result mg/kg	LCS Rec. %	Rec. Limits %	LCS Qualifier
Chloride	200	201	101	90.0-110	

L1256203-44 Original Sample (OS) • Matrix Spike (MS) • Matrix Spike Duplicate (MSD)

(OS) L1256203-44 09/01/20 01:37 • (MS) R3565928-4 09/01/20 02:33 • (MSD) R3565928-5 09/01/20 02:51

Analyte	Spike Amount (dry) mg/kg	Original Result (dry) mg/kg	MS Result (dry) mg/kg	MSD Result (dry) mg/kg	MS Rec. %	MSD Rec. %	Dilution	Rec. Limits %	MS Qualifier	MSD Qualifier	RPD %	RPD Limits %
Chloride	504	U	517	506	103	100	1	80.0-120			2.24	20

Method Blank (MB)

(MB) R3568161-2 09/01/20 21:29

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)	*106*			*77.0-120*

Laboratory Control Sample (LCS)

(LCS) R3568161-1 09/01/20 20:48

Analyte	Spike Amount mg/kg	LCS Result mg/kg	LCS Rec. %	Rec. Limits %	LCS Qualifier
TPH (GC/FID) Low Fraction	5.50	6.12	111	72.0-127	
(S) a,a,a-Trifluorotoluene(FID)			*103*	*77.0-120*	

L1256173-19 Original Sample (OS) • Matrix Spike (MS) • Matrix Spike Duplicate (MSD)

(OS) L1256173-19 09/02/20 06:27 • (MS) R3568161-3 09/02/20 08:05 • (MSD) R3568161-4 09/02/20 08:42

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	5.76	U	2.99	3.35	51.9	58.6	1	10.0-151			11.1	28
(S) a,a,a-Trifluorotoluene(FID)					*100*	*97.9*		*77.0-120*				

Method Blank (MB)

(MB) R3566987-2 09/02/20 04:31

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)	*96.5*			*77.0-120*

Laboratory Control Sample (LCS)

(LCS) R3566987-1 09/02/20 03:45

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

Method Blank (MB)

(MB) R3567079-2 09/02/20 05:36

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)	*91.0*			*77.0-120*

Laboratory Control Sample (LCS)

(LCS) R3567079-1 09/02/20 04:42

Analyte	Spike Amount mg/kg	LCS Result mg/kg	LCS Rec. %	Rec. Limits %	LCS Qualifier
TPH (GC/FID) Low Fraction	5.50	5.58	101	72.0-127	
(S) a,a,a-Trifluorotoluene(FID)			*106*	*77.0-120*	

L1256203-01 Original Sample (OS) • Matrix Spike (MS) • Matrix Spike Duplicate (MSD)

(OS) L1256203-01 09/02/20 11:19 • (MS) R3567079-3 09/02/20 13:23 • (MSD) R3567079-4 09/02/20 13:44

Analyte	Spike Amount (dry) mg/kg	Original Result (dry) mg/kg	MS Result (dry) mg/kg	MSD Result (dry) mg/kg	MS Rec. %	MSD Rec. %	Dilution	Rec. Limits %	MS Qualifier	MSD Qualifier	RPD %	RPD Limits %
TPH (GC/FID) Low Fraction	5.55	0.0259	5.09	5.08	91.2	89.2	1	10.0-151			0.203	28
(S) a,a,a-Trifluorotoluene(FID)					*98.8*	*97.8*		*77.0-120*				

Method Blank (MB)

(MB) R3566381-2 09/02/20 05:31

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	*99.1*			*75.0-131*
(S) 4-Bromofluorobenzene	*96.1*			*67.0-138*
(S) 1,2-Dichloroethane-d4	*83.9*			*70.0-130*

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

(LCS) R3566381-1 09/02/20 04:09 • (LCSD) R3566381-3 09/02/20 05:52

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 %
Benzene	0.125	0.134	0.137	107	110	70.0-123			2.21	20
Ethylbenzene	0.125	0.120	0.126	96.0	101	74.0-126			4.88	20
Toluene	0.125	0.114	0.119	91.2	95.2	75.0-121			4.29	20
Xylenes, Total	0.375	0.361	0.371	96.3	98.9	72.0-127			2.73	20
(S) Toluene-d8				*94.1*	*94.6*	*75.0-131*				
(S) 4-Bromofluorobenzene				*102*	*103*	*67.0-138*				
(S) 1,2-Dichloroethane-d4				*104*	*101*	*70.0-130*				

L1255968-01 Original Sample (OS) • Matrix Spike (MS) • Matrix Spike Duplicate (MSD)

(OS) L1255968-01 09/02/20 14:06 • (MS) R3566381-4 09/02/20 14:27 • (MSD) R3566381-5 09/02/20 14:47

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 %
Benzene	5.00	1.52	9.34	8.97	156	149	40	10.0-149	J5		4.04	37
Ethylbenzene	5.00	9.98	21.5	21.2	230	224	40	10.0-160	J5	J5	1.41	38
Toluene	5.00	36.9	62.2	62.9	506	520	40	10.0-156	V	V	1.12	38
Xylenes, Total	15.0	53.0	98.7	99.1	305	307	40	10.0-160	J5	J5	0.404	38
(S) Toluene-d8					*95.4*	*95.9*		*75.0-131*				
(S) 4-Bromofluorobenzene					*104*	*106*		*67.0-138*				
(S) 1,2-Dichloroethane-d4					*102*	*99.0*		*70.0-130*				

Method Blank (MB)

(MB) R3568065-3 09/01/20 21:10

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	*105*			*67.0-138*
(S) 1,2-Dichloroethane-d4	*107*			*70.0-130*

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

(LCS) R3568065-1 09/01/20 19:55 • (LCSD) R3568065-2 09/01/20 20:14

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 %
Benzene	0.125	0.127	0.126	102	101	70.0-123			0.791	20
Ethylbenzene	0.125	0.120	0.125	96.0	100	74.0-126			4.08	20
Toluene	0.125	0.123	0.119	98.4	95.2	75.0-121			3.31	20
Xylenes, Total	0.375	0.394	0.399	105	106	72.0-127			1.26	20
(S) Toluene-d8				*97.4*	*99.5*	*75.0-131*				
(S) 4-Bromofluorobenzene				*104*	*105*	*67.0-138*				
(S) 1,2-Dichloroethane-d4				*114*	*116*	*70.0-130*				

L1256173-27 Original Sample (OS) • Matrix Spike (MS) • Matrix Spike Duplicate (MSD)

(OS) L1256173-27 09/02/20 04:23 • (MS) R3568065-4 09/02/20 04:42 • (MSD) R3568065-5 09/02/20 05:01

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	0.139	U	0.185	0.177	133	127	1	10.0-149			4.31	37
Ethylbenzene	0.139	U	0.180	0.172	130	124	1	10.0-160			4.42	38
Toluene	0.139	U	0.176	0.168	126	121	1	10.0-156			4.53	38
Xylenes, Total	0.417	U	0.588	0.564	141	135	1	10.0-160			4.25	38
(S) Toluene-d8					*98.9*	*99.2*		*75.0-131*				
(S) 4-Bromofluorobenzene					*110*	*109*		*67.0-138*				
(S) 1,2-Dichloroethane-d4					*112*	*107*		*70.0-130*				

Method Blank (MB)

(MB) R3567051-2 09/01/20 22:12

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	*102*			*75.0-131*
(S) 4-Bromofluorobenzene	*92.3*			*67.0-138*
(S) 1,2-Dichloroethane-d4	*99.6*			*70.0-130*

Laboratory Control Sample (LCS)

(LCS) R3567051-1 09/01/20 19:59

Analyte	Spike Amount mg/kg	LCS Result mg/kg	LCS Rec. %	Rec. Limits %	LCS Qualifier
Benzene	0.125	0.105	84.0	70.0-123	
Ethylbenzene	0.125	0.108	86.4	74.0-126	
Toluene	0.125	0.101	80.8	75.0-121	
Xylenes, Total	0.375	0.335	89.3	72.0-127	
(S) Toluene-d8			*98.0*	*75.0-131*	
(S) 4-Bromofluorobenzene			*95.8*	*67.0-138*	
(S) 1,2-Dichloroethane-d4			*107*	*70.0-130*	

L1256162-04 Original Sample (OS) • Matrix Spike (MS) • Matrix Spike Duplicate (MSD)

(OS) L1256162-04 09/02/20 05:57 • (MS) R3567051-3 09/02/20 06:16 • (MSD) R3567051-4 09/02/20 06:35

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 %
Benzene	2.50	0.384	3.36	3.35	119	119	20	10.0-149			0.298	37
Ethylbenzene	2.50	4.72	9.41	9.50	188	191	20	10.0-160	J5	J5	0.952	38
Toluene	2.50	8.10	15.1	15.0	280	276	20	10.0-156	J5	J5	0.664	38
Xylenes, Total	7.50	24.1	42.0	41.3	239	229	20	10.0-160	J5	J5	1.68	38
(S) Toluene-d8					*100*	*98.2*		*75.0-131*				
(S) 4-Bromofluorobenzene					*91.3*	*92.3*		*67.0-138*				
(S) 1,2-Dichloroethane-d4					*104*	*103*		*70.0-130*				

Method Blank (MB)

(MB) R3566859-2 09/02/20 08:36

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	*105*			*75.0-131*
(S) 4-Bromofluorobenzene	*95.4*			*67.0-138*
(S) 1,2-Dichloroethane-d4	*86.0*			*70.0-130*

Laboratory Control Sample (LCS)

(LCS) R3566859-1 09/02/20 07:39

Analyte	Spike Amount mg/kg	LCS Result mg/kg	LCS Rec. %	Rec. Limits %	LCS Qualifier
Benzene	0.125	0.124	99.2	70.0-123	
Ethylbenzene	0.125	0.124	99.2	74.0-126	
Toluene	0.125	0.122	97.6	75.0-121	
Xylenes, Total	0.375	0.379	101	72.0-127	
(S) Toluene-d8			*97.8*	*75.0-131*	
(S) 4-Bromofluorobenzene			*102*	*67.0-138*	
(S) 1,2-Dichloroethane-d4			*97.9*	*70.0-130*	

L1256173-33 Original Sample (OS) • Matrix Spike (MS) • Matrix Spike Duplicate (MSD)

(OS) L1256173-33 09/02/20 09:10 • (MS) R3566859-3 09/02/20 15:30 • (MSD) R3566859-4 09/02/20 15:49

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	0.131	U	0.107	0.0795	81.5	60.6	1	10.0-149			29.3	37
Ethylbenzene	0.131	0.000785	0.112	0.0818	84.9	61.8	1	10.0-160			31.2	38
Toluene	0.131	U	0.116	0.0849	88.7	64.8	1	10.0-156			31.2	38
Xylenes, Total	0.393	0.00683	0.324	0.254	80.5	62.8	1	10.0-160			24.2	38
(S) Toluene-d8					*104*	*104*		*75.0-131*				
(S) 4-Bromofluorobenzene					*94.4*	*95.7*		*67.0-138*				
(S) 1,2-Dichloroethane-d4					*97.9*	*97.0*		*70.0-130*				

Method Blank (MB)

(MB) R3567638-1 09/04/20 23:54

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	*67.4*			*18.0-148*

Laboratory Control Sample (LCS)

(LCS) R3567638-2 09/05/20 00:08

Analyte	Spike Amount mg/kg	LCS Result mg/kg	LCS Rec. %	Rec. Limits %	LCS Qualifier
C10-C28 Diesel Range	50.0	35.5	71.0	50.0-150	
(S) o-Terphenyl			*81.8*	*18.0-148*	

L1255941-02 Original Sample (OS) • Matrix Spike (MS) • Matrix Spike Duplicate (MSD)

(OS) L1255941-02 09/05/20 17:23 • (MS) R3567691-1 09/05/20 17:36 • (MSD) R3567691-2 09/05/20 17:49

Analyte	Spike Amount mg/kg	Original Result mg/kg	MS Result mg/kg	MSD Result mg/kg	MS Rec. %	MSD Rec. %	Dilution	Rec. Limits %	MS Qualifier	MSD Qualifier	RPD %	RPD Limits %
C10-C28 Diesel Range	48.3	717	767	1210	104	1030	10	50.0-150		J3 V	44.8	20
(S) o-Terphenyl					*314*	*426*		*18.0-148*	J1	J1		

Sample Narrative:

OS: Surrogate failure due to matrix interference

Method Blank (MB)

(MB) R3567980-1 09/07/20 13:52

Analyte	MB Result mg/kg	MB Qualifier	MB MDL mg/kg	MB RDL mg/kg
C10-C28 Diesel Range	U		1.61	4.00
C28-C40 Oil Range	U		0.274	4.00
(S) o-Terphenyl	*75.8*			*18.0-148*

Laboratory Control Sample (LCS)

(LCS) R3567980-2 09/07/20 14:05

Analyte	Spike Amount mg/kg	LCS Result mg/kg	LCS Rec. %	Rec. Limits %	LCS Qualifier
C10-C28 Diesel Range	50.0	35.7	71.4	50.0-150	
(S) o-Terphenyl			*79.7*	*18.0-148*	

L1257938-03 Original Sample (OS) • Matrix Spike (MS) • Matrix Spike Duplicate (MSD)

(OS) L1257938-03 09/07/20 16:30 • (MS) R3567980-3 09/07/20 16:43 • (MSD) R3567980-4 09/07/20 16:56

Analyte	Spike Amount (dry) mg/kg	Original Result (dry) mg/kg	MS Result (dry) mg/kg	MSD Result (dry) mg/kg	MS Rec. %	MSD Rec. %	Dilution	Rec. Limits %	MS Qualifier	MSD Qualifier	RPD %	RPD Limits %
C10-C28 Diesel Range	56.8	U	38.7	37.4	68.1	66.1	1	50.0-150			3.34	20
(S) o-Terphenyl					*79.6*	*79.1*		*18.0-148*				

Method Blank (MB)

(MB) R3568390-1 09/09/20 08:25

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	7.49		0.274	4.00
(S) o-Terphenyl	*74.3*			*18.0-148*

Laboratory Control Sample (LCS)

(LCS) R3568390-2 09/09/20 08:38

Analyte	Spike Amount mg/kg	LCS Result mg/kg	LCS Rec. %	Rec. Limits %	LCS Qualifier
C10-C28 Diesel Range	50.0	36.2	72.4	50.0-150	
(S) o-Terphenyl			*95.8*	*18.0-148*	

L1256173-18 Original Sample (OS) • Matrix Spike (MS) • Matrix Spike Duplicate (MSD)

(OS) L1256173-18 09/09/20 08:51 • (MS) R3568390-3 09/09/20 09:05 • (MSD) R3568390-4 09/09/20 09:18

Analyte	Spike Amount (dry) mg/kg	Original Result (dry) mg/kg	MS Result (dry) mg/kg	MSD Result (dry) mg/kg	MS Rec. %	MSD Rec. %	Dilution	Rec. Limits %	MS Qualifier	MSD Qualifier	RPD %	RPD Limits %
C10-C28 Diesel Range	52.5	U	33.5	31.4	63.8	59.8	1	50.0-150			6.47	20
(S) o-Terphenyl					*86.6*	*77.5*		*18.0-148*				

Method Blank (MB)

(MB) R3568754-1 09/09/20 13:17

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	1.94	J	0.274	4.00
(S) o-Terphenyl	*85.0*			*18.0-148*

Laboratory Control Sample (LCS)

(LCS) R3568754-2 09/09/20 13:29

Analyte	Spike Amount mg/kg	LCS Result mg/kg	LCS Rec. %	Rec. Limits %	LCS Qualifier
C10-C28 Diesel Range	50.0	42.6	85.2	50.0-150	
(S) o-Terphenyl			*69.2*	*18.0-148*	

L1256203-01 Original Sample (OS) • Matrix Spike (MS) • Matrix Spike Duplicate (MSD)

(OS) L1256203-01 09/09/20 13:42 • (MS) R3568754-3 09/09/20 13:55 • (MSD) R3568754-4 09/09/20 14:07

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	51.3	U	45.1	42.9	88.0	83.5	1	50.0-150			5.15	20
(S) o-Terphenyl					*66.0*	*64.2*		*18.0-148*				

Method Blank (MB)

(MB) R3569226-1 09/11/20 01:34

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	*89.9*			*18.0-148*

Laboratory Control Sample (LCS)

(LCS) R3569226-2 09/11/20 01:47

Analyte	Spike Amount mg/kg	LCS Result mg/kg	LCS Rec. %	Rec. Limits %	LCS Qualifier
C10-C28 Diesel Range	50.0	42.2	84.4	50.0-150	
(S) o-Terphenyl			*26.0*	*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.
J5	The sample matrix interfered with the ability to make any accurate determination; spike value is high.
J7	Surrogate recovery cannot be used for control limit evaluation due to dilution.
Q	Sample was prepared and/or analyzed past holding time as defined in the method. Concentrations should be considered minimum values.
V	The sample concentration is too high to evaluate accurate spike recoveries.

ACCREDITATIONS & LOCATIONS

ONE LAB. NATIONWIDE.

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

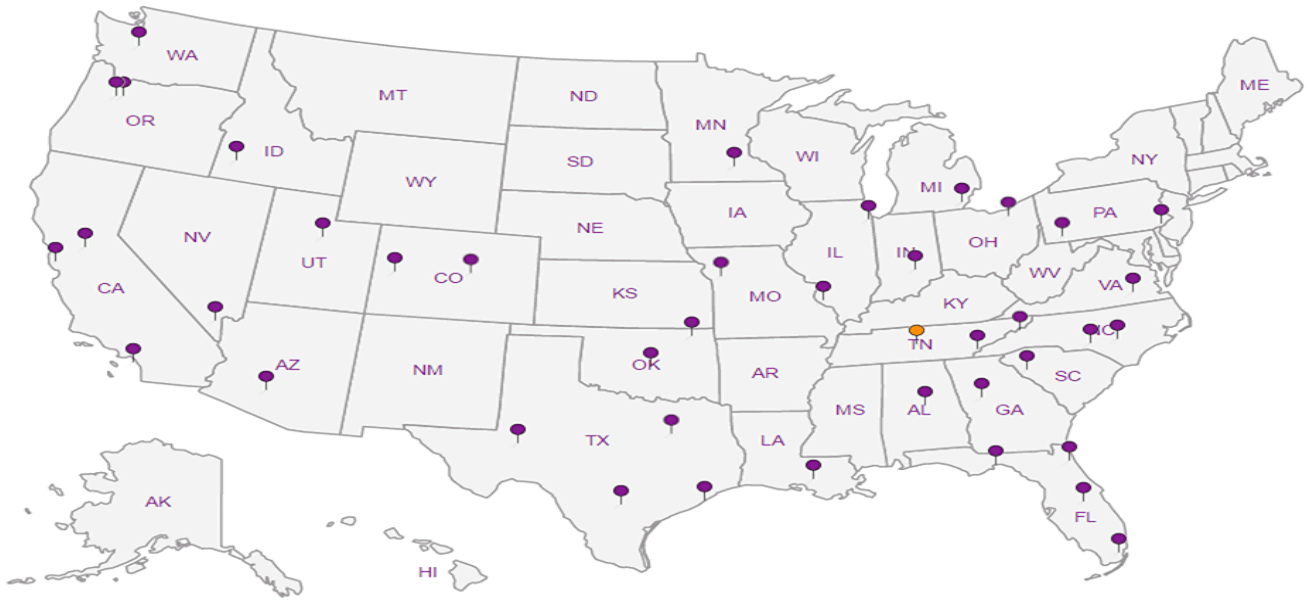
Third Party Federal Accreditations

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

Page: 1 of 5

Tetra Tech, Inc.

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

128173

Client Name:	Conoco Phillips	**Site Manager:**	Christian Llull
Project Name:	James A #011 Release	**Contact Info:**	Email: christian.llull@tetratech.com Phone: (512) 338-1667
Project Location: (county, state)	Lea County, New Mexico	**Project #:**	212C-MD-02250
Invoice to:	Accounts Payable 901 West Wall Street, Suite 100 Midland, Texas 79701		
Receiving Laboratory:	Pace Analytical	**Sampler Signature:**	John Thurston
Comments:	COPTETRA Acctnum		

ANALYSIS REQUEST
(Circle or Specify Method No.)

LAB # (LAB USE ONLY)	SAMPLE IDENTIFICATION	SAMPLING 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																															
	BH-1 (0-1)	8/26/2020			X				X			1	N	X		X												X					01
	BH-1 (2-3)	8/26/2020			X				X			1	N	X		X												X					02
	BH-1 (4-5)	8/26/2020			X				X			1	N	X		X												X					03
	BH-1 (6-7)	8/26/2020			X				X			1	N	X		X												X					04
	BH-1 (9-10)	8/26/2020			X				X			1	N	X		X												X					05
	BH-1 (14-15')	8/26/2020			X				X			1	N	X		X												X					06
	BH-1 (19-20')	8/26/2020			X				X			1	N	X		X												X					07
	BH-2 (0-1')	8/26/2020			X				X			1	N	X		X												X					08
	BH-2 (2-3')	8/26/2020			X				X			1	N	X		X												X					09
	BH-2 (4-5')	8/26/2020			X				X			1	N	X		X												X					10

Relinquished by:	Date: 8/28/20	Time: 1345	Received by: Date: 8/28/20 Time: 1345
Relinquished by:	Date: 8/28/20	Time: 17:00	Received by: Date: 8/28/20 Time: 17:00
Relinquished by:	Date:	Time:	Received by: Date: 8.29.20 Time: 1000

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 #: _____

Received by OCD: 3/5/2021 3:12:10 PM

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

12/6/17

Client Name:	Conoco Phillips	**Site Manager:**	Christian Llull
Project Name:	James A #011 Release	**Contact Info:**	Email: christian.llull@tetratech.com Phone: (512) 338-1667
Project Location: (county, state)	Lea County, New Mexico	**Project #:**	212C-MD-02250
Invoice to:	Accounts Payable 901 West Wall Street, Suite 100 Midland, Texas 79701		
Receiving Laboratory:	Pace Analytical	**Sampler Signature:**	John Thurston
Comments:	COPTETRA Acctnum		

ANALYSIS REQUEST
(Circle or Specify Method No.)

LAB # (LAB USE ONLY)	SAMPLE IDENTIFICATION	SAMPLING DATE (YEAR: 2020)	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
	BH-2 (6-7)	8/26/2020			X				X			1	N	X		X												X					11	
	BH-2 (9-10)	8/26/2020			X				X			1	N	X		X												X					12	
	BH-2 (14-15')	8/26/2020			X				X			1	N	X		X												X					13	
	BH-2 (19-20')	8/26/2020			X				X			1	N	X		X												X					14	
	BH-2 (24-25')	8/26/2020			X				X			1	N	X		X												X					15	
	BH-3 (0-1')	8/26/2020			X				X			1	N	X		X												X					16	
	BH-3 (2-3')	8/26/2020			X				X			1	N	X		X												X					17	
	BH-4 (0-1')	8/26/2020			X				X			1	N	X		X												X					18	
	BH-4 (2-3')	8/26/2020			X				X			1	N	X		X												X					19	
	BH-4 (4-5')	8/26/2020			X				X			1	N	X		X												X					20	

Relinquished by:	Date:	Time:	Received by:	Date:	Time:
	8/28/20	1345		8/28/20	1345
Relinquished by:	Date:	Time:	Received by:	Date:	Time:
	8/28/20	17:00	SwA	8/28/20	17:00
Relinquished by:	Date:	Time:	Received by:	Date:	Time:
				8-29-20	1000

ORIGINAL COPY

1.5 ± 0 = 1.5 AM

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 #: _____

Released to Imaging: 4/8/2021 11:24:56 AM

Received by OCD: 3/5/2021 3:12:10 PM

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

12516173

Client Name:	Conoco Phillips	**Site Manager:**	Christian Llull
Project Name:	James A #011 Release	**Contact Info:**	Email: christian.llull@tetratech.com Phone: (512) 338-1667
Project Location: (county, state)	Lea County, New Mexico	**Project #:**	212C-MD-02250
Invoice to:	Accounts Payable 901 West Wall Street, Suite 100 Midland, Texas 79701		
Receiving Laboratory:	Pace Analytical	**Sampler Signature:**	John Thurston
Comments:	COPTETRA Acctnum		

ANALYSIS REQUEST
(Circle or Specify Method No.)

LAB # (LAB USE ONLY)	SAMPLE IDENTIFICATION	SAMPLING YEAR: 2020 DATE	TIME	MATRIX WATER	SOIL	PRESERVATIVE METHOD HCL	HNO_3	ICE	NONE	# CONTAINERS	FILTERED (Y/N)	BTEX 8021B BTEX 8260B	TPH TX1005 (Ext to C35)	TPH 8015M (GRO - DRO - ORO - MRO)	PAH 8270C	Total Metals Ag As Ba Cd Cr Pb Se Hg	TCLP Metals Ag As Ba Cd Cr Pb Se Hg	TCLP Volatiles	TCLP Semi Volatiles	RCI	GC/MS Vol. 8260B / 624	GC/MS Semi. Vol. 8270C/625	PCB's 8082 / 608	NORM	PLM (Asbestos)	Chloride 300.0	Chloride Sulfate TDS	General Water Chemistry (see attached list)	Anion/Cation Balance	TPH 8015R		HOLD
	BH-5 (0-1')	8/26/2020			X			X		1	N	X		X												X					21	
	BH-5 (2-3')	8/26/2020			X			X		1	N	X		X												X					22	
	BH-5 (4-5')	8/26/2020			X			X		1	N	X		X												X					23	
	BH-5 (6-7')	8/26/2020			X			X		1	N	X		X												X					24	
	BH-5 (9-10')	8/26/2020			X			X		1	N	X		X												X					25	
	BH-6 (0-1')	8/26/2020			X			X		1	N	X		X												X					26	
	BH-6 (2-3')	8/26/2020			X			X		1	N	X		X												X					27	
	BH-6 (4-5')	8/26/2020			X			X		1	N	X		X												X					28	
	BH-6 (6-7')	8/26/2020			X			X		1	N	X		X												X					29	
	BH-6 (9-10')	8/26/2020			X			X		1	N	X		X												X					30	

Relinquished by:	Date:	Time:	Received by:	Date:	Time:
[signature]	8/28/20	1345	[signature]	8/28/20	13:45
[signature]	8/28/20	17:00	SWA	8/28/20	17:00
			[signature]	8-29-20	1000

LAB USE ONLY

Sample Temperature

1.5±0=1.5 AA

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 #: ____________

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Released to Imaging: 4/8/2021 11:24:56 AM

Analysis Request of Chain of Custody Record

Page: 4 of 5

Tetra Tech, Inc.

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

12/6/13

Client Name:	Conoco Phillips	**Site Manager:**	Christian Llull
Project Name:	James A #011 Release	**Contact Info:**	Email: christian.llull@tetratech.com Phone: (512) 338-1667
Project Location: (county, state)	Lea County, New Mexico	**Project #:**	212C-MD-02250
Invoice to:	Accounts Payable 901 West Wall Street, Suite 100 Midland, Texas 79701		
Receiving Laboratory:	Pace Analytical	**Sampler Signature:**	John Thurston
Comments:	COPTETRA Acctnum		

ANALYSIS REQUEST
(Circle or Specify Method No.)

LAB # (LAB USE ONLY)	SAMPLE IDENTIFICATION	SAMPLING 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
	BH-7 (0-1')	8/26/2020			X				X			1	N	X		X												X					31	
	BH-7 (2-3')	8/26/2020			X				X			1	N	X		X												X					32	
	BH-7 (4-5')	8/26/2020			X				X			1	N	X		X												X					33	
	BH-7 (6-7')	8/26/2020			X				X			1	N	X		X												X					34	
	BH-7 (9-10')	8/26/2020			X				X			1	N	X		X												X					35	
	BH-8 (0-1')	8/26/2020			X				X			1	N	X		X												X					36	
	BH-8 (2-3')	8/26/2020			X				X			1	N	X		X												X					37	
	BH-8 (4-5')	8/26/2020			X				X			1	N	X		X												X					38	
	BH-9(0-1')	8/26/2020			X				X			1	N	X		X												X					39	
	BH-9 (2-3')	8/26/2020			X				X			1	N	X		X												X					40	

Relinquished by:	Date: 8/28/20	Time: 1345	Received by: Date: 8/28/20 Time: 13:45
Relinquished by:	Date: 8/28/20	Time: 17:00	Received by: Date: 8/28/20 Time: 17:00
Relinquished by:	Date:	Time:	Received by: Date: 8-28-20 Time: 1000

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 #: _____

Received by OCD: 3/5/2021 3:12:10 PM

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

126677

Client Name:	Conoco Phillips	**Site Manager:**	Christian Llull
Project Name:	James #011 A Release	**Contact Info:**	Email: christian.llull@tetratech.com Phone: (512) 338-1667
Project Location: (county, state)	Lea County, New Mexico	**Project #:**	212C-MD-02250
Invoice to:	Accounts Payable 901 West Wall Street, Suite 100 Midland, Texas 79701		
Receiving Laboratory:	Pace Analytical	**Sampler Signature:**	John Thurston
Comments:	COPTETRA Acctnum		

ANALYSIS REQUEST
(Circle or Specify Method No.)

LAB # (LAB USE ONLY)	SAMPLE IDENTIFICATION	SAMPLING 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
	BG-1 (0-1')	8/26/2020			X				X			1	N	X		X												X					4	1
	BG-1 (4-5)	8/26/2020			X				X			1	N	X		X												X					4	2
	BG-1 (6-7')	8/26/2020			X				X			1	N	X		X												X					4	3
	BG-1 (9-10')	8/26/2020			X				X			1	N	X		X												X					4	4

Relinquished by:	Date:	Time:	Received by:	Date:	Time:
	8/28/20	1345		8/28/20	1345
	8/28/20	17:00		8/28/20	17:00
				8-31-20	1000

ORIGINAL COPY

1.5±0=1.5 KO AM

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 #: _____

Released to Imaging: 4/8/2021 11:24:56 AM

Pace Analytical®
National Center for Testing & Innovation

ANALYTICAL REPORT

September 21, 2020

ConocoPhillips - Tetra Tech

Sample Delivery Group:	L1260251
Samples Received:	09/10/2020
Project Number:	212C-MD-02250
Description:	James A #011 Stuffing Box Release

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.

TABLE OF CONTENTS

BH-10 (0-1') L1260251-01 Solid

Collected by: Joe Tyler | Collected date/time: 09/04/20 12:00 | Received date/time: 09/10/20 09:30

Method	Batch	Dilution	Preparation date/time	Analysis date/time	Analyst	Location
Total Solids by Method 2540 G-2011	WG1544748	1	09/18/20 16:08	09/18/20 16:15	KDW	Mt. Juliet, TN
Wet Chemistry by Method 300.0	WG1541864	1	09/13/20 20:10	09/14/20 00:32	ELN	Mt. Juliet, TN
Volatile Organic Compounds (GC) by Method 8015D/GRO	WG1542333	27.8	09/04/20 12:00	09/13/20 21:10	DWR	Mt. Juliet, TN
Volatile Organic Compounds (GC/MS) by Method 8260B	WG1542519	1.11	09/04/20 12:00	09/14/20 06:11	DWR	Mt. Juliet, TN
Semi-Volatile Organic Compounds (GC) by Method 8015	WG1544028	1	09/17/20 23:17	09/18/20 09:48	TJD	Mt. Juliet, TN

BH-10 (3-4') L1260251-02 Solid

Collected by: Joe Tyler | Collected date/time: 09/04/20 12:20 | Received date/time: 09/10/20 09:30

Method	Batch	Dilution	Preparation date/time	Analysis date/time	Analyst	Location
Total Solids by Method 2540 G-2011	WG1544748	1	09/18/20 16:08	09/18/20 16:15	KDW	Mt. Juliet, TN
Wet Chemistry by Method 300.0	WG1541864	1	09/13/20 20:10	09/14/20 01:02	ELN	Mt. Juliet, TN
Volatile Organic Compounds (GC) by Method 8015D/GRO	WG1542333	27.5	09/04/20 12:20	09/13/20 21:32	DWR	Mt. Juliet, TN
Volatile Organic Compounds (GC/MS) by Method 8260B	WG1542519	1.1	09/04/20 12:20	09/14/20 06:30	DWR	Mt. Juliet, TN
Semi-Volatile Organic Compounds (GC) by Method 8015	WG1544028	1	09/17/20 23:17	09/18/20 08:55	TJD	Mt. Juliet, TN

BH-11 (0-1') L1260251-03 Solid

Collected by: Joe Tyler | Collected date/time: 09/04/20 13:00 | Received date/time: 09/10/20 09:30

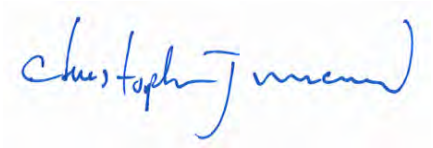
Method	Batch	Dilution	Preparation date/time	Analysis date/time	Analyst	Location
Total Solids by Method 2540 G-2011	WG1544748	1	09/18/20 16:08	09/18/20 16:15	KDW	Mt. Juliet, TN
Wet Chemistry by Method 300.0	WG1541864	1	09/13/20 20:10	09/14/20 01:16	ELN	Mt. Juliet, TN
Volatile Organic Compounds (GC) by Method 8015D/GRO	WG1542333	25	09/04/20 13:00	09/13/20 21:54	DWR	Mt. Juliet, TN
Volatile Organic Compounds (GC/MS) by Method 8260B	WG1542519	1	09/04/20 13:00	09/14/20 06:49	DWR	Mt. Juliet, TN
Semi-Volatile Organic Compounds (GC) by Method 8015	WG1544028	1	09/17/20 23:17	09/18/20 07:49	TJD	Mt. Juliet, TN

BH-11 (3-4') L1260251-04 Solid

Collected by: Joe Tyler | Collected date/time: 09/04/20 13:20 | Received date/time: 09/10/20 09:30

Method	Batch	Dilution	Preparation date/time	Analysis date/time	Analyst	Location
Total Solids by Method 2540 G-2011	WG1544748	1	09/18/20 16:08	09/18/20 16:15	KDW	Mt. Juliet, TN
Wet Chemistry by Method 300.0	WG1541864	1	09/13/20 20:10	09/14/20 01:31	ELN	Mt. Juliet, TN
Volatile Organic Compounds (GC) by Method 8015D/GRO	WG1542333	25	09/04/20 13:20	09/13/20 22:17	DWR	Mt. Juliet, TN
Volatile Organic Compounds (GC/MS) by Method 8260B	WG1542747	1	09/04/20 13:20	09/14/20 18:06	DWR	Mt. Juliet, TN
Semi-Volatile Organic Compounds (GC) by Method 8015	WG1544028	1	09/17/20 23:17	09/18/20 07:36	TJD	Mt. Juliet, TN

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



Chris McCord
Project Manager

Total Solids by Method 2540 G-2011

Analyte	Result	Qualifier	Dilution	Analysis	Batch
	%			date / time	
Total Solids	97.7		1	09/18/2020 16:15	WG1544748

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	40.3		9.41	20.5	1	09/14/2020 00:32	WG1541864

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	0.670	J	0.630	2.90	27.8	09/13/2020 21:10	WG1542333
(S) a,a,a-Trifluorotoluene(FID)	*98.2*			*77.0-120*		*09/13/2020 21:10*	WG1542333

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	0.000609	J	0.000541	0.00116	1.11	09/14/2020 06:11	WG1542519
Toluene	0.00434	J	0.00150	0.00579	1.11	09/14/2020 06:11	WG1542519
Ethylbenzene	U		0.000854	0.00290	1.11	09/14/2020 06:11	WG1542519
Total Xylenes	0.00229	J	0.00102	0.00754	1.11	09/14/2020 06:11	WG1542519
(S) Toluene-d8	*99.7*			*75.0-131*		*09/14/2020 06:11*	WG1542519
(S) 4-Bromofluorobenzene	*94.4*			*67.0-138*		*09/14/2020 06:11*	WG1542519
(S) 1,2-Dichloroethane-d4	*103*			*70.0-130*		*09/14/2020 06:11*	WG1542519

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	7.18		1.65	4.09	1	09/18/2020 09:48	WG1544028
C28-C40 Oil Range	33.2		0.280	4.09	1	09/18/2020 09:48	WG1544028
(S) o-Terphenyl	*60.4*			*18.0-148*		*09/18/2020 09:48*	WG1544028

Total Solids by Method 2540 G-2011

Analyte	Result	Qualifier	Dilution	Analysis	Batch
	%			date / time	
Total Solids	97.7		1	09/18/2020 16:15	WG1544748

Wet Chemistry by Method 300.0

Analyte	Result (dry)	Qualifier	MDL (dry)	RDL (dry)	Dilution	Analysis	Batch
	mg/kg		mg/kg	mg/kg		date / time	
Chloride	53.3		9.42	20.5	1	09/14/2020 01:02	WG1541864

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	0.672	J	0.624	2.88	27.5	09/13/2020 21:32	WG1542333
(S) a,a,a-Trifluorotoluene(FID)	*99.3*			*77.0-120*		*09/13/2020 21:32*	WG1542333

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	0.000690	J	0.000538	0.00115	1.1	09/14/2020 06:30	WG1542519
Toluene	0.00420	J	0.00150	0.00575	1.1	09/14/2020 06:30	WG1542519
Ethylbenzene	U		0.000848	0.00288	1.1	09/14/2020 06:30	WG1542519
Total Xylenes	0.00146	J	0.00101	0.00748	1.1	09/14/2020 06:30	WG1542519
(S) Toluene-d8	*101*			*75.0-131*		*09/14/2020 06:30*	WG1542519
(S) 4-Bromofluorobenzene	*91.4*			*67.0-138*		*09/14/2020 06:30*	WG1542519
(S) 1,2-Dichloroethane-d4	*104*			*70.0-130*		*09/14/2020 06:30*	WG1542519

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	5.21		1.65	4.10	1	09/18/2020 08:55	WG1544028
C28-C40 Oil Range	24.5		0.281	4.10	1	09/18/2020 08:55	WG1544028
(S) o-Terphenyl	*63.4*			*18.0-148*		*09/18/2020 08:55*	WG1544028

Total Solids by Method 2540 G-2011

Analyte	Result	Qualifier	Dilution	Analysis	Batch
	%			date / time	
Total Solids	98.8		1	09/18/2020 16:15	WG1544748

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		9.31	20.2	1	09/14/2020 01:16	WG1541864

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		0.556	2.56	25	09/13/2020 21:54	WG1542333
(S) a,a,a-Trifluorotoluene(FID)	*98.5*			*77.0-120*		*09/13/2020 21:54*	WG1542333

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

Analyte	Result (dry)	Qualifier	MDL (dry)	RDL (dry)	Dilution	Analysis	Batch
	mg/kg		mg/kg	mg/kg		date / time	
Benzene	U		0.000478	0.00102	1	09/14/2020 06:49	WG1542519
Toluene	0.00340	J	0.00133	0.00512	1	09/14/2020 06:49	WG1542519
Ethylbenzene	U		0.000755	0.00256	1	09/14/2020 06:49	WG1542519
Total Xylenes	0.00150	J	0.000901	0.00666	1	09/14/2020 06:49	WG1542519
(S) Toluene-d8	*99.1*			*75.0-131*		*09/14/2020 06:49*	WG1542519
(S) 4-Bromofluorobenzene	*94.0*			*67.0-138*		*09/14/2020 06:49*	WG1542519
(S) 1,2-Dichloroethane-d4	*106*			*70.0-130*		*09/14/2020 06:49*	WG1542519

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	4.01	J	1.63	4.05	1	09/18/2020 07:49	WG1544028
C28-C40 Oil Range	13.4		0.277	4.05	1	09/18/2020 07:49	WG1544028
(S) o-Terphenyl	*62.0*			*18.0-148*		*09/18/2020 07:49*	WG1544028

Total Solids by Method 2540 G-2011

Analyte	Result	Qualifier	Dilution	Analysis	Batch
	%			date / time	
Total Solids	92.6		1	09/18/2020 16:15	WG1544748

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		9.93	21.6	1	09/14/2020 01:31	WG1541864

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		0.663	3.05	25	09/13/2020 22:17	WG1542333
(S) a,a,a-Trifluorotoluene(FID)	*97.9*			*77.0-120*		*09/13/2020 22:17*	WG1542333

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	09/14/2020 18:06	WG1542747
Toluene	0.00265	J	0.00159	0.00611	1	09/14/2020 18:06	WG1542747
Ethylbenzene	U		0.000900	0.00305	1	09/14/2020 18:06	WG1542747
Total Xylenes	U		0.00107	0.00794	1	09/14/2020 18:06	WG1542747
(S) Toluene-d8	*101*			*75.0-131*		*09/14/2020 18:06*	WG1542747
(S) 4-Bromofluorobenzene	*93.7*			*67.0-138*		*09/14/2020 18:06*	WG1542747
(S) 1,2-Dichloroethane-d4	*77.2*			*70.0-130*		*09/14/2020 18:06*	WG1542747

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	1.86	J	1.74	4.32	1	09/18/2020 07:36	WG1544028
C28-C40 Oil Range	3.69	J	0.296	4.32	1	09/18/2020 07:36	WG1544028
(S) o-Terphenyl	*63.4*			*18.0-148*		*09/18/2020 07:36*	WG1544028

Received by OCD: 3/5/2021 3:12:10 PM

Method Blank (MB)

(MB) R3572222-1 09/18/20 16:15

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

L1260251-01 Original Sample (OS) • Duplicate (DUP)

(OS) L1260251-01 09/18/20 16:15 • (DUP) R3572222-3 09/18/20 16:15

Analyte	Original Result %	DUP Result %	Dilution	DUP RPD %	DUP Qualifier	DUP RPD Limits %
Total Solids	97.7	97.9	1	0.159		10

Laboratory Control Sample (LCS)

(LCS) R3572222-2 09/18/20 16:15

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

Released to Imaging: 4/8/2021 11:24:56 AM

Method Blank (MB)

(MB) R3569986-1 09/13/20 21:39

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

L1260251-01 Original Sample (OS) • Duplicate (DUP)

(OS) L1260251-01 09/14/20 00:32 • (DUP) R3569986-3 09/14/20 00:47

Analyte	Original Result (dry) mg/kg	DUP Result (dry) mg/kg	Dilution	DUP RPD %	DUP Qualifier	DUP RPD Limits %
Chloride	40.3	40.2	1	0.432		20

L1260772-06 Original Sample (OS) • Duplicate (DUP)

(OS) L1260772-06 09/14/20 06:00 • (DUP) R3569986-6 09/14/20 06:15

Analyte	Original Result mg/kg	DUP Result mg/kg	Dilution	DUP RPD %	DUP Qualifier	DUP RPD Limits %
Chloride	3960	4110	10	3.70		20

Laboratory Control Sample (LCS)

(LCS) R3569986-2 09/13/20 21:53

Analyte	Spike Amount mg/kg	LCS Result mg/kg	LCS Rec. %	Rec. Limits %	LCS Qualifier
Chloride	200	197	98.3	90.0-110	

L1260772-01 Original Sample (OS) • Matrix Spike (MS) • Matrix Spike Duplicate (MSD)

(OS) L1260772-01 09/14/20 03:31 • (MS) R3569986-4 09/14/20 03:46 • (MSD) R3569986-5 09/14/20 04:01

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 %
Chloride	500	10100	10300	10800	43.3	129	1	80.0-120	E V	E V	4.05	20

Method Blank (MB)

(MB) R3571502-2 09/13/20 11:54

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)	*98.1*			*77.0-120*

Laboratory Control Sample (LCS)

(LCS) R3571502-1 09/13/20 10:37

Analyte	Spike Amount mg/kg	LCS Result mg/kg	LCS Rec. %	Rec. Limits %	LCS Qualifier
TPH (GC/FID) Low Fraction	5.50	5.83	106	72.0-127	
(S) a,a,a-Trifluorotoluene(FID)			*103*	*77.0-120*	

L1260251-04 Original Sample (OS) • Matrix Spike (MS) • Matrix Spike Duplicate (MSD)

(OS) L1260251-04 09/13/20 22:17 • (MS) R3571502-3 09/13/20 22:40 • (MSD) R3571502-4 09/13/20 23:02

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	94.1	U	82.4	85.3	87.7	90.6	25	10.0-151			3.35	28
(S) a,a,a-Trifluorotoluene(FID)					*102*	*103*		*77.0-120*				

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Method Blank (MB)

(MB) R3571013-3 09/14/20 04:19

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	*89.8*			*67.0-138*
(S) 1,2-Dichloroethane-d4	*101*			*70.0-130*

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

(LCS) R3571013-1 09/14/20 03:03 • (LCSD) R3571013-2 09/14/20 03:22

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 %
Benzene	0.125	0.121	0.123	96.8	98.4	70.0-123			1.64	20
Ethylbenzene	0.125	0.117	0.119	93.6	95.2	74.0-126			1.69	20
Toluene	0.125	0.114	0.113	91.2	90.4	75.0-121			0.881	20
Xylenes, Total	0.375	0.364	0.361	97.1	96.3	72.0-127			0.828	20
(S) Toluene-d8				*97.2*	*96.4*	*75.0-131*				
(S) 4-Bromofluorobenzene				*94.1*	*97.1*	*67.0-138*				
(S) 1,2-Dichloroethane-d4				*105*	*109*	*70.0-130*				

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Method Blank (MB)

(MB) R3570617-2 09/14/20 13:01

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	*105*			*75.0-131*
(S) 4-Bromofluorobenzene	*96.4*			*67.0-138*
(S) 1,2-Dichloroethane-d4	*83.9*			*70.0-130*

Laboratory Control Sample (LCS)

(LCS) R3570617-1 09/14/20 12:04

Analyte	Spike Amount mg/kg	LCS Result mg/kg	LCS Rec. %	Rec. Limits %	LCS Qualifier
Benzene	0.125	0.125	100	70.0-123	
Ethylbenzene	0.125	0.128	102	74.0-126	
Toluene	0.125	0.123	98.4	75.0-121	
Xylenes, Total	0.375	0.370	98.7	72.0-127	
(S) Toluene-d8			*98.7*	*75.0-131*	
(S) 4-Bromofluorobenzene			*99.5*	*67.0-138*	
(S) 1,2-Dichloroethane-d4			*99.1*	*70.0-130*	

Received by OCD: 4/5/2021 3:12:10 PM

Method Blank (MB)

(MB) R3572094-1 09/18/20 06:03

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	*69.2*			*18.0-148*

Laboratory Control Sample (LCS)

(LCS) R3572094-2 09/18/20 06:16

Analyte	Spike Amount mg/kg	LCS Result mg/kg	LCS Rec. %	Rec. Limits %	LCS Qualifier
C10-C28 Diesel Range	50.0	33.3	66.6	50.0-150	
(S) o-Terphenyl			*85.4*	*18.0-148*	

L1260251-01 Original Sample (OS) • Matrix Spike (MS) • Matrix Spike Duplicate (MSD)

(OS) L1260251-01 09/18/20 09:48 • (MS) R3572094-3 09/18/20 10:02 • (MSD) R3572094-4 09/18/20 10:15

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	51.2	7.18	39.9	43.5	64.0	71.0	1	50.0-150			8.59	20
(S) o-Terphenyl					*76.4*	*84.1*		*18.0-148*				

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Guide to Reading and Understanding Your Laboratory Report

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

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

Abbreviations and Definitions

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

Qualifier	Description
E	The analyte concentration exceeds the upper limit of the calibration range of the instrument established by the initial calibration (ICAL).
J	The identification of the analyte is acceptable; the reported value is an estimate.
V	The sample concentration is too high to evaluate accurate spike recoveries.

ACCREDITATIONS & LOCATIONS

ONE LAB. NATIONWIDE.

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

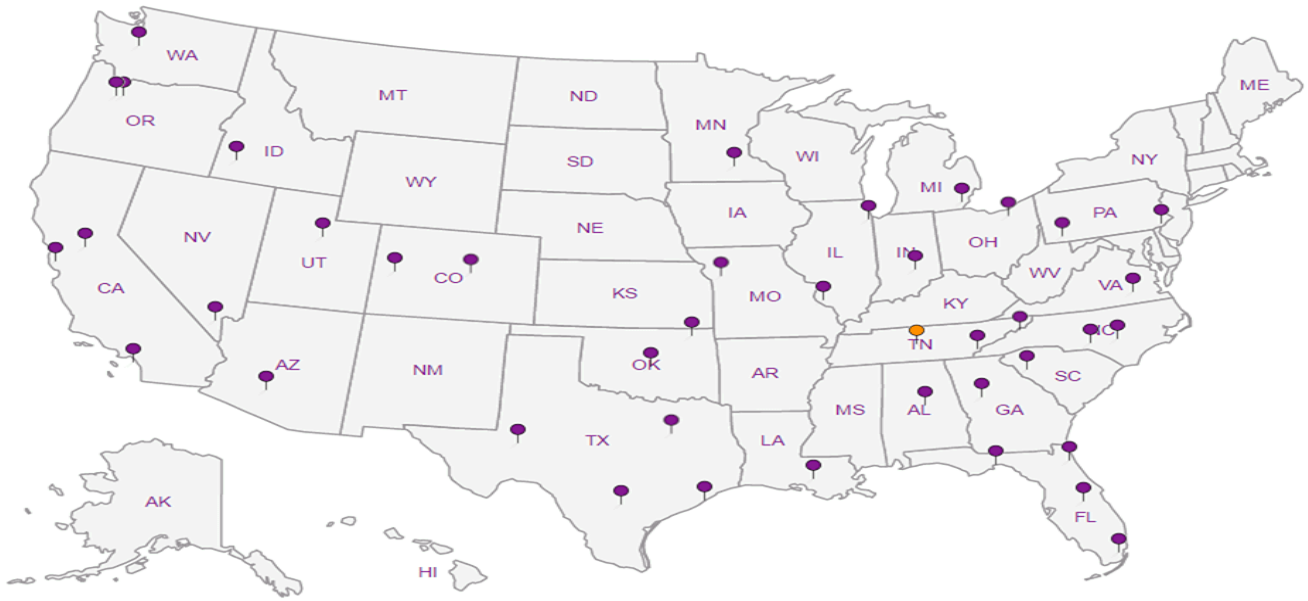
Third Party Federal Accreditations

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

Page : 1 of 1

Tetra Tech, Inc.

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

A094

Client Name:	ConocoPhillips	**Site Manager:**	Christian Llull
Project Name:	James A #011 Stuffing Box Release	**Contact Info:**	Email: christian.llull@tetratech.com Phone: (512) 338-1667
Project Location: (county, state)	Eddy County, New Mexico	**Project #:**	212C-MD-02250
Invoice to:	Accounts Payable 901 West Wall Street, Suite 100 Midland, Texas 79701		
Receiving Laboratory:	Pace Analytical	**Sampler Signature:**	L 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
L1200251																																	
-01	BH-10 (0'-1')	09/04/20	1200		X				X			1	N	X		X											X						
02	BH-10 (3'-4')	09/04/20	1220		X				X			1	N	X		X											X						
03	BH-11 (0'-1')	09/04/20	1300		X				X			1	N	X		X											X						
04	BH-11 (3'-4')	09/04/20	1320		X				X			1	N	X		X											X						

Relinquished by: L. Tyler	Date: 9-08-2020	Time: 1400	Received by:	Date: 9-8-20	Time: 1800
Relinquished by:	Date: 9-8-20	Time: 15:30	Received by: FedEx	Date: 9-8-20	Time: 15:30
Relinquished by:	Date:	Time:	Received by:	Date: 09/10/2020	Time: 9:30

ORIGINAL COPY

1922 0813 2410

LAB USE ONLY

Sample Temperature

2.2 - .1 = 2.1

MM

REMARKS:

- [X] Standard
- [ ] Rush: Same Day 24 hr 48 hr 72 hr
- [ ] Rush Charges Authorized
- [ ]

(Circle) HAND DELIVERED FEDEX UPS Tracking #: _____

Sample Receipt Checklist

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

APPENDIX D
Soil Boring Logs

212C-MD-02250 | TETRA TECH | **LOG OF BORING BG-1** | Page 1 of 1

Project Name: James A #011 Stuffing Box Release

Borehole Location: GPS: 32.426208, -103.849582 | Surface Elevation: 3195 ft

Borehole Number: BG-1 | Borehole Diameter (in.): 8 | Date Started: 8/26/2020 | Date Finished: 8/26/2020

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
			95									**-SM-** SILTY SAND: Brown, loose, with occasional caliche, no hydrocarbon odor, no staining dry.		BG-1 (0-1')
			68.1											
5			62.5											BG-1 (4-5')
													5.5	
			120									-- CALICHE: White, hard, with occasional SILT (ML), no hydrocarbon odor, no staining dry.		BG-1 (6-7')
10			88.6										10	BG-1 (9-10')

Bottom of borehole at 10.0 feet.

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

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

Notes:

Analytical sample intervals are shown in the "Remarks" column above. Surface elevation is based on Google Earth data.

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

JAMES A 11 LOGS.GPJ ` 1-22-21 ` TT_AUSTIN_GEOTECH_NOWELL3 ` 2015 TT TEMPLATE DECEMBER WELL.GDT ` ` `

Revised 5-16-12 (RHM)

212C-MD-02250 | TETRA TECH | **LOG OF BORING BH-1** | Page 1 of 1

Project Name: James A #011 Stuffing Box Release

Borehole Location: GPS: 32.426589, -103.849291 | Surface Elevation: 3196 ft

Borehole Number: BH-1 | Borehole Diameter (in.): 8 | Date Started: 8/26/2020 | Date Finished: 8/26/2020

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
												-- CALICHE: Light tan, cemented, with occasional brown SILTY SAND (SM), no hydrocarbon odor, heavy staining, dry.		BH-1 (0-1')
														BH-1 (2-3')
5			1760											BH-1 (4-5')
													5.5	
												-SM- SILTY SAND: Brown, medium dense, with occasional caliche, no hydrocarbon odor, heavy staining, dry.		BH-1 (6-7')
10			305											BH-1 (9-10')
15			342											BH-1 (14-15')
20													20	BH-1 (19-20')

Bottom of borehole at 20.0 feet.

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

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

Notes:
Analytical sample intervals are shown in the "Remarks" column above. Surface elevation is based on Google Earth data.

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

JAMES A 11 LOGS.GPJ ` 1-22-21 ` TT_AUSTIN_GEOTECH_NOWELL3 ` 2015 TT TEMPLATE DECEMBER WELL.GDT ` ` `

Revised 5-16-12 (RHM)

Received by OCD: 3/5/2021 3:12:10 PM

212C-MD-02250 | TETRA TECH

LOG OF BORING BH-2

Page 1 of 1

Project Name: James A #011 Stuffing Box Release

Borehole Location: GPS: 32.426361, -103.849171 | Surface Elevation: 3196 ft

Borehole Number: BH-2 | Borehole Diameter (in.): 8 | Date Started: 8/26/2020 | Date Finished: 8/26/2020

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: Brown, loose, with occasional caliche, no hydrocarbon odor, heavy staining, dry.		BH-2 (0-1')
													1.5	
												-- CALICHE: Light tan, hard, no hydrocarbon odor, no staining, dry.		BH-2 (2-3')
													3.5	
5			900									**-SM-** SILTY SAND: Reddish brown, medium dense, with occasional caliche. no hydrocarbon odor, no staining, dry.		BH-2 (4-5')
													5.5	
			140									**-SM-** SILTY SAND: Light reddish tan, dense, with caliche, no hydrocarbon odor, no staining, dry.		BH-2 (6-7')
10			250											BH-2 (9-10')
													12	
												-- MUDSTONE: Brown, very hard, no hydrocarbon odor, no staining, dry.		
15			112											BH-2 (14-15')
20			100											BH-2 (19-20')
25													25	BH-2 (24-25')

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

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

Notes:

Bottom of borehole at 25.0 feet.

Analytical sample intervals are shown in the "Remarks" column above. Surface elevation is based on Google Earth data.

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

JAMES A 11 LOGS.GPJ ` 1-22-21 ` TT_AUSTIN_GEOTECH_NOWELL3 ` 2015 TT TEMPLATE DECEMBER WELL.GDT ` ` `

Revised 5-16-12 (RHM)

Released to Imaging: 4/8/2021 11:24:56 AM

212C-MD-02250 | TETRA TECH | **LOG OF BORING BH-3** | Page 1 of 1

Project Name: James A #011 Stuffing Box Release

Borehole Location: GPS: 32.426707, -103.849297 | Surface Elevation: 3196 ft

Borehole Number: BH-3 | Borehole Diameter (in.): 8 | Date Started: 8/26/2020 | Date Finished: 8/26/2020

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
			243									-- CALICHE: Light tan, cemented, with occasional brown SILTY SAND (SM), no hydrocarbon odor, no staining, dry.		BH-3 (0-1')
			451											BH-3 (2-3')
5			1080										5.5	
			948									**-SM-** SILTY SAND: Brown, medium dense, with occasional caliche, no hydrocarbon odor, no staining, dry.		
10			641										10	

Bottom of borehole at 10.0 feet.

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

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

Notes:

Analytical sample intervals are shown in the "Remarks" column above. Surface elevation is based on Google Earth data.

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

212C-MD-02250	TETRA TECH	**LOG OF BORING BH-4**	Page 1 of 1

Project Name: James A #011 Stuffing Box Release

Borehole Location: GPS: 32.426681, -103.849163 | Surface Elevation: 3196 ft

Borehole Number: BH-4 | Borehole Diameter (in.): 8 | Date Started: 8/26/2020 | Date Finished: 8/26/2020

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
			2450									-- CALICHE: Light tan, cemented, with occasional brown SILTY SAND (SM), no hydrocarbon odor, no staining, dry.		BH-4 (0-1')
			530											BH-4 (2-3')
5			736										5	BH-4 (4-5')

Bottom of borehole at 5.0 feet.

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

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

Notes:

Analytical sample intervals are shown in the "Remarks" column above. Surface elevation is based on Google Earth data.

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

212C-MD-02250 | TETRA TECH | **LOG OF BORING BH-5** | Page 1 of 1

Project Name: James A #011 Stuffing Box Release

Borehole Location: GPS: 32.426551, -103.849102 | Surface Elevation: 3196 ft

Borehole Number: BH-5 | Borehole Diameter (in.): 8 | Date Started: 8/26/2020 | Date Finished: 8/26/2020

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
			316									-- CALICHE: Light tan, cemented, with occasional brown SILTY SAND (SM), no hydrocarbon odor, no staining, dry.		BH-5 (0-1')
			101											BH-5 (2-3')
5			126											BH-5 (4-5')
			83									-- Increasing amount of brown SILTY SAND (SM).		BH-5 (6-7')
													8	
10			48									**-SM-** SILTY SAND: Brown, medium dense, with occasional caliche, no hydrocarbon odor, no staining, dry.	10	BH-5 (9-10')

Bottom of borehole at 10.0 feet.

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

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

Notes:

Analytical sample intervals are shown in the "Remarks" column above. Surface elevation is based on Google Earth data.

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

JAMES A 11 LOGS.GPJ ` 1-22-21 ` TT_AUSTIN_GEOTECH_NOWELL3 ` 2015 TT TEMPLATE DECEMBER WELL.GDT ` ` `

Revised 5-16-12 (RHM)

212C-MD-02250 | TETRA TECH | **LOG OF BORING BH-6** | Page 1 of 1

Project Name: James A #011 Stuffing Box Release

Borehole Location: GPS: 32.426321, -103.849071 | Surface Elevation: 3196 ft

Borehole Number: BH-6 | Borehole Diameter (in.): 8 | Date Started: 8/26/2020 | Date Finished: 8/26/2020

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
			170									**-SM-** SILTY SAND: Brown, loose, with occasional caliche, no hydrocarbon odor, no staining, dry.	1.5	BH-6 (0-1')
			170									-- CALICHE: Light reddish tan, hard, no hydrocarbon odor, no staining, dry.		BH-6 (2-3')
5			123									-- with reddish brown mudstone @ 4' to 6'.		BH-6 (4-5')
			144									-- with reddish brown SILTY SAND (SM) @ 6' to 10'.		BH-6 (6-7')
10			145										10	BH-6 (9-10')

Bottom of borehole at 10.0 feet.

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

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

Notes:

Analytical sample intervals are shown in the "Remarks" column above. Surface elevation is based on Google Earth data.

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

212C-MD-02250 | TETRA TECH | **LOG OF BORING BH-7** | Page 1 of 1

Project Name: James A #011 Stuffing Box Release

Borehole Location: GPS: 32.426388, -103.849342 | Surface Elevation: 3196 ft

Borehole Number: BH-7 | Borehole Diameter (in.): 8 | Date Started: 8/26/2020 | Date Finished: 8/26/2020

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
			150									-- CALICHE: Light tan, cemented, with occasional brown SILTY SAND (SM), no hydrocarbon odor, no staining, dry.		BH-7 (0-1')
			160											BH-7 (2-3')
5			355											BH-7 (4-5')
			450									-- Increasing amount of brown SILTY SAND (SM).		BH-7 (6-7')
													8	
10			255									**-SM-** SILTY SAND: Brown, medium dense, with occasional caliche, no hydrocarbon odor, no staining, dry.	10	BH-7 (9-10')

Bottom of borehole at 10.0 feet.

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

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

Notes:

Analytical sample intervals are shown in the "Remarks" column above. Surface elevation is based on Google Earth data.

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

JAMES A 11 LOGS.GPJ ` 1-22-21 ` TT_AUSTIN_GEOTECH_NOWELL3 ` 2015 TT TEMPLATE DECEMBER WELL.GDT ` ` ` Revised 5-16-12 (RHM)

212C-MD-02250	TETRA TECH	**LOG OF BORING BH-8**	Page 1 of 1

Project Name: James A #011 Stuffing Box Release

Borehole Location: GPS: 32.426575, -103.849469 | Surface Elevation: 3196 ft

Borehole Number: BH-8 | Borehole Diameter (in.): 8 | Date Started: 8/26/2020 | Date Finished: 8/26/2020

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
			4020									-- CALICHE: Light tan, cemented, with occasional brown SILTY SAND (SM), no hydrocarbon odor, no staining, dry.		BH-8 (0-1')
			455											BH-8 (2-3')
5			238										5	BH-8 (4-5')

Bottom of borehole at 5.0 feet.

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

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

Notes:

Analytical sample intervals are shown in the "Remarks" column above. Surface elevation is based on Google Earth data.

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

212C-MD-02250 | TETRA TECH | **LOG OF BORING BH-9** | Page 1 of 1

Project Name: James A #011 Stuffing Box Release

Borehole Location: GPS: 32.426483, -103.849690 | Surface Elevation: 3194 ft

Borehole Number: BH-9 | Borehole Diameter (in.): 8 | Date Started: 8/26/2020 | Date Finished: 8/26/2020

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
			143									-- CALICHE: Light tan, cemented, with occasional brown SILTY SAND (SM), no hydrocarbon odor, no staining, dry.		BH-9 (0-1')
			460											BH-9 (2-3')
5			640										5	

Bottom of borehole at 5.0 feet.

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

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

Notes:

Analytical sample intervals are shown in the "Remarks" column above. Surface elevation is based on Google Earth data.

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

212C-MD-02250	TETRA TECH	LOG OF BORING BH-10	Page 1 of 1

Project Name: James A #011 Stuffing Box Release

Borehole Location: GPS: 32.426669, -103.849556 | Surface Elevation: 3196 ft

Borehole Number: BH-10 | Borehole Diameter (in.): 4 | Date Started: 9/4/2020 | Date Finished: 9/4/2020

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
			232									-- CALICHE: Light tan, cemented, with occasional brown SILTY SAND (SM), no hydrocarbon odor, no staining, dry.		BH-10 (0-1')
			180										4	BH-10 (3-4')

Bottom of borehole at 4.0 feet.

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

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

Notes:

Analytical sample intervals are shown in the "Remarks" column above. Surface elevation is based on Google Earth data.

Logger: Joe Tyler | Drilling Equipment: Hand Auger | Driller: Tetra Tech

JAMES A 11 LOGS.GPJ ` 1-22-21 ` TT_AUSTIN_GEOTECH_NOWELL3 ` 2015 TT TEMPLATE DECEMBER WELL.GDT ' ` `

Revised 5-16-12 (RHM)

212C-MD-02250 | TETRA TECH | **LOG OF BORING BH-11** | Page 1 of 1

Project Name: James A #011 Stuffing Box Release

Borehole Location: GPS: 32.426719, -103.849106 | Surface Elevation: 3196 ft

Borehole Number: BH-11 | Borehole Diameter (in.): 4 | Date Started: 9/4/2020 | Date Finished: 9/4/2020

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
			201									-- CALICHE: Light tan, cemented, with occasional brown SILTY SAND (SM), no hydrocarbon odor, no staining, dry.		BH-11 (0-1')
			134										4	BH-11 (3-4')

Bottom of borehole at 4.0 feet.

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

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

Notes:

Analytical sample intervals are shown in the "Remarks" column above. Surface elevation is based on Google Earth data.

Logger: Joe Tyler | Drilling Equipment: Hand Auger | Driller: Tetra Tech

JAMES A 11 LOGS.GPJ ` 1-22-21 ` TT_AUSTIN_GEOTECH_NOWELL3 ` 2015 TT TEMPLATE DECEMBER WELL.GDT ` ` `

Revised 5-16-12 (RHM)

212C-MD-02250	TETRA TECH	**LOG OF BORING BH-12**	Page 1 of 1

Project Name: James A #011 Stuffing Box Release

Borehole Location: GPS: 32.426202, -103.849039 | Surface Elevation: 3198 ft

Borehole Number: BH-12 | Borehole Diameter (in.): 4 | Date Started: 12/10/2020 | Date Finished: 12/10/2020

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: Brown, loose, with occasional caliche, no hydrocarbon odor, no staining dry.	1	BH-12 (0-1')
												Bottom of borehole at 1.0 feet.		

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

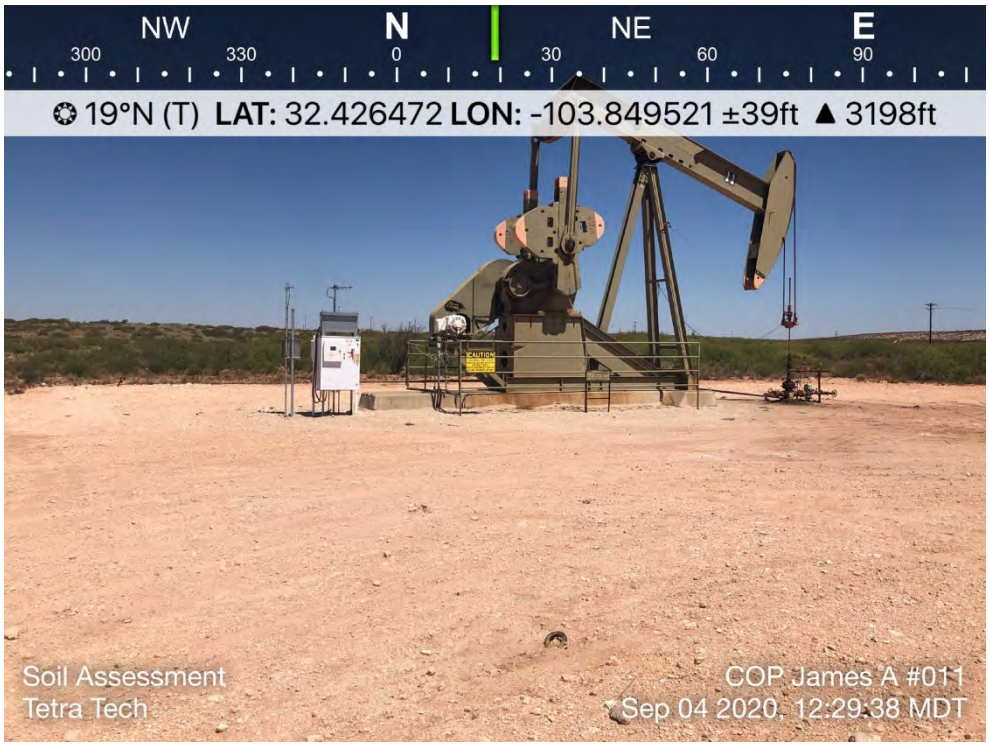
Operation Types: Hand Auger, Mud Rotary, Air Rotary, Continuous Flight Auger, Direct Push, Wash Rotary, Core Barrel

Notes:
Analytical sample intervals are shown in the "Remarks" column above. Surface elevation is based on Google Earth data.

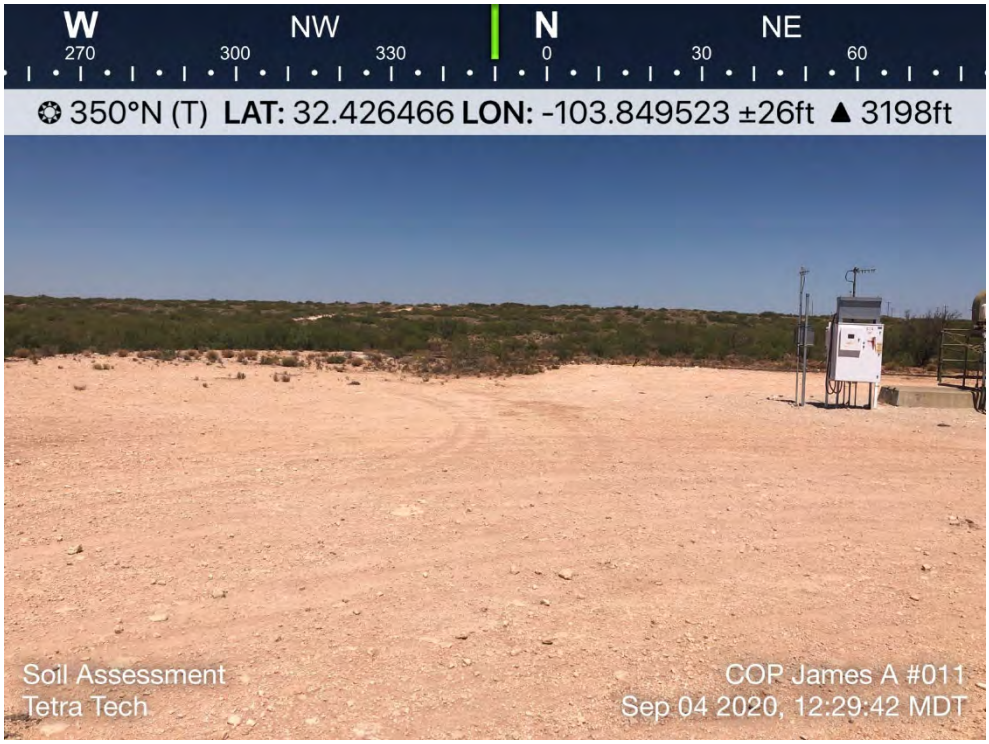
Logger: Adrian Garcia | Drilling Equipment: Hand Auger | Driller: Tetra Tech

Released to Imaging: 4/8/2021 11:24:56 AM

APPENDIX E
Photographic Documentation



TETRA TECH, INC. PROJECT NO. 212C-MD-02250	DESCRIPTION	View north of the impacted surface and surrounded area.	1
	SITE NAME	James A #011 Stuffing Box Release	9/04/2020



TETRA TECH, INC. PROJECT NO. 212C-MD-02250	DESCRIPTION	View northwest of the impacted surface and surrounded area.	2
	SITE NAME	James A #011 Stuffing Box Release	9/04/2020

TETRA TECH, INC. PROJECT NO. 212C-MD-02250	DESCRIPTION	View northeast of the impacted surface and surrounded area.	3
	SITE NAME	James A #011 Stuffing Box Release	9/04/2020

TETRA TECH, INC. PROJECT NO. 212C-MD-02250	DESCRIPTION	View east of the impacted surface and surrounded area.	4
	SITE NAME	James A #011 Stuffing Box Release	9/04/2020

TETRA TECH, INC. PROJECT NO. 212C-MD-02250	DESCRIPTION	View northwest of the impacted surface area.	5
	SITE NAME	James A #011 Stuffing Box Release	8/26/2020

TETRA TECH, INC. PROJECT NO. 212C-MD-02250	DESCRIPTION	View south of the impacted surface area.	6
	SITE NAME	James A #011 Stuffing Box Release	8/26/2020

TETRA TECH, INC. PROJECT NO. 212C-MD-02250	DESCRIPTION	View west of the impacted pasture area.	7
	SITE NAME	James A #011 Stuffing Box Release	8/26/2020

TETRA TECH, INC. PROJECT NO. 212C-MD-02250	DESCRIPTION	View south of the impacted surface area.	8
	SITE NAME	James A #011 Stuffing Box Release	8/26/2020

TETRA TECH, INC. PROJECT NO. 212C-MD-02250	DESCRIPTION	View east of the impacted surface area and surrounded pasture area.	9
	SITE NAME	James A #011 Stuffing Box Release	8/26/2020

APPENDIX F
NMSLO Seed Mixture Details

United States Department of Agriculture

Natural Resources Conservation Service

A product of the National Cooperative Soil Survey, a joint effort of the United States Department of Agriculture and other Federal agencies, State agencies including the Agricultural Experiment Stations, and local participants

Custom Soil Resource Report for Eddy Area, New Mexico

James A #11 Release Remediation

January 19, 2021

Custom Soil Resource Report
Soil Map

Map Scale: 1:328 if printed on A portrait (8.5" x 11") sheet.

N

Meters
0 4 9 18 27

Feet
0 15 30 60 90

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

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: Eddy Area, New Mexico
Survey Area Data: Version 16, Jun 8, 2020

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
PD	Pajarito-Dune land complex, 0 to 3 percent slopes	0.2	100.0%
Totals for Area of Interest		**0.2**	**100.0%**

Map Unit Descriptions

The map units delineated on the detailed soil maps in a soil survey represent the soils or miscellaneous areas in the survey area. The map unit descriptions, along with the maps, can be used to determine the composition and properties of a unit.

A map unit delineation on a soil map represents an area dominated by one or more major kinds of soil or miscellaneous areas. A map unit is identified and named according to the taxonomic classification of the dominant soils. Within a taxonomic class there are precisely defined limits for the properties of the soils. On the landscape, however, the soils are natural phenomena, and they have the characteristic variability of all natural phenomena. Thus, the range of some observed properties may extend beyond the limits defined for a taxonomic class. Areas of soils of a single taxonomic class rarely, if ever, can be mapped without including areas of other taxonomic classes. Consequently, every map unit is made up of the soils or miscellaneous areas for which it is named and some minor components that belong to taxonomic classes other than those of the major soils.

Most minor soils have properties similar to those of the dominant soil or soils in the map unit, and thus they do not affect use and management. These are called noncontrasting, or similar, components. They may or may not be mentioned in a particular map unit description. Other minor components, however, have properties and behavioral characteristics divergent enough to affect use or to require different management. These are called contrasting, or dissimilar, components. They generally are in small areas and could not be mapped separately because of the scale used. Some small areas of strongly contrasting soils or miscellaneous areas are identified by a special symbol on the maps. If included in the database for a given area, the contrasting minor components are identified in the map unit descriptions along with some characteristics of each. A few areas of minor components may not have been observed, and consequently they are not mentioned in the descriptions, especially where the pattern was so complex that it was impractical to make enough observations to identify all the soils and miscellaneous areas on the landscape.

The presence of minor components in a map unit in no way diminishes the usefulness or accuracy of the data. The objective of mapping is not to delineate pure taxonomic classes but rather to separate the landscape into landforms or landform segments that have similar use and management requirements. The delineation of such segments on the map provides sufficient information for the development of resource plans. If intensive use of small areas is planned, however, onsite investigation is needed to define and locate the soils and miscellaneous areas.

An identifying symbol precedes the map unit name in the map unit descriptions. Each description includes general facts about the unit and gives important soil properties and qualities.

Soils that have profiles that are almost alike make up a *soil series*. Except for differences in texture of the surface layer, all the soils of a series have major horizons that are similar in composition, thickness, and arrangement.

Soils of one series can differ in texture of the surface layer, slope, stoniness, salinity, degree of erosion, and other characteristics that affect their use. On the basis of such differences, a soil series is divided into *soil phases*. Most of the areas shown on the detailed soil maps are phases of soil series. The name of a soil phase commonly indicates a feature that affects use or management. For example, Alpha silt loam, 0 to 2 percent slopes, is a phase of the Alpha series.

Some map units are made up of two or more major soils or miscellaneous areas. These map units are complexes, associations, or undifferentiated groups.

A *complex* consists of two or more soils or miscellaneous areas in such an intricate pattern or in such small areas that they cannot be shown separately on the maps. The pattern and proportion of the soils or miscellaneous areas are somewhat similar in all areas. Alpha-Beta complex, 0 to 6 percent slopes, is an example.

An *association* is made up of two or more geographically associated soils or miscellaneous areas that are shown as one unit on the maps. Because of present or anticipated uses of the map units in the survey area, it was not considered practical or necessary to map the soils or miscellaneous areas separately. The pattern and relative proportion of the soils or miscellaneous areas are somewhat similar. Alpha-Beta association, 0 to 2 percent slopes, is an example.

An *undifferentiated group* is made up of two or more soils or miscellaneous areas that could be mapped individually but are mapped as one unit because similar interpretations can be made for use and management. The pattern and proportion of the soils or miscellaneous areas in a mapped area are not uniform. An area can be made up of only one of the major soils or miscellaneous areas, or it can be made up of all of them. Alpha and Beta soils, 0 to 2 percent slopes, is an example.

Some surveys include *miscellaneous areas*. Such areas have little or no soil material and support little or no vegetation. Rock outcrop is an example.

Eddy Area, New Mexico

PD—Pajarito-Dune land complex, 0 to 3 percent slopes

Map Unit Setting

National map unit symbol: 1w55
Elevation: 3,000 to 5,000 feet
Mean annual precipitation: 10 to 15 inches
Mean annual air temperature: 60 to 64 degrees F
Frost-free period: 190 to 220 days
Farmland classification: Not prime farmland

Map Unit Composition

Pajarito and similar soils: 46 percent
Dune land: 45 percent
Minor components: 9 percent
Estimates are based on observations, descriptions, and transects of the mapunit.

Description of Pajarito

Setting

Landform: Dunes, interdunes, plains
Landform position (three-dimensional): Side slope
Down-slope shape: Convex, linear
Across-slope shape: Convex, linear
Parent material: Mixed alluvium and/or eolian sands

Typical profile

H1 - 0 to 9 inches: fine sandy loam
H2 - 9 to 36 inches: fine sandy loam
H3 - 36 to 72 inches: fine sandy loam

Properties and qualities

Slope: 0 to 3 percent
Depth to restrictive feature: More than 80 inches
Drainage class: Well drained
Runoff class: Very low
Capacity of the most limiting layer to transmit water (Ksat): High (2.00 to 6.00 in/hr)
Depth to water table: More than 80 inches
Frequency of flooding: None
Frequency of ponding: None
Calcium carbonate, maximum content: 15 percent
Maximum salinity: Nonsaline to very slightly saline (0.0 to 2.0 mmhos/cm)
Sodium adsorption ratio, maximum: 1.0
Available water capacity: Moderate (about 8.4 inches)

Interpretive groups

Land capability classification (irrigated): 2e
Land capability classification (nonirrigated): 7e
Hydrologic Soil Group: A
Ecological site: R042XC003NM - Loamy Sand
Hydric soil rating: No

Description of Dune Land

Setting

Landform: Dune fields
Landform position (two-dimensional): Footslope, shoulder, backslope
Landform position (three-dimensional): Talf
Down-slope shape: Convex, linear
Across-slope shape: Convex, linear
Parent material: Mixed alluvium and/or eolian sands

Typical profile

H1 - 0 to 6 inches: sandy loam
H2 - 6 to 60 inches: sandy loam

Interpretive groups

Land capability classification (irrigated): None specified
Ecological site: R042XC003NM - Loamy Sand
Hydric soil rating: No

Minor Components

Rock outcrop

Percent of map unit: 5 percent
Hydric soil rating: No

Largo

Percent of map unit: 4 percent
Ecological site: R042XC007NM - Loamy
Hydric soil rating: No

NMSLO Seed Mix Sandy Loam (SL)

SANDY LOAM (SL) SITES SEED MIXTURE:

COMMON NAME	VARIETY	APPLICATION RATE (PLS/Acre)	DRILL BOX
Grasses:			
Galleta grass	Viva, VNS, So.	2.5	F
Little bluestem	Cimmaron, Pastura	2.5	F
Blue grama	Hachita, Lovington	2.0	D
Sideoats grama	Vaughn, El Reno	2.0	F
Sand dropseed	VNS, Southern	1.0	S
Forbs:			
Indian blanketflower	VNS, Southern	1.0	D
Parry penstemon	VNS, Southern	1.0	D
Blue flax	Appar	1.0	D
Desert globemallow	VNS, Southern	1.0	D
Shrubs:			
Fourwing saltbush	VNS, Southern	2.0	D
Common winterfat	VNS, Southern	1.0	F
Apache plume	VNS, Southern	0.75	F
	Total PLS/acre	17.75	

S = Small seed drill box, D = Standard seed drill box, F = Fluffy seed drill box

- VNS, Southern – No Variety Stated, seed should be from a southern latitude collection of this species.
- Double above seed rates for broadcast or hydroseeding.
- If Parry penstemon is not available, substitute firecracker penstemon.
- If desert globemallow is not available, substitute scarlet globemallow or Nelson globemallow.
- If a species is not available, provide a suggested substitute to the New Mexico Land Office for approval. Increasing all other species proportionately may be acceptable.

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

CONDITIONS

Action 19890

CONDITIONS OF APPROVAL

Operator:	OGRID:	Action Number:	Action Type:
CONOCOPHILLIPS COMPANY P.O.Box 2197 Office SP2-12-W156 Houston, TX77252	217817	19890	C-141

OCD Reviewer	Condition
chensley	None