TETRA TECH

January 19, 2021

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

Re: Release Characterization and Remediation Work Plan
ConocoPhillips
MCA 478 Injection Line Release
Unit Letter O, Section 28, Township 17 South, Range 32 East
Lea County, New Mexico
Incident ID# nRM1935448024

Sir or Madam:

Tetra Tech, Inc. (Tetra Tech) was contacted by ConocoPhillips to assess a release that occurred from a subsurface injection line associated with the Maljamar Cooperative Agreement (MCA) Unit #478 injection well (API No. 30-025-39351). The release footprint is located in Public Land Survey System (PLSS) Unit Letter O, Section 23, Township 17 South, Range 32 East, in Lea County, New Mexico (Site). The approximate release point occurred at coordinates 32.800096°, -103.770461°, as shown on Figures 1 and 2.

BACKGROUND

According to the State of New Mexico Oil Conservation Division (NMOCD) C-141 Initial Report, the release was discovered on October 29, 2019. The C-141 reports that the release occurred due to a leak on a subsurface water injection line. Approximately 50 barrels (bbls) of produced water and 6 bbls of crude oil were reported released. A vacuum truck recovered 10 bbls of produced water and 2 bbls of oil. The NMOCD received the initial C-141 on November 4, 2019 and subsequently assigned the release the Incident ID nRM1935448024. The initial C-141 form is included in Appendix A.

SITE CHARACTERIZATION

A site characterization was performed and no watercourses, sinkholes, residences, schools, hospitals, institutions, churches, springs, private domestic water wells, springs, playa lakes, wetlands, incorporated municipal boundaries, subsurface mines, or floodplains are located within the distances specified in 19.15.09 New Mexico Administrative Code (NMAC). The Site is in an area of low karst potential.

According to the New Mexico Office of the State Engineers (NMOSE) reporting system, there are three (3) water wells located within an 800-meter (approximately ½-mile) radius of the release location. The average depth to groundwater is 102 feet below ground surface (bgs). The site characterization data is included in Appendix B.

REGULATORY FRAMEWORK

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

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

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

Constituent	Remediation RRAL
Chloride	20,000 mg/kg
TPH (GRO+DRO+ORO)	2,500 mg/kg
BTEX	50 mg/kg
Benzene	10 mg/kg

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

Constituent	Reclamation Requirements
Chloride	600 mg/kg
TPH (GRO+DRO+ORO)	100 mg/kg

INITIAL RESPONSE ACTIVITIES

The subsurface water injection line runs east-west just north of a lease road between the MCA 478 injection well and a tin horn where the line ties in approximately 650 feet east of the well. The release occurred from a point on the injection line near a “T” in the lease road. The release extent consisted of approximately 17,500 square feet of primarily lease road and some pasture, as shown in Figure 3.

According to site records, initial response actions were taken by COP Operations at the release site on November 1, 2019. Approximately 475 cubic yards of contaminated soil were removed from impacted areas in the lease road at this time and sent to R360 for disposal. According to the records, confirmation samples were not collected during the remediation activities. Waste manifests were not available at the time of this report.

Tetra Tech conducted a visual site inspection of the release area on May 18, 2021 to assess current site conditions and document the release area footprint. The NMOCD online well records indicate that the MCA 478 injection well is active. During the site visit, stressed vegetation was observed in the pasture north of the lease road and the reported release point coordinates. A cursory aerial review of this area revealed evidence of disturbed soils and possible remedial actions conducted in this area prior to the October 2019 injection line release. Based on this review, this area north of the release point is believed unrelated to the MCA 478 Injection Line Release. The nRM1935448024 release extent, area of disturbed soils, and observed site features are presented in Figure 3.

SITE ASSESSMENT SUMMARY

In August and September 2021, Tetra Tech personnel returned to the Site to conduct soil sampling to delineate the release extent and confirm the efficacy of the reported remediation activities conducted during the initial response. A total of sixteen (16) borings were installed to achieve vertical and horizontal delineation of the release. Twelve (12) hand auger borings (AH-1 through AH-12) were installed along the perimeter of the reported release extent to depths ranging from 3 to 6 feet bgs to horizontally delineate the release. Four (4) borings (BH-1 through BH-4) were installed using an air rotary drill rig within the release extent to depths ranging from 20 to 30 feet bgs to achieve vertical delineation of the release. Select samples were field screened for salinity using an ExTech EC400 ExStik and for total hydrocarbons using a photoionization detector (PID) to measure volatile organics. Boring logs for select borings are presented in Appendix C. Photographic documentation of Site conditions at the time of the assessment is presented in Appendix D. Boring locations are presented in Figure 4.

A total of fifty-eight (58) samples were collected from the sixteen (16) borings and submitted to Pace Analytical (Pace) in Mount Juliet, Tennessee to be analyzed for TPH (DRO and ORO) by EPA Method 8015, TPH Low Fraction (GRO) by EPA Method 8015D, BTEX by EPA Method 8260B, and chlorides by EPA Method 300.0. A copy of the laboratory analytical report and chain-of-custody documentation are included in Appendix E.

SUMMARY OF SAMPLING RESULTS

Results from the August and September 2021 soil sampling events are summarized in Table 1. The analytical results associated with two sample locations located in the lease road (BH-1 and BH-4) are below both the reclamation requirements and the applicable Site RRAL of 20,000 mg/kg for oil and gas production areas. The analytical results associated with BH-2 (just off lease road) were above the site reclamation requirements in the upper 3 feet. The analytical results associated with sample locations AH-1, BH-3, and AH-8 were above the Site reclamation requirement of 600 mg/kg in the 2-3 foot, 0-1 foot and 0-1 foot sample intervals, respectively. The results associated with all other perimeter sample locations (AH-2 through AH-7 and AH-9 through AH-12) were below the Site reclamation requirements for chloride, TPH, and BTEX in all analyzed samples.

REMEDIATION WORK PLAN

Based on the analytical results from the assessment, ConocoPhillips proposes to remove the impacted material within the release extent as shown in Figure 5. Impacted soils will be excavated using heavy equipment (backhoes, hoe rams, and track hoes) to a maximum depth of 3 feet below the surrounding surface or until a representative sample from the walls and bottom of the excavation is below the reclamation requirements or the Site RRALs. Heavy equipment will come no more than 3 feet from any pressurized lines. Impacted soils within the vicinity of the surface and subsurface lines which intersect the release footprint will be dug by hand to the maximum extent practicable.

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 analytical 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 770 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. Six (6) confirmation floor samples and eighteen (18) confirmation sidewall samples are proposed for verification of remedial activities. The proposed excavation encompasses a surface area of approximately 7,600 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

Post-remediation, the backfilled pasture areas will be seeded (in the next 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.

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. Final reclamation will create a landform that approximates and blends in with the surrounding landform, while controlling erosion.

CONCLUSION

ConocoPhillips proposes to begin remediation activities at the Site within 120 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. If you have any questions concerning the soil assessment or the proposed remediation activities for the Site, please call me at (512) 338-2861.

Sincerely,
Tetra Tech, Inc.

Christian M. Llull, P.G.
Program Manager

cc:
Ms. Jenni Fortunato, RMR – ConocoPhillips

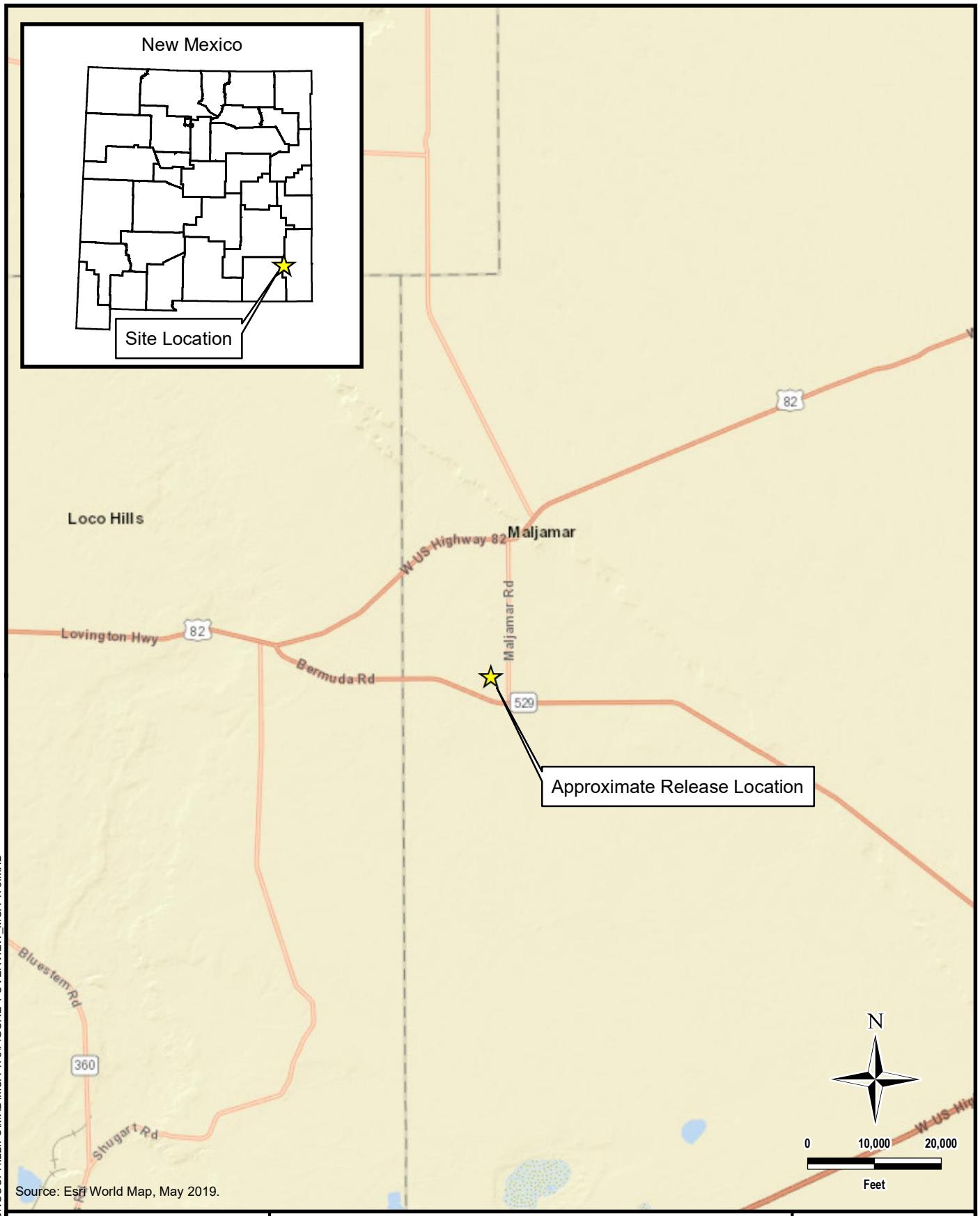
LIST OF ATTACHMENTS

Figures:

Tables:

Appendices:

FIGURES



DOCUMENT PATH: D:\CONOCOPHILLIPS\MXD\MCA 478\FIGURE 1 OVERVIEW_MCA 478.MXD

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

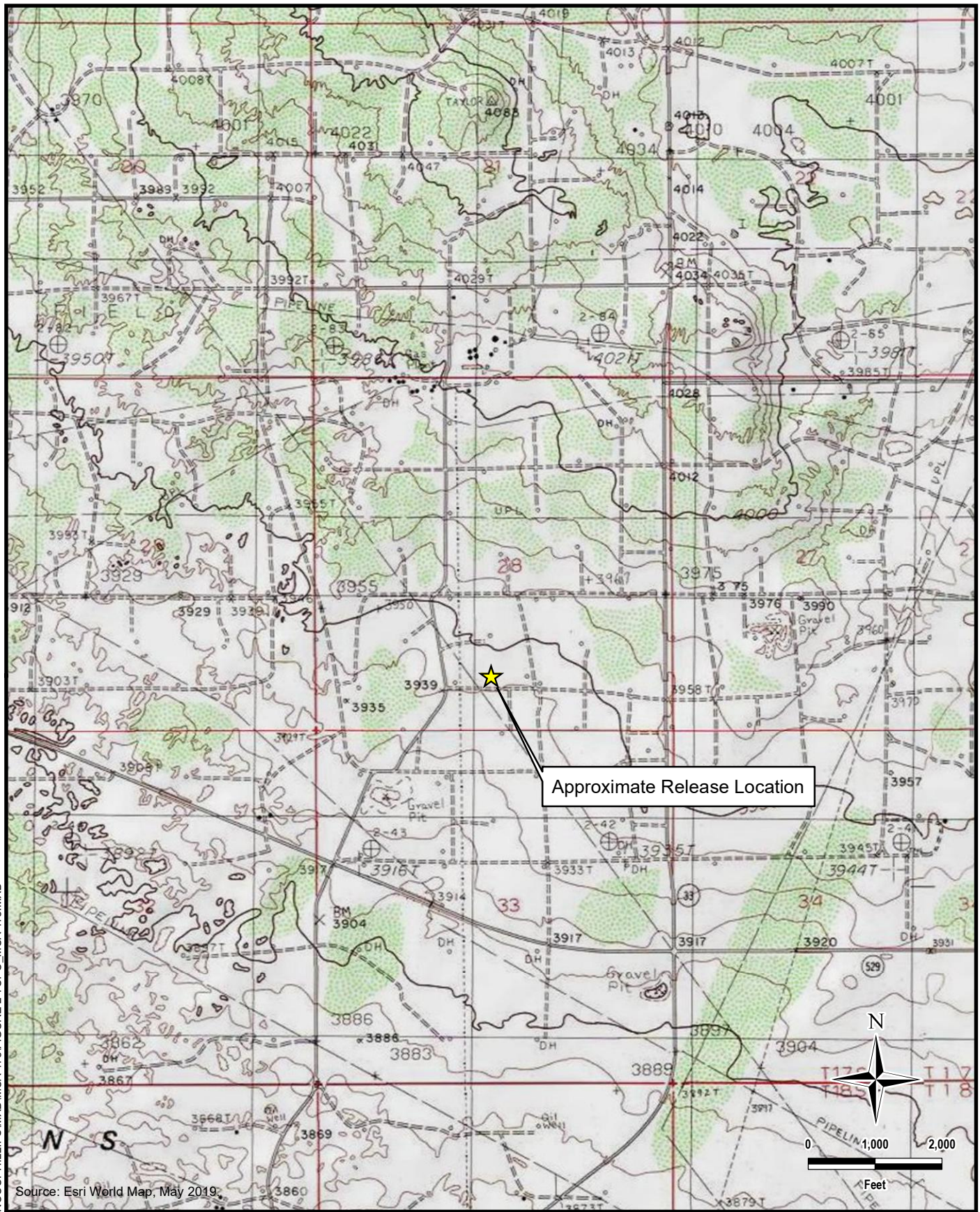
CONOCOPHILLIPS

NRM1935448024
(32.800087°, -103.770536°)
LEA COUNTY, NEW MEXICO

MCA 478 INJECTION LINE RELEASE
OVERVIEW MAP

PROJECT NO.:	212C-MD-02505
DATE:	MAY 28, 2021
DESIGNED BY:	AAM

Figure No.
1



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www.tetratech.com

901 West Wall Street, Suite 100
Midland, Texas 79701
Phone: (432) 682-4559
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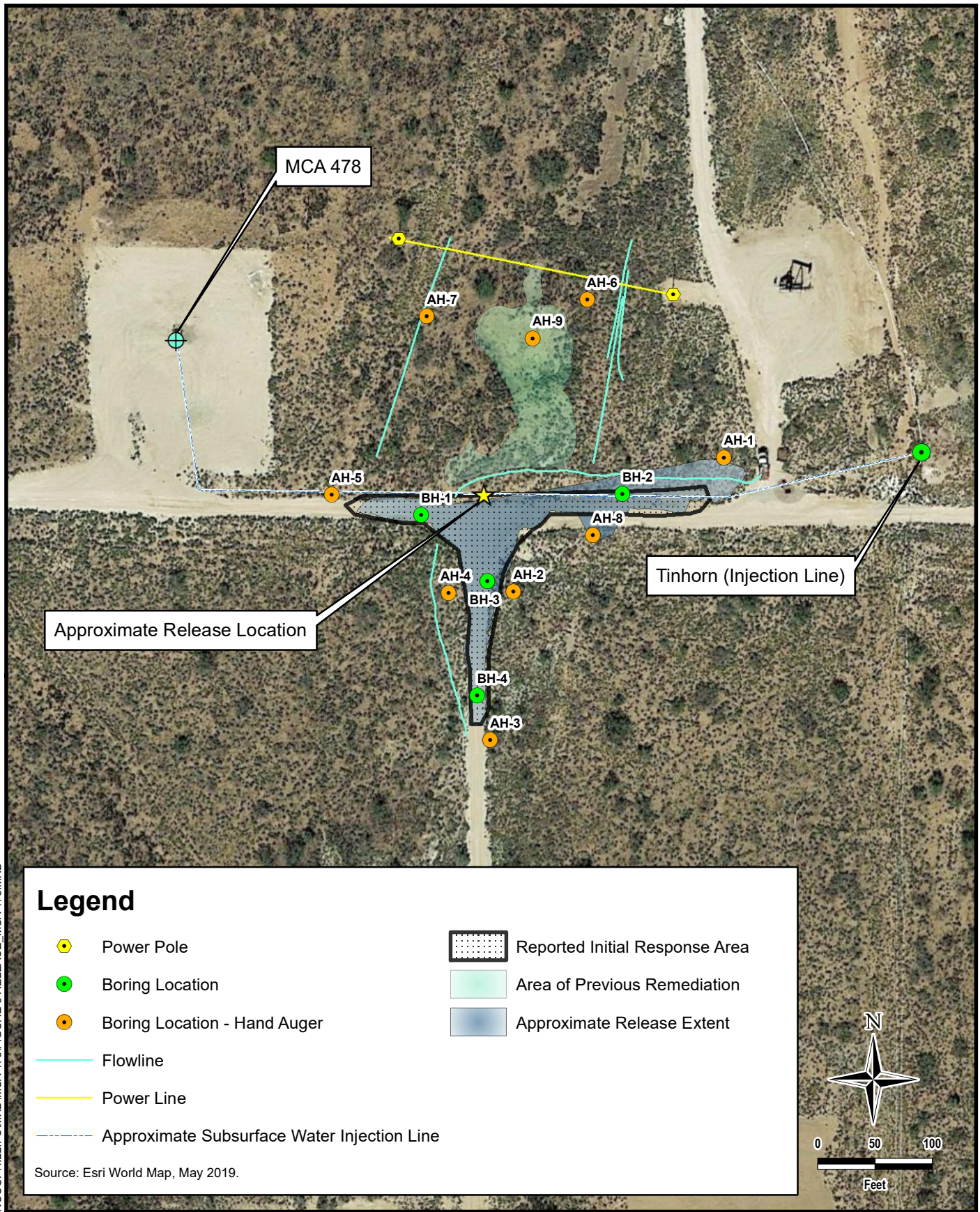
MCA 478 INJECTION LINE RELEASE
TOPOGRAPHIC MAP

PROJECT NO.:	212C-MD-02505
DATE:	MAY 28, 2021
DESIGNED BY:	AAM

Figure No.
2



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

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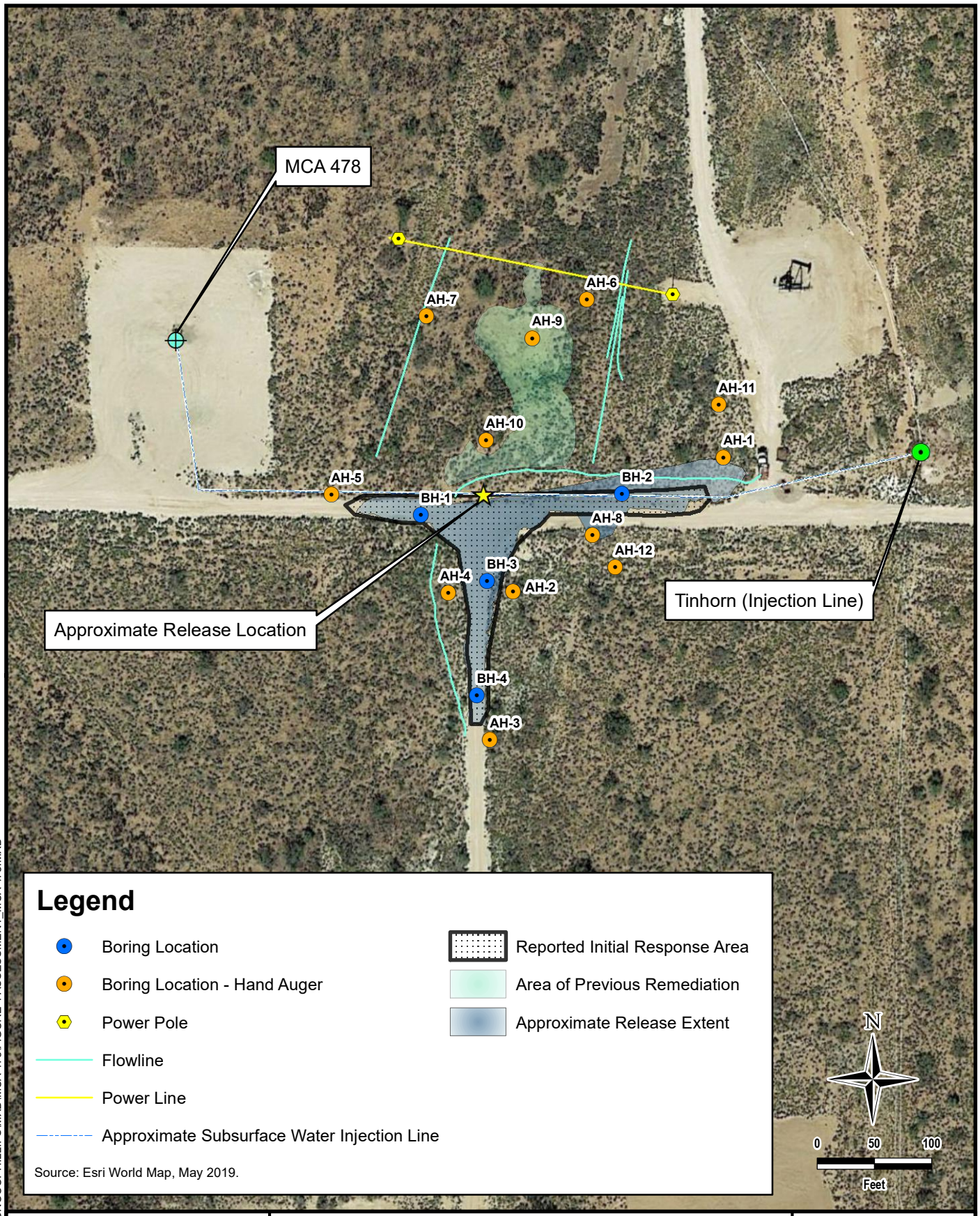
MCA 478 INJECTION LINE RELEASE
APPROXIMATE RELEASE EXTENT AND SITE FEATURES

PROJECT NO.:	212C-MD-02505
DATE:	JANUARY 18, 2022
DESIGNED BY:	AAM

Figure No.
3



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

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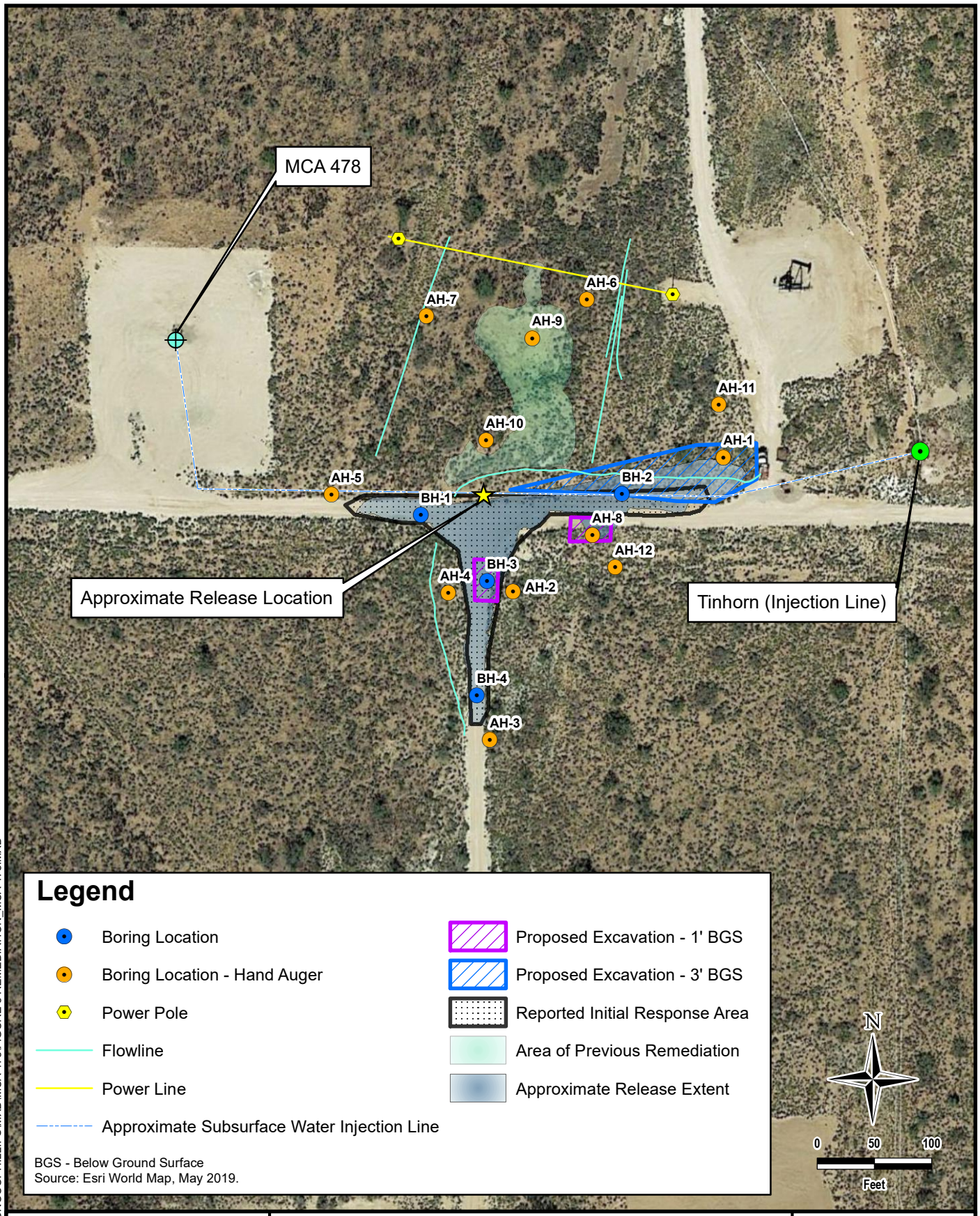
MCA 478 INJECTION LINE RELEASE
SITE ASSESSMENT MAP

PROJECT NO.:	212C-MD-02505
DATE:	JANUARY 18, 2022
DESIGNED BY:	AAM

Figure No.
4



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

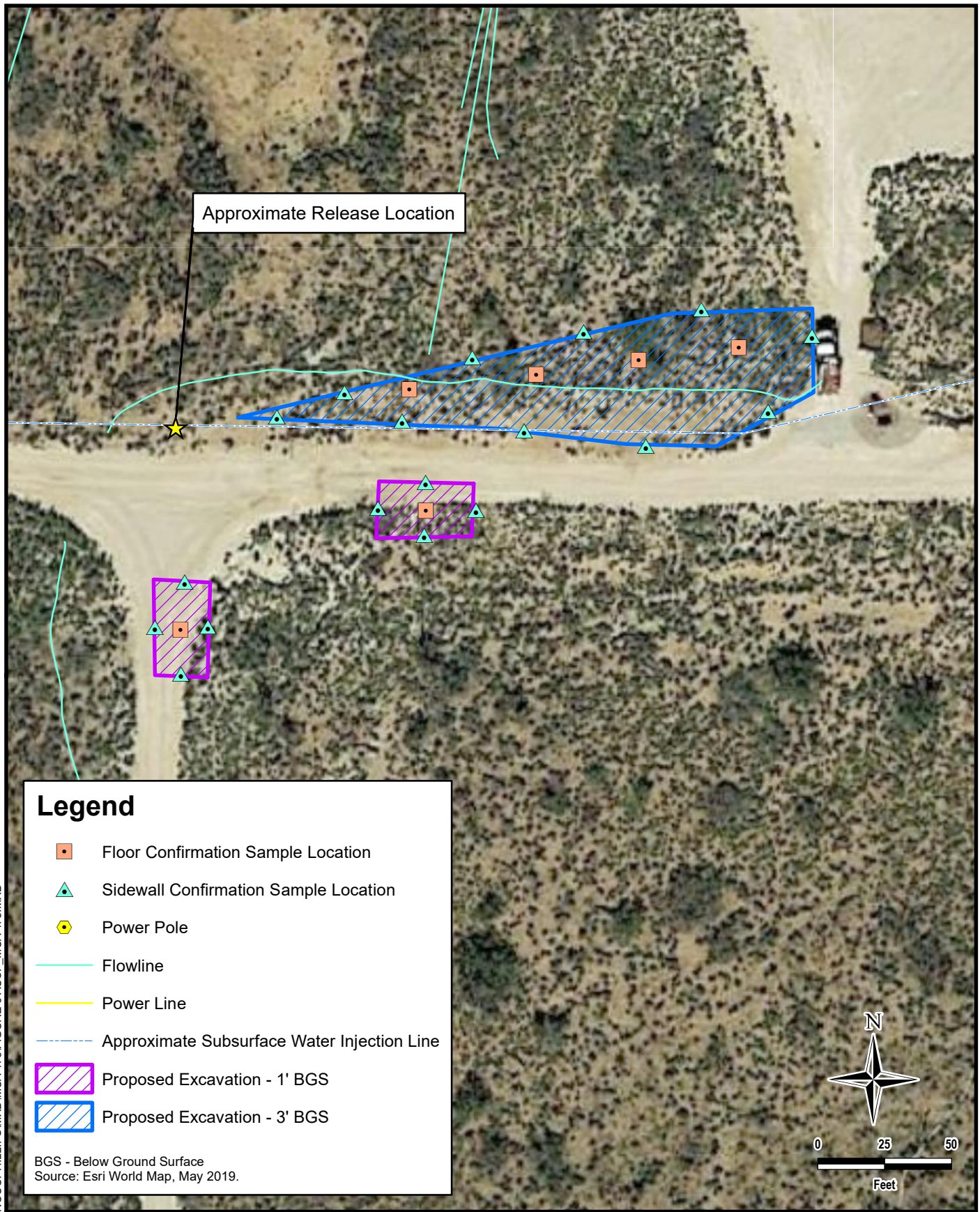
CONOCOPHILLIPS

NRM1935448024
(32.800087°, -103.770536°)
LEA COUNTY, NEW MEXICO

MCA 478 INJECTION LINE RELEASE
PROPOSED REMEDIATION EXTENT

PROJECT NO.:	212C-MD-02505
DATE:	JANUARY 18, 2022
DESIGNED BY:	AAM

Figure No.
5



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

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MCA 478 INJECTION LINE RELEASE
ALTERNATIVE CONFIRMATION SAMPLING PLAN

PROJECT NO.:	212C-MD-02505
DATE:	JANUARY 18, 2022
DESIGNED BY:	AAM

Figure No.
6

TABLES

TABLE 1
SUMMARY OF ANALYTICAL RESULTS
SOIL ASSESSMENT - NRM1935448024
CONOCOPHILLIPS
MCA 478 INJECTION LINE RELEASE
LEA 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_{36}		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	
AH-1	8/12/2021	0-1	35.3	-	< 20.3		< 0.00103		< 0.00514		< 0.00257		0.00102	J	0.00102		0.0533	B J	3.30	J	14.6		18.0	
		2-3	85.1	-	***647***		< 0.00115		< 0.00575		< 0.00287		< 0.00747		-		0.0474	B J	2.18	J	9.18		11.4	
AH-2	8/12/2021	0-1	39.1	-	9.56	J P1	< 0.00104		< 0.00520		< 0.00260		< 0.00676		-		0.0510	B J	6.41		30.2		36.7	
		2-3	61.2	-	16.8	J	< 0.00105		< 0.00525		< 0.00263		< 0.00683		-		0.0487	B J	< 4.10		5.42		5.47	
AH-3	8/12/2021	0-1	42.3	-	10.7	J	< 0.00104		< 0.00518		< 0.00259		< 0.00674		-		0.0494	B J	1.93	J	8.76		10.7	
		2-3	56.5	-	12.6	J	< 0.00107		< 0.00535		< 0.00267		< 0.00695		-		0.0598	B J	2.10	J	10.6		12.8	
AH-4	8/12/2021	0-1	32.9	-	< 20.3		< 0.00103		< 0.00514		< 0.00257		< 0.00669		-		0.0556	B J	2.74	J	11.6		14.4	
		2-3	54.3	-	12.1	J	< 0.00103		< 0.00516		< 0.00258		< 0.00671		-		0.0580	B J	6.25		24.5		30.8	
AH-5	8/12/2021	0-1	69.9	-	11.8	J	< 0.00103		< 0.00517		< 0.00258		< 0.00672		-		0.0408	B J	2.87	J	7.78		10.7	
		2-3	52.1	-	< 20.3		< 0.00103		< 0.00515		< 0.00257		< 0.00669		-		0.0439	B J	2.38	J	9.07		11.5	
AH-6	8/12/2021	0-1	17.8	-	11.9	J	< 0.00103		< 0.00516		< 0.00258		< 0.00671		-		0.0421	B J	< 4.06		5.76		5.80	
AH-7	8/12/2021	0-1	19.2	-	57.2		< 0.00103	J3	< 0.00515	J3	< 0.00258	J3	0.00456	J	0.00456		0.0589	B J	4.67		24.2		28.9	
AH-8	8/12/2021	0-1	78.3	-	***690***		< 0.00112		< 0.00560		< 0.00280		0.00227	J	0.00227		0.0462	B J	< 4.24		6.11		6.16	
		2-3	536	-	19.8	J	< 0.00105		< 0.00523		< 0.00261		0.00214	J	0.00214		0.0559	B J	2.27	J	6.54		8.87	
AH-9	8/18/2021	0-1	25.6	0.1	18.2	J	< 0.00138		< 0.00691		< 0.00345		< 0.00898		-		< 0.119		< 4.76	J6	0.719	J	0.719	
		2-3	28.4	0.1	14.9	J	< 0.00148		< 0.00739		< 0.00370		< 0.00961		-		< 0.124		< 4.95		< 4.95		-	
		3-4	27.6	0.1	10.4	J	< 0.00116		< 0.00578		< 0.00289		< 0.00751		-		< 0.108		< 4.31		1.04	J	1.04	
		5-6	90.1	0.1	14.4	J	< 0.00123		< 0.00616		< 0.00308		< 0.00801		-		< 0.112		< 4.46		2.31	J	2.31	
AH-10	8/18/2021	0-1	32.2	0.1	< 20.2		< 0.00102		< 0.00512		< 0.00256		< 0.00666		-		0.0226	J	< 4.05		4.25		4.27	
		2-3	37.9	0.1	< 20.5		< 0.00105		< 0.00523		< 0.00261		< 0.00680		-		0.0222	J	< 4.09		3.02	J	3.04	
		3-4	56.6	0.1	10.3	J	< 0.00116		< 0.00581		< 0.00290		< 0.00755		-		< 0.108		2.37	J	10.0		12.4	
		5-6	56.8	0.1	16.5	J	< 0.00143		< 0.00717		< 0.00359		< 0.00933		-		< 0.122		< 4.87		0.374	J	0.374	
AH-11	9/20/2021	0-1	-	-	< 20.8		< 0.00108		< 0.00539		< 0.00269		< 0.00700		-		< 0.104		1.67	J	5.21		6.88	
		2-3	-	-	< 20.8		< 0.00108		< 0.00540		< 0.00270		< 0.00702		-		< 0.104		< 4.16		5.90		5.90	
AH-12	9/20/2021	0-1	-	-	< 21.1		< 0.00111		< 0.00556		< 0.00278		< 0.00723		-		< 0.106		4.27		68.4		72.7	
		2-3	-	-	< 20.8		< 0.00108		< 0.00540		< 0.00270		< 0.00701		-		0.0330	B J	< 4.16		4.02	J	4.05	
BH-1	8/18/2021	0-1	252	0.3	100		< 0.00142		< 0.00709		< 0.00355		0.00912	J	0.00192		< 0.121		6.00		5.37	B	11.4	
		2-3	360	0.2	277		< 0.00114		< 0.00570		< 0.00285		0.00155	J	0.00155		< 0.107		2.66	J	4.84	B	7.50	
		4-5	577	0.1	428		< 0.00111		< 0.00557		< 0.00278		< 0.00724		-		< 0.106		2.56	J	12.3		14.9	
		6-7	912	0.1	881		< 0.00121		< 0.00604		< 0.00302		< 0.00785		-		< 0.110		4.90		7.36	B	12.3	
		9-10	801	0.1	752		< 0.00113		< 0.00567		< 0.00284		< 0.00737		-		< 0.107		2.34	J	3.22	B J	5.56	
		14-15	425	0.1	314		< 0.00108		< 0.00539		< 0.00269		< 0.00701		-		< 0.104		2.25	J	2.19	B J	4.44	
		19-20	323	0.1	102		< 0.00107		< 0.00537		< 0.00268		< 0.00698		-		< 0.104		2.43	J	1.93	B J	4.36	
BH-2	8/18/2021	0-1	956	0.2	***1,090***		< 0.00122		< 0.00611		< 0.00306		< 0.00795		-		< 0.111		11.2		37.2		48.4	
		2-3	1290	0.1	***1,080***		< 0.00110		< 0.00551		< 0.00275		0.00132	J	0.00132		< 0.105		6.07		19.8		25.9	
		4-5	1430	0.1	1,340		< 0.00114		< 0.00569		< 0.00285		0.00108	J	0.00108		< 0.107		4.30		8.27	B	12.6	
		6-7	651	0.1	514		< 0.00106		< 0.00528		< 0.00264		< 0.00686		-		< 0.103		2.25	J	2.39	B J	4.64	
		9-10	676	0.1	681		< 0.00108		< 0.00542		< 0.00271		< 0.00704		-		< 0.104		2.22	J	2.50	B J	4.72	
		14-15	681	0.1	610		< 0.00112		< 0.00558		< 0.00279		< 0.00726		-		< 0.106		< 4.23		0.947	B J	0.947	
		19-20	520	0.1	606		< 0.00110		< 0.00550		< 0.00275		< 0.00714		-		< 0.105		< 4.20		0.896	B J	0.896	
		24-25	320	0.1	326		< 0.00108		< 0.00541		< 0.00270		< 0.00703		-		< 0.104		< 4.16		0.494	B J	0.494	

TABLE 1
SUMMARY OF ANALYTICAL RESULTS
SOIL ASSESSMENT - NRM1935448024
CONOCOPHILLIPS
MCA 478 INJECTION LINE RELEASE
LEA 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_{36}		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
BH-3	8/18/2021	0-1	569	0.1	***666***		< 0.00119		< 0.00594		< 0.00297		< 0.00773		-	0.0281	J	19.0		47.2		66.2
		2-3	402	0.1	419		< 0.00107		< 0.00534		< 0.00267		< 0.00694		-	0.0296	J	7.38		18.2		25.6
		4-5	567	0.1	548		< 0.00110		< 0.00548		< 0.00274		< 0.00712		-	0.0250	J	< 4.19		2.99	J	3.02
		6-7	917	0.1	757		< 0.00128		< 0.00642		< 0.00321		< 0.00835		-	0.0317	J	< 4.57		< 4.57		0.0317
		9-10	961	0.1	563		< 0.00113		< 0.00565		< 0.00282		< 0.00734		-	0.0354	J	< 4.26		< 4.26		0.0354
		14-15	976	0.1	296		< 0.00107		< 0.00536		< 0.00268		< 0.00697		-	0.0261	J	< 4.14		0.582	J	0.608
		19-20	662	0.1	587		< 0.00113		< 0.00565		< 0.00283		< 0.00735		-	0.0337	J	< 4.26		< 4.26		0.0337
		24-25	445	0.1	110		< 0.00110		< 0.00548		< 0.00274		< 0.00712		-	0.0279	J	< 4.19		< 4.19		0.0279
BH-4	8/18/2021	0-1	586	0.1	565		< 0.00115		< 0.00575		< 0.00288		< 0.00748		-	0.0284	J	16.2		42.1		58.3
		2-3	401	0.1	530		< 0.00110	J3	< 0.00549	J3	< 0.00275	J3	< 0.00714	J3	-	0.0283	J	< 4.20		4.02	J	4.05
		4-5	1130	0.2	977		< 0.00116		< 0.00578		0.000867	J	0.00180	J	0.00267	< 0.108		< 4.31		2.06	J	2.06
		6-7	1120	0.2	856		< 0.00113		< 0.00567		< 0.00284		< 0.00737		-	0.0268	J	< 4.27		< 4.27		0.0268
		9-10	1110	0.1	810		< 0.00112		< 0.00562		< 0.00281		< 0.00731		-	0.0249	J	< 4.25		< 4.25		0.0249
		14-15	1020	0.1	835		< 0.00113		< 0.00566		< 0.00283		< 0.00736		-	0.0262	J	< 4.26		< 4.26		0.0262
		19-20	972	0.1	730		< 0.00117		< 0.00587		< 0.00294		< 0.00764		-	0.0307	J	< 4.35		< 4.35		0.0307
		24-25	683	0.1	695		< 0.00115		< 0.00577		< 0.00288		< 0.00750		-	0.0286	J	< 4.31		< 4.31		0.0286
		29-30	361	0.1	103		< 0.00144		< 0.00721		< 0.00361		< 0.00938		-	0.0337	J	< 4.88		< 4.88		0.0337

NOTES:

ft. Feet
bgs Below ground surface
ppm Parts per million
mg/kg Milligrams per kilogram
TPH Total Petroleum Hydrocarbons
GRO Gasoline range organics
DRO Diesel range organics
ORO Oil range organics
1 EPA Method 300.0
2 EPA Method 8260B
3 EPA Method 8015
4 EPA Method 8015D/GRO

Bold and italicized values indicate exceedance of proposed Remediation RRALs and Reclamation Requirements.

Shaded rows indicate intervals proposed for excavation.

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.
J3 The associated batch QC was outside the established quality control range for precision.
J6 The sample matrix interfered with the ability to make any accurate determination; spike value is low.
P1 RPD value not applicable for sample concentrations less than 5 times the reporting limit.

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	NRM1935448024
District RP	
Facility ID	
Application ID	

Release Notification

RSJ3X-191104-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)*
Contact mailing address 5735 SW 7000 Andrews, TX 79714	

Location of Release Source

Latitude 32.8003922 Longitude -103.7714081
(NAD 83 in decimal degrees to 5 decimal places)

Site Name MCA 478	Site Type LINE LEAK
Date Release Discovered 10/2919	API# *(if applicable)*

Unit Letter	Section	Township	Range	County
O	28	17S	32E	LEA

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) 6	Volume Recovered (bbls) 2
☑ Produced Water	Volume Released (bbls) 50	Volume Recovered (bbls) 10
	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: Underground water Injection line for the MCA 478 developed a leak which led to a 56 bbl spill. 12 bbls. of fluid was recovered with a vacuum truck leaving approximately 44 bbls. in the ground on and off pad

Form C-141
Page 2

State of New Mexico
Oil Conservation Division

Incident ID	NRM1935448024
District RP	
Facility ID	
Application ID	

Was this a major release as defined by 19.15.29.7(A) NMAC? ☑ Yes ☐ No	If YES, for what reason(s) does the responsible party consider this a major release? it was more than 25 bbls.

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

It was given on 10/30/19 to district 1 email address and Bradford Billings

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:

Remediation process is ongoing.

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: 11/4/19

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

OCD Only

Received by: Ramona Marcus Date: 12/20/2019

L48 Spill Volume Estimate Form

Facility Name & Number:	MCA 478 injection line
Asset Area:	Maljamar
Release Discovery Date & Time:	10/29/19 8:35pm
Release Type:	Oil Mixture
Provide any known details about the event:	an additional 12 bbls were recovered, for a total of 56 bbls released. (5.6 Oil, 50.4 PW)

Spill Calculation - Subsurface Spill - Rectangle

Was the release on pad or off-pad?	On Pad - 10.5%; Off Pad - 15.12% soil spilled-fluid saturation factor
Has it rained at least a half inch in the last 24 hours?	Yes, On Pad - 8%; Off Pad - 13.57% soil spilled-fluid saturation factor; if No, use factors above.

Convert Irregular shape into a series of rectangles	Length (ft.)	Width (ft.)	Depth (in.)	Soil Spilled-Fluid Saturation	Estimated volume of each area (bbl.)	Total Estimated Volume of Spill (bbl.)	Percentage of Oil if Spilled Fluid is a Mixture	Total Estimated Volume of Spilled Oil (bbl.)	Total Estimated Volume of Spilled Liquid other than Oil (bbl.)
Rectangle A	120.0	18.0	1.50	10.50%	48.060	5.046	10.00%	0.505	4.542
Rectangle B	116.0	4.0	2.00	15.12%	13.765	2.081	10.00%	0.208	1.873
Rectangle C	333.0	16.0	1.00	10.50%	79.032	8.298	10.00%	0.830	7.469
Rectangle D	24.0	25.0	4.00	15.12%	35.600	5.383	10.00%	0.538	4.844
Rectangle E	30.0	6.0	3.00	15.12%	8.010	1.211	10.00%	0.121	1.090
Rectangle F	65.0	12.0	4.00	15.12%	46.280	6.998	10.00%	0.700	6.298
Rectangle G	12.0	8.0	4.00	15.12%	5.696	0.861	10.00%	0.086	0.775
Rectangle H	12.0	18.0	4.00	15.12%	12.816	1.938	10.00%	0.194	1.744
Rectangle I	26.0	16.0	4.00	15.12%	24.683	3.732	10.00%	0.373	3.359
Rectangle I	37.0	16.0	4.00	15.12%	35.125	5.311	10.00%	0.531	4.780
Rectangle I	35.0	6.0	6.00	10.50%	18.690	1.962	10.00%	0.196	1.766
Rectangle J	34.0	15.0	1.00	10.50%	7.565	0.794	10.00%	0.079	0.715
Rectangle I	36.0	16.0	1.00	10.50%	8.544	0.897	10.00%	0.090	0.807
Rectangle I					0.000	0.000		0.000	0.000
Rectangle I					0.000	0.000		0.000	0.000
Rectangle J					0.000	0.000		0.000	0.000
					Total Volume Release:	44.513		4.451	40.062

NRM1935448024

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

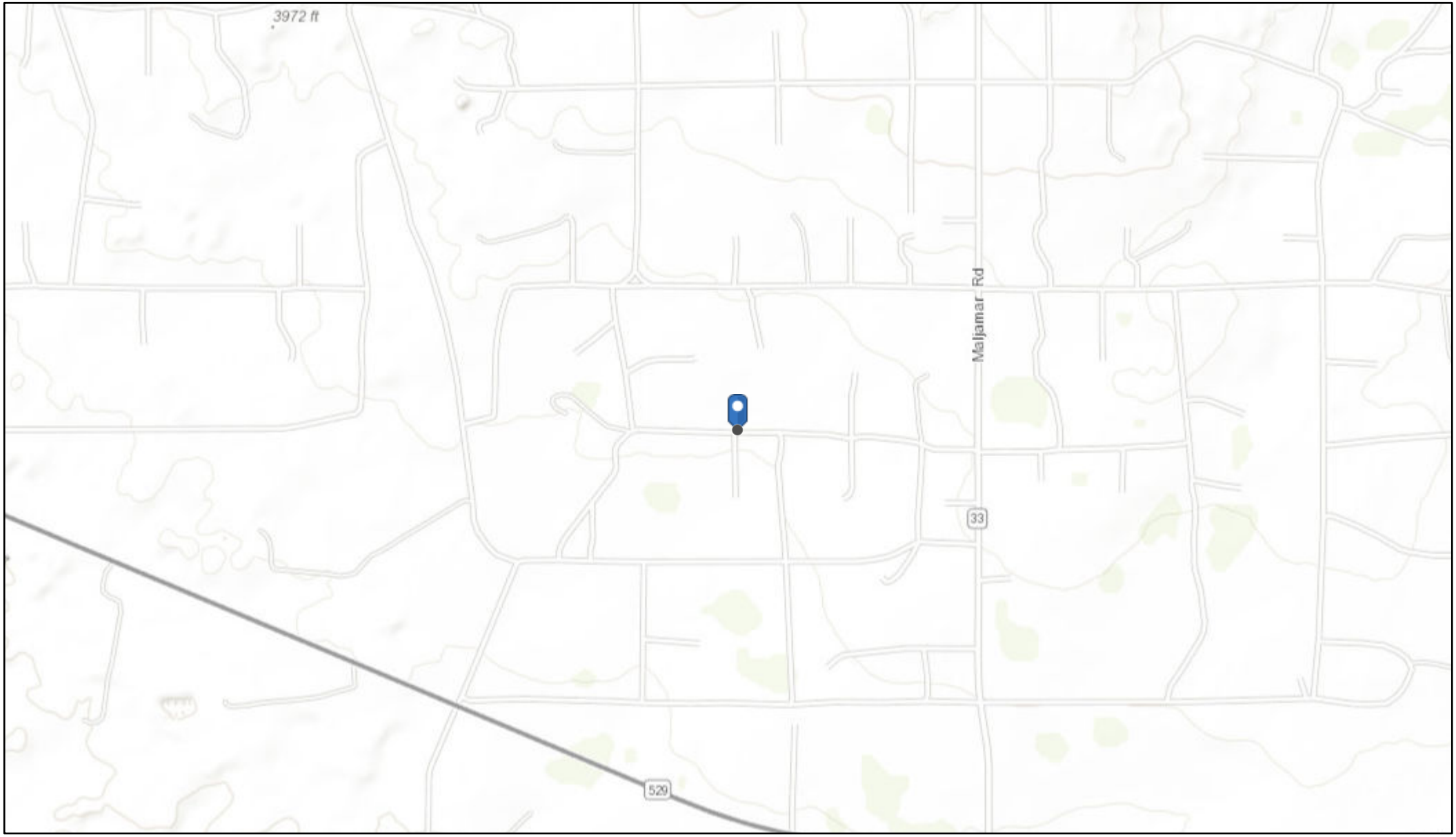
Received by: _____ Date: _____

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

Signature: Jennifer Nobui Date: _____

APPENDIX B
Site Characterization Data

NMOCD Waterbodies



5/19/2021, 4:35:18 PM

OSE Water-bodies

PLJV Probable Playas

OSE Streams

1:18,056

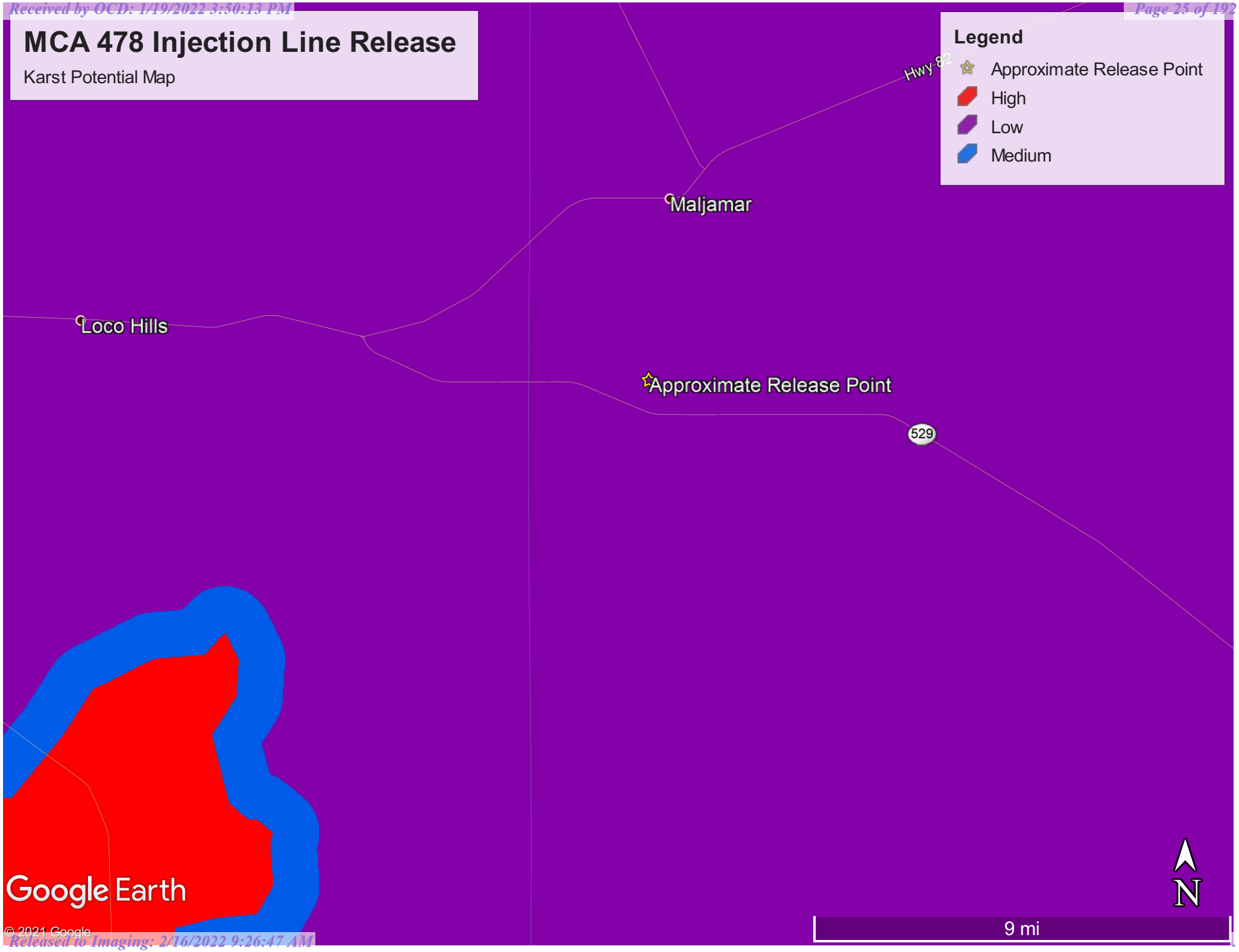
0 0.13 0.25 0.5 mi

0 0.2 0.4 0.8 km

Bureau of Land Management, Texas Parks & Wildlife, Esri, HERE, Garmin, INCREMENT P, USGS, METI/NASA, EPA, USDA

MCA 478 Injection Line Release

Karst Potential Map



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

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

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

(quarters are 1=NW 2=NE 3=SW 4=SE)
(quarters are smallest to largest) (NAD83 UTM in meters) (In feet)

POD Number	POD Sub-basin	County	Q 64	Q 16	Q 4	Sec	Tws	Rng	X	Y	Distance	Depth Well	Depth Water	Water Column
RA 12721 POD4	RA	LE	1	1	2	33	17S	32E	615055	3629589	215	140		
RA 12721 POD3	RA	LE	2	3	4	28	17S	32E	615417	3629979	349	115		
RA 12721 POD6	RA	LE	1	2	2	33	17S	32E	615530	3629431	548	130		
RA 12721 POD5	RA	LE	2	4	4	28	17S	32E	615650	3629961	555	130	124	6
RA 12721 POD8	RA	LE	1	2	1	33	17S	32E	614640	3629463	583	130	108	22
RA 12721 POD1	RA	LE	3	2	3	28	17S	32E	614645	3630141	588	125		
RA 12721 POD7	RA	LE	1	3	2	33	17S	32E	615064	3629198	599	130		
RA 12721 POD2	RA	LE	1	1	4	28	17S	32E	615055	3630407	615	124	75	49

Average Depth to Water: **102 feet**
Minimum Depth: **75 feet**
Maximum Depth: **124 feet**

Record Count: 8

UTMNAD83 Radius Search (in meters):

Easting (X): 615120.36 **Northing (Y):** 3629795 **Radius:** 800

APPENDIX C
Boring Logs

212C-MD-02505 | TETRA TECH

LOG OF BORING BH-1

Page 1 of 1

Project Name: MCA 478 Injection Line Release

Borehole Location: GPS: 32.800041°, -103.770714° | Surface Elevation: 3942 ft

Borehole Number: BH-1 | Borehole Diameter (in.): 8 | Date Started: 8/18/2021 | Date Finished: 8/18/2021

WATER LEVEL OBSERVATIONS

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

Remarks:

DEPTH (ft)	OPERATION TYPE	SAMPLE	CHLORIDE FIELD SCREENING (ppm) ExStik	VOC FIELD SCREENING (ppm) PID	SAMPLE RECOVERY (%)	MOISTURE CONTENT (%)	DRY DENSITY (pcf)	LIQUID LIMIT LL	PLASTICITY INDEX PI	MINUS NO. 200 (%)	GRAPHIC LOG	MATERIAL DESCRIPTION	DEPTH (ft)	REMARKS
			252	0.3								**-CALICHE-** CALICHE (LEASE ROAD): White to tan, dry, heavily cemented with calcium carbonate, with abundant gravel, no staining, no odor.	1	BH-1 (0'-1')
			360	0.2								**-SM-** SILTY SAND: Tan, slightly moist, loose, very fine grained, with abundant caliche gravel, no staining, no odor.	2	BH-1 (2'-3')
5			577	0.1								**-SM-** SILTY SAND: Dark brown, slightly moist, medium dense, fine grained, with abundant clay, with trace gravel, no staining, no odor. -- Dry @ 4' -- Abundant caliche gravel @ 6'		BH-1 (4'-5')
			912	0.1										BH-1 (6'-7')
													9	
10			801	0.1								**-SP-** SAND: Tan, dry, medium dense, very fine grained, with abundant caliche gravel, with some silt, no staining, no odor.		BH-1 (9'-10')
													14	
15			425	0.1								**-SP-** SAND: Tan, dry, dense, very fine grained, with some silt, with some gravel, no staining, no odor.		BH-1 (14'-15')
20			323	0.1									20	BH-1 (19'-20')

Bottom of borehole at 20.0 feet.

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

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

Notes:

Analytical samples are shown in the "Remarks" column. Surface elevation is an estimated value based on Google Earth data.

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

212C-MD-02505 | TETRA TECH | **LOG OF BORING BH-2** | Page 1 of 1

Project Name: MCA 478 Injection Line Release

Borehole Location: GPS: 32.800090°, -103.770143° | Surface Elevation: 3943 ft

Borehole Number: BH-2 | Borehole Diameter (in.): 8 | Date Started: 8/18/2021 | Date Finished: 8/18/2021

WATER LEVEL OBSERVATIONS

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

Remarks:

DEPTH (ft)	OPERATION TYPE	SAMPLE	CHLORIDE FIELD SCREENING (ppm) ExStik	VOC FIELD SCREENING (ppm) PID	SAMPLE RECOVERY (%)	MOISTURE CONTENT (%)	DRY DENSITY (pcf)	LIQUID LIMIT LL	PLASTICITY INDEX PI	MINUS NO. 200 (%)	GRAPHIC LOG	MATERIAL DESCRIPTION	DEPTH (ft)	REMARKS
			956	0.2								**-CALICHE-** CALICHE (LEASE ROAD): White to tan, dry, heavily cemented with calcium carbonate, with abundant gravel, no staining, no odor.	1	BH-2 (0'-1')
			1290	0.1								**-SM-** SILTY SAND: Tan, slightly moist, loose, very fine grained, with abundant caliche gravel, no staining, no odor.		BH-2 (2'-3')
5			1430	0.1										BH-2 (4'-5')
			651	0.1								**-SM-** SILTY SAND: Dark brown, slightly moist, medium dense, fine grained, with abundant clay, with trace gravel, no staining, no odor.	6	BH-2 (6'-7')
												-- Dry @ 6.5'	8	
												-- Abundant caliche gravel @ 7'		
10			676	0.1								**-SP-** SAND: Tan, dry, medium dense, very fine grained, with abundant caliche gravel, with some silt, no staining, no odor.		BH-2 (9'-10')
15			681	0.1										BH-2 (14'-15')
20			520	0.1									20	BH-2 (19'-20')
												-SP- SAND: Tan, dry, dense, very fine grained, with some silt, with some gravel, no staining, no odor.		
25			320	0.1									25	BH-2 (24'-25')

Bottom of borehole at 25.0 feet.

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

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

Notes:

Analytical samples are shown in the "Remarks" column. Surface elevation is an estimated value based on Google Earth data.

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

212C-MD-02505 | TETRA TECH | **LOG OF BORING BH-3** | Page 1 of 1

Project Name: MCA 478 Injection Line Release

Borehole Location: GPS: 32.799882°, -103.770528° | Surface Elevation: 3942 ft

Borehole Number: BH-3 | Borehole Diameter (in.): 8 | Date Started: 8/18/2021 | Date Finished: 8/18/2021

WATER LEVEL OBSERVATIONS

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

Remarks:

DEPTH (ft)	OPERATION TYPE	SAMPLE	CHLORIDE FIELD SCREENING (ppm) ExStik	VOC FIELD SCREENING (ppm) PID	SAMPLE RECOVERY (%)	MOISTURE CONTENT (%)	DRY DENSITY (pcf)	LIQUID LIMIT LL	PLASTICITY INDEX PI	MINUS NO. 200 (%)	GRAPHIC LOG	MATERIAL DESCRIPTION	DEPTH (ft)	REMARKS
			569	0.1								**-CALICHE-** CALICHE (LEASE ROAD): White to tan, dry, heavily cemented with calcium carbonate, with abundant gravel, no staining, no odor.	1	BH-3 (0'-1')
			402	0.1								**-SM-** SILTY SAND: Tan, slightly moist, loose, very fine grained, with abundant caliche gravel, no staining, no odor.		BH-3 (2'-3')
5			567	0.1										BH-3 (4'-5')
			917	0.1								**-SM-** SILTY SAND: Dark brown, slightly moist, medium dense, fine grained, with abundant clay, with trace gravel, no staining, no odor.	6	BH-3 (6'-7')
												-- Dry @ 6.5'	8	
												-- Abundant caliche gravel @ 7'		
10			961	0.1								**-SP-** SAND: Tan, dry, medium dense, very fine grained, with abundant caliche gravel, with some silt, no staining, no odor.		BH-3 (9'-10')
15			976	0.1										BH-3 (14'-15')
20			662	0.1									20	BH-3 (19'-20')
												-SP- SAND: Tan, dry, dense, very fine grained, with some silt, with some gravel, no staining, no odor.		
25			445	0.1									25	BH-3 (24'-25')

Bottom of borehole at 25.0 feet.

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

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

Notes:

Analytical samples are shown in the "Remarks" column. Surface elevation is an estimated value based on Google Earth data.

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

212C-MD-02505 | TETRA TECH | **LOG OF BORING BH-4** | Page 1 of 1

Project Name: MCA 478 Injection Line Release

Borehole Location: GPS: 32.799610°, -103.770558° | Surface Elevation: 3940 ft

Borehole Number: BH-4 | Borehole Diameter (in.): 8 | Date Started: 8/18/2021 | Date Finished: 8/18/2021

WATER LEVEL OBSERVATIONS

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

Remarks:

DEPTH (ft)	OPERATION TYPE	SAMPLE	CHLORIDE FIELD SCREENING (ppm) ExStik	VOC FIELD SCREENING (ppm) PID	SAMPLE RECOVERY (%)	MOISTURE CONTENT (%)	DRY DENSITY (pcf)	LIQUID LIMIT LL	PLASTICITY INDEX PI	MINUS NO. 200 (%)	GRAPHIC LOG	MATERIAL DESCRIPTION	DEPTH (ft)	REMARKS
			586	0.1								**-CALICHE-** CALICHE (LEASE ROAD): White to tan, dry, heavily cemented with calcium carbonate, with abundant gravel, no staining, no odor.	1	BH-4 (0'-1')
			401	0.1								**-SM-** SILTY SAND: Tan, slightly moist, loose, very fine grained, with abundant caliche gravel, no staining, no odor.		BH-4 (2'-3')
5			1130	0.2										BH-4 (4'-5')
			1120	0.2								**-SM-** SILTY SAND: Dark brown, slightly moist, medium dense, fine grained, with abundant clay, with trace gravel, no staining, no odor.	6	BH-4 (6'-7')
												-- Dry @ 6.5'	8	
												-- Abundant caliche gravel @ 7'		
10			1110	0.1								**-SP-** SAND: Tan, dry, medium dense, very fine grained, with abundant caliche gravel, with some silt, no staining, no odor.		BH-4 (9'-10')
15			1020	0.1										BH-4 (14'-15')
20			972	0.1									20	BH-4 (19'-20')
												-SP- SAND: Tan, dry, dense, very fine grained, with some silt, with some gravel, no staining, no odor.		
25			683	0.1										BH-4 (24'-25')
30			361	0.1									30	BH-4 (29'-30')

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

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

Notes:

Bottom of borehole at 30.0 feet.

Analytical samples are shown in the "Remarks" column. Surface elevation is an estimated value based on Google Earth data.

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

212C-MD-02505	TETRA TECH	**LOG OF BORING AH-8**	Page 1 of 1

Project Name: MCA 478 Injection Line Release

Borehole Location: GPS: 32.800220°, -103.770528° | Surface Elevation: 3944 ft

Borehole Number: AH-8 | Borehole Diameter (in.): 4 | Date Started: 8/18/2021 | Date Finished: 8/18/2021

WATER LEVEL OBSERVATIONS

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

Remarks:

DEPTH (ft)	OPERATION TYPE	SAMPLE	CHLORIDE FIELD SCREENING (ppm) ExStik	VOC FIELD SCREENING (ppm) PID	SAMPLE RECOVERY (%)	MOISTURE CONTENT (%)	DRY DENSITY (pcf)	LIQUID LIMIT LL	PLASTICITY INDEX PI	MINUS NO. 200 (%)	GRAPHIC LOG	MATERIAL DESCRIPTION	DEPTH (ft)	REMARKS
			32.2	0.1								**-SM-** SILTY SAND: Tan, slightly moist, loose, very fine grained, with abundant caliche gravel, no staining, no odor.		AH-8 (0'-1')
			37.9	0.1									3	AH-8 (2'-3')
5			56.6	0.1								**-SM-** SILTY SAND: Dark brown, slightly moist, medium dense, fine grained, with abundant clay, with trace gravel, no staining, no odor. -- Dry @ 4'		AH-8 (4'-5')
			56.8	0.1									6	AH-8 (5'-6')

Bottom of borehole at 6.0 feet.

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

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

Notes:

Analytical samples are shown in the "Remarks" column. Surface elevation is an estimated value based on Google Earth data.

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

212C-MD-02505 | TETRA TECH | **LOG OF BORING AH-9** | Page 1 of 1

Project Name: MCA 478 Injection Line Release

Borehole Location: GPS: 32.800463°, -103.770396° | Surface Elevation: 3945 ft

Borehole Number: AH-9 | Borehole Diameter (in.): 4 | Date Started: 8/18/2021 | Date Finished: 8/18/2021

WATER LEVEL OBSERVATIONS

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

Remarks:

DEPTH (ft)	OPERATION TYPE	SAMPLE	CHLORIDE FIELD SCREENING (ppm) ExStik	VOC FIELD SCREENING (ppm) PID	SAMPLE RECOVERY (%)	MOISTURE CONTENT (%)	DRY DENSITY (pcf)	LIQUID LIMIT LL	PLASTICITY INDEX PI	MINUS NO. 200 (%)	GRAPHIC LOG	MATERIAL DESCRIPTION	DEPTH (ft)	REMARKS
			25.6	0.1								**-SM-** SILTY SAND: Tan, slightly moist, loose, very fine grained, with abundant caliche gravel, no staining, no odor.		AH-9 (0'-1')
			28.4	0.1									3	AH-9 (2'-3')
5			27.6	0.1								**-SM-** SILTY SAND: Dark brown, slightly moist, medium dense, fine grained, with abundant clay, with trace gravel, no staining, no odor. -- Dry @ 4'		AH-9 (4'-5')
			90.1	0.1									6	AH-9 (6'-7')

Bottom of borehole at 6.0 feet.

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

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

Notes:

Analytical samples are shown in the "Remarks" column. Surface elevation is an estimated value based on Google Earth data.

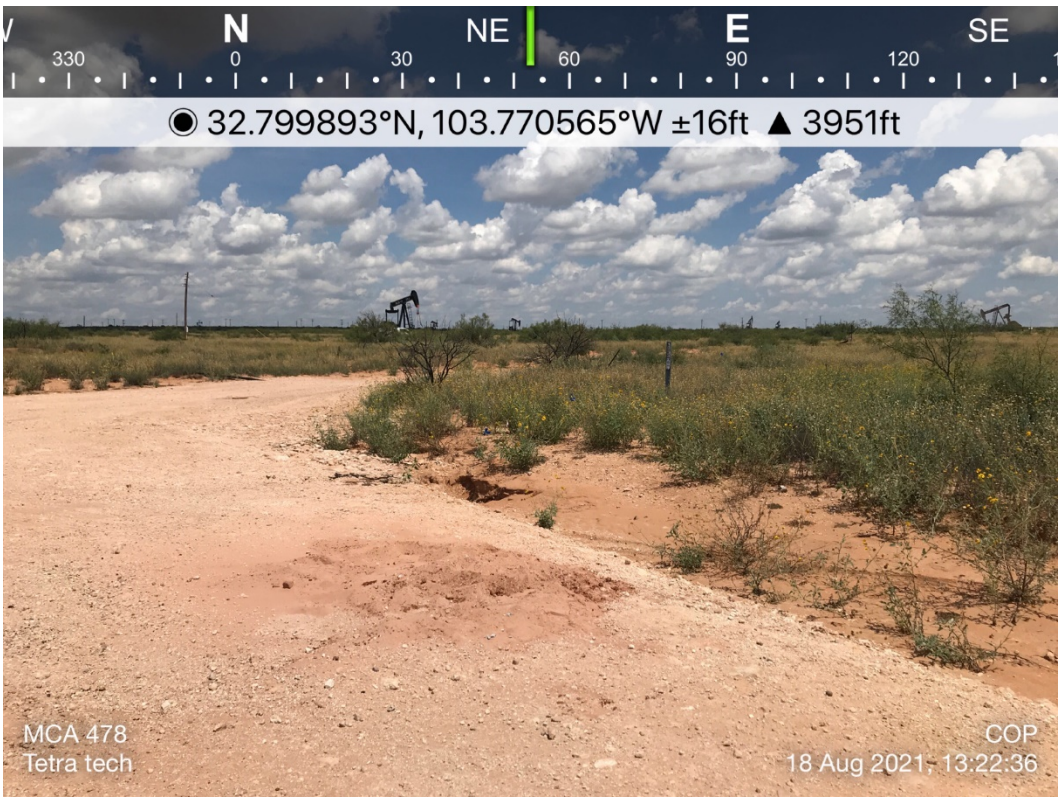
Logger: Devin Dominguez | Drilling Equipment: Hand Auger | Driller: Tetra Tech

APPENDIX D
Photographic Documentation

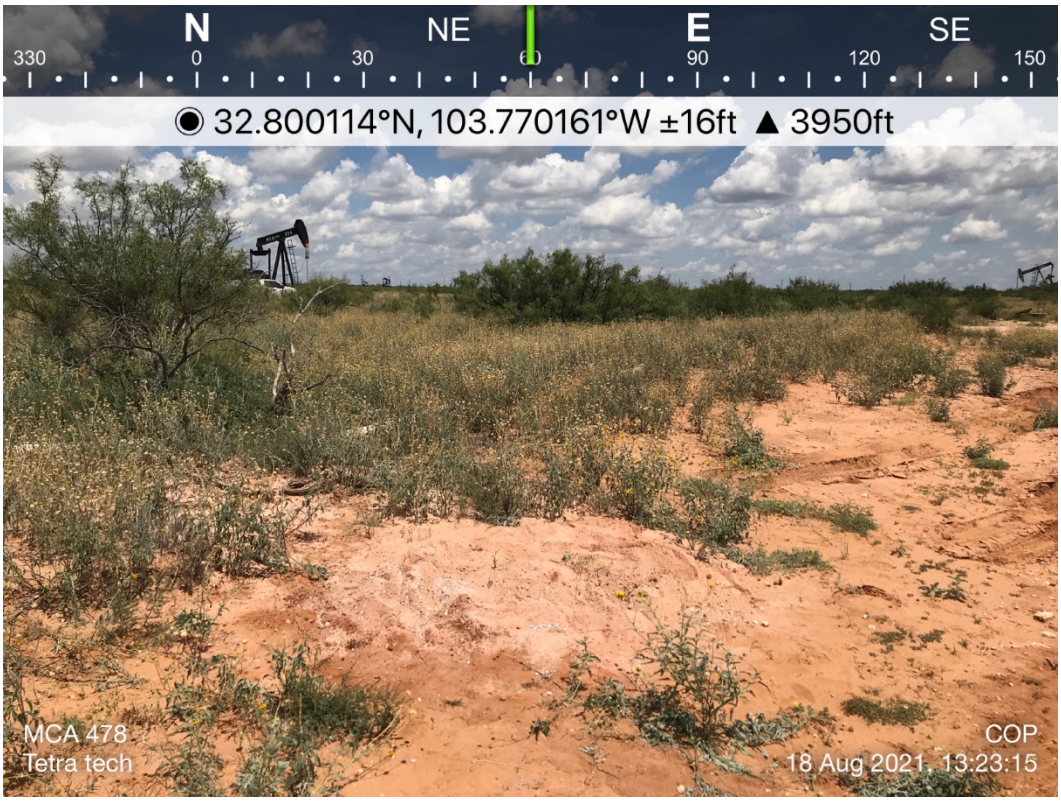
TETRA TECH, INC. PROJECT NO. 212C-MD-02505	DESCRIPTION	View west northwest. Release area and initial response area.	1
	SITE NAME	ConocoPhillips MCA 478 Injection Line Release	8/18/2021

TETRA TECH, INC. PROJECT NO. 212C-MD-02505	DESCRIPTION	View south southeast. Release area and initial response area.	2
	SITE NAME	ConocoPhillips MCA 478 Injection Line Release	8/18/2021

TETRA TECH, INC. PROJECT NO. 212C-MD-02505	DESCRIPTION	View south. Southern end of the release area and initial response area.	3
	SITE NAME	ConocoPhillips MCA 478 Injection Line Release	8/18/2021

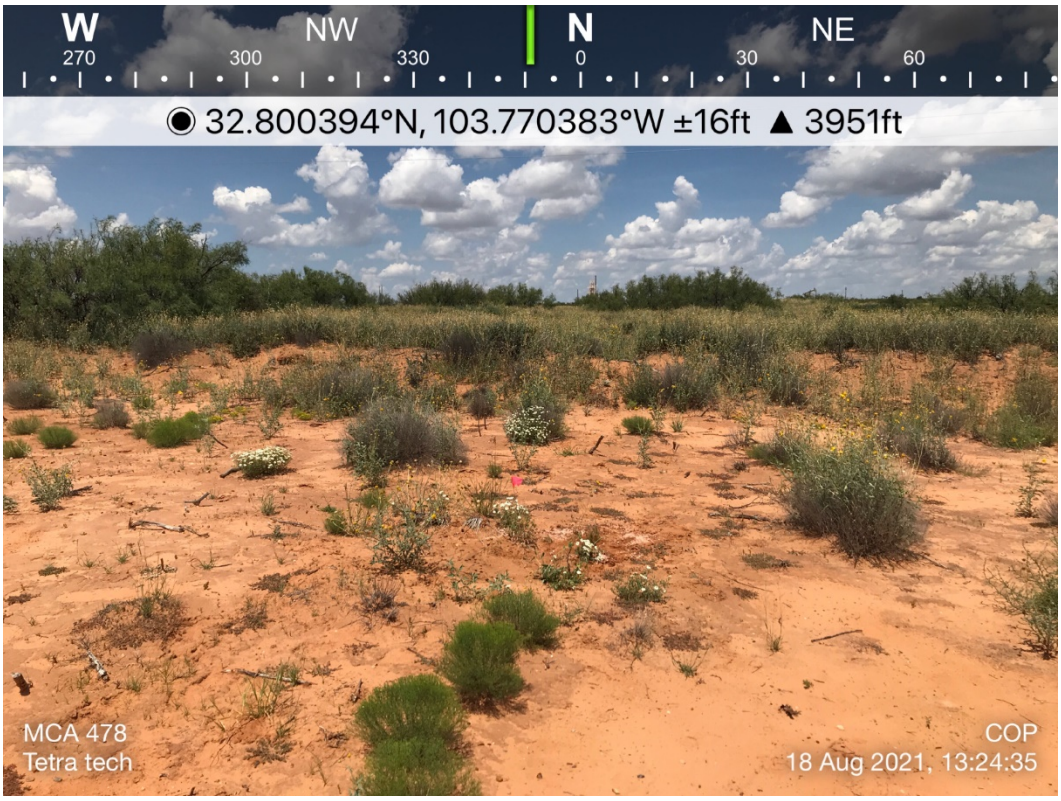


TETRA TECH, INC. PROJECT NO. 212C-MD-02505	DESCRIPTION	View northeast. Approximate release point, release area and initial response area.	4
	SITE NAME	ConocoPhillips MCA 478 Injection Line Release	8/18/2021



TETRA TECH, INC. PROJECT NO. 212C-MD-02505	DESCRIPTION	View northeast. Northern edge of the reported initial response area, 3" poly flowline, and proposed excavation area.	5
	SITE NAME	ConocoPhillips MCA 478 Injection Line Release	8/18/2021

TETRA TECH, INC. PROJECT NO. 212C-MD-02505	DESCRIPTION	View southwest. Release area and initial response area.	6
	SITE NAME	ConocoPhillips MCA 478 Injection Line Release	8/18/2021



TETRA TECH, INC. PROJECT NO. 212C-MD-02505	DESCRIPTION	View north. Area of previous remediation.	7
	SITE NAME	ConocoPhillips MCA 478 Injection Line Release	8/18/2021

TETRA TECH, INC. PROJECT NO. 212C-MD-02505	DESCRIPTION	View northwest. Area of previous remediation.	8
	SITE NAME	ConocoPhillips MCA 478 Injection Line Release	8/18/2021

APPENDIX E
Laboratory Analytical Data

ANALYTICAL REPORT

August 30, 2021

ConocoPhillips - Tetra Tech

Sample Delivery Group:	L1390780
Samples Received:	08/14/2021
Project Number:	212C-MD-02505
Description:	MCA 478 Injection Line 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.

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

TABLE OF CONTENTS

AH-1 (0'-1') L1390780-01 Solid

Collected by: Andrew Garcia | Collected date/time: 08/12/21 08:30 | Received date/time: 08/14/21 09:45

Method	Batch	Dilution	Preparation date/time	Analysis date/time	Analyst	Location
Total Solids by Method 2540 G-2011	WG1726128	1	08/20/21 15:50	08/20/21 16:00	CMK	Mt. Juliet, TN
Wet Chemistry by Method 300.0	WG1725360	1	08/18/21 22:40	08/19/21 02:07	ELN	Mt. Juliet, TN
Volatile Organic Compounds (GC) by Method 8015D/GRO	WG1724907	1	08/17/21 17:36	08/18/21 01:06	JHH	Mt. Juliet, TN
Volatile Organic Compounds (GC/MS) by Method 8260B	WG1725611	1	08/17/21 17:36	08/18/21 18:21	ADM	Mt. Juliet, TN
Semi-Volatile Organic Compounds (GC) by Method 8015M	WG1728498	1	08/24/21 23:01	08/25/21 15:52	CAG	Mt. Juliet, TN

AH-1 (2'-3') L1390780-02 Solid

Collected by: Andrew Garcia | Collected date/time: 08/12/21 09:00 | Received date/time: 08/14/21 09:45

Method	Batch	Dilution	Preparation date/time	Analysis date/time	Analyst	Location
Total Solids by Method 2540 G-2011	WG1726128	1	08/20/21 15:50	08/20/21 16:00	CMK	Mt. Juliet, TN
Wet Chemistry by Method 300.0	WG1725360	10	08/18/21 22:40	08/19/21 02:16	ELN	Mt. Juliet, TN
Volatile Organic Compounds (GC) by Method 8015D/GRO	WG1724907	1	08/17/21 17:36	08/18/21 01:29	JHH	Mt. Juliet, TN
Volatile Organic Compounds (GC/MS) by Method 8260B	WG1725611	1	08/17/21 17:36	08/18/21 18:40	ADM	Mt. Juliet, TN
Semi-Volatile Organic Compounds (GC) by Method 8015M	WG1728498	1	08/24/21 23:01	08/25/21 16:20	CAG	Mt. Juliet, TN

AH-2 (0'-1') L1390780-03 Solid

Collected by: Andrew Garcia | Collected date/time: 08/12/21 09:30 | Received date/time: 08/14/21 09:45

Method	Batch	Dilution	Preparation date/time	Analysis date/time	Analyst	Location
Total Solids by Method 2540 G-2011	WG1726129	1	08/20/21 15:44	08/20/21 15:49	CMK	Mt. Juliet, TN
Wet Chemistry by Method 300.0	WG1725360	1	08/18/21 22:40	08/19/21 02:25	ELN	Mt. Juliet, TN
Volatile Organic Compounds (GC) by Method 8015D/GRO	WG1724907	1	08/17/21 17:36	08/18/21 01:53	JHH	Mt. Juliet, TN
Volatile Organic Compounds (GC/MS) by Method 8260B	WG1725611	1	08/17/21 17:36	08/18/21 18:59	ADM	Mt. Juliet, TN
Semi-Volatile Organic Compounds (GC) by Method 8015M	WG1728498	1	08/24/21 23:01	08/25/21 16:06	CAG	Mt. Juliet, TN

AH-2 (2'-3') L1390780-04 Solid

Collected by: Andrew Garcia | Collected date/time: 08/12/21 10:00 | Received date/time: 08/14/21 09:45

Method	Batch	Dilution	Preparation date/time	Analysis date/time	Analyst	Location
Total Solids by Method 2540 G-2011	WG1726129	1	08/20/21 15:44	08/20/21 15:49	CMK	Mt. Juliet, TN
Wet Chemistry by Method 300.0	WG1725360	1	08/18/21 22:40	08/19/21 03:03	ELN	Mt. Juliet, TN
Volatile Organic Compounds (GC) by Method 8015D/GRO	WG1724907	1	08/17/21 17:36	08/18/21 02:16	JHH	Mt. Juliet, TN
Volatile Organic Compounds (GC/MS) by Method 8260B	WG1725611	1	08/17/21 17:36	08/18/21 19:18	ADM	Mt. Juliet, TN
Semi-Volatile Organic Compounds (GC) by Method 8015M	WG1728498	1	08/24/21 23:01	08/25/21 16:06	CAG	Mt. Juliet, TN

AH-3 (0'-1') L1390780-05 Solid

Collected by: Andrew Garcia | Collected date/time: 08/12/21 10:30 | Received date/time: 08/14/21 09:45

Method	Batch	Dilution	Preparation date/time	Analysis date/time	Analyst	Location
Total Solids by Method 2540 G-2011	WG1726129	1	08/20/21 15:44	08/20/21 15:49	CMK	Mt. Juliet, TN
Wet Chemistry by Method 300.0	WG1725360	1	08/18/21 22:40	08/19/21 03:13	ELN	Mt. Juliet, TN
Volatile Organic Compounds (GC) by Method 8015D/GRO	WG1724907	1	08/17/21 17:36	08/18/21 02:40	JHH	Mt. Juliet, TN
Volatile Organic Compounds (GC/MS) by Method 8260B	WG1725611	1	08/17/21 17:36	08/18/21 19:37	ADM	Mt. Juliet, TN
Semi-Volatile Organic Compounds (GC) by Method 8015M	WG1728498	1	08/24/21 23:01	08/25/21 17:15	CAG	Mt. Juliet, TN

AH-3 (2'-3') L1390780-06 Solid

Collected by: Andrew Garcia | Collected date/time: 08/12/21 11:00 | Received date/time: 08/14/21 09:45

Method	Batch	Dilution	Preparation date/time	Analysis date/time	Analyst	Location
Total Solids by Method 2540 G-2011	WG1726129	1	08/20/21 15:44	08/20/21 15:49	CMK	Mt. Juliet, TN
Wet Chemistry by Method 300.0	WG1725360	1	08/18/21 22:40	08/19/21 03:41	ELN	Mt. Juliet, TN
Volatile Organic Compounds (GC) by Method 8015D/GRO	WG1724907	1	08/17/21 17:36	08/18/21 03:04	JHH	Mt. Juliet, TN
Volatile Organic Compounds (GC/MS) by Method 8260B	WG1725611	1	08/17/21 17:36	08/18/21 19:56	ADM	Mt. Juliet, TN
Semi-Volatile Organic Compounds (GC) by Method 8015M	WG1728498	1	08/24/21 23:01	08/25/21 15:11	CAG	Mt. Juliet, TN

AH-4 (0'-1') L1390780-07 Solid

Collected by: Andrew Garcia | Collected date/time: 08/12/21 11:30 | Received date/time: 08/14/21 09:45

Method	Batch	Dilution	Preparation date/time	Analysis date/time	Analyst	Location
Total Solids by Method 2540 G-2011	WG1726129	1	08/20/21 15:44	08/20/21 15:49	CMK	Mt. Juliet, TN
Wet Chemistry by Method 300.0	WG1725360	1	08/18/21 22:40	08/19/21 03:51	ELN	Mt. Juliet, TN
Volatile Organic Compounds (GC) by Method 8015D/GRO	WG1724907	1	08/17/21 17:36	08/18/21 03:27	JHH	Mt. Juliet, TN
Volatile Organic Compounds (GC/MS) by Method 8260B	WG1725611	1	08/17/21 17:36	08/18/21 20:15	ADM	Mt. Juliet, TN
Semi-Volatile Organic Compounds (GC) by Method 8015M	WG1728498	1	08/24/21 23:01	08/25/21 14:58	CAG	Mt. Juliet, TN

AH-4 (2'-3') L1390780-08 Solid

Collected by: Andrew Garcia | Collected date/time: 08/12/21 12:00 | Received date/time: 08/14/21 09:45

Method	Batch	Dilution	Preparation date/time	Analysis date/time	Analyst	Location
Total Solids by Method 2540 G-2011	WG1726129	1	08/20/21 15:44	08/20/21 15:49	CMK	Mt. Juliet, TN
Wet Chemistry by Method 300.0	WG1725360	1	08/18/21 22:40	08/19/21 04:00	ELN	Mt. Juliet, TN
Volatile Organic Compounds (GC) by Method 8015D/GRO	WG1724907	1	08/17/21 17:36	08/18/21 03:51	JHH	Mt. Juliet, TN
Volatile Organic Compounds (GC/MS) by Method 8260B	WG1725611	1	08/17/21 17:36	08/18/21 20:34	ADM	Mt. Juliet, TN
Semi-Volatile Organic Compounds (GC) by Method 8015M	WG1728498	1	08/24/21 23:01	08/25/21 15:25	CAG	Mt. Juliet, TN

AH-5 (0'-1') L1390780-09 Solid

Collected by: Andrew Garcia | Collected date/time: 08/12/21 12:30 | Received date/time: 08/14/21 09:45

Method	Batch	Dilution	Preparation date/time	Analysis date/time	Analyst	Location
Total Solids by Method 2540 G-2011	WG1726129	1	08/20/21 15:44	08/20/21 15:49	CMK	Mt. Juliet, TN
Wet Chemistry by Method 300.0	WG1725360	1	08/18/21 22:40	08/19/21 04:10	ELN	Mt. Juliet, TN
Volatile Organic Compounds (GC) by Method 8015D/GRO	WG1724907	1	08/17/21 17:36	08/18/21 04:14	JHH	Mt. Juliet, TN
Volatile Organic Compounds (GC/MS) by Method 8260B	WG1725611	1	08/17/21 17:36	08/18/21 20:53	ADM	Mt. Juliet, TN
Semi-Volatile Organic Compounds (GC) by Method 8015M	WG1728498	1	08/24/21 23:01	08/25/21 17:29	CAG	Mt. Juliet, TN

AH-5 (2'-3') L1390780-10 Solid

Collected by: Andrew Garcia | Collected date/time: 08/12/21 13:00 | Received date/time: 08/14/21 09:45

Method	Batch	Dilution	Preparation date/time	Analysis date/time	Analyst	Location
Total Solids by Method 2540 G-2011	WG1726129	1	08/20/21 15:44	08/20/21 15:49	CMK	Mt. Juliet, TN
Wet Chemistry by Method 300.0	WG1725360	1	08/18/21 22:40	08/19/21 04:19	ELN	Mt. Juliet, TN
Volatile Organic Compounds (GC) by Method 8015D/GRO	WG1724907	1	08/17/21 17:36	08/18/21 04:38	JHH	Mt. Juliet, TN
Volatile Organic Compounds (GC/MS) by Method 8260B	WG1725617	1	08/17/21 17:36	08/20/21 08:43	JHH	Mt. Juliet, TN
Semi-Volatile Organic Compounds (GC) by Method 8015M	WG1729347	1	08/25/21 21:15	08/26/21 12:47	DMG	Mt. Juliet, TN

AH-6 (0'-1') L1390780-11 Solid

Collected by: Andrew Garcia | Collected date/time: 08/12/21 13:30 | Received date/time: 08/14/21 09:45

Method	Batch	Dilution	Preparation date/time	Analysis date/time	Analyst	Location
Total Solids by Method 2540 G-2011	WG1726129	1	08/20/21 15:44	08/20/21 15:49	CMK	Mt. Juliet, TN
Wet Chemistry by Method 300.0	WG1725360	1	08/18/21 22:40	08/19/21 04:29	ELN	Mt. Juliet, TN
Volatile Organic Compounds (GC) by Method 8015D/GRO	WG1724907	1	08/17/21 17:36	08/18/21 05:02	JHH	Mt. Juliet, TN
Volatile Organic Compounds (GC/MS) by Method 8260B	WG1725617	1	08/17/21 17:36	08/20/21 08:24	JHH	Mt. Juliet, TN
Semi-Volatile Organic Compounds (GC) by Method 8015M	WG1729347	1	08/25/21 21:15	08/26/21 13:00	DMG	Mt. Juliet, TN

AH-7 (0'-1') L1390780-12 Solid

Collected by: Andrew Garcia | Collected date/time: 08/12/21 14:00 | Received date/time: 08/14/21 09:45

Method	Batch	Dilution	Preparation date/time	Analysis date/time	Analyst	Location
Total Solids by Method 2540 G-2011	WG1726129	1	08/20/21 15:44	08/20/21 15:49	CMK	Mt. Juliet, TN
Wet Chemistry by Method 300.0	WG1725360	1	08/18/21 22:40	08/19/21 04:38	ELN	Mt. Juliet, TN
Volatile Organic Compounds (GC) by Method 8015D/GRO	WG1724907	1	08/17/21 17:36	08/18/21 05:26	JHH	Mt. Juliet, TN
Volatile Organic Compounds (GC/MS) by Method 8260B	WG1726892	1	08/17/21 17:36	08/20/21 17:10	JHH	Mt. Juliet, TN
Volatile Organic Compounds (GC/MS) by Method 8260B	WG1727570	1	08/17/21 17:36	08/22/21 20:59	JHH	Mt. Juliet, TN
Semi-Volatile Organic Compounds (GC) by Method 8015M	WG1729347	1	08/25/21 21:15	08/27/21 12:24	JDG	Mt. Juliet, TN

AH-8 (0'-1') L1390780-13 Solid

Collected by: Andrew Garcia | Collected date/time: 08/12/21 14:30 | Received date/time: 08/14/21 09:45

Method	Batch	Dilution	Preparation date/time	Analysis date/time	Analyst	Location
Total Solids by Method 2540 G-2011	WG1726130	1	08/20/21 15:32	08/20/21 15:41	CMK	Mt. Juliet, TN
Wet Chemistry by Method 300.0	WG1725360	10	08/18/21 22:40	08/19/21 04:48	ELN	Mt. Juliet, TN
Volatile Organic Compounds (GC) by Method 8015D/GRO	WG1724907	1	08/17/21 17:36	08/18/21 05:49	JHH	Mt. Juliet, TN
Volatile Organic Compounds (GC/MS) by Method 8260B	WG1726892	1	08/17/21 17:36	08/20/21 17:29	JHH	Mt. Juliet, TN
Volatile Organic Compounds (GC/MS) by Method 8260B	WG1727570	1	08/17/21 17:36	08/22/21 21:18	JHH	Mt. Juliet, TN
Semi-Volatile Organic Compounds (GC) by Method 8015M	WG1729347	1	08/25/21 21:15	08/26/21 13:14	DMG	Mt. Juliet, TN

AH-8 (2'-3') L1390780-14 Solid

Collected by: Andrew Garcia | Collected date/time: 08/12/21 15:00 | Received date/time: 08/14/21 09:45

Method	Batch	Dilution	Preparation date/time	Analysis date/time	Analyst	Location
Total Solids by Method 2540 G-2011	WG1726130	1	08/20/21 15:32	08/20/21 15:41	CMK	Mt. Juliet, TN
Wet Chemistry by Method 300.0	WG1725360	1	08/18/21 22:40	08/19/21 04:57	ELN	Mt. Juliet, TN
Volatile Organic Compounds (GC) by Method 8015D/GRO	WG1724907	1	08/17/21 17:36	08/18/21 06:13	JHH	Mt. Juliet, TN
Volatile Organic Compounds (GC/MS) by Method 8260B	WG1726892	1	08/17/21 17:36	08/20/21 17:48	JHH	Mt. Juliet, TN
Volatile Organic Compounds (GC/MS) by Method 8260B	WG1727570	1	08/17/21 17:36	08/22/21 21:37	JHH	Mt. Juliet, TN
Semi-Volatile Organic Compounds (GC) by Method 8015M	WG1729347	1	08/25/21 21:15	08/26/21 13:28	DMG	Mt. Juliet, TN

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

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

Chris McCord
Project Manager

Total Solids by Method 2540 G-2011

Analyte	Result	Qualifier	Dilution	Analysis	Batch
	%			date / time	
Total Solids	98.7		1	08/20/2021 16:00	WG1726128

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		9.32	20.3	1	08/19/2021 02:07	WG1725360

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	0.0533	B J	0.0220	0.101	1	08/18/2021 01:06	WG1724907
(S) a,a,a-Trifluorotoluene(FID)	*99.0*			*77.0-120*		*08/18/2021 01:06*	WG1724907

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		0.000480	0.00103	1	08/18/2021 18:21	WG1725611
Toluene	U		0.00134	0.00514	1	08/18/2021 18:21	WG1725611
Ethylbenzene	U		0.000757	0.00257	1	08/18/2021 18:21	WG1725611
Total Xylenes	0.00102	J	0.000904	0.00668	1	08/18/2021 18:21	WG1725611
(S) Toluene-d8	*97.8*			*75.0-131*		*08/18/2021 18:21*	WG1725611
(S) 4-Bromofluorobenzene	*92.8*			*67.0-138*		*08/18/2021 18:21*	WG1725611
(S) 1,2-Dichloroethane-d4	*95.8*			*70.0-130*		*08/18/2021 18:21*	WG1725611

Semi-Volatile Organic Compounds (GC) by Method 8015M

Analyte	Result (dry)	Qualifier	MDL (dry)	RDL (dry)	Dilution	Analysis	Batch
	mg/kg		mg/kg	mg/kg		date / time	
C10-C28 Diesel Range	3.30	J	1.63	4.05	1	08/25/2021 15:52	WG1728498
C28-C36 Motor Oil Range	14.6		0.278	4.05	1	08/25/2021 15:52	WG1728498
(S) o-Terphenyl	*63.6*			*18.0-148*		*08/25/2021 15:52*	WG1728498

Total Solids by Method 2540 G-2011

Analyte	Result	Qualifier	Dilution	Analysis	Batch
	%			date / time	
Total Solids	93.1		1	08/20/2021 16:00	WG1726128

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	647		98.9	215	10	08/19/2021 02:16	WG1725360

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	0.0474	B J	0.0233	0.107	1	08/18/2021 01:29	WG1724907
(S) a,a,a-Trifluorotoluene(FID)	*99.0*			*77.0-120*		*08/18/2021 01:29*	WG1724907

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

Analyte	Result (dry)	Qualifier	MDL (dry)	RDL (dry)	Dilution	Analysis	Batch
	mg/kg		mg/kg	mg/kg		date / time	
Benzene	U		0.000537	0.00115	1	08/18/2021 18:40	WG1725611
Toluene	U		0.00149	0.00575	1	08/18/2021 18:40	WG1725611
Ethylbenzene	U		0.000847	0.00287	1	08/18/2021 18:40	WG1725611
Total Xylenes	U		0.00101	0.00747	1	08/18/2021 18:40	WG1725611
(S) Toluene-d8	*101*			*75.0-131*		*08/18/2021 18:40*	WG1725611
(S) 4-Bromofluorobenzene	*94.9*			*67.0-138*		*08/18/2021 18:40*	WG1725611
(S) 1,2-Dichloroethane-d4	*105*			*70.0-130*		*08/18/2021 18:40*	WG1725611

Semi-Volatile Organic Compounds (GC) by Method 8015M

Analyte	Result (dry)	Qualifier	MDL (dry)	RDL (dry)	Dilution	Analysis	Batch
	mg/kg		mg/kg	mg/kg		date / time	
C10-C28 Diesel Range	2.18	J	1.73	4.30	1	08/25/2021 16:20	WG1728498
C28-C36 Motor Oil Range	9.18		0.294	4.30	1	08/25/2021 16:20	WG1728498
(S) o-Terphenyl	*67.9*			*18.0-148*		*08/25/2021 16:20*	WG1728498

Total Solids by Method 2540 G-2011

Analyte	Result	Qualifier	Dilution	Analysis	Batch
	%			date / time	
Total Solids	98.0		1	08/20/2021 15:49	WG1726129

Wet Chemistry by Method 300.0

Analyte	Result (dry)	Qualifier	MDL (dry)	RDL (dry)	Dilution	Analysis	Batch
	mg/kg		mg/kg	mg/kg		date / time	
Chloride	9.56	J P1	9.39	20.4	1	08/19/2021 02:25	WG1725360

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	0.0510	B J	0.0221	0.102	1	08/18/2021 01:53	WG1724907
(S) a,a,a-Trifluorotoluene(FID)	*98.6*			*77.0-120*		*08/18/2021 01:53*	WG1724907

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	08/18/2021 18:59	WG1725611
Toluene	U		0.00135	0.00520	1	08/18/2021 18:59	WG1725611
Ethylbenzene	U		0.000767	0.00260	1	08/18/2021 18:59	WG1725611
Total Xylenes	U		0.000916	0.00676	1	08/18/2021 18:59	WG1725611
(S) Toluene-d8	*102*			*75.0-131*		*08/18/2021 18:59*	WG1725611
(S) 4-Bromofluorobenzene	*88.1*			*67.0-138*		*08/18/2021 18:59*	WG1725611
(S) 1,2-Dichloroethane-d4	*95.6*			*70.0-130*		*08/18/2021 18:59*	WG1725611

Semi-Volatile Organic Compounds (GC) by Method 8015M

Analyte	Result (dry)	Qualifier	MDL (dry)	RDL (dry)	Dilution	Analysis	Batch
	mg/kg		mg/kg	mg/kg		date / time	
C10-C28 Diesel Range	6.41		1.64	4.08	1	08/25/2021 16:06	WG1728498
C28-C36 Motor Oil Range	30.2		0.280	4.08	1	08/25/2021 16:06	WG1728498
(S) o-Terphenyl	*52.7*			*18.0-148*		*08/25/2021 16:06*	WG1728498

Total Solids by Method 2540 G-2011

Analyte	Result	Qualifier	Dilution	Analysis	Batch
	%			date / time	
Total Solids	97.5		1	08/20/2021 15:49	WG1726129

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	16.8	J	9.43	20.5	1	08/19/2021 03:03	WG1725360

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	0.0487	B J	0.0222	0.103	1	08/18/2021 02:16	WG1724907
(S) a,a,a-Trifluorotoluene(FID)	*99.3*			*77.0-120*		*08/18/2021 02:16*	WG1724907

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	08/18/2021 19:18	WG1725611
Toluene	U		0.00137	0.00525	1	08/18/2021 19:18	WG1725611
Ethylbenzene	U		0.000774	0.00263	1	08/18/2021 19:18	WG1725611
Total Xylenes	U		0.000925	0.00683	1	08/18/2021 19:18	WG1725611
(S) Toluene-d8	*88.5*			*75.0-131*		*08/18/2021 19:18*	WG1725611
(S) 4-Bromofluorobenzene	*93.4*			*67.0-138*		*08/18/2021 19:18*	WG1725611
(S) 1,2-Dichloroethane-d4	*102*			*70.0-130*		*08/18/2021 19:18*	WG1725611

Semi-Volatile Organic Compounds (GC) by Method 8015M

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	08/25/2021 16:06	WG1728498
C28-C36 Motor Oil Range	5.42		0.281	4.10	1	08/25/2021 16:06	WG1728498
(S) o-Terphenyl	*68.7*			*18.0-148*		*08/25/2021 16:06*	WG1728498

Total Solids by Method 2540 G-2011

Analyte	Result	Qualifier	Dilution	Analysis	Batch
	%			date / time	
Total Solids	98.2		1	08/20/2021 15:49	WG1726129

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	10.7	J	9.37	20.4	1	08/19/2021 03:13	WG1725360

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	0.0494	B J	0.0221	0.102	1	08/18/2021 02:40	WG1724907
(S) a,a,a-Trifluorotoluene(FID)	*98.9*			*77.0-120*		*08/18/2021 02:40*	WG1724907

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		0.000484	0.00104	1	08/18/2021 19:37	WG1725611
Toluene	U		0.00135	0.00518	1	08/18/2021 19:37	WG1725611
Ethylbenzene	U		0.000764	0.00259	1	08/18/2021 19:37	WG1725611
Total Xylenes	U		0.000912	0.00674	1	08/18/2021 19:37	WG1725611
(S) Toluene-d8	*99.4*			*75.0-131*		*08/18/2021 19:37*	WG1725611
(S) 4-Bromofluorobenzene	*93.1*			*67.0-138*		*08/18/2021 19:37*	WG1725611
(S) 1,2-Dichloroethane-d4	*105*			*70.0-130*		*08/18/2021 19:37*	WG1725611

Semi-Volatile Organic Compounds (GC) by Method 8015M

Analyte	Result (dry)	Qualifier	MDL (dry)	RDL (dry)	Dilution	Analysis	Batch
	mg/kg		mg/kg	mg/kg		date / time	
C10-C28 Diesel Range	1.93	J	1.64	4.07	1	08/25/2021 17:15	WG1728498
C28-C36 Motor Oil Range	8.76		0.279	4.07	1	08/25/2021 17:15	WG1728498
(S) o-Terphenyl	*66.2*			*18.0-148*		*08/25/2021 17:15*	WG1728498

Total Solids by Method 2540 G-2011

Analyte	Result	Qualifier	Dilution	Analysis	Batch
	%			date / time	
Total Solids	96.7		1	08/20/2021 15:49	WG1726129

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	12.6	J	9.52	20.7	1	08/19/2021 03:41	WG1725360

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	0.0598	B J	0.0224	0.103	1	08/18/2021 03:04	WG1724907
(S) a,a,a-Trifluorotoluene(FID)	*99.2*			*77.0-120*		*08/18/2021 03:04*	WG1724907

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		0.000499	0.00107	1	08/18/2021 19:56	WG1725611
Toluene	U		0.00139	0.00535	1	08/18/2021 19:56	WG1725611
Ethylbenzene	U		0.000788	0.00267	1	08/18/2021 19:56	WG1725611
Total Xylenes	U		0.000941	0.00695	1	08/18/2021 19:56	WG1725611
(S) Toluene-d8	*97.4*			*75.0-131*		*08/18/2021 19:56*	WG1725611
(S) 4-Bromofluorobenzene	*92.1*			*67.0-138*		*08/18/2021 19:56*	WG1725611
(S) 1,2-Dichloroethane-d4	*99.9*			*70.0-130*		*08/18/2021 19:56*	WG1725611

Semi-Volatile Organic Compounds (GC) by Method 8015M

Analyte	Result (dry)	Qualifier	MDL (dry)	RDL (dry)	Dilution	Analysis	Batch
	mg/kg		mg/kg	mg/kg		date / time	
C10-C28 Diesel Range	2.10	J	1.67	4.14	1	08/25/2021 15:11	WG1728498
C28-C36 Motor Oil Range	10.6		0.283	4.14	1	08/25/2021 15:11	WG1728498
(S) o-Terphenyl	*70.2*			*18.0-148*		*08/25/2021 15:11*	WG1728498

Total Solids by Method 2540 G-2011

Analyte	Result	Qualifier	Dilution	Analysis	Batch
	%			date / time	
Total Solids	98.6		1	08/20/2021 15:49	WG1726129

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		9.33	20.3	1	08/19/2021 03:51	WG1725360

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	0.0556	B J	0.0220	0.101	1	08/18/2021 03:27	WG1724907
(S) a,a,a-Trifluorotoluene(FID)	*99.2*			*77.0-120*		*08/18/2021 03:27*	WG1724907

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		0.000480	0.00103	1	08/18/2021 20:15	WG1725611
Toluene	U		0.00134	0.00514	1	08/18/2021 20:15	WG1725611
Ethylbenzene	U		0.000758	0.00257	1	08/18/2021 20:15	WG1725611
Total Xylenes	U		0.000905	0.00669	1	08/18/2021 20:15	WG1725611
(S) Toluene-d8	*92.8*			*75.0-131*		*08/18/2021 20:15*	WG1725611
(S) 4-Bromofluorobenzene	*93.1*			*67.0-138*		*08/18/2021 20:15*	WG1725611
(S) 1,2-Dichloroethane-d4	*102*			*70.0-130*		*08/18/2021 20:15*	WG1725611

Semi-Volatile Organic Compounds (GC) by Method 8015M

Analyte	Result (dry)	Qualifier	MDL (dry)	RDL (dry)	Dilution	Analysis	Batch
	mg/kg		mg/kg	mg/kg		date / time	
C10-C28 Diesel Range	2.74	J	1.63	4.06	1	08/25/2021 14:58	WG1728498
C28-C36 Motor Oil Range	11.6		0.278	4.06	1	08/25/2021 14:58	WG1728498
(S) o-Terphenyl	*75.8*			*18.0-148*		*08/25/2021 14:58*	WG1728498

Total Solids by Method 2540 G-2011

Analyte	Result	Qualifier	Dilution	Analysis	Batch
	%			date / time	
Total Solids	98.4		1	08/20/2021 15:49	WG1726129

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	12.1	J	9.35	20.3	1	08/19/2021 04:00	WG1725360

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	0.0580	B J	0.0220	0.102	1	08/18/2021 03:51	WG1724907
(S) a,a,a-Trifluorotoluene(FID)	*98.1*			*77.0-120*		*08/18/2021 03:51*	WG1724907

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	08/18/2021 20:34	WG1725611
Toluene	U		0.00134	0.00516	1	08/18/2021 20:34	WG1725611
Ethylbenzene	U		0.000760	0.00258	1	08/18/2021 20:34	WG1725611
Total Xylenes	U		0.000908	0.00671	1	08/18/2021 20:34	WG1725611
(S) Toluene-d8	*101*			*75.0-131*		*08/18/2021 20:34*	WG1725611
(S) 4-Bromofluorobenzene	*89.8*			*67.0-138*		*08/18/2021 20:34*	WG1725611
(S) 1,2-Dichloroethane-d4	*90.6*			*70.0-130*		*08/18/2021 20:34*	WG1725611

Semi-Volatile Organic Compounds (GC) by Method 8015M

Analyte	Result (dry)	Qualifier	MDL (dry)	RDL (dry)	Dilution	Analysis	Batch
	mg/kg		mg/kg	mg/kg		date / time	
C10-C28 Diesel Range	6.25		1.64	4.06	1	08/25/2021 15:25	WG1728498
C28-C36 Motor Oil Range	24.5		0.278	4.06	1	08/25/2021 15:25	WG1728498
(S) o-Terphenyl	*56.0*			*18.0-148*		*08/25/2021 15:25*	WG1728498

Total Solids by Method 2540 G-2011

Analyte	Result	Qualifier	Dilution	Analysis	Batch
	%			date / time	
Total Solids	98.4		1	08/20/2021 15:49	WG1726129

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	11.8	J	9.35	20.3	1	08/19/2021 04:10	WG1725360

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	0.0408	B J	0.0221	0.102	1	08/18/2021 04:14	WG1724907
(S) a,a,a-Trifluorotoluene(FID)	*100*			*77.0-120*		*08/18/2021 04:14*	WG1724907

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	08/18/2021 20:53	WG1725611
Toluene	U		0.00134	0.00517	1	08/18/2021 20:53	WG1725611
Ethylbenzene	U		0.000761	0.00258	1	08/18/2021 20:53	WG1725611
Total Xylenes	U		0.000909	0.00672	1	08/18/2021 20:53	WG1725611
(S) Toluene-d8	*91.6*			*75.0-131*		*08/18/2021 20:53*	WG1725611
(S) 4-Bromofluorobenzene	*91.1*			*67.0-138*		*08/18/2021 20:53*	WG1725611
(S) 1,2-Dichloroethane-d4	*107*			*70.0-130*		*08/18/2021 20:53*	WG1725611

Semi-Volatile Organic Compounds (GC) by Method 8015M

Analyte	Result (dry)	Qualifier	MDL (dry)	RDL (dry)	Dilution	Analysis	Batch
	mg/kg		mg/kg	mg/kg		date / time	
C10-C28 Diesel Range	2.87	J	1.64	4.07	1	08/25/2021 17:29	WG1728498
C28-C36 Motor Oil Range	7.78		0.279	4.07	1	08/25/2021 17:29	WG1728498
(S) o-Terphenyl	*71.3*			*18.0-148*		*08/25/2021 17:29*	WG1728498

Total Solids by Method 2540 G-2011

Analyte	Result	Qualifier	Dilution	Analysis	Batch
	%			date / time	
Total Solids	98.5		1	08/20/2021 15:49	WG1726129

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		9.34	20.3	1	08/19/2021 04:19	WG1725360

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	0.0439	B J	0.0220	0.101	1	08/18/2021 04:38	WG1724907
(S) a,a,a-Trifluorotoluene(FID)	*99.6*			*77.0-120*		*08/18/2021 04:38*	WG1724907

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		0.000481	0.00103	1	08/20/2021 08:43	WG1725617
Toluene	U		0.00134	0.00515	1	08/20/2021 08:43	WG1725617
Ethylbenzene	U		0.000759	0.00257	1	08/20/2021 08:43	WG1725617
Total Xylenes	U		0.000906	0.00669	1	08/20/2021 08:43	WG1725617
(S) Toluene-d8	*96.9*			*75.0-131*		*08/20/2021 08:43*	WG1725617
(S) 4-Bromofluorobenzene	*102*			*67.0-138*		*08/20/2021 08:43*	WG1725617
(S) 1,2-Dichloroethane-d4	*92.9*			*70.0-130*		*08/20/2021 08:43*	WG1725617

Semi-Volatile Organic Compounds (GC) by Method 8015M

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	1.63	4.06	1	08/26/2021 12:47	WG1729347
C28-C36 Motor Oil Range	9.07		0.278	4.06	1	08/26/2021 12:47	WG1729347
(S) o-Terphenyl	*68.3*			*18.0-148*		*08/26/2021 12:47*	WG1729347

Total Solids by Method 2540 G-2011

Analyte	Result	Qualifier	Dilution	Analysis	Batch
	%			date / time	
Total Solids	98.4		1	08/20/2021 15:49	WG1726129

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	11.9	J	9.35	20.3	1	08/19/2021 04:29	WG1725360

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

Analyte	Result (dry)	Qualifier	MDL (dry)	RDL (dry)	Dilution	Analysis	Batch
	mg/kg		mg/kg	mg/kg		date / time	
TPH (GC/FID) Low Fraction	0.0421	B J	0.0221	0.102	1	08/18/2021 05:02	WG1724907
(S) a,a,a-Trifluorotoluene(FID)	*99.2*			*77.0-120*		*08/18/2021 05:02*	WG1724907

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	08/20/2021 08:24	WG1725617
Toluene	U		0.00134	0.00516	1	08/20/2021 08:24	WG1725617
Ethylbenzene	U		0.000761	0.00258	1	08/20/2021 08:24	WG1725617
Total Xylenes	U		0.000909	0.00671	1	08/20/2021 08:24	WG1725617
(S) Toluene-d8	*93.4*			*75.0-131*		*08/20/2021 08:24*	WG1725617
(S) 4-Bromofluorobenzene	*103*			*67.0-138*		*08/20/2021 08:24*	WG1725617
(S) 1,2-Dichloroethane-d4	*97.1*			*70.0-130*		*08/20/2021 08:24*	WG1725617

Semi-Volatile Organic Compounds (GC) by Method 8015M

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	08/26/2021 13:00	WG1729347
C28-C36 Motor Oil Range	5.76		0.278	4.06	1	08/26/2021 13:00	WG1729347
(S) o-Terphenyl	*72.0*			*18.0-148*		*08/26/2021 13:00*	WG1729347

Total Solids by Method 2540 G-2011

Analyte	Result	Qualifier	Dilution	Analysis	Batch
	%			date / time	
Total Solids	98.5		1	08/20/2021 15:49	WG1726129

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	57.2		9.34	20.3	1	08/19/2021 04:38	WG1725360

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	0.0589	B J	0.0220	0.102	1	08/18/2021 05:26	WG1724907
(S) a,a,a-Trifluorotoluene(FID)	*98.8*			*77.0-120*		*08/18/2021 05:26*	WG1724907

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	J3	0.000481	0.00103	1	08/20/2021 17:10	WG1726892
Toluene	U	J3	0.00134	0.00515	1	08/20/2021 17:10	WG1726892
Ethylbenzene	U	J3	0.000759	0.00258	1	08/20/2021 17:10	WG1726892
Total Xylenes	0.00456	J	0.000907	0.00670	1	08/22/2021 20:59	WG1727570
(S) Toluene-d8	*107*			*75.0-131*		*08/20/2021 17:10*	WG1726892
(S) Toluene-d8	*95.9*			*75.0-131*		*08/22/2021 20:59*	WG1727570
(S) 4-Bromofluorobenzene	*82.1*			*67.0-138*		*08/20/2021 17:10*	WG1726892
(S) 4-Bromofluorobenzene	*101*			*67.0-138*		*08/22/2021 20:59*	WG1727570
(S) 1,2-Dichloroethane-d4	*112*			*70.0-130*		*08/20/2021 17:10*	WG1726892
(S) 1,2-Dichloroethane-d4	*87.0*			*70.0-130*		*08/22/2021 20:59*	WG1727570

Semi-Volatile Organic Compounds (GC) by Method 8015M

Analyte	Result (dry)	Qualifier	MDL (dry)	RDL (dry)	Dilution	Analysis	Batch
	mg/kg		mg/kg	mg/kg		date / time	
C10-C28 Diesel Range	4.67		1.63	4.06	1	08/27/2021 12:24	WG1729347
C28-C36 Motor Oil Range	24.2		0.278	4.06	1	08/27/2021 12:24	WG1729347
(S) o-Terphenyl	*97.2*			*18.0-148*		*08/27/2021 12:24*	WG1729347

Total Solids by Method 2540 G-2011

Analyte	Result	Qualifier	Dilution	Analysis	Batch
	%			date / time	
Total Solids	94.3		1	08/20/2021 15:41	WG1726130

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	690		97.5	212	10	08/19/2021 04:48	WG1725360

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	0.0462	B J	0.0230	0.106	1	08/18/2021 05:49	WG1724907
(S) a,a,a-Trifluorotoluene(FID)	*99.9*			*77.0-120*		*08/18/2021 05:49*	WG1724907

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	08/20/2021 17:29	WG1726892
Toluene	U		0.00146	0.00560	1	08/20/2021 17:29	WG1726892
Ethylbenzene	U		0.000825	0.00280	1	08/20/2021 17:29	WG1726892
Total Xylenes	0.00227	J	0.000986	0.00728	1	08/22/2021 21:18	WG1727570
(S) Toluene-d8	*105*			*75.0-131*		*08/20/2021 17:29*	WG1726892
(S) Toluene-d8	*96.3*			*75.0-131*		*08/22/2021 21:18*	WG1727570
(S) 4-Bromofluorobenzene	*83.0*			*67.0-138*		*08/20/2021 17:29*	WG1726892
(S) 4-Bromofluorobenzene	*102*			*67.0-138*		*08/22/2021 21:18*	WG1727570
(S) 1,2-Dichloroethane-d4	*118*			*70.0-130*		*08/20/2021 17:29*	WG1726892
(S) 1,2-Dichloroethane-d4	*88.9*			*70.0-130*		*08/22/2021 21:18*	WG1727570

Semi-Volatile Organic Compounds (GC) by Method 8015M

Analyte	Result (dry)	Qualifier	MDL (dry)	RDL (dry)	Dilution	Analysis	Batch
	mg/kg		mg/kg	mg/kg		date / time	
C10-C28 Diesel Range	U		1.71	4.24	1	08/26/2021 13:14	WG1729347
C28-C36 Motor Oil Range	6.11		0.290	4.24	1	08/26/2021 13:14	WG1729347
(S) o-Terphenyl	*65.0*			*18.0-148*		*08/26/2021 13:14*	WG1729347

Total Solids by Method 2540 G-2011

Analyte	Result	Qualifier	Dilution	Analysis	Batch
	%			date / time	
Total Solids	97.8		1	08/20/2021 15:41	WG1726130

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	19.8	J	9.41	20.5	1	08/19/2021 04:57	WG1725360

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	0.0559	B J	0.0222	0.102	1	08/18/2021 06:13	WG1724907
(S) a,a,a-Trifluorotoluene(FID)	*98.8*			*77.0-120*		*08/18/2021 06:13*	WG1724907

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

Analyte	Result (dry)	Qualifier	MDL (dry)	RDL (dry)	Dilution	Analysis	Batch
	mg/kg		mg/kg	mg/kg		date / time	
Benzene	U		0.000488	0.00105	1	08/20/2021 17:48	WG1726892
Toluene	U		0.00136	0.00523	1	08/20/2021 17:48	WG1726892
Ethylbenzene	U		0.000771	0.00261	1	08/20/2021 17:48	WG1726892
Total Xylenes	0.00214	J	0.000920	0.00680	1	08/22/2021 21:37	WG1727570
(S) Toluene-d8	*105*			*75.0-131*		*08/20/2021 17:48*	WG1726892
(S) Toluene-d8	*93.5*			*75.0-131*		*08/22/2021 21:37*	WG1727570
(S) 4-Bromofluorobenzene	*80.9*			*67.0-138*		*08/20/2021 17:48*	WG1726892
(S) 4-Bromofluorobenzene	*107*			*67.0-138*		*08/22/2021 21:37*	WG1727570
(S) 1,2-Dichloroethane-d4	*119*			*70.0-130*		*08/20/2021 17:48*	WG1726892
(S) 1,2-Dichloroethane-d4	*91.0*			*70.0-130*		*08/22/2021 21:37*	WG1727570

Semi-Volatile Organic Compounds (GC) by Method 8015M

Analyte	Result (dry)	Qualifier	MDL (dry)	RDL (dry)	Dilution	Analysis	Batch
	mg/kg		mg/kg	mg/kg		date / time	
C10-C28 Diesel Range	2.27	J	1.65	4.09	1	08/26/2021 13:28	WG1729347
C28-C36 Motor Oil Range	6.54		0.280	4.09	1	08/26/2021 13:28	WG1729347
(S) o-Terphenyl	*64.9*			*18.0-148*		*08/26/2021 13:28*	WG1729347

Method Blank (MB)

(MB) R3695085-1 08/20/21 16:00

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

L1390689-01 Original Sample (OS) • Duplicate (DUP)

(OS) L1390689-01 08/20/21 16:00 • (DUP) R3695085-3 08/20/21 16:00

Analyte	Original Result %	DUP Result %	Dilution	DUP RPD %	DUP Qualifier	DUP RPD Limits %
Total Solids	85.4	86.2	1	0.973		10

Laboratory Control Sample (LCS)

(LCS) R3695085-2 08/20/21 16:00

Analyte	Spike Amount %	LCS Result %	LCS Rec. %	Rec. Limits %	LCS Qualifier
Total Solids	50.0	50.1	100	85.0-115	

Method Blank (MB)

(MB) R3695084-1 08/20/21 15:49

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

L1390780-11 Original Sample (OS) • Duplicate (DUP)

(OS) L1390780-11 08/20/21 15:49 • (DUP) R3695084-3 08/20/21 15:49

Analyte	Original Result %	DUP Result %	Dilution	DUP RPD %	DUP Qualifier	DUP RPD Limits %
Total Solids	98.4	98.3	1	0.0615		10

Laboratory Control Sample (LCS)

(LCS) R3695084-2 08/20/21 15:49

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) R3695071-1 08/20/21 15:41

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

L1390782-01 Original Sample (OS) • Duplicate (DUP)

(OS) L1390782-01 08/20/21 15:41 • (DUP) R3695071-3 08/20/21 15:41

Analyte	Original Result %	DUP Result %	Dilution	DUP RPD %	DUP Qualifier	DUP RPD Limits %
Total Solids	87.0	85.6	1	1.68		10

Laboratory Control Sample (LCS)

(LCS) R3695071-2 08/20/21 15:41

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) R3695260-1 08/19/21 00:08

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

L1390780-03 Original Sample (OS) • Duplicate (DUP)

(OS) L1390780-03 08/19/21 02:25 • (DUP) R3695260-3 08/19/21 02:35

Analyte	Original Result (dry) mg/kg	DUP Result (dry) mg/kg	Dilution	DUP RPD %	DUP Qualifier	DUP RPD Limits %
Chloride	9.56	U	1	200	P1	20

L1390810-01 Original Sample (OS) • Duplicate (DUP)

(OS) L1390810-01 08/19/21 05:07 • (DUP) R3695260-6 08/19/21 05:36

Analyte	Original Result (dry) mg/kg	DUP Result (dry) mg/kg	Dilution	DUP RPD %	DUP Qualifier	DUP RPD Limits %
Chloride	6800	7150	20	4.91		20

Laboratory Control Sample (LCS)

(LCS) R3695260-2 08/19/21 00:17

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

L1390780-03 Original Sample (OS) • Matrix Spike (MS) • Matrix Spike Duplicate (MSD)

(OS) L1390780-03 08/19/21 02:25 • (MS) R3695260-4 08/19/21 02:44 • (MSD) R3695260-5 08/19/21 02:54

Analyte	Spike Amount (dry) mg/kg	Original Result (dry) mg/kg	MS Result (dry) mg/kg	MSD Result (dry) mg/kg	MS Rec. %	MSD Rec. %	Dilution	Rec. Limits %	MS Qualifier	MSD Qualifier	RPD %	RPD Limits %
Chloride	510	9.56	528	522	102	101	1	80.0-120			1.11	20

Method Blank (MB)

(MB) R3693666-3 08/17/21 21:13

Analyte	MB Result mg/kg	MB Qualifier	MB MDL mg/kg	MB RDL mg/kg
TPH (GC/FID) Low Fraction	0.0450	J	0.0217	0.100
(S) a,a,a-Trifluorotoluene(FID)	*101*			*77.0-120*

Laboratory Control Sample (LCS)

(LCS) R3693666-2 08/17/21 20:21

Analyte	Spike Amount mg/kg	LCS Result mg/kg	LCS Rec. %	Rec. Limits %	LCS Qualifier
TPH (GC/FID) Low Fraction	5.50	5.52	100	72.0-127	
(S) a,a,a-Trifluorotoluene(FID)			*110*	*77.0-120*	

Method Blank (MB)

(MB) R3694840-3 08/18/21 16:57

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	*96.9*			*75.0-131*
(S) 4-Bromofluorobenzene	*91.4*			*67.0-138*
(S) 1,2-Dichloroethane-d4	*104*			*70.0-130*

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

(LCS) R3694840-1 08/18/21 15:41 • (LCSD) R3694840-2 08/18/21 16:00

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	0.126	0.121	101	96.8	70.0-123			4.05	20
Ethylbenzene	0.125	0.115	0.108	92.0	86.4	74.0-126			6.28	20
Toluene	0.125	0.112	0.112	89.6	89.6	75.0-121			0.000	20
Xylenes, Total	0.375	0.357	0.331	95.2	88.3	72.0-127			7.56	20
(S) Toluene-d8				*92.0*	*96.9*	*75.0-131*				
(S) 4-Bromofluorobenzene				*87.3*	*93.9*	*67.0-138*				
(S) 1,2-Dichloroethane-d4				*119*	*119*	*70.0-130*				

Method Blank (MB)

(MB) R3694943-3 08/20/21 04:35

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	*94.6*			*75.0-131*
(S) 4-Bromofluorobenzene	*99.5*			*67.0-138*
(S) 1,2-Dichloroethane-d4	*74.9*			*70.0-130*

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

(LCS) R3694943-1 08/20/21 03:00 • (LCSD) R3694943-2 08/20/21 03:19

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	0.136	0.141	109	113	70.0-123			3.61	20
Ethylbenzene	0.125	0.120	0.128	96.0	102	74.0-126			6.45	20
Toluene	0.125	0.120	0.126	96.0	101	75.0-121			4.88	20
Xylenes, Total	0.375	0.357	0.367	95.2	97.9	72.0-127			2.76	20
(S) Toluene-d8				*95.6*	*95.6*	*75.0-131*				
(S) 4-Bromofluorobenzene				*98.9*	*103*	*67.0-138*				
(S) 1,2-Dichloroethane-d4				*92.7*	*92.8*	*70.0-130*				

Method Blank (MB)

(MB) R3694978-2 08/20/21 12:57

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
(S) Toluene-d8	*106*			*75.0-131*
(S) 4-Bromofluorobenzene	*81.1*			*67.0-138*
(S) 1,2-Dichloroethane-d4	*116*			*70.0-130*

Laboratory Control Sample (LCS)

(LCS) R3694978-1 08/20/21 12:19

Analyte	Spike Amount mg/kg	LCS Result mg/kg	LCS Rec. %	Rec. Limits %	LCS Qualifier
Benzene	0.125	0.112	89.6	70.0-123	
Ethylbenzene	0.125	0.103	82.4	74.0-126	
Toluene	0.125	0.116	92.8	75.0-121	
(S) Toluene-d8			*103*	*75.0-131*	
(S) 4-Bromofluorobenzene			*87.3*	*67.0-138*	
(S) 1,2-Dichloroethane-d4			*125*	*70.0-130*	

L1390780-12 Original Sample (OS) • Matrix Spike (MS) • Matrix Spike Duplicate (MSD)

(OS) L1390780-12 08/20/21 17:10 • (MS) R3694978-3 08/20/21 23:09 • (MSD) R3694978-4 08/20/21 23:28

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	0.128	U	0.0665	0.116	52.0	91.1	1	10.0-149		J3	54.6	37
Ethylbenzene	0.128	U	0.0586	0.102	45.9	80.0	1	10.0-160		J3	54.2	38
Toluene	0.128	U	0.0679	0.120	53.1	93.5	1	10.0-156		J3	55.1	38
(S) Toluene-d8					*101*	*102*		*75.0-131*				
(S) 4-Bromofluorobenzene					*87.1*	*87.6*		*67.0-138*				
(S) 1,2-Dichloroethane-d4					*106*	*109*		*70.0-130*				

Method Blank (MB)

(MB) R3695091-3 08/22/21 18:26

Analyte	MB Result mg/kg	MB Qualifier	MB MDL mg/kg	MB RDL mg/kg
Xylenes, Total	U		0.000880	0.00650
(S) Toluene-d8	*92.2*			*75.0-131*
(S) 4-Bromofluorobenzene	*106*			*67.0-138*
(S) 1,2-Dichloroethane-d4	*106*			*70.0-130*

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

(LCS) R3695091-1 08/22/21 17:10 • (LCSD) R3695091-2 08/22/21 17:29

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 %
Xylenes, Total	0.375	0.350	0.326	93.3	86.9	72.0-127			7.10	20
(S) Toluene-d8				*92.1*	*94.1*	*75.0-131*				
(S) 4-Bromofluorobenzene				*98.7*	*100*	*67.0-138*				
(S) 1,2-Dichloroethane-d4				*97.6*	*99.6*	*70.0-130*				

Method Blank (MB)

(MB) R3696850-1 08/25/21 14:58

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-C36 Motor Oil Range	U		0.274	4.00
(S) o-Terphenyl	*71.2*			*18.0-148*

Laboratory Control Sample (LCS)

(LCS) R3696850-2 08/25/21 15:11

Analyte	Spike Amount mg/kg	LCS Result mg/kg	LCS Rec. %	Rec. Limits %	LCS Qualifier
C10-C28 Diesel Range	50.0	38.3	76.6	50.0-150	
(S) o-Terphenyl			*77.9*	*18.0-148*	

L1393830-02 Original Sample (OS) • Matrix Spike (MS) • Matrix Spike Duplicate (MSD)

(OS) L1393830-02 08/25/21 16:34 • (MS) R3696850-3 08/25/21 16:47 • (MSD) R3696850-4 08/25/21 17:01

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 %
C10-C28 Diesel Range	54.5	41.7	81.9	71.7	73.8	55.5	2	50.0-150			13.4	20
(S) o-Terphenyl					*62.2*	*61.3*		*18.0-148*				

Method Blank (MB)

(MB) R3696697-1 08/26/21 04:06

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-C36 Motor Oil Range	U		0.274	4.00
(S) o-Terphenyl	*61.3*			*18.0-148*

Laboratory Control Sample (LCS)

(LCS) R3696697-2 08/26/21 04:20

Analyte	Spike Amount mg/kg	LCS Result mg/kg	LCS Rec. %	Rec. Limits %	LCS Qualifier
C10-C28 Diesel Range	50.0	41.0	82.0	50.0-150	
(S) o-Terphenyl			*58.4*	*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.
J3	The associated batch QC was outside the established quality control range for precision.
P1	RPD value not applicable for sample concentrations less than 5 times the reporting limit.

Pace Analytical National 12065 Lebanon Rd Mount Juliet, TN 37122

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

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

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

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

Analysis Request of Chain of Custody Record

L1390780

Page : 1 of 2

Tetra Tech, Inc.

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

Client Name:	Conoco Phillips	**Site Manager:**	Christian Llull
Project Name:	MCA 478 Injection Line Release	**Contact Info:**	Email: Christian.Llull@tetratech.com Phone: (512) 565-0190
Project Location: (county, state)	Lea County, New Mexico	**Project #:**	212C-MD-02505
Invoice to:	Accounts Payable 901 West Wall Street, Suite 100 Midland, Texas 79701		
Receiving Laboratory:	Pace Analytical	**Sampler Signature:**	Andrew Garcia

Comments: COPTETRA Acctnum

ANALYSIS REQUEST
(Circle or Specify Method No.)

LAB # (LAB USE ONLY)	SAMPLE IDENTIFICATION	SAMPLING YEAR: 2021 DATE	SAMPLING TIME	MATRIX: WATER	MATRIX: SOIL	MATRIX:	PRESERVATIVE METHOD: HCL	PRESERVATIVE METHOD: 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
	AH-1 (0'-1')	08/12/21	830		X				X			1	N	X		X												X		-01				
	AH-1 (2'-3')	08/12/21	900		X				X			1	N	X		X												X		-02				
	AH-2 (0'-1')	08/12/21	930		X				X			1	N	X		X												X		-03				
	AH-2 (2'-3')	08/12/21	1000		X				X			1	N	X		X												X		-04				
	AH-3 (0'-1')	08/12/21	1030		X				X			1	N	X		X												X		-05				
	AH-3 (2'-3')	08/12/21	1100		X				X			1	N	X		X												X		-06				
	AH-4 (0'-1')	08/12/21	1130		X				X			1	N	X		X												X		-07				
	AH-4 (2'-3')	08/12/21	1200		X				X			1	N	X		X												X		-08				
	AH-5 (0'-1')	08/12/21	1230		X				X			1	N	X		X												X		-09				
	AH-5 (2'-3')	08/12/21	1300		X				X			1	N	X		X												X		-10				

Relinquished by:	Date:	Time:	Received by:	Date:	Time:
Andrew Garcia	12-Aug-21			8-13-21	14:00
	8-13-21	16:35	SLA	8/3/21	16:35
				8/14/21	0945

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 #: _____

H160

4.3+0=4.3 AOBL

Analysis Request of Chain of Custody Record

L1390780

Page : 2 of 2

Tetra Tech, Inc.

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

Client Name:	Conoco Phillips	**Site Manager:**	Christian Llull
Project Name:	MCA 478 Injection Line Release	**Contact Info:**	Email: Christian.Llull@tetratech.com Phone: (512) 565-0190
Project Location: (county, state)	Lea County, New Mexico	**Project #:**	212C-MD-02505
Invoice to:	Accounts Payable 901 West Wall Street, Suite 100 Midland, Texas 79701		
Receiving Laboratory:	Pace Analytical	**Sampler Signature:**	Andrew Garcia

Comments: COPTETRA Acctnum

ANALYSIS REQUEST
(Circle or Specify Method No.)

LAB # (LAB USE ONLY)	SAMPLE IDENTIFICATION	SAMPLING YEAR: 2021 DATE	SAMPLING TIME	MATRIX: WATER	MATRIX: SOIL	MATRIX:	PRESERVATIVE METHOD: HCL	PRESERVATIVE METHOD: 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
	AH-6 (0'-1')	08/12/21	1330		X				X			1	N	X		X												X		-	11			
	AH-7 (0'-1')	08/12/21	1400		X				X			1	N	X		X												X		-	12			
	AH-8 (0'-1')	08/12/21	1430		X				X			1	N	X		X												X		-	13			
	AH-8 (2'-3')	08/12/21	1500		X				X			1	N	X		X												X		-	14			

Relinquished by: Andrew Garcia	Date: 12-Aug-21	Time:	Received by:	Date: 8-13-21	Time: 14:45
Relinquished by:	Date: 8-13-21	Time: 16:30	Received by: SCVA	Date: 8-13-21	Time: 1630
Relinquished by:	Date:	Time:	Received by:	Date: 8/14/21	Time: 0945

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 #: _____

4.3+0=4.3 AGBL

Pace Analytical National Center for Testing & Innovation
Cooler Receipt Form

Client: JAB	L1390780
Cooler Received/Opened On: 11/14/21 Temperature:	4.3 ±0 = 4.3
Received By: Jeff Ar	
Signature:	

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

Pace Analytical®

ANALYTICAL REPORT

September 14, 2021

Revised Report

ConocoPhillips - Tetra Tech

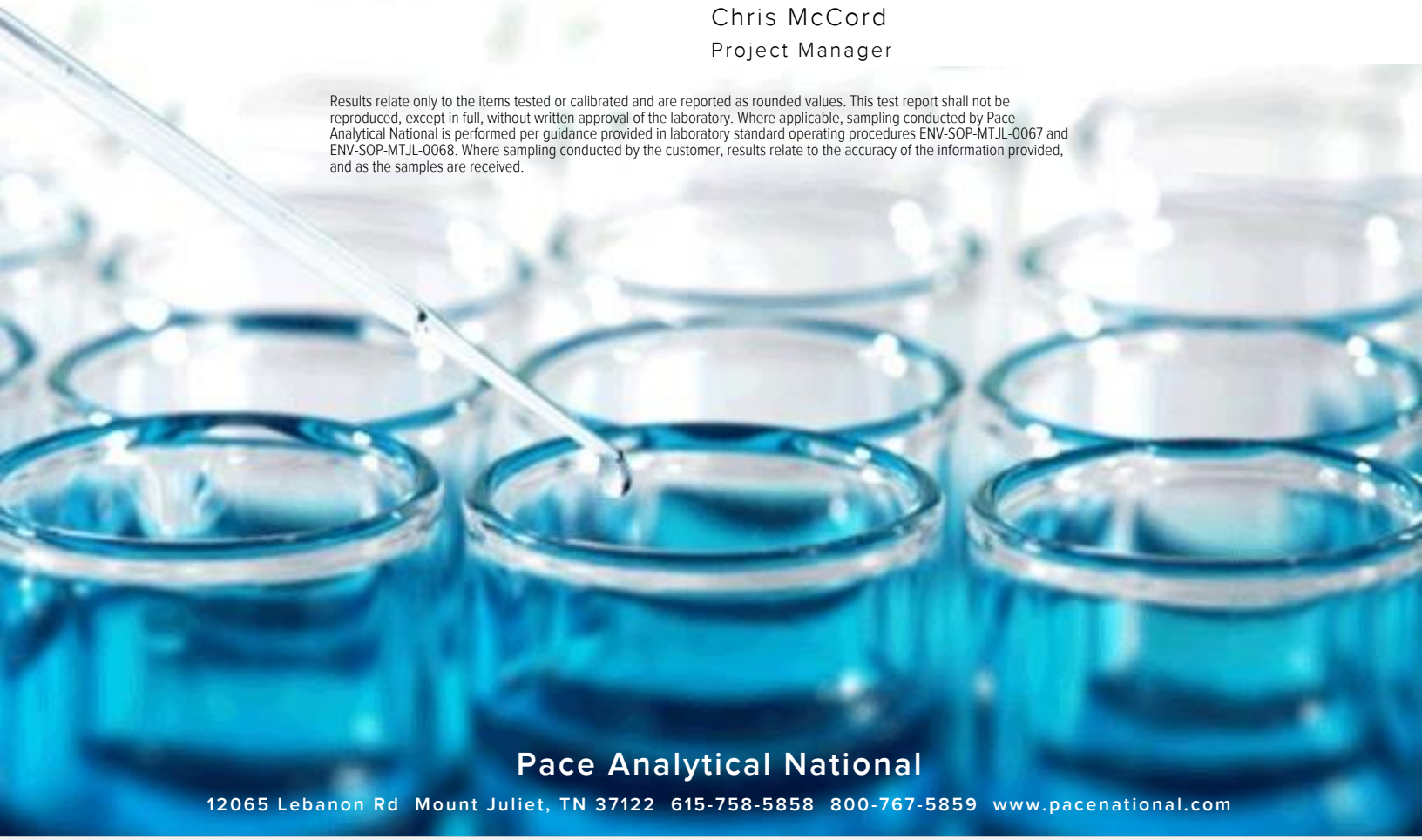
Sample Delivery Group:	L1393283
Samples Received:	08/20/2021
Project Number:	212C-MD-02505
Description:	MCA 478 Flowline Release

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.



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

TABLE OF CONTENTS

BH-1 (0-1') L1393283-01 Solid

Collected by: Devin Dominguez | Collected date/time: 08/18/21 12:00 | Received date/time: 08/20/21 08:00

Method	Batch	Dilution	Preparation date/time	Analysis date/time	Analyst	Location
Total Solids by Method 2540 G-2011	WG1730096	1	08/27/21 09:14	08/27/21 09:20	KDW	Mt. Juliet, TN
Wet Chemistry by Method 300.0	WG1729560	1	08/26/21 10:12	08/26/21 15:42	MCG	Mt. Juliet, TN
Volatile Organic Compounds (GC) by Method 8015D/GRO	WG1729237	1	08/24/21 16:29	08/27/21 04:32	MGF	Mt. Juliet, TN
Volatile Organic Compounds (GC/MS) by Method 8260B	WG1729528	1	08/24/21 16:29	08/25/21 19:53	DWR	Mt. Juliet, TN
Semi-Volatile Organic Compounds (GC) by Method 8015M	WG1731366	1	08/31/21 20:54	09/02/21 17:10	TJD	Mt. Juliet, TN

BH-1 (2'-3') L1393283-02 Solid

Collected by: Devin Dominguez | Collected date/time: 08/18/21 12:05 | Received date/time: 08/20/21 08:00

Method	Batch	Dilution	Preparation date/time	Analysis date/time	Analyst	Location
Total Solids by Method 2540 G-2011	WG1730096	1	08/27/21 09:14	08/27/21 09:20	KDW	Mt. Juliet, TN
Wet Chemistry by Method 300.0	WG1729560	1	08/26/21 10:12	08/26/21 16:10	MCG	Mt. Juliet, TN
Volatile Organic Compounds (GC) by Method 8015D/GRO	WG1729237	1	08/24/21 16:29	08/27/21 04:54	MGF	Mt. Juliet, TN
Volatile Organic Compounds (GC/MS) by Method 8260B	WG1729528	1	08/24/21 16:29	08/25/21 20:12	DWR	Mt. Juliet, TN
Semi-Volatile Organic Compounds (GC) by Method 8015M	WG1731366	1	08/31/21 20:54	09/02/21 17:53	CAG	Mt. Juliet, TN
Semi-Volatile Organic Compounds (GC) by Method 8015M	WG1735354	1	09/05/21 16:09	09/06/21 15:11	JN	Mt. Juliet, TN

BH-1 (4'-5') L1393283-03 Solid

Collected by: Devin Dominguez | Collected date/time: 08/18/21 12:10 | Received date/time: 08/20/21 08:00

Method	Batch	Dilution	Preparation date/time	Analysis date/time	Analyst	Location
Total Solids by Method 2540 G-2011	WG1730096	1	08/27/21 09:14	08/27/21 09:20	KDW	Mt. Juliet, TN
Wet Chemistry by Method 300.0	WG1729560	5	08/26/21 10:12	08/26/21 16:48	MCG	Mt. Juliet, TN
Volatile Organic Compounds (GC) by Method 8015D/GRO	WG1729237	1	08/24/21 16:29	08/27/21 05:15	MGF	Mt. Juliet, TN
Volatile Organic Compounds (GC/MS) by Method 8260B	WG1729528	1	08/24/21 16:29	08/25/21 20:31	DWR	Mt. Juliet, TN
Semi-Volatile Organic Compounds (GC) by Method 8015M	WG1731366	1	08/31/21 20:54	09/02/21 18:21	TJD	Mt. Juliet, TN

BH-1 (6'-7') L1393283-04 Solid

Collected by: Devin Dominguez | Collected date/time: 08/18/21 12:15 | Received date/time: 08/20/21 08:00

Method	Batch	Dilution	Preparation date/time	Analysis date/time	Analyst	Location
Total Solids by Method 2540 G-2011	WG1730096	1	08/27/21 09:14	08/27/21 09:20	KDW	Mt. Juliet, TN
Wet Chemistry by Method 300.0	WG1729560	1	08/26/21 10:12	08/26/21 16:58	MCG	Mt. Juliet, TN
Volatile Organic Compounds (GC) by Method 8015D/GRO	WG1729237	1	08/24/21 16:29	08/27/21 05:37	MGF	Mt. Juliet, TN
Volatile Organic Compounds (GC/MS) by Method 8260B	WG1729528	1	08/24/21 16:29	08/25/21 20:50	DWR	Mt. Juliet, TN
Semi-Volatile Organic Compounds (GC) by Method 8015M	WG1731366	1	08/31/21 20:54	09/02/21 18:07	CAG	Mt. Juliet, TN
Semi-Volatile Organic Compounds (GC) by Method 8015M	WG1735354	1	09/05/21 16:09	09/06/21 14:18	JN	Mt. Juliet, TN

BH-1 (9'-10') L1393283-05 Solid

Collected by: Devin Dominguez | Collected date/time: 08/18/21 12:20 | Received date/time: 08/20/21 08:00

Method	Batch	Dilution	Preparation date/time	Analysis date/time	Analyst	Location
Total Solids by Method 2540 G-2011	WG1730096	1	08/27/21 09:14	08/27/21 09:20	KDW	Mt. Juliet, TN
Wet Chemistry by Method 300.0	WG1729561	1	08/25/21 21:05	08/26/21 00:07	ELN	Mt. Juliet, TN
Volatile Organic Compounds (GC) by Method 8015D/GRO	WG1729237	1	08/24/21 16:29	08/27/21 05:58	MGF	Mt. Juliet, TN
Volatile Organic Compounds (GC/MS) by Method 8260B	WG1729528	1	08/24/21 16:29	08/25/21 21:09	DWR	Mt. Juliet, TN
Semi-Volatile Organic Compounds (GC) by Method 8015M	WG1731366	1	08/31/21 20:54	09/02/21 16:56	TJD	Mt. Juliet, TN

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

BH-1 (14'-15') L1393283-06 Solid

Collected by: Devin Dominguez | Collected date/time: 08/18/21 12:25 | Received date/time: 08/20/21 08:00

Method	Batch	Dilution	Preparation date/time	Analysis date/time	Analyst	Location
Total Solids by Method 2540 G-2011	WG1730097	1	08/27/21 09:04	08/27/21 09:12	KDW	Mt. Juliet, TN
Wet Chemistry by Method 300.0	WG1729561	1	08/25/21 21:05	08/26/21 00:16	ELN	Mt. Juliet, TN
Volatile Organic Compounds (GC) by Method 8015D/GRO	WG1729237	1	08/24/21 16:29	08/27/21 06:20	MGF	Mt. Juliet, TN
Volatile Organic Compounds (GC/MS) by Method 8260B	WG1729549	1	08/24/21 16:29	08/26/21 09:39	ACG	Mt. Juliet, TN
Semi-Volatile Organic Compounds (GC) by Method 8015M	WG1731366	1	08/31/21 20:54	09/02/21 16:27	TJD	Mt. Juliet, TN

BH-1 (19'-20') L1393283-07 Solid

Collected by: Devin Dominguez | Collected date/time: 08/18/21 12:30 | Received date/time: 08/20/21 08:00

Method	Batch	Dilution	Preparation date/time	Analysis date/time	Analyst	Location
Total Solids by Method 2540 G-2011	WG1730097	1	08/27/21 09:04	08/27/21 09:12	KDW	Mt. Juliet, TN
Wet Chemistry by Method 300.0	WG1729561	1	08/25/21 21:05	08/26/21 00:25	ELN	Mt. Juliet, TN
Volatile Organic Compounds (GC) by Method 8015D/GRO	WG1729237	1	08/24/21 16:29	08/27/21 06:41	MGF	Mt. Juliet, TN
Volatile Organic Compounds (GC/MS) by Method 8260B	WG1729549	1	08/24/21 16:29	08/26/21 09:58	ACG	Mt. Juliet, TN
Semi-Volatile Organic Compounds (GC) by Method 8015M	WG1731366	1	08/31/21 20:54	09/02/21 15:59	TJD	Mt. Juliet, TN

BH-2 (0-1') L1393283-08 Solid

Collected by: Devin Dominguez | Collected date/time: 08/18/21 12:35 | Received date/time: 08/20/21 08:00

Method	Batch	Dilution	Preparation date/time	Analysis date/time	Analyst	Location
Total Solids by Method 2540 G-2011	WG1730097	1	08/27/21 09:04	08/27/21 09:12	KDW	Mt. Juliet, TN
Wet Chemistry by Method 300.0	WG1729561	10	08/25/21 21:05	08/26/21 00:35	ELN	Mt. Juliet, TN
Volatile Organic Compounds (GC) by Method 8015D/GRO	WG1729237	1	08/24/21 16:29	08/27/21 07:03	MGF	Mt. Juliet, TN
Volatile Organic Compounds (GC/MS) by Method 8260B	WG1729549	1	08/24/21 16:29	08/26/21 10:18	ACG	Mt. Juliet, TN
Semi-Volatile Organic Compounds (GC) by Method 8015M	WG1731366	1	08/31/21 20:54	09/02/21 18:49	TJD	Mt. Juliet, TN

BH-2 (2'-3') L1393283-09 Solid

Collected by: Devin Dominguez | Collected date/time: 08/18/21 12:40 | Received date/time: 08/20/21 08:00

Method	Batch	Dilution	Preparation date/time	Analysis date/time	Analyst	Location
Total Solids by Method 2540 G-2011	WG1730097	1	08/27/21 09:04	08/27/21 09:12	KDW	Mt. Juliet, TN
Wet Chemistry by Method 300.0	WG1729561	10	08/25/21 21:05	08/26/21 00:44	ELN	Mt. Juliet, TN
Volatile Organic Compounds (GC) by Method 8015D/GRO	WG1729237	1	08/24/21 16:29	08/27/21 07:24	MGF	Mt. Juliet, TN
Volatile Organic Compounds (GC/MS) by Method 8260B	WG1729549	1	08/24/21 16:29	08/26/21 10:37	ACG	Mt. Juliet, TN
Semi-Volatile Organic Compounds (GC) by Method 8015M	WG1731366	1	08/31/21 20:54	09/02/21 18:35	TJD	Mt. Juliet, TN

BH-2 (4'-5') L1393283-10 Solid

Collected by: Devin Dominguez | Collected date/time: 08/18/21 12:45 | Received date/time: 08/20/21 08:00

Method	Batch	Dilution	Preparation date/time	Analysis date/time	Analyst	Location
Total Solids by Method 2540 G-2011	WG1730097	1	08/27/21 09:04	08/27/21 09:12	KDW	Mt. Juliet, TN
Wet Chemistry by Method 300.0	WG1729561	10	08/25/21 21:05	08/26/21 00:54	ELN	Mt. Juliet, TN
Volatile Organic Compounds (GC) by Method 8015D/GRO	WG1729237	1	08/24/21 16:29	08/27/21 07:46	MGF	Mt. Juliet, TN
Volatile Organic Compounds (GC/MS) by Method 8260B	WG1729549	1	08/24/21 16:29	08/26/21 10:56	ACG	Mt. Juliet, TN
Semi-Volatile Organic Compounds (GC) by Method 8015M	WG1731366	1	08/31/21 20:54	09/02/21 16:42	CAG	Mt. Juliet, TN
Semi-Volatile Organic Compounds (GC) by Method 8015M	WG1735354	1	09/05/21 16:09	09/06/21 13:12	JN	Mt. Juliet, TN

BH-2 (6'-7') L1393283-11 Solid

Collected by: Devin Dominguez | Collected date/time: 08/18/21 12:50 | Received date/time: 08/20/21 08:00

Method	Batch	Dilution	Preparation date/time	Analysis date/time	Analyst	Location
Total Solids by Method 2540 G-2011	WG1730097	1	08/27/21 09:04	08/27/21 09:12	KDW	Mt. Juliet, TN
Wet Chemistry by Method 300.0	WG1729561	1	08/25/21 21:05	08/26/21 01:03	ELN	Mt. Juliet, TN
Volatile Organic Compounds (GC) by Method 8015D/GRO	WG1729237	1	08/24/21 16:29	08/27/21 08:07	MGF	Mt. Juliet, TN
Volatile Organic Compounds (GC/MS) by Method 8260B	WG1729549	1	08/24/21 16:29	08/26/21 11:16	ACG	Mt. Juliet, TN
Semi-Volatile Organic Compounds (GC) by Method 8015M	WG1731366	1	08/31/21 20:54	09/02/21 15:02	TJD	Mt. Juliet, TN

BH-2 (9'-10') L1393283-12 Solid

Collected by: Devin Dominguez | Collected date/time: 08/18/21 12:55 | Received date/time: 08/20/21 08:00

Method	Batch	Dilution	Preparation date/time	Analysis date/time	Analyst	Location
Total Solids by Method 2540 G-2011	WG1730097	1	08/27/21 09:04	08/27/21 09:12	KDW	Mt. Juliet, TN
Wet Chemistry by Method 300.0	WG1729561	1	08/25/21 21:05	08/26/21 01:13	ELN	Mt. Juliet, TN
Volatile Organic Compounds (GC) by Method 8015D/GRO	WG1729237	1	08/24/21 16:29	08/27/21 08:29	MGF	Mt. Juliet, TN
Volatile Organic Compounds (GC/MS) by Method 8260B	WG1729549	1	08/24/21 16:29	08/26/21 11:35	ACG	Mt. Juliet, TN
Semi-Volatile Organic Compounds (GC) by Method 8015M	WG1731366	1	08/31/21 20:54	09/02/21 16:13	TJD	Mt. Juliet, TN

BH-2 (14'-15') L1393283-13 Solid

Collected by: Devin Dominguez | Collected date/time: 08/18/21 13:00 | Received date/time: 08/20/21 08:00

Method	Batch	Dilution	Preparation date/time	Analysis date/time	Analyst	Location
Total Solids by Method 2540 G-2011	WG1730097	1	08/27/21 09:04	08/27/21 09:12	KDW	Mt. Juliet, TN
Wet Chemistry by Method 300.0	WG1729561	1	08/25/21 21:05	08/26/21 01:41	ELN	Mt. Juliet, TN
Volatile Organic Compounds (GC) by Method 8015D/GRO	WG1729237	1	08/24/21 16:29	08/27/21 08:50	MGF	Mt. Juliet, TN
Volatile Organic Compounds (GC/MS) by Method 8260B	WG1729549	1	08/24/21 16:29	08/26/21 11:54	ACG	Mt. Juliet, TN
Semi-Volatile Organic Compounds (GC) by Method 8015M	WG1731366	1	08/31/21 20:54	09/02/21 15:16	TJD	Mt. Juliet, TN

BH-2 (19'-20') L1393283-14 Solid

Collected by: Devin Dominguez | Collected date/time: 08/18/21 13:05 | Received date/time: 08/20/21 08:00

Method	Batch	Dilution	Preparation date/time	Analysis date/time	Analyst	Location
Total Solids by Method 2540 G-2011	WG1730097	1	08/27/21 09:04	08/27/21 09:12	KDW	Mt. Juliet, TN
Wet Chemistry by Method 300.0	WG1729563	1	08/25/21 23:30	08/26/21 05:16	ELN	Mt. Juliet, TN
Volatile Organic Compounds (GC) by Method 8015D/GRO	WG1729237	1	08/24/21 16:29	08/27/21 09:12	MGF	Mt. Juliet, TN
Volatile Organic Compounds (GC/MS) by Method 8260B	WG1729549	1	08/24/21 16:29	08/26/21 12:13	ACG	Mt. Juliet, TN
Semi-Volatile Organic Compounds (GC) by Method 8015M	WG1731366	1	08/31/21 20:54	09/02/21 15:31	TJD	Mt. Juliet, TN

BH-2 (24'-25') L1393283-15 Solid

Collected by: Devin Dominguez | Collected date/time: 08/18/21 13:10 | Received date/time: 08/20/21 08:00

Method	Batch	Dilution	Preparation date/time	Analysis date/time	Analyst	Location
Total Solids by Method 2540 G-2011	WG1730097	1	08/27/21 09:04	08/27/21 09:12	KDW	Mt. Juliet, TN
Wet Chemistry by Method 300.0	WG1729563	1	08/25/21 23:30	08/26/21 05:26	ELN	Mt. Juliet, TN
Volatile Organic Compounds (GC) by Method 8015D/GRO	WG1729237	1	08/24/21 16:29	08/27/21 09:33	MGF	Mt. Juliet, TN
Volatile Organic Compounds (GC/MS) by Method 8260B	WG1729549	1	08/24/21 16:29	08/26/21 12:32	ACG	Mt. Juliet, TN
Semi-Volatile Organic Compounds (GC) by Method 8015M	WG1731366	1	08/31/21 20:54	09/02/21 15:45	TJD	Mt. Juliet, TN

BH-3 (0-1') L1393283-16 Solid

Collected by: Devin Dominguez | Collected date/time: 08/18/21 13:30 | Received date/time: 08/20/21 08:00

Method	Batch	Dilution	Preparation date/time	Analysis date/time	Analyst	Location
Total Solids by Method 2540 G-2011	WG1730098	1	08/27/21 10:19	08/27/21 10:25	KDW	Mt. Juliet, TN
Wet Chemistry by Method 300.0	WG1729563	1	08/25/21 23:30	08/26/21 05:35	ELN	Mt. Juliet, TN
Volatile Organic Compounds (GC) by Method 8015D/GRO	WG1729246	1	08/24/21 16:29	08/25/21 18:51	ACG	Mt. Juliet, TN
Volatile Organic Compounds (GC/MS) by Method 8260B	WG1729549	1	08/24/21 16:29	08/26/21 12:52	ACG	Mt. Juliet, TN
Semi-Volatile Organic Compounds (GC) by Method 8015M	WG1731366	1	08/31/21 20:54	09/02/21 19:04	TJD	Mt. Juliet, TN

BH-3 (2'-3') L1393283-17 Solid

Collected by: Devin Dominguez | Collected date/time: 08/18/21 13:35 | Received date/time: 08/20/21 08:00

Method	Batch	Dilution	Preparation date/time	Analysis date/time	Analyst	Location
Total Solids by Method 2540 G-2011	WG1730098	1	08/27/21 10:19	08/27/21 10:25	KDW	Mt. Juliet, TN
Wet Chemistry by Method 300.0	WG1729563	10	08/25/21 23:30	08/26/21 05:45	ELN	Mt. Juliet, TN
Volatile Organic Compounds (GC) by Method 8015D/GRO	WG1729246	1	08/24/21 16:29	08/25/21 19:13	ACG	Mt. Juliet, TN
Volatile Organic Compounds (GC/MS) by Method 8260B	WG1729549	1	08/24/21 16:29	08/26/21 13:11	ACG	Mt. Juliet, TN
Semi-Volatile Organic Compounds (GC) by Method 8015M	WG1731367	1	08/30/21 22:05	08/31/21 20:12	CAG	Mt. Juliet, TN

BH-3 (4'-5') L1393283-18 Solid

Collected by: Devin Dominguez | Collected date/time: 08/18/21 13:40 | Received date/time: 08/20/21 08:00

Method	Batch	Dilution	Preparation date/time	Analysis date/time	Analyst	Location
Total Solids by Method 2540 G-2011	WG1730098	1	08/27/21 10:19	08/27/21 10:25	KDW	Mt. Juliet, TN
Wet Chemistry by Method 300.0	WG1729563	10	08/25/21 23:30	08/26/21 05:54	ELN	Mt. Juliet, TN
Volatile Organic Compounds (GC) by Method 8015D/GRO	WG1729246	1	08/24/21 16:29	08/25/21 19:35	ACG	Mt. Juliet, TN
Volatile Organic Compounds (GC/MS) by Method 8260B	WG1729549	1	08/24/21 16:29	08/26/21 13:30	ACG	Mt. Juliet, TN
Semi-Volatile Organic Compounds (GC) by Method 8015M	WG1731372	1	08/30/21 16:00	08/31/21 08:49	CAG	Mt. Juliet, TN

BH-3 (6'-7') L1393283-19 Solid

Collected by: Devin Dominguez | Collected date/time: 08/18/21 13:45 | Received date/time: 08/20/21 08:00

Method	Batch	Dilution	Preparation date/time	Analysis date/time	Analyst	Location
Total Solids by Method 2540 G-2011	WG1730098	1	08/27/21 10:19	08/27/21 10:25	KDW	Mt. Juliet, TN
Wet Chemistry by Method 300.0	WG1729563	5	08/25/21 23:30	08/26/21 06:04	ELN	Mt. Juliet, TN
Volatile Organic Compounds (GC) by Method 8015D/GRO	WG1729246	1	08/24/21 16:29	08/25/21 19:57	ACG	Mt. Juliet, TN
Volatile Organic Compounds (GC/MS) by Method 8260B	WG1729549	1	08/24/21 16:29	08/26/21 13:50	ACG	Mt. Juliet, TN
Semi-Volatile Organic Compounds (GC) by Method 8015M	WG1731372	1	08/30/21 16:00	08/31/21 04:42	CAG	Mt. Juliet, TN

BH-3 (9'-10') L1393283-20 Solid

Collected by: Devin Dominguez | Collected date/time: 08/18/21 13:50 | Received date/time: 08/20/21 08:00

Method	Batch	Dilution	Preparation date/time	Analysis date/time	Analyst	Location
Total Solids by Method 2540 G-2011	WG1730098	1	08/27/21 10:19	08/27/21 10:25	KDW	Mt. Juliet, TN
Wet Chemistry by Method 300.0	WG1729563	1	08/25/21 23:30	08/26/21 06:13	ELN	Mt. Juliet, TN
Volatile Organic Compounds (GC) by Method 8015D/GRO	WG1729246	1	08/24/21 16:29	08/25/21 20:19	ACG	Mt. Juliet, TN
Volatile Organic Compounds (GC/MS) by Method 8260B	WG1729549	1	08/24/21 16:29	08/26/21 14:09	ACG	Mt. Juliet, TN
Semi-Volatile Organic Compounds (GC) by Method 8015M	WG1731372	1	08/30/21 16:00	08/31/21 04:56	CAG	Mt. Juliet, TN

BH-3 (14'-15') L1393283-21 Solid

Collected by: Devin Dominguez | Collected date/time: 08/18/21 13:55 | Received date/time: 08/20/21 08:00

Method	Batch	Dilution	Preparation date/time	Analysis date/time	Analyst	Location
Total Solids by Method 2540 G-2011	WG1730098	1	08/27/21 10:19	08/27/21 10:25	KDW	Mt. Juliet, TN
Wet Chemistry by Method 300.0	WG1729563	1	08/25/21 23:30	08/26/21 06:23	ELN	Mt. Juliet, TN
Volatile Organic Compounds (GC) by Method 8015D/GRO	WG1729246	1	08/24/21 19:07	08/25/21 20:41	ACG	Mt. Juliet, TN
Volatile Organic Compounds (GC/MS) by Method 8260B	WG1729549	1	08/24/21 19:07	08/26/21 14:28	ACG	Mt. Juliet, TN
Semi-Volatile Organic Compounds (GC) by Method 8015M	WG1731372	1	08/30/21 16:00	08/31/21 07:26	CAG	Mt. Juliet, TN

BH-3 (19-20') L1393283-22 Solid

Collected by: Devin Dominguez | Collected date/time: 08/18/21 14:00 | Received date/time: 08/20/21 08:00

Method	Batch	Dilution	Preparation date/time	Analysis date/time	Analyst	Location
Total Solids by Method 2540 G-2011	WG1730098	1	08/27/21 10:19	08/27/21 10:25	KDW	Mt. Juliet, TN
Wet Chemistry by Method 300.0	WG1729563	1	08/25/21 23:30	08/26/21 06:51	ELN	Mt. Juliet, TN
Volatile Organic Compounds (GC) by Method 8015D/GRO	WG1729246	1	08/24/21 19:07	08/25/21 21:03	ACG	Mt. Juliet, TN
Volatile Organic Compounds (GC/MS) by Method 8260B	WG1729549	1	08/24/21 19:07	08/26/21 14:47	ACG	Mt. Juliet, TN
Semi-Volatile Organic Compounds (GC) by Method 8015M	WG1731372	1	08/30/21 16:00	08/31/21 05:10	CAG	Mt. Juliet, TN

BH-3 (24'-25') L1393283-23 Solid

Collected by: Devin Dominguez | Collected date/time: 08/18/21 14:05 | Received date/time: 08/20/21 08:00

Method	Batch	Dilution	Preparation date/time	Analysis date/time	Analyst	Location
Total Solids by Method 2540 G-2011	WG1730098	1	08/27/21 10:19	08/27/21 10:25	KDW	Mt. Juliet, TN
Wet Chemistry by Method 300.0	WG1729563	1	08/25/21 23:30	08/26/21 07:29	ELN	Mt. Juliet, TN
Volatile Organic Compounds (GC) by Method 8015D/GRO	WG1729246	1	08/24/21 19:07	08/25/21 21:25	ACG	Mt. Juliet, TN
Volatile Organic Compounds (GC/MS) by Method 8260B	WG1729549	1	08/24/21 19:07	08/26/21 15:07	ACG	Mt. Juliet, TN
Semi-Volatile Organic Compounds (GC) by Method 8015M	WG1731372	1	08/30/21 16:00	08/31/21 05:23	CAG	Mt. Juliet, TN

BH-4 (0-1') L1393283-24 Solid

Collected by: Devin Dominguez | Collected date/time: 08/18/21 14:20 | Received date/time: 08/20/21 08:00

Method	Batch	Dilution	Preparation date/time	Analysis date/time	Analyst	Location
Total Solids by Method 2540 G-2011	WG1730098	1	08/27/21 10:19	08/27/21 10:25	KDW	Mt. Juliet, TN
Wet Chemistry by Method 300.0	WG1729563	1	08/25/21 23:30	08/26/21 07:39	ELN	Mt. Juliet, TN
Volatile Organic Compounds (GC) by Method 8015D/GRO	WG1729246	1	08/24/21 19:07	08/25/21 21:47	ACG	Mt. Juliet, TN
Volatile Organic Compounds (GC/MS) by Method 8260B	WG1729549	1	08/24/21 19:07	08/26/21 15:26	ACG	Mt. Juliet, TN
Semi-Volatile Organic Compounds (GC) by Method 8015M	WG1731372	1	08/30/21 16:00	08/31/21 09:30	CAG	Mt. Juliet, TN

BH4 (2'-3') L1393283-25 Solid

Collected by: Devin Dominguez | Collected date/time: 08/18/21 14:30 | Received date/time: 08/20/21 08:00

Method	Batch	Dilution	Preparation date/time	Analysis date/time	Analyst	Location
Total Solids by Method 2540 G-2011	WG1730098	1	08/27/21 10:19	08/27/21 10:25	KDW	Mt. Juliet, TN
Wet Chemistry by Method 300.0	WG1729563	5	08/25/21 23:30	08/26/21 07:48	ELN	Mt. Juliet, TN
Volatile Organic Compounds (GC) by Method 8015D/GRO	WG1729246	1	08/24/21 19:07	08/25/21 22:09	ACG	Mt. Juliet, TN
Volatile Organic Compounds (GC/MS) by Method 8260B	WG1729549	1	08/24/21 19:07	08/26/21 15:45	ACG	Mt. Juliet, TN
Semi-Volatile Organic Compounds (GC) by Method 8015M	WG1731372	1	08/30/21 16:00	08/31/21 05:37	CAG	Mt. Juliet, TN

BH4 (4'-5') L1393283-26 Solid

Collected by: Devin Dominguez | Collected date/time: 08/18/21 14:35 | Received date/time: 08/20/21 08:00

Method	Batch	Dilution	Preparation date/time	Analysis date/time	Analyst	Location
Total Solids by Method 2540 G-2011	WG1730100	1	08/30/21 09:38	08/30/21 09:44	CMK	Mt. Juliet, TN
Wet Chemistry by Method 300.0	WG1729563	10	08/25/21 23:30	08/26/21 07:58	ELN	Mt. Juliet, TN
Volatile Organic Compounds (GC) by Method 8015D/GRO	WG1729246	1	08/24/21 19:07	08/25/21 22:32	ACG	Mt. Juliet, TN
Volatile Organic Compounds (GC/MS) by Method 8260B	WG1729711	1	08/24/21 19:07	08/26/21 01:10	JHH	Mt. Juliet, TN
Semi-Volatile Organic Compounds (GC) by Method 8015M	WG1731372	1	08/30/21 16:00	08/31/21 05:51	CAG	Mt. Juliet, TN

BH4 (6'-7') L1393283-27 Solid

Collected by: Devin Dominguez | Collected date/time: 08/18/21 14:40 | Received date/time: 08/20/21 08:00

Method	Batch	Dilution	Preparation date/time	Analysis date/time	Analyst	Location
Total Solids by Method 2540 G-2011	WG1730100	1	08/30/21 09:38	08/30/21 09:44	CMK	Mt. Juliet, TN
Wet Chemistry by Method 300.0	WG1729563	1	08/25/21 23:30	08/26/21 08:07	ELN	Mt. Juliet, TN
Volatile Organic Compounds (GC) by Method 8015D/GRO	WG1729246	1	08/24/21 19:07	08/25/21 22:54	ACG	Mt. Juliet, TN
Volatile Organic Compounds (GC/MS) by Method 8260B	WG1729711	1	08/24/21 19:07	08/26/21 01:29	JHH	Mt. Juliet, TN
Semi-Volatile Organic Compounds (GC) by Method 8015M	WG1731372	1	08/30/21 16:00	08/31/21 08:35	CAG	Mt. Juliet, TN

BH4 (9'-10') L1393283-28 Solid

Collected by: Devin Dominguez | Collected date/time: 08/18/21 14:45 | Received date/time: 08/20/21 08:00

Method	Batch	Dilution	Preparation date/time	Analysis date/time	Analyst	Location
Total Solids by Method 2540 G-2011	WG1730100	1	08/30/21 09:38	08/30/21 09:44	CMK	Mt. Juliet, TN
Wet Chemistry by Method 300.0	WG1729563	1	08/25/21 23:30	08/26/21 08:17	ELN	Mt. Juliet, TN
Volatile Organic Compounds (GC) by Method 8015D/GRO	WG1729246	1	08/24/21 19:07	08/25/21 23:16	ACG	Mt. Juliet, TN
Volatile Organic Compounds (GC/MS) by Method 8260B	WG1729711	1	08/24/21 19:07	08/26/21 01:48	JHH	Mt. Juliet, TN
Semi-Volatile Organic Compounds (GC) by Method 8015M	WG1731372	1	08/30/21 16:00	08/31/21 06:04	CAG	Mt. Juliet, TN

BH4 (14'-15') L1393283-29 Solid

Collected by: Devin Dominguez | Collected date/time: 08/18/21 14:50 | Received date/time: 08/20/21 08:00

Method	Batch	Dilution	Preparation date/time	Analysis date/time	Analyst	Location
Total Solids by Method 2540 G-2011	WG1730100	1	08/30/21 09:38	08/30/21 09:44	CMK	Mt. Juliet, TN
Wet Chemistry by Method 300.0	WG1729563	1	08/25/21 23:30	08/26/21 08:45	ELN	Mt. Juliet, TN
Volatile Organic Compounds (GC) by Method 8015D/GRO	WG1729246	1	08/24/21 19:07	08/25/21 23:37	ACG	Mt. Juliet, TN
Volatile Organic Compounds (GC/MS) by Method 8260B	WG1729711	1	08/24/21 19:07	08/26/21 02:07	JHH	Mt. Juliet, TN
Semi-Volatile Organic Compounds (GC) by Method 8015M	WG1731372	1	08/30/21 16:00	08/31/21 06:18	CAG	Mt. Juliet, TN

BH4 (19'-20') L1393283-30 Solid

Collected by: Devin Dominguez | Collected date/time: 08/18/21 14:55 | Received date/time: 08/20/21 08:00

Method	Batch	Dilution	Preparation date/time	Analysis date/time	Analyst	Location
Total Solids by Method 2540 G-2011	WG1730100	1	08/30/21 09:38	08/30/21 09:44	CMK	Mt. Juliet, TN
Wet Chemistry by Method 300.0	WG1729563	1	08/25/21 23:30	08/26/21 08:55	ELN	Mt. Juliet, TN
Volatile Organic Compounds (GC) by Method 8015D/GRO	WG1729246	1	08/24/21 19:07	08/25/21 23:59	ACG	Mt. Juliet, TN
Volatile Organic Compounds (GC/MS) by Method 8260B	WG1729711	1	08/24/21 19:07	08/26/21 02:25	JHH	Mt. Juliet, TN
Semi-Volatile Organic Compounds (GC) by Method 8015M	WG1731372	1	08/30/21 16:00	08/31/21 08:21	CAG	Mt. Juliet, TN

BH-4 (24'-25') L1393283-31 Solid

Collected by: Devin Dominguez | Collected date/time: 08/18/21 15:00 | Received date/time: 08/20/21 08:00

Method	Batch	Dilution	Preparation date/time	Analysis date/time	Analyst	Location
Total Solids by Method 2540 G-2011	WG1730100	1	08/30/21 09:38	08/30/21 09:44	CMK	Mt. Juliet, TN
Wet Chemistry by Method 300.0	WG1729563	1	08/25/21 23:30	08/26/21 09:04	ELN	Mt. Juliet, TN
Volatile Organic Compounds (GC) by Method 8015D/GRO	WG1729246	1	08/24/21 19:07	08/26/21 00:21	ACG	Mt. Juliet, TN
Volatile Organic Compounds (GC/MS) by Method 8260B	WG1729711	1	08/24/21 19:07	08/26/21 02:44	JHH	Mt. Juliet, TN
Semi-Volatile Organic Compounds (GC) by Method 8015M	WG1731372	1	08/30/21 16:00	08/31/21 06:32	CAG	Mt. Juliet, TN

BH-4 (29'30') L1393283-32 Solid

Collected by: Devin Dominguez | Collected date/time: 08/18/21 15:05 | Received date/time: 08/20/21 08:00

Method	Batch	Dilution	Preparation date/time	Analysis date/time	Analyst	Location
Total Solids by Method 2540 G-2011	WG1730100	1	08/30/21 09:38	08/30/21 09:44	CMK	Mt. Juliet, TN
Wet Chemistry by Method 300.0	WG1729563	1	08/25/21 23:30	08/26/21 09:24	ELN	Mt. Juliet, TN
Volatile Organic Compounds (GC) by Method 8015D/GRO	WG1729246	1	08/24/21 19:07	08/26/21 00:43	ACG	Mt. Juliet, TN
Volatile Organic Compounds (GC/MS) by Method 8260B	WG1729711	1	08/24/21 19:07	08/26/21 03:03	JHH	Mt. Juliet, TN
Semi-Volatile Organic Compounds (GC) by Method 8015M	WG1731372	1	08/30/21 16:00	08/31/21 06:45	CAG	Mt. Juliet, TN

AH-10 (0-1') L1393283-33 Solid

Collected by: Devin Dominguez | Collected date/time: 08/18/21 15:10 | Received date/time: 08/20/21 08:00

Method	Batch	Dilution	Preparation date/time	Analysis date/time	Analyst	Location
Total Solids by Method 2540 G-2011	WG1730100	1	08/30/21 09:38	08/30/21 09:44	CMK	Mt. Juliet, TN
Wet Chemistry by Method 300.0	WG1729563	1	08/25/21 23:30	08/26/21 09:33	ELN	Mt. Juliet, TN
Volatile Organic Compounds (GC) by Method 8015D/GRO	WG1729246	1	08/24/21 19:07	08/26/21 01:05	ACG	Mt. Juliet, TN
Volatile Organic Compounds (GC/MS) by Method 8260B	WG1729711	1	08/24/21 19:07	08/26/21 03:22	JHH	Mt. Juliet, TN
Semi-Volatile Organic Compounds (GC) by Method 8015M	WG1731372	1	08/30/21 16:00	08/31/21 08:07	CAG	Mt. Juliet, TN

AH-10 (2'-3') L1393283-34 Solid

Collected by: Devin Dominguez | Collected date/time: 08/18/21 15:15 | Received date/time: 08/20/21 08:00

Method	Batch	Dilution	Preparation date/time	Analysis date/time	Analyst	Location
Total Solids by Method 2540 G-2011	WG1730100	1	08/30/21 09:38	08/30/21 09:44	CMK	Mt. Juliet, TN
Wet Chemistry by Method 300.0	WG1729564	1	08/26/21 18:07	08/27/21 00:23	MCG	Mt. Juliet, TN
Volatile Organic Compounds (GC) by Method 8015D/GRO	WG1729246	1	08/24/21 19:07	08/26/21 01:27	ACG	Mt. Juliet, TN
Volatile Organic Compounds (GC/MS) by Method 8260B	WG1729711	1	08/24/21 19:07	08/26/21 03:41	JHH	Mt. Juliet, TN
Semi-Volatile Organic Compounds (GC) by Method 8015M	WG1731372	1	08/30/21 16:00	08/31/21 06:59	CAG	Mt. Juliet, TN

AH-10 (3'-4') L1393283-35 Solid

Collected by: Devin Dominguez | Collected date/time: 08/18/21 15:20 | Received date/time: 08/20/21 08:00

Method	Batch	Dilution	Preparation date/time	Analysis date/time	Analyst	Location
Total Solids by Method 2540 G-2011	WG1730100	1	08/30/21 09:38	08/30/21 09:44	CMK	Mt. Juliet, TN
Wet Chemistry by Method 300.0	WG1729564	1	08/26/21 18:07	08/27/21 00:32	MCG	Mt. Juliet, TN
Volatile Organic Compounds (GC) by Method 8015D/GRO	WG1729246	1	08/24/21 19:07	08/26/21 01:49	ACG	Mt. Juliet, TN
Volatile Organic Compounds (GC/MS) by Method 8260B	WG1729711	1	08/24/21 19:07	08/26/21 04:00	JHH	Mt. Juliet, TN
Semi-Volatile Organic Compounds (GC) by Method 8015M	WG1731372	1	08/30/21 16:00	08/31/21 07:13	CAG	Mt. Juliet, TN

Cp Tc Ss Cn Sr Qc Gl Al Sc

AH-10 (5'-6') L1393283-36 Solid

Collected by: Devin Dominguez | Collected date/time: 08/18/21 15:25 | Received date/time: 08/20/21 08:00

Method	Batch	Dilution	Preparation date/time	Analysis date/time	Analyst	Location
Total Solids by Method 2540 G-2011	WG1730104	1	08/27/21 13:55	08/27/21 14:01	KDW	Mt. Juliet, TN
Wet Chemistry by Method 300.0	WG1729564	1	08/26/21 18:07	08/27/21 00:42	MCG	Mt. Juliet, TN
Volatile Organic Compounds (GC) by Method 8015D/GRO	WG1729250	1	08/24/21 19:07	08/25/21 18:52	MGF	Mt. Juliet, TN
Volatile Organic Compounds (GC/MS) by Method 8260B	WG1729711	1	08/24/21 19:07	08/26/21 04:19	JHH	Mt. Juliet, TN
Semi-Volatile Organic Compounds (GC) by Method 8015M	WG1731865	1	08/31/21 20:53	09/01/21 05:53	CAG	Mt. Juliet, TN

AH-9 (0-1') L1393283-37 Solid

Collected by: Devin Dominguez | Collected date/time: 08/18/21 15:30 | Received date/time: 08/20/21 08:00

Method	Batch	Dilution	Preparation date/time	Analysis date/time	Analyst	Location
Total Solids by Method 2540 G-2011	WG1730104	1	08/27/21 13:55	08/27/21 14:01	KDW	Mt. Juliet, TN
Wet Chemistry by Method 300.0	WG1729564	1	08/26/21 18:07	08/27/21 00:51	MCG	Mt. Juliet, TN
Volatile Organic Compounds (GC) by Method 8015D/GRO	WG1729250	1	08/24/21 19:07	08/25/21 19:16	MGF	Mt. Juliet, TN
Volatile Organic Compounds (GC/MS) by Method 8260B	WG1729711	1	08/24/21 19:07	08/26/21 04:38	JHH	Mt. Juliet, TN
Semi-Volatile Organic Compounds (GC) by Method 8015M	WG1731865	1	08/31/21 20:53	09/01/21 06:06	CAG	Mt. Juliet, TN

AH-9 (2'-3') L1393283-38 Solid

Collected by: Devin Dominguez | Collected date/time: 08/18/21 15:35 | Received date/time: 08/20/21 08:00

Method	Batch	Dilution	Preparation date/time	Analysis date/time	Analyst	Location
Total Solids by Method 2540 G-2011	WG1730104	1	08/27/21 13:55	08/27/21 14:01	KDW	Mt. Juliet, TN
Wet Chemistry by Method 300.0	WG1729564	1	08/26/21 18:07	08/27/21 01:01	MCG	Mt. Juliet, TN
Volatile Organic Compounds (GC) by Method 8015D/GRO	WG1729250	1	08/24/21 19:07	08/25/21 19:40	MGF	Mt. Juliet, TN
Volatile Organic Compounds (GC/MS) by Method 8260B	WG1729711	1	08/24/21 19:07	08/26/21 04:57	JHH	Mt. Juliet, TN
Semi-Volatile Organic Compounds (GC) by Method 8015M	WG1731865	1	08/31/21 20:53	09/01/21 06:48	CAG	Mt. Juliet, TN

AH-9 (3'-4') L1393283-39 Solid

Collected by: Devin Dominguez | Collected date/time: 08/18/21 15:40 | Received date/time: 08/20/21 08:00

Method	Batch	Dilution	Preparation date/time	Analysis date/time	Analyst	Location
Total Solids by Method 2540 G-2011	WG1730104	1	08/27/21 13:55	08/27/21 14:01	KDW	Mt. Juliet, TN
Wet Chemistry by Method 300.0	WG1729564	1	08/26/21 18:07	08/27/21 01:10	MCG	Mt. Juliet, TN
Volatile Organic Compounds (GC) by Method 8015D/GRO	WG1729250	1	08/24/21 19:07	08/25/21 20:03	MGF	Mt. Juliet, TN
Volatile Organic Compounds (GC/MS) by Method 8260B	WG1729711	1	08/24/21 19:07	08/26/21 05:16	JHH	Mt. Juliet, TN
Semi-Volatile Organic Compounds (GC) by Method 8015M	WG1731865	1	08/31/21 20:53	09/01/21 07:01	CAG	Mt. Juliet, TN

AH-9 (5'-6') L1393283-40 Solid

Collected by: Devin Dominguez | Collected date/time: 08/18/21 15:45 | Received date/time: 08/20/21 08:00

Method	Batch	Dilution	Preparation date/time	Analysis date/time	Analyst	Location
Total Solids by Method 2540 G-2011	WG1730104	1	08/27/21 13:55	08/27/21 14:01	KDW	Mt. Juliet, TN
Wet Chemistry by Method 300.0	WG1729564	1	08/26/21 18:07	08/27/21 01:20	MCG	Mt. Juliet, TN
Volatile Organic Compounds (GC) by Method 8015D/GRO	WG1729250	1	08/24/21 19:07	08/25/21 20:27	MGF	Mt. Juliet, TN
Volatile Organic Compounds (GC/MS) by Method 8260B	WG1729711	1	08/24/21 19:07	08/26/21 05:35	JHH	Mt. Juliet, TN
Semi-Volatile Organic Compounds (GC) by Method 8015M	WG1731865	1	08/31/21 20:53	09/01/21 07:15	CAG	Mt. Juliet, TN

Cp
Tc
Ss
Cn
Sr
Qc
Gl
Al
Sc

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

Chris McCord
Project Manager

Report Revision History

Level II Report - Version 1: 09/13/21 09:37

Project Narrative

Report revision due to sample IDs revised for L1383283-33 through-36 per client.

Total Solids by Method 2540 G-2011

Analyte	Result	Qualifier	Dilution	Analysis	Batch
	%			date / time	
Total Solids	82.7		1	08/27/2021 09:20	WG1730096

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	100		11.1	24.2	1	08/26/2021 15:42	WG1729560

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		0.0262	0.121	1	08/27/2021 04:32	WG1729237
(S) a,a,a-Trifluorotoluene(FID)	*110*			*77.0-120*		*08/27/2021 04:32*	WG1729237

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		0.000663	0.00142	1	08/25/2021 19:53	WG1729528
Toluene	U		0.00184	0.00709	1	08/25/2021 19:53	WG1729528
Ethylbenzene	U		0.00105	0.00355	1	08/25/2021 19:53	WG1729528
Total Xylenes	0.00912	J	0.00125	0.00922	1	08/25/2021 19:53	WG1729528
(S) Toluene-d8	*107*			*75.0-131*		*08/25/2021 19:53*	WG1729528
(S) 4-Bromofluorobenzene	*103*			*67.0-138*		*08/25/2021 19:53*	WG1729528
(S) 1,2-Dichloroethane-d4	*102*			*70.0-130*		*08/25/2021 19:53*	WG1729528

Semi-Volatile Organic Compounds (GC) by Method 8015M

Analyte	Result (dry)	Qualifier	MDL (dry)	RDL (dry)	Dilution	Analysis	Batch
	mg/kg		mg/kg	mg/kg		date / time	
C10-C28 Diesel Range	6.00		1.95	4.84	1	09/02/2021 17:10	WG1731366
C28-C36 Motor Oil Range	5.37	B	0.331	4.84	1	09/02/2021 17:10	WG1731366
(S) o-Terphenyl	*75.8*			*18.0-148*		*09/02/2021 17:10*	WG1731366

Total Solids by Method 2540 G-2011

Analyte	Result	Qualifier	Dilution	Analysis	Batch
	%			date / time	
Total Solids	93.5		1	08/27/2021 09:20	WG1730096

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	277		9.84	21.4	1	08/26/2021 16:10	WG1729560

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	08/27/2021 04:54	WG1729237
(S) a,a,a-Trifluorotoluene(FID)	*109*			*77.0-120*		*08/27/2021 04:54*	WG1729237

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	08/25/2021 20:12	WG1729528
Toluene	U		0.00148	0.00570	1	08/25/2021 20:12	WG1729528
Ethylbenzene	U		0.000840	0.00285	1	08/25/2021 20:12	WG1729528
Total Xylenes	0.00155	J	0.00100	0.00741	1	08/25/2021 20:12	WG1729528
(S) Toluene-d8	*108*			*75.0-131*		*08/25/2021 20:12*	WG1729528
(S) 4-Bromofluorobenzene	*103*			*67.0-138*		*08/25/2021 20:12*	WG1729528
(S) 1,2-Dichloroethane-d4	*98.9*			*70.0-130*		*08/25/2021 20:12*	WG1729528

Semi-Volatile Organic Compounds (GC) by Method 8015M

Analyte	Result (dry)	Qualifier	MDL (dry)	RDL (dry)	Dilution	Analysis	Batch
	mg/kg		mg/kg	mg/kg		date / time	
C10-C28 Diesel Range	2.66	J	1.72	4.28	1	09/02/2021 17:53	WG1731366
C10-C28 Diesel Range	U	Q	1.72	4.28	1	09/06/2021 15:11	WG1735354
C28-C36 Motor Oil Range	4.84	B	0.293	4.28	1	09/02/2021 17:53	WG1731366
C28-C36 Motor Oil Range	2.70	J Q	0.293	4.28	1	09/06/2021 15:11	WG1735354
(S) o-Terphenyl	*78.2*			*18.0-148*		*09/02/2021 17:53*	WG1731366
(S) o-Terphenyl	*62.4*			*18.0-148*		*09/06/2021 15:11*	WG1735354

Sample Narrative:

L1393283-02 WG1731366, WG1735354: Duplicate Analysis performed due to septa bleed. Results don't confirm; both analyses reported

Total Solids by Method 2540 G-2011

Analyte	Result	Qualifier	Dilution	Analysis	Batch
	%			date / time	
Total Solids	94.6		1	08/27/2021 09:20	WG1730096

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	428		48.6	106	5	08/26/2021 16:48	WG1729560

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	08/27/2021 05:15	WG1729237
(S) a,a,a-Trifluorotoluene(FID)	*110*			*77.0-120*		*08/27/2021 05:15*	WG1729237

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

Analyte	Result (dry)	Qualifier	MDL (dry)	RDL (dry)	Dilution	Analysis	Batch
	mg/kg		mg/kg	mg/kg		date / time	
Benzene	U		0.000520	0.00111	1	08/25/2021 20:31	WG1729528
Toluene	U		0.00145	0.00557	1	08/25/2021 20:31	WG1729528
Ethylbenzene	U		0.000821	0.00278	1	08/25/2021 20:31	WG1729528
Total Xylenes	U		0.000980	0.00724	1	08/25/2021 20:31	WG1729528
(S) Toluene-d8	*108*			*75.0-131*		*08/25/2021 20:31*	WG1729528
(S) 4-Bromofluorobenzene	*99.6*			*67.0-138*		*08/25/2021 20:31*	WG1729528
(S) 1,2-Dichloroethane-d4	*94.0*			*70.0-130*		*08/25/2021 20:31*	WG1729528

Semi-Volatile Organic Compounds (GC) by Method 8015M

Analyte	Result (dry)	Qualifier	MDL (dry)	RDL (dry)	Dilution	Analysis	Batch
	mg/kg		mg/kg	mg/kg		date / time	
C10-C28 Diesel Range	2.56	J	1.70	4.23	1	09/02/2021 18:21	WG1731366
C28-C36 Motor Oil Range	12.3		0.290	4.23	1	09/02/2021 18:21	WG1731366
(S) o-Terphenyl	*88.7*			*18.0-148*		*09/02/2021 18:21*	WG1731366

Total Solids by Method 2540 G-2011

Analyte	Result	Qualifier	Dilution	Analysis	Batch
	%			date / time	
Total Solids	90.6		1	08/27/2021 09:20	WG1730096

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	881		10.2	22.1	1	08/26/2021 16:58	WG1729560

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	0.110	1	08/27/2021 05:37	WG1729237
(S) a,a,a-Trifluorotoluene(FID)	*110*			*77.0-120*		*08/27/2021 05:37*	WG1729237

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		0.000564	0.00121	1	08/25/2021 20:50	WG1729528
Toluene	U		0.00157	0.00604	1	08/25/2021 20:50	WG1729528
Ethylbenzene	U		0.000890	0.00302	1	08/25/2021 20:50	WG1729528
Total Xylenes	U		0.00106	0.00785	1	08/25/2021 20:50	WG1729528
(S) Toluene-d8	*108*			*75.0-131*		*08/25/2021 20:50*	WG1729528
(S) 4-Bromofluorobenzene	*99.4*			*67.0-138*		*08/25/2021 20:50*	WG1729528
(S) 1,2-Dichloroethane-d4	*90.2*			*70.0-130*		*08/25/2021 20:50*	WG1729528

Semi-Volatile Organic Compounds (GC) by Method 8015M

Analyte	Result (dry)	Qualifier	MDL (dry)	RDL (dry)	Dilution	Analysis	Batch
	mg/kg		mg/kg	mg/kg		date / time	
C10-C28 Diesel Range	4.90		1.78	4.42	1	09/02/2021 18:07	WG1731366
C10-C28 Diesel Range	2.00	J Q	1.78	4.42	1	09/06/2021 14:18	WG1735354
C28-C36 Motor Oil Range	7.36	B	0.302	4.42	1	09/02/2021 18:07	WG1731366
C28-C36 Motor Oil Range	2.74	J Q	0.302	4.42	1	09/06/2021 14:18	WG1735354
(S) o-Terphenyl	*68.9*			*18.0-148*		*09/02/2021 18:07*	WG1731366
(S) o-Terphenyl	*59.5*			*18.0-148*		*09/06/2021 14:18*	WG1735354

Sample Narrative:

L1393283-04 WG1731366, WG1735354: Duplicate Analysis performed due to septa bleed. 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	08/27/2021 09:20	WG1730096

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	752		9.82	21.3	1	08/26/2021 00:07	WG1729561

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	08/27/2021 05:58	WG1729237
(S) a,a,a-Trifluorotoluene(FID)	*111*			*77.0-120*		*08/27/2021 05:58*	WG1729237

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	0.00113	1	08/25/2021 21:09	WG1729528
Toluene	U		0.00147	0.00567	1	08/25/2021 21:09	WG1729528
Ethylbenzene	U		0.000836	0.00284	1	08/25/2021 21:09	WG1729528
Total Xylenes	U		0.000998	0.00737	1	08/25/2021 21:09	WG1729528
(S) Toluene-d8	*108*			*75.0-131*		*08/25/2021 21:09*	WG1729528
(S) 4-Bromofluorobenzene	*101*			*67.0-138*		*08/25/2021 21:09*	WG1729528
(S) 1,2-Dichloroethane-d4	*99.1*			*70.0-130*		*08/25/2021 21:09*	WG1729528

Semi-Volatile Organic Compounds (GC) by Method 8015M

Analyte	Result (dry)	Qualifier	MDL (dry)	RDL (dry)	Dilution	Analysis	Batch
	mg/kg		mg/kg	mg/kg		date / time	
C10-C28 Diesel Range	2.34	J	1.72	4.27	1	09/02/2021 16:56	WG1731366
C28-C36 Motor Oil Range	3.22	B J	0.292	4.27	1	09/02/2021 16:56	WG1731366
(S) o-Terphenyl	*161*	J1		*18.0-148*		*09/02/2021 16:56*	WG1731366

Total Solids by Method 2540 G-2011

Analyte	Result	Qualifier	Dilution	Analysis	Batch
	%			date / time	
Total Solids	96.3		1	08/27/2021 09:12	WG1730097

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	314		9.56	20.8	1	08/26/2021 00:16	WG1729561

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	08/27/2021 06:20	WG1729237
(S) a,a,a-Trifluorotoluene(FID)	*109*			*77.0-120*		*08/27/2021 06:20*	WG1729237

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	08/26/2021 09:39	WG1729549
Toluene	U		0.00140	0.00539	1	08/26/2021 09:39	WG1729549
Ethylbenzene	U		0.000794	0.00269	1	08/26/2021 09:39	WG1729549
Total Xylenes	U		0.000949	0.00701	1	08/26/2021 09:39	WG1729549
(S) Toluene-d8	*106*			*75.0-131*		*08/26/2021 09:39*	WG1729549
(S) 4-Bromofluorobenzene	*103*			*67.0-138*		*08/26/2021 09:39*	WG1729549
(S) 1,2-Dichloroethane-d4	*97.4*			*70.0-130*		*08/26/2021 09:39*	WG1729549

Semi-Volatile Organic Compounds (GC) by Method 8015M

Analyte	Result (dry)	Qualifier	MDL (dry)	RDL (dry)	Dilution	Analysis	Batch
	mg/kg		mg/kg	mg/kg		date / time	
C10-C28 Diesel Range	2.25	J	1.67	4.16	1	09/02/2021 16:27	WG1731366
C28-C36 Motor Oil Range	2.19	B J	0.285	4.16	1	09/02/2021 16:27	WG1731366
(S) o-Terphenyl	*84.1*			*18.0-148*		*09/02/2021 16:27*	WG1731366

Total Solids by Method 2540 G-2011

Analyte	Result	Qualifier	Dilution	Analysis	Batch
	%			date / time	
Total Solids	96.5		1	08/27/2021 09:12	WG1730097

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	102		9.54	20.7	1	08/26/2021 00:25	WG1729561

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	08/27/2021 06:41	WG1729237
(S) a,a,a-Trifluorotoluene(FID)	*110*			*77.0-120*		*08/27/2021 06:41*	WG1729237

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	08/26/2021 09:58	WG1729549
Toluene	U		0.00140	0.00537	1	08/26/2021 09:58	WG1729549
Ethylbenzene	U		0.000791	0.00268	1	08/26/2021 09:58	WG1729549
Total Xylenes	U		0.000945	0.00698	1	08/26/2021 09:58	WG1729549
(S) Toluene-d8	*107*			*75.0-131*		*08/26/2021 09:58*	WG1729549
(S) 4-Bromofluorobenzene	*101*			*67.0-138*		*08/26/2021 09:58*	WG1729549
(S) 1,2-Dichloroethane-d4	*96.1*			*70.0-130*		*08/26/2021 09:58*	WG1729549

Semi-Volatile Organic Compounds (GC) by Method 8015M

Analyte	Result (dry)	Qualifier	MDL (dry)	RDL (dry)	Dilution	Analysis	Batch
	mg/kg		mg/kg	mg/kg		date / time	
C10-C28 Diesel Range	2.43	J	1.67	4.15	1	09/02/2021 15:59	WG1731366
C28-C36 Motor Oil Range	1.93	B J	0.284	4.15	1	09/02/2021 15:59	WG1731366
(S) o-Terphenyl	*94.8*			*18.0-148*		*09/02/2021 15:59*	WG1731366

Total Solids by Method 2540 G-2011

Analyte	Result	Qualifier	Dilution	Analysis	Batch
	%			date / time	
Total Solids	90.0		1	08/27/2021 09:12	WG1730097

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	1090		102	222	10	08/26/2021 00:35	WG1729561

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	08/27/2021 07:03	WG1729237
(S) a,a,a-Trifluorotoluene(FID)	*111*			*77.0-120*		*08/27/2021 07:03*	WG1729237

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		0.000571	0.00122	1	08/26/2021 10:18	WG1729549
Toluene	U		0.00159	0.00611	1	08/26/2021 10:18	WG1729549
Ethylbenzene	U		0.000901	0.00306	1	08/26/2021 10:18	WG1729549
Total Xylenes	U		0.00108	0.00795	1	08/26/2021 10:18	WG1729549
(S) Toluene-d8	*106*			*75.0-131*		*08/26/2021 10:18*	WG1729549
(S) 4-Bromofluorobenzene	*101*			*67.0-138*		*08/26/2021 10:18*	WG1729549
(S) 1,2-Dichloroethane-d4	*97.1*			*70.0-130*		*08/26/2021 10:18*	WG1729549

Semi-Volatile Organic Compounds (GC) by Method 8015M

Analyte	Result (dry)	Qualifier	MDL (dry)	RDL (dry)	Dilution	Analysis	Batch
	mg/kg		mg/kg	mg/kg		date / time	
C10-C28 Diesel Range	11.2		1.79	4.44	1	09/02/2021 18:49	WG1731366
C28-C36 Motor Oil Range	37.2		0.304	4.44	1	09/02/2021 18:49	WG1731366
(S) o-Terphenyl	*65.9*			*18.0-148*		*09/02/2021 18:49*	WG1731366

Total Solids by Method 2540 G-2011

Analyte	Result	Qualifier	Dilution	Analysis	Batch
	%			date / time	
Total Solids	95.2		1	08/27/2021 09:12	WG1730097

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		96.7	210	10	08/26/2021 00:44	WG1729561

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	08/27/2021 07:24	WG1729237
(S) a,a,a-Trifluorotoluene(FID)	*111*			*77.0-120*		*08/27/2021 07:24*	WG1729237

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		0.000515	0.00110	1	08/26/2021 10:37	WG1729549
Toluene	U		0.00143	0.00551	1	08/26/2021 10:37	WG1729549
Ethylbenzene	U		0.000812	0.00275	1	08/26/2021 10:37	WG1729549
Total Xylenes	0.00132	J	0.000970	0.00716	1	08/26/2021 10:37	WG1729549
(S) Toluene-d8	*106*			*75.0-131*		*08/26/2021 10:37*	WG1729549
(S) 4-Bromofluorobenzene	*102*			*67.0-138*		*08/26/2021 10:37*	WG1729549
(S) 1,2-Dichloroethane-d4	*96.3*			*70.0-130*		*08/26/2021 10:37*	WG1729549

Semi-Volatile Organic Compounds (GC) by Method 8015M

Analyte	Result (dry)	Qualifier	MDL (dry)	RDL (dry)	Dilution	Analysis	Batch
	mg/kg		mg/kg	mg/kg		date / time	
C10-C28 Diesel Range	6.07		1.69	4.20	1	09/02/2021 18:35	WG1731366
C28-C36 Motor Oil Range	19.8		0.288	4.20	1	09/02/2021 18:35	WG1731366
(S) o-Terphenyl	*90.5*			*18.0-148*		*09/02/2021 18:35*	WG1731366

Total Solids by Method 2540 G-2011

Analyte	Result	Qualifier	Dilution	Analysis	Batch
	%			date / time	
Total Solids	93.5		1	08/27/2021 09:12	WG1730097

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	1340		98.4	214	10	08/26/2021 00:54	WG1729561

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	08/27/2021 07:46	WG1729237
(S) a,a,a-Trifluorotoluene(FID)	*110*			*77.0-120*		*08/27/2021 07:46*	WG1729237

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	08/26/2021 10:56	WG1729549
Toluene	U		0.00148	0.00569	1	08/26/2021 10:56	WG1729549
Ethylbenzene	U		0.000839	0.00285	1	08/26/2021 10:56	WG1729549
Total Xylenes	0.00108	J	0.00100	0.00740	1	08/26/2021 10:56	WG1729549
(S) Toluene-d8	*106*			*75.0-131*		*08/26/2021 10:56*	WG1729549
(S) 4-Bromofluorobenzene	*102*			*67.0-138*		*08/26/2021 10:56*	WG1729549
(S) 1,2-Dichloroethane-d4	*97.1*			*70.0-130*		*08/26/2021 10:56*	WG1729549

Semi-Volatile Organic Compounds (GC) by Method 8015M

Analyte	Result (dry)	Qualifier	MDL (dry)	RDL (dry)	Dilution	Analysis	Batch
	mg/kg		mg/kg	mg/kg		date / time	
C10-C28 Diesel Range	4.30		1.72	4.28	1	09/02/2021 16:42	WG1731366
C10-C28 Diesel Range	U	Q	1.72	4.28	1	09/06/2021 13:12	WG1735354
C28-C36 Motor Oil Range	8.27	B	0.293	4.28	1	09/02/2021 16:42	WG1731366
C28-C36 Motor Oil Range	2.05	J Q	0.293	4.28	1	09/06/2021 13:12	WG1735354
(S) o-Terphenyl	*83.4*			*18.0-148*		*09/02/2021 16:42*	WG1731366
(S) o-Terphenyl	*50.0*			*18.0-148*		*09/06/2021 13:12*	WG1735354

Sample Narrative:

L1393283-10 WG1731366, WG1735354: Duplicate Analysis performed due to septa bleed. Results don't confirm; both analyses reported

Total Solids by Method 2540 G-2011

Analyte	Result	Qualifier	Dilution	Analysis	Batch
	%			date / time	
Total Solids	97.3		1	08/27/2021 09:12	WG1730097

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	514		9.46	20.6	1	08/26/2021 01:03	WG1729561

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	0.0508	J	0.0223	0.103	1	08/27/2021 08:07	WG1729237
(S) a,a,a-Trifluorotoluene(FID)	*109*			*77.0-120*		*08/27/2021 08:07*	WG1729237

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

Analyte	Result (dry)	Qualifier	MDL (dry)	RDL (dry)	Dilution	Analysis	Batch
	mg/kg		mg/kg	mg/kg		date / time	
Benzene	U		0.000493	0.00106	1	08/26/2021 11:16	WG1729549
Toluene	U		0.00137	0.00528	1	08/26/2021 11:16	WG1729549
Ethylbenzene	U		0.000778	0.00264	1	08/26/2021 11:16	WG1729549
Total Xylenes	U		0.000929	0.00686	1	08/26/2021 11:16	WG1729549
(S) Toluene-d8	*107*			*75.0-131*		*08/26/2021 11:16*	WG1729549
(S) 4-Bromofluorobenzene	*101*			*67.0-138*		*08/26/2021 11:16*	WG1729549
(S) 1,2-Dichloroethane-d4	*96.4*			*70.0-130*		*08/26/2021 11:16*	WG1729549

Semi-Volatile Organic Compounds (GC) by Method 8015M

Analyte	Result (dry)	Qualifier	MDL (dry)	RDL (dry)	Dilution	Analysis	Batch
	mg/kg		mg/kg	mg/kg		date / time	
C10-C28 Diesel Range	2.25	J	1.66	4.11	1	09/02/2021 15:02	WG1731366
C28-C36 Motor Oil Range	2.39	B J	0.282	4.11	1	09/02/2021 15:02	WG1731366
(S) o-Terphenyl	*86.0*			*18.0-148*		*09/02/2021 15:02*	WG1731366

Total Solids by Method 2540 G-2011

Analyte	Result	Qualifier	Dilution	Analysis	Batch
	%			date / time	
Total Solids	96.0		1	08/27/2021 09:12	WG1730097

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	681		9.58	20.8	1	08/26/2021 01:13	WG1729561

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	08/27/2021 08:29	WG1729237
(S) a,a,a-Trifluorotoluene(FID)	*110*			*77.0-120*		*08/27/2021 08:29*	WG1729237

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		0.000506	0.00108	1	08/26/2021 11:35	WG1729549
Toluene	U		0.00141	0.00542	1	08/26/2021 11:35	WG1729549
Ethylbenzene	U		0.000799	0.00271	1	08/26/2021 11:35	WG1729549
Total Xylenes	U		0.000954	0.00704	1	08/26/2021 11:35	WG1729549
(S) Toluene-d8	*106*			*75.0-131*		*08/26/2021 11:35*	WG1729549
(S) 4-Bromofluorobenzene	*102*			*67.0-138*		*08/26/2021 11:35*	WG1729549
(S) 1,2-Dichloroethane-d4	*96.2*			*70.0-130*		*08/26/2021 11:35*	WG1729549

Semi-Volatile Organic Compounds (GC) by Method 8015M

Analyte	Result (dry)	Qualifier	MDL (dry)	RDL (dry)	Dilution	Analysis	Batch
	mg/kg		mg/kg	mg/kg		date / time	
C10-C28 Diesel Range	2.22	J	1.68	4.17	1	09/02/2021 16:13	WG1731366
C28-C36 Motor Oil Range	2.50	B J	0.285	4.17	1	09/02/2021 16:13	WG1731366
(S) o-Terphenyl	*83.0*			*18.0-148*		*09/02/2021 16:13*	WG1731366

Total Solids by Method 2540 G-2011

Analyte	Result	Qualifier	Dilution	Analysis	Batch
	%			date / time	
Total Solids	94.5		1	08/27/2021 09:12	WG1730097

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	610		9.74	21.2	1	08/26/2021 01:41	WG1729561

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	08/27/2021 08:50	WG1729237
(S) a,a,a-Trifluorotoluene(FID)	*110*			*77.0-120*		*08/27/2021 08:50*	WG1729237

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

Analyte	Result (dry)	Qualifier	MDL (dry)	RDL (dry)	Dilution	Analysis	Batch
	mg/kg		mg/kg	mg/kg		date / time	
Benzene	U		0.000521	0.00112	1	08/26/2021 11:54	WG1729549
Toluene	U		0.00145	0.00558	1	08/26/2021 11:54	WG1729549
Ethylbenzene	U		0.000823	0.00279	1	08/26/2021 11:54	WG1729549
Total Xylenes	U		0.000983	0.00726	1	08/26/2021 11:54	WG1729549
(S) Toluene-d8	*107*			*75.0-131*		*08/26/2021 11:54*	WG1729549
(S) 4-Bromofluorobenzene	*102*			*67.0-138*		*08/26/2021 11:54*	WG1729549
(S) 1,2-Dichloroethane-d4	*95.4*			*70.0-130*		*08/26/2021 11:54*	WG1729549

Semi-Volatile Organic Compounds (GC) by Method 8015M

Analyte	Result (dry)	Qualifier	MDL (dry)	RDL (dry)	Dilution	Analysis	Batch
	mg/kg		mg/kg	mg/kg		date / time	
C10-C28 Diesel Range	U		1.70	4.23	1	09/02/2021 15:16	WG1731366
C28-C36 Motor Oil Range	0.947	B J	0.290	4.23	1	09/02/2021 15:16	WG1731366
(S) o-Terphenyl	*72.3*			*18.0-148*		*09/02/2021 15:16*	WG1731366

Total Solids by Method 2540 G-2011

Analyte	Result	Qualifier	Dilution	Analysis	Batch
	%			date / time	
Total Solids	95.3		1	08/27/2021 09:12	WG1730097

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	606		9.65	21.0	1	08/26/2021 05:16	WG1729563

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	08/27/2021 09:12	WG1729237
(S) a,a,a-Trifluorotoluene(FID)	*109*			*77.0-120*		*08/27/2021 09:12*	WG1729237

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	08/26/2021 12:13	WG1729549
Toluene	U		0.00143	0.00550	1	08/26/2021 12:13	WG1729549
Ethylbenzene	U		0.000810	0.00275	1	08/26/2021 12:13	WG1729549
Total Xylenes	U		0.000967	0.00714	1	08/26/2021 12:13	WG1729549
(S) Toluene-d8	*107*			*75.0-131*		*08/26/2021 12:13*	WG1729549
(S) 4-Bromofluorobenzene	*102*			*67.0-138*		*08/26/2021 12:13*	WG1729549
(S) 1,2-Dichloroethane-d4	*97.2*			*70.0-130*		*08/26/2021 12:13*	WG1729549

Semi-Volatile Organic Compounds (GC) by Method 8015M

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	09/02/2021 15:31	WG1731366
C28-C36 Motor Oil Range	0.896	B J	0.288	4.20	1	09/02/2021 15:31	WG1731366
(S) o-Terphenyl	*74.1*			*18.0-148*		*09/02/2021 15:31*	WG1731366

Total Solids by Method 2540 G-2011

Analyte	Result	Qualifier	Dilution	Analysis	Batch
	%			date / time	
Total Solids	96.1		1	08/27/2021 09:12	WG1730097

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	326		9.58	20.8	1	08/26/2021 05:26	WG1729563

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	08/27/2021 09:33	WG1729237
(S) a,a,a-Trifluorotoluene(FID)	*110*			*77.0-120*		*08/27/2021 09:33*	WG1729237

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

Analyte	Result (dry)	Qualifier	MDL (dry)	RDL (dry)	Dilution	Analysis	Batch
	mg/kg		mg/kg	mg/kg		date / time	
Benzene	U		0.000505	0.00108	1	08/26/2021 12:32	WG1729549
Toluene	U		0.00141	0.00541	1	08/26/2021 12:32	WG1729549
Ethylbenzene	U		0.000797	0.00270	1	08/26/2021 12:32	WG1729549
Total Xylenes	U		0.000952	0.00703	1	08/26/2021 12:32	WG1729549
(S) Toluene-d8	*106*			*75.0-131*		*08/26/2021 12:32*	WG1729549
(S) 4-Bromofluorobenzene	*102*			*67.0-138*		*08/26/2021 12:32*	WG1729549
(S) 1,2-Dichloroethane-d4	*97.2*			*70.0-130*		*08/26/2021 12:32*	WG1729549

Semi-Volatile Organic Compounds (GC) by Method 8015M

Analyte	Result (dry)	Qualifier	MDL (dry)	RDL (dry)	Dilution	Analysis	Batch
	mg/kg		mg/kg	mg/kg		date / time	
C10-C28 Diesel Range	U		1.68	4.16	1	09/02/2021 15:45	WG1731366
C28-C36 Motor Oil Range	0.494	B J	0.285	4.16	1	09/02/2021 15:45	WG1731366
(S) o-Terphenyl	*87.9*			*18.0-148*		*09/02/2021 15:45*	WG1731366

Total Solids by Method 2540 G-2011

Analyte	Result	Qualifier	Dilution	Analysis	Batch
	%			date / time	
Total Solids	91.4		1	08/27/2021 10:25	WG1730098

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	666		10.1	21.9	1	08/26/2021 05:35	WG1729563

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	0.0281	J	0.0237	0.109	1	08/25/2021 18:51	WG1729246
(S) a,a,a-Trifluorotoluene(FID)	*97.3*			*77.0-120*		*08/25/2021 18:51*	WG1729246

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

Analyte	Result (dry)	Qualifier	MDL (dry)	RDL (dry)	Dilution	Analysis	Batch
	mg/kg		mg/kg	mg/kg		date / time	
Benzene	U		0.000555	0.00119	1	08/26/2021 12:52	WG1729549
Toluene	U		0.00155	0.00594	1	08/26/2021 12:52	WG1729549
Ethylbenzene	U		0.000876	0.00297	1	08/26/2021 12:52	WG1729549
Total Xylenes	U		0.00105	0.00773	1	08/26/2021 12:52	WG1729549
(S) Toluene-d8	*107*			*75.0-131*		*08/26/2021 12:52*	WG1729549
(S) 4-Bromofluorobenzene	*104*			*67.0-138*		*08/26/2021 12:52*	WG1729549
(S) 1,2-Dichloroethane-d4	*92.8*			*70.0-130*		*08/26/2021 12:52*	WG1729549

Semi-Volatile Organic Compounds (GC) by Method 8015M

Analyte	Result (dry)	Qualifier	MDL (dry)	RDL (dry)	Dilution	Analysis	Batch
	mg/kg		mg/kg	mg/kg		date / time	
C10-C28 Diesel Range	19.0		1.76	4.38	1	09/02/2021 19:04	WG1731366
C28-C36 Motor Oil Range	47.2		0.300	4.38	1	09/02/2021 19:04	WG1731366
(S) o-Terphenyl	*56.9*			*18.0-148*		*09/02/2021 19:04*	WG1731366

Total Solids by Method 2540 G-2011

Analyte	Result	Qualifier	Dilution	Analysis	Batch
	%			date / time	
Total Solids	96.7		1	08/27/2021 10:25	WG1730098

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	419		95.1	207	10	08/26/2021 05:45	WG1729563

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	0.0296	J	0.0224	0.103	1	08/25/2021 19:13	WG1729246
(S) a,a,a-Trifluorotoluene(FID)	*95.9*			*77.0-120*		*08/25/2021 19:13*	WG1729246

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

Analyte	Result (dry)	Qualifier	MDL (dry)	RDL (dry)	Dilution	Analysis	Batch
	mg/kg		mg/kg	mg/kg		date / time	
Benzene	U		0.000498	0.00107	1	08/26/2021 13:11	WG1729549
Toluene	U		0.00139	0.00534	1	08/26/2021 13:11	WG1729549
Ethylbenzene	U		0.000787	0.00267	1	08/26/2021 13:11	WG1729549
Total Xylenes	U		0.000939	0.00694	1	08/26/2021 13:11	WG1729549
(S) Toluene-d8	*106*			*75.0-131*		*08/26/2021 13:11*	WG1729549
(S) 4-Bromofluorobenzene	*103*			*67.0-138*		*08/26/2021 13:11*	WG1729549
(S) 1,2-Dichloroethane-d4	*97.4*			*70.0-130*		*08/26/2021 13:11*	WG1729549

Semi-Volatile Organic Compounds (GC) by Method 8015M

Analyte	Result (dry)	Qualifier	MDL (dry)	RDL (dry)	Dilution	Analysis	Batch
	mg/kg		mg/kg	mg/kg		date / time	
C10-C28 Diesel Range	7.38		1.66	4.13	1	08/31/2021 20:12	WG1731367
C28-C36 Motor Oil Range	18.2		0.283	4.13	1	08/31/2021 20:12	WG1731367
(S) o-Terphenyl	*73.4*			*18.0-148*		*08/31/2021 20:12*	WG1731367

Total Solids by Method 2540 G-2011

Analyte	Result	Qualifier	Dilution	Analysis	Batch
	%			date / time	
Total Solids	95.4		1	08/27/2021 10:25	WG1730098

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	548		96.4	210	10	08/26/2021 05:54	WG1729563

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	0.0250	J	0.0227	0.105	1	08/25/2021 19:35	WG1729246
(S) a,a,a-Trifluorotoluene(FID)	*96.3*			*77.0-120*		*08/25/2021 19:35*	WG1729246

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

Analyte	Result (dry)	Qualifier	MDL (dry)	RDL (dry)	Dilution	Analysis	Batch
	mg/kg		mg/kg	mg/kg		date / time	
Benzene	U		0.000512	0.00110	1	08/26/2021 13:30	WG1729549
Toluene	U		0.00142	0.00548	1	08/26/2021 13:30	WG1729549
Ethylbenzene	U		0.000808	0.00274	1	08/26/2021 13:30	WG1729549
Total Xylenes	U		0.000965	0.00712	1	08/26/2021 13:30	WG1729549
(S) Toluene-d8	*107*			*75.0-131*		*08/26/2021 13:30*	WG1729549
(S) 4-Bromofluorobenzene	*103*			*67.0-138*		*08/26/2021 13:30*	WG1729549
(S) 1,2-Dichloroethane-d4	*96.9*			*70.0-130*		*08/26/2021 13:30*	WG1729549

Semi-Volatile Organic Compounds (GC) by Method 8015M

Analyte	Result (dry)	Qualifier	MDL (dry)	RDL (dry)	Dilution	Analysis	Batch
	mg/kg		mg/kg	mg/kg		date / time	
C10-C28 Diesel Range	U		1.69	4.19	1	08/31/2021 08:49	WG1731372
C28-C36 Motor Oil Range	2.99	J	0.287	4.19	1	08/31/2021 08:49	WG1731372
(S) o-Terphenyl	*63.5*			*18.0-148*		*08/31/2021 08:49*	WG1731372

Total Solids by Method 2540 G-2011

Analyte	Result	Qualifier	Dilution	Analysis	Batch
	%			date / time	
Total Solids	87.6		1	08/27/2021 10:25	WG1730098

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	757		52.5	114	5	08/26/2021 06:04	WG1729563

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

Analyte	Result (dry)	Qualifier	MDL (dry)	RDL (dry)	Dilution	Analysis	Batch
	mg/kg		mg/kg	mg/kg		date / time	
TPH (GC/FID) Low Fraction	0.0317	J	0.0248	0.114	1	08/25/2021 19:57	WG1729246
(S) a,a,a-Trifluorotoluene(FID)	*95.9*			*77.0-120*		*08/25/2021 19:57*	WG1729246

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		0.000600	0.00128	1	08/26/2021 13:50	WG1729549
Toluene	U		0.00167	0.00642	1	08/26/2021 13:50	WG1729549
Ethylbenzene	U		0.000946	0.00321	1	08/26/2021 13:50	WG1729549
Total Xylenes	U		0.00113	0.00835	1	08/26/2021 13:50	WG1729549
(S) Toluene-d8	*106*			*75.0-131*		*08/26/2021 13:50*	WG1729549
(S) 4-Bromofluorobenzene	*102*			*67.0-138*		*08/26/2021 13:50*	WG1729549
(S) 1,2-Dichloroethane-d4	*97.8*			*70.0-130*		*08/26/2021 13:50*	WG1729549

Semi-Volatile Organic Compounds (GC) by Method 8015M

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	4.57	1	08/31/2021 04:42	WG1731372
C28-C36 Motor Oil Range	U		0.313	4.57	1	08/31/2021 04:42	WG1731372
(S) o-Terphenyl	*57.7*			*18.0-148*		*08/31/2021 04:42*	WG1731372

Total Solids by Method 2540 G-2011

Analyte	Result	Qualifier	Dilution	Analysis	Batch
	%			date / time	
Total Solids	94.0		1	08/27/2021 10:25	WG1730098

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	563		9.79	21.3	1	08/26/2021 06:13	WG1729563

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	0.0354	J	0.0231	0.106	1	08/25/2021 20:19	WG1729246
(S) a,a,a-Trifluorotoluene(FID)	*96.2*			*77.0-120*		*08/25/2021 20:19*	WG1729246

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

Analyte	Result (dry)	Qualifier	MDL (dry)	RDL (dry)	Dilution	Analysis	Batch
	mg/kg		mg/kg	mg/kg		date / time	
Benzene	U		0.000527	0.00113	1	08/26/2021 14:09	WG1729549
Toluene	U		0.00147	0.00565	1	08/26/2021 14:09	WG1729549
Ethylbenzene	U		0.000832	0.00282	1	08/26/2021 14:09	WG1729549
Total Xylenes	U		0.000994	0.00734	1	08/26/2021 14:09	WG1729549
(S) Toluene-d8	*105*			*75.0-131*		*08/26/2021 14:09*	WG1729549
(S) 4-Bromofluorobenzene	*106*			*67.0-138*		*08/26/2021 14:09*	WG1729549
(S) 1,2-Dichloroethane-d4	*98.8*			*70.0-130*		*08/26/2021 14:09*	WG1729549

Semi-Volatile Organic Compounds (GC) by Method 8015M

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	08/31/2021 04:56	WG1731372
C28-C36 Motor Oil Range	U		0.292	4.26	1	08/31/2021 04:56	WG1731372
(S) o-Terphenyl	*68.8*			*18.0-148*		*08/31/2021 04:56*	WG1731372

Total Solids by Method 2540 G-2011

Analyte	Result	Qualifier	Dilution	Analysis	Batch
	%			date / time	
Total Solids	96.5		1	08/27/2021 10:25	WG1730098

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	296		9.53	20.7	1	08/26/2021 06:23	WG1729563

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	0.0261	J	0.0225	0.104	1	08/25/2021 20:41	WG1729246
(S) a,a,a-Trifluorotoluene(FID)	*96.7*			*77.0-120*		*08/25/2021 20:41*	WG1729246

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	08/26/2021 14:28	WG1729549
Toluene	U		0.00139	0.00536	1	08/26/2021 14:28	WG1729549
Ethylbenzene	U		0.000790	0.00268	1	08/26/2021 14:28	WG1729549
Total Xylenes	U		0.000944	0.00697	1	08/26/2021 14:28	WG1729549
(S) Toluene-d8	*107*			*75.0-131*		*08/26/2021 14:28*	WG1729549
(S) 4-Bromofluorobenzene	*104*			*67.0-138*		*08/26/2021 14:28*	WG1729549
(S) 1,2-Dichloroethane-d4	*96.6*			*70.0-130*		*08/26/2021 14:28*	WG1729549

Semi-Volatile Organic Compounds (GC) by Method 8015M

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	08/31/2021 07:26	WG1731372
C28-C36 Motor Oil Range	0.582	J	0.284	4.14	1	08/31/2021 07:26	WG1731372
(S) o-Terphenyl	*69.6*			*18.0-148*		*08/31/2021 07:26*	WG1731372

Total Solids by Method 2540 G-2011

Analyte	Result	Qualifier	Dilution	Analysis	Batch
	%			date / time	
Total Solids	93.9		1	08/27/2021 10:25	WG1730098

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	587		9.80	21.3	1	08/26/2021 06:51	WG1729563

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	0.0337	J	0.0231	0.107	1	08/25/2021 21:03	WG1729246
(S) a,a,a-Trifluorotoluene(FID)	*94.8*			*77.0-120*		*08/25/2021 21:03*	WG1729246

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	08/26/2021 14:47	WG1729549
Toluene	U		0.00147	0.00565	1	08/26/2021 14:47	WG1729549
Ethylbenzene	U		0.000833	0.00283	1	08/26/2021 14:47	WG1729549
Total Xylenes	U		0.000995	0.00735	1	08/26/2021 14:47	WG1729549
(S) Toluene-d8	*104*			*75.0-131*		*08/26/2021 14:47*	WG1729549
(S) 4-Bromofluorobenzene	*103*			*67.0-138*		*08/26/2021 14:47*	WG1729549
(S) 1,2-Dichloroethane-d4	*95.5*			*70.0-130*		*08/26/2021 14:47*	WG1729549

Semi-Volatile Organic Compounds (GC) by Method 8015M

Analyte	Result (dry)	Qualifier	MDL (dry)	RDL (dry)	Dilution	Analysis	Batch
	mg/kg		mg/kg	mg/kg		date / time	
C10-C28 Diesel Range	U		1.72	4.26	1	08/31/2021 05:10	WG1731372
C28-C36 Motor Oil Range	U		0.292	4.26	1	08/31/2021 05:10	WG1731372
(S) o-Terphenyl	*63.0*			*18.0-148*		*08/31/2021 05:10*	WG1731372

Total Solids by Method 2540 G-2011

Analyte	Result	Qualifier	Dilution	Analysis	Batch
	%			date / time	
Total Solids	95.5		1	08/27/2021 10:25	WG1730098

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	110		9.64	20.9	1	08/26/2021 07:29	WG1729563

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	0.0279	J	0.0227	0.105	1	08/25/2021 21:25	WG1729246
(S) a,a,a-Trifluorotoluene(FID)	*96.4*			*77.0-120*		*08/25/2021 21:25*	WG1729246

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		0.000511	0.00110	1	08/26/2021 15:07	WG1729549
Toluene	U		0.00142	0.00548	1	08/26/2021 15:07	WG1729549
Ethylbenzene	U		0.000807	0.00274	1	08/26/2021 15:07	WG1729549
Total Xylenes	U		0.000964	0.00712	1	08/26/2021 15:07	WG1729549
(S) Toluene-d8	*107*			*75.0-131*		*08/26/2021 15:07*	WG1729549
(S) 4-Bromofluorobenzene	*101*			*67.0-138*		*08/26/2021 15:07*	WG1729549
(S) 1,2-Dichloroethane-d4	*96.8*			*70.0-130*		*08/26/2021 15:07*	WG1729549

Semi-Volatile Organic Compounds (GC) by Method 8015M

Analyte	Result (dry)	Qualifier	MDL (dry)	RDL (dry)	Dilution	Analysis	Batch
	mg/kg		mg/kg	mg/kg		date / time	
C10-C28 Diesel Range	U		1.69	4.19	1	08/31/2021 05:23	WG1731372
C28-C36 Motor Oil Range	U		0.287	4.19	1	08/31/2021 05:23	WG1731372
(S) o-Terphenyl	*66.9*			*18.0-148*		*08/31/2021 05:23*	WG1731372

Total Solids by Method 2540 G-2011

Analyte	Result	Qualifier	Dilution	Analysis	Batch
	%			date / time	
Total Solids	93.0		1	08/27/2021 10:25	WG1730098

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	565		9.89	21.5	1	08/26/2021 07:39	WG1729563

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	0.0284	J	0.0233	0.107	1	08/25/2021 21:47	WG1729246
(S) a,a,a-Trifluorotoluene(FID)	*94.9*			*77.0-120*		*08/25/2021 21:47*	WG1729246

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

Analyte	Result (dry)	Qualifier	MDL (dry)	RDL (dry)	Dilution	Analysis	Batch
	mg/kg		mg/kg	mg/kg		date / time	
Benzene	U		0.000537	0.00115	1	08/26/2021 15:26	WG1729549
Toluene	U		0.00150	0.00575	1	08/26/2021 15:26	WG1729549
Ethylbenzene	U		0.000848	0.00288	1	08/26/2021 15:26	WG1729549
Total Xylenes	U		0.00101	0.00748	1	08/26/2021 15:26	WG1729549
(S) Toluene-d8	*106*			*75.0-131*		*08/26/2021 15:26*	WG1729549
(S) 4-Bromofluorobenzene	*103*			*67.0-138*		*08/26/2021 15:26*	WG1729549
(S) 1,2-Dichloroethane-d4	*97.4*			*70.0-130*		*08/26/2021 15:26*	WG1729549

Semi-Volatile Organic Compounds (GC) by Method 8015M

Analyte	Result (dry)	Qualifier	MDL (dry)	RDL (dry)	Dilution	Analysis	Batch
	mg/kg		mg/kg	mg/kg		date / time	
C10-C28 Diesel Range	16.2		1.73	4.30	1	08/31/2021 09:30	WG1731372
C28-C36 Motor Oil Range	42.1		0.295	4.30	1	08/31/2021 09:30	WG1731372
(S) o-Terphenyl	*48.2*			*18.0-148*		*08/31/2021 09:30*	WG1731372

Total Solids by Method 2540 G-2011

Analyte	Result	Qualifier	Dilution	Analysis	Batch
	%			date / time	
Total Solids	95.3		1	08/27/2021 10:25	WG1730098

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	530		48.3	105	5	08/26/2021 07:48	WG1729563

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	0.0283	J	0.0228	0.105	1	08/25/2021 22:09	WG1729246
(S) a,a,a-Trifluorotoluene(FID)	*96.1*			*77.0-120*		*08/25/2021 22:09*	WG1729246

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	J3	0.000513	0.00110	1	08/26/2021 15:45	WG1729549
Toluene	U	J3	0.00143	0.00549	1	08/26/2021 15:45	WG1729549
Ethylbenzene	U	J3	0.000810	0.00275	1	08/26/2021 15:45	WG1729549
Total Xylenes	U	J3	0.000967	0.00714	1	08/26/2021 15:45	WG1729549
(S) Toluene-d8	*106*			*75.0-131*		*08/26/2021 15:45*	WG1729549
(S) 4-Bromofluorobenzene	*99.7*			*67.0-138*		*08/26/2021 15:45*	WG1729549
(S) 1,2-Dichloroethane-d4	*96.6*			*70.0-130*		*08/26/2021 15:45*	WG1729549

Semi-Volatile Organic Compounds (GC) by Method 8015M

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	08/31/2021 05:37	WG1731372
C28-C36 Motor Oil Range	4.02	J	0.287	4.20	1	08/31/2021 05:37	WG1731372
(S) o-Terphenyl	*67.8*			*18.0-148*		*08/31/2021 05:37*	WG1731372

Total Solids by Method 2540 G-2011

Analyte	Result	Qualifier	Dilution	Analysis	Batch
	%			date / time	
Total Solids	92.8		1	08/30/2021 09:44	WG1730100

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	977		99.2	216	10	08/26/2021 07:58	WG1729563

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	08/25/2021 22:32	WG1729246
(S) a,a,a-Trifluorotoluene(FID)	*96.1*			*77.0-120*		*08/25/2021 22:32*	WG1729246

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		0.000540	0.00116	1	08/26/2021 01:10	WG1729711
Toluene	U		0.00150	0.00578	1	08/26/2021 01:10	WG1729711
Ethylbenzene	0.000867	J	0.000852	0.00289	1	08/26/2021 01:10	WG1729711
Total Xylenes	0.00180	J	0.00102	0.00751	1	08/26/2021 01:10	WG1729711
(S) Toluene-d8	*123*			*75.0-131*		*08/26/2021 01:10*	WG1729711
(S) 4-Bromofluorobenzene	*84.5*			*67.0-138*		*08/26/2021 01:10*	WG1729711
(S) 1,2-Dichloroethane-d4	*89.1*			*70.0-130*		*08/26/2021 01:10*	WG1729711

Semi-Volatile Organic Compounds (GC) by Method 8015M

Analyte	Result (dry)	Qualifier	MDL (dry)	RDL (dry)	Dilution	Analysis	Batch
	mg/kg		mg/kg	mg/kg		date / time	
C10-C28 Diesel Range	U		1.74	4.31	1	08/31/2021 05:51	WG1731372
C28-C36 Motor Oil Range	2.06	J	0.295	4.31	1	08/31/2021 05:51	WG1731372
(S) o-Terphenyl	*66.6*			*18.0-148*		*08/31/2021 05:51*	WG1731372

Total Solids by Method 2540 G-2011

Analyte	Result	Qualifier	Dilution	Analysis	Batch
	%			date / time	
Total Solids	93.7		1	08/30/2021 09:44	WG1730100

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	856		9.82	21.3	1	08/26/2021 08:07	WG1729563

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	0.0268	J	0.0232	0.107	1	08/25/2021 22:54	WG1729246
(S) a,a,a-Trifluorotoluene(FID)	*95.8*			*77.0-120*		*08/25/2021 22:54*	WG1729246

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	0.00113	1	08/26/2021 01:29	WG1729711
Toluene	U		0.00147	0.00567	1	08/26/2021 01:29	WG1729711
Ethylbenzene	U		0.000836	0.00284	1	08/26/2021 01:29	WG1729711
Total Xylenes	U		0.000998	0.00737	1	08/26/2021 01:29	WG1729711
(S) Toluene-d8	*119*			*75.0-131*		*08/26/2021 01:29*	WG1729711
(S) 4-Bromofluorobenzene	*84.8*			*67.0-138*		*08/26/2021 01:29*	WG1729711
(S) 1,2-Dichloroethane-d4	*87.6*			*70.0-130*		*08/26/2021 01:29*	WG1729711

Semi-Volatile Organic Compounds (GC) by Method 8015M

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	4.27	1	08/31/2021 08:35	WG1731372
C28-C36 Motor Oil Range	U		0.292	4.27	1	08/31/2021 08:35	WG1731372
(S) o-Terphenyl	*67.5*			*18.0-148*		*08/31/2021 08:35*	WG1731372

Total Solids by Method 2540 G-2011

Analyte	Result	Qualifier	Dilution	Analysis	Batch
	%			date / time	
Total Solids	94.2		1	08/30/2021 09:44	WG1730100

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	810		9.77	21.2	1	08/26/2021 08:17	WG1729563

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

Analyte	Result (dry)	Qualifier	MDL (dry)	RDL (dry)	Dilution	Analysis	Batch
	mg/kg		mg/kg	mg/kg		date / time	
TPH (GC/FID) Low Fraction	0.0249	J	0.0230	0.106	1	08/25/2021 23:16	WG1729246
(S) a,a,a-Trifluorotoluene(FID)	*96.9*			*77.0-120*		*08/25/2021 23:16*	WG1729246

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

Analyte	Result (dry)	Qualifier	MDL (dry)	RDL (dry)	Dilution	Analysis	Batch
	mg/kg		mg/kg	mg/kg		date / time	
Benzene	U		0.000525	0.00112	1	08/26/2021 01:48	WG1729711
Toluene	U		0.00146	0.00562	1	08/26/2021 01:48	WG1729711
Ethylbenzene	U		0.000829	0.00281	1	08/26/2021 01:48	WG1729711
Total Xylenes	U		0.000989	0.00731	1	08/26/2021 01:48	WG1729711
(S) Toluene-d8	*122*			*75.0-131*		*08/26/2021 01:48*	WG1729711
(S) 4-Bromofluorobenzene	*85.4*			*67.0-138*		*08/26/2021 01:48*	WG1729711
(S) 1,2-Dichloroethane-d4	*89.2*			*70.0-130*		*08/26/2021 01:48*	WG1729711

Semi-Volatile Organic Compounds (GC) by Method 8015M

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	08/31/2021 06:04	WG1731372
C28-C36 Motor Oil Range	U		0.291	4.25	1	08/31/2021 06:04	WG1731372
(S) o-Terphenyl	*60.0*			*18.0-148*		*08/31/2021 06:04*	WG1731372

Total Solids by Method 2540 G-2011

Analyte	Result	Qualifier	Dilution	Analysis	Batch
	%			date / time	
Total Solids	93.8		1	08/30/2021 09:44	WG1730100

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	835		9.81	21.3	1	08/26/2021 08:45	WG1729563

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

Analyte	Result (dry)	Qualifier	MDL (dry)	RDL (dry)	Dilution	Analysis	Batch
	mg/kg		mg/kg	mg/kg		date / time	
TPH (GC/FID) Low Fraction	0.0262	J	0.0231	0.107	1	08/25/2021 23:37	WG1729246
(S) a,a,a-Trifluorotoluene(FID)	*95.9*			*77.0-120*		*08/25/2021 23:37*	WG1729246

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

Analyte	Result (dry)	Qualifier	MDL (dry)	RDL (dry)	Dilution	Analysis	Batch
	mg/kg		mg/kg	mg/kg		date / time	
Benzene	U		0.000529	0.00113	1	08/26/2021 02:07	WG1729711
Toluene	U		0.00147	0.00566	1	08/26/2021 02:07	WG1729711
Ethylbenzene	U		0.000835	0.00283	1	08/26/2021 02:07	WG1729711
Total Xylenes	U		0.000997	0.00736	1	08/26/2021 02:07	WG1729711
(S) Toluene-d8	*121*			*75.0-131*		*08/26/2021 02:07*	WG1729711
(S) 4-Bromofluorobenzene	*84.9*			*67.0-138*		*08/26/2021 02:07*	WG1729711
(S) 1,2-Dichloroethane-d4	*85.7*			*70.0-130*		*08/26/2021 02:07*	WG1729711

Semi-Volatile Organic Compounds (GC) by Method 8015M

Analyte	Result (dry)	Qualifier	MDL (dry)	RDL (dry)	Dilution	Analysis	Batch
	mg/kg		mg/kg	mg/kg		date / time	
C10-C28 Diesel Range	U		1.72	4.26	1	08/31/2021 06:18	WG1731372
C28-C36 Motor Oil Range	U		0.292	4.26	1	08/31/2021 06:18	WG1731372
(S) o-Terphenyl	*69.7*			*18.0-148*		*08/31/2021 06:18*	WG1731372

Total Solids by Method 2540 G-2011

Analyte	Result	Qualifier	Dilution	Analysis	Batch
	%			date / time	
Total Solids	92.0		1	08/30/2021 09:44	WG1730100

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	730		10.0	21.7	1	08/26/2021 08:55	WG1729563

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	0.0307	J	0.0236	0.109	1	08/25/2021 23:59	WG1729246
(S) a,a,a-Trifluorotoluene(FID)	*95.2*			*77.0-120*		*08/25/2021 23:59*	WG1729246

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	0.00117	1	08/26/2021 02:25	WG1729711
Toluene	U		0.00153	0.00587	1	08/26/2021 02:25	WG1729711
Ethylbenzene	U		0.000866	0.00294	1	08/26/2021 02:25	WG1729711
Total Xylenes	U		0.00103	0.00764	1	08/26/2021 02:25	WG1729711
(S) Toluene-d8	*120*			*75.0-131*		*08/26/2021 02:25*	WG1729711
(S) 4-Bromofluorobenzene	*84.7*			*67.0-138*		*08/26/2021 02:25*	WG1729711
(S) 1,2-Dichloroethane-d4	*89.1*			*70.0-130*		*08/26/2021 02:25*	WG1729711

Semi-Volatile Organic Compounds (GC) by Method 8015M

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	08/31/2021 08:21	WG1731372
C28-C36 Motor Oil Range	U		0.298	4.35	1	08/31/2021 08:21	WG1731372
(S) o-Terphenyl	*67.0*			*18.0-148*		*08/31/2021 08:21*	WG1731372

Total Solids by Method 2540 G-2011

Analyte	Result	Qualifier	Dilution	Analysis	Batch
	%			date / time	
Total Solids	92.9		1	08/30/2021 09:44	WG1730100

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	695		9.90	21.5	1	08/26/2021 09:04	WG1729563

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	0.0286	J	0.0234	0.108	1	08/26/2021 00:21	WG1729246
(S) a,a,a-Trifluorotoluene(FID)	*95.4*			*77.0-120*		*08/26/2021 00:21*	WG1729246

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

Analyte	Result (dry)	Qualifier	MDL (dry)	RDL (dry)	Dilution	Analysis	Batch
	mg/kg		mg/kg	mg/kg		date / time	
Benzene	U		0.000539	0.00115	1	08/26/2021 02:44	WG1729711
Toluene	U		0.00150	0.00577	1	08/26/2021 02:44	WG1729711
Ethylbenzene	U		0.000850	0.00288	1	08/26/2021 02:44	WG1729711
Total Xylenes	U		0.00102	0.00750	1	08/26/2021 02:44	WG1729711
(S) Toluene-d8	*119*			*75.0-131*		*08/26/2021 02:44*	WG1729711
(S) 4-Bromofluorobenzene	*85.2*			*67.0-138*		*08/26/2021 02:44*	WG1729711
(S) 1,2-Dichloroethane-d4	*90.1*			*70.0-130*		*08/26/2021 02:44*	WG1729711

Semi-Volatile Organic Compounds (GC) by Method 8015M

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	4.31	1	08/31/2021 06:32	WG1731372
C28-C36 Motor Oil Range	U		0.295	4.31	1	08/31/2021 06:32	WG1731372
(S) o-Terphenyl	*73.0*			*18.0-148*		*08/31/2021 06:32*	WG1731372

Total Solids by Method 2540 G-2011

Analyte	Result	Qualifier	Dilution	Analysis	Batch
	%			date / time	
Total Solids	82.0		1	08/30/2021 09:44	WG1730100

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	103		11.2	24.4	1	08/26/2021 09:24	WG1729563

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	0.0337	J	0.0265	0.122	1	08/26/2021 00:43	WG1729246
(S) a,a,a-Trifluorotoluene(FID)	*97.1*			*77.0-120*		*08/26/2021 00:43*	WG1729246

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		0.000674	0.00144	1	08/26/2021 03:03	WG1729711
Toluene	U		0.00188	0.00721	1	08/26/2021 03:03	WG1729711
Ethylbenzene	U		0.00106	0.00361	1	08/26/2021 03:03	WG1729711
Total Xylenes	U		0.00127	0.00938	1	08/26/2021 03:03	WG1729711
(S) Toluene-d8	*116*			*75.0-131*		*08/26/2021 03:03*	WG1729711
(S) 4-Bromofluorobenzene	*88.5*			*67.0-138*		*08/26/2021 03:03*	WG1729711
(S) 1,2-Dichloroethane-d4	*97.8*			*70.0-130*		*08/26/2021 03:03*	WG1729711

Semi-Volatile Organic Compounds (GC) by Method 8015M

Analyte	Result (dry)	Qualifier	MDL (dry)	RDL (dry)	Dilution	Analysis	Batch
	mg/kg		mg/kg	mg/kg		date / time	
C10-C28 Diesel Range	U		1.96	4.88	1	08/31/2021 06:45	WG1731372
C28-C36 Motor Oil Range	U		0.334	4.88	1	08/31/2021 06:45	WG1731372
(S) o-Terphenyl	*70.3*			*18.0-148*		*08/31/2021 06:45*	WG1731372

Total Solids by Method 2540 G-2011

Analyte	Result	Qualifier	Dilution	Analysis	Batch
	%			date / time	
Total Solids	98.8		1	08/30/2021 09:44	WG1730100

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	08/26/2021 09:33	WG1729563

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	0.0226	J	0.0220	0.101	1	08/26/2021 01:05	WG1729246
(S) a,a,a-Trifluorotoluene(FID)	*96.6*			*77.0-120*		*08/26/2021 01:05*	WG1729246

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	08/26/2021 03:22	WG1729711
Toluene	U		0.00133	0.00512	1	08/26/2021 03:22	WG1729711
Ethylbenzene	U		0.000755	0.00256	1	08/26/2021 03:22	WG1729711
Total Xylenes	U		0.000901	0.00666	1	08/26/2021 03:22	WG1729711
(S) Toluene-d8	*117*			*75.0-131*		*08/26/2021 03:22*	WG1729711
(S) 4-Bromofluorobenzene	*88.3*			*67.0-138*		*08/26/2021 03:22*	WG1729711
(S) 1,2-Dichloroethane-d4	*96.1*			*70.0-130*		*08/26/2021 03:22*	WG1729711

Semi-Volatile Organic Compounds (GC) by Method 8015M

Analyte	Result (dry)	Qualifier	MDL (dry)	RDL (dry)	Dilution	Analysis	Batch
	mg/kg		mg/kg	mg/kg		date / time	
C10-C28 Diesel Range	U		1.63	4.05	1	08/31/2021 08:07	WG1731372
C28-C36 Motor Oil Range	4.25		0.277	4.05	1	08/31/2021 08:07	WG1731372
(S) o-Terphenyl	*68.3*			*18.0-148*		*08/31/2021 08:07*	WG1731372

Total Solids by Method 2540 G-2011

Analyte	Result	Qualifier	Dilution	Analysis	Batch
	%			date / time	
Total Solids	97.8		1	08/30/2021 09:44	WG1730100

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		9.41	20.5	1	08/27/2021 00:23	WG1729564

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	0.0222	J	0.0222	0.102	1	08/26/2021 01:27	WG1729246
(S) a,a,a-Trifluorotoluene(FID)	*96.7*			*77.0-120*		*08/26/2021 01:27*	WG1729246

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

Analyte	Result (dry)	Qualifier	MDL (dry)	RDL (dry)	Dilution	Analysis	Batch
	mg/kg		mg/kg	mg/kg		date / time	
Benzene	U		0.000488	0.00105	1	08/26/2021 03:41	WG1729711
Toluene	U		0.00136	0.00523	1	08/26/2021 03:41	WG1729711
Ethylbenzene	U		0.000771	0.00261	1	08/26/2021 03:41	WG1729711
Total Xylenes	U		0.000920	0.00680	1	08/26/2021 03:41	WG1729711
(S) Toluene-d8	*119*			*75.0-131*		*08/26/2021 03:41*	WG1729711
(S) 4-Bromofluorobenzene	*84.0*			*67.0-138*		*08/26/2021 03:41*	WG1729711
(S) 1,2-Dichloroethane-d4	*91.8*			*70.0-130*		*08/26/2021 03:41*	WG1729711

Semi-Volatile Organic Compounds (GC) by Method 8015M

Analyte	Result (dry)	Qualifier	MDL (dry)	RDL (dry)	Dilution	Analysis	Batch
	mg/kg		mg/kg	mg/kg		date / time	
C10-C28 Diesel Range	U		1.65	4.09	1	08/31/2021 06:59	WG1731372
C28-C36 Motor Oil Range	3.02	J	0.280	4.09	1	08/31/2021 06:59	WG1731372
(S) o-Terphenyl	*69.3*			*18.0-148*		*08/31/2021 06:59*	WG1731372

Total Solids by Method 2540 G-2011

Analyte	Result	Qualifier	Dilution	Analysis	Batch
	%			date / time	
Total Solids	92.5		1	08/30/2021 09:44	WG1730100

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	10.3	J	9.94	21.6	1	08/27/2021 00:32	WG1729564

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	08/26/2021 01:49	WG1729246
(S) a,a,a-Trifluorotoluene(FID)	*96.4*			*77.0-120*		*08/26/2021 01:49*	WG1729246

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		0.000542	0.00116	1	08/26/2021 04:00	WG1729711
Toluene	U		0.00151	0.00581	1	08/26/2021 04:00	WG1729711
Ethylbenzene	U		0.000856	0.00290	1	08/26/2021 04:00	WG1729711
Total Xylenes	U		0.00102	0.00755	1	08/26/2021 04:00	WG1729711
(S) Toluene-d8	*120*			*75.0-131*		*08/26/2021 04:00*	WG1729711
(S) 4-Bromofluorobenzene	*84.1*			*67.0-138*		*08/26/2021 04:00*	WG1729711
(S) 1,2-Dichloroethane-d4	*93.0*			*70.0-130*		*08/26/2021 04:00*	WG1729711

Semi-Volatile Organic Compounds (GC) by Method 8015M

Analyte	Result (dry)	Qualifier	MDL (dry)	RDL (dry)	Dilution	Analysis	Batch
	mg/kg		mg/kg	mg/kg		date / time	
C10-C28 Diesel Range	2.37	J	1.74	4.32	1	08/31/2021 07:13	WG1731372
C28-C36 Motor Oil Range	10.0		0.296	4.32	1	08/31/2021 07:13	WG1731372
(S) o-Terphenyl	*66.8*			*18.0-148*		*08/31/2021 07:13*	WG1731372

Total Solids by Method 2540 G-2011

Analyte	Result	Qualifier	Dilution	Analysis	Batch
	%			date / time	
Total Solids	82.2		1	08/27/2021 14:01	WG1730104

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	16.5	J	11.2	24.3	1	08/27/2021 00:42	WG1729564

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		0.0264	0.122	1	08/25/2021 18:52	WG1729250
(S) a,a,a-Trifluorotoluene(FID)	*102*			*77.0-120*		*08/25/2021 18:52*	WG1729250

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		0.000670	0.00143	1	08/26/2021 04:19	WG1729711
Toluene	U		0.00187	0.00717	1	08/26/2021 04:19	WG1729711
Ethylbenzene	U		0.00106	0.00359	1	08/26/2021 04:19	WG1729711
Total Xylenes	U		0.00126	0.00933	1	08/26/2021 04:19	WG1729711
(S) Toluene-d8	*119*			*75.0-131*		*08/26/2021 04:19*	WG1729711
(S) 4-Bromofluorobenzene	*83.5*			*67.0-138*		*08/26/2021 04:19*	WG1729711
(S) 1,2-Dichloroethane-d4	*91.9*			*70.0-130*		*08/26/2021 04:19*	WG1729711

Semi-Volatile Organic Compounds (GC) by Method 8015M

Analyte	Result (dry)	Qualifier	MDL (dry)	RDL (dry)	Dilution	Analysis	Batch
	mg/kg		mg/kg	mg/kg		date / time	
C10-C28 Diesel Range	U		1.96	4.87	1	09/01/2021 05:53	WG1731865
C28-C36 Motor Oil Range	0.374	J	0.333	4.87	1	09/01/2021 05:53	WG1731865
(S) o-Terphenyl	*46.1*			*18.0-148*		*09/01/2021 05:53*	WG1731865

Total Solids by Method 2540 G-2011

Analyte	Result	Qualifier	Dilution	Analysis	Batch
	%			date / time	
Total Solids	84.0		1	08/27/2021 14:01	WG1730104

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	18.2	J	11.0	23.8	1	08/27/2021 00:51	WG1729564

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	08/25/2021 19:16	WG1729250
(S) a,a,a-Trifluorotoluene(FID)	*102*			*77.0-120*		*08/25/2021 19:16*	WG1729250

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		0.000645	0.00138	1	08/26/2021 04:38	WG1729711
Toluene	U		0.00180	0.00691	1	08/26/2021 04:38	WG1729711
Ethylbenzene	U		0.00102	0.00345	1	08/26/2021 04:38	WG1729711
Total Xylenes	U		0.00122	0.00898	1	08/26/2021 04:38	WG1729711
(S) Toluene-d8	*117*			*75.0-131*		*08/26/2021 04:38*	WG1729711
(S) 4-Bromofluorobenzene	*91.1*			*67.0-138*		*08/26/2021 04:38*	WG1729711
(S) 1,2-Dichloroethane-d4	*99.1*			*70.0-130*		*08/26/2021 04:38*	WG1729711

Semi-Volatile Organic Compounds (GC) by Method 8015M

Analyte	Result (dry)	Qualifier	MDL (dry)	RDL (dry)	Dilution	Analysis	Batch
	mg/kg		mg/kg	mg/kg		date / time	
C10-C28 Diesel Range	U	J6	1.92	4.76	1	09/01/2021 06:06	WG1731865
C28-C36 Motor Oil Range	0.719	J	0.326	4.76	1	09/01/2021 06:06	WG1731865
(S) o-Terphenyl	*50.6*			*18.0-148*		*09/01/2021 06:06*	WG1731865

Total Solids by Method 2540 G-2011

Analyte	Result	Qualifier	Dilution	Analysis	Batch
	%			date / time	
Total Solids	80.7		1	08/27/2021 14:01	WG1730104

Wet Chemistry by Method 300.0

Analyte	Result (dry)	Qualifier	MDL (dry)	RDL (dry)	Dilution	Analysis	Batch
	mg/kg		mg/kg	mg/kg		date / time	
Chloride	14.9	J	11.4	24.8	1	08/27/2021 01:01	WG1729564

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		0.0269	0.124	1	08/25/2021 19:40	WG1729250
(S) a,a,a-Trifluorotoluene(FID)	*101*			*77.0-120*		*08/25/2021 19:40*	WG1729250

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		0.000691	0.00148	1	08/26/2021 04:57	WG1729711
Toluene	U		0.00192	0.00739	1	08/26/2021 04:57	WG1729711
Ethylbenzene	U		0.00109	0.00370	1	08/26/2021 04:57	WG1729711
Total Xylenes	U		0.00130	0.00961	1	08/26/2021 04:57	WG1729711
(S) Toluene-d8	*120*			*75.0-131*		*08/26/2021 04:57*	WG1729711
(S) 4-Bromofluorobenzene	*85.5*			*67.0-138*		*08/26/2021 04:57*	WG1729711
(S) 1,2-Dichloroethane-d4	*91.4*			*70.0-130*		*08/26/2021 04:57*	WG1729711

Semi-Volatile Organic Compounds (GC) by Method 8015M

Analyte	Result (dry)	Qualifier	MDL (dry)	RDL (dry)	Dilution	Analysis	Batch
	mg/kg		mg/kg	mg/kg		date / time	
C10-C28 Diesel Range	U		1.99	4.95	1	09/01/2021 06:48	WG1731865
C28-C36 Motor Oil Range	U		0.339	4.95	1	09/01/2021 06:48	WG1731865
(S) o-Terphenyl	*43.9*			*18.0-148*		*09/01/2021 06:48*	WG1731865

Total Solids by Method 2540 G-2011

Analyte	Result	Qualifier	Dilution	Analysis	Batch
	%			date / time	
Total Solids	92.8		1	08/27/2021 14:01	WG1730104

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	10.4	J	9.92	21.6	1	08/27/2021 01:10	WG1729564

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	08/25/2021 20:03	WG1729250
(S) a,a,a-Trifluorotoluene(FID)	*103*			*77.0-120*		*08/25/2021 20:03*	WG1729250

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		0.000540	0.00116	1	08/26/2021 05:16	WG1729711
Toluene	U		0.00150	0.00578	1	08/26/2021 05:16	WG1729711
Ethylbenzene	U		0.000852	0.00289	1	08/26/2021 05:16	WG1729711
Total Xylenes	U		0.00102	0.00751	1	08/26/2021 05:16	WG1729711
(S) Toluene-d8	*118*			*75.0-131*		*08/26/2021 05:16*	WG1729711
(S) 4-Bromofluorobenzene	*90.3*			*67.0-138*		*08/26/2021 05:16*	WG1729711
(S) 1,2-Dichloroethane-d4	*98.2*			*70.0-130*		*08/26/2021 05:16*	WG1729711

Semi-Volatile Organic Compounds (GC) by Method 8015M

Analyte	Result (dry)	Qualifier	MDL (dry)	RDL (dry)	Dilution	Analysis	Batch
	mg/kg		mg/kg	mg/kg		date / time	
C10-C28 Diesel Range	U		1.74	4.31	1	09/01/2021 07:01	WG1731865
C28-C36 Motor Oil Range	1.04	J	0.295	4.31	1	09/01/2021 07:01	WG1731865
(S) o-Terphenyl	*59.0*			*18.0-148*		*09/01/2021 07:01*	WG1731865

Total Solids by Method 2540 G-2011

Analyte	Result	Qualifier	Dilution	Analysis	Batch
	%			date / time	
Total Solids	89.6		1	08/27/2021 14:01	WG1730104

Wet Chemistry by Method 300.0

Analyte	Result (dry)	Qualifier	MDL (dry)	RDL (dry)	Dilution	Analysis	Batch
	mg/kg		mg/kg	mg/kg		date / time	
Chloride	14.4	J	10.3	22.3	1	08/27/2021 01:20	WG1729564

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

Analyte	Result (dry)	Qualifier	MDL (dry)	RDL (dry)	Dilution	Analysis	Batch
	mg/kg		mg/kg	mg/kg		date / time	
TPH (GC/FID) Low Fraction	U		0.0242	0.112	1	08/25/2021 20:27	WG1729250
(S) a,a,a-Trifluorotoluene(FID)	*101*			*77.0-120*		*08/25/2021 20:27*	WG1729250

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		0.000575	0.00123	1	08/26/2021 05:35	WG1729711
Toluene	U		0.00160	0.00616	1	08/26/2021 05:35	WG1729711
Ethylbenzene	U		0.000908	0.00308	1	08/26/2021 05:35	WG1729711
Total Xylenes	U		0.00108	0.00801	1	08/26/2021 05:35	WG1729711
(S) Toluene-d8	*115*			*75.0-131*		*08/26/2021 05:35*	WG1729711
(S) 4-Bromofluorobenzene	*88.4*			*67.0-138*		*08/26/2021 05:35*	WG1729711
(S) 1,2-Dichloroethane-d4	*95.9*			*70.0-130*		*08/26/2021 05:35*	WG1729711

Semi-Volatile Organic Compounds (GC) by Method 8015M

Analyte	Result (dry)	Qualifier	MDL (dry)	RDL (dry)	Dilution	Analysis	Batch
	mg/kg		mg/kg	mg/kg		date / time	
C10-C28 Diesel Range	U		1.80	4.46	1	09/01/2021 07:15	WG1731865
C28-C36 Motor Oil Range	2.31	J	0.306	4.46	1	09/01/2021 07:15	WG1731865
(S) o-Terphenyl	*62.5*			*18.0-148*		*09/01/2021 07:15*	WG1731865

Method Blank (MB)

(MB) R3697588-1 08/27/21 09:20

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

L1393283-03 Original Sample (OS) • Duplicate (DUP)

(OS) L1393283-03 08/27/21 09:20 • (DUP) R3697588-3 08/27/21 09:20

Analyte	Original Result %	DUP Result %	Dilution	DUP RPD %	DUP Qualifier	DUP RPD Limits %
Total Solids	94.6	94.8	1	0.179		10

Laboratory Control Sample (LCS)

(LCS) R3697588-2 08/27/21 09:20

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) R3697587-1 08/27/21 09:12

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

L1393283-11 Original Sample (OS) • Duplicate (DUP)

(OS) L1393283-11 08/27/21 09:12 • (DUP) R3697587-3 08/27/21 09:12

Analyte	Original Result %	DUP Result %	Dilution	DUP RPD %	DUP Qualifier	DUP RPD Limits %
Total Solids	97.3	96.9	1	0.365		10

Laboratory Control Sample (LCS)

(LCS) R3697587-2 08/27/21 09:12

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) R3697561-1 08/27/21 10:25

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

L1393283-23 Original Sample (OS) • Duplicate (DUP)

(OS) L1393283-23 08/27/21 10:25 • (DUP) R3697561-3 08/27/21 10:25

Analyte	Original Result %	DUP Result %	Dilution	DUP RPD %	DUP Qualifier	DUP RPD Limits %
Total Solids	95.5	95.4	1	0.0501		10

Laboratory Control Sample (LCS)

(LCS) R3697561-2 08/27/21 10:25

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) R3698215-1 08/30/21 09:44

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

L1393283-34 Original Sample (OS) • Duplicate (DUP)

(OS) L1393283-34 08/30/21 09:44 • (DUP) R3698215-3 08/30/21 09:44

Analyte	Original Result %	DUP Result %	Dilution	DUP RPD %	DUP Qualifier	DUP RPD Limits %
Total Solids	97.8	97.9	1	0.0832		10

Laboratory Control Sample (LCS)

(LCS) R3698215-2 08/30/21 09:44

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) R3697574-1 08/27/21 14:01

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

L1393297-01 Original Sample (OS) • Duplicate (DUP)

(OS) L1393297-01 08/27/21 14:01 • (DUP) R3697574-3 08/27/21 14:01

Analyte	Original Result %	DUP Result %	Dilution	DUP RPD %	DUP Qualifier	DUP RPD Limits %
Total Solids	83.2	83.6	1	0.478		10

Laboratory Control Sample (LCS)

(LCS) R3697574-2 08/27/21 14:01

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) R3697248-1 08/26/21 11:19

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

L1393263-32 Original Sample (OS) • Duplicate (DUP)

(OS) L1393263-32 08/26/21 14:16 • (DUP) R3697248-3 08/26/21 14:26

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

L1393283-02 Original Sample (OS) • Duplicate (DUP)

(OS) L1393283-02 08/26/21 16:10 • (DUP) R3697248-4 08/26/21 16:20

Analyte	Original Result (dry) mg/kg	DUP Result (dry) mg/kg	Dilution	DUP RPD %	DUP Qualifier	DUP RPD Limits %
Chloride	277	270	1	2.59		20

Laboratory Control Sample (LCS)

(LCS) R3697248-2 08/26/21 11:29

Analyte	Spike Amount mg/kg	LCS Result mg/kg	LCS Rec. %	Rec. Limits %	LCS Qualifier
Chloride	200	196	97.9	90.0-110	

L1393283-02 Original Sample (OS) • Matrix Spike (MS) • Matrix Spike Duplicate (MSD)

(OS) L1393283-02 08/26/21 16:10 • (MS) R3697248-5 08/26/21 16:29 • (MSD) R3697248-6 08/26/21 16:39

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	535	277	828	808	103	99.4	1	80.0-120			2.37	20

Method Blank (MB)

(MB) R3696691-1 08/25/21 22:45

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

L1393736-01 Original Sample (OS) • Duplicate (DUP)

(OS) L1393736-01 08/26/21 01:51 • (DUP) R3696691-3 08/26/21 02:00

Analyte	Original Result (dry) mg/kg	DUP Result (dry) mg/kg	Dilution	DUP RPD %	DUP Qualifier	DUP RPD Limits %
Chloride	15.1	18.3	1	19.2	J	20

L1393736-12 Original Sample (OS) • Duplicate (DUP)

(OS) L1393736-12 08/26/21 04:19 • (DUP) R3696691-6 08/26/21 04:28

Analyte	Original Result (dry) mg/kg	DUP Result (dry) mg/kg	Dilution	DUP RPD %	DUP Qualifier	DUP RPD Limits %
Chloride	1980	2000	10	1.19		20

Laboratory Control Sample (LCS)

(LCS) R3696691-2 08/25/21 22:55

Analyte	Spike Amount mg/kg	LCS Result mg/kg	LCS Rec. %	Rec. Limits %	LCS Qualifier
Chloride	200	214	107	90.0-110	

L1393736-01 Original Sample (OS) • Matrix Spike (MS) • Matrix Spike Duplicate (MSD)

(OS) L1393736-01 08/26/21 01:51 • (MS) R3696691-4 08/26/21 02:10 • (MSD) R3696691-5 08/26/21 02:19

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	659	15.1	665	647	98.6	95.9	1	80.0-120			2.69	20

Method Blank (MB)

(MB) R3696692-1 08/26/21 04:57

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

L1393283-22 Original Sample (OS) • Duplicate (DUP)

(OS) L1393283-22 08/26/21 06:51 • (DUP) R3696692-3 08/26/21 07:01

Analyte	Original Result (dry) mg/kg	DUP Result (dry) mg/kg	Dilution	DUP RPD %	DUP Qualifier	DUP RPD Limits %
Chloride	587	603	1	2.72		20

L1393283-31 Original Sample (OS) • Duplicate (DUP)

(OS) L1393283-31 08/26/21 09:04 • (DUP) R3696692-6 08/26/21 09:14

Analyte	Original Result (dry) mg/kg	DUP Result (dry) mg/kg	Dilution	DUP RPD %	DUP Qualifier	DUP RPD Limits %
Chloride	695	697	1	0.206		20

Laboratory Control Sample (LCS)

(LCS) R3696692-2 08/26/21 05:06

Analyte	Spike Amount mg/kg	LCS Result mg/kg	LCS Rec. %	Rec. Limits %	LCS Qualifier
Chloride	200	208	104	90.0-110	

L1393283-22 Original Sample (OS) • Matrix Spike (MS) • Matrix Spike Duplicate (MSD)

(OS) L1393283-22 08/26/21 06:51 • (MS) R3696692-4 08/26/21 07:10 • (MSD) R3696692-5 08/26/21 07:20

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	587	1160	1220	107	118	1	80.0-120	E	E	5.26	20

Method Blank (MB)

(MB) R3697250-1 08/27/21 00:04

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

L1393397-01 Original Sample (OS) • Duplicate (DUP)

(OS) L1393397-01 08/27/21 01:29 • (DUP) R3697250-3 08/27/21 01:58

Analyte	Original Result (dry) mg/kg	DUP Result (dry) mg/kg	Dilution	DUP RPD %	DUP Qualifier	DUP RPD Limits %
Chloride	26.5	31.1	1	15.9		20

L1393397-13 Original Sample (OS) • Duplicate (DUP)

(OS) L1393397-13 08/27/21 04:11 • (DUP) R3697250-4 08/27/21 04:21

Analyte	Original Result (dry) mg/kg	DUP Result (dry) mg/kg	Dilution	DUP RPD %	DUP Qualifier	DUP RPD Limits %
Chloride	11000	11200	10	1.02		20

Laboratory Control Sample (LCS)

(LCS) R3697250-2 08/27/21 00:13

Analyte	Spike Amount mg/kg	LCS Result mg/kg	LCS Rec. %	Rec. Limits %	LCS Qualifier
Chloride	200	196	98.2	90.0-110	

L1393397-13 Original Sample (OS) • Matrix Spike (MS) • Matrix Spike Duplicate (MSD)

(OS) L1393397-13 08/27/21 04:11 • (MS) R3697250-5 08/27/21 04:30 • (MSD) R3697250-6 08/27/21 04:40

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	620	11000	11700	13900	97.2	452	10	80.0-120		E V	17.3	20

Method Blank (MB)

(MB) R3698506-2 08/27/21 02:12

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)	*110*			*77.0-120*

Laboratory Control Sample (LCS)

(LCS) R3698506-1 08/27/21 01:29

Analyte	Spike Amount mg/kg	LCS Result mg/kg	LCS Rec. %	Rec. Limits %	LCS Qualifier
TPH (GC/FID) Low Fraction	5.50	5.21	94.7	72.0-127	
(S) a,a,a-Trifluorotoluene(FID)			*99.6*	*77.0-120*	

L1392967-03 Original Sample (OS) • Matrix Spike (MS) • Matrix Spike Duplicate (MSD)

(OS) L1392967-03 08/27/21 02:33 • (MS) R3698506-3 08/27/21 09:55 • (MSD) R3698506-4 08/27/21 10:16

Analyte	Spike Amount mg/kg	Original Result mg/kg	MS Result mg/kg	MSD Result mg/kg	MS Rec. %	MSD Rec. %	Dilution	Rec. Limits %	MS Qualifier	MSD Qualifier	RPD %	RPD Limits %
TPH (GC/FID) Low Fraction	5.50	0.145	1.68	2.60	27.9	45.0	1	10.0-151		J3	43.0	28
(S) a,a,a-Trifluorotoluene(FID)					*94.4*	*99.1*		*77.0-120*				

Method Blank (MB)

(MB) R3697805-2 08/25/21 16:55

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)	*96.9*			*77.0-120*

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

(LCS) R3697805-1 08/25/21 16:11 • (LCSD) R3697805-3 08/25/21 17:58

Analyte	Spike Amount mg/kg	LCS Result mg/kg	LCSD Result mg/kg	LCS Rec. %	LCSD Rec. %	Rec. Limits %	LCS Qualifier	LCSD Qualifier	RPD %	RPD Limits %
TPH (GC/FID) Low Fraction	5.50	4.30	4.28	78.2	77.8	72.0-127			0.466	20
(S) a,a,a-Trifluorotoluene(FID)				*110*	*111*	*77.0-120*				

L1393283-16 Original Sample (OS) • Matrix Spike (MS) • Matrix Spike Duplicate (MSD)

(OS) L1393283-16 08/25/21 18:51 • (MS) R3697805-4 08/26/21 02:11 • (MSD) R3697805-5 08/26/21 02:33

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	6.02	0.0281	2.99	2.65	49.2	43.5	1	10.0-151			12.0	28
(S) a,a,a-Trifluorotoluene(FID)					*108*	*106*		*77.0-120*				

Method Blank (MB)

(MB) R3696731-2 08/25/21 14:16

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)	*103*			*77.0-120*

Laboratory Control Sample (LCS)

(LCS) R3696731-1 08/25/21 13:28

Analyte	Spike Amount mg/kg	LCS Result mg/kg	LCS Rec. %	Rec. Limits %	LCS Qualifier
TPH (GC/FID) Low Fraction	5.50	4.94	89.8	72.0-127	
(S) a,a,a-Trifluorotoluene(FID)			*106*	*77.0-120*	

Method Blank (MB)

(MB) R3697144-3 08/25/21 16:43

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	*102*			*67.0-138*
(S) 1,2-Dichloroethane-d4	*106*			*70.0-130*

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

(LCS) R3697144-1 08/25/21 15:27 • (LCSD) R3697144-2 08/25/21 15:46

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	0.117	0.114	93.6	91.2	70.0-123			2.60	20
Ethylbenzene	0.125	0.118	0.116	94.4	92.8	74.0-126			1.71	20
Toluene	0.125	0.122	0.119	97.6	95.2	75.0-121			2.49	20
Xylenes, Total	0.375	0.368	0.362	98.1	96.5	72.0-127			1.64	20
(S) Toluene-d8				*106*	*106*	*75.0-131*				
(S) 4-Bromofluorobenzene				*103*	*103*	*67.0-138*				
(S) 1,2-Dichloroethane-d4				*111*	*111*	*70.0-130*				

L1393273-02 Original Sample (OS) • Matrix Spike (MS) • Matrix Spike Duplicate (MSD)

(OS) L1393273-02 08/25/21 22:06 • (MS) R3697144-4 08/25/21 23:22 • (MSD) R3697144-5 08/25/21 23:41

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	1.00	0.569	1.77	1.95	120	138	8	10.0-149			9.68	37
Ethylbenzene	1.00	2.49	7.18	7.75	469	526	8	10.0-160	J5	J5	7.64	38
Toluene	1.00	0.982	3.09	3.28	211	230	8	10.0-156	J5	J5	5.97	38
Xylenes, Total	3.00	8.05	23.2	24.8	505	558	8	10.0-160	J5	J5	6.67	38
(S) Toluene-d8					*108*	*106*		*75.0-131*				
(S) 4-Bromofluorobenzene					*103*	*99.9*		*67.0-138*				
(S) 1,2-Dichloroethane-d4					*103*	*105*		*70.0-130*				

Method Blank (MB)

(MB) R3699180-3 08/26/21 09:19

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	*107*			*75.0-131*
(S) 4-Bromofluorobenzene	*100*			*67.0-138*
(S) 1,2-Dichloroethane-d4	*98.3*			*70.0-130*

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

(LCS) R3699180-1 08/26/21 08:02 • (LCSD) R3699180-2 08/26/21 08:21

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	0.111	0.112	88.8	89.6	70.0-123			0.897	20
Ethylbenzene	0.125	0.119	0.117	95.2	93.6	74.0-126			1.69	20
Toluene	0.125	0.112	0.110	89.6	88.0	75.0-121			1.80	20
Xylenes, Total	0.375	0.311	0.346	82.9	92.3	72.0-127			10.7	20
(S) Toluene-d8				*99.5*	*101*	*75.0-131*				
(S) 4-Bromofluorobenzene				*104*	*108*	*67.0-138*				
(S) 1,2-Dichloroethane-d4				*104*	*103*	*70.0-130*				

L1393283-25 Original Sample (OS) • Matrix Spike (MS) • Matrix Spike Duplicate (MSD)

(OS) L1393283-25 08/26/21 15:45 • (MS) R3699180-4 08/26/21 16:04 • (MSD) R3699180-5 08/26/21 16:24

Analyte	Spike Amount (dry) mg/kg	Original Result (dry) mg/kg	MS Result (dry) mg/kg	MSD Result (dry) mg/kg	MS Rec. %	MSD Rec. %	Dilution	Rec. Limits %	MS Qualifier	MSD Qualifier	RPD %	RPD Limits %
Benzene	0.136	U	0.0759	0.146	55.7	107	1	10.0-149		J3	63.2	37
Ethylbenzene	0.136	U	0.0823	0.157	60.4	115	1	10.0-160		J3	62.5	38
Toluene	0.136	U	0.0789	0.157	57.9	115	1	10.0-156		J3	66.3	38
Xylenes, Total	0.409	U	0.227	0.448	55.6	110	1	10.0-160		J3	65.4	38
(S) Toluene-d8					*104*	*105*		*75.0-131*				
(S) 4-Bromofluorobenzene					*99.2*	*103*		*67.0-138*				
(S) 1,2-Dichloroethane-d4					*96.1*	*98.1*		*70.0-130*				

Method Blank (MB)

(MB) R3698596-3 08/25/21 22:59

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	*120*			*75.0-131*
(S) 4-Bromofluorobenzene	*86.4*			*67.0-138*
(S) 1,2-Dichloroethane-d4	*89.1*			*70.0-130*

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

(LCS) R3698596-1 08/25/21 21:44 • (LCSD) R3698596-2 08/25/21 22:03

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	0.107	0.106	85.6	84.8	70.0-123			0.939	20
Ethylbenzene	0.125	0.119	0.120	95.2	96.0	74.0-126			0.837	20
Toluene	0.125	0.123	0.126	98.4	101	75.0-121			2.41	20
Xylenes, Total	0.375	0.335	0.337	89.3	89.9	72.0-127			0.595	20
(S) Toluene-d8				*114*	*113*	*75.0-131*				
(S) 4-Bromofluorobenzene				*90.5*	*90.3*	*67.0-138*				
(S) 1,2-Dichloroethane-d4				*102*	*101*	*70.0-130*				

Method Blank (MB)

(MB) R3700320-1 09/02/21 14:34

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-C36 Motor Oil Range	0.858	J	0.274	4.00
(S) o-Terphenyl	*86.8*			*18.0-148*

Laboratory Control Sample (LCS)

(LCS) R3700320-2 09/02/21 14:48

Analyte	Spike Amount mg/kg	LCS Result mg/kg	LCS Rec. %	Rec. Limits %	LCS Qualifier
C10-C28 Diesel Range	50.0	43.6	87.2	50.0-150	
(S) o-Terphenyl			*86.5*	*18.0-148*	

L1393283-01 Original Sample (OS) • Matrix Spike (MS) • Matrix Spike Duplicate (MSD)

(OS) L1393283-01 09/02/21 17:10 • (MS) R3700320-3 09/02/21 17:24 • (MSD) R3700320-4 09/02/21 17:39

Analyte	Spike Amount (dry) mg/kg	Original Result (dry) mg/kg	MS Result (dry) mg/kg	MSD Result (dry) mg/kg	MS Rec. %	MSD Rec. %	Dilution	Rec. Limits %	MS Qualifier	MSD Qualifier	RPD %	RPD Limits %
C10-C28 Diesel Range	59.7	6.00	38.2	44.7	53.9	64.7	1	50.0-150			15.7	20
(S) o-Terphenyl					*45.3*	*55.0*		*18.0-148*				

Method Blank (MB)

(MB) R3698946-1 08/31/21 16:23

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-C36 Motor Oil Range	U		0.274	4.00
(S) o-Terphenyl	*69.2*			*18.0-148*

Laboratory Control Sample (LCS)

(LCS) R3698946-2 08/31/21 16:37

Analyte	Spike Amount mg/kg	LCS Result mg/kg	LCS Rec. %	Rec. Limits %	LCS Qualifier
C10-C28 Diesel Range	50.0	32.4	64.8	50.0-150	
(S) o-Terphenyl			*61.1*	*18.0-148*	

L1393384-02 Original Sample (OS) • Matrix Spike (MS) • Matrix Spike Duplicate (MSD)

(OS) L1393384-02 08/31/21 20:52 • (MS) R3698946-3 08/31/21 21:06 • (MSD) R3698946-4 08/31/21 21:19

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	65.8	259	254	306	0.000	71.1	1	50.0-150	J6		18.7	20
(S) o-Terphenyl					*60.7*	*58.2*		*18.0-148*				

Method Blank (MB)

(MB) R3698555-1 08/31/21 03:48

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-C36 Motor Oil Range	U		0.274	4.00
(S) o-Terphenyl	*57.8*			*18.0-148*

Laboratory Control Sample (LCS)

(LCS) R3698555-2 08/31/21 04:02

Analyte	Spike Amount mg/kg	LCS Result mg/kg	LCS Rec. %	Rec. Limits %	LCS Qualifier
C10-C28 Diesel Range	50.0	41.4	82.8	50.0-150	
(S) o-Terphenyl			*60.1*	*18.0-148*	

L1393283-21 Original Sample (OS) • Matrix Spike (MS) • Matrix Spike Duplicate (MSD)

(OS) L1393283-21 08/31/21 07:26 • (MS) R3698555-3 08/31/21 07:40 • (MSD) R3698555-4 08/31/21 07:54

Analyte	Spike Amount (dry) mg/kg	Original Result (dry) mg/kg	MS Result (dry) mg/kg	MSD Result (dry) mg/kg	MS Rec. %	MSD Rec. %	Dilution	Rec. Limits %	MS Qualifier	MSD Qualifier	RPD %	RPD Limits %
C10-C28 Diesel Range	49.5	U	38.4	39.5	77.6	78.6	1	50.0-150			2.66	20
(S) o-Terphenyl					*53.0*	*54.6*		*18.0-148*				

Method Blank (MB)

(MB) R3699059-1 09/01/21 05:25

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-C36 Motor Oil Range	U		0.274	4.00
(S) o-Terphenyl	*50.9*			*18.0-148*

Laboratory Control Sample (LCS)

(LCS) R3699059-2 09/01/21 05:39

Analyte	Spike Amount mg/kg	LCS Result mg/kg	LCS Rec. %	Rec. Limits %	LCS Qualifier
C10-C28 Diesel Range	50.0	29.6	59.2	50.0-150	
(S) o-Terphenyl			*46.8*	*18.0-148*	

L1393283-37 Original Sample (OS) • Matrix Spike (MS) • Matrix Spike Duplicate (MSD)

(OS) L1393283-37 09/01/21 06:06 • (MS) R3699059-3 09/01/21 06:20 • (MSD) R3699059-4 09/01/21 06:34

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	58.2	U	30.0	27.5	51.5	47.3	1	50.0-150		J6	8.70	20
(S) o-Terphenyl					*38.3*	*36.6*		*18.0-148*				

Method Blank (MB)

(MB) R3700962-1 09/06/21 11:39

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-C36 Motor Oil Range	U		0.274	4.00
(S) o-Terphenyl	*55.9*			*18.0-148*

Laboratory Control Sample (LCS)

(LCS) R3700962-2 09/06/21 11:52

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			*63.2*	*18.0-148*	

L1396261-01 Original Sample (OS) • Matrix Spike (MS) • Matrix Spike Duplicate (MSD)

(OS) L1396261-01 09/06/21 13:38 • (MS) R3700962-3 09/06/21 13:51 • (MSD) R3700962-4 09/06/21 14:05

Analyte	Spike Amount mg/kg	Original Result mg/kg	MS Result mg/kg	MSD Result mg/kg	MS Rec. %	MSD Rec. %	Dilution	Rec. Limits %	MS Qualifier	MSD Qualifier	RPD %	RPD Limits %
C10-C28 Diesel Range	47.7	4.81	50.9	35.1	96.6	63.9	1	50.0-150		J3	36.7	20
(S) o-Terphenyl					*52.8*	*58.2*		*18.0-148*				

Guide to Reading and Understanding Your Laboratory Report

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

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

Abbreviations and Definitions

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

Qualifier	Description
B	The same analyte is found in the associated blank.
E	The analyte concentration exceeds the upper limit of the calibration range of the instrument established by the initial calibration (ICAL).
J	The identification of the analyte is acceptable; the reported value is an estimate.
J1	Surrogate recovery limits have been exceeded; values are outside upper control limits.
J3	The associated batch QC was outside the established quality control range for precision.
J5	The sample matrix interfered with the ability to make any accurate determination; spike value is high.
J6	The sample matrix interfered with the ability to make any accurate determination; spike value is low.
Q	Sample was prepared and/or analyzed past holding time as defined in the method. Concentrations should be considered minimum values.

GLOSSARY OF TERMS

Qualifier	Description
V	The sample concentration is too high to evaluate accurate spike recoveries.

Pace Analytical National 12065 Lebanon Rd Mount Juliet, TN 37122

Alabama	40660	Nebraska	NE-OS-15-05
Alaska	17-026	Nevada	TN000032021-1
Arizona	AZ0612	New Hampshire	2975
Arkansas	88-0469	New Jersey–NELAP	TN002
California	2932	New Mexico [1]	TN00003
Colorado	TN00003	New York	11742
Connecticut	PH-0197	North Carolina	Env375
Florida	E87487	North Carolina [1]	DW21704
Georgia	NELAP	North Carolina [3]	41
Georgia [1]	923	North Dakota	R-140
Idaho	TN00003	Ohio–VAP	CL0069
Illinois	200008	Oklahoma	9915
Indiana	C-TN-01	Oregon	TN200002
Iowa	364	Pennsylvania	68-02979
Kansas	E-10277	Rhode Island	LA000356
Kentucky [1 6]	KY90010	South Carolina	84004002
Kentucky [2]	16	South Dakota	n/a
Louisiana	AI30792	Tennessee [1 4]	2006
Louisiana	LA018	Texas	T104704245-20-18
Maine	TN00003	Texas [5]	LAB0152
Maryland	324	Utah	TN000032021-11
Massachusetts	M-TN003	Vermont	VT2006
Michigan	9958	Virginia	110033
Minnesota	047-999-395	Washington	C847
Mississippi	TN00003	West Virginia	233
Missouri	340	Wisconsin	998093910
Montana	CERT0086	Wyoming	A2LA
A2LA – ISO 17025	1461.01	AIHA-LAP,LLC EMLAP	100789
A2LA – ISO 17025 [5]	1461.02	DOD	1461.01
Canada	1461.01	USDA	P330-15-00234
EPA–Crypto	TN00003		

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

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

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

Analysis Request of Chain of Custody Record

L1393283

Page : 1 of 4

Tetra Tech, Inc.

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

J021

Client Name:	Conoco Phillips	**Site Manager:**	Sam Abbott
Project Name:	MCA 478 Flowline Release	**Contact Info:**	Email: sam.abbott@tetratech.com Phone: 512-739-7874
Project Location: (county, state)	Lea County, New Mexico	**Project #:**	212C-MD-02508
Invoice to:	Accounts Payable 901 West Wall Street, Suite 100 Midland, Texas 79701		
Receiving Laboratory:	Pace Analytical	**Sampler Signature:**	Devin Dominguez
Comments:	COPTETRA Acctnum		CNT=40 TB=0

ANALYSIS REQUEST
(Circle or Specify Method No.)

LAB # (LAB USE ONLY)	SAMPLE IDENTIFICATION	SAMPLING DATE (YEAR: 2021)	SAMPLING TIME	MATRIX: WATER	MATRIX: SOIL	PRESERVATIVE METHOD: HCL	PRESERVATIVE METHOD: HNO_3	PRESERVATIVE METHOD: ICE	PRESERVATIVE METHOD: NONE	# CONTAINERS	FILTERED (Y/N)	BTEX 8021B BTEX 8260B	TPH TX1005 (Ext to C35)	TPH 8015M (GRO - DRO - ORO - MRO)	PAH 8270C	Total Metals Ag As Ba Cd Cr Pb Se Hg	TCLP Metals Ag As Ba Cd Cr Pb Se Hg	TCLP Volatiles	TCLP Semi Volatiles	RCI	GC/MS Vol. 8260B / 624	GC/MS Semi. Vol. 8270C/625	PCB's 8082 / 608	NORM	PLM (Asbestos)	Chloride 300.0	Chloride Sulfate TDS	General Water Chemistry (see attached list)	Anion/Cation Balance	TPH 8015R		HOLD
	BH-1 (0-1')	8/18/2021	1200		X			X		1	N	X		X												X					-	01
	BH-1 (2'-3')	8/18/2021	1205		X			X		1	N	X		X												X					-	02
	BH-1 (4'-5')	8/18/2021	1210		X			X		1	N	X		X												X					-	03
	BH-1 (6'-7')	8/18/2021	1215		X			X		1	N	X		X												X					-	04
	BH-1 (9'-10')	8/18/2021	1220		X			X		1	N	X		X												X					-	05
	BH-1 (14'-15')	8/18/2021	1225		X			X		1	N	X		X												X					-	06
	BH-1 (19'-20')	8/18/2021	1230		X			X		1	N	X		X												X					-	07
	BH-2 (0-1')	8/18/2021	1235		X			X		1	N	X		X												X					-	08
	BH-2 (2'-3')	8/18/2021	1240		X			X		1	N	X		X												X					-	09
	BH-2 (4'-5')	8/18/2021	1245		X			X		1	N	X		X												X					-	10

Relinquished by:	Date: 8-19-21	Time: 1300	Received by:
Relinquished by:	Date: 8-19-21	Time: 1630	Received by:
Relinquished by:	Date:	Time:	Received by: T. Robertson 8/20/21 900

LAB USE ONLY
Sample Temperature

REMARKS:
- [X] Standard
- [ ] RUSH: Same Day 24 hr. 48 hr. 72 hr.
- [ ] Rush Charges Authorized
- [ ] Special Report Limits or TRRP Report

(Circle) HAND DELIVERED FEDEX UPS Tracking #:

Sample Receipt Checklist

COC Seal Present/Intact:	Y N	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		

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3.2 - .1 = 3.1 A2 GW

Analysis Request of Chain of Custody Record

L1393283

Page : 2 of 4

Tetra Tech, Inc.

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

Client Name:	Conoco Phillips	**Site Manager:**	Sam Abbott
Project Name:	MCA 478 Flowline Release	**Contact Info:**	Email: sam.abbott@tetratech.com Phone: 512-739-7874
Project Location: (county, state)	Lea County, New Mexico	**Project #:**	212C-MD-02508
Invoice to:	Accounts Payable 901 West Wall Street, Suite 100 Midland, Texas 79701		
Receiving Laboratory:	Pace Analytical	**Sampler Signature:**	Devin Dominguez

Comments: COPTETRA Acctnum CNT=40 TB=0

ANALYSIS REQUEST
(Circle or Specify Method No.)

LAB # (LAB USE ONLY)	SAMPLE IDENTIFICATION	SAMPLING YEAR: 2021 DATE	SAMPLING TIME	MATRIX WATER	MATRIX SOIL	MATRIX	PRESERVATIVE METHOD HCL	PRESERVATIVE METHOD HNO_3	PRESERVATIVE METHOD ICE	PRESERVATIVE METHOD NONE		# CONTAINERS	FILTERED (Y/N)	BTEX 8021B BTEX 8260B	TPH TX1005 (Ext to C35)	TPH 8015M (GRO - DRO - ORO - MRO)	PAH 8270C	Total Metals Ag As Ba Cd Cr Pb Se Hg	TCLP Metals Ag As Ba Cd Cr Pb Se Hg	TCLP Volatiles	TCLP Semi Volatiles	RCI	GC/MS Vol. 8260B / 624	GC/MS Semi. Vol. 8270C/625	PCB's 8082 / 608	NORM	PLM (Asbestos)	Chloride 300.0	Chloride Sulfate TDS	General Water Chemistry (see attached list)	Anion/Cation Balance	TPH 8015R		HOLD
	BH-2 (6'-7')	8/18/2021	1250		X				X			1	N	X		X												X					-	11
	BH-2 (9'-10')	8/18/2021	1255		X				X			1	N	X		X												X					-	12
	BH-2 (14'-15')	8/18/2021	1300		X				X			1	N	X		X												X					-	13
	BH-2 (19'-20')	8/18/2021	1305		X				X			1	N	X		X												X					-	14
	BH-2 (24'-25')	8/18/2021	1310		X				X			1	N	X		X												X					-	15
	BH-3 (0-1')	8/18/2021	1330		X				X			1	N	X		X												X					-	16
	BH-3 (2'-3')	8/18/2021	1335		X				X			1	N	X		X												X					-	17
	BH-3 (4'-5')	8/18/2021	1340		X				X			1	N	X		X												X					-	18
	BH-3 (6'-7')	8/18/2021	1345		X				X			1	N	X		X												X					-	19
	BH-3 (9'-10')	8/18/2021	1350		X				X			1	N	X		X												X					-	20

Relinquished by:	Date: 8-19-21	Time: 13:00	Received by: Date: 8-19-21 Time: 13:00
Relinquished by:	Date: 8-19-21	Time: 16:30	Received by: Date: 8-19-21 Time: 16:30
Relinquished by:	Date:	Time:	Received by: T. Robertson Date: 8/20/21 Time: 800

ORIGINAL COPY

LAB USE ONLY

Sample Temperature

REMARKS:

- [X] Standard
- [ ] RUSH: Same Day 24 hr. 48 hr. 72 hr.
- [ ] Rush Charges Authorized
- [ ] Special Report Limits or TRRP Report

(Circle) HAND DELIVERED FEDEX UPS Tracking #: _____

3.2 - 1 = 3.1 D2Gl

Analysis Request of Chain of Custody Record

L1393283

Page: 3 of 4

Tetra Tech, Inc.

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

Client Name:	Conoco Phillips	**Site Manager:**	Sam Abbott
Project Name:	MCA 478 Flowline Release	**Contact Info:**	Email: sam.abbott@tetratech.com Phone: 512-739-7874
Project Location: (county, state)	Lea County, New Mexico	**Project #:**	212C-MD-02508
Invoice to:	Accounts Payable 901 West Wall Street, Suite 100 Midland, Texas 79701		
Receiving Laboratory:	Pace Analytical	**Sampler Signature:**	Devin Dominguez

Comments: COPTETRA Acctnum CH=40 TB=0

ANALYSIS REQUEST
(Circle or Specify Method No.)

LAB # (LAB USE ONLY)	SAMPLE IDENTIFICATION	SAMPLING YEAR: 2021 DATE	SAMPLING TIME	MATRIX: WATER	MATRIX: SOIL	MATRIX:	PRESERVATIVE METHOD: HCL	PRESERVATIVE METHOD: 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-3 (14'-15')	8/18/2021	1355		X				X			1	N	X		X												X						21
	BH-3 (19'-20')	8/18/2021	1400		X				X			1	N	X		X												X						22
	BH-3 (24'-25')	8/18/2021	1405		X				X			1	N	X		X												X						23
	BH-4 (0-1')	8/18/2021	1420		X				X			1	N	X		X												X						24
	BH-4 (2'-3')	8/18/2021	1430		X				X			1	N	X		X												X						25
	BH-4 (4'-5')	8/18/2021	1435		X				X			1	N	X		X												X						26
	BH-4 (6'-7')	8/18/2021	1440		X				X			1	N	X		X												X						27
	BH-4 (9'-10')	8/18/2021	1445		X				X			1	N	X		X												X						28
	BH-4 (14'-15')	8/18/2021	1450		X				X			1	N	X		X												X						29
	BH-4 (19'-20')	8/18/2021	1455		X				X			1	N	X		X												X						30

Relinquished by: Lee Young	Date: 8-19-21	Time: 13:00	Received by: Kelly Pennington	Date: 8-19-21	Time: 13:00
Relinquished by: Kelly Pennington	Date: 8-19-21	Time: 16:35	Received by: SWA	Date: 8-19-21	Time: 16:35
Relinquished by:	Date:	Time:	Received by: T. Robertson	Date: 8/20/21	Time: 800

ORIGINAL COPY

LAB USE ONLY

Sample Temperature

REMARKS:

- [X] Standard
- [ ] RUSH: Same Day 24 hr. 48 hr. 72 hr.
- [ ] Rush Charges Authorized
- [ ] Special Report Limits or TRRP Report

(Circle) HAND DELIVERED FEDEX UPS Tracking #: _____

3.2-153.1 A260

Analysis Request of Chain of Custody Record

L139328

Page: 4 of 4

Tetra Tech, Inc.

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

Client Name:	Conoco Phillips	**Site Manager:**	Sam Abbott
Project Name:	MCA 478 Flowline Release	**Contact Info:**	Email: sam.abbott@tetratech.com Phone: 512-739-7874
Project Location: (county, state)	Lea County, New Mexico	**Project #:**	212C-MD-02508
Invoice to:	Accounts Payable 901 West Wall Street, Suite 100 Midland, Texas 79701		
Receiving Laboratory:	Pace Analytical	**Sampler Signature:**	Devin Dominguez
Comments:	COPTETRA Acctnum		

ANALYSIS REQUEST
(Circle or Specify Method No.)

LAB # (LAB USE ONLY)	SAMPLE IDENTIFICATION	SAMPLING DATE	SAMPLING TIME	MATRIX: WATER	MATRIX: SOIL	PRESERVATIVE METHOD: HCL	PRESERVATIVE METHOD: HNO_3	PRESERVATIVE METHOD: ICE	PRESERVATIVE METHOD: NONE	# CONTAINERS	FILTERED (Y/N)	BTEX 8021B BTEX 8260B	TPH TX1005 (Ext to C35)	TPH 8015M (GRO - DRO - ORO - MRO)	PAH 8270C	Total Metals Ag As Ba Cd Cr Pb Se Hg	TCLP Metals Ag As Ba Cd Cr Pb Se Hg	TCLP Volatiles	TCLP Semi Volatiles	RCI	GC/MS Vol. 8260B / 624	GC/MS Semi. Vol. 8270C/625	PCB's 8082 / 608	NORM	PLM (Asbestos)	Chloride 300.0	Chloride Sulfate TDS	General Water Chemistry (see attached list)	Anion/Cation Balance	TPH 8015R	HOLD
		YEAR: 2021																												
	BH-4 (24'-25')	8/18/2021	1500		X			X		1	N	X		X											X					31
	BH-4 (29'-30')	8/18/2021	1505		X			X		1	N	X		X											X					32
	AH-8 (0-1')	8/18/2021	1510		X			X		1	N	X		X											X					33
	AH-8 (2'-3')	8/18/2021	1515		X			X		1	N	X		X											X					34
	AH-8 (3'-4')	8/18/2021	1520		X			X		1	N	X		X											X					35
	AH-8 (5'-6')	8/18/2021	1525		X			X		1	N	X		X											X					36
	AH-9 (0-1')	8/18/2021	1530		X			X		1	N	X		X											X					37
	AH-9 (2'-3')	8/18/2021	1535		X			X		1	N	X		X											X					38
	AH-9 (3'-4')	8/18/2021	1540		X			X		1	N	X		X											X					39
	AH-9 (5'-6')	8/18/2021	1545		X			X		1	N	X		X											X					40

Relinquished by: Jose Z	Date: 8-19-21	Time: 13:00	Received by:	Date: 8-19-21	Time: 13:00
Relinquished by:	Date: 8-19-21	Time: 16:35	Received by:	Date: 8-19-21	Time: 16:35
Relinquished by:	Date:	Time:	Received by: T. Robertson	Date: 8/20/21	Time: 800

ORIGINAL COPY

LAB USE ONLY

Sample Temperature

REMARKS:

- [X] Standard
- [ ] RUSH: Same Day 24 hr. 48 hr. 72 hr.
- [ ] Rush Charges Authorized
- [ ] Special Report Limits or TRRP Report

(Circle) HAND DELIVERED FEDEX UPS Tracking #: _____

3.2-.1=3.1 D260

Erica McNeese

From: Abbott, Sam <Sam.Abbott@tetratech.com>
Sent: Monday, September 13, 2021 3:37 PM
To: Erica McNeese <Erica.McNeese@pacelabs.com>; Chris McCord <Chris.McCord@pacelabs.com>
Subject: RE: Pace Analytical National Level II Report for 212C-MD-02505 MCA 478 Flowline Release L1393283

Thanks Erica. No, I had a typo in my email, 5'-6' is correct.

From: Erica McNeese <Erica.McNeese@pacelabs.com>
Sent: Monday, September 13, 2021 3:36 PM
To: Abbott, Sam <Sam.Abbott@tetratech.com>; Chris McCord <Chris.McCord@pacelabs.com>
Subject: RE: Pace Analytical National Level II Report for 212C-MD-02505 MCA 478 Flowline Release L1393283

Sam,

Will do. For the deepest AH-8 sample, the COC has 5'-6' . Does this need to be revised to 5'-5' as indicated below?

Thank you,

Erica McNeese

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

From: Abbott, Sam <Sam.Abbott@tetratech.com>
Sent: Monday, September 13, 2021 2:33 PM
To: Chris McCord <Chris.McCord@pacelabs.com>
Cc: Erica McNeese <Erica.McNeese@pacelabs.com>
Subject: FW: Pace Analytical National Level II Report for 212C-MD-02505 MCA 478 Flowline Release L1393283
Importance: High

Hi Chris,

Could we get this report revised to change the AH-8 sample labels to AH-10?

AH-10 (0'-1')
AH-10 (2'-3')
AH-10 (3'-4')
AH-10 (5'-5')

Thank you,
Sam

Pace Analytical®

ANALYTICAL REPORT

October 04, 2021

ConocoPhillips - Tetra Tech

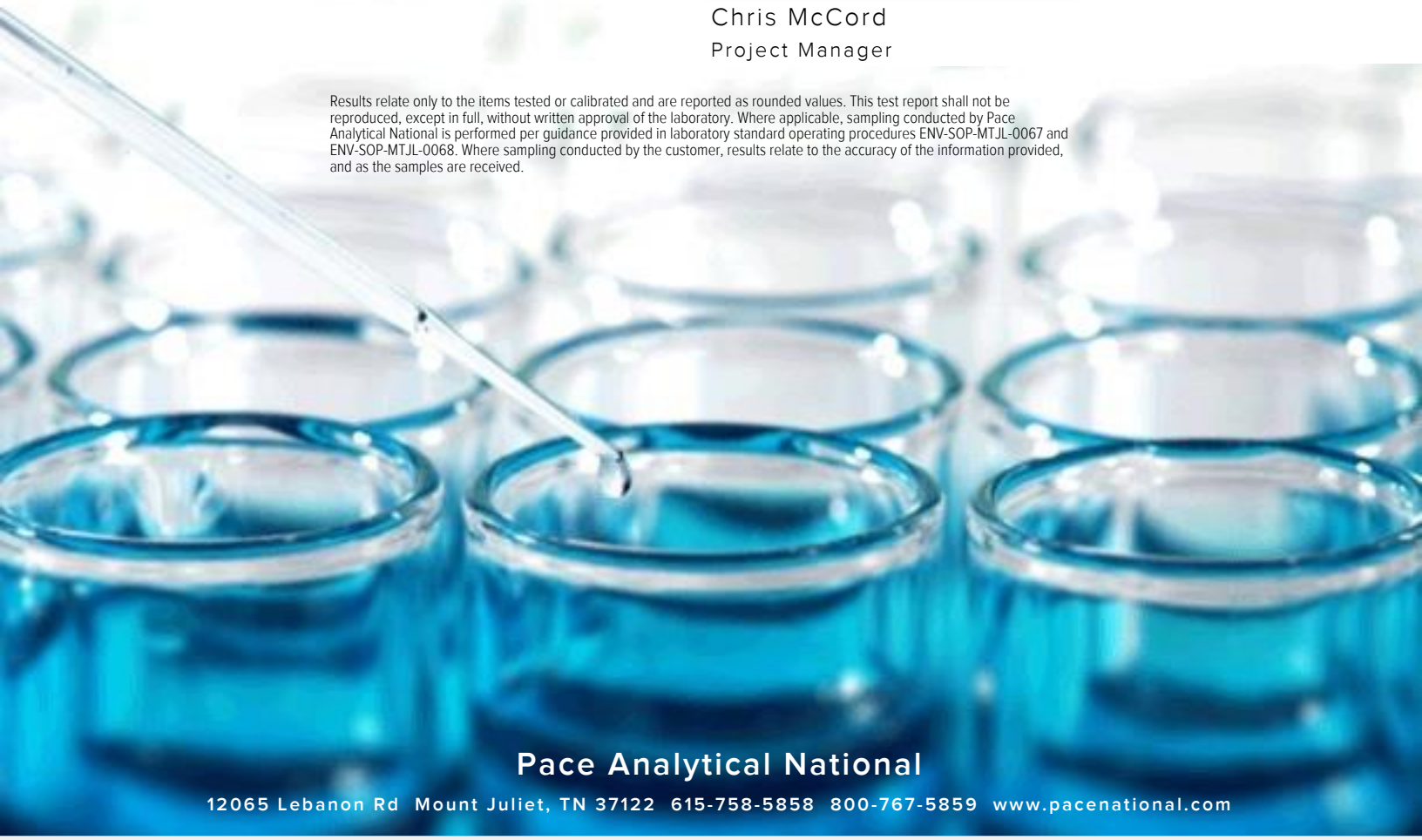
Sample Delivery Group:	L1407432
Samples Received:	09/22/2021
Project Number:	212C-MD-02505
Description:	MCA 478

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

Entire Report Reviewed By:

Chris McCord
Project Manager

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



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

TABLE OF CONTENTS

AH-11 (0-1') L1407432-01 Solid

Collected by: Devin Dominguez | Collected date/time: 09/20/21 15:00 | Received date/time: 09/22/21 09:45

Method	Batch	Dilution	Preparation date/time	Analysis date/time	Analyst	Location
Total Solids by Method 2540 G-2011	WG1747730	1	09/29/21 18:04	09/29/21 18:12	CMK	Mt. Juliet, TN
Wet Chemistry by Method 300.0	WG1748692	1	09/29/21 17:57	09/29/21 20:45	ELN	Mt. Juliet, TN
Volatile Organic Compounds (GC) by Method 8015D/GRO	WG1748194	1	09/24/21 16:31	09/29/21 18:07	JHH	Mt. Juliet, TN
Volatile Organic Compounds (GC/MS) by Method 8260B	WG1746386	1	09/24/21 16:31	09/25/21 02:36	JHH	Mt. Juliet, TN
Semi-Volatile Organic Compounds (GC) by Method 8015M	WG1749721	1	10/01/21 11:58	10/02/21 22:50	JN	Mt. Juliet, TN

AH-11 (2'-3') L1407432-02 Solid

Collected by: Devin Dominguez | Collected date/time: 09/20/21 15:10 | Received date/time: 09/22/21 09:45

Method	Batch	Dilution	Preparation date/time	Analysis date/time	Analyst	Location
Total Solids by Method 2540 G-2011	WG1747730	1	09/29/21 18:04	09/29/21 18:12	CMK	Mt. Juliet, TN
Wet Chemistry by Method 300.0	WG1748692	1	09/29/21 17:57	09/29/21 20:54	ELN	Mt. Juliet, TN
Volatile Organic Compounds (GC) by Method 8015D/GRO	WG1748194	1	09/24/21 16:31	09/29/21 18:30	JHH	Mt. Juliet, TN
Volatile Organic Compounds (GC/MS) by Method 8260B	WG1746386	1	09/24/21 16:31	09/25/21 02:55	JHH	Mt. Juliet, TN
Semi-Volatile Organic Compounds (GC) by Method 8015M	WG1749721	1	10/01/21 11:58	10/02/21 21:29	JN	Mt. Juliet, TN

AH-12 (0-1') L1407432-03 Solid

Collected by: Devin Dominguez | Collected date/time: 09/20/21 15:30 | Received date/time: 09/22/21 09:45

Method	Batch	Dilution	Preparation date/time	Analysis date/time	Analyst	Location
Total Solids by Method 2540 G-2011	WG1747730	1	09/29/21 18:04	09/29/21 18:12	CMK	Mt. Juliet, TN
Wet Chemistry by Method 300.0	WG1748692	1	09/29/21 17:57	09/29/21 21:04	ELN	Mt. Juliet, TN
Volatile Organic Compounds (GC) by Method 8015D/GRO	WG1748194	1	09/24/21 16:31	09/29/21 18:54	JHH	Mt. Juliet, TN
Volatile Organic Compounds (GC/MS) by Method 8260B	WG1746386	1	09/24/21 16:31	09/25/21 03:15	JHH	Mt. Juliet, TN
Semi-Volatile Organic Compounds (GC) by Method 8015M	WG1749721	1	10/01/21 11:58	10/02/21 23:04	JN	Mt. Juliet, TN

AH-12 (2'-3') L1407432-04 Solid

Collected by: Devin Dominguez | Collected date/time: 09/20/21 15:40 | Received date/time: 09/22/21 09:45

Method	Batch	Dilution	Preparation date/time	Analysis date/time	Analyst	Location
Total Solids by Method 2540 G-2011	WG1747730	1	09/29/21 18:04	09/29/21 18:12	CMK	Mt. Juliet, TN
Wet Chemistry by Method 300.0	WG1748692	1	09/29/21 17:57	09/29/21 21:13	ELN	Mt. Juliet, TN
Volatile Organic Compounds (GC) by Method 8015D/GRO	WG1749966	1	09/24/21 16:31	10/02/21 06:07	DWR	Mt. Juliet, TN
Volatile Organic Compounds (GC/MS) by Method 8260B	WG1746386	1	09/24/21 16:31	09/25/21 03:34	JHH	Mt. Juliet, TN
Semi-Volatile Organic Compounds (GC) by Method 8015M	WG1749721	1	10/01/21 11:58	10/02/21 21:43	JN	Mt. Juliet, TN

CASE NARRATIVE

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

Chris McCord
Project Manager

Total Solids by Method 2540 G-2011

Analyte	Result	Qualifier	Dilution	Analysis	Batch
	%			date / time	
Total Solids	96.3		1	09/29/2021 18:12	WG1747730

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		9.56	20.8	1	09/29/2021 20:45	WG1748692

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	09/29/2021 18:07	WG1748194
(S) a,a,a-Trifluorotoluene(FID)	*100*			*77.0-120*		*09/29/2021 18:07*	WG1748194

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	09/25/2021 02:36	WG1746386
Toluene	U		0.00140	0.00539	1	09/25/2021 02:36	WG1746386
Ethylbenzene	U		0.000794	0.00269	1	09/25/2021 02:36	WG1746386
Total Xylenes	U		0.000948	0.00700	1	09/25/2021 02:36	WG1746386
(S) Toluene-d8	*111*			*75.0-131*		*09/25/2021 02:36*	WG1746386
(S) 4-Bromofluorobenzene	*96.6*			*67.0-138*		*09/25/2021 02:36*	WG1746386
(S) 1,2-Dichloroethane-d4	*107*			*70.0-130*		*09/25/2021 02:36*	WG1746386

Semi-Volatile Organic Compounds (GC) by Method 8015M

Analyte	Result (dry)	Qualifier	MDL (dry)	RDL (dry)	Dilution	Analysis	Batch
	mg/kg		mg/kg	mg/kg		date / time	
C10-C28 Diesel Range	1.67	J	1.67	4.15	1	10/02/2021 22:50	WG1749721
C28-C36 Motor Oil Range	5.21		0.285	4.15	1	10/02/2021 22:50	WG1749721
(S) o-Terphenyl	*48.2*			*18.0-148*		*10/02/2021 22:50*	WG1749721

Total Solids by Method 2540 G-2011

Analyte	Result	Qualifier	Dilution	Analysis	Batch
	%			date / time	
Total Solids	96.1		1	09/29/2021 18:12	WG1747730

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		9.57	20.8	1	09/29/2021 20:54	WG1748692

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	09/29/2021 18:30	WG1748194
(S) a,a,a-Trifluorotoluene(FID)	*101*			*77.0-120*		*09/29/2021 18:30*	WG1748194

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	09/25/2021 02:55	WG1746386
Toluene	U		0.00140	0.00540	1	09/25/2021 02:55	WG1746386
Ethylbenzene	U		0.000796	0.00270	1	09/25/2021 02:55	WG1746386
Total Xylenes	U		0.000951	0.00702	1	09/25/2021 02:55	WG1746386
(S) Toluene-d8	*109*			*75.0-131*		*09/25/2021 02:55*	WG1746386
(S) 4-Bromofluorobenzene	*98.3*			*67.0-138*		*09/25/2021 02:55*	WG1746386
(S) 1,2-Dichloroethane-d4	*104*			*70.0-130*		*09/25/2021 02:55*	WG1746386

Semi-Volatile Organic Compounds (GC) by Method 8015M

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	4.16	1	10/02/2021 21:29	WG1749721
C28-C36 Motor Oil Range	5.90		0.285	4.16	1	10/02/2021 21:29	WG1749721
(S) o-Terphenyl	*54.7*			*18.0-148*		*10/02/2021 21:29*	WG1749721

Total Solids by Method 2540 G-2011

Analyte	Result	Qualifier	Dilution	Analysis	Batch
	%			date / time	
Total Solids	94.7		1	09/29/2021 18:12	WG1747730

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		9.72	21.1	1	09/29/2021 21:04	WG1748692

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	09/29/2021 18:54	WG1748194
(S) a,a,a-Trifluorotoluene(FID)	*101*			*77.0-120*		*09/29/2021 18:54*	WG1748194

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	09/25/2021 03:15	WG1746386
Toluene	U		0.00145	0.00556	1	09/25/2021 03:15	WG1746386
Ethylbenzene	U		0.000820	0.00278	1	09/25/2021 03:15	WG1746386
Total Xylenes	U		0.000979	0.00723	1	09/25/2021 03:15	WG1746386
(S) Toluene-d8	*108*			*75.0-131*		*09/25/2021 03:15*	WG1746386
(S) 4-Bromofluorobenzene	*98.4*			*67.0-138*		*09/25/2021 03:15*	WG1746386
(S) 1,2-Dichloroethane-d4	*107*			*70.0-130*		*09/25/2021 03:15*	WG1746386

Semi-Volatile Organic Compounds (GC) by Method 8015M

Analyte	Result (dry)	Qualifier	MDL (dry)	RDL (dry)	Dilution	Analysis	Batch
	mg/kg		mg/kg	mg/kg		date / time	
C10-C28 Diesel Range	4.27		1.70	4.22	1	10/02/2021 23:04	WG1749721
C28-C36 Motor Oil Range	68.4		0.289	4.22	1	10/02/2021 23:04	WG1749721
(S) o-Terphenyl	*56.9*			*18.0-148*		*10/02/2021 23:04*	WG1749721

Total Solids by Method 2540 G-2011

Analyte	Result	Qualifier	Dilution	Analysis	Batch
	%			date / time	
Total Solids	96.2		1	09/29/2021 18:12	WG1747730

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		9.56	20.8	1	09/29/2021 21:13	WG1748692

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	0.0330	B J	0.0226	0.104	1	10/02/2021 06:07	WG1749966
(S) a,a,a-Trifluorotoluene(FID)	*87.5*			*77.0-120*		*10/02/2021 06:07*	WG1749966

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	09/25/2021 03:34	WG1746386
Toluene	U		0.00140	0.00540	1	09/25/2021 03:34	WG1746386
Ethylbenzene	U		0.000795	0.00270	1	09/25/2021 03:34	WG1746386
Total Xylenes	U		0.000950	0.00701	1	09/25/2021 03:34	WG1746386
(S) Toluene-d8	*110*			*75.0-131*		*09/25/2021 03:34*	WG1746386
(S) 4-Bromofluorobenzene	*97.8*			*67.0-138*		*09/25/2021 03:34*	WG1746386
(S) 1,2-Dichloroethane-d4	*107*			*70.0-130*		*09/25/2021 03:34*	WG1746386

Semi-Volatile Organic Compounds (GC) by Method 8015M

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	4.16	1	10/02/2021 21:43	WG1749721
C28-C36 Motor Oil Range	4.02	J	0.285	4.16	1	10/02/2021 21:43	WG1749721
(S) o-Terphenyl	*45.6*			*18.0-148*		*10/02/2021 21:43*	WG1749721

Method Blank (MB)

(MB) R3710591-1 09/29/21 18:12

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

L1407427-07 Original Sample (OS) • Duplicate (DUP)

(OS) L1407427-07 09/29/21 18:12 • (DUP) R3710591-3 09/29/21 18:12

Analyte	Original Result %	DUP Result %	Dilution	DUP RPD %	DUP Qualifier	DUP RPD Limits %
Total Solids	80.3	79.3	1	1.32		10

Laboratory Control Sample (LCS)

(LCS) R3710591-2 09/29/21 18:12

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) R3710902-1 09/29/21 18:39

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

L1407424-01 Original Sample (OS) • Duplicate (DUP)

(OS) L1407424-01 09/29/21 19:38 • (DUP) R3710902-3 09/29/21 19:48

Analyte	Original Result (dry) mg/kg	DUP Result (dry) mg/kg	Dilution	DUP RPD %	DUP Qualifier	DUP RPD Limits %
Chloride	13.8	13.5	1	2.24	J	20

Laboratory Control Sample (LCS)

(LCS) R3710902-2 09/29/21 18:48

Analyte	Spike Amount mg/kg	LCS Result mg/kg	LCS Rec. %	Rec. Limits %	LCS Qualifier
Chloride	200	199	99.3	90.0-110	

L1407424-01 Original Sample (OS) • Matrix Spike (MS) • Matrix Spike Duplicate (MSD)

(OS) L1407424-01 09/29/21 19:38 • (MS) R3710902-4 09/29/21 19:57 • (MSD) R3710902-5 09/29/21 20:07

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 %
Chloride	620	13.8	480	522	75.2	82.0	1	80.0-120	J6		8.38	20

Method Blank (MB)

(MB) R3710285-2 09/29/21 10:34

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)	*101*			*77.0-120*

Laboratory Control Sample (LCS)

(LCS) R3710285-1 09/29/21 09:46

Analyte	Spike Amount mg/kg	LCS Result mg/kg	LCS Rec. %	Rec. Limits %	LCS Qualifier
TPH (GC/FID) Low Fraction	5.50	5.62	102	72.0-127	
(S) a,a,a-Trifluorotoluene(FID)			*108*	*77.0-120*	

Method Blank (MB)

(MB) R3711826-2 10/02/21 05:45

Analyte	MB Result mg/kg	MB Qualifier	MB MDL mg/kg	MB RDL mg/kg
TPH (GC/FID) Low Fraction	0.0284	J	0.0217	0.100
(S) a,a,a-Trifluorotoluene(FID)	*88.1*			*77.0-120*

Laboratory Control Sample (LCS)

(LCS) R3711826-1 10/02/21 05:01

Analyte	Spike Amount mg/kg	LCS Result mg/kg	LCS Rec. %	Rec. Limits %	LCS Qualifier
TPH (GC/FID) Low Fraction	5.50	4.33	78.7	72.0-127	
(S) a,a,a-Trifluorotoluene(FID)			*103*	*77.0-120*	

Method Blank (MB)

(MB) R3709977-3 09/24/21 23:00

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	*110*			*75.0-131*
(S) 4-Bromofluorobenzene	*93.8*			*67.0-138*
(S) 1,2-Dichloroethane-d4	*108*			*70.0-130*

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

(LCS) R3709977-1 09/24/21 21:28 • (LCSD) R3709977-2 09/24/21 21:47

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	0.106	0.115	84.8	92.0	70.0-123			8.14	20
Ethylbenzene	0.125	0.120	0.129	96.0	103	74.0-126			7.23	20
Toluene	0.125	0.110	0.122	88.0	97.6	75.0-121			10.3	20
Xylenes, Total	0.375	0.340	0.368	90.7	98.1	72.0-127			7.91	20
(S) Toluene-d8				*103*	*105*	*75.0-131*				
(S) 4-Bromofluorobenzene				*101*	*99.4*	*67.0-138*				
(S) 1,2-Dichloroethane-d4				*112*	*112*	*70.0-130*				

L1407245-01 Original Sample (OS) • Matrix Spike (MS) • Matrix Spike Duplicate (MSD)

(OS) L1407245-01 09/25/21 06:26 • (MS) R3709977-4 09/25/21 06:45 • (MSD) R3709977-5 09/25/21 08:01

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	2.62	0.0298	1.39	2.61	51.7	98.3	20	10.0-149		J3	61.2	37
Ethylbenzene	2.62	1.10	3.10	4.49	76.2	129	20	10.0-160			36.7	38
Toluene	2.62	0.690	2.35	3.56	63.4	110	20	10.0-156		J3	41.0	38
Xylenes, Total	7.86	7.29	14.9	18.4	97.1	142	20	10.0-160			20.9	38
(S) Toluene-d8					*104*	*103*		*75.0-131*				
(S) 4-Bromofluorobenzene					*105*	*107*		*67.0-138*				
(S) 1,2-Dichloroethane-d4					*111*	*108*		*70.0-130*				

Sample Narrative:

OS: Non-target compounds too high to run at a lower dilution.

Method Blank (MB)

(MB) R3711653-1 10/02/21 02:26

Analyte	MB Result mg/kg	MB Qualifier	MB MDL mg/kg	MB RDL mg/kg
C10-C28 Diesel Range	U		1.61	4.00
C28-C36 Motor Oil Range	U		0.274	4.00
(S) o-Terphenyl	*61.6*			*18.0-148*

Laboratory Control Sample (LCS)

(LCS) R3711653-2 10/02/21 02:39

Analyte	Spike Amount mg/kg	LCS Result mg/kg	LCS Rec. %	Rec. Limits %	LCS Qualifier
C10-C28 Diesel Range	50.0	34.4	68.8	50.0-150	
(S) o-Terphenyl			*61.1*	*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.
J3	The associated batch QC was outside the established quality control range for precision.
J6	The sample matrix interfered with the ability to make any accurate determination; spike value is low.

Pace Analytical National 12065 Lebanon Rd Mount Juliet, TN 37122

Alabama	40660	Nebraska	NE-OS-15-05
Alaska	17-026	Nevada	TN000032021-1
Arizona	AZ0612	New Hampshire	2975
Arkansas	88-0469	New Jersey–NELAP	TN002
California	2932	New Mexico [1]	TN00003
Colorado	TN00003	New York	11742
Connecticut	PH-0197	North Carolina	Env375
Florida	E87487	North Carolina [1]	DW21704
Georgia	NELAP	North Carolina [3]	41
Georgia [1]	923	North Dakota	R-140
Idaho	TN00003	Ohio–VAP	CL0069
Illinois	200008	Oklahoma	9915
Indiana	C-TN-01	Oregon	TN200002
Iowa	364	Pennsylvania	68-02979
Kansas	E-10277	Rhode Island	LA000356
Kentucky [1 6]	KY90010	South Carolina	84004002
Kentucky [2]	16	South Dakota	n/a
Louisiana	AI30792	Tennessee [1 4]	2006
Louisiana	LA018	Texas	T104704245-20-18
Maine	TN00003	Texas [5]	LAB0152
Maryland	324	Utah	TN000032021-11
Massachusetts	M-TN003	Vermont	VT2006
Michigan	9958	Virginia	110033
Minnesota	047-999-395	Washington	C847
Mississippi	TN00003	West Virginia	233
Missouri	340	Wisconsin	998093910
Montana	CERT0086	Wyoming	A2LA
A2LA – ISO 17025	1461.01	AIHA-LAP,LLC EMLAP	100789
A2LA – ISO 17025 [5]	1461.02	DOD	1461.01
Canada	1461.01	USDA	P330-15-00234
EPA–Crypto	TN00003		

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

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

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

B052

Analysis Request of Chain of Custody Record

Page 1 of 1

Tetra Tech, Inc.

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

U407432

Client Name: ConocoPhillips	Site Manager: Christian Llull
Project Name: MCA 478	
Project Location: (county, state) Lea County, New Mexico	Project #: 212C-MD-02533 Task 100
Invoice to: Accounts Payable 901 West Wall Street, Suite 100 Midland, Texas 79701	
Receiving Laboratory: Pace Analytical	Sampler Signature: Devin Dominguez
Comments: COPTETRA Acctnum	

ANALYSIS REQUEST (Circle or Specify Method No.)

LAB # (LAB USE ONLY)	SAMPLE IDENTIFICATION	SAMPLING DATE	SAMPLING TIME	MATRIX WATER	MATRIX SOIL	PRESERVATIVE METHOD HCL	PRESERVATIVE METHOD HNO_3	PRESERVATIVE METHOD ICE	PRESERVATIVE METHOD None	# CONTAINERS	FILTERED (Y/N)	BTEX 8021B BTEX 8260B	TPH TX1005 (Ext to C35)	TPH 8015M (GRO - DRO - ORO - MRO)	PAH 8270C	Total Metals Ag As Ba Cd Cr Pb Se Hg	TCLP Metals Ag As Ba Cd Cr Pb Se Hg	TCLP Volatiles	TCLP Semi Volatiles	RCI	GC/MS Vol. 8260B / 624	GC/MS Semi. Vol. 8270C/625	PCB's 8082 / 608	NORM	PLM (Asbestos)	Chloride	Chloride Sulfate TDS	General Water Chemistry (see attached list)	Anion/Cation Balance	TPH 8015R			Hold
-01	AH-11 (0-1')	9/20/2021	1500		X			X		1	N	X		X												X							
-02	AH-11 (2'-3')	9/20/2021	1510		X			X		1	N	X		X												X							
-03	AH-12 (0-1')	9/20/2021	1530		X			X		1	N	X		X												X							
-04	AH-12 (2'-3')	9/20/2021	1540		X			X		1	N	X		X												X							

Sample Receipt Checklist

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

Relinquished by:	Date:	Time:	Received by:	Date:	Time:
	9/21/21	900		9/22/21	945
Relinquished by:	Date:	Time:	Received by:	Date:	Time:
Relinquished by:	Date:	Time:	Received by:	Date:	Time:

LAB USE ONLY

Sample Temperature 2.6 to 2.6 A30+

REMARKS:

- [X] STANDARD
- [ ] RUSH: Same Day 24 hr 48 hr 72 hr
- [ ] Rush Charges Authorized
- [ ] Special Report Limits or TRRP Report

(Circle) HAND DELIVERED FEDEX UPS Tracking #: _____

ORIGINAL COPY

B052

Analysis Request of Chain of Custody Record

Page 1 of 1

Tetra Tech, Inc.

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

U407432

Client Name:	ConocoPhillips	Site Manager:	Christian Llull
Project Name:	MCA 478		
Project Location: (county, state)	Lea County, New Mexico	Project #:	212C-MD-02505 ~~212C-MD-02505 Task 100~~
Invoice to:	Accounts Payable 901 West Wall Street, Suite 100 Midland, Texas 79701		
Receiving Laboratory:	Pace Analytical	Sampler Signature:	Devin Dominguez
Comments:	COPTETRA Accinum		

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		# CONTAINERS	FILTERED (Y/N)	BTEX 8021B BTEX 8260B	TPH TX1005 (Ext to C35)	TPH 8015M (GRO - DRO - ORO - VRO)	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	Chloride Sulfate TDS	General Water Chemistry (see attached list)	Anion/Cation Balance	TPH 8015R			Hold
-01	AH-11 (0-1')	9/20/2021	1500		X				X			1	N	X		X												X						
-02	AH-11 (2'-3')	9/20/2021	1510		X				X			1	N	X		X												X						
-03	AH-12 (0-1')	9/20/2021	1530		X				X			1	N	X		X												X						
-04	AH-12 (2'-3')	9/20/2021	1540		X				X			1	N	X		X												X						

Sample Receipt Checklist

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

Relinquished by:		Date: 9/21/21	Time: 900	Received by:	Date: 9/22/21 Time: 945
Relinquished by:		Date:	Time:	Received by:	Date: Time:
Relinquished by:		Date:	Time:	Received by:	Date: Time:

LAB USE ONLY

Sample Temperature 2.6 to 2.6 A30+

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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APPENDIX F
NMSLO Seed Mixture Details

United States Department of Agriculture

NRCS

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 Lea County, New Mexico

MCA 478

October 11, 2021

Preface

Soil surveys contain information that affects land use planning in survey areas. They highlight soil limitations that affect various land uses and provide information about the properties of the soils in the survey areas. Soil surveys are designed for many different users, including farmers, ranchers, foresters, agronomists, urban planners, community officials, engineers, developers, builders, and home buyers. Also, conservationists, teachers, students, and specialists in recreation, waste disposal, and pollution control can use the surveys to help them understand, protect, or enhance the environment.

Various land use regulations of Federal, State, and local governments may impose special restrictions on land use or land treatment. Soil surveys identify soil properties that are used in making various land use or land treatment decisions. The information is intended to help the land users identify and reduce the effects of soil limitations on various land uses. The landowner or user is responsible for identifying and complying with existing laws and regulations.

Although soil survey information can be used for general farm, local, and wider area planning, onsite investigation is needed to supplement this information in some cases. Examples include soil quality assessments (http://www.nrcs.usda.gov/wps/portal/nrcs/main/soils/health/) and certain conservation and engineering applications. For more detailed information, contact your local USDA Service Center (https://offices.sc.egov.usda.gov/locator/app?agency=nrcs) or your NRCS State Soil Scientist (http://www.nrcs.usda.gov/wps/portal/nrcs/detail/soils/contactus/?cid=nrcs142p2_053951).

Great differences in soil properties can occur within short distances. Some soils are seasonally wet or subject to flooding. Some are too unstable to be used as a foundation for buildings or roads. Clayey or wet soils are poorly suited to use as septic tank absorption fields. A high water table makes a soil poorly suited to basements or underground installations.

The National Cooperative Soil Survey is a joint effort of the United States Department of Agriculture and other Federal agencies, State agencies including the Agricultural Experiment Stations, and local agencies. The Natural Resources Conservation Service (NRCS) has leadership for the Federal part of the National Cooperative Soil Survey.

Information about soils is updated periodically. Updated information is available through the NRCS Web Soil Survey, the site for official soil survey information.

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Contents

How Soil Surveys Are Made

Soil surveys are made to provide information about the soils and miscellaneous areas in a specific area. They include a description of the soils and miscellaneous areas and their location on the landscape and tables that show soil properties and limitations affecting various uses. Soil scientists observed the steepness, length, and shape of the slopes; the general pattern of drainage; the kinds of crops and native plants; and the kinds of bedrock. They observed and described many soil profiles. A soil profile is the sequence of natural layers, or horizons, in a soil. The profile extends from the surface down into the unconsolidated material in which the soil formed or from the surface down to bedrock. The unconsolidated material is devoid of roots and other living organisms and has not been changed by other biological activity.

Currently, soils are mapped according to the boundaries of major land resource areas (MLRAs). MLRAs are geographically associated land resource units that share common characteristics related to physiography, geology, climate, water resources, soils, biological resources, and land uses (USDA, 2006). Soil survey areas typically consist of parts of one or more MLRA.

The soils and miscellaneous areas in a survey area occur in an orderly pattern that is related to the geology, landforms, relief, climate, and natural vegetation of the area. Each kind of soil and miscellaneous area is associated with a particular kind of landform or with a segment of the landform. By observing the soils and miscellaneous areas in the survey area and relating their position to specific segments of the landform, a soil scientist develops a concept, or model, of how they were formed. Thus, during mapping, this model enables the soil scientist to predict with a considerable degree of accuracy the kind of soil or miscellaneous area at a specific location on the landscape.

Commonly, individual soils on the landscape merge into one another as their characteristics gradually change. To construct an accurate soil map, however, soil scientists must determine the boundaries between the soils. They can observe only a limited number of soil profiles. Nevertheless, these observations, supplemented by an understanding of the soil-vegetation-landscape relationship, are sufficient to verify predictions of the kinds of soil in an area and to determine the boundaries.

Soil scientists recorded the characteristics of the soil profiles that they studied. They noted soil color, texture, size and shape of soil aggregates, kind and amount of rock fragments, distribution of plant roots, reaction, and other features that enable them to identify soils. After describing the soils in the survey area and determining their properties, the soil scientists assigned the soils to taxonomic classes (units). Taxonomic classes are concepts. Each taxonomic class has a set of soil characteristics with precisely defined limits. The classes are used as a basis for comparison to classify soils systematically. Soil taxonomy, the system of taxonomic classification used in the United States, is based mainly on the kind and character of soil properties and the arrangement of horizons within the profile. After the soil

scientists classified and named the soils in the survey area, they compared the individual soils with similar soils in the same taxonomic class in other areas so that they could confirm data and assemble additional data based on experience and research.

The objective of soil mapping is not to delineate pure map unit components; the objective is to separate the landscape into landforms or landform segments that have similar use and management requirements. Each map unit is defined by a unique combination of soil components and/or miscellaneous areas in predictable proportions. Some components may be highly contrasting to the other components of the map unit. The presence of minor components in a map unit in no way diminishes the usefulness or accuracy of the data. The delineation of such landforms and landform segments on the map provides sufficient information for the development of resource plans. If intensive use of small areas is planned, onsite investigation is needed to define and locate the soils and miscellaneous areas.

Soil scientists make many field observations in the process of producing a soil map. The frequency of observation is dependent upon several factors, including scale of mapping, intensity of mapping, design of map units, complexity of the landscape, and experience of the soil scientist. Observations are made to test and refine the soil-landscape model and predictions and to verify the classification of the soils at specific locations. Once the soil-landscape model is refined, a significantly smaller number of measurements of individual soil properties are made and recorded. These measurements may include field measurements, such as those for color, depth to bedrock, and texture, and laboratory measurements, such as those for content of sand, silt, clay, salt, and other components. Properties of each soil typically vary from one point to another across the landscape.

Observations for map unit components are aggregated to develop ranges of characteristics for the components. The aggregated values are presented. Direct measurements do not exist for every property presented for every map unit component. Values for some properties are estimated from combinations of other properties.

While a soil survey is in progress, samples of some of the soils in the area generally are collected for laboratory analyses and for engineering tests. Soil scientists interpret the data from these analyses and tests as well as the field-observed characteristics and the soil properties to determine the expected behavior of the soils under different uses. Interpretations for all of the soils are field tested through observation of the soils in different uses and under different levels of management. Some interpretations are modified to fit local conditions, and some new interpretations are developed to meet local needs. Data are assembled from other sources, such as research information, production records, and field experience of specialists. For example, data on crop yields under defined levels of management are assembled from farm records and from field or plot experiments on the same kinds of soil.

Predictions about soil behavior are based not only on soil properties but also on such variables as climate and biological activity. Soil conditions are predictable over long periods of time, but they are not predictable from year to year. For example, soil scientists can predict with a fairly high degree of accuracy that a given soil will have a high water table within certain depths in most years, but they cannot predict that a high water table will always be at a specific level in the soil on a specific date.

After soil scientists located and identified the significant natural bodies of soil in the survey area, they drew the boundaries of these bodies on aerial photographs and

identified each as a specific map unit. Aerial photographs show trees, buildings, fields, roads, and rivers, all of which help in locating boundaries accurately.

Soil Map

The soil map section includes the soil map for the defined area of interest, a list of soil map units on the map and extent of each map unit, and cartographic symbols displayed on the map. Also presented are various metadata about data used to produce the map, and a description of each soil map unit.

Custom Soil Resource Report
Soil Map

MAP LEGEND

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

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

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

Water Features
- Streams and Canals

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

Background
- Aerial Photography

MAP INFORMATION

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

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

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

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

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

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

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

Soil Survey Area: Lea County, New Mexico
Survey Area Data: Version 18, Sep 10, 2021

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
MF	Maljamar and Palomas fine sands, 0 to 3 percent slopes	12.2	100.0%
Totals for Area of Interest		**12.2**	**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.

Lea County, New Mexico

MF—Maljamar and Palomas fine sands, 0 to 3 percent slopes

Map Unit Setting

National map unit symbol: dmqb
Elevation: 3,000 to 3,900 feet
Mean annual precipitation: 10 to 15 inches
Mean annual air temperature: 60 to 62 degrees F
Frost-free period: 190 to 205 days
Farmland classification: Farmland of statewide importance

Map Unit Composition

Maljamar and similar soils: 46 percent
Palomas and similar soils: 44 percent
Minor components: 10 percent
Estimates are based on observations, descriptions, and transects of the mapunit.

Description of Maljamar

Setting

Landform: Plains
Landform position (three-dimensional): Rise
Down-slope shape: Linear
Across-slope shape: Linear
Parent material: Sandy eolian deposits derived from sedimentary rock

Typical profile

A - 0 to 24 inches: fine sand
Bt - 24 to 50 inches: sandy clay loam
Bkm - 50 to 60 inches: cemented material

Properties and qualities

Slope: 0 to 3 percent
Depth to restrictive feature: 40 to 60 inches to petrocalcic
Drainage class: Well drained
Runoff class: Very low
Capacity of the most limiting layer to transmit water (Ksat): Very low to moderately low (0.00 to 0.06 in/hr)
Depth to water table: More than 80 inches
Frequency of flooding: None
Frequency of ponding: None
Calcium carbonate, maximum content: 5 percent
Maximum salinity: Nonsaline to very slightly saline (0.0 to 2.0 mmhos/cm)
Sodium adsorption ratio, maximum: 2.0
Available water supply, 0 to 60 inches: Low (about 5.6 inches)

Interpretive groups

Land capability classification (irrigated): 7e
Land capability classification (nonirrigated): 7e
Hydrologic Soil Group: B
Ecological site: R042XC003NM - Loamy Sand
Hydric soil rating: No

Description of Palomas

Setting

Landform: Plains
Landform position (three-dimensional): Rise
Down-slope shape: Linear
Across-slope shape: Linear
Parent material: Alluvium derived from sandstone

Typical profile

A - 0 to 16 inches: fine sand
Bt - 16 to 60 inches: sandy clay loam
Bk - 60 to 66 inches: sandy loam

Properties and qualities

Slope: 0 to 3 percent
Depth to restrictive feature: More than 80 inches
Drainage class: Well drained
Runoff class: Low
Capacity of the most limiting layer to transmit water (Ksat): Moderately high to high (0.60 to 2.00 in/hr)
Depth to water table: More than 80 inches
Frequency of flooding: None
Frequency of ponding: None
Calcium carbonate, maximum content: 45 percent
Gypsum, maximum content: 1 percent
Maximum salinity: Nonsaline to very slightly saline (0.0 to 2.0 mmhos/cm)
Sodium adsorption ratio, maximum: 2.0
Available water supply, 0 to 60 inches: Moderate (about 7.5 inches)

Interpretive groups

Land capability classification (irrigated): None specified
Land capability classification (nonirrigated): 7e
Hydrologic Soil Group: B
Ecological site: R042XC003NM - Loamy Sand
Hydric soil rating: No

Minor Components

Kermit

Percent of map unit: 5 percent
Ecological site: R042XC022NM - Sandhills
Hydric soil rating: No

Wink

Percent of map unit: 5 percent
Ecological site: R042XC003NM - Loamy Sand
Hydric soil rating: No

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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
Phone:(505) 476-3470 Fax:(505) 476-3462

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

CONDITIONS

Action 73676

CONDITIONS

Operator: CONOCOPHILLIPS COMPANY 600 W. Illinois Avenue Midland, TX 79701	OGRID: 217817
	Action Number: 73676
	Action Type: [C-141] Release Corrective Action (C-141)

CONDITIONS

Created By	Condition	Condition Date
jnobui	Remediation Plan Approved with Conditions. The Alternative Confirmation Sampling Plan is approved. Please excavate down to 4 ft by boring BH-2.	2/16/2022