



April 20, 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 300 Flowline Release
Unit Letter J, Section 28, Township 17 South, Range 32 East
Lea County, New Mexico
1RP-5752
Incident ID NRM1929049253

Sir or Madam:

Tetra Tech, Inc. (Tetra Tech) was contacted by ConocoPhillips (COP) to evaluate and assess a release that occurred from the Maljamar Cooperative Agreement (MCA) #300 well flowline. The MCA #300 well is located at 32.79611°, -103.77401°, approximately 2,700 feet (ft) southwest of the release site. The API # associated with the MCA #300 is 30-025-23984. The release footprint is located in Public Land Survey System (PLSS) Unit Letter J, Section 28, Township 17 South, Range 32 East, in Lea County, New Mexico (Site). The approximate release point coordinates are 32.802891°, -103.769883°. The Site location is shown on Figures 1 and 2.

BACKGROUND

According to the State of New Mexico C-141 Initial Report, the release was discovered on October 4, 2019. The release occurred as the result of a flowline rupture south of the MCA 2C header and encompassed an area of approximately 3,100 square feet. Approximately 5 barrels (bbls) of crude oil and 33 bbls of produced water were released, of which 2 bbls of crude oil and 9 bbls of produced water were reported recovered during initial response activities. The New Mexico Oil Conservation District (NMOCD) received the C-141 report form for the release on October 17, 2019 and subsequently assigned the Site the Remediation Permit (RP) number 1RP-5752 and Incident Identification (ID) NRM1929049253. The initial C-141 Form for 1RP-5752 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 19.15.0029 New Mexico Administrative Code (NMAC). The Site is in an area of low karst potential.

The Site is within a New Mexico oil and gas production area. According to the New Mexico Office of the State Engineers (NMOSE) database, there are six wells within a ½ mile (800-meter) radius of the Site with

Release Characterization and Remediation Work Plan
April 20, 2021

ConocoPhillips

an average depth to groundwater at 99 ft below ground surface (bgs). The minimum depth to groundwater in the area is 75 ft bgs. The site characterization data is included in Appendix B.

REGULATORY FRAMEWORK

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	10,000 mg/kg
TPH	2,500 mg/kg
BTEX	50 mg/kg

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

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

INITIAL RESPONSE

Per 19.15.29.8 B. (4) NMAC, the responsible party may commence remediation immediately after discovery of a release. Free fluids were recovered with a vacuum truck during initial response. The release footprint was initially fenced to limit access to the site as necessary to protect human health and the environment. COP initiated remediation activities in early 2020. During remediation, the visibly impacted soils within the release extent were excavated to 1 foot below ground surface (bgs). After the initial response remediation activities, further remediation efforts were halted to assess soils both vertically and horizontally for potential environmental impacts.

SITE ASSESSMENT

Based on review of the release area and available documentation, the release associated with 1RP-5752 occurred within the footprint of a previous release associated with 1RP-3579. The 1RP-3579 release encompasses and extends approximately 330 ft north of the 1RP-5752 release footprint.

In order to achieve horizontal and vertical delineation of the 1RP-5752 release extent, Tetra Tech personnel conducted soil sampling from March to July 2020 on behalf of COP. With an abundance of surface flowlines and subsurface injection lines running across and through the release footprint, a drilling rig was not able to safely access the release extent footprint and drill for release characterization and delineation. Therefore, the site assessment activities consisted of digging a series of test pits within the release extent footprint with a mini excavator for vertical delineation, as well as completing borings for horizontal delineation around the release extent perimeter using a hand auger.

For the additional delineation, a total of four (4) test pits (or trenches) were completed within the interior of the 1RP-5752 release extent. One test pit/trench were completed outside the 1RP-5752 release extent, as a portion of the investigation of the 1RP-3579 release extent. Trenches (T)-1 through T-4 were completed in the 1RP-5752 release footprint and T-11 was completed in the 1RP-3579 release footprint.

A series of auger holes (AH) were completed as shown in Figure 4 to complete horizontal delineation. These auger holes were installed along and around the perimeter of the release extent (to the east, south and west) to a depth of 4 ft bgs to achieve horizontal delineation. The auger holes were completed alongside

Release Characterization and Remediation Work Plan
April 20, 2021

ConocoPhillips

the trench locations and named accordingly. For instance, AH-1E and AH-1W are locations which provide horizontal delineation on the east and west sides of T-1, respectively. In some areas, additional step out locations were required for horizontal delineation. These locations are designated with a numeral following the cardinal direction (i.e. AH-1E-2). Figure 4 depicts the release extent and the May 2020 sampling locations. Test pit logs and boring logs from the 2020 assessment activities are included in Appendix D.

A total of 72 soil samples were collected from these various trench and boring locations and submitted to Pace Analytical National Center for Testing & Innovation (Pace) in Nashville, Tennessee to be analyzed for a combination of chlorides via EPA Method 300.0, TPH via EPA Method 8015M, and BTEX via EPA Method 8021B. Copies of the laboratory analytical reports and chain-of-custody documentation are included in Appendix D.

SUMMARY OF ASSESSMENT AND RELEASE CHARACTERIZATION

During the initial assessment event in 2020, the analytical results associated with boring locations T-2 through T-4, AH-1S, AH-9W and AH-11W were above RRALs for TPH and/or chloride in the majority of the surface sample intervals. Analytical results associated with boring locations AH-1S-2, AH-1S-3, AH-1E-2, AH-1W, AH-1E, AH-2W, AH-2E, AH-3W, AH-3E, AH-4W, AH-4E, AH-11W-2 and AH-11E were below the RRALs for TPH, BTEX and chloride. Results from the 2020 soil sampling events are summarized in Table 1.

The MCA 2-C Production Header facility area has numerous underground injection lines and surface flowlines, in addition to piping and production equipment throughout the area. The 2020 sampling locations were chosen based on accessibility and to avoid safety issues due to the surface and subsurface infrastructure. Totals depths of the borings and test pits ranged from 1 to 17.5 ft bgs.

T-3 was installed within the release footprint to specifically clarify the vertical extent of the release in the 1RP-5752 footprint. The analytical results associated with the 10'-11' sample at T-3 is the vertical delineation point for this release and is below the most stringent RRALs for chloride, TPH and BTEX.

The horizontal extent of the release footprint was defined through several iterations of hand auger borings. The analytical results associated with the AH-1S location exceeded the RRAL for TPH, however, AH-1S-2 & AH-1S-3 were completed as additional southern delineation points and were below the applicable RRALs. AH-2E, AH-3E, AH-4E, AH-9E, AH-10E and AH-11E bound the release to the east. After several iterative boring locations, the release extent is bound to the west by locations AH-1W, AH-2W, AH-3W, AH-4W, AH-9W-2, AH-9W-3, AH-9W-4 and AH-9W-5. AH-9N bounds the release to the north. The analytical results associated with these samples collected around the release area in the upper four ft were below the reclamation RRALs for total TPH (GRO + DRO + ORO), BTEX and/or chloride in all samples. These borings meet the requirements for horizontal delineation per 19.15.29.11(A)(5)(b) NMAC. The trench and boring locations are shown on Figure 4. Photographic documentation of the release area post-initial response is included as Appendix E.

REMEDIATION WORK PLAN

Based on the analytical results, ConocoPhillips proposes to further excavate soils to a total depth of 4 ft bgs in and around trench locations T-1 through T-4, as depicted in Figure 5. Screening samples will be collected during the excavation process to determine if the remediation footprint for the site will be modified based on field conditions. Impacted soils will be excavated using heavy equipment (backhoes, hoe rams, and track hoes) to a maximum depth of 4 ft below surface or until a representative sample from the walls and bottom of the excavation is below the RRAL for chlorides (600 mg/kg). Any area of the release extent that runs along steel flowlines or subsurface piping will be hand-dug to a depth of 4 ft or the maximum extent practicable.

Excavated soils will be transported offsite and disposed of at an NMOCD-approved or permitted facility. Confirmation floor and sidewall samples will be collected for verification of remedial activities, and analyzed

Release Characterization and Remediation Work Plan
April 20, 2021

ConocoPhillips

for TPH, BTEX, and chloride. Once the sample 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 335 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 5. Approximately ten (10) confirmation floor samples and sixteen (16) confirmation sidewall samples are proposed for verification of remedial activities. The proposed excavation encompasses an area of approximately 3,000 square feet.

These confirmation sidewall and floor samples will be representative of no more than approximately 500 square feet of excavated area. Confirmation samples will be sent to an accredited laboratory for analysis of TPH, BTEX, and chlorides. 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

The backfilled areas will be seeded in Spring 2021 (or the first favorable growing season) to aid in revegetation. Based on soils at the Site, the New Mexico State Land Office (NMSLO) Sandy (S) 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.

CONCLUSION

ConocoPhillips proposes to begin remediation activities at the Site within 90 days of approval of this submittal. 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 or Greg at (432) 682-4559.

Sincerely,
Tetra Tech, Inc.



Christian M. Llull, P.G.
Project Manager



Greg W. Pope, P.G.
Program Manager

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

Release Characterization and Remediation Work Plan
April 20, 2021

ConocoPhillips

List of Attachments

Figures:

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

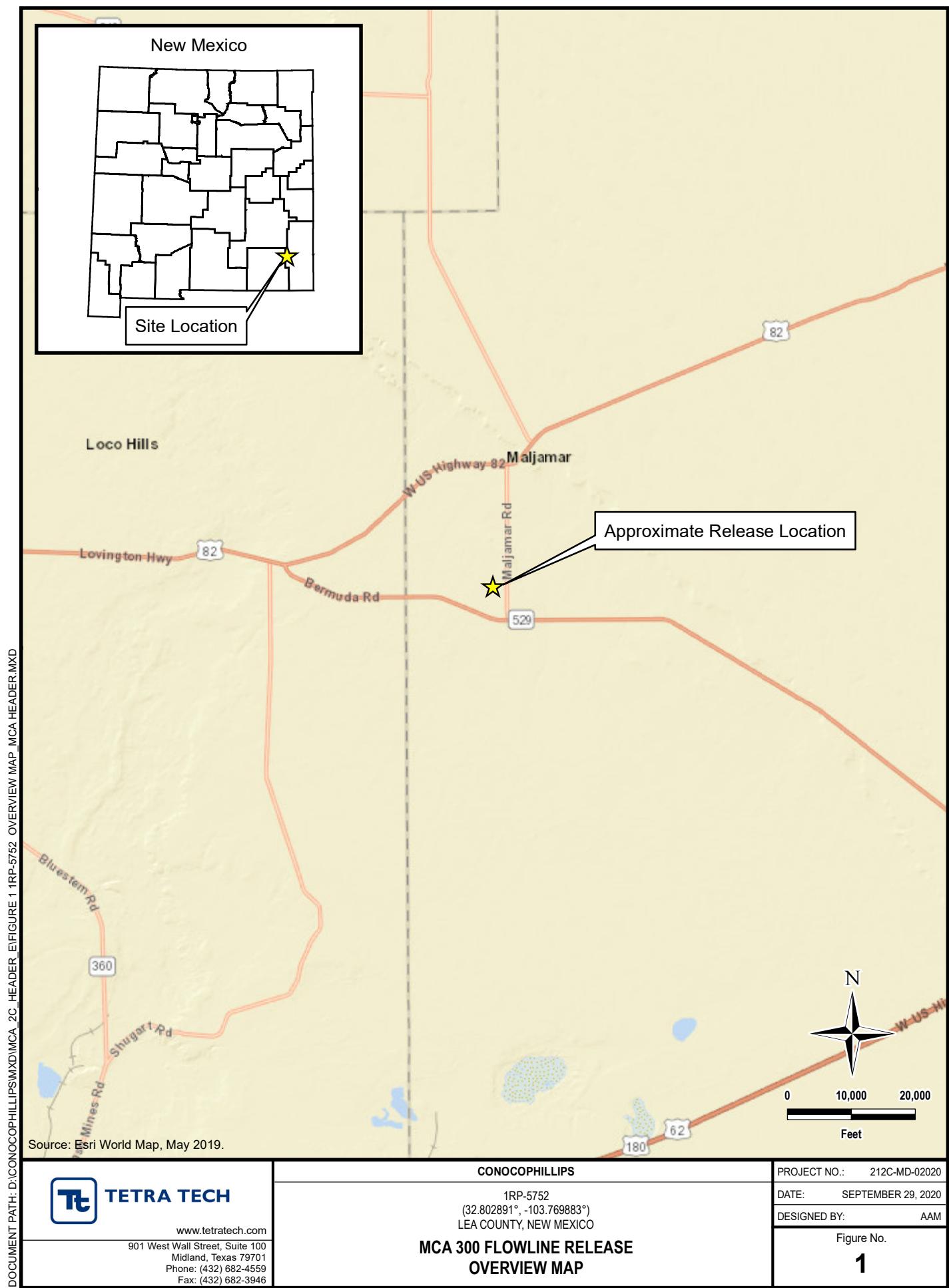
Tables:

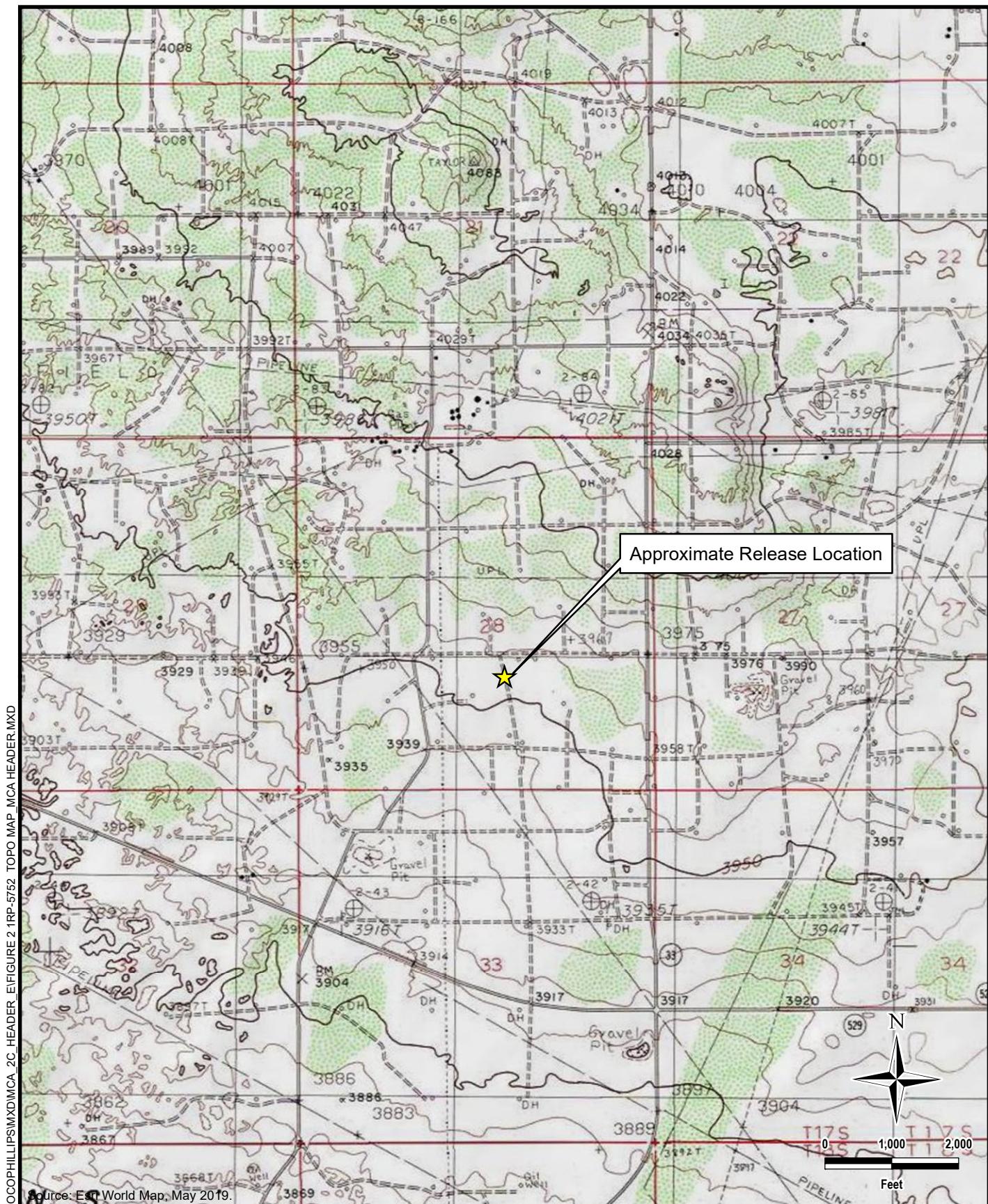
- Table 1 – Summary of Analytical Results – Soil Assessment

Appendices:

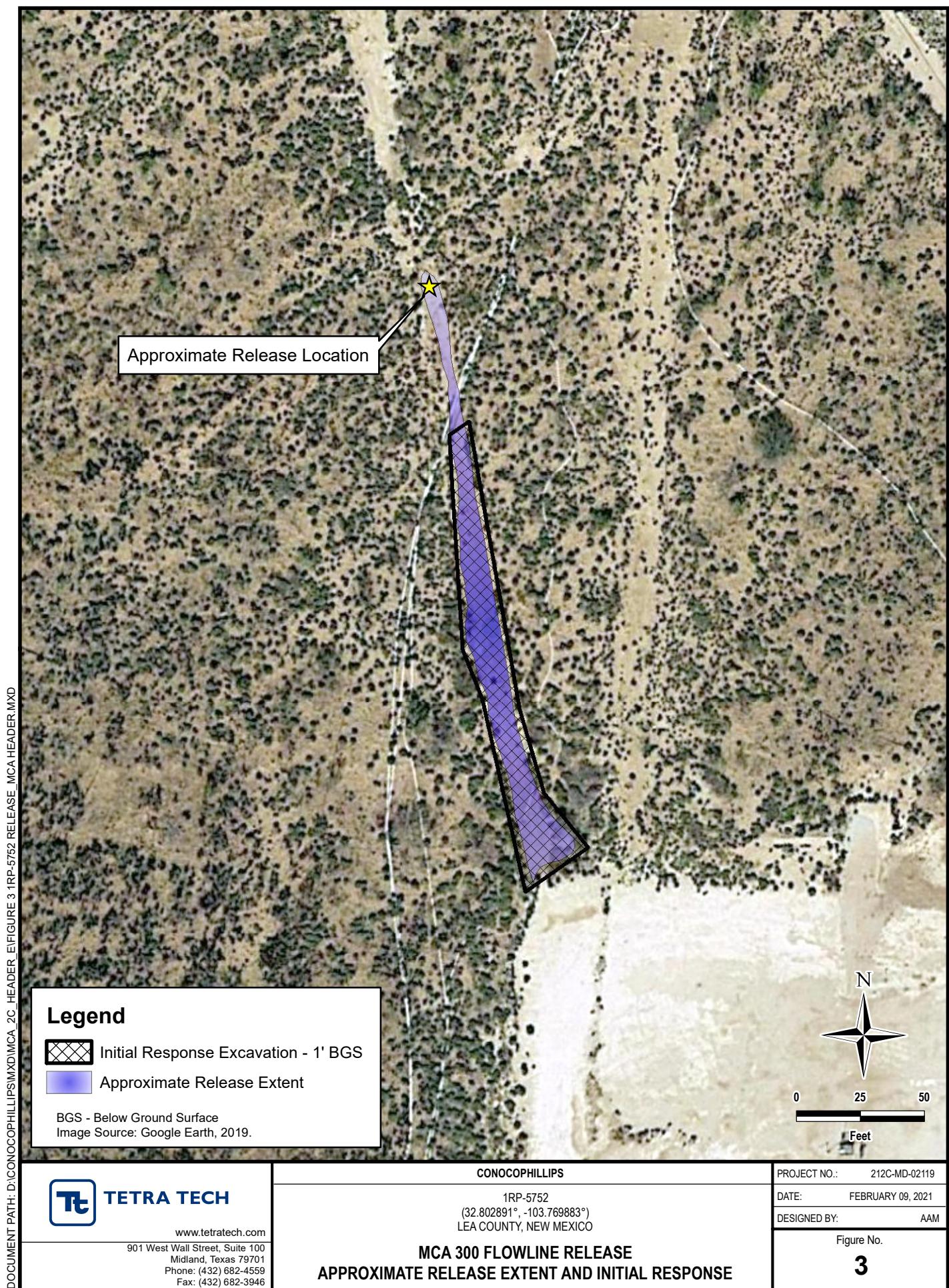
- Appendix A – C-141 Form
- Appendix B – Site Characterization Data
- Appendix C – Laboratory Analytical Reports
- Appendix D – Soil Boring Logs
- Appendix E – Photographic Documentation
- Appendix F – NMSLO Seed Mixture Details

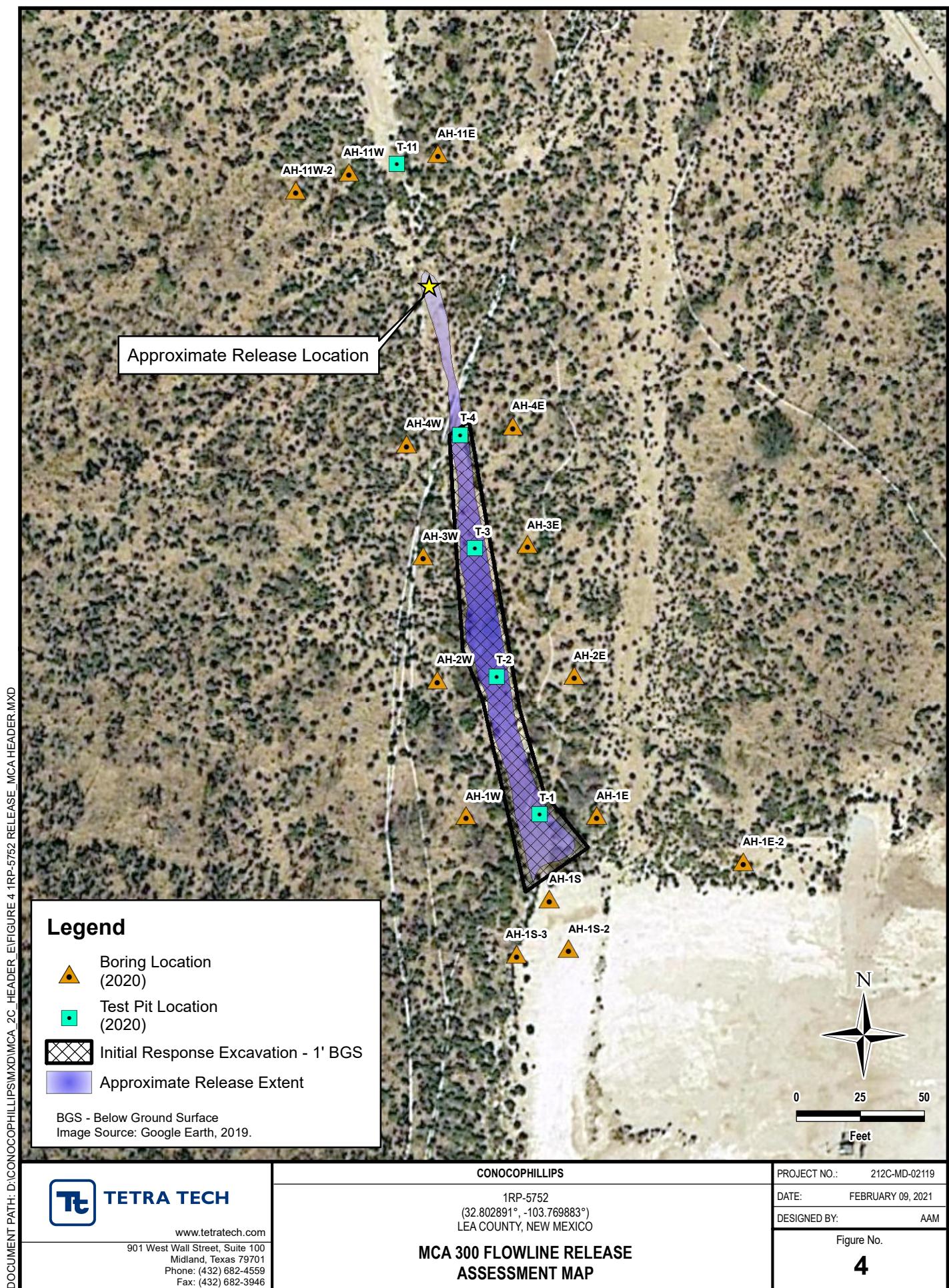
FIGURES

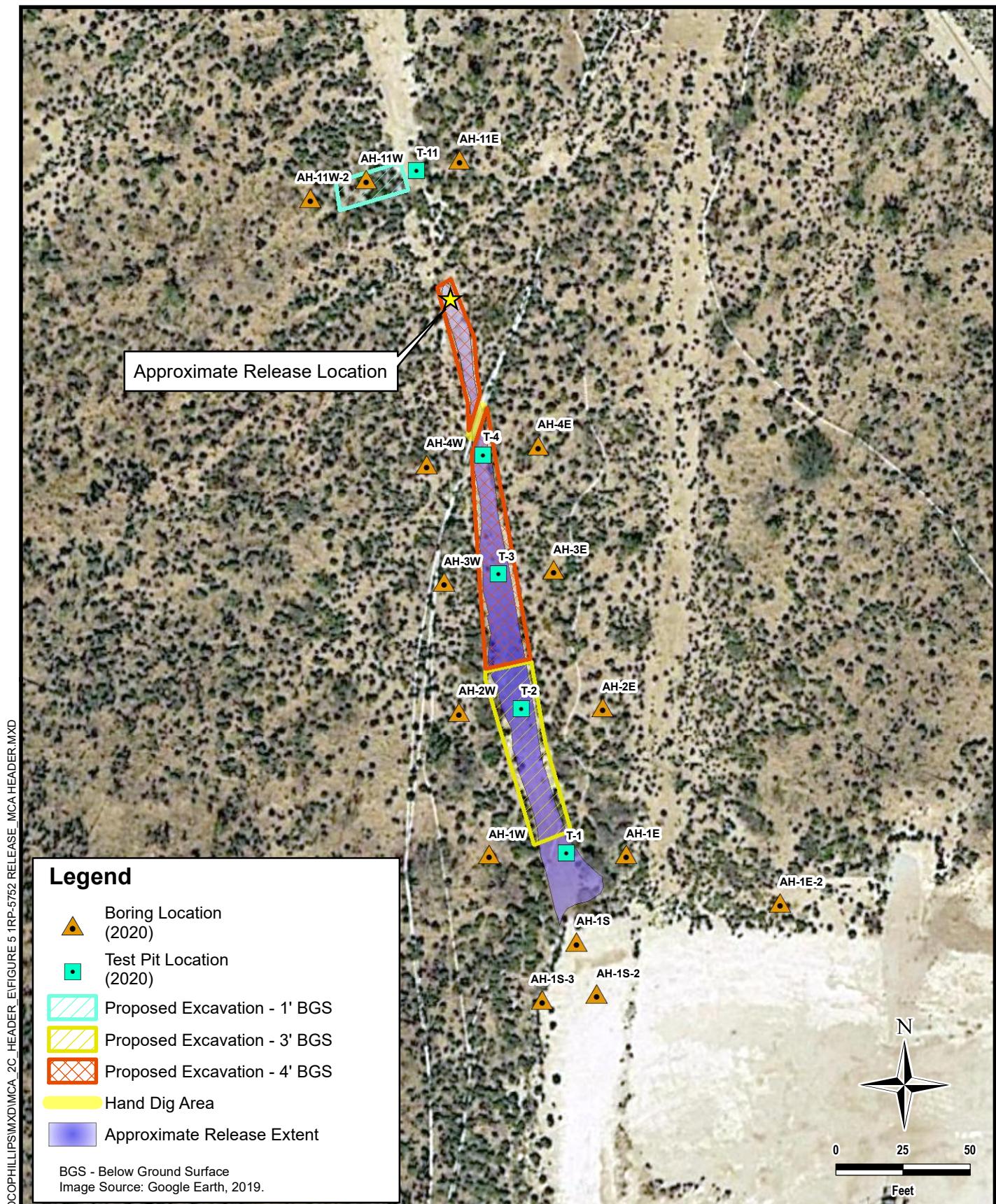




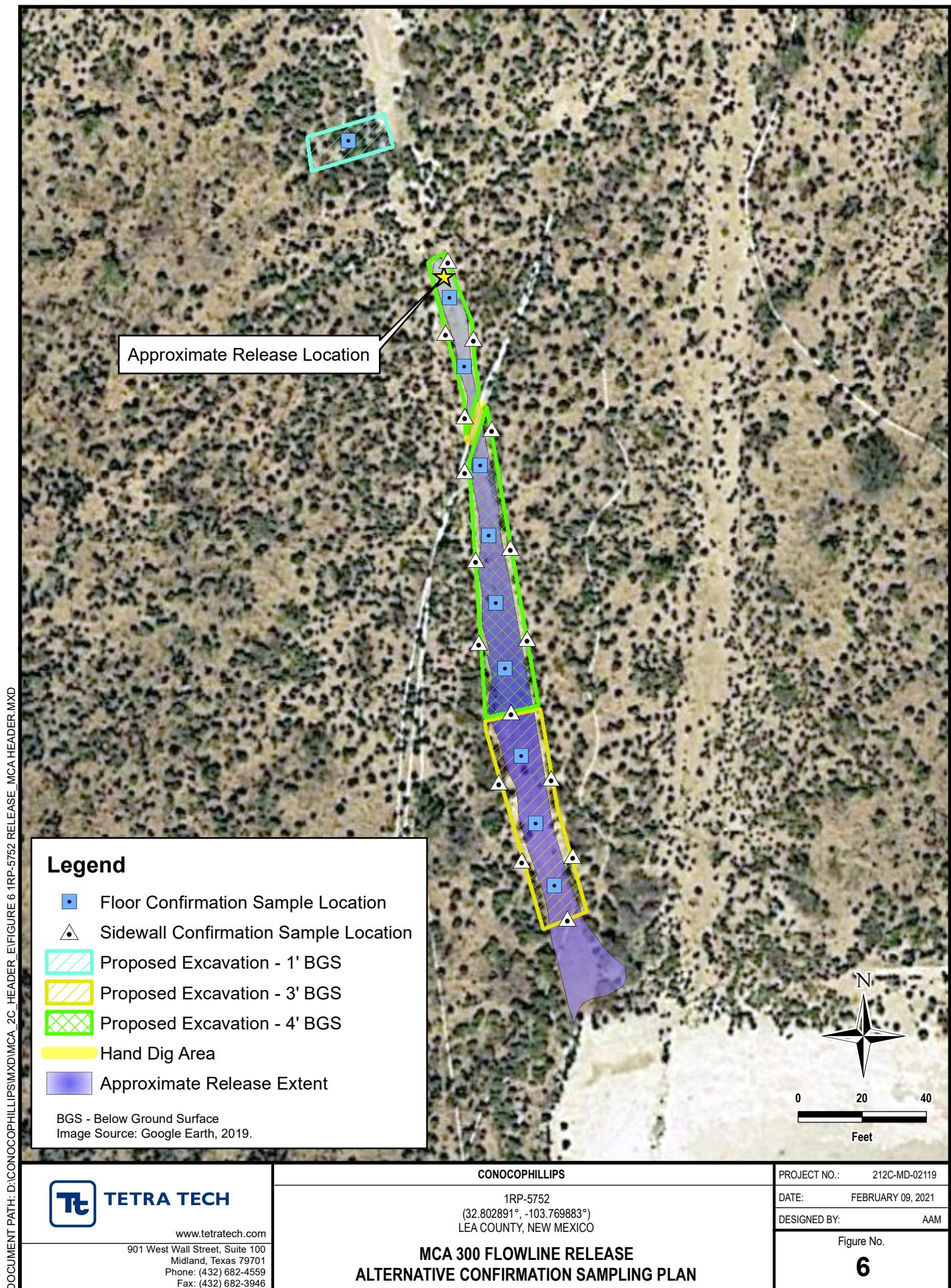
 TETRA TECH www.tetratech.com 901 West Wall Street, Suite 100 Midland, Texas 79701 Phone: (432) 682-4559 Fax: (432) 682-3946	CONOCOPHILLIPS 1RP-5752 (32.802891°, -103.769883°) LEA COUNTY, NEW MEXICO MCA 300 FLOWLINE RELEASE TOPOGRAPHIC MAP	PROJECT NO.: 212C-MD-02020 DATE: SEPTEMBER 29, 2020 DESIGNED BY: AAM Figure No. 2
---	--	--







 TETRA TECH www.tetratech.com 901 West Wall Street, Suite 100 Midland, Texas 79701 Phone: (432) 682-4559 Fax: (432) 682-3946	CONOCOPHILLIPS 1RP-5752 (32.802891°, -103.769883°) LEA COUNTY, NEW MEXICO MCA 300 FLOWLINE RELEASE PROPOSED REMEDIATION EXTENT	PROJECT NO.: 212C-MD-02119
		DATE: FEBRUARY 09, 2021
		DESIGNED BY: AAM
Figure No.		5



TABLES

TABLE 1
SUMMARY OF ANALYTICAL RESULTS
SOIL ASSESSMENT - 1RP-5752
CONOCOPHILLIPS
MCA 300 FLOWLINE 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		DRO		ORO		Total TPH (GRO+DRO+ORO)	
			ft. bgs	ppm		mg/kg	Q	mg/kg	Q	mg/kg	Q	mg/kg	Q		mg/kg	Q	mg/kg	Q	mg/kg	Q		
T-1	3/3/2020	1-2	395	0.1	243	<0.00112		<0.00562		<0.00281		<0.00731		-	<0.114		6.05		16.3		22.4	
		3-4	390	-	130	<0.00129		<0.00643		<0.00321		<0.00836		-	<0.130		<5.14		1.31	J	1.31	
		5-6	190	0.0	34.9	<0.00125		<0.00626		<0.00313		<0.00814		-	<0.110		<4.39		4.24	J	4.24	
AH-1E	3/3/2020	0-1	100	0.0	8.57	BJ	<0.00102		<0.00510		<0.00255		<0.00664		-	<0.102		16.0		42.3		58.3
AH-1E-2	7/23/2020	0-1	62.4	1.8	<21.2		<0.00106		<0.00531		<0.00265		<0.00690		-	<0.106		<4.24		1.59	J	1.59
AH-1E-2	7/23/2020	2-3	49.4	2.2	<21.0		<0.00105		<0.00526		<0.00263		<0.00684		-	<0.105		<4.21		3.96	J	3.96
AH-1S	3/3/2020	0-1	120	0.0	11.0	B	<0.00125		<0.00627		<0.00313		<0.00815		-	<0.104		19.1	J	41.4	J	60.5
AH-1S	3/3/2020	3-4	95	-	20.6		<0.00106		<0.00532		<0.00266		<0.00691		-	<0.106		67.8		74.6		142
AH-1S-2	7/8/2020	0-1	225	0.0	<21.4		<0.00107		<0.00535		<0.00268		<0.00696		-	<0.107		3.23	J	14.3		17.5
AH-1S-2	7/8/2020	2-3	90	0.0	<20.7		<0.00104		<0.00519		<0.00259		<0.00674		-	<0.104		2.53	J	11.7		14.2
AH-1S-3	7/24/2020	0-1	62.6	3.2	<24.2		<0.00142		<0.00711		<0.00356		<0.00925		-	0.0703	J V3	<4.84		1.43	J	1.50
AH-1S-3	7/24/2020	2-3	231	4.6	120		<0.00103		<0.00514		<0.00257		<0.00669		-	<0.103		<4.12		1.75	J	1.75
AH-1S-3	7/24/2020	4-5	2810	1.5	3250		<0.00172		<0.00861		<0.00431		<0.0112		-	<0.110		<4.42		4.11	J	4.11
AH-1S-4	7/24/2020	0-1	98.1	1.1	31.1		<0.00110		<0.00550		<0.00275		<0.00715		-	<0.111		8.26		28.2		36.5
AH-1S-4	7/24/2020	2-3	73.2	1.2	35.9		<0.00130		<0.00651		<0.00325		<0.00846		-	<0.115		<4.60		1.43	J	1.43
AH-1S-4	7/24/2020	4-5	109	1.1	25.6		<0.00107		<0.00533		<0.00266		<0.0069		-	<0.107		<4.26		4.00	J	4.00
AH-1W	3/3/2020	0-1	27	0.0	1.45	BJ	<0.00103		<0.00515		<0.00257		<0.00669		-	<0.103		<4.12		5.88		5.88
AH-1W	3/3/2020	3-4	56	0.0	9.36	BJ	<0.00106		<0.00528		<0.00264		<0.00686		-	<0.106		<4.22		2.57	BJ	2.57
T-2	3/3/2020	1-2	400	0.0	131		<0.00106		<0.00530		0.000906	J	0.0103		0.0112	0.0254	J	458		445		903
T-2	3/3/2020	3-4	200	-	190		<0.00112		<0.00561		<0.00281		<0.00730		-	0.0308	J	43.9		35.7		79.6
AH-2E	3/3/2020	5-6	315	-	125		<0.00109		<0.00544		<0.00272		<0.00707		-	0.0257	J	63.0		48.8		112
AH-2E	3/3/2020	0-1	58	0.0	1.77	BJ	<0.00205		<0.0103		<0.00513		<0.0133		-	<0.103	J3	<4.10		1.34	J	1.34
AH-2W	3/3/2020	3-4	26	-	1.79	BJ	<0.00120		<0.00601		<0.00300		<0.00781		-	<0.120	J3	<4.81		1.44	J	1.44
AH-2W	3/3/2020	0-1	54	0.0	4.90	BJ	<0.00101		<0.00505		<0.00252		<0.00656		-	<0.101	J3	1.79	J	10.6		12.4
AH-2W	3/3/2020	3-4	480	-	137		<0.00106		<0.00530		<0.00265		<0.00689		-	<0.106	J3	<4.24		4.13	J	4.13
T-3	3/4/2020	1-2	1929	499	970	0.000746	J	<0.00533		<0.00267		<0.00693		0.000746	2.83	J3	489		270		762	
		3-4	2400	4.8	3100	<0.00113		<0.00567		<0.00283		<0.00737		-	<0.113	J3	<4.53		2.42	J	2.42	
		5-6	1200	2.2	NS	NS		NS		NS		NS		-	NS		NS		NS		-	
		6-7	1250	3.0	1140	<0.00108		<0.00538		<0.00269		<0.00700		-	<0.108	J3	2.12	J	1.64	J	3.76	
		8-9	1220	-	NS	NS		NS		NS		NS		-	NS		NS		NS		-	
AH-3E	3/4/2020	10-11	924	-	879	<0.00106		<0.00532		<0.00266		<0.00692		-	<0.106		<4.26		0.543	J	0.543	
		0-1	54	0.0	2.50	BJ	<0.00109		<0.00544		<0.00272		<0.00707		-	<0.109		2.49	J	8.59		11.1
		3-4	120	-	6.75	BJ	<0.00104		<0.00522		<0.00261		<0.00678		-	<0.104		<4.17		5.17		5.17
AH-3W	7/24/2020	0-1	89.4	2.7	<20.6		<0.00114		<0.00571		<0.00286		<0.00743		-	<0.103		5.95	J	31.0		37.0
		2-3	158	3.1	40.0		<0.00102		<0.00512		<0.00256		<0.00666		-	<0.102		<12.2		19.8		19.8

TABLE 1
SUMMARY OF ANALYTICAL RESULTS
SOIL ASSESSMENT - 1RP-5752
CONOCOPHILLIPS
MCA 300 FLOWLINE 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		DRO		ORO		Total TPH (GRO+DRO+ORO)
			Chloride	PID		mg/kg	Q	mg/kg	Q	mg/kg	Q	mg/kg	Q		mg/kg	Q	mg/kg	Q	mg/kg	Q	
ft. bgs	ppm	ft. bgs	mg/kg	Q	mg/kg	Q	mg/kg	Q	mg/kg	Q	mg/kg	Q	mg/kg	Q	mg/kg	Q	mg/kg	Q	mg/kg	Q	mg/kg
T-4	3/4/2020	1-2	2500	547.0	988	< 0.00109		< 0.00543		< 0.00272		< 0.00706		-	< 0.109		295		214	509	
		2-4	4750	3.7	-	-		-	-	-	-	-	-	-	-	-	-	-	-	-	
		5-6	6600	1.3	5780	< 0.00109		< 0.00543		< 0.00272		< 0.00706		-	< 0.109		< 4.35		0.399	J 0.399	
		8-9	5500	-	5290	< 0.00108		< 0.00542		< 0.00271		< 0.00704		-	< 0.108		11.6		10.1	21.7	
AH-4E	3/3/2020	0-1	36	0.1	2.79	BJ	< 0.00104		< 0.00521		< 0.00261		< 0.00678		-	0.0568	BJ	7.86		29.7	37.6
		3-4	1400	0.0	106	-	< 0.00105		< 0.00526		< 0.00263		< 0.00683		-	0.0258	J	8.59		30.2	38.8
AH-4W	3/3/2020	0-1	23	0.0	2.64	BJ	< 0.00104		< 0.00521		< 0.00260		< 0.00677		-	0.0422	BJ	7.90		28.0	35.9
		3-4	695	0.0	285	-	< 0.00106		< 0.00530		< 0.00265		< 0.00689		-	< 0.106		2.16	J	7.64	9.80
T-11	3/10/2020	1-2	1200	0.3	225	< 0.00121		< 0.00603		< 0.00302		< 0.00784		-	0.177		11.8		14.2	26.2	
		3-4	1900	0.0	-	-		-	-	-	-	-	-	-	-	-	-	-	-	-	
		5-6	2400	0.0	-	-		-	-	-	-	-	-	-	-	-	-	-	-	-	
		7-8	1200	0.0	-	-		-	-	-	-	-	-	-	-	-	-	-	-	-	
		9-10	1250	0.0	-	-		-	-	-	-	-	-	-	-	-	-	-	-	-	
		14-15	450	0.0	545	< 0.00105		< 0.00526		< 0.00263		< 0.00683		-	0.0631	BJ	< 4.20		0.557	J 0.620	
AH-11E	3/10/2020	15	450	0.0	-	-		-	-	-	-	-	-	-	-	-	-	-	-	-	
		0-1	54	0.1	3.39	BJ	< 0.00105		< 0.00524		< 0.00262		< 0.00681		-	< 0.105		8.83		28.8	37.6
AH-11W	3/10/2020	3-4	325	0.0	45.7	-	< 0.00107		< 0.00535		< 0.00267		< 0.00695		-	< 0.107		2.82	J 16.5	19.3	
		0-1	38	0.1	3030	< 0.00107		< 0.00534		< 0.00267		< 0.00695		-	< 0.107		2.46	J	10.8	13.3	
AH-11W-2	7/8/2020	3-4	413	0.0	42.6	-	< 0.00107	J3	< 0.00537	J3	< 0.00268	J3	< 0.00697	J3	-	< 0.107		< 4.29		5.92	5.92
		0-1	106	0.7	< 20.1	-	< 0.00100		< 0.00501		< 0.00251		< 0.00652		-	< 0.100		6.11		33.6	39.7
1		2-3	76	2.1	< 22.8	-	< 0.00129		< 0.00643		< 0.00322		< 0.00836		-	< 0.114		5.65		23.5	29.2

NOTES:

ft. Feet

bgs Below ground surface

ppm Parts per million

mg/kg Milligrams per kilogram

NS Not sampled

NA Sample not analyzed

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 RRALs

Shaded rows indicate depth intervals proposed for excavation and remediation.

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 established quality control range for precision.

T8 Sample(s) received past/too close to holding time expiration.

V3 The internal standard exhibited poor recovery due to sample matrix interference.

The analytical results will be biased high. BDL results will be unaffected.

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	NRM1929049253
District RP	1RP-5752
Facility ID	fCOH0815142265
Application ID	pRM1929048645

Release Notification

Responsible Party

Responsible Party ConocoPhillips Company	OGRID 217817
Contact Name ConocoPhillips Company	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 32.80380 Longitude -103.76900
(NAD 83 in decimal degrees to 5 decimal places)

Site Name MCA 300 FLOWLINE	Site Type flowline
Date Release Discovered 10/4/19	API# (if applicable)

Unit Letter	Section	Township	Range	County
J	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)

<input checked="" type="checkbox"/> Crude Oil	Volume Released (bbls) 5	Volume Recovered (bbls) 2
<input checked="" type="checkbox"/> Produced Water	Volume Released (bbls) 33	Volume Recovered (bbls) 9
	Is the concentration of total dissolved solids (TDS) in the produced water >10,000 mg/l?	<input type="checkbox"/> Yes <input type="checkbox"/> No
<input type="checkbox"/> Condensate	Volume Released (bbls)	Volume Recovered (bbls)
<input type="checkbox"/> Natural Gas	Volume Released (Mcf)	Volume Recovered (Mcf)
<input type="checkbox"/> Other (describe)	Volume/Weight Released (provide units)	Volume/Weight Recovered (provide units)

Cause of Release Flowline rupture south to MCA 2C Header.

Form C-141

Page 2

State of New Mexico
Oil Conservation Division

Incident ID	NRM1929049253
District RP	1RP-5752
Facility ID	fCOH0815142265
Application ID	pRM1929048645

Was this a major release as defined by 19.15.29.7(A) NMAC?	If YES, for what reason(s) does the responsible party consider this a major release? it was more than 25 bbls.
<input checked="" type="checkbox"/> Yes <input type="checkbox"/> No	

If YES, was immediate notice given to the OCD? By whom? To whom? When and by what means (phone, email, etc)? Yes, email sent to Bradford Billings, District 1 spill reporting email address and Dylan Rose-Coss	
---	--

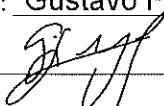
Initial Response

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

<input checked="" type="checkbox"/> The source of the release has been stopped. <input checked="" type="checkbox"/> The impacted area has been secured to protect human health and the environment. <input checked="" type="checkbox"/> Released materials have been contained via the use of berms or dikes, absorbent pads, or other containment devices. <input checked="" type="checkbox"/> All free liquids and recoverable materials have been removed and managed appropriately.
If all the actions described above have <u>not</u> been undertaken, explain why:

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

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

Printed Name: Gustavo Fejervary Title: Environmental Coordinator
 Signature: 
 Date: 10/16/19
 email: g.fejervary@cop.com Telephone: 432/210-7037

OCD Only
 Received by: Ramona Marcus Date: 10/17/2019

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?	<input type="checkbox"/> Yes <input type="checkbox"/> No
Are the lateral extents of the release within 300 feet of a continuously flowing watercourse or any other significant watercourse?	<input type="checkbox"/> Yes <input type="checkbox"/> 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)?	<input type="checkbox"/> Yes <input type="checkbox"/> No
Are the lateral extents of the release within 300 feet of an occupied permanent residence, school, hospital, institution, or church?	<input type="checkbox"/> Yes <input type="checkbox"/> 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?	<input type="checkbox"/> Yes <input type="checkbox"/> No
Are the lateral extents of the release within 1000 feet of any other fresh water well or spring?	<input type="checkbox"/> Yes <input type="checkbox"/> No
Are the lateral extents of the release within incorporated municipal boundaries or within a defined municipal fresh water well field?	<input type="checkbox"/> Yes <input type="checkbox"/> No
Are the lateral extents of the release within 300 feet of a wetland?	<input type="checkbox"/> Yes <input type="checkbox"/> No
Are the lateral extents of the release overlying a subsurface mine?	<input type="checkbox"/> Yes <input type="checkbox"/> No
Are the lateral extents of the release overlying an unstable area such as karst geology?	<input type="checkbox"/> Yes <input type="checkbox"/> No
Are the lateral extents of the release within a 100-year floodplain?	<input type="checkbox"/> Yes <input type="checkbox"/> No
Did the release impact areas not on an exploration, development, production, or storage site?	<input type="checkbox"/> Yes <input type="checkbox"/> 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.

Incident ID	
District RP	
Facility ID	
Application ID	

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

Printed Name: _____ Title: _____

Signature:  Date: _____

email: _____ Telephone: _____

OCD Only

Received by: _____ Date: _____

Incident ID	
District RP	
Facility ID	
Application ID	

Remediation Plan

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

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

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

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

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

Printed Name: _____ Title: _____

Signature:  Date: _____

email: _____ Telephone: _____

OCD Only

Received by: _____ Date: _____

Approved Approved with Attached Conditions of Approval Denied Deferral Approved

Signature:  Date: _____

APPENDIX B

Site Characterization Data



New Mexico Office of the State Engineer

Water Column/Average Depth to Water

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

(R=POD has been replaced,
O=orphaned,
C=the file is closed) (quarters are 1=NW 2=NE 3=SW 4=SE)
(quarters are smallest to largest) (NAD83 UTM in meters) (In feet)

POD Number	POD Sub-Code	basin	County	Q Q Q		64 16 4 Sec	Tws	Rng	X	Y	Distance	Depth	Depth	Water
				RA	LE	2 3 4	28 17S 32E					Well	Water Column	
RA 12721 POD3				RA	LE	2 3 4	28 17S 32E		615417	3629979	275	115		
RA 12721 POD2				RA	LE	1 1 4	28 17S 32E		615055	3630407	324	124	75	49
RA 12721 POD5				RA	LE	2 4 4	28 17S 32E		615650	3629961	499	130	124	6
RA 12721 POD1				RA	LE	3 2 3	28 17S 32E		614645	3630141	528	125		
RA 12721 POD4				RA	LE	1 1 2	33 17S 32E		615055	3629589	528	140		
RA 12721 POD6				RA	LE	1 2 2	33 17S 32E		615530	3629431	763	130		

Average Depth to Water: **99 feet**

Minimum Depth: **75 feet**

Maximum Depth: **124 feet**

Record Count: 6

UTMNAD83 Radius Search (in meters):

Easting (X): 615171.79

Northing (Y): 3630105

Radius: 800

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

Legend

-  32.802891°, -103.769883
-  High
-  Low
-  Medium

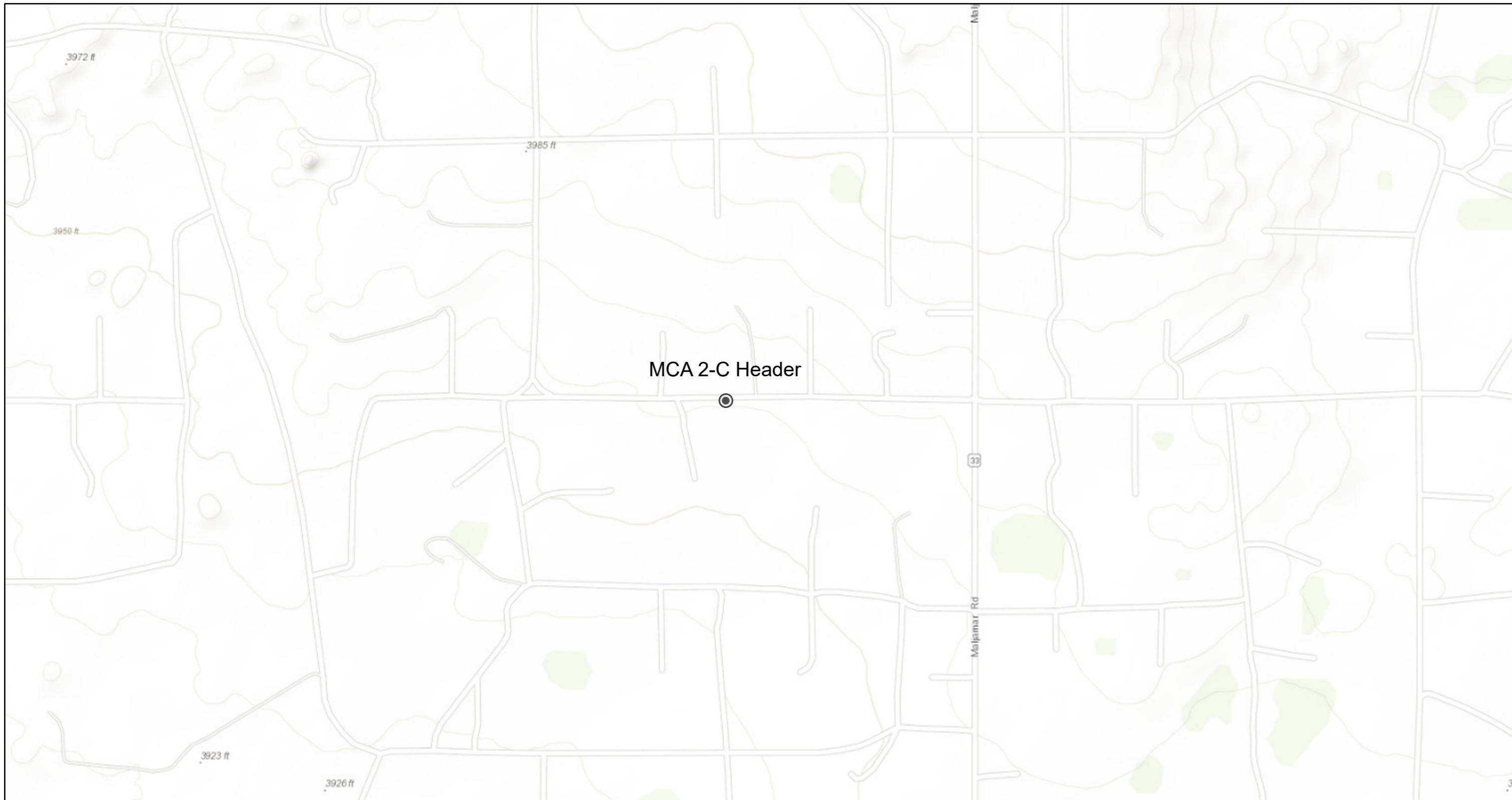
126

Majamar Rd

 32.802891°, -103.769883

1000 ft

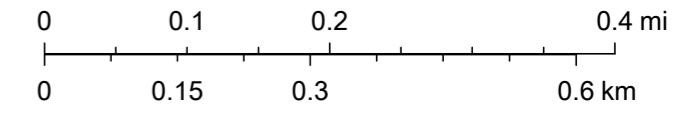
MCA 2-C Header



3/27/2020, 12:37:39 PM

1:10,144

- Override 1
- NMDOT GPS ROADS
- PLJV Probable Playas
- New Mexico Counties
- + NMDOT Railroads
- OSE Streams
- New Mexico Towns
- OSE Water-bodies



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

APPENDIX C

Laboratory Analytical Data



ANALYTICAL REPORT

March 16, 2020

1 Cp

2 Tc

3 Ss

4 Cn

5 Sr

6 Qc

7 Gl

8 Al

9 Sc

ConocoPhillips - Tetra Tech

Sample Delivery Group: L1196380
Samples Received: 03/06/2020
Project Number: 212C-MD-02119
Description: COP MCA 2-C Header Release
Site: LEA COUNTY, NEW MEXICO
Report To:
Christian Llull
901 West Wall
Suite 100
Midland, TX 79701

Entire Report Reviewed By:

Chris McCord
Project Manager

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

Cp: Cover Page	1	1
Tc: Table of Contents	2	2
Ss: Sample Summary	3	3
Cn: Case Narrative	8	4
Sr: Sample Results	9	5
T-1 (1'-2') L1196380-01	9	
T-1 (3'-4') L1196380-02	10	
T-1 (5'-6') L1196380-03	11	
AH-1S (0'-1') L1196380-04	12	
AH-1S (3'-4') L1196380-05	13	
AH-1E (0'-1') L1196380-06	14	
AH-1E (3'-4') L1196380-07	15	
AH-1W (0'-1') L1196380-08	16	
AH-1W (3'-4') L1196380-09	17	
T-2 (1'-2') L1196380-10	18	
T-2 (3'-4') L1196380-11	19	
T-2 (5'-6') L1196380-12	20	
AH-2W (0'-1') L1196380-13	21	
AH-2W (3'-4') L1196380-14	22	
AH-2E (0'-1') L1196380-15	23	
AH-2E (3'-4') L1196380-16	24	
T-3 (1'-2') L1196380-17	25	
T-3 (3'-4') L1196380-18	26	
T-3 (6'-7') L1196380-19	27	
T-3 (10'-11') L1196380-20	28	
AH-3E (0'-1') L1196380-21	29	
AH-3E (3'-4') L1196380-22	30	
T-4 (1'-2') L1196380-23	31	
T-4 (5'-6') L1196380-24	32	
T-4 (8'-9') L1196380-25	33	
Qc: Quality Control Summary	34	
Total Solids by Method 2540 G-2011	34	
Wet Chemistry by Method 300.0	38	
Volatile Organic Compounds (GC) by Method 8015D/GRO	41	
Volatile Organic Compounds (GC/MS) by Method 8260B	45	
Semi-Volatile Organic Compounds (GC) by Method 8015	49	
Gl: Glossary of Terms	52	
Al: Accreditations & Locations	53	
Sc: Sample Chain of Custody	54	



SAMPLE SUMMARY

T-1 (1'-2') L1196380-01 Solid

Method	Batch	Dilution	Preparation date/time	Analysis date/time	Analyst	Location
Total Solids by Method 2540 G-2011	WG1440589	1	03/10/20 09:35	03/10/20 09:43	KBC	Mt. Juliet, TN
Wet Chemistry by Method 300.0	WG1441019	1	03/10/20 20:15	03/11/20 01:15	ELN	Mt. Juliet, TN
Volatile Organic Compounds (GC) by Method 8015D/GRO	WG1440503	1.01	03/06/20 23:59	03/09/20 14:33	ADM	Mt. Juliet, TN
Volatile Organic Compounds (GC/MS) by Method 8260B	WG1439823	1	03/06/20 23:59	03/07/20 13:49	BMB	Mt. Juliet, TN
Semi-Volatile Organic Compounds (GC) by Method 8015	WG1440342	1	03/09/20 09:07	03/10/20 04:25	KME	Mt. Juliet, TN

T-1 (3'-4') L1196380-02 Solid

Method	Batch	Dilution	Preparation date/time	Analysis date/time	Analyst	Location
Total Solids by Method 2540 G-2011	WG1440589	1	03/10/20 09:35	03/10/20 09:43	KBC	Mt. Juliet, TN
Wet Chemistry by Method 300.0	WG1441019	1	03/10/20 20:15	03/11/20 01:32	ELN	Mt. Juliet, TN
Volatile Organic Compounds (GC) by Method 8015D/GRO	WG1441449	1.01	03/06/20 23:59	03/10/20 19:36	BMB	Mt. Juliet, TN
Volatile Organic Compounds (GC/MS) by Method 8260B	WG1439823	1	03/06/20 23:59	03/07/20 14:08	BMB	Mt. Juliet, TN
Semi-Volatile Organic Compounds (GC) by Method 8015	WG1440342	1	03/09/20 09:07	03/10/20 14:34	KME	Mt. Juliet, TN

T-1 (5'-6') L1196380-03 Solid

Method	Batch	Dilution	Preparation date/time	Analysis date/time	Analyst	Location
Total Solids by Method 2540 G-2011	WG1440589	1	03/10/20 09:35	03/10/20 09:43	KBC	Mt. Juliet, TN
Wet Chemistry by Method 300.0	WG1441019	1	03/10/20 20:15	03/11/20 02:26	ELN	Mt. Juliet, TN
Volatile Organic Compounds (GC) by Method 8015D/GRO	WG1440503	1	03/06/20 23:59	03/09/20 15:14	ADM	Mt. Juliet, TN
Volatile Organic Compounds (GC/MS) by Method 8260B	WG1439823	1.14	03/06/20 23:59	03/07/20 14:28	BMB	Mt. Juliet, TN
Semi-Volatile Organic Compounds (GC) by Method 8015	WG1440342	1	03/09/20 09:07	03/10/20 04:13	KME	Mt. Juliet, TN

AH-1S (0'-1') L1196380-04 Solid

Method	Batch	Dilution	Preparation date/time	Analysis date/time	Analyst	Location
Total Solids by Method 2540 G-2011	WG1440590	1	03/10/20 16:32	03/10/20 16:41	KBC	Mt. Juliet, TN
Wet Chemistry by Method 300.0	WG1441019	1	03/10/20 20:15	03/11/20 03:02	ELN	Mt. Juliet, TN
Volatile Organic Compounds (GC) by Method 8015D/GRO	WG1440503	1	03/06/20 23:59	03/09/20 15:35	ADM	Mt. Juliet, TN
Volatile Organic Compounds (GC/MS) by Method 8260B	WG1439823	1.2	03/06/20 23:59	03/07/20 14:47	BMB	Mt. Juliet, TN
Semi-Volatile Organic Compounds (GC) by Method 8015	WG1440342	10	03/09/20 09:07	03/10/20 14:46	KME	Mt. Juliet, TN

AH-1S (3'-4') L1196380-05 Solid

Method	Batch	Dilution	Preparation date/time	Analysis date/time	Analyst	Location
Total Solids by Method 2540 G-2011	WG1440590	1	03/10/20 16:32	03/10/20 16:41	KBC	Mt. Juliet, TN
Wet Chemistry by Method 300.0	WG1441019	1	03/10/20 20:15	03/11/20 03:20	ELN	Mt. Juliet, TN
Volatile Organic Compounds (GC) by Method 8015D/GRO	WG1440503	1	03/06/20 23:59	03/09/20 15:55	ADM	Mt. Juliet, TN
Volatile Organic Compounds (GC/MS) by Method 8260B	WG1439823	1	03/06/20 23:59	03/07/20 15:06	BMB	Mt. Juliet, TN
Semi-Volatile Organic Compounds (GC) by Method 8015	WG1441726	1	03/10/20 09:16	03/11/20 12:46	KME	Mt. Juliet, TN

1 Cp

2 Tc

3 Ss

4 Cn

5 Sr

6 Qc

7 Gl

8 Al

9 Sc

AH-1E (0'-1') L1196380-06 Solid

Collected by Adrian
Collected date/time 03/03/20 12:00
Received date/time 03/06/20 08:00

Method	Batch	Dilution	Preparation date/time	Analysis date/time	Analyst	Location
Total Solids by Method 2540 G-2011	WG1440590	1	03/10/20 16:32	03/10/20 16:41	KBC	Mt. Juliet, TN
Wet Chemistry by Method 300.0	WG1441019	1	03/10/20 20:15	03/11/20 04:13	ELN	Mt. Juliet, TN
Volatile Organic Compounds (GC) by Method 8015D/GRO	WG1440503	1	03/06/20 23:59	03/09/20 17:59	ADM	Mt. Juliet, TN
Volatile Organic Compounds (GC/MS) by Method 8260B	WG1439823	1	03/06/20 23:59	03/07/20 15:25	BMB	Mt. Juliet, TN
Semi-Volatile Organic Compounds (GC) by Method 8015	WG1441726	1	03/10/20 09:16	03/11/20 12:59	KME	Mt. Juliet, TN

AH-1E (3'-4') L1196380-07 Solid

Collected by Adrian
Collected date/time 03/03/20 12:10
Received date/time 03/06/20 08:00

Method	Batch	Dilution	Preparation date/time	Analysis date/time	Analyst	Location
Total Solids by Method 2540 G-2011	WG1440590	1	03/10/20 16:32	03/10/20 16:41	KBC	Mt. Juliet, TN
Wet Chemistry by Method 300.0	WG1441019	1	03/10/20 20:15	03/11/20 04:31	ELN	Mt. Juliet, TN
Volatile Organic Compounds (GC) by Method 8015D/GRO	WG1440503	1	03/07/20 07:44	03/09/20 18:19	ADM	Mt. Juliet, TN
Volatile Organic Compounds (GC/MS) by Method 8260B	WG1439944	1	03/07/20 07:44	03/07/20 23:50	ACG	Mt. Juliet, TN
Semi-Volatile Organic Compounds (GC) by Method 8015	WG1441726	1	03/10/20 09:16	03/11/20 12:08	KME	Mt. Juliet, TN

AH-1W (0'-1') L1196380-08 Solid

Collected by Adrian
Collected date/time 03/03/20 12:20
Received date/time 03/06/20 08:00

Method	Batch	Dilution	Preparation date/time	Analysis date/time	Analyst	Location
Total Solids by Method 2540 G-2011	WG1440590	1	03/10/20 16:32	03/10/20 16:41	KBC	Mt. Juliet, TN
Wet Chemistry by Method 300.0	WG1441019	1	03/10/20 20:15	03/11/20 04:49	ELN	Mt. Juliet, TN
Volatile Organic Compounds (GC) by Method 8015D/GRO	WG1440503	1	03/07/20 07:44	03/09/20 18:40	ADM	Mt. Juliet, TN
Volatile Organic Compounds (GC/MS) by Method 8260B	WG1439944	1	03/07/20 07:44	03/08/20 00:11	ACG	Mt. Juliet, TN
Semi-Volatile Organic Compounds (GC) by Method 8015	WG1441726	1	03/10/20 09:16	03/11/20 11:55	KME	Mt. Juliet, TN

AH-1W (3'-4') L1196380-09 Solid

Collected by Adrian
Collected date/time 03/03/20 13:00
Received date/time 03/06/20 08:00

Method	Batch	Dilution	Preparation date/time	Analysis date/time	Analyst	Location
Total Solids by Method 2540 G-2011	WG1440590	1	03/10/20 16:32	03/10/20 16:41	KBC	Mt. Juliet, TN
Wet Chemistry by Method 300.0	WG1441019	1	03/10/20 20:15	03/11/20 05:07	ELN	Mt. Juliet, TN
Volatile Organic Compounds (GC) by Method 8015D/GRO	WG1440503	1	03/07/20 07:44	03/09/20 19:00	ADM	Mt. Juliet, TN
Volatile Organic Compounds (GC/MS) by Method 8260B	WG1439944	1	03/07/20 07:44	03/08/20 00:31	ACG	Mt. Juliet, TN
Semi-Volatile Organic Compounds (GC) by Method 8015	WG1441726	1	03/10/20 09:16	03/11/20 11:43	KME	Mt. Juliet, TN

T-2 (1'-2') L1196380-10 Solid

Collected by Adrian
Collected date/time 03/03/20 13:10
Received date/time 03/06/20 08:00

Method	Batch	Dilution	Preparation date/time	Analysis date/time	Analyst	Location
Total Solids by Method 2540 G-2011	WG1440590	1	03/10/20 16:32	03/10/20 16:41	KBC	Mt. Juliet, TN
Wet Chemistry by Method 300.0	WG1441019	1	03/10/20 20:15	03/11/20 05:25	ELN	Mt. Juliet, TN
Volatile Organic Compounds (GC) by Method 8015D/GRO	WG1440503	1	03/07/20 07:44	03/09/20 19:21	ADM	Mt. Juliet, TN
Volatile Organic Compounds (GC/MS) by Method 8260B	WG1439944	1	03/07/20 07:44	03/08/20 00:51	ACG	Mt. Juliet, TN
Semi-Volatile Organic Compounds (GC) by Method 8015	WG1441726	20	03/10/20 09:16	03/11/20 13:11	KME	Mt. Juliet, TN

1 Cp

2 Tc

3 Ss

4 Cn

5 Sr

6 Qc

7 Gl

8 Al

9 Sc

T-2 (3'-4') L1196380-11 Solid

Method	Batch	Dilution	Preparation date/time	Analysis date/time	Analyst	Location
Total Solids by Method 2540 G-2011	WG1440590	1	03/10/20 16:32	03/10/20 16:41	KBC	Mt. Juliet, TN
Wet Chemistry by Method 300.0	WG1441019	1	03/10/20 20:15	03/11/20 05:43	ELN	Mt. Juliet, TN
Volatile Organic Compounds (GC) by Method 8015D/GRO	WG1440503	1	03/07/20 07:44	03/09/20 19:41	ADM	Mt. Juliet, TN
Volatile Organic Compounds (GC/MS) by Method 8260B	WG1439944	1	03/07/20 07:44	03/08/20 01:11	ACG	Mt. Juliet, TN
Semi-Volatile Organic Compounds (GC) by Method 8015	WG1441726	1	03/10/20 09:16	03/11/20 12:21	KME	Mt. Juliet, TN

T-2 (5'-6') L1196380-12 Solid

Method	Batch	Dilution	Preparation date/time	Analysis date/time	Analyst	Location
Total Solids by Method 2540 G-2011	WG1440590	1	03/10/20 16:32	03/10/20 16:41	KBC	Mt. Juliet, TN
Wet Chemistry by Method 300.0	WG1441019	1	03/10/20 20:15	03/11/20 06:01	ELN	Mt. Juliet, TN
Volatile Organic Compounds (GC) by Method 8015D/GRO	WG1440503	1	03/07/20 07:44	03/09/20 20:02	ADM	Mt. Juliet, TN
Volatile Organic Compounds (GC/MS) by Method 8260B	WG1439944	1	03/07/20 07:44	03/08/20 01:32	ACG	Mt. Juliet, TN
Semi-Volatile Organic Compounds (GC) by Method 8015	WG1441726	1	03/10/20 09:16	03/11/20 12:33	KME	Mt. Juliet, TN

AH-2W (0'-1') L1196380-13 Solid

Method	Batch	Dilution	Preparation date/time	Analysis date/time	Analyst	Location
Total Solids by Method 2540 G-2011	WG1440590	1	03/10/20 16:32	03/10/20 16:41	KBC	Mt. Juliet, TN
Wet Chemistry by Method 300.0	WG1441019	1	03/10/20 20:15	03/11/20 06:19	ELN	Mt. Juliet, TN
Volatile Organic Compounds (GC) by Method 8015D/GRO	WG1440608	1	03/07/20 07:44	03/09/20 21:56	DWR	Mt. Juliet, TN
Volatile Organic Compounds (GC/MS) by Method 8260B	WG1439944	1	03/07/20 07:44	03/08/20 01:52	ACG	Mt. Juliet, TN
Semi-Volatile Organic Compounds (GC) by Method 8015	WG1440864	1	03/10/20 08:32	03/11/20 19:35	JDG	Mt. Juliet, TN

AH-2W (3'-4') L1196380-14 Solid

Method	Batch	Dilution	Preparation date/time	Analysis date/time	Analyst	Location
Total Solids by Method 2540 G-2011	WG1440591	1	03/10/20 15:32	03/10/20 15:47	KBC	Mt. Juliet, TN
Wet Chemistry by Method 300.0	WG1441019	1	03/10/20 20:15	03/11/20 06:37	ELN	Mt. Juliet, TN
Volatile Organic Compounds (GC) by Method 8015D/GRO	WG1440608	1	03/07/20 07:44	03/09/20 22:20	DWR	Mt. Juliet, TN
Volatile Organic Compounds (GC/MS) by Method 8260B	WG1439944	1	03/07/20 07:44	03/08/20 03:12	ACG	Mt. Juliet, TN
Semi-Volatile Organic Compounds (GC) by Method 8015	WG1440864	1	03/10/20 08:32	03/11/20 16:42	FM	Mt. Juliet, TN

AH-2E (0'-1') L1196380-15 Solid

Method	Batch	Dilution	Preparation date/time	Analysis date/time	Analyst	Location
Total Solids by Method 2540 G-2011	WG1440591	1	03/10/20 15:32	03/10/20 15:47	KBC	Mt. Juliet, TN
Wet Chemistry by Method 300.0	WG1441019	1	03/10/20 20:15	03/11/20 06:55	ELN	Mt. Juliet, TN
Volatile Organic Compounds (GC) by Method 8015D/GRO	WG1440608	1	03/07/20 07:44	03/09/20 22:44	DWR	Mt. Juliet, TN
Volatile Organic Compounds (GC/MS) by Method 8260B	WG1439944	2	03/07/20 07:44	03/08/20 03:33	ACG	Mt. Juliet, TN
Semi-Volatile Organic Compounds (GC) by Method 8015	WG1440864	1	03/10/20 08:32	03/11/20 16:04	FM	Mt. Juliet, TN

1 Cp

2 Tc

3 Ss

4 Cn

5 Sr

6 Qc

7 Gl

8 Al

9 Sc

AH-2E (3'-4') L1196380-16 Solid

Collected by Adrian
Collected date/time 03/03/20 14:30
Received date/time 03/06/20 08:00

Method	Batch	Dilution	Preparation date/time	Analysis date/time	Analyst	Location
Total Solids by Method 2540 G-2011	WG1440591	1	03/10/20 15:32	03/10/20 15:47	KBC	Mt. Juliet, TN
Wet Chemistry by Method 300.0	WG1441019	1	03/10/20 20:15	03/11/20 07:48	ELN	Mt. Juliet, TN
Volatile Organic Compounds (GC) by Method 8015D/GRO	WG1440608	1	03/07/20 07:44	03/09/20 23:08	DWR	Mt. Juliet, TN
Volatile Organic Compounds (GC/MS) by Method 8260B	WG1439944	1	03/07/20 07:44	03/08/20 03:53	ACG	Mt. Juliet, TN
Semi-Volatile Organic Compounds (GC) by Method 8015	WG1440864	1	03/10/20 08:32	03/11/20 14:47	FM	Mt. Juliet, TN

T-3 (1'-2') L1196380-17 Solid

Collected by Adrian
Collected date/time 03/04/20 10:00
Received date/time 03/06/20 08:00

Method	Batch	Dilution	Preparation date/time	Analysis date/time	Analyst	Location
Total Solids by Method 2540 G-2011	WG1440591	1	03/10/20 15:32	03/10/20 15:47	KBC	Mt. Juliet, TN
Wet Chemistry by Method 300.0	WG1441019	5	03/10/20 20:15	03/11/20 08:06	ELN	Mt. Juliet, TN
Volatile Organic Compounds (GC) by Method 8015D/GRO	WG1440608	1	03/07/20 07:44	03/09/20 23:31	DWR	Mt. Juliet, TN
Volatile Organic Compounds (GC/MS) by Method 8260B	WG1440467	1	03/07/20 07:44	03/09/20 13:34	BMB	Mt. Juliet, TN
Semi-Volatile Organic Compounds (GC) by Method 8015	WG1440864	5	03/10/20 08:32	03/11/20 20:25	JDG	Mt. Juliet, TN

T-3 (3'-4') L1196380-18 Solid

Collected by Adrian
Collected date/time 03/04/20 10:10
Received date/time 03/06/20 08:00

Method	Batch	Dilution	Preparation date/time	Analysis date/time	Analyst	Location
Total Solids by Method 2540 G-2011	WG1440591	1	03/10/20 15:32	03/10/20 15:47	KBC	Mt. Juliet, TN
Wet Chemistry by Method 300.0	WG1441019	10	03/10/20 20:15	03/11/20 08:24	ELN	Mt. Juliet, TN
Volatile Organic Compounds (GC) by Method 8015D/GRO	WG1440608	1	03/07/20 07:44	03/09/20 23:55	DWR	Mt. Juliet, TN
Volatile Organic Compounds (GC/MS) by Method 8260B	WG1439944	1	03/07/20 07:44	03/08/20 04:34	ACG	Mt. Juliet, TN
Semi-Volatile Organic Compounds (GC) by Method 8015	WG1440864	1	03/10/20 08:32	03/11/20 16:29	FM	Mt. Juliet, TN

T-3 (6'-7') L1196380-19 Solid

Collected by Adrian
Collected date/time 03/04/20 10:30
Received date/time 03/06/20 08:00

Method	Batch	Dilution	Preparation date/time	Analysis date/time	Analyst	Location
Total Solids by Method 2540 G-2011	WG1440591	1	03/10/20 15:32	03/10/20 15:47	KBC	Mt. Juliet, TN
Wet Chemistry by Method 300.0	WG1441019	5	03/10/20 20:15	03/11/20 08:42	ELN	Mt. Juliet, TN
Volatile Organic Compounds (GC) by Method 8015D/GRO	WG1440608	1	03/07/20 07:44	03/10/20 00:19	DWR	Mt. Juliet, TN
Volatile Organic Compounds (GC/MS) by Method 8260B	WG1439944	1	03/07/20 07:44	03/08/20 04:54	ACG	Mt. Juliet, TN
Semi-Volatile Organic Compounds (GC) by Method 8015	WG1440864	1	03/10/20 08:32	03/11/20 16:16	FM	Mt. Juliet, TN

T-3 (10'-11') L1196380-20 Solid

Collected by Adrian
Collected date/time 03/04/20 10:50
Received date/time 03/06/20 08:00

Method	Batch	Dilution	Preparation date/time	Analysis date/time	Analyst	Location
Total Solids by Method 2540 G-2011	WG1440591	1	03/10/20 15:32	03/10/20 15:47	KBC	Mt. Juliet, TN
Wet Chemistry by Method 300.0	WG1441019	5	03/10/20 20:15	03/11/20 09:00	ELN	Mt. Juliet, TN
Volatile Organic Compounds (GC) by Method 8015D/GRO	WG1440814	1	03/07/20 07:44	03/11/20 02:05	DWR	Mt. Juliet, TN
Volatile Organic Compounds (GC/MS) by Method 8260B	WG1439944	1	03/07/20 07:44	03/08/20 05:14	ACG	Mt. Juliet, TN
Semi-Volatile Organic Compounds (GC) by Method 8015	WG1440864	1	03/10/20 08:32	03/11/20 15:00	FM	Mt. Juliet, TN

1 Cp

2 Tc

3 Ss

4 Cn

5 Sr

6 Qc

7 Gl

8 Al

9 Sc

AH-3E (0'-1') L1196380-21 Solid

Collected by Adrian
Collected date/time 03/04/20 11:30
Received date/time 03/06/20 08:00

Method	Batch	Dilution	Preparation date/time	Analysis date/time	Analyst	Location
Total Solids by Method 2540 G-2011	WG1440591	1	03/10/20 15:32	03/10/20 15:47	KBC	Mt. Juliet, TN
Wet Chemistry by Method 300.0	WG1440418	1	03/10/20 09:35	03/10/20 19:16	LBR	Mt. Juliet, TN
Volatile Organic Compounds (GC) by Method 8015D/GRO	WG1440814	1	03/07/20 07:44	03/11/20 02:29	DWR	Mt. Juliet, TN
Volatile Organic Compounds (GC/MS) by Method 8260B	WG1439944	1	03/07/20 07:44	03/08/20 05:34	ACG	Mt. Juliet, TN
Semi-Volatile Organic Compounds (GC) by Method 8015	WG1440864	1	03/10/20 08:32	03/12/20 16:24	FM	Mt. Juliet, TN

AH-3E (3'-4') L1196380-22 Solid

Collected by Adrian
Collected date/time 03/04/20 11:50
Received date/time 03/06/20 08:00

Method	Batch	Dilution	Preparation date/time	Analysis date/time	Analyst	Location
Total Solids by Method 2540 G-2011	WG1440591	1	03/10/20 15:32	03/10/20 15:47	KBC	Mt. Juliet, TN
Wet Chemistry by Method 300.0	WG1440418	1	03/10/20 09:35	03/10/20 19:25	LBR	Mt. Juliet, TN
Volatile Organic Compounds (GC) by Method 8015D/GRO	WG1440814	1	03/07/20 07:44	03/11/20 02:53	DWR	Mt. Juliet, TN
Volatile Organic Compounds (GC/MS) by Method 8260B	WG1440544	1	03/07/20 07:44	03/09/20 16:15	JAH	Mt. Juliet, TN
Semi-Volatile Organic Compounds (GC) by Method 8015	WG1440864	1	03/10/20 08:32	03/11/20 16:54	FM	Mt. Juliet, TN

T-4 (1'-2') L1196380-23 Solid

Collected by Adrian
Collected date/time 03/04/20 13:00
Received date/time 03/06/20 08:00

Method	Batch	Dilution	Preparation date/time	Analysis date/time	Analyst	Location
Total Solids by Method 2540 G-2011	WG1440591	1	03/10/20 15:32	03/10/20 15:47	KBC	Mt. Juliet, TN
Wet Chemistry by Method 300.0	WG1440418	1	03/10/20 09:35	03/10/20 19:35	LBR	Mt. Juliet, TN
Volatile Organic Compounds (GC) by Method 8015D/GRO	WG1440814	1	03/07/20 07:44	03/11/20 03:17	DWR	Mt. Juliet, TN
Volatile Organic Compounds (GC/MS) by Method 8260B	WG1440544	1	03/07/20 07:44	03/09/20 16:35	JAH	Mt. Juliet, TN
Semi-Volatile Organic Compounds (GC) by Method 8015	WG1440864	5	03/10/20 08:32	03/11/20 20:13	JDG	Mt. Juliet, TN

T-4 (5'-6') L1196380-24 Solid

Collected by Adrian
Collected date/time 03/04/20 13:30
Received date/time 03/06/20 08:00

Method	Batch	Dilution	Preparation date/time	Analysis date/time	Analyst	Location
Total Solids by Method 2540 G-2011	WG1440592	1	03/10/20 15:03	03/10/20 15:12	KBC	Mt. Juliet, TN
Wet Chemistry by Method 300.0	WG1440418	20	03/10/20 09:35	03/10/20 19:44	LBR	Mt. Juliet, TN
Volatile Organic Compounds (GC) by Method 8015D/GRO	WG1440814	1	03/07/20 07:44	03/11/20 03:41	DWR	Mt. Juliet, TN
Volatile Organic Compounds (GC/MS) by Method 8260B	WG1440544	1	03/07/20 07:44	03/09/20 16:56	JAH	Mt. Juliet, TN
Semi-Volatile Organic Compounds (GC) by Method 8015	WG1440864	1	03/10/20 08:32	03/11/20 15:13	FM	Mt. Juliet, TN

T-4 (8'-9') L1196380-25 Solid

Collected by Adrian
Collected date/time 03/04/20 14:00
Received date/time 03/06/20 08:00

Method	Batch	Dilution	Preparation date/time	Analysis date/time	Analyst	Location
Total Solids by Method 2540 G-2011	WG1440592	1	03/10/20 15:03	03/10/20 15:12	KBC	Mt. Juliet, TN
Wet Chemistry by Method 300.0	WG1441166	10	03/10/20 21:00	03/11/20 02:50	ELN	Mt. Juliet, TN
Volatile Organic Compounds (GC) by Method 8015D/GRO	WG1440814	1	03/07/20 07:44	03/11/20 04:05	DWR	Mt. Juliet, TN
Volatile Organic Compounds (GC/MS) by Method 8260B	WG1440544	1	03/07/20 07:44	03/09/20 17:16	JAH	Mt. Juliet, TN
Semi-Volatile Organic Compounds (GC) by Method 8015	WG1440864	1	03/10/20 08:32	03/11/20 17:07	FM	Mt. Juliet, TN

1 Cp

2 Tc

3 Ss

4 Cn

5 Sr

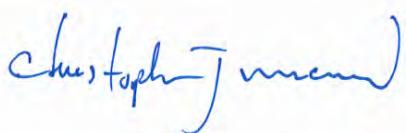
6 Qc

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

- ¹ Cp
- ² Tc
- ³ Ss
- ⁴ Cn
- ⁵ Sr
- ⁶ Qc
- ⁷ GI
- ⁸ AI
- ⁹ SC

Total Solids by Method 2540 G-2011

Analyte	Result %	<u>Qualifier</u>	Dilution	Analysis date / time	<u>Batch</u>
Total Solids	88.9		1	03/10/2020 09:43	WG1440589

¹ Cp² Tc³ Ss⁴ Cn⁵ Sr⁶ Qc⁷ GI⁸ Al⁹ Sc

Wet Chemistry by Method 300.0

Analyte	Result (dry) mg/kg	<u>Qualifier</u>	MDL (dry) mg/kg	RDL (dry) mg/kg	Dilution	Analysis date / time	<u>Batch</u>
Chloride	243		0.894	11.2	1	03/11/2020 01:15	WG1441019

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

Analyte	Result (dry) mg/kg	<u>Qualifier</u>	MDL (dry) mg/kg	RDL (dry) mg/kg	Dilution	Analysis date / time	<u>Batch</u>
TPH (GC/FID) Low Fraction	U		0.0246	0.114	1.01	03/09/2020 14:33	WG1440503
(S)-a,a,a-Trifluorotoluene(FID)	97.5			77.0-120		03/09/2020 14:33	WG1440503

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

Analyte	Result (dry) mg/kg	<u>Qualifier</u>	MDL (dry) mg/kg	RDL (dry) mg/kg	Dilution	Analysis date / time	<u>Batch</u>
Benzene	U		0.000450	0.00112	1	03/07/2020 13:49	WG1439823
Toluene	U		0.00141	0.00562	1	03/07/2020 13:49	WG1439823
Ethylbenzene	U		0.000596	0.00281	1	03/07/2020 13:49	WG1439823
Total Xylenes	U		0.00538	0.00731	1	03/07/2020 13:49	WG1439823
(S)-Toluene-d8	106			75.0-131		03/07/2020 13:49	WG1439823
(S)-4-Bromofluorobenzene	96.8			67.0-138		03/07/2020 13:49	WG1439823
(S)-1,2-Dichloroethane-d4	114			70.0-130		03/07/2020 13:49	WG1439823

Semi-Volatile Organic Compounds (GC) by Method 8015

Analyte	Result (dry) mg/kg	<u>Qualifier</u>	MDL (dry) mg/kg	RDL (dry) mg/kg	Dilution	Analysis date / time	<u>Batch</u>
C10-C28 Diesel Range	6.05		1.81	4.50	1	03/10/2020 04:25	WG1440342
C28-C40 Oil Range	16.3		0.308	4.50	1	03/10/2020 04:25	WG1440342
(S)-o-Terphenyl	60.2			18.0-148		03/10/2020 04:25	WG1440342

Total Solids by Method 2540 G-2011

Analyte	Result %	<u>Qualifier</u>	Dilution	Analysis date / time	<u>Batch</u>
Total Solids	77.8		1	03/10/2020 09:43	WG1440589

¹ Cp² Tc³ Ss⁴ Cn⁵ Sr⁶ Qc⁷ GI⁸ Al⁹ Sc

Wet Chemistry by Method 300.0

Analyte	Result (dry) mg/kg	<u>Qualifier</u>	MDL (dry) mg/kg	RDL (dry) mg/kg	Dilution	Analysis date / time	<u>Batch</u>
Chloride	130		1.02	12.9	1	03/11/2020 01:32	WG1441019

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

Analyte	Result (dry) mg/kg	<u>Qualifier</u>	MDL (dry) mg/kg	RDL (dry) mg/kg	Dilution	Analysis date / time	<u>Batch</u>
TPH (GC/FID) Low Fraction	U		0.0282	0.130	1.01	03/10/2020 19:36	WG1441449
(S)-a,a,a-Trifluorotoluene(FID)	98.5			77.0-120		03/10/2020 19:36	WG1441449

⁶ Qc⁷ GI

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

Analyte	Result (dry) mg/kg	<u>Qualifier</u>	MDL (dry) mg/kg	RDL (dry) mg/kg	Dilution	Analysis date / time	<u>Batch</u>
Benzene	U		0.000514	0.00129	1	03/07/2020 14:08	WG1439823
Toluene	U		0.00161	0.00643	1	03/07/2020 14:08	WG1439823
Ethylbenzene	U		0.000682	0.00321	1	03/07/2020 14:08	WG1439823
Total Xylenes	U		0.00615	0.00836	1	03/07/2020 14:08	WG1439823
(S)-Toluene-d8	105			75.0-131		03/07/2020 14:08	WG1439823
(S)-4-Bromofluorobenzene	93.8			67.0-138		03/07/2020 14:08	WG1439823
(S)-1,2-Dichloroethane-d4	114			70.0-130		03/07/2020 14:08	WG1439823

⁸ Al

Semi-Volatile Organic Compounds (GC) by Method 8015

Analyte	Result (dry) mg/kg	<u>Qualifier</u>	MDL (dry) mg/kg	RDL (dry) mg/kg	Dilution	Analysis date / time	<u>Batch</u>
C10-C28 Diesel Range	U		2.07	5.14	1	03/10/2020 14:34	WG1440342
C28-C40 Oil Range	1.31	J	0.352	5.14	1	03/10/2020 14:34	WG1440342
(S)-o-Terphenyl	59.2			18.0-148		03/10/2020 14:34	WG1440342

Total Solids by Method 2540 G-2011

Analyte	Result %	<u>Qualifier</u>	Dilution	Analysis date / time	<u>Batch</u>
Total Solids	91.0		1	03/10/2020 09:43	WG1440589

¹ Cp² Tc³ Ss⁴ Cn⁵ Sr⁶ Qc⁷ GI⁸ Al⁹ Sc

Wet Chemistry by Method 300.0

Analyte	Result (dry) mg/kg	<u>Qualifier</u>	MDL (dry) mg/kg	RDL (dry) mg/kg	Dilution	Analysis date / time	<u>Batch</u>
Chloride	34.9		0.873	11.0	1	03/11/2020 02:26	WG1441019

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

Analyte	Result (dry) mg/kg	<u>Qualifier</u>	MDL (dry) mg/kg	RDL (dry) mg/kg	Dilution	Analysis date / time	<u>Batch</u>
TPH (GC/FID) Low Fraction	U		0.0238	0.110	1	03/09/2020 15:14	WG1440503
(S)-a,a,a-Trifluorotoluene(FID)	97.5			77.0-120		03/09/2020 15:14	WG1440503

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

Analyte	Result (dry) mg/kg	<u>Qualifier</u>	MDL (dry) mg/kg	RDL (dry) mg/kg	Dilution	Analysis date / time	<u>Batch</u>
Benzene	U		0.000501	0.00125	1.14	03/07/2020 14:28	WG1439823
Toluene	U		0.00157	0.00626	1.14	03/07/2020 14:28	WG1439823
Ethylbenzene	U		0.000663	0.00313	1.14	03/07/2020 14:28	WG1439823
Total Xylenes	U		0.00599	0.00814	1.14	03/07/2020 14:28	WG1439823
(S)-Toluene-d8	105			75.0-131		03/07/2020 14:28	WG1439823
(S)-4-Bromofluorobenzene	89.6			67.0-138		03/07/2020 14:28	WG1439823
(S)-1,2-Dichloroethane-d4	111			70.0-130		03/07/2020 14:28	WG1439823

Semi-Volatile Organic Compounds (GC) by Method 8015

Analyte	Result (dry) mg/kg	<u>Qualifier</u>	MDL (dry) mg/kg	RDL (dry) mg/kg	Dilution	Analysis date / time	<u>Batch</u>
C10-C28 Diesel Range	U		1.77	4.39	1	03/10/2020 04:13	WG1440342
C28-C40 Oil Range	4.24	J	0.301	4.39	1	03/10/2020 04:13	WG1440342
(S)-o-Terphenyl	69.9			18.0-148		03/10/2020 04:13	WG1440342

Total Solids by Method 2540 G-2011

Analyte	Result %	<u>Qualifier</u>	Dilution	Analysis date / time	<u>Batch</u>
Total Solids	95.7		1	03/10/2020 16:41	WG1440590

¹ Cp² Tc³ Ss⁴ Cn⁵ Sr⁶ Qc⁷ GI⁸ Al⁹ Sc

Wet Chemistry by Method 300.0

Analyte	Result (dry) mg/kg	<u>Qualifier</u>	MDL (dry) mg/kg	RDL (dry) mg/kg	Dilution	Analysis date / time	<u>Batch</u>
Chloride	11.0	<u>B</u>	0.830	10.4	1	03/11/2020 03:02	WG1441019

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

Analyte	Result (dry) mg/kg	<u>Qualifier</u>	MDL (dry) mg/kg	RDL (dry) mg/kg	Dilution	Analysis date / time	<u>Batch</u>
TPH (GC/FID) Low Fraction	U		0.0227	0.104	1	03/09/2020 15:35	WG1440503
(S)-a,a,a-Trifluorotoluene(FID)	96.9			77.0-120		03/09/2020 15:35	WG1440503

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

Analyte	Result (dry) mg/kg	<u>Qualifier</u>	MDL (dry) mg/kg	RDL (dry) mg/kg	Dilution	Analysis date / time	<u>Batch</u>
Benzene	U		0.000501	0.00125	1.2	03/07/2020 14:47	WG1439823
Toluene	U		0.00157	0.00627	1.2	03/07/2020 14:47	WG1439823
Ethylbenzene	U		0.000664	0.00313	1.2	03/07/2020 14:47	WG1439823
Total Xylenes	U		0.00600	0.00815	1.2	03/07/2020 14:47	WG1439823
(S)-Toluene-d8	106			75.0-131		03/07/2020 14:47	WG1439823
(S)-4-Bromofluorobenzene	93.3			67.0-138		03/07/2020 14:47	WG1439823
(S)-1,2-Dichloroethane-d4	109			70.0-130		03/07/2020 14:47	WG1439823

Semi-Volatile Organic Compounds (GC) by Method 8015

Analyte	Result (dry) mg/kg	<u>Qualifier</u>	MDL (dry) mg/kg	RDL (dry) mg/kg	Dilution	Analysis date / time	<u>Batch</u>
C10-C28 Diesel Range	19.1	<u>J</u>	16.8	41.8	10	03/10/2020 14:46	WG1440342
C28-C40 Oil Range	41.4	<u>J</u>	2.86	41.8	10	03/10/2020 14:46	WG1440342
(S)-o-Terphenyl	76.4			18.0-148		03/10/2020 14:46	WG1440342

Sample Narrative:

L1196380-04 WG1440342: Cannot run at lower dilution due to viscosity of extract

Total Solids by Method 2540 G-2011

Analyte	Result %	<u>Qualifier</u>	Dilution	Analysis date / time	<u>Batch</u>
Total Solids	94.0		1	03/10/2020 16:41	WG1440590

¹ Cp² Tc³ Ss⁴ Cn⁵ Sr⁶ Qc⁷ GI⁸ Al⁹ Sc

Wet Chemistry by Method 300.0

Analyte	Result (dry) mg/kg	<u>Qualifier</u>	MDL (dry) mg/kg	RDL (dry) mg/kg	Dilution	Analysis date / time	<u>Batch</u>
Chloride	20.6		0.845	10.6	1	03/11/2020 03:20	WG1441019

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

Analyte	Result (dry) mg/kg	<u>Qualifier</u>	MDL (dry) mg/kg	RDL (dry) mg/kg	Dilution	Analysis date / time	<u>Batch</u>
TPH (GC/FID) Low Fraction	U		0.0231	0.106	1	03/09/2020 15:55	WG1440503
(S)-a,a,a-Trifluorotoluene(FID)	97.6			77.0-120		03/09/2020 15:55	WG1440503

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

Analyte	Result (dry) mg/kg	<u>Qualifier</u>	MDL (dry) mg/kg	RDL (dry) mg/kg	Dilution	Analysis date / time	<u>Batch</u>
Benzene	U		0.000425	0.00106	1	03/07/2020 15:06	WG1439823
Toluene	U		0.00133	0.00532	1	03/07/2020 15:06	WG1439823
Ethylbenzene	U		0.000564	0.00266	1	03/07/2020 15:06	WG1439823
Total Xylenes	U		0.00508	0.00691	1	03/07/2020 15:06	WG1439823
(S)-Toluene-d8	107			75.0-131		03/07/2020 15:06	WG1439823
(S)-4-Bromofluorobenzene	91.4			67.0-138		03/07/2020 15:06	WG1439823
(S)-1,2-Dichloroethane-d4	105			70.0-130		03/07/2020 15:06	WG1439823

Semi-Volatile Organic Compounds (GC) by Method 8015

Analyte	Result (dry) mg/kg	<u>Qualifier</u>	MDL (dry) mg/kg	RDL (dry) mg/kg	Dilution	Analysis date / time	<u>Batch</u>
C10-C28 Diesel Range	67.8		1.71	4.25	1	03/11/2020 12:46	WG1441726
C28-C40 Oil Range	74.6		0.291	4.25	1	03/11/2020 12:46	WG1441726
(S)-o-Terphenyl	52.3			18.0-148		03/11/2020 12:46	WG1441726

Total Solids by Method 2540 G-2011

Analyte	Result %	<u>Qualifier</u>	Dilution	Analysis date / time	<u>Batch</u>
Total Solids	97.9		1	03/10/2020 16:41	WG1440590

¹ Cp² Tc³ Ss⁴ Cn⁵ Sr⁶ Qc⁷ GI⁸ Al⁹ Sc

Wet Chemistry by Method 300.0

Analyte	Result (dry) mg/kg	<u>Qualifier</u>	MDL (dry) mg/kg	RDL (dry) mg/kg	Dilution	Analysis date / time	<u>Batch</u>
Chloride	8.57	<u>B</u> <u>J</u>	0.812	10.2	1	03/11/2020 04:13	WG1441019

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

Analyte	Result (dry) mg/kg	<u>Qualifier</u>	MDL (dry) mg/kg	RDL (dry) mg/kg	Dilution	Analysis date / time	<u>Batch</u>
TPH (GC/FID) Low Fraction	U		0.0222	0.102	1	03/09/2020 17:59	WG1440503
(S) a,a,a-Trifluorotoluene(FID)	96.1			77.0-120		03/09/2020 17:59	WG1440503

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

Analyte	Result (dry) mg/kg	<u>Qualifier</u>	MDL (dry) mg/kg	RDL (dry) mg/kg	Dilution	Analysis date / time	<u>Batch</u>
Benzene	U		0.000408	0.00102	1	03/07/2020 15:25	WG1439823
Toluene	U		0.00128	0.00510	1	03/07/2020 15:25	WG1439823
Ethylbenzene	U		0.000541	0.00255	1	03/07/2020 15:25	WG1439823
Total Xylenes	U		0.00488	0.00664	1	03/07/2020 15:25	WG1439823
(S) Toluene-d8	108			75.0-131		03/07/2020 15:25	WG1439823
(S) 4-Bromofluorobenzene	97.5			67.0-138		03/07/2020 15:25	WG1439823
(S) 1,2-Dichloroethane-d4	106			70.0-130		03/07/2020 15:25	WG1439823

Semi-Volatile Organic Compounds (GC) by Method 8015

Analyte	Result (dry) mg/kg	<u>Qualifier</u>	MDL (dry) mg/kg	RDL (dry) mg/kg	Dilution	Analysis date / time	<u>Batch</u>
C10-C28 Diesel Range	16.0		1.64	4.08	1	03/11/2020 12:59	WG1441726
C28-C40 Oil Range	42.3		0.280	4.08	1	03/11/2020 12:59	WG1441726
(S) o-Terphenyl	44.3			18.0-148		03/11/2020 12:59	WG1441726

Total Solids by Method 2540 G-2011

Analyte	Result %	<u>Qualifier</u>	Dilution	Analysis date / time	<u>Batch</u>
Total Solids	91.9		1	03/10/2020 16:41	WG1440590

¹ Cp² Tc³ Ss⁴ Cn⁵ Sr⁶ Qc⁷ GI⁸ Al⁹ Sc

Wet Chemistry by Method 300.0

Analyte	Result (dry) mg/kg	<u>Qualifier</u>	MDL (dry) mg/kg	RDL (dry) mg/kg	Dilution	Analysis date / time	<u>Batch</u>
Chloride	51.6		0.865	10.9	1	03/11/2020 04:31	WG1441019

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

Analyte	Result (dry) mg/kg	<u>Qualifier</u>	MDL (dry) mg/kg	RDL (dry) mg/kg	Dilution	Analysis date / time	<u>Batch</u>
TPH (GC/FID) Low Fraction	U		0.0236	0.109	1	03/09/2020 18:19	WG1440503
(S)-a,a,a-Trifluorotoluene(FID)	97.1			77.0-120		03/09/2020 18:19	WG1440503

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

Analyte	Result (dry) mg/kg	<u>Qualifier</u>	MDL (dry) mg/kg	RDL (dry) mg/kg	Dilution	Analysis date / time	<u>Batch</u>
Benzene	U		0.000435	0.00109	1	03/07/2020 23:50	WG1439944
Toluene	U		0.00136	0.00544	1	03/07/2020 23:50	WG1439944
Ethylbenzene	U		0.000577	0.00272	1	03/07/2020 23:50	WG1439944
Total Xylenes	U		0.00520	0.00707	1	03/07/2020 23:50	WG1439944
(S)-Toluene-d8	102			75.0-131		03/07/2020 23:50	WG1439944
(S)-4-Bromofluorobenzene	102			67.0-138		03/07/2020 23:50	WG1439944
(S)-1,2-Dichloroethane-d4	88.6			70.0-130		03/07/2020 23:50	WG1439944

Semi-Volatile Organic Compounds (GC) by Method 8015

Analyte	Result (dry) mg/kg	<u>Qualifier</u>	MDL (dry) mg/kg	RDL (dry) mg/kg	Dilution	Analysis date / time	<u>Batch</u>
C10-C28 Diesel Range	5.27		1.75	4.35	1	03/11/2020 12:08	WG1441726
C28-C40 Oil Range	19.8		0.298	4.35	1	03/11/2020 12:08	WG1441726
(S)-o-Terphenyl	63.6			18.0-148		03/11/2020 12:08	WG1441726

Total Solids by Method 2540 G-2011

Analyte	Result %	<u>Qualifier</u>	Dilution	Analysis date / time	<u>Batch</u>
Total Solids	97.1		1	03/10/2020 16:41	WG1440590

¹ Cp² Tc³ Ss⁴ Cn⁵ Sr⁶ Qc⁷ GI⁸ Al⁹ Sc

Wet Chemistry by Method 300.0

Analyte	Result (dry) mg/kg	<u>Qualifier</u>	MDL (dry) mg/kg	RDL (dry) mg/kg	Dilution	Analysis date / time	<u>Batch</u>
Chloride	1.45	<u>B</u> <u>J</u>	0.819	10.3	1	03/11/2020 04:49	WG1441019

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

Analyte	Result (dry) mg/kg	<u>Qualifier</u>	MDL (dry) mg/kg	RDL (dry) mg/kg	Dilution	Analysis date / time	<u>Batch</u>
TPH (GC/FID) Low Fraction	U		0.0224	0.103	1	03/09/2020 18:40	WG1440503
(S) a,a,a-Trifluorotoluene(FID)	96.9			77.0-120		03/09/2020 18:40	WG1440503

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

Analyte	Result (dry) mg/kg	<u>Qualifier</u>	MDL (dry) mg/kg	RDL (dry) mg/kg	Dilution	Analysis date / time	<u>Batch</u>
Benzene	U		0.000412	0.00103	1	03/08/2020 00:11	WG1439944
Toluene	U		0.00129	0.00515	1	03/08/2020 00:11	WG1439944
Ethylbenzene	U		0.000546	0.00257	1	03/08/2020 00:11	WG1439944
Total Xylenes	U		0.00492	0.00669	1	03/08/2020 00:11	WG1439944
(S) Toluene-d8	103			75.0-131		03/08/2020 00:11	WG1439944
(S) 4-Bromofluorobenzene	104			67.0-138		03/08/2020 00:11	WG1439944
(S) 1,2-Dichloroethane-d4	88.9			70.0-130		03/08/2020 00:11	WG1439944

Semi-Volatile Organic Compounds (GC) by Method 8015

Analyte	Result (dry) mg/kg	<u>Qualifier</u>	MDL (dry) mg/kg	RDL (dry) mg/kg	Dilution	Analysis date / time	<u>Batch</u>
C10-C28 Diesel Range	U		1.66	4.12	1	03/11/2020 11:55	WG1441726
C28-C40 Oil Range	5.88		0.282	4.12	1	03/11/2020 11:55	WG1441726
(S) o-Terphenyl	66.2			18.0-148		03/11/2020 11:55	WG1441726

Total Solids by Method 2540 G-2011

Analyte	Result %	<u>Qualifier</u>	Dilution	Analysis date / time	<u>Batch</u>
Total Solids	94.8		1	03/10/2020 16:41	WG1440590

¹ Cp² Tc³ Ss⁴ Cn⁵ Sr⁶ Qc⁷ GI⁸ Al⁹ Sc

Wet Chemistry by Method 300.0

Analyte	Result (dry) mg/kg	<u>Qualifier</u>	MDL (dry) mg/kg	RDL (dry) mg/kg	Dilution	Analysis date / time	<u>Batch</u>
Chloride	9.36	<u>B</u> <u>J</u>	0.839	10.6	1	03/11/2020 05:07	WG1441019

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

Analyte	Result (dry) mg/kg	<u>Qualifier</u>	MDL (dry) mg/kg	RDL (dry) mg/kg	Dilution	Analysis date / time	<u>Batch</u>
TPH (GC/FID) Low Fraction	U		0.0229	0.106	1	03/09/2020 19:00	WG1440503
(S) a,a,a-Trifluorotoluene(FID)	96.7			77.0-120		03/09/2020 19:00	WG1440503

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

Analyte	Result (dry) mg/kg	<u>Qualifier</u>	MDL (dry) mg/kg	RDL (dry) mg/kg	Dilution	Analysis date / time	<u>Batch</u>
Benzene	U		0.000422	0.00106	1	03/08/2020 00:31	WG1439944
Toluene	U		0.00132	0.00528	1	03/08/2020 00:31	WG1439944
Ethylbenzene	U		0.000559	0.00264	1	03/08/2020 00:31	WG1439944
Total Xylenes	U		0.00504	0.00686	1	03/08/2020 00:31	WG1439944
(S) Toluene-d8	103			75.0-131		03/08/2020 00:31	WG1439944
(S) 4-Bromofluorobenzene	103			67.0-138		03/08/2020 00:31	WG1439944
(S) 1,2-Dichloroethane-d4	87.6			70.0-130		03/08/2020 00:31	WG1439944

Semi-Volatile Organic Compounds (GC) by Method 8015

Analyte	Result (dry) mg/kg	<u>Qualifier</u>	MDL (dry) mg/kg	RDL (dry) mg/kg	Dilution	Analysis date / time	<u>Batch</u>
C10-C28 Diesel Range	U		1.70	4.22	1	03/11/2020 11:43	WG1441726
C28-C40 Oil Range	2.57	<u>B</u> <u>J</u>	0.289	4.22	1	03/11/2020 11:43	WG1441726
(S) o-Terphenyl	67.6			18.0-148		03/11/2020 11:43	WG1441726

Collected date/time: 03/03/2020 13:10

L1196380

Total Solids by Method 2540 G-2011

Analyte	Result %	<u>Qualifier</u>	Dilution	Analysis date / time	<u>Batch</u>
Total Solids	94.4		1	03/10/2020 16:41	WG1440590

¹Cp²Tc³Ss⁴Cn⁵Sr⁶Qc⁷Gl⁸Al⁹Sc

Wet Chemistry by Method 300.0

Analyte	Result (dry) mg/kg	<u>Qualifier</u>	MDL (dry) mg/kg	RDL (dry) mg/kg	Dilution	Analysis date / time	<u>Batch</u>
Chloride	131		0.842	10.6	1	03/11/2020 05:25	WG1441019

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

Analyte	Result (dry) mg/kg	<u>Qualifier</u>	MDL (dry) mg/kg	RDL (dry) mg/kg	Dilution	Analysis date / time	<u>Batch</u>
TPH (GC/FID) Low Fraction	0.0254	<u>J</u>	0.0230	0.106	1	03/09/2020 19:21	WG1440503
(S) a,a,a-Trifluorotoluene(FID)	96.3			77.0-120		03/09/2020 19:21	WG1440503

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

Analyte	Result (dry) mg/kg	<u>Qualifier</u>	MDL (dry) mg/kg	RDL (dry) mg/kg	Dilution	Analysis date / time	<u>Batch</u>
Benzene	U		0.000424	0.00106	1	03/08/2020 00:51	WG1439944
Toluene	U		0.00132	0.00530	1	03/08/2020 00:51	WG1439944
Ethylbenzene	0.000906	<u>J</u>	0.000561	0.00265	1	03/08/2020 00:51	WG1439944
Total Xylenes	0.0103		0.00506	0.00688	1	03/08/2020 00:51	WG1439944
(S) Toluene-d8	101			75.0-131		03/08/2020 00:51	WG1439944
(S) 4-Bromofluorobenzene	103			67.0-138		03/08/2020 00:51	WG1439944
(S) 1,2-Dichloroethane-d4	88.1			70.0-130		03/08/2020 00:51	WG1439944

Semi-Volatile Organic Compounds (GC) by Method 8015

Analyte	Result (dry) mg/kg	<u>Qualifier</u>	MDL (dry) mg/kg	RDL (dry) mg/kg	Dilution	Analysis date / time	<u>Batch</u>
C10-C28 Diesel Range	458		34.1	84.7	20	03/11/2020 13:11	WG1441726
C28-C40 Oil Range	445		5.80	84.7	20	03/11/2020 13:11	WG1441726
(S) o-Terphenyl	109	<u>J7</u>		18.0-148		03/11/2020 13:11	WG1441726

Total Solids by Method 2540 G-2011

Analyte	Result %	<u>Qualifier</u>	Dilution	Analysis date / time	<u>Batch</u>
Total Solids	89.1		1	03/10/2020 16:41	WG1440590

¹ Cp² Tc³ Ss⁴ Cn⁵ Sr⁶ Qc⁷ GI⁸ Al⁹ Sc

Wet Chemistry by Method 300.0

Analyte	Result (dry) mg/kg	<u>Qualifier</u>	MDL (dry) mg/kg	RDL (dry) mg/kg	Dilution	Analysis date / time	<u>Batch</u>
Chloride	190		0.893	11.2	1	03/11/2020 05:43	WG1441019

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

Analyte	Result (dry) mg/kg	<u>Qualifier</u>	MDL (dry) mg/kg	RDL (dry) mg/kg	Dilution	Analysis date / time	<u>Batch</u>
TPH (GC/FID) Low Fraction	0.0308	J	0.0244	0.112	1	03/09/2020 19:41	WG1440503
(S)-a,a,a-Trifluorotoluene(FID)	95.8			77.0-120		03/09/2020 19:41	WG1440503

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

Analyte	Result (dry) mg/kg	<u>Qualifier</u>	MDL (dry) mg/kg	RDL (dry) mg/kg	Dilution	Analysis date / time	<u>Batch</u>
Benzene	U		0.000449	0.00112	1	03/08/2020 01:11	WG1439944
Toluene	U		0.00140	0.00561	1	03/08/2020 01:11	WG1439944
Ethylbenzene	U		0.000595	0.00281	1	03/08/2020 01:11	WG1439944
Total Xylenes	U		0.00537	0.00730	1	03/08/2020 01:11	WG1439944
(S)-Toluene-d8	103			75.0-131		03/08/2020 01:11	WG1439944
(S)-4-Bromofluorobenzene	104			67.0-138		03/08/2020 01:11	WG1439944
(S)-1,2-Dichloroethane-d4	88.8			70.0-130		03/08/2020 01:11	WG1439944

Semi-Volatile Organic Compounds (GC) by Method 8015

Analyte	Result (dry) mg/kg	<u>Qualifier</u>	MDL (dry) mg/kg	RDL (dry) mg/kg	Dilution	Analysis date / time	<u>Batch</u>
C10-C28 Diesel Range	43.9		1.81	4.49	1	03/11/2020 12:21	WG1441726
C28-C40 Oil Range	35.7		0.308	4.49	1	03/11/2020 12:21	WG1441726
(S)-o-Terphenyl	47.1			18.0-148		03/11/2020 12:21	WG1441726

Total Solids by Method 2540 G-2011

Analyte	Result %	<u>Qualifier</u>	Dilution	Analysis date / time	<u>Batch</u>
Total Solids	91.9		1	03/10/2020 16:41	WG1440590

¹ Cp² Tc³ Ss⁴ Cn⁵ Sr⁶ Qc⁷ GI⁸ Al⁹ Sc

Wet Chemistry by Method 300.0

Analyte	Result (dry) mg/kg	<u>Qualifier</u>	MDL (dry) mg/kg	RDL (dry) mg/kg	Dilution	Analysis date / time	<u>Batch</u>
Chloride	125		0.865	10.9	1	03/11/2020 06:01	WG1441019

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

Analyte	Result (dry) mg/kg	<u>Qualifier</u>	MDL (dry) mg/kg	RDL (dry) mg/kg	Dilution	Analysis date / time	<u>Batch</u>
TPH (GC/FID) Low Fraction	0.0257	J	0.0236	0.109	1	03/09/2020 20:02	WG1440503
(S) a,a,a-Trifluorotoluene(FID)	96.9			77.0-120		03/09/2020 20:02	WG1440503

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

Analyte	Result (dry) mg/kg	<u>Qualifier</u>	MDL (dry) mg/kg	RDL (dry) mg/kg	Dilution	Analysis date / time	<u>Batch</u>
Benzene	U		0.000435	0.00109	1	03/08/2020 01:32	WG1439944
Toluene	U		0.00136	0.00544	1	03/08/2020 01:32	WG1439944
Ethylbenzene	U		0.000577	0.00272	1	03/08/2020 01:32	WG1439944
Total Xylenes	U		0.00520	0.00707	1	03/08/2020 01:32	WG1439944
(S) Toluene-d8	103			75.0-131		03/08/2020 01:32	WG1439944
(S) 4-Bromofluorobenzene	106			67.0-138		03/08/2020 01:32	WG1439944
(S) 1,2-Dichloroethane-d4	88.4			70.0-130		03/08/2020 01:32	WG1439944

Semi-Volatile Organic Compounds (GC) by Method 8015

Analyte	Result (dry) mg/kg	<u>Qualifier</u>	MDL (dry) mg/kg	RDL (dry) mg/kg	Dilution	Analysis date / time	<u>Batch</u>
C10-C28 Diesel Range	63.0		1.75	4.35	1	03/11/2020 12:33	WG1441726
C28-C40 Oil Range	48.8		0.298	4.35	1	03/11/2020 12:33	WG1441726
(S) o-Terphenyl	49.5			18.0-148		03/11/2020 12:33	WG1441726

Total Solids by Method 2540 G-2011

Analyte	Result %	<u>Qualifier</u>	Dilution	Analysis date / time	<u>Batch</u>
Total Solids	99.1		1	03/10/2020 16:41	WG1440590

¹ Cp² Tc³ Ss⁴ Cn⁵ Sr⁶ Qc⁷ GI⁸ Al⁹ Sc

Wet Chemistry by Method 300.0

Analyte	Result (dry) mg/kg	<u>Qualifier</u>	MDL (dry) mg/kg	RDL (dry) mg/kg	Dilution	Analysis date / time	<u>Batch</u>
Chloride	4.90	<u>B</u> <u>J</u>	0.802	10.1	1	03/11/2020 06:19	WG1441019

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

Analyte	Result (dry) mg/kg	<u>Qualifier</u>	MDL (dry) mg/kg	RDL (dry) mg/kg	Dilution	Analysis date / time	<u>Batch</u>
TPH (GC/FID) Low Fraction	U	<u>J</u> <u>3</u>	0.0219	0.101	1	03/09/2020 21:56	WG1440608
(S) a,a,a-Trifluorotoluene(FID)	93.8			77.0-120		03/09/2020 21:56	WG1440608

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

Analyte	Result (dry) mg/kg	<u>Qualifier</u>	MDL (dry) mg/kg	RDL (dry) mg/kg	Dilution	Analysis date / time	<u>Batch</u>
Benzene	U		0.000404	0.00101	1	03/08/2020 01:52	WG1439944
Toluene	U		0.00126	0.00505	1	03/08/2020 01:52	WG1439944
Ethylbenzene	U		0.000535	0.00252	1	03/08/2020 01:52	WG1439944
Total Xylenes	U		0.00482	0.00656	1	03/08/2020 01:52	WG1439944
(S) Toluene-d8	102			75.0-131		03/08/2020 01:52	WG1439944
(S) 4-Bromofluorobenzene	104			67.0-138		03/08/2020 01:52	WG1439944
(S) 1,2-Dichloroethane-d4	89.2			70.0-130		03/08/2020 01:52	WG1439944

Semi-Volatile Organic Compounds (GC) by Method 8015

Analyte	Result (dry) mg/kg	<u>Qualifier</u>	MDL (dry) mg/kg	RDL (dry) mg/kg	Dilution	Analysis date / time	<u>Batch</u>
C10-C28 Diesel Range	1.79	<u>J</u>	1.62	4.04	1	03/11/2020 19:35	WG1440864
C28-C40 Oil Range	10.6		0.277	4.04	1	03/11/2020 19:35	WG1440864
(S) o-Terphenyl	67.9			18.0-148		03/11/2020 19:35	WG1440864

Total Solids by Method 2540 G-2011

Analyte	Result %	<u>Qualifier</u>	Dilution	Analysis date / time	<u>Batch</u>
Total Solids	94.3		1	03/10/2020 15:47	WG1440591

¹ Cp² Tc³ Ss⁴ Cn⁵ Sr⁶ Qc⁷ GI⁸ Al⁹ Sc

Wet Chemistry by Method 300.0

Analyte	Result (dry) mg/kg	<u>Qualifier</u>	MDL (dry) mg/kg	RDL (dry) mg/kg	Dilution	Analysis date / time	<u>Batch</u>
Chloride	137		0.843	10.6	1	03/11/2020 06:37	WG1441019

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

Analyte	Result (dry) mg/kg	<u>Qualifier</u>	MDL (dry) mg/kg	RDL (dry) mg/kg	Dilution	Analysis date / time	<u>Batch</u>
TPH (GC/FID) Low Fraction	U	<u>J3</u>	0.0230	0.106	1	03/09/2020 22:20	WG1440608
(S) a,a,a-Trifluorotoluene(FID)	93.3			77.0-120		03/09/2020 22:20	WG1440608

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

Analyte	Result (dry) mg/kg	<u>Qualifier</u>	MDL (dry) mg/kg	RDL (dry) mg/kg	Dilution	Analysis date / time	<u>Batch</u>
Benzene	U		0.000424	0.00106	1	03/08/2020 03:12	WG1439944
Toluene	U		0.00133	0.00530	1	03/08/2020 03:12	WG1439944
Ethylbenzene	U		0.000562	0.00265	1	03/08/2020 03:12	WG1439944
Total Xylenes	U		0.00507	0.00689	1	03/08/2020 03:12	WG1439944
(S) Toluene-d8	102			75.0-131		03/08/2020 03:12	WG1439944
(S) 4-Bromofluorobenzene	104			67.0-138		03/08/2020 03:12	WG1439944
(S) 1,2-Dichloroethane-d4	88.5			70.0-130		03/08/2020 03:12	WG1439944

Semi-Volatile Organic Compounds (GC) by Method 8015

Analyte	Result (dry) mg/kg	<u>Qualifier</u>	MDL (dry) mg/kg	RDL (dry) mg/kg	Dilution	Analysis date / time	<u>Batch</u>
C10-C28 Diesel Range	U		1.71	4.24	1	03/11/2020 16:42	WG1440864
C28-C40 Oil Range	4.13	<u>J</u>	0.290	4.24	1	03/11/2020 16:42	WG1440864
(S) o-Terphenyl	53.9			18.0-148		03/11/2020 16:42	WG1440864

Total Solids by Method 2540 G-2011

Analyte	Result %	<u>Qualifier</u>	Dilution	Analysis date / time	<u>Batch</u>
Total Solids	97.5		1	03/10/2020 15:47	WG1440591

¹ Cp² Tc³ Ss⁴ Cn⁵ Sr⁶ Qc⁷ GI⁸ Al⁹ Sc

Wet Chemistry by Method 300.0

Analyte	Result (dry) mg/kg	<u>Qualifier</u>	MDL (dry) mg/kg	RDL (dry) mg/kg	Dilution	Analysis date / time	<u>Batch</u>
Chloride	1.77	<u>B</u> <u>J</u>	0.815	10.3	1	03/11/2020 06:55	WG1441019

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

Analyte	Result (dry) mg/kg	<u>Qualifier</u>	MDL (dry) mg/kg	RDL (dry) mg/kg	Dilution	Analysis date / time	<u>Batch</u>
TPH (GC/FID) Low Fraction	U	<u>J</u> <u>3</u>	0.0222	0.103	1	03/09/2020 22:44	WG1440608
(S) a,a,a-Trifluorotoluene(FID)	94.0			77.0-120		03/09/2020 22:44	WG1440608

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

Analyte	Result (dry) mg/kg	<u>Qualifier</u>	MDL (dry) mg/kg	RDL (dry) mg/kg	Dilution	Analysis date / time	<u>Batch</u>
Benzene	U		0.000820	0.00205	2	03/08/2020 03:33	WG1439944
Toluene	U		0.00256	0.0103	2	03/08/2020 03:33	WG1439944
Ethylbenzene	U		0.00109	0.00513	2	03/08/2020 03:33	WG1439944
Total Xylenes	U		0.00980	0.0133	2	03/08/2020 03:33	WG1439944
(S) Toluene-d8	102			75.0-131		03/08/2020 03:33	WG1439944
(S) 4-Bromofluorobenzene	105			67.0-138		03/08/2020 03:33	WG1439944
(S) 1,2-Dichloroethane-d4	88.1			70.0-130		03/08/2020 03:33	WG1439944

Semi-Volatile Organic Compounds (GC) by Method 8015

Analyte	Result (dry) mg/kg	<u>Qualifier</u>	MDL (dry) mg/kg	RDL (dry) mg/kg	Dilution	Analysis date / time	<u>Batch</u>
C10-C28 Diesel Range	U		1.65	4.10	1	03/11/2020 16:04	WG1440864
C28-C40 Oil Range	1.34	<u>J</u>	0.281	4.10	1	03/11/2020 16:04	WG1440864
(S) o-Terphenyl	44.2			18.0-148		03/11/2020 16:04	WG1440864

Total Solids by Method 2540 G-2011

Analyte	Result %	<u>Qualifier</u>	Dilution	Analysis date / time	<u>Batch</u>
Total Solids	83.2		1	03/10/2020 15:47	WG1440591

¹ Cp² Tc³ Ss⁴ Cn⁵ Sr⁶ Qc⁷ GI⁸ Al⁹ Sc

Wet Chemistry by Method 300.0

Analyte	Result (dry) mg/kg	<u>Qualifier</u>	MDL (dry) mg/kg	RDL (dry) mg/kg	Dilution	Analysis date / time	<u>Batch</u>
Chloride	1.79	<u>B</u> <u>J</u>	0.955	12.0	1	03/11/2020 07:48	WG1441019

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

Analyte	Result (dry) mg/kg	<u>Qualifier</u>	MDL (dry) mg/kg	RDL (dry) mg/kg	Dilution	Analysis date / time	<u>Batch</u>
TPH (GC/FID) Low Fraction	U	<u>J</u> <u>3</u>	0.0261	0.120	1	03/09/2020 23:08	WG1440608
(S) a,a,a-Trifluorotoluene(FID)	95.0			77.0-120		03/09/2020 23:08	WG1440608

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

Analyte	Result (dry) mg/kg	<u>Qualifier</u>	MDL (dry) mg/kg	RDL (dry) mg/kg	Dilution	Analysis date / time	<u>Batch</u>
Benzene	U		0.000481	0.00120	1	03/08/2020 03:53	WG1439944
Toluene	U		0.00150	0.00601	1	03/08/2020 03:53	WG1439944
Ethylbenzene	U		0.000637	0.00300	1	03/08/2020 03:53	WG1439944
Total Xylenes	U		0.00574	0.00781	1	03/08/2020 03:53	WG1439944
(S) Toluene-d8	102			75.0-131		03/08/2020 03:53	WG1439944
(S) 4-Bromofluorobenzene	106			67.0-138		03/08/2020 03:53	WG1439944
(S) 1,2-Dichloroethane-d4	88.8			70.0-130		03/08/2020 03:53	WG1439944

Semi-Volatile Organic Compounds (GC) by Method 8015

Analyte	Result (dry) mg/kg	<u>Qualifier</u>	MDL (dry) mg/kg	RDL (dry) mg/kg	Dilution	Analysis date / time	<u>Batch</u>
C10-C28 Diesel Range	U		1.93	4.81	1	03/11/2020 14:47	WG1440864
C28-C40 Oil Range	1.44	<u>J</u>	0.329	4.81	1	03/11/2020 14:47	WG1440864
(S) o-Terphenyl	43.8			18.0-148		03/11/2020 14:47	WG1440864

Collected date/time: 03/04/20 10:00

L1196380

Total Solids by Method 2540 G-2011

Analyte	Result %	<u>Qualifier</u>	Dilution	Analysis date / time	<u>Batch</u>
Total Solids	93.8		1	03/10/2020 15:47	WG1440591

¹Cp²Tc³Ss⁴Cn⁵Sr⁶Qc⁷Gl⁸Al⁹Sc

Wet Chemistry by Method 300.0

Analyte	Result (dry) mg/kg	<u>Qualifier</u>	MDL (dry) mg/kg	RDL (dry) mg/kg	Dilution	Analysis date / time	<u>Batch</u>
Chloride	970		4.24	53.3	5	03/11/2020 08:06	WG1441019

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

Analyte	Result (dry) mg/kg	<u>Qualifier</u>	MDL (dry) mg/kg	RDL (dry) mg/kg	Dilution	Analysis date / time	<u>Batch</u>
TPH (GC/FID) Low Fraction	2.83	<u>J3</u>	0.0231	0.107	1	03/09/2020 23:31	WG1440608
(S) a,a,a-Trifluorotoluene(FID)	93.0			77.0-120		03/09/2020 23:31	WG1440608

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

Analyte	Result (dry) mg/kg	<u>Qualifier</u>	MDL (dry) mg/kg	RDL (dry) mg/kg	Dilution	Analysis date / time	<u>Batch</u>
Benzene	0.000746	<u>J</u>	0.000427	0.00107	1	03/09/2020 13:34	WG1440467
Toluene	U		0.00133	0.00533	1	03/09/2020 13:34	WG1440467
Ethylbenzene	U		0.000565	0.00267	1	03/09/2020 13:34	WG1440467
Total Xylenes	U		0.00510	0.00693	1	03/09/2020 13:34	WG1440467
(S) Toluene-d8	106			75.0-131		03/09/2020 13:34	WG1440467
(S) 4-Bromofluorobenzene	102			67.0-138		03/09/2020 13:34	WG1440467
(S) 1,2-Dichloroethane-d4	96.5			70.0-130		03/09/2020 13:34	WG1440467

Semi-Volatile Organic Compounds (GC) by Method 8015

Analyte	Result (dry) mg/kg	<u>Qualifier</u>	MDL (dry) mg/kg	RDL (dry) mg/kg	Dilution	Analysis date / time	<u>Batch</u>
C10-C28 Diesel Range	489		8.58	21.3	5	03/11/2020 20:25	WG1440864
C28-C40 Oil Range	270		1.46	21.3	5	03/11/2020 20:25	WG1440864
(S) o-Terphenyl	108			18.0-148		03/11/2020 20:25	WG1440864

Total Solids by Method 2540 G-2011

Analyte	Result %	<u>Qualifier</u>	Dilution	Analysis date / time	<u>Batch</u>
Total Solids	88.3		1	03/10/2020 15:47	WG1440591

¹ Cp² Tc³ Ss⁴ Cn⁵ Sr⁶ Qc⁷ GI⁸ Al⁹ Sc

Wet Chemistry by Method 300.0

Analyte	Result (dry) mg/kg	<u>Qualifier</u>	MDL (dry) mg/kg	RDL (dry) mg/kg	Dilution	Analysis date / time	<u>Batch</u>
Chloride	3100		9.01	113	10	03/11/2020 08:24	WG1441019

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

Analyte	Result (dry) mg/kg	<u>Qualifier</u>	MDL (dry) mg/kg	RDL (dry) mg/kg	Dilution	Analysis date / time	<u>Batch</u>
TPH (GC/FID) Low Fraction	U	<u>J3</u>	0.0246	0.113	1	03/09/2020 23:55	WG1440608
(S) a,a,a-Trifluorotoluene(FID)	99.3			77.0-120		03/09/2020 23:55	WG1440608

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

Analyte	Result (dry) mg/kg	<u>Qualifier</u>	MDL (dry) mg/kg	RDL (dry) mg/kg	Dilution	Analysis date / time	<u>Batch</u>
Benzene	U		0.000453	0.00113	1	03/08/2020 04:34	WG1439944
Toluene	U		0.00142	0.00567	1	03/08/2020 04:34	WG1439944
Ethylbenzene	U		0.000601	0.00283	1	03/08/2020 04:34	WG1439944
Total Xylenes	U		0.00542	0.00737	1	03/08/2020 04:34	WG1439944
(S) Toluene-d8	103			75.0-131		03/08/2020 04:34	WG1439944
(S) 4-Bromofluorobenzene	105			67.0-138		03/08/2020 04:34	WG1439944
(S) 1,2-Dichloroethane-d4	88.9			70.0-130		03/08/2020 04:34	WG1439944

Semi-Volatile Organic Compounds (GC) by Method 8015

Analyte	Result (dry) mg/kg	<u>Qualifier</u>	MDL (dry) mg/kg	RDL (dry) mg/kg	Dilution	Analysis date / time	<u>Batch</u>
C10-C28 Diesel Range	U		1.82	4.53	1	03/11/2020 16:29	WG1440864
C28-C40 Oil Range	2.42	<u>J</u>	0.310	4.53	1	03/11/2020 16:29	WG1440864
(S) o-Terphenyl	62.7			18.0-148		03/11/2020 16:29	WG1440864

Total Solids by Method 2540 G-2011

Analyte	Result %	<u>Qualifier</u>	Dilution	Analysis date / time	<u>Batch</u>
Total Solids	92.9		1	03/10/2020 15:47	WG1440591

¹ Cp² Tc³ Ss⁴ Cn⁵ Sr⁶ Qc⁷ GI⁸ Al⁹ Sc

Wet Chemistry by Method 300.0

Analyte	Result (dry) mg/kg	<u>Qualifier</u>	MDL (dry) mg/kg	RDL (dry) mg/kg	Dilution	Analysis date / time	<u>Batch</u>
Chloride	1140		4.29	53.8	5	03/11/2020 08:42	WG1441019

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

Analyte	Result (dry) mg/kg	<u>Qualifier</u>	MDL (dry) mg/kg	RDL (dry) mg/kg	Dilution	Analysis date / time	<u>Batch</u>
TPH (GC/FID) Low Fraction	U	<u>J3</u>	0.0234	0.108	1	03/10/2020 00:19	WG1440608
(S) a,a,a-Trifluorotoluene(FID)	95.9			77.0-120		03/10/2020 00:19	WG1440608

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

Analyte	Result (dry) mg/kg	<u>Qualifier</u>	MDL (dry) mg/kg	RDL (dry) mg/kg	Dilution	Analysis date / time	<u>Batch</u>
Benzene	U		0.000431	0.00108	1	03/08/2020 04:54	WG1439944
Toluene	U		0.00135	0.00538	1	03/08/2020 04:54	WG1439944
Ethylbenzene	U		0.000571	0.00269	1	03/08/2020 04:54	WG1439944
Total Xylenes	U		0.00515	0.00700	1	03/08/2020 04:54	WG1439944
(S) Toluene-d8	103			75.0-131		03/08/2020 04:54	WG1439944
(S) 4-Bromofluorobenzene	106			67.0-138		03/08/2020 04:54	WG1439944
(S) 1,2-Dichloroethane-d4	89.4			70.0-130		03/08/2020 04:54	WG1439944

Semi-Volatile Organic Compounds (GC) by Method 8015

Analyte	Result (dry) mg/kg	<u>Qualifier</u>	MDL (dry) mg/kg	RDL (dry) mg/kg	Dilution	Analysis date / time	<u>Batch</u>
C10-C28 Diesel Range	2.12	<u>J</u>	1.73	4.31	1	03/11/2020 16:16	WG1440864
C28-C40 Oil Range	1.64	<u>J</u>	0.295	4.31	1	03/11/2020 16:16	WG1440864
(S) o-Terphenyl	64.1			18.0-148		03/11/2020 16:16	WG1440864

Total Solids by Method 2540 G-2011

Analyte	Result %	<u>Qualifier</u>	Dilution	Analysis date / time	<u>Batch</u>
Total Solids	94.0		1	03/10/2020 15:47	WG1440591

¹ Cp² Tc³ Ss⁴ Cn⁵ Sr⁶ Qc⁷ GI⁸ Al⁹ Sc

Wet Chemistry by Method 300.0

Analyte	Result (dry) mg/kg	<u>Qualifier</u>	MDL (dry) mg/kg	RDL (dry) mg/kg	Dilution	Analysis date / time	<u>Batch</u>
Chloride	879		4.24	53.2	5	03/11/2020 09:00	WG1441019

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

Analyte	Result (dry) mg/kg	<u>Qualifier</u>	MDL (dry) mg/kg	RDL (dry) mg/kg	Dilution	Analysis date / time	<u>Batch</u>
TPH (GC/FID) Low Fraction	U		0.0231	0.106	1	03/11/2020 02:05	WG1440814
(S)-a,a,a-Trifluorotoluene(FID)	96.7			77.0-120		03/11/2020 02:05	WG1440814

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

Analyte	Result (dry) mg/kg	<u>Qualifier</u>	MDL (dry) mg/kg	RDL (dry) mg/kg	Dilution	Analysis date / time	<u>Batch</u>
Benzene	U		0.000426	0.00106	1	03/08/2020 05:14	WG1439944
Toluene	U		0.00133	0.00532	1	03/08/2020 05:14	WG1439944
Ethylbenzene	U		0.000564	0.00266	1	03/08/2020 05:14	WG1439944
Total Xylenes	U		0.00509	0.00692	1	03/08/2020 05:14	WG1439944
(S)-Toluene-d8	102			75.0-131		03/08/2020 05:14	WG1439944
(S)-4-Bromofluorobenzene	105			67.0-138		03/08/2020 05:14	WG1439944
(S)-1,2-Dichloroethane-d4	89.8			70.0-130		03/08/2020 05:14	WG1439944

Semi-Volatile Organic Compounds (GC) by Method 8015

Analyte	Result (dry) mg/kg	<u>Qualifier</u>	MDL (dry) mg/kg	RDL (dry) mg/kg	Dilution	Analysis date / time	<u>Batch</u>
C10-C28 Diesel Range	U		1.71	4.26	1	03/11/2020 15:00	WG1440864
C28-C40 Oil Range	0.543	J	0.292	4.26	1	03/11/2020 15:00	WG1440864
(S)-o-Terphenyl	54.8			18.0-148		03/11/2020 15:00	WG1440864

Total Solids by Method 2540 G-2011

Analyte	Result %	<u>Qualifier</u>	Dilution	Analysis date / time	<u>Batch</u>
Total Solids	91.9		1	03/10/2020 15:47	WG1440591

¹ Cp² Tc³ Ss⁴ Cn⁵ Sr⁶ Qc⁷ GI⁸ Al⁹ Sc

Wet Chemistry by Method 300.0

Analyte	Result (dry) mg/kg	<u>Qualifier</u>	MDL (dry) mg/kg	RDL (dry) mg/kg	Dilution	Analysis date / time	<u>Batch</u>
Chloride	2.50	<u>B</u> <u>J</u>	0.865	10.9	1	03/10/2020 19:16	WG1440418

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

Analyte	Result (dry) mg/kg	<u>Qualifier</u>	MDL (dry) mg/kg	RDL (dry) mg/kg	Dilution	Analysis date / time	<u>Batch</u>
TPH (GC/FID) Low Fraction	U		0.0236	0.109	1	03/11/2020 02:29	WG1440814
(S) a,a,a-Trifluorotoluene(FID)	98.9			77.0-120		03/11/2020 02:29	WG1440814

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

Analyte	Result (dry) mg/kg	<u>Qualifier</u>	MDL (dry) mg/kg	RDL (dry) mg/kg	Dilution	Analysis date / time	<u>Batch</u>
Benzene	U		0.000435	0.00109	1	03/08/2020 05:34	WG1439944
Toluene	U		0.00136	0.00544	1	03/08/2020 05:34	WG1439944
Ethylbenzene	U		0.000577	0.00272	1	03/08/2020 05:34	WG1439944
Total Xylenes	U		0.00520	0.00707	1	03/08/2020 05:34	WG1439944
(S) Toluene-d8	103			75.0-131		03/08/2020 05:34	WG1439944
(S) 4-Bromofluorobenzene	105			67.0-138		03/08/2020 05:34	WG1439944
(S) 1,2-Dichloroethane-d4	89.1			70.0-130		03/08/2020 05:34	WG1439944

Semi-Volatile Organic Compounds (GC) by Method 8015

Analyte	Result (dry) mg/kg	<u>Qualifier</u>	MDL (dry) mg/kg	RDL (dry) mg/kg	Dilution	Analysis date / time	<u>Batch</u>
C10-C28 Diesel Range	2.49	<u>J</u>	1.75	4.35	1	03/12/2020 16:24	WG1440864
C28-C40 Oil Range	8.59		0.298	4.35	1	03/12/2020 16:24	WG1440864
(S) o-Terphenyl	54.8			18.0-148		03/12/2020 16:24	WG1440864

Total Solids by Method 2540 G-2011

Analyte	Result	<u>Qualifier</u>	Dilution	Analysis date / time	<u>Batch</u>
Total Solids	95.9	%	1	03/10/2020 15:47	WG1440591

¹ Cp² Tc³ Ss⁴ Cn⁵ Sr⁶ Qc⁷ GI⁸ Al⁹ Sc

Wet Chemistry by Method 300.0

Analyte	Result (dry)	<u>Qualifier</u>	MDL (dry)	RDL (dry)	Dilution	Analysis date / time	<u>Batch</u>
Chloride	6.75	<u>B J</u>	0.829	10.4	1	03/10/2020 19:25	WG1440418

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

Analyte	Result (dry)	<u>Qualifier</u>	MDL (dry)	RDL (dry)	Dilution	Analysis date / time	<u>Batch</u>
TPH (GC/FID) Low Fraction	U		0.0226	0.104	1	03/11/2020 02:53	WG1440814
(S) a,a,a-Trifluorotoluene(FID)	100			77.0-120		03/11/2020 02:53	WG1440814

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

Analyte	Result (dry)	<u>Qualifier</u>	MDL (dry)	RDL (dry)	Dilution	Analysis date / time	<u>Batch</u>
Benzene	U		0.000417	0.00104	1	03/09/2020 16:15	WG1440544
Toluene	U		0.00130	0.00522	1	03/09/2020 16:15	WG1440544
Ethylbenzene	U		0.000553	0.00261	1	03/09/2020 16:15	WG1440544
Total Xylenes	U		0.00499	0.00678	1	03/09/2020 16:15	WG1440544
(S) Toluene-d8	102			75.0-131		03/09/2020 16:15	WG1440544
(S) 4-Bromofluorobenzene	102			67.0-138		03/09/2020 16:15	WG1440544
(S) 1,2-Dichloroethane-d4	86.9			70.0-130		03/09/2020 16:15	WG1440544

Semi-Volatile Organic Compounds (GC) by Method 8015

Analyte	Result (dry)	<u>Qualifier</u>	MDL (dry)	RDL (dry)	Dilution	Analysis date / time	<u>Batch</u>
C10-C28 Diesel Range	U		1.68	4.17	1	03/11/2020 16:54	WG1440864
C28-C40 Oil Range	5.17		0.286	4.17	1	03/11/2020 16:54	WG1440864
(S) o-Terphenyl	69.6			18.0-148		03/11/2020 16:54	WG1440864

Collected date/time: 03/04/20 13:00

L1196380

Total Solids by Method 2540 G-2011

Analyte	Result %	<u>Qualifier</u>	Dilution	Analysis date / time	<u>Batch</u>
Total Solids	92.1		1	03/10/2020 15:47	WG1440591

¹Cp²Tc³Ss⁴Cn⁵Sr⁶Qc⁷Gl⁸Al⁹Sc

Wet Chemistry by Method 300.0

Analyte	Result (dry) mg/kg	<u>Qualifier</u>	MDL (dry) mg/kg	RDL (dry) mg/kg	Dilution	Analysis date / time	<u>Batch</u>
Chloride	988		0.863	10.9	1	03/10/2020 19:35	WG1440418

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

Analyte	Result (dry) mg/kg	<u>Qualifier</u>	MDL (dry) mg/kg	RDL (dry) mg/kg	Dilution	Analysis date / time	<u>Batch</u>
TPH (GC/FID) Low Fraction	U		0.0236	0.109	1	03/11/2020 03:17	WG1440814
(S)-a,a,a-Trifluorotoluene(FID)	98.9			77.0-120		03/11/2020 03:17	WG1440814

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

Analyte	Result (dry) mg/kg	<u>Qualifier</u>	MDL (dry) mg/kg	RDL (dry) mg/kg	Dilution	Analysis date / time	<u>Batch</u>
Benzene	U		0.000434	0.00109	1	03/09/2020 16:35	WG1440544
Toluene	U		0.00136	0.00543	1	03/09/2020 16:35	WG1440544
Ethylbenzene	U		0.000576	0.00272	1	03/09/2020 16:35	WG1440544
Total Xylenes	U		0.00519	0.00706	1	03/09/2020 16:35	WG1440544
(S)-Toluene-d8	102			75.0-131		03/09/2020 16:35	WG1440544
(S)-4-Bromofluorobenzene	104			67.0-138		03/09/2020 16:35	WG1440544
(S)-1,2-Dichloroethane-d4	88.0			70.0-130		03/09/2020 16:35	WG1440544

Semi-Volatile Organic Compounds (GC) by Method 8015

Analyte	Result (dry) mg/kg	<u>Qualifier</u>	MDL (dry) mg/kg	RDL (dry) mg/kg	Dilution	Analysis date / time	<u>Batch</u>
C10-C28 Diesel Range	295		8.74	21.7	5	03/11/2020 20:13	WG1440864
C28-C40 Oil Range	214		1.49	21.7	5	03/11/2020 20:13	WG1440864
(S)-o-Terphenyl	69.7			18.0-148		03/11/2020 20:13	WG1440864

Total Solids by Method 2540 G-2011

Analyte	Result %	<u>Qualifier</u>	Dilution	Analysis date / time	<u>Batch</u>
Total Solids	92.0		1	03/10/2020 15:12	WG1440592

¹ Cp² Tc³ Ss⁴ Cn⁵ Sr⁶ Qc⁷ GI⁸ Al⁹ Sc

Wet Chemistry by Method 300.0

Analyte	Result (dry) mg/kg	<u>Qualifier</u>	MDL (dry) mg/kg	RDL (dry) mg/kg	Dilution	Analysis date / time	<u>Batch</u>
Chloride	5780		17.3	217	20	03/10/2020 19:44	WG1440418

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

Analyte	Result (dry) mg/kg	<u>Qualifier</u>	MDL (dry) mg/kg	RDL (dry) mg/kg	Dilution	Analysis date / time	<u>Batch</u>
TPH (GC/FID) Low Fraction	U		0.0236	0.109	1	03/11/2020 03:41	WG1440814
(S)-a,a,a-Trifluorotoluene(FID)	97.9			77.0-120		03/11/2020 03:41	WG1440814

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

Analyte	Result (dry) mg/kg	<u>Qualifier</u>	MDL (dry) mg/kg	RDL (dry) mg/kg	Dilution	Analysis date / time	<u>Batch</u>
Benzene	U		0.000435	0.00109	1	03/09/2020 16:56	WG1440544
Toluene	U		0.00136	0.00543	1	03/09/2020 16:56	WG1440544
Ethylbenzene	U		0.000576	0.00272	1	03/09/2020 16:56	WG1440544
Total Xylenes	U		0.00519	0.00706	1	03/09/2020 16:56	WG1440544
(S)-Toluene-d8	102			75.0-131		03/09/2020 16:56	WG1440544
(S)-4-Bromofluorobenzene	105			67.0-138		03/09/2020 16:56	WG1440544
(S)-1,2-Dichloroethane-d4	88.5			70.0-130		03/09/2020 16:56	WG1440544

Semi-Volatile Organic Compounds (GC) by Method 8015

Analyte	Result (dry) mg/kg	<u>Qualifier</u>	MDL (dry) mg/kg	RDL (dry) mg/kg	Dilution	Analysis date / time	<u>Batch</u>
C10-C28 Diesel Range	U		1.75	4.35	1	03/11/2020 15:13	WG1440864
C28-C40 Oil Range	0.399	J	0.298	4.35	1	03/11/2020 15:13	WG1440864
(S)-o-Terphenyl	38.9			18.0-148		03/11/2020 15:13	WG1440864

Total Solids by Method 2540 G-2011

Analyte	Result %	<u>Qualifier</u>	Dilution	Analysis date / time	<u>Batch</u>
Total Solids	92.3		1	03/10/2020 15:12	WG1440592

¹ Cp² Tc³ Ss⁴ Cn⁵ Sr⁶ Qc⁷ GI⁸ Al⁹ Sc

Wet Chemistry by Method 300.0

Analyte	Result (dry) mg/kg	<u>Qualifier</u>	MDL (dry) mg/kg	RDL (dry) mg/kg	Dilution	Analysis date / time	<u>Batch</u>
Chloride	5290		8.61	108	10	03/11/2020 02:50	WG1441166

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

Analyte	Result (dry) mg/kg	<u>Qualifier</u>	MDL (dry) mg/kg	RDL (dry) mg/kg	Dilution	Analysis date / time	<u>Batch</u>
TPH (GC/FID) Low Fraction	U		0.0235	0.108	1	03/11/2020 04:05	WG1440814
(S)-a,a,a-Trifluorotoluene(FID)	99.7			77.0-120		03/11/2020 04:05	WG1440814

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

Analyte	Result (dry) mg/kg	<u>Qualifier</u>	MDL (dry) mg/kg	RDL (dry) mg/kg	Dilution	Analysis date / time	<u>Batch</u>
Benzene	U		0.000433	0.00108	1	03/09/2020 17:16	WG1440544
Toluene	U		0.00135	0.00542	1	03/09/2020 17:16	WG1440544
Ethylbenzene	U		0.000574	0.00271	1	03/09/2020 17:16	WG1440544
Total Xylenes	U		0.00518	0.00704	1	03/09/2020 17:16	WG1440544
(S)-Toluene-d8	101			75.0-131		03/09/2020 17:16	WG1440544
(S)-4-Bromofluorobenzene	104			67.0-138		03/09/2020 17:16	WG1440544
(S)-1,2-Dichloroethane-d4	87.7			70.0-130		03/09/2020 17:16	WG1440544

Semi-Volatile Organic Compounds (GC) by Method 8015

Analyte	Result (dry) mg/kg	<u>Qualifier</u>	MDL (dry) mg/kg	RDL (dry) mg/kg	Dilution	Analysis date / time	<u>Batch</u>
C10-C28 Diesel Range	11.6		1.74	4.33	1	03/11/2020 17:07	WG1440864
C28-C40 Oil Range	10.1		0.297	4.33	1	03/11/2020 17:07	WG1440864
(S)-o-Terphenyl	46.0			18.0-148		03/11/2020 17:07	WG1440864

QUALITY CONTROL SUMMARY

L1196380-01,02,03

ONE LAB. NAT Page 60 of 309

Method Blank (MB)

(MB) R3507462-1 03/10/20 09:43

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

¹Cp²Tc³Ss⁴Cn⁵Sr⁶Qc⁷Gl⁸Al⁹Sc

L1196380-02 Original Sample (OS) • Duplicate (DUP)

(OS) L1196380-02 03/10/20 09:43 • (DUP) R3507462-3 03/10/20 09:43

Analyte	Original Result %	DUP Result %	Dilution %	DUP RPD %	<u>DUP Qualifier</u>	DUP RPD Limits %
Total Solids	77.8	78.6	1	1.13		10

Laboratory Control Sample (LCS)

(LCS) R3507462-2 03/10/20 09:43

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

⁷Gl⁸Al⁹Sc

QUALITY CONTROL SUMMARY

L1196380-04,05,06,07,08,09,10,11,12,13

ONE LAB. NAT Page 61 of 309

Method Blank (MB)

(MB) R3507375-1 03/10/20 16:41

Analyte	MB Result %	<u>MB Qualifier</u>	MB MDL %	MB RDL %
Total Solids	0.00100			

¹Cp²Tc³Ss⁴Cn⁵Sr⁶Qc⁷Gl⁸Al⁹Sc

L1196380-13 Original Sample (OS) • Duplicate (DUP)

(OS) L1196380-13 03/10/20 16:41 • (DUP) R3507375-3 03/10/20 16:41

Analyte	Original Result %	DUP Result %	Dilution %	DUP RPD %	<u>DUP Qualifier</u>	DUP RPD Limits %
Total Solids	99.1	98.8	1	0.336		10

Laboratory Control Sample (LCS)

(LCS) R3507375-2 03/10/20 16:41

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

QUALITY CONTROL SUMMARY

Method Blank (MB)

(MB) R3507369-1 03/10/20 15:47

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

¹Cp²Tc³Ss⁴Cn⁵Sr⁶Qc⁷Gl⁸Al⁹Sc

L1196380-21 Original Sample (OS) • Duplicate (DUP)

(OS) L1196380-21 03/10/20 15:47 • (DUP) R3507369-3 03/10/20 15:47

Analyte	Original Result %	DUP Result %	Dilution	DUP RPD %	<u>DUP Qualifier</u>	DUP RPD Limits %
Total Solids	91.9	91.8	1	0.115		10

Laboratory Control Sample (LCS)

(LCS) R3507369-2 03/10/20 15:47

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

QUALITY CONTROL SUMMARY

L1196380-24,25

ONE LAB. NAT Page 63 of 309

Method Blank (MB)

(MB) R3507368-1 03/10/20 15:12

Analyte	MB Result %	<u>MB Qualifier</u>	MB MDL %	MB RDL %
Total Solids	0.00100			

¹Cp²Tc³Ss⁴Cn⁵Sr⁶Qc⁷Gl⁸Al⁹Sc

L1196380-24 Original Sample (OS) • Duplicate (DUP)

(OS) L1196380-24 03/10/20 15:12 • (DUP) R3507368-3 03/10/20 15:12

Analyte	Original Result %	DUP Result %	Dilution %	DUP RPD %	<u>DUP Qualifier</u>	DUP RPD Limits %
Total Solids	92.0	91.6	1	0.471		10

Laboratory Control Sample (LCS)

(LCS) R3507368-2 03/10/20 15:12

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

QUALITY CONTROL SUMMARY

Method Blank (MB)

(MB) R3507340-1 03/10/20 14:16

Analyte	MB Result mg/kg	<u>MB Qualifier</u>	MB MDL mg/kg	MB RDL mg/kg
Chloride	2.36	J	0.795	10.0

¹Cp²Tc³Ss⁴Cn⁵Sr⁶Qc⁷Gl⁸Al⁹Sc

L1196066-01 Original Sample (OS) • Duplicate (DUP)

(OS) L1196066-01 03/10/20 15:37 • (DUP) R3507340-3 03/10/20 15:46

Analyte	Original Result mg/kg	DUP Result mg/kg	Dilution	DUP RPD	<u>DUP Qualifier</u>	DUP RPD Limits
Chloride	13400	14700	20	9.19		20

L1196380-24 Original Sample (OS) • Duplicate (DUP)

(OS) L1196380-24 03/10/20 19:44 • (DUP) R3507340-6 03/10/20 19:54

Analyte	Original Result (dry) mg/kg	DUP Result (dry) mg/kg	Dilution	DUP RPD	<u>DUP Qualifier</u>	DUP RPD Limits
Chloride	5780	5660	20	2.08		20

Laboratory Control Sample (LCS)

(LCS) R3507340-2 03/10/20 14:25

Analyte	Spike Amount mg/kg	LCS Result mg/kg	LCS Rec. %	Rec. Limits %	<u>LCS Qualifier</u>
Chloride	200	190	95.0	90.0-110	

L1196066-04 Original Sample (OS) • Matrix Spike (MS) • Matrix Spike Duplicate (MSD)

(OS) L1196066-04 03/10/20 16:15 • (MS) R3507340-4 03/10/20 16:24 • (MSD) R3507340-5 03/10/20 16:34

Analyte	Spike Amount mg/kg	Original Result mg/kg	MS Result mg/kg	MSD Result mg/kg	MS Rec. %	MSD Rec. %	Dilution	Rec. Limits %	<u>MS Qualifier</u>	<u>MSD Qualifier</u>	RPD	RPD Limits
Chloride	500	34.7	552	567	104	106	1	80.0-120			2.61	20

QUALITY CONTROL SUMMARY

L1196380-01,02,03,04,05,06,07,08,09,10,11,12,13,14,15,16,17,18,19,20

Method Blank (MB)

(MB) R3507449-1 03/11/20 00:08

Analyte	MB Result	<u>MB Qualifier</u>	MB MDL	MB RDL
	mg/kg		mg/kg	mg/kg
Chloride	1.21	J	0.795	10.0

¹Cp²Tc³Ss⁴Cn⁵Sr⁶Qc⁷Gl⁸Al⁹Sc

L1196380-03 Original Sample (OS) • Duplicate (DUP)

(OS) L1196380-03 03/11/20 02:26 • (DUP) R3507449-5 03/11/20 02:44

Analyte	Original Result	DUP Result	Dilution	DUP RPD	<u>DUP Qualifier</u>	DUP RPD Limits
	(dry) mg/kg	(dry) mg/kg		%		%
Chloride	34.9	32.8	1	6.22		20

L1196380-20 Original Sample (OS) • Duplicate (DUP)

(OS) L1196380-20 03/11/20 09:00 • (DUP) R3507449-6 03/11/20 09:18

Analyte	Original Result	DUP Result	Dilution	DUP RPD	<u>DUP Qualifier</u>	DUP RPD Limits
	(dry) mg/kg	(dry) mg/kg		%		%
Chloride	879	884	5	0.584		20

Laboratory Control Sample (LCS)

(LCS) R3507449-2 03/11/20 00:26

Analyte	Spike Amount	LCS Result	LCS Rec.	Rec. Limits	<u>LCS Qualifier</u>
	mg/kg	mg/kg	%	%	
Chloride	200	211	106	90.0-110	

L1196380-02 Original Sample (OS) • Matrix Spike (MS) • Matrix Spike Duplicate (MSD)

(OS) L1196380-02 03/11/20 01:32 • (MS) R3507449-3 03/11/20 01:50 • (MSD) R3507449-4 03/11/20 02:08

Analyte	Spike Amount	Original Result	MS Result (dry)	MSD Result	MS Rec.	MSD Rec.	Dilution	Rec. Limits	<u>MS Qualifier</u>	<u>MSD Qualifier</u>	RPD	RPD Limits
	(dry) mg/kg	(dry) mg/kg	mg/kg	mg/kg	%	%		%			%	%
Chloride	643	130	784	784	102	102	1	80.0-120			0.0482	20

QUALITY CONTROL SUMMARY

Method Blank (MB)

(MB) R3507518-1 03/10/20 22:46

Analyte	MB Result mg/kg	<u>MB Qualifier</u>	MB MDL mg/kg	MB RDL mg/kg
Chloride	1.46	J	0.795	10.0

¹Cp²Tc³Ss⁴Cn⁵Sr⁶Qc⁷Gl⁸Al⁹Sc

L1196337-05 Original Sample (OS) • Duplicate (DUP)

(OS) L1196337-05 03/10/20 23:45 • (DUP) R3507518-3 03/11/20 00:00

Analyte	Original Result (dry) mg/kg	DUP Result (dry) mg/kg	Dilution	DUP RPD %	<u>DUP Qualifier</u>	DUP RPD Limits %
Chloride	1.92	10.7	1	139	J P1	20

L1197088-01 Original Sample (OS) • Duplicate (DUP)

(OS) L1197088-01 03/11/20 14:36 • (DUP) R3507662-4 03/11/20 16:45

Analyte	Original Result mg/kg	DUP Result mg/kg	Dilution	DUP RPD %	<u>DUP Qualifier</u>	DUP RPD Limits %
Chloride	ND	6.83	1	0.000		20

Laboratory Control Sample (LCS)

(LCS) R3507518-2 03/10/20 23:01

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

L1196337-11 Original Sample (OS) • Matrix Spike (MS) • Matrix Spike Duplicate (MSD)

(OS) L1196337-11 03/11/20 01:33 • (MS) R3507518-4 03/11/20 02:19 • (MSD) R3507518-5 03/11/20 02:34

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 %	<u>MS Qualifier</u>	<u>MSD Qualifier</u>	RPD %	RPD Limits %
Chloride	631	1.51	643	643	102	102	1	80.0-120			0.0254	20

QUALITY CONTROL SUMMARY

Method Blank (MB)

(MB) R3507212-2 03/09/20 12:26

Analyte	MB Result mg/kg	<u>MB Qualifier</u>	MB MDL mg/kg	MB RDL mg/kg
TPH (GC/FID) Low Fraction	U		0.0217	0.100
(S) <i>a,a,a-Trifluorotoluene(FID)</i>	98.2			77.0-120

¹Cp²Tc³Ss⁴Cn⁵Sr⁶Qc⁷Gl⁸Al⁹Sc

Laboratory Control Sample (LCS)

(LCS) R3507212-1 03/09/20 11:19

Analyte	Spike Amount mg/kg	LCS Result mg/kg	LCS Rec. %	Rec. Limits %	<u>LCS Qualifier</u>
TPH (GC/FID) Low Fraction	5.50	5.69	103	72.0-127	
(S) <i>a,a,a-Trifluorotoluene(FID)</i>		106		77.0-120	

QUALITY CONTROL SUMMARY

Method Blank (MB)

(MB) R3506876-2 03/09/20 14:15

Analyte	MB Result mg/kg	<u>MB Qualifier</u>	MB MDL mg/kg	MB RDL mg/kg
TPH (GC/FID) Low Fraction	U		0.0217	0.100
(S) <i>a,a,a-Trifluorotoluene(FID)</i>	96.9			77.0-120

¹Cp²Tc³Ss⁴Cn⁵Sr⁶Qc⁷Gl⁸Al⁹Sc

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

(LCS) R3506876-1 03/09/20 11:55 • (LCSD) R3506876-3 03/09/20 20:21

Analyte	Spike Amount mg/kg	LCS Result mg/kg	LCSD Result mg/kg	LCS Rec. %	LCSD Rec. %	Rec. Limits %	<u>LCS Qualifier</u>	<u>LCSD Qualifier</u>	RPD %	RPD Limits %
TPH (GC/FID) Low Fraction	5.50	6.21	4.69	113	85.3	72.0-127	J3		27.9	20
(S) <i>a,a,a-Trifluorotoluene(FID)</i>			104	103		77.0-120				

L1196456-04 Original Sample (OS) • Matrix Spike (MS) • Matrix Spike Duplicate (MSD)

(OS) L1196456-04 03/09/20 21:32 • (MS) R3506876-4 03/10/20 00:43 • (MSD) R3506876-5 03/10/20 08:33

Analyte	Spike Amount mg/kg	Original Result mg/kg	MS Result mg/kg	MSD Result mg/kg	MS Rec. %	MSD Rec. %	Dilution	Rec. Limits %	<u>MS Qualifier</u>	<u>MSD Qualifier</u>	RPD %	RPD Limits %
TPH (GC/FID) Low Fraction	132	ND	120	148	90.9	112	25	10.0-151			20.9	28
(S) <i>a,a,a-Trifluorotoluene(FID)</i>				103	109			77.0-120				

QUALITY CONTROL SUMMARY

Method Blank (MB)

(MB) R3508424-2 03/11/20 01:41

Analyte	MB Result mg/kg	<u>MB Qualifier</u>	MB MDL mg/kg	MB RDL mg/kg
TPH (GC/FID) Low Fraction	U		0.0217	0.100
(S) <i>a,a,a-Trifluorotoluene(FID)</i>	101			77.0-120

¹Cp²Tc³Ss⁴Cn⁵Sr⁶Qc⁷Gl⁸Al⁹Sc

Laboratory Control Sample (LCS)

(LCS) R3508424-1 03/10/20 23:35

Analyte	Spike Amount mg/kg	LCS Result mg/kg	LCS Rec. %	Rec. Limits %	<u>LCS Qualifier</u>
TPH (GC/FID) Low Fraction	5.50	4.46	81.1	72.0-127	
(S) <i>a,a,a-Trifluorotoluene(FID)</i>		104		77.0-120	

L1196478-01 Original Sample (OS) • Matrix Spike (MS) • Matrix Spike Duplicate (MSD)

(OS) L1196478-01 03/11/20 04:29 • (MS) R3508424-3 03/11/20 10:09 • (MSD) R3508424-4 03/11/20 10:33

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 %	<u>MS Qualifier</u>	<u>MSD Qualifier</u>	RPD	RPD Limits
TPH (GC/FID) Low Fraction	99.9	ND	86.7	82.7	86.8	82.8	25	10.0-151			4.70	28
(S) <i>a,a,a-Trifluorotoluene(FID)</i>				106		106		77.0-120				

QUALITY CONTROL SUMMARY

L1196380-02

Method Blank (MB)

(MB) R3507711-2 03/10/20 11:18

Analyte	MB Result mg/kg	<u>MB Qualifier</u>	MB MDL mg/kg	MB RDL mg/kg
TPH (GC/FID) Low Fraction	U		0.0217	0.100
(S) <i>a,a,a-Trifluorotoluene(FID)</i>	99.2			77.0-120

¹Cp²Tc³Ss⁴Cn⁵Sr⁶Qc⁷Gl⁸Al⁹Sc

Laboratory Control Sample (LCS)

(LCS) R3507711-1 03/10/20 10:07

Analyte	Spike Amount mg/kg	LCS Result mg/kg	LCS Rec. %	Rec. Limits %	<u>LCS Qualifier</u>
TPH (GC/FID) Low Fraction	5.50	5.56	101	72.0-127	
(S) <i>a,a,a-Trifluorotoluene(FID)</i>		100		77.0-120	

QUALITY CONTROL SUMMARY

Method Blank (MB)

(MB) R3507285-3 03/07/20 11:24

Analyte	MB Result mg/kg	<u>MB Qualifier</u>	MB MDL mg/kg	MB RDL mg/kg
Benzene	U		0.000400	0.00100
Ethylbenzene	U		0.000530	0.00250
Toluene	U		0.00125	0.00500
Xylenes, Total	U		0.00478	0.00650
(S) Toluene-d8	107		75.0-131	
(S) 4-Bromofluorobenzene	90.8		67.0-138	
(S) 1,2-Dichloroethane-d4	108		70.0-130	

¹Cp²Tc³Ss⁴Cn⁵Sr⁶Qc⁷Gl⁸Al⁹Sc

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

(LCS) R3507285-1 03/07/20 10:08 • (LCSD) R3507285-2 03/07/20 10:27

Analyte	Spike Amount mg/kg	LCS Result mg/kg	LCSD Result mg/kg	LCS Rec. %	LCSD Rec. %	Rec. Limits %	<u>LCS Qualifier</u>	<u>LCSD Qualifier</u>	RPD %	RPD Limits %
Benzene	0.125	0.113	0.109	90.4	87.2	70.0-123			3.60	20
Ethylbenzene	0.125	0.106	0.104	84.8	83.2	74.0-126			1.90	20
Toluene	0.125	0.101	0.105	80.8	84.0	75.0-121			3.88	20
Xylenes, Total	0.375	0.295	0.306	78.7	81.6	72.0-127			3.66	20
(S) Toluene-d8			98.0	104	75.0-131					
(S) 4-Bromofluorobenzene			95.4	96.8	67.0-138					
(S) 1,2-Dichloroethane-d4			115	114	70.0-130					

L1196313-36 Original Sample (OS) • Matrix Spike (MS) • Matrix Spike Duplicate (MSD)

(OS) L1196313-36 03/07/20 16:23 • (MS) R3507285-4 03/07/20 16:42 • (MSD) R3507285-5 03/07/20 17:01

Analyte	Spike Amount mg/kg	Original Result mg/kg	MS Result mg/kg	MS Rec. %	MSD Rec. %	Dilution	Rec. Limits %	<u>MS Qualifier</u>	<u>MSD Qualifier</u>	RPD %	RPD Limits %
Benzene	50.0	174	162	175	0.000	2.00	400	J6	J6	7.72	37
Ethylbenzene	50.0	287	247	277	0.000	0.000	400	10.0-160	V	V	11.5
Toluene	50.0	876	662	721	0.000	0.000	400	10.0-156	V	V	8.53
Xylenes, Total	150	1620	1340	1440	0.000	0.000	400	10.0-160	V	V	7.19
(S) Toluene-d8			105	106	75.0-131						
(S) 4-Bromofluorobenzene			107	120	67.0-138						
(S) 1,2-Dichloroethane-d4			119	114	70.0-130						

.

QUALITY CONTROL SUMMARY

Method Blank (MB)

(MB) R3506611-3 03/07/20 21:08

Analyte	MB Result mg/kg	<u>MB Qualifier</u>	MB MDL mg/kg	MB RDL mg/kg
Benzene	U		0.000400	0.00100
Ethylbenzene	U		0.000530	0.00250
Toluene	U		0.00125	0.00500
Xylenes, Total	U		0.00478	0.00650
(S) Toluene-d8	102		75.0-131	
(S) 4-Bromofluorobenzene	103		67.0-138	
(S) 1,2-Dichloroethane-d4	89.5		70.0-130	

¹Cp²Tc³Ss⁴Cn⁵Sr⁶Qc⁷Gl⁸Al⁹Sc

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

(LCS) R3506611-1 03/07/20 19:47 • (LCSD) R3506611-2 03/07/20 20:07

Analyte	Spike Amount mg/kg	LCS Result mg/kg	LCSD Result mg/kg	LCS Rec. %	LCSD Rec. %	Rec. Limits	<u>LCS Qualifier</u>	<u>LCSD Qualifier</u>	RPD	RPD Limits
Benzene	0.125	0.122	0.121	97.6	96.8	70.0-123			0.823	20
Ethylbenzene	0.125	0.105	0.105	84.0	84.0	74.0-126			0.000	20
Toluene	0.125	0.109	0.109	87.2	87.2	75.0-121			0.000	20
Xylenes, Total	0.375	0.306	0.308	81.6	82.1	72.0-127			0.651	20
(S) Toluene-d8				101	99.8	75.0-131				
(S) 4-Bromofluorobenzene				105	105	67.0-138				
(S) 1,2-Dichloroethane-d4				93.2	91.0	70.0-130				

QUALITY CONTROL SUMMARY

[L1196380-17](#)

Method Blank (MB)

(MB) R3507671-3 03/09/20 10:48

Analyte	MB Result mg/kg	<u>MB Qualifier</u>	MB MDL mg/kg	MB RDL mg/kg
Benzene	U		0.000400	0.00100
Ethylbenzene	U		0.000530	0.00250
Toluene	U		0.00125	0.00500
Xylenes, Total	U		0.00478	0.00650
(S) Toluene-d8	105		75.0-131	
(S) 4-Bromofluorobenzene	101		67.0-138	
(S) 1,2-Dichloroethane-d4	98.3		70.0-130	

¹Cp²Tc³Ss⁴Cn⁵Sr⁶Qc⁷Gl⁸Al⁹Sc

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

(LCS) R3507671-1 03/09/20 09:32 • (LCSD) R3507671-2 03/09/20 09:51

Analyte	Spike Amount mg/kg	LCS Result mg/kg	LCSD Result mg/kg	LCS Rec. %	LCSD Rec. %	Rec. Limits	<u>LCS Qualifier</u>	<u>LCSD Qualifier</u>	RPD	RPD Limits
Benzene	0.125	0.103	0.102	82.4	81.6	70.0-123			0.976	20
Ethylbenzene	0.125	0.107	0.105	85.6	84.0	74.0-126			1.89	20
Toluene	0.125	0.0999	0.0972	79.9	77.8	75.0-121			2.74	20
Xylenes, Total	0.375	0.347	0.342	92.5	91.2	72.0-127			1.45	20
(S) Toluene-d8			100	97.2	75.0-131					
(S) 4-Bromofluorobenzene			103	104	67.0-138					
(S) 1,2-Dichloroethane-d4			104	106	70.0-130					

QUALITY CONTROL SUMMARY

Method Blank (MB)

(MB) R3508061-3 03/09/20 12:12

Analyte	MB Result mg/kg	<u>MB Qualifier</u>	MB MDL mg/kg	MB RDL mg/kg
Benzene	U		0.000400	0.00100
Ethylbenzene	U		0.000530	0.00250
Toluene	U		0.00125	0.00500
Xylenes, Total	U		0.00478	0.00650
(S) Toluene-d8	101		75.0-131	
(S) 4-Bromofluorobenzene	103		67.0-138	
(S) 1,2-Dichloroethane-d4	88.4		70.0-130	

¹Cp²Tc³Ss⁴Cn⁵Sr⁶Qc⁷Gl⁸Al⁹Sc

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

(LCS) R3508061-1 03/09/20 10:51 • (LCSD) R3508061-2 03/09/20 11:11

Analyte	Spike Amount mg/kg	LCS Result mg/kg	LCSD Result mg/kg	LCS Rec. %	LCSD Rec. %	Rec. Limits	<u>LCS Qualifier</u>	<u>LCSD Qualifier</u>	RPD	RPD Limits
Benzene	0.125	0.127	0.131	102	105	70.0-123			3.10	20
Ethylbenzene	0.125	0.112	0.113	89.6	90.4	74.0-126			0.889	20
Toluene	0.125	0.116	0.118	92.8	94.4	75.0-121			1.71	20
Xylenes, Total	0.375	0.332	0.329	88.5	87.7	72.0-127			0.908	20
(S) Toluene-d8				102	101	75.0-131				
(S) 4-Bromofluorobenzene				104	104	67.0-138				
(S) 1,2-Dichloroethane-d4				90.9	91.1	70.0-130				

QUALITY CONTROL SUMMARY

Method Blank (MB)

(MB) R3507001-1 03/10/20 01:41

Analyte	MB Result mg/kg	<u>MB Qualifier</u>	MB MDL mg/kg	MB RDL mg/kg
C10-C28 Diesel Range	U		1.61	4.00
C28-C40 Oil Range	U		0.274	4.00
(S) o-Terphenyl	69.5			18.0-148

¹Cp²Tc³Ss⁴Cn⁵Sr⁶Qc⁷Gl⁸Al⁹Sc

Laboratory Control Sample (LCS)

(LCS) R3507001-2 03/10/20 01:54

Analyte	Spike Amount mg/kg	LCS Result mg/kg	LCS Rec. %	Rec. Limits %	<u>LCS Qualifier</u>
C10-C28 Diesel Range	50.0	38.0	76.0	50.0-150	
(S) o-Terphenyl			73.1	18.0-148	

L1196316-01 Original Sample (OS) • Matrix Spike (MS) • Matrix Spike Duplicate (MSD)

(OS) L1196316-01 03/10/20 02:57 • (MS) R3507001-3 03/10/20 03:10 • (MSD) R3507001-4 03/10/20 03:22

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 %	<u>MS Qualifier</u>	<u>MSD Qualifier</u>	RPD	RPD Limits
C10-C28 Diesel Range	57.9	U	34.9	37.1	60.3	63.6	1	50.0-150			5.96	20
(S) o-Terphenyl					59.0	61.3		18.0-148				

QUALITY CONTROL SUMMARY

L1196380-13,14,15,16,17,18,19,20,21,22,23,24,25

Method Blank (MB)

(MB) R3507564-1 03/11/20 11:18

Analyte	MB Result mg/kg	<u>MB Qualifier</u>	MB MDL mg/kg	MB RDL mg/kg
C10-C28 Diesel Range	U		1.61	4.00
C28-C40 Oil Range	U		0.274	4.00
(S) o-Terphenyl	64.4			18.0-148

¹Cp²Tc³Ss⁴Cn⁵Sr⁶Qc⁷Gl⁸Al⁹Sc

Laboratory Control Sample (LCS)

(LCS) R3507564-2 03/11/20 11:30

Analyte	Spike Amount mg/kg	LCS Result mg/kg	LCS Rec. %	Rec. Limits %	<u>LCS Qualifier</u>
C10-C28 Diesel Range	50.0	36.1	72.2	50.0-150	
(S) o-Terphenyl			78.2	18.0-148	

L1196380-13 Original Sample (OS) • Matrix Spike (MS) • Matrix Spike Duplicate (MSD)

(OS) L1196380-13 03/11/20 19:35 • (MS) R3507564-3 03/11/20 19:47 • (MSD) R3507564-4 03/11/20 20:00

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 %	<u>MS Qualifier</u>	<u>MSD Qualifier</u>	RPD	RPD Limits
C10-C28 Diesel Range	50.5	1.79	35.9	35.6	67.7	67.1	1	50.0-150			0.846	20
(S) o-Terphenyl					60.1	65.0		18.0-148				

QUALITY CONTROL SUMMARY

Method Blank (MB)

(MB) R3507565-1 03/11/20 10:52

Analyte	MB Result mg/kg	<u>MB Qualifier</u>	MB MDL mg/kg	MB RDL mg/kg
C10-C28 Diesel Range	U		1.61	4.00
C28-C40 Oil Range	0.551	J	0.274	4.00
(S) o-Terphenyl	59.0			18.0-148

¹Cp²Tc³Ss⁴Cn⁵Sr⁶Qc⁷Gl⁸Al⁹Sc

Laboratory Control Sample (LCS)

(LCS) R3507565-2 03/11/20 11:05

Analyte	Spike Amount mg/kg	LCS Result mg/kg	LCS Rec. %	Rec. Limits %	<u>LCS Qualifier</u>
C10-C28 Diesel Range	50.0	35.6	71.2	50.0-150	
(S) o-Terphenyl		77.9		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].	1 Cp
MDL	Method Detection Limit.	2 Tc
MDL (dry)	Method Detection Limit.	3 Ss
ND	Not detected at the Reporting Limit (or MDL where applicable).	4 Cn
RDL	Reported Detection Limit.	5 Sr
RDL (dry)	Reported Detection Limit.	6 Qc
Rec.	Recovery.	7 GI
RPD	Relative Percent Difference.	8 AI
SDG	Sample Delivery Group.	9 Sc
(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.
J7	Surrogate recovery cannot be used for control limit evaluation due to dilution.
P1	RPD value not applicable for sample concentrations less than 5 times the reporting limit.
V	The sample concentration is too high to evaluate accurate spike recoveries.

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

- * Not all certifications held by the laboratory are applicable to the results reported in the attached report.
- * Accreditation is only applicable to the test methods specified on each scope of accreditation held by Pace National.

State Accreditations

Alabama	40660
Alaska	17-026
Arizona	AZ0612
Arkansas	88-0469
California	2932
Colorado	TN00003
Connecticut	PH-0197
Florida	E87487
Georgia	NELAP
Georgia ¹	923
Idaho	TN00003
Illinois	200008
Indiana	C-TN-01
Iowa	364
Kansas	E-10277
Kentucky ¹⁶	90010
Kentucky ²	16
Louisiana	AI30792
Louisiana ¹	LA180010
Maine	TN0002
Maryland	324
Massachusetts	M-TN003
Michigan	9958
Minnesota	047-999-395
Mississippi	TN00003
Missouri	340
Montana	CERT0086

Nebraska	NE-OS-15-05
Nevada	TN-03-2002-34
New Hampshire	2975
New Jersey-NELAP	TN002
New Mexico ¹	n/a
New York	11742
North Carolina	Env375
North Carolina ¹	DW21704
North Carolina ³	41
North Dakota	R-140
Ohio-VAP	CL0069
Oklahoma	9915
Oregon	TN200002
Pennsylvania	68-02979
Rhode Island	LA000356
South Carolina	84004
South Dakota	n/a
Tennessee ¹⁴	2006
Texas	T104704245-18-15
Texas ⁵	LAB0152
Utah	TN00003
Vermont	VT2006
Virginia	460132
Washington	C847
West Virginia	233
Wisconsin	9980939910
Wyoming	A2LA

Third Party Federal Accreditations

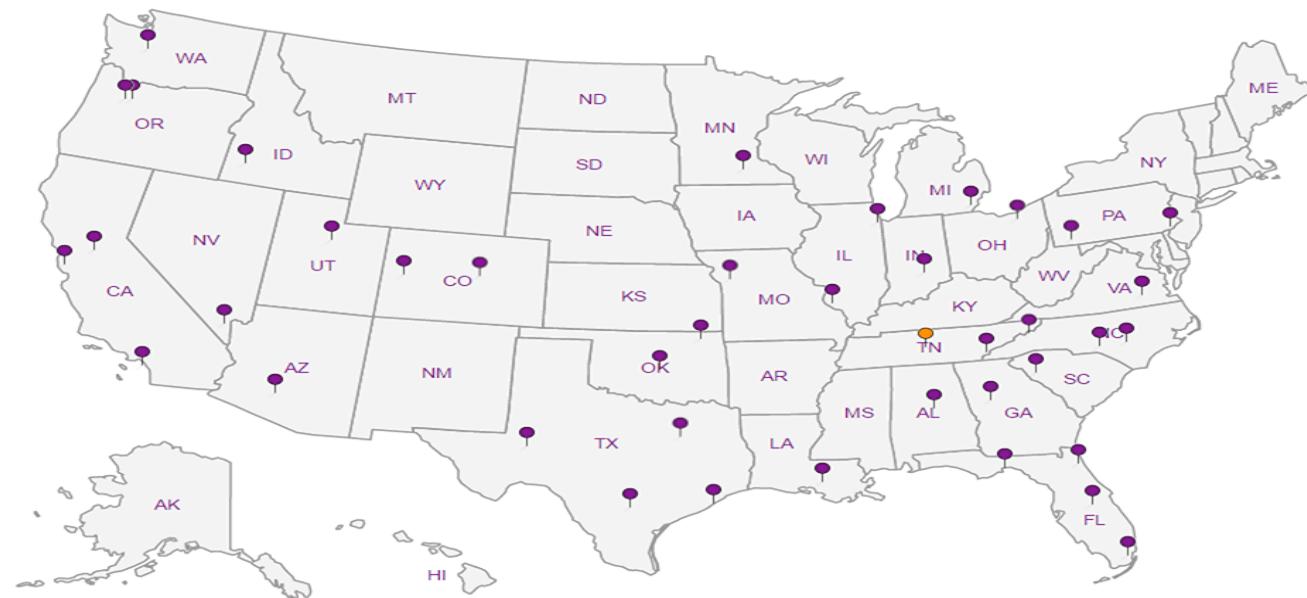
A2LA – ISO 17025	1461.01
A2LA – ISO 17025 ⁵	1461.02
Canada	1461.01
EPA-Crypto	TN00003

AIHA-LAP,LLC EMLAP	100789
DOD	1461.01
USDA	P330-15-00234

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

Our Locations

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



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



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: COP 2-C Header Release

Contact Info: Email: christian.llull@tetrtech.com
 Phone: (512) 338-1667

Project Location:
 (county, state) Lea County, New Mexico

Project #: 212C-MD-02119

Invoice to: Accounts Payable
 901 West Wall Street, Suite 100 Midland, Texas 79701

Receiving Laboratory: Pace Analytical

Sampler Signature: Adrian

Comments: COPTETRA Acctnum

J044

LAB # LAB USE ONLY	SAMPLE IDENTIFICATION L1196380	SAMPLING		MATRIX	PRESERVATIVE METHOD			# CONTAINERS	FILTERED (Y/N)	
		YEAR: 2020		WATER	SOIL	HCL	HNO ₃			
		DATE	TIME							
-01	T-1 (1'-2')	03/03/20	1100	X		X		1	N	X
-02	T-1 (3'-4')	03/03/20	1110	X		X		1	N	X
-03	T-1 (5'-6')	03/03/20	1120	X		X		1	N	X
-04	AH-1S (0'-1')	03/03/20	1130	X		X		1	N	X
-05	AH-1S (3'-4')	03/03/20	1150	X		X		1	N	X
-06	AH-1E (0'-1')	03/03/20	1200	X		X		1	N	X
-07	AH-1E (3'-4')	03/03/20	1210	X		X		1	N	X
-08	AH-1W (0'-1')	03/03/20	1220	X		X		1	N	X
-09	AH-1W (3'-4')	03/03/20	1300	X		X		1	N	X
-10	T-2 (1'-2')	03/03/20	1310	X		X		1	N	X

Relinquished by: Date: Time: Received by: Date: Time:

3-5-20 14:30

Kathleen 3-5-20 14:30

Relinquished by: Date: Time: Received by: Date: Time:

3-5-20 17:30

Sara 3-5-20 17:30

Relinquished by: Date: Time: Received by: Date: Time:

3/6/20 8:00

ORIGINAL COPY

LAB USE ONLY	<input checked="" type="checkbox"/> Standard
	<input type="checkbox"/> RUSH: Same Day 24 hr. 48 hr. 72 hr.
	<input type="checkbox"/> Rush Charges Authorized
	<input type="checkbox"/> Special Report Limits or TRRP Report
Sample Temperature	(Circle) HAND DELIVERED FEDEX UPS Tracking #:

RAD SCREEN: <0.5 mR/hr

.9+.2=1.1 uG



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		ANALYSIS REQUEST (Circle or Specify Method No.)																																										
Project Name: COP 2-C Header Release		Contact Info: Email: christian.llull@tetrtech.com Phone: (512) 338-1667																																												
Project Location: (county, state) Lea County, New Mexico		Project #: 212C-MD-02119																																												
Invoice to: Accounts Payable 901 West Wall Street, Suite 100 Midland, Texas 79701																																														
Receiving Laboratory: Pace Analytical		Sampler Signature: Adrian																																												
Comments: COPTETRA Acctnum																																														
LAB # (LAB USE ONLY)	SAMPLE IDENTIFICATION <i>L1196380</i>	SAMPLING		MATRIX	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 Volatiles		TCLP Semi Volatiles		RCI		GC/MS Vol. 8260B / 624		GC/MS Semi. Vol. 8270C/625		PCBs 8082 / 608		NORM		PLM (Asbestos)		Chloride 300.0		General Water Chemistry (see attached list)		Anion/Cation Balance		TPH 8015R		HOLD	
		YEAR: 2020			DATE	TIME			WATER	SOIL	HCL	HNO ₃	ICE	NONE	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 Volatiles	TCLP Semi Volatiles	RCI	GC/MS Vol. 8260B / 624	GC/MS Semi. Vol. 8270C/625	PCBs 8082 / 608	NORM	PLM (Asbestos)	Chloride 300.0	General Water Chemistry (see attached list)	Anion/Cation Balance	TPH 8015R	HOLD													
-11	T-2 (3'-4')	03/03/20	1320	X			X			1	N	X	X	X																																
-12	T-2 (5'-6')	03/03/20	1330	X			X			1	N	X	X	X																																
-13	AH-2W (0'-1')	03/03/20	1400	X			X			1	N	X	X	X																																
-14	AH-2W (3'-4')	03/03/20	1410	X			X			1	N	X	X	X																																
-15	AH-2E (0'-1')	03/03/20	1420	X			X			1	N	X	X	X																																
-16	AH-2E (3'-4')	03/03/20	1430	X			X			1	N	X	X	X																																
-17	T-3 (1'-2')	03/04/20	1000	X			X			1	N	X	X	X																																
-18	T-3 (3'-4')	03/04/20	1010	X			X			1	N	X	X	X																																
-19	T-3 (6'-7')	03/04/20	1030	X			X			1	N	X	X	X																																
-20	T-3 (10'-11')	03/04/20	1050	X			X			1	N	X	X	X																																
Relinquished by: <i>Joe Yer</i>		Date: 3-5-20	Time: 14:30	Received by: <i>Kal Llull</i>		Date: 3-5-20	Time: 14:30	Sample Temperature		LAB USE ONLY		REMARKS:																																		
Relinquished by: <i>Kal Llull</i>		Date: 3-5-20	Time: 17:30	Received by: <i>Sofia</i>		Date: 3-5-20	Time: 17:30							<input checked="" type="checkbox"/> Standard <input type="checkbox"/> RUSH: Same Day 24 hr. 48 hr. 72 hr. <input type="checkbox"/> Rush Charges Authorized <input type="checkbox"/> Special Report Limits or TRRP Report																																
Relinquished by:		Date:	Time:	Received by: <i>W Taylor</i>		Date: 3/6/20	Time: 8:00																																							
ORIGINAL COPY														(Circle) HAND DELIVERED FEDEX UPS Tracking #:																																

 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: COP 2-C Header Release		Contact Info: Email: christian.llull@tetrtech.com Phone: (512) 338-1667												
Project Location: (county, state) Lea County, New Mexico		Project #: 212C-MD-02119												
Invoice to: Accounts Payable 901 West Wall Street, Suite 100 Midland, Texas 79701														
Receiving Laboratory: Pace Analytical		Sampler Signature: Adrian												
Comments: COPTETRA Acctnum														
LAB # (LAB USE ONLY)	SAMPLE IDENTIFICATION L1196380		SAMPLING	MATRIX	PRESERVATIVE METHOD	# CONTAINERS	FILTERED (Y/N)	ANALYSIS REQUEST (Circle or Specify Method No.)						
			YEAR: 2020		WATER			SOIL	HCL	HNO ₃	ICE	NONE	BTEX 8021B BTEX 8260B	TPH TX1005 (Ext to C35)
			DATE	TIME									TPH 8015M (GRO - DRO - ORO + MRO)	PAH 8270C
-21	AH-3E (0'-1')	03/04/20	1130	X		X		X	X	Total Metals Ag As Ba Cd Cr Pb Se Hg				
-22	AH-3E (3'-4')	03/04/20	1150	X		X		X	X	TCLP Volatiles				
-23	T-4 (1'-2')	03/04/20	1300	X		X		X		RCI				
-24	T-4 (5'-6')	03/04/20	1330	X		X		X		GC/MS Vol. 8260B / 624				
-25	T-4 (8'-9')	03/04/20	1400	X		X		X		GC/MS Semi. Vol. 8270C/625				
										PCBs 8082 / 608				
										NORM				
										PLM (Asbestos)				
										Chloride 300.0				
										Chloride Sulfate TDS				
										General Water Chemistry (see attached list)				
										Anion/Cation Balance				
										TPH 8015R				
										HOLD				
Relinquished by:		Date: 3-5-20	Time: 3-5-14:30	Received by:		Date: 3-5-20	Time: 14:30	LAB USE ONLY Sample Temperature	REMARKS:					
Relinquished by:		Date: 3-5-20	Time: 17:30	Received by:		Date: 3-5-20	Time: 17:30		<input checked="" type="checkbox"/> Standard					
Relinquished by:		Date: 3-6-20	Time: 8:00	Received by:		Date: 3-6-20	Time: 8:00		<input type="checkbox"/> RUSH: Same Day 24 hr. 48 hr. 72 hr.	<input type="checkbox"/> Rush Charges Authorized	<input type="checkbox"/> Special Report Limits or TRRP Report			
(Circle) HAND DELIVERED FEDEX UPS Tracking #:														

Pace Analytical National Center for Testing & Innovation
Cooler Receipt Form

Client:	L1196380		
Cooler Received/Opened On:	3 / 6 / 20	Temperature:	17/
Received By:	Willie Taylor	800	
Signature:	Willie Taylor		
Receipt Check List	NP	Yes	No
COC Seal Present / Intact?	<input checked="" type="checkbox"/>		
COC Signed / Accurate?		<input checked="" type="checkbox"/>	
Bottles arrive intact?		<input checked="" type="checkbox"/>	
Correct bottles used?		<input checked="" type="checkbox"/>	
Sufficient volume sent?		<input checked="" type="checkbox"/>	
If Applicable			
VOA Zero headspace?			
Preservation Correct / Checked?			



ANALYTICAL REPORT

March 24, 2020

¹Cp²Tc³Ss⁴Cn⁵Sr⁶Qc⁷Gl⁸Al⁹Sc

ConocoPhillips - Tetra Tech

Sample Delivery Group: L1199114
 Samples Received: 03/13/2020
 Project Number: 212C-MD-02119
 Description: COP MCA 2-C Header Release
 Site: LEA COUNTY, NEW MEXICO
 Report To:
 Christian Llull
 901 West Wall
 Suite 100
 Midland, TX 79701

Entire Report Reviewed By:

Chris McCord
Project Manager

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

Cp: Cover Page	1
Tc: Table of Contents	2
Ss: Sample Summary	4
Cn: Case Narrative	16
Sr: Sample Results	17
AH-4E (0-1') L1199114-01	17
AH-4E (3-4') L1199114-02	18
AH-4W (0-1') L1199114-03	19
AH-4W (3-4') L1199114-04	20
T-5 (1-2') L1199114-05	21
T-5 (3-4') L1199114-06	22
T-5 (5-6') L1199114-07	23
T-5 (7-8') L1199114-08	24
AH-5S (0-1') L1199114-09	25
AH-5S (3-4') L1199114-10	26
AH-5E (0-1') L1199114-11	27
AH-5E (3-4') L1199114-12	28
AH-5W (0-1') L1199114-13	29
AH-5W (3-4) L1199114-14	30
T-6 (1-2') L1199114-15	31
T-6 (9-10') L1199114-16	32
AH-6E (0-1') L1199114-17	33
AH-6E (3-4') L1199114-18	34
AH-6W (0-1') L1199114-19	35
AH-6W (3-4') L1199114-20	36
AH-7W (0-1') L1199114-21	37
AH-7W (3-4') L1199114-22	38
T-7 (1-2') L1199114-23	39
T-7 (17.5') L1199114-24	40
AH-7E (0-1') L1199114-25	41
AH-7E (3-4') L1199114-26	42
AH-8N (0-1') L1199114-27	43
AH-8N (3-4') L1199114-28	44
T-8 (1-2') L1199114-29	45
T-8 (3-4') L1199114-30	46
T-8 (7-8') L1199114-31	47
T-8 (9-10') L1199114-32	48
AH-8E (0-1') L1199114-33	49
AH-8E (3-4') L1199114-34	50
AH-8W (0-1') L1199114-35	51



AH-8W (3-4')	L1199114-36	52	¹ Cp
AH-9E (0-1)	L1199114-37	53	² Tc
AH-9E (3-4')	L1199114-38	54	³ Ss
T-9 (1-2')	L1199114-39	55	⁴ Cn
T-9 (3-4')	L1199114-40	56	⁵ Sr
T-9 (7-8')	L1199114-41	57	⁶ Qc
T-9 (9-10')	L1199114-42	58	⁷ Gl
AH-9W (0-1')	L1199114-43	59	⁸ Al
AH-9W (3-4')	L1199114-44	60	⁹ Sc
AH-10E (0-1')	L1199114-45	61	
AH-10E (3-4')	L1199114-46	62	
AH-10W (0-1')	L1199114-47	63	
AH-10W (3-4')	L1199114-48	64	
T-10 (1-2')	L1199114-49	65	
T-10 (14-15')	L1199114-50	66	
T-9 (16'-17')	L1199114-51	67	
AH-11W (0-1')	L1199114-52	68	
AH-11W (3-4')	L1199114-53	69	
AH-11E (0-1')	L1199114-54	70	
AH-11E (3-4')	L1199114-55	71	
T-11 (1-2')	L1199114-56	72	
T-11 (14-15')	L1199114-57	73	
Qc: Quality Control Summary		74	
Total Solids by Method 2540 G-2011		74	
Wet Chemistry by Method 300.0		80	
Volatile Organic Compounds (GC) by Method 8015D/GRO		84	
Volatile Organic Compounds (GC/MS) by Method 8260B		92	
Semi-Volatile Organic Compounds (GC) by Method 8015		96	
Gl: Glossary of Terms		100	
Al: Accreditations & Locations		101	
Sc: Sample Chain of Custody		102	

AH-4E (0-1') L1199114-01 Solid

Collected by Adrian
03/03/20 11:00
Received date/time 03/13/20 08:00

Method	Batch	Dilution	Preparation date/time	Analysis date/time	Analyst	Location
Total Solids by Method 2540 G-2011	WG1445642	1	03/19/20 01:41	03/19/20 01:48	KBC	Mt. Juliet, TN
Wet Chemistry by Method 300.0	WG1444779	1	03/18/20 02:57	03/18/20 20:10	ST	Mt. Juliet, TN
Volatile Organic Compounds (GC) by Method 8015D/GRO	WG1445119	1	03/16/20 08:41	03/17/20 00:27	DWR	Mt. Juliet, TN
Volatile Organic Compounds (GC/MS) by Method 8260B	WG1445122	1	03/16/20 08:41	03/17/20 00:32	DWR	Mt. Juliet, TN
Semi-Volatile Organic Compounds (GC) by Method 8015	WG1445151	1	03/17/20 16:06	03/18/20 21:53	FM	Mt. Juliet, TN

AH-4E (3-4') L1199114-02 Solid

Collected by Adrian
03/03/20 11:10
Received date/time 03/13/20 08:00

Method	Batch	Dilution	Preparation date/time	Analysis date/time	Analyst	Location
Total Solids by Method 2540 G-2011	WG1445642	1	03/19/20 01:41	03/19/20 01:48	KBC	Mt. Juliet, TN
Wet Chemistry by Method 300.0	WG1444779	1	03/18/20 02:57	03/18/20 20:20	ST	Mt. Juliet, TN
Volatile Organic Compounds (GC) by Method 8015D/GRO	WG1445448	1	03/16/20 08:41	03/17/20 13:18	ADM	Mt. Juliet, TN
Volatile Organic Compounds (GC/MS) by Method 8260B	WG1445122	1	03/16/20 08:41	03/17/20 00:52	DWR	Mt. Juliet, TN
Semi-Volatile Organic Compounds (GC) by Method 8015	WG1445151	1	03/17/20 16:06	03/18/20 22:05	FM	Mt. Juliet, TN

AH-4W (0-1') L1199114-03 Solid

Collected by Adrian
03/03/20 11:20
Received date/time 03/13/20 08:00

Method	Batch	Dilution	Preparation date/time	Analysis date/time	Analyst	Location
Total Solids by Method 2540 G-2011	WG1445642	1	03/19/20 01:41	03/19/20 01:48	KBC	Mt. Juliet, TN
Wet Chemistry by Method 300.0	WG1444779	1	03/18/20 02:57	03/18/20 20:29	ST	Mt. Juliet, TN
Volatile Organic Compounds (GC) by Method 8015D/GRO	WG1445119	1	03/16/20 08:41	03/17/20 01:09	DWR	Mt. Juliet, TN
Volatile Organic Compounds (GC/MS) by Method 8260B	WG1445122	1	03/16/20 08:41	03/17/20 01:12	DWR	Mt. Juliet, TN
Semi-Volatile Organic Compounds (GC) by Method 8015	WG1445151	1	03/17/20 16:06	03/18/20 21:40	FM	Mt. Juliet, TN

AH-4W (3-4') L1199114-04 Solid

Collected by Adrian
03/03/20 11:30
Received date/time 03/13/20 08:00

Method	Batch	Dilution	Preparation date/time	Analysis date/time	Analyst	Location
Total Solids by Method 2540 G-2011	WG1445642	1	03/19/20 01:41	03/19/20 01:48	KBC	Mt. Juliet, TN
Wet Chemistry by Method 300.0	WG1444779	1	03/18/20 02:57	03/18/20 20:39	ST	Mt. Juliet, TN
Volatile Organic Compounds (GC) by Method 8015D/GRO	WG1445448	1	03/16/20 08:41	03/17/20 13:39	ADM	Mt. Juliet, TN
Volatile Organic Compounds (GC/MS) by Method 8260B	WG1445122	1	03/16/20 08:41	03/17/20 01:32	DWR	Mt. Juliet, TN
Semi-Volatile Organic Compounds (GC) by Method 8015	WG1445151	1	03/17/20 16:06	03/17/20 22:04	KME	Mt. Juliet, TN

T-5 (1-2') L1199114-05 Solid

Collected by Adrian
03/05/20 11:50
Received date/time 03/13/20 08:00

Method	Batch	Dilution	Preparation date/time	Analysis date/time	Analyst	Location
Total Solids by Method 2540 G-2011	WG1445642	1	03/19/20 01:41	03/19/20 01:48	KBC	Mt. Juliet, TN
Wet Chemistry by Method 300.0	WG1444779	1	03/18/20 02:57	03/18/20 20:48	ST	Mt. Juliet, TN
Volatile Organic Compounds (GC) by Method 8015D/GRO	WG1445119	1	03/16/20 08:41	03/17/20 01:50	DWR	Mt. Juliet, TN
Volatile Organic Compounds (GC/MS) by Method 8260B	WG1445122	1	03/16/20 08:41	03/17/20 01:52	DWR	Mt. Juliet, TN
Semi-Volatile Organic Compounds (GC) by Method 8015	WG1445151	1	03/17/20 16:06	03/17/20 21:00	KME	Mt. Juliet, TN

1 Cp

2 Tc

3 Ss

4 Cn

5 Sr

6 Qc

7 Gl

8 Al

9 Sc

T-5 (3-4') L1199114-06 Solid

Method	Batch	Dilution	Preparation date/time	Analysis date/time	Analyst	Location
Total Solids by Method 2540 G-2011	WG1445642	1	03/19/20 01:41	03/19/20 01:48	KBC	Mt. Juliet, TN
Wet Chemistry by Method 300.0	WG1444780	1	03/18/20 08:48	03/18/20 10:55	GB	Mt. Juliet, TN
Volatile Organic Compounds (GC) by Method 8015D/GRO	WG1445119	1	03/16/20 08:41	03/17/20 02:10	DWR	Mt. Juliet, TN
Volatile Organic Compounds (GC/MS) by Method 8260B	WG1445122	1.04	03/16/20 08:41	03/17/20 02:13	DWR	Mt. Juliet, TN
Semi-Volatile Organic Compounds (GC) by Method 8015	WG1445151	1	03/17/20 16:06	03/17/20 21:13	KME	Mt. Juliet, TN

T-5 (5-6') L1199114-07 Solid

Method	Batch	Dilution	Preparation date/time	Analysis date/time	Analyst	Location
Total Solids by Method 2540 G-2011	WG1445642	1	03/19/20 01:41	03/19/20 01:48	KBC	Mt. Juliet, TN
Wet Chemistry by Method 300.0	WG1444780	5	03/18/20 08:48	03/18/20 11:14	GB	Mt. Juliet, TN
Volatile Organic Compounds (GC) by Method 8015D/GRO	WG1445448	1	03/16/20 08:41	03/17/20 13:59	ADM	Mt. Juliet, TN
Volatile Organic Compounds (GC/MS) by Method 8260B	WG1445122	1	03/16/20 08:41	03/17/20 02:33	DWR	Mt. Juliet, TN
Semi-Volatile Organic Compounds (GC) by Method 8015	WG1445151	1	03/17/20 16:06	03/17/20 20:35	KME	Mt. Juliet, TN

T-5 (7-8') L1199114-08 Solid

Method	Batch	Dilution	Preparation date/time	Analysis date/time	Analyst	Location
Total Solids by Method 2540 G-2011	WG1445642	1	03/19/20 01:41	03/19/20 01:48	KBC	Mt. Juliet, TN
Wet Chemistry by Method 300.0	WG1444780	1	03/18/20 08:48	03/18/20 11:23	GB	Mt. Juliet, TN
Volatile Organic Compounds (GC) by Method 8015D/GRO	WG1445119	1	03/16/20 08:41	03/17/20 02:52	DWR	Mt. Juliet, TN
Volatile Organic Compounds (GC/MS) by Method 8260B	WG1445122	1	03/16/20 08:41	03/17/20 02:53	DWR	Mt. Juliet, TN
Semi-Volatile Organic Compounds (GC) by Method 8015	WG1445151	1	03/17/20 16:06	03/17/20 20:48	KME	Mt. Juliet, TN

AH-5S (0-1') L1199114-09 Solid

Method	Batch	Dilution	Preparation date/time	Analysis date/time	Analyst	Location
Total Solids by Method 2540 G-2011	WG1445643	1	03/19/20 01:30	03/19/20 01:36	KBC	Mt. Juliet, TN
Wet Chemistry by Method 300.0	WG1444780	1	03/18/20 08:48	03/18/20 11:33	GB	Mt. Juliet, TN
Volatile Organic Compounds (GC) by Method 8015D/GRO	WG1445119	1	03/16/20 08:41	03/17/20 03:12	DWR	Mt. Juliet, TN
Volatile Organic Compounds (GC/MS) by Method 8260B	WG1445122	1	03/16/20 08:41	03/17/20 03:13	DWR	Mt. Juliet, TN
Semi-Volatile Organic Compounds (GC) by Method 8015	WG1445151	20	03/17/20 16:06	03/17/20 23:32	KME	Mt. Juliet, TN

AH-5S (3-4') L1199114-10 Solid

Method	Batch	Dilution	Preparation date/time	Analysis date/time	Analyst	Location
Total Solids by Method 2540 G-2011	WG1445643	1	03/19/20 01:30	03/19/20 01:36	KBC	Mt. Juliet, TN
Wet Chemistry by Method 300.0	WG1444780	1	03/18/20 08:48	03/18/20 11:42	GB	Mt. Juliet, TN
Volatile Organic Compounds (GC) by Method 8015D/GRO	WG1445448	1	03/16/20 08:41	03/17/20 14:20	ADM	Mt. Juliet, TN
Volatile Organic Compounds (GC/MS) by Method 8260B	WG1445122	1	03/16/20 08:41	03/17/20 03:34	DWR	Mt. Juliet, TN
Semi-Volatile Organic Compounds (GC) by Method 8015	WG1445151	20	03/17/20 16:06	03/17/20 23:57	KME	Mt. Juliet, TN

1 Cp

2 Tc

3 Ss

4 Cn

5 Sr

6 Qc

7 Gl

8 Al

9 Sc

AH-5E (0-1') L1199114-11 Solid

Collected by Adrian
Collected date/time 03/05/20 11:00
Received date/time 03/13/20 08:00

Method	Batch	Dilution	Preparation date/time	Analysis date/time	Analyst	Location
Total Solids by Method 2540 G-2011	WG1445643	1	03/19/20 01:30	03/19/20 01:36	KBC	Mt. Juliet, TN
Wet Chemistry by Method 300.0	WG1444780	1	03/18/20 08:48	03/18/20 11:52	GB	Mt. Juliet, TN
Volatile Organic Compounds (GC) by Method 8015D/GRO	WG1445119	1	03/16/20 08:41	03/17/20 03:53	DWR	Mt. Juliet, TN
Volatile Organic Compounds (GC/MS) by Method 8260B	WG1445122	1	03/16/20 08:41	03/17/20 03:54	DWR	Mt. Juliet, TN
Semi-Volatile Organic Compounds (GC) by Method 8015	WG1445151	1	03/17/20 16:06	03/18/20 22:18	FM	Mt. Juliet, TN

¹ Cp² Tc³ Ss⁴ Cn⁵ Sr⁶ Qc⁷ Gl⁸ Al⁹ Sc

AH-5E (3-4') L1199114-12 Solid

Collected by Adrian
Collected date/time 03/05/20 11:10
Received date/time 03/13/20 08:00

Method	Batch	Dilution	Preparation date/time	Analysis date/time	Analyst	Location
Total Solids by Method 2540 G-2011	WG1445643	1	03/19/20 01:30	03/19/20 01:36	KBC	Mt. Juliet, TN
Wet Chemistry by Method 300.0	WG1444780	1	03/18/20 08:48	03/18/20 12:01	GB	Mt. Juliet, TN
Volatile Organic Compounds (GC) by Method 8015D/GRO	WG1445448	1	03/16/20 08:41	03/17/20 14:41	ADM	Mt. Juliet, TN
Volatile Organic Compounds (GC/MS) by Method 8260B	WG1445122	1	03/16/20 08:41	03/17/20 04:14	DWR	Mt. Juliet, TN
Semi-Volatile Organic Compounds (GC) by Method 8015	WG1445151	1	03/17/20 16:06	03/18/20 19:46	FM	Mt. Juliet, TN

AH-5W (0-1') L1199114-13 Solid

Collected by Adrian
Collected date/time 03/05/20 11:20
Received date/time 03/13/20 08:00

Method	Batch	Dilution	Preparation date/time	Analysis date/time	Analyst	Location
Total Solids by Method 2540 G-2011	WG1445643	1	03/19/20 01:30	03/19/20 01:36	KBC	Mt. Juliet, TN
Wet Chemistry by Method 300.0	WG1444780	1	03/18/20 08:48	03/18/20 12:49	GB	Mt. Juliet, TN
Volatile Organic Compounds (GC) by Method 8015D/GRO	WG1445119	1	03/16/20 08:41	03/17/20 04:34	DWR	Mt. Juliet, TN
Volatile Organic Compounds (GC/MS) by Method 8260B	WG1445122	1	03/16/20 08:41	03/17/20 04:35	DWR	Mt. Juliet, TN
Semi-Volatile Organic Compounds (GC) by Method 8015	WG1445151	1	03/17/20 16:06	03/18/20 19:59	FM	Mt. Juliet, TN

AH-5W (3-4) L1199114-14 Solid

Collected by Adrian
Collected date/time 03/05/20 11:30
Received date/time 03/13/20 08:00

Method	Batch	Dilution	Preparation date/time	Analysis date/time	Analyst	Location
Total Solids by Method 2540 G-2011	WG1445643	1	03/19/20 01:30	03/19/20 01:36	KBC	Mt. Juliet, TN
Wet Chemistry by Method 300.0	WG1444780	1	03/18/20 08:48	03/18/20 12:58	GB	Mt. Juliet, TN
Volatile Organic Compounds (GC) by Method 8015D/GRO	WG1445119	1	03/16/20 08:41	03/17/20 04:55	DWR	Mt. Juliet, TN
Volatile Organic Compounds (GC/MS) by Method 8260B	WG1445122	1	03/16/20 08:41	03/17/20 04:55	DWR	Mt. Juliet, TN
Semi-Volatile Organic Compounds (GC) by Method 8015	WG1445151	1	03/17/20 16:06	03/17/20 21:26	KME	Mt. Juliet, TN

T-6 (1-2') L1199114-15 Solid

Collected by Adrian
Collected date/time 03/05/20 11:50
Received date/time 03/13/20 08:00

Method	Batch	Dilution	Preparation date/time	Analysis date/time	Analyst	Location
Total Solids by Method 2540 G-2011	WG1445643	1	03/19/20 01:30	03/19/20 01:36	KBC	Mt. Juliet, TN
Wet Chemistry by Method 300.0	WG1444780	5	03/18/20 08:48	03/18/20 13:08	GB	Mt. Juliet, TN
Volatile Organic Compounds (GC) by Method 8015D/GRO	WG1445119	1	03/16/20 08:41	03/17/20 05:15	DWR	Mt. Juliet, TN
Volatile Organic Compounds (GC/MS) by Method 8260B	WG1445122	1	03/16/20 08:41	03/17/20 05:15	DWR	Mt. Juliet, TN
Semi-Volatile Organic Compounds (GC) by Method 8015	WG1445151	20	03/17/20 16:06	03/18/20 00:15	KME	Mt. Juliet, TN

T-6 (9-10') L1199114-16 Solid

Collected by Adrian
Collected date/time 03/05/20 12:20
Received date/time 03/13/20 08:00

Method	Batch	Dilution	Preparation date/time	Analysis date/time	Analyst	Location
Total Solids by Method 2540 G-2011	WG1445643	1	03/19/20 01:30	03/19/20 01:36	KBC	Mt. Juliet, TN
Wet Chemistry by Method 300.0	WG1444780	1	03/18/20 08:48	03/18/20 13:17	GB	Mt. Juliet, TN
Volatile Organic Compounds (GC) by Method 8015D/GRO	WG1445448	1	03/16/20 08:41	03/17/20 15:01	ADM	Mt. Juliet, TN
Volatile Organic Compounds (GC/MS) by Method 8260B	WG1445122	1	03/16/20 08:41	03/17/20 05:35	DWR	Mt. Juliet, TN
Semi-Volatile Organic Compounds (GC) by Method 8015	WG1445151	1	03/17/20 16:06	03/17/20 21:38	KME	Mt. Juliet, TN

AH-6E (0-1') L1199114-17 Solid

Collected by Adrian
Collected date/time 03/05/20 13:00
Received date/time 03/13/20 08:00

Method	Batch	Dilution	Preparation date/time	Analysis date/time	Analyst	Location
Total Solids by Method 2540 G-2011	WG1445643	1	03/19/20 01:30	03/19/20 01:36	KBC	Mt. Juliet, TN
Wet Chemistry by Method 300.0	WG1444780	1	03/18/20 08:48	03/18/20 13:27	GB	Mt. Juliet, TN
Volatile Organic Compounds (GC) by Method 8015D/GRO	WG1445119	1	03/16/20 08:41	03/17/20 07:01	DWR	Mt. Juliet, TN
Volatile Organic Compounds (GC/MS) by Method 8260B	WG1445122	1	03/16/20 08:41	03/17/20 05:56	DWR	Mt. Juliet, TN
Semi-Volatile Organic Compounds (GC) by Method 8015	WG1446556	1	03/19/20 06:41	03/19/20 23:30	KME	Mt. Juliet, TN

AH-6E (3-4') L1199114-18 Solid

Collected by Adrian
Collected date/time 03/05/20 13:10
Received date/time 03/13/20 08:00

Method	Batch	Dilution	Preparation date/time	Analysis date/time	Analyst	Location
Total Solids by Method 2540 G-2011	WG1445643	1	03/19/20 01:30	03/19/20 01:36	KBC	Mt. Juliet, TN
Wet Chemistry by Method 300.0	WG1444780	1	03/18/20 08:48	03/18/20 13:36	GB	Mt. Juliet, TN
Volatile Organic Compounds (GC) by Method 8015D/GRO	WG1445119	1	03/16/20 08:41	03/17/20 07:22	DWR	Mt. Juliet, TN
Volatile Organic Compounds (GC/MS) by Method 8260B	WG1445122	1	03/16/20 08:41	03/17/20 06:16	DWR	Mt. Juliet, TN
Semi-Volatile Organic Compounds (GC) by Method 8015	WG1446556	1	03/19/20 06:41	03/19/20 21:32	KME	Mt. Juliet, TN

AH-6W (0-1') L1199114-19 Solid

Collected by Adrian
Collected date/time 03/05/20 11:00
Received date/time 03/13/20 08:00

Method	Batch	Dilution	Preparation date/time	Analysis date/time	Analyst	Location
Total Solids by Method 2540 G-2011	WG1445647	1	03/19/20 01:21	03/19/20 01:27	KBC	Mt. Juliet, TN
Wet Chemistry by Method 300.0	WG1444780	1	03/18/20 08:48	03/18/20 13:46	GB	Mt. Juliet, TN
Volatile Organic Compounds (GC) by Method 8015D/GRO	WG1445119	1	03/16/20 08:41	03/17/20 07:42	DWR	Mt. Juliet, TN
Volatile Organic Compounds (GC/MS) by Method 8260B	WG1445122	1	03/16/20 08:41	03/17/20 06:36	DWR	Mt. Juliet, TN
Semi-Volatile Organic Compounds (GC) by Method 8015	WG1446556	1	03/19/20 06:41	03/19/20 21:45	KME	Mt. Juliet, TN

AH-6W (3-4') L1199114-20 Solid

Collected by Adrian
Collected date/time 03/05/20 11:10
Received date/time 03/13/20 08:00

Method	Batch	Dilution	Preparation date/time	Analysis date/time	Analyst	Location
Total Solids by Method 2540 G-2011	WG1445647	1	03/19/20 01:21	03/19/20 01:27	KBC	Mt. Juliet, TN
Wet Chemistry by Method 300.0	WG1444780	1	03/18/20 08:48	03/18/20 13:55	GB	Mt. Juliet, TN
Volatile Organic Compounds (GC) by Method 8015D/GRO	WG1445119	1	03/16/20 08:41	03/17/20 08:03	DWR	Mt. Juliet, TN
Volatile Organic Compounds (GC/MS) by Method 8260B	WG1445122	1	03/16/20 08:41	03/17/20 06:56	DWR	Mt. Juliet, TN
Semi-Volatile Organic Compounds (GC) by Method 8015	WG1446556	1	03/19/20 06:41	03/19/20 21:57	KME	Mt. Juliet, TN

1 Cp

2 Tc

3 Ss

4 Cn

5 Sr

6 Qc

7 Gl

8 Al

9 Sc

AH-7W (0-1') L1199114-21 Solid

Collected by Adrian
Collected date/time 03/05/20 11:20
Received date/time 03/13/20 08:00

Method	Batch	Dilution	Preparation date/time	Analysis date/time	Analyst	Location
Total Solids by Method 2540 G-2011	WG1445647	1	03/19/20 01:21	03/19/20 01:27	KBC	Mt. Juliet, TN
Wet Chemistry by Method 300.0	WG1444780	1	03/18/20 08:48	03/18/20 14:24	GB	Mt. Juliet, TN
Volatile Organic Compounds (GC) by Method 8015D/GRO	WG1445120	1	03/16/20 08:59	03/17/20 01:23	ADM	Mt. Juliet, TN
Volatile Organic Compounds (GC/MS) by Method 8260B	WG1445259	1	03/16/20 08:59	03/17/20 15:22	BMB	Mt. Juliet, TN
Semi-Volatile Organic Compounds (GC) by Method 8015	WG1446556	1	03/19/20 06:41	03/20/20 07:45	KME	Mt. Juliet, TN

AH-7W (3-4') L1199114-22 Solid

Collected by Adrian
Collected date/time 03/05/20 11:30
Received date/time 03/13/20 08:00

Method	Batch	Dilution	Preparation date/time	Analysis date/time	Analyst	Location
Total Solids by Method 2540 G-2011	WG1445647	1	03/19/20 01:21	03/19/20 01:27	KBC	Mt. Juliet, TN
Wet Chemistry by Method 300.0	WG1444780	5	03/18/20 08:48	03/18/20 14:34	GB	Mt. Juliet, TN
Volatile Organic Compounds (GC) by Method 8015D/GRO	WG1445120	1	03/16/20 08:59	03/17/20 01:44	ADM	Mt. Juliet, TN
Volatile Organic Compounds (GC/MS) by Method 8260B	WG1445259	1	03/16/20 08:59	03/17/20 15:41	BMB	Mt. Juliet, TN
Semi-Volatile Organic Compounds (GC) by Method 8015	WG1446556	1	03/19/20 06:41	03/19/20 23:56	KME	Mt. Juliet, TN

T-7 (1-2') L1199114-23 Solid

Collected by Adrian
Collected date/time 03/05/20 11:50
Received date/time 03/13/20 08:00

Method	Batch	Dilution	Preparation date/time	Analysis date/time	Analyst	Location
Total Solids by Method 2540 G-2011	WG1445647	1	03/19/20 01:21	03/19/20 01:27	KBC	Mt. Juliet, TN
Wet Chemistry by Method 300.0	WG1444780	5	03/18/20 08:48	03/18/20 14:43	GB	Mt. Juliet, TN
Volatile Organic Compounds (GC) by Method 8015D/GRO	WG1445120	1	03/16/20 08:59	03/17/20 02:04	ADM	Mt. Juliet, TN
Volatile Organic Compounds (GC/MS) by Method 8260B	WG1445259	1	03/16/20 08:59	03/17/20 16:00	BMB	Mt. Juliet, TN
Semi-Volatile Organic Compounds (GC) by Method 8015	WG1446556	1	03/19/20 06:41	03/19/20 22:40	KME	Mt. Juliet, TN

T-7 (17.5') L1199114-24 Solid

Collected by Adrian
Collected date/time 03/05/20 13:00
Received date/time 03/13/20 08:00

Method	Batch	Dilution	Preparation date/time	Analysis date/time	Analyst	Location
Total Solids by Method 2540 G-2011	WG1445647	1	03/19/20 01:21	03/19/20 01:27	KBC	Mt. Juliet, TN
Wet Chemistry by Method 300.0	WG1444780	1	03/18/20 08:48	03/18/20 14:53	GB	Mt. Juliet, TN
Volatile Organic Compounds (GC) by Method 8015D/GRO	WG1445120	1	03/16/20 08:59	03/17/20 02:25	ADM	Mt. Juliet, TN
Volatile Organic Compounds (GC/MS) by Method 8260B	WG1445259	1	03/16/20 08:59	03/17/20 16:19	BMB	Mt. Juliet, TN
Semi-Volatile Organic Compounds (GC) by Method 8015	WG1446556	1	03/19/20 06:41	03/20/20 07:19	KME	Mt. Juliet, TN

AH-7E (0-1') L1199114-25 Solid

Collected by Adrian
Collected date/time 03/05/20 13:10
Received date/time 03/13/20 08:00

Method	Batch	Dilution	Preparation date/time	Analysis date/time	Analyst	Location
Total Solids by Method 2540 G-2011	WG1445647	1	03/19/20 01:21	03/19/20 01:27	KBC	Mt. Juliet, TN
Wet Chemistry by Method 300.0	WG1444780	1	03/18/20 08:48	03/18/20 15:02	GB	Mt. Juliet, TN
Volatile Organic Compounds (GC) by Method 8015D/GRO	WG1445660	1	03/16/20 08:59	03/17/20 18:13	DWR	Mt. Juliet, TN
Volatile Organic Compounds (GC/MS) by Method 8260B	WG1445259	1	03/16/20 08:59	03/17/20 16:38	BMB	Mt. Juliet, TN
Semi-Volatile Organic Compounds (GC) by Method 8015	WG1446556	1	03/19/20 06:41	03/20/20 00:59	KME	Mt. Juliet, TN

1 Cp

2 Tc

3 Ss

4 Cn

5 Sr

6 Qc

7 Gl

8 Al

9 Sc

AH-7E (3-4') L1199114-26 Solid

Collected by Adrian
Collected date/time 03/06/20 11:00
Received date/time 03/13/20 08:00

Method	Batch	Dilution	Preparation date/time	Analysis date/time	Analyst	Location
Total Solids by Method 2540 G-2011	WG1445647	1	03/19/20 01:21	03/19/20 01:27	KBC	Mt. Juliet, TN
Wet Chemistry by Method 300.0	WG1445291	10	03/17/20 22:10	03/18/20 00:06	ELN	Mt. Juliet, TN
Volatile Organic Compounds (GC) by Method 8015D/GRO	WG1445120	1	03/16/20 08:59	03/17/20 06:54	ADM	Mt. Juliet, TN
Volatile Organic Compounds (GC/MS) by Method 8260B	WG1445259	1	03/16/20 08:59	03/17/20 16:57	BMB	Mt. Juliet, TN
Semi-Volatile Organic Compounds (GC) by Method 8015	WG1446556	1	03/19/20 06:41	03/20/20 00:08	KME	Mt. Juliet, TN

AH-8N (0-1') L1199114-27 Solid

Collected by Adrian
Collected date/time 03/06/20 11:20
Received date/time 03/13/20 08:00

Method	Batch	Dilution	Preparation date/time	Analysis date/time	Analyst	Location
Total Solids by Method 2540 G-2011	WG1445647	1	03/19/20 01:21	03/19/20 01:27	KBC	Mt. Juliet, TN
Wet Chemistry by Method 300.0	WG1445291	1	03/17/20 22:10	03/18/20 00:15	ELN	Mt. Juliet, TN
Volatile Organic Compounds (GC) by Method 8015D/GRO	WG1445120	1	03/16/20 08:59	03/17/20 07:14	ADM	Mt. Juliet, TN
Volatile Organic Compounds (GC/MS) by Method 8260B	WG1445259	1	03/16/20 08:59	03/17/20 17:16	BMB	Mt. Juliet, TN
Semi-Volatile Organic Compounds (GC) by Method 8015	WG1446556	1	03/19/20 06:41	03/19/20 23:05	KME	Mt. Juliet, TN

AH-8N (3-4') L1199114-28 Solid

Collected by Adrian
Collected date/time 03/06/20 11:30
Received date/time 03/13/20 08:00

Method	Batch	Dilution	Preparation date/time	Analysis date/time	Analyst	Location
Total Solids by Method 2540 G-2011	WG1445648	1	03/19/20 00:56	03/19/20 01:04	KBC	Mt. Juliet, TN
Wet Chemistry by Method 300.0	WG1445291	5	03/17/20 22:10	03/18/20 00:24	ELN	Mt. Juliet, TN
Volatile Organic Compounds (GC) by Method 8015D/GRO	WG1445120	1	03/16/20 08:59	03/17/20 07:35	ADM	Mt. Juliet, TN
Volatile Organic Compounds (GC/MS) by Method 8260B	WG1445259	1	03/16/20 08:59	03/17/20 17:35	BMB	Mt. Juliet, TN
Semi-Volatile Organic Compounds (GC) by Method 8015	WG1446556	1	03/19/20 06:41	03/20/20 07:32	KME	Mt. Juliet, TN

T-8 (1-2') L1199114-29 Solid

Collected by Adrian
Collected date/time 03/06/20 11:50
Received date/time 03/13/20 08:00

Method	Batch	Dilution	Preparation date/time	Analysis date/time	Analyst	Location
Total Solids by Method 2540 G-2011	WG1445648	1	03/19/20 00:56	03/19/20 01:04	KBC	Mt. Juliet, TN
Wet Chemistry by Method 300.0	WG1445291	5	03/17/20 22:10	03/18/20 00:34	ELN	Mt. Juliet, TN
Volatile Organic Compounds (GC) by Method 8015D/GRO	WG1445660	1	03/16/20 08:59	03/17/20 18:34	DWR	Mt. Juliet, TN
Volatile Organic Compounds (GC/MS) by Method 8260B	WG1445259	1	03/16/20 08:59	03/17/20 17:54	BMB	Mt. Juliet, TN
Semi-Volatile Organic Compounds (GC) by Method 8015	WG1446556	20	03/19/20 06:41	03/20/20 02:28	KME	Mt. Juliet, TN

T-8 (3-4') L1199114-30 Solid

Collected by Adrian
Collected date/time 03/06/20 12:00
Received date/time 03/13/20 08:00

Method	Batch	Dilution	Preparation date/time	Analysis date/time	Analyst	Location
Total Solids by Method 2540 G-2011	WG1445648	1	03/19/20 00:56	03/19/20 01:04	KBC	Mt. Juliet, TN
Wet Chemistry by Method 300.0	WG1445291	5	03/17/20 22:10	03/18/20 00:53	ELN	Mt. Juliet, TN
Volatile Organic Compounds (GC) by Method 8015D/GRO	WG1445120	1	03/16/20 08:59	03/17/20 08:16	ADM	Mt. Juliet, TN
Volatile Organic Compounds (GC/MS) by Method 8260B	WG1445259	1	03/16/20 08:59	03/17/20 18:13	BMB	Mt. Juliet, TN
Semi-Volatile Organic Compounds (GC) by Method 8015	WG1447675	20	03/20/20 15:35	03/21/20 04:09	JDG	Mt. Juliet, TN

1 Cp

2 Tc

3 Ss

4 Cn

5 Sr

6 Qc

7 Gl

8 Al

9 Sc

T-8 (7-8') L1199114-31 Solid

Method	Batch	Dilution	Preparation date/time	Analysis date/time	Analyst	Location
Total Solids by Method 2540 G-2011	WG1445648	1	03/19/20 00:56	03/19/20 01:04	KBC	Mt. Juliet, TN
Wet Chemistry by Method 300.0	WG1445291	5	03/17/20 22:10	03/18/20 01:02	ELN	Mt. Juliet, TN
Volatile Organic Compounds (GC) by Method 8015D/GRO	WG1445660	1	03/16/20 08:59	03/17/20 18:54	DWR	Mt. Juliet, TN
Volatile Organic Compounds (GC/MS) by Method 8260B	WG1445259	1	03/16/20 08:59	03/17/20 18:32	BMB	Mt. Juliet, TN
Semi-Volatile Organic Compounds (GC) by Method 8015	WG1447675	1	03/20/20 15:35	03/21/20 13:28	JDG	Mt. Juliet, TN

T-8 (9-10') L1199114-32 Solid

Method	Batch	Dilution	Preparation date/time	Analysis date/time	Analyst	Location
Total Solids by Method 2540 G-2011	WG1445648	1	03/19/20 00:56	03/19/20 01:04	KBC	Mt. Juliet, TN
Wet Chemistry by Method 300.0	WG1445291	5	03/17/20 22:10	03/18/20 01:12	ELN	Mt. Juliet, TN
Volatile Organic Compounds (GC) by Method 8015D/GRO	WG1445120	1	03/16/20 08:59	03/17/20 08:57	ADM	Mt. Juliet, TN
Volatile Organic Compounds (GC/MS) by Method 8260B	WG1445259	1	03/16/20 08:59	03/17/20 18:51	BMB	Mt. Juliet, TN
Semi-Volatile Organic Compounds (GC) by Method 8015	WG1447675	1	03/20/20 15:35	03/21/20 02:54	JDG	Mt. Juliet, TN

AH-8E (0-1') L1199114-33 Solid

Method	Batch	Dilution	Preparation date/time	Analysis date/time	Analyst	Location
Total Solids by Method 2540 G-2011	WG1445648	1	03/19/20 00:56	03/19/20 01:04	KBC	Mt. Juliet, TN
Wet Chemistry by Method 300.0	WG1445291	1	03/17/20 22:10	03/18/20 01:40	ELN	Mt. Juliet, TN
Volatile Organic Compounds (GC) by Method 8015D/GRO	WG1445120	1	03/16/20 08:59	03/17/20 09:17	ADM	Mt. Juliet, TN
Volatile Organic Compounds (GC/MS) by Method 8260B	WG1445259	1	03/16/20 08:59	03/17/20 19:10	BMB	Mt. Juliet, TN
Semi-Volatile Organic Compounds (GC) by Method 8015	WG1447675	1	03/20/20 15:35	03/21/20 03:07	JDG	Mt. Juliet, TN

AH-8E (3-4') L1199114-34 Solid

Method	Batch	Dilution	Preparation date/time	Analysis date/time	Analyst	Location
Total Solids by Method 2540 G-2011	WG1445648	1	03/19/20 00:56	03/19/20 01:04	KBC	Mt. Juliet, TN
Wet Chemistry by Method 300.0	WG1445291	1	03/17/20 22:10	03/18/20 02:09	ELN	Mt. Juliet, TN
Volatile Organic Compounds (GC) by Method 8015D/GRO	WG1445120	1	03/16/20 08:59	03/17/20 09:38	ADM	Mt. Juliet, TN
Volatile Organic Compounds (GC/MS) by Method 8260B	WG1445267	1	03/16/20 08:59	03/18/20 08:16	BMB	Mt. Juliet, TN
Semi-Volatile Organic Compounds (GC) by Method 8015	WG1447675	1	03/20/20 15:35	03/21/20 02:41	JDG	Mt. Juliet, TN

AH-8W (0-1') L1199114-35 Solid

Method	Batch	Dilution	Preparation date/time	Analysis date/time	Analyst	Location
Total Solids by Method 2540 G-2011	WG1445648	1	03/19/20 00:56	03/19/20 01:04	KBC	Mt. Juliet, TN
Wet Chemistry by Method 300.0	WG1445291	1	03/17/20 22:10	03/18/20 02:18	ELN	Mt. Juliet, TN
Volatile Organic Compounds (GC) by Method 8015D/GRO	WG1445120	1	03/16/20 08:59	03/17/20 09:58	ADM	Mt. Juliet, TN
Volatile Organic Compounds (GC/MS) by Method 8260B	WG1445267	1	03/16/20 08:59	03/18/20 08:37	BMB	Mt. Juliet, TN
Semi-Volatile Organic Compounds (GC) by Method 8015	WG1447675	20	03/20/20 15:35	03/21/20 03:57	JDG	Mt. Juliet, TN

1 Cp

2 Tc

3 Ss

4 Cn

5 Sr

6 Qc

7 Gl

8 Al

9 Sc

AH-8W (3-4') L1199114-36 Solid

Collected by Adrian
Collected date/time 03/06/20 11:10
Received date/time 03/13/20 08:00

Method	Batch	Dilution	Preparation date/time	Analysis date/time	Analyst	Location
Total Solids by Method 2540 G-2011	WG1445648	1	03/19/20 00:56	03/19/20 01:04	KBC	Mt. Juliet, TN
Wet Chemistry by Method 300.0	WG1445291	1	03/17/20 22:10	03/18/20 02:28	ELN	Mt. Juliet, TN
Volatile Organic Compounds (GC) by Method 8015D/GRO	WG1445120	1	03/16/20 08:59	03/17/20 10:18	ADM	Mt. Juliet, TN
Volatile Organic Compounds (GC/MS) by Method 8260B	WG1445267	1	03/16/20 08:59	03/18/20 08:58	BMB	Mt. Juliet, TN
Semi-Volatile Organic Compounds (GC) by Method 8015	WG1447675	1	03/20/20 15:35	03/21/20 13:02	JDG	Mt. Juliet, TN

AH-9E (0-1) L1199114-37 Solid

Collected by Adrian
Collected date/time 03/06/20 11:20
Received date/time 03/13/20 08:00

Method	Batch	Dilution	Preparation date/time	Analysis date/time	Analyst	Location
Total Solids by Method 2540 G-2011	WG1445648	1	03/19/20 00:56	03/19/20 01:04	KBC	Mt. Juliet, TN
Wet Chemistry by Method 300.0	WG1445291	1	03/17/20 22:10	03/18/20 02:37	ELN	Mt. Juliet, TN
Volatile Organic Compounds (GC) by Method 8015D/GRO	WG1445120	1	03/16/20 08:59	03/17/20 10:39	ADM	Mt. Juliet, TN
Volatile Organic Compounds (GC/MS) by Method 8260B	WG1445267	1	03/16/20 08:59	03/18/20 09:18	BMB	Mt. Juliet, TN
Semi-Volatile Organic Compounds (GC) by Method 8015	WG1447675	1	03/20/20 15:35	03/21/20 00:48	JDG	Mt. Juliet, TN

AH-9E (3-4') L1199114-38 Solid

Collected by Adrian
Collected date/time 03/06/20 11:30
Received date/time 03/13/20 08:00

Method	Batch	Dilution	Preparation date/time	Analysis date/time	Analyst	Location
Total Solids by Method 2540 G-2011	WG1445649	1	03/19/20 00:46	03/19/20 00:54	KBC	Mt. Juliet, TN
Wet Chemistry by Method 300.0	WG1445291	1	03/17/20 22:10	03/18/20 02:47	ELN	Mt. Juliet, TN
Volatile Organic Compounds (GC) by Method 8015D/GRO	WG1445120	1	03/16/20 08:59	03/17/20 10:59	ADM	Mt. Juliet, TN
Volatile Organic Compounds (GC/MS) by Method 8260B	WG1445267	1	03/16/20 08:59	03/18/20 09:39	BMB	Mt. Juliet, TN
Semi-Volatile Organic Compounds (GC) by Method 8015	WG1447675	1	03/20/20 15:35	03/21/20 13:15	JDG	Mt. Juliet, TN

T-9 (1-2') L1199114-39 Solid

Collected by Adrian
Collected date/time 03/06/20 11:50
Received date/time 03/13/20 08:00

Method	Batch	Dilution	Preparation date/time	Analysis date/time	Analyst	Location
Total Solids by Method 2540 G-2011	WG1445649	1	03/19/20 00:46	03/19/20 00:54	KBC	Mt. Juliet, TN
Wet Chemistry by Method 300.0	WG1445291	20	03/17/20 22:10	03/18/20 02:57	ELN	Mt. Juliet, TN
Volatile Organic Compounds (GC) by Method 8015D/GRO	WG1445660	1	03/16/20 08:59	03/17/20 19:15	DWR	Mt. Juliet, TN
Volatile Organic Compounds (GC/MS) by Method 8260B	WG1445267	1	03/16/20 08:59	03/18/20 10:00	BMB	Mt. Juliet, TN
Semi-Volatile Organic Compounds (GC) by Method 8015	WG1447675	20	03/20/20 15:35	03/21/20 03:32	JDG	Mt. Juliet, TN

T-9 (3-4') L1199114-40 Solid

Collected by Adrian
Collected date/time 03/06/20 12:00
Received date/time 03/13/20 08:00

Method	Batch	Dilution	Preparation date/time	Analysis date/time	Analyst	Location
Total Solids by Method 2540 G-2011	WG1445649	1	03/19/20 00:46	03/19/20 00:54	KBC	Mt. Juliet, TN
Wet Chemistry by Method 300.0	WG1445291	20	03/17/20 22:10	03/18/20 03:06	ELN	Mt. Juliet, TN
Volatile Organic Compounds (GC) by Method 8015D/GRO	WG1445660	1	03/16/20 08:59	03/17/20 19:35	DWR	Mt. Juliet, TN
Volatile Organic Compounds (GC/MS) by Method 8260B	WG1445267	1	03/16/20 08:59	03/18/20 10:21	BMB	Mt. Juliet, TN
Semi-Volatile Organic Compounds (GC) by Method 8015	WG1447675	10	03/20/20 15:35	03/21/20 03:44	JDG	Mt. Juliet, TN

1 Cp

2 Tc

3 Ss

4 Cn

5 Sr

6 Qc

7 Gl

8 Al

9 Sc

T-9 (7-8') L1199114-41 Solid

Collected by Adrian
Collected date/time 03/06/20 12:10
Received date/time 03/13/20 08:00

Method	Batch	Dilution	Preparation date/time	Analysis date/time	Analyst	Location
Total Solids by Method 2540 G-2011	WG1445649	1	03/19/20 00:46	03/19/20 00:54	KBC	Mt. Juliet, TN
Wet Chemistry by Method 300.0	WG1445291	20	03/17/20 22:10	03/18/20 03:35	ELN	Mt. Juliet, TN
Volatile Organic Compounds (GC) by Method 8015D/GRO	WG1445738	1	03/16/20 09:14	03/20/20 16:07	JAH	Mt. Juliet, TN
Volatile Organic Compounds (GC/MS) by Method 8260B	WG1445267	1	03/16/20 09:14	03/18/20 10:41	BMB	Mt. Juliet, TN
Semi-Volatile Organic Compounds (GC) by Method 8015	WG1447675	1	03/20/20 15:35	03/21/20 01:00	JDG	Mt. Juliet, TN

T-9 (9-10') L1199114-42 Solid

Collected by Adrian
Collected date/time 03/06/20 12:20
Received date/time 03/13/20 08:00

Method	Batch	Dilution	Preparation date/time	Analysis date/time	Analyst	Location
Total Solids by Method 2540 G-2011	WG1445649	1	03/19/20 00:46	03/19/20 00:54	KBC	Mt. Juliet, TN
Wet Chemistry by Method 300.0	WG1445291	20	03/17/20 22:10	03/18/20 03:44	ELN	Mt. Juliet, TN
Volatile Organic Compounds (GC) by Method 8015D/GRO	WG1445128	1	03/16/20 09:14	03/17/20 07:31	BMB	Mt. Juliet, TN
Volatile Organic Compounds (GC/MS) by Method 8260B	WG1445267	1	03/16/20 09:14	03/18/20 11:02	BMB	Mt. Juliet, TN
Semi-Volatile Organic Compounds (GC) by Method 8015	WG1447675	1	03/20/20 15:35	03/21/20 01:13	JDG	Mt. Juliet, TN

AH-9W (0-1') L1199114-43 Solid

Collected by Adrian
Collected date/time 03/06/20 13:00
Received date/time 03/13/20 08:00

Method	Batch	Dilution	Preparation date/time	Analysis date/time	Analyst	Location
Total Solids by Method 2540 G-2011	WG1445649	1	03/19/20 00:46	03/19/20 00:54	KBC	Mt. Juliet, TN
Wet Chemistry by Method 300.0	WG1445291	1	03/17/20 22:10	03/18/20 03:54	ELN	Mt. Juliet, TN
Volatile Organic Compounds (GC) by Method 8015D/GRO	WG1445128	1	03/16/20 09:14	03/17/20 07:53	BMB	Mt. Juliet, TN
Volatile Organic Compounds (GC/MS) by Method 8260B	WG1445267	1	03/16/20 09:14	03/18/20 11:23	BMB	Mt. Juliet, TN
Semi-Volatile Organic Compounds (GC) by Method 8015	WG1447675	50	03/20/20 15:35	03/21/20 03:19	JDG	Mt. Juliet, TN

AH-9W (3-4') L1199114-44 Solid

Collected by Adrian
Collected date/time 03/06/20 13:10
Received date/time 03/13/20 08:00

Method	Batch	Dilution	Preparation date/time	Analysis date/time	Analyst	Location
Total Solids by Method 2540 G-2011	WG1445649	1	03/19/20 00:46	03/19/20 00:54	KBC	Mt. Juliet, TN
Wet Chemistry by Method 300.0	WG1445291	1	03/17/20 22:10	03/18/20 04:03	ELN	Mt. Juliet, TN
Volatile Organic Compounds (GC) by Method 8015D/GRO	WG1445128	1	03/16/20 09:14	03/17/20 08:25	BMB	Mt. Juliet, TN
Volatile Organic Compounds (GC/MS) by Method 8260B	WG1445267	1	03/16/20 09:14	03/18/20 11:43	BMB	Mt. Juliet, TN
Semi-Volatile Organic Compounds (GC) by Method 8015	WG1447675	1	03/20/20 15:35	03/21/20 01:26	JDG	Mt. Juliet, TN

AH-10E (0-1') L1199114-45 Solid

Collected by Adrian
Collected date/time 03/09/20 11:00
Received date/time 03/13/20 08:00

Method	Batch	Dilution	Preparation date/time	Analysis date/time	Analyst	Location
Total Solids by Method 2540 G-2011	WG1445649	1	03/19/20 00:46	03/19/20 00:54	KBC	Mt. Juliet, TN
Wet Chemistry by Method 300.0	WG1445292	1	03/17/20 20:08	03/18/20 00:58	ELN	Mt. Juliet, TN
Volatile Organic Compounds (GC) by Method 8015D/GRO	WG1445128	1	03/16/20 09:14	03/17/20 09:13	BMB	Mt. Juliet, TN
Volatile Organic Compounds (GC/MS) by Method 8260B	WG1445267	1	03/16/20 09:14	03/18/20 12:04	BMB	Mt. Juliet, TN
Semi-Volatile Organic Compounds (GC) by Method 8015	WG1447675	1	03/20/20 15:35	03/21/20 01:38	JDG	Mt. Juliet, TN

1 Cp

2 Tc

3 Ss

4 Cn

5 Sr

6 Qc

7 Gl

8 Al

9 Sc

AH-10E (3-4') L1199114-46 Solid

Collected by Adrian
Collected date/time 03/09/20 11:10
Received date/time 03/13/20 08:00

Method	Batch	Dilution	Preparation date/time	Analysis date/time	Analyst	Location
Total Solids by Method 2540 G-2011	WG1445649	1	03/19/20 00:46	03/19/20 00:54	KBC	Mt. Juliet, TN
Wet Chemistry by Method 300.0	WG1445292	1	03/17/20 20:08	03/18/20 01:51	ELN	Mt. Juliet, TN
Volatile Organic Compounds (GC) by Method 8015D/GRO	WG1445128	1	03/16/20 09:14	03/17/20 09:57	BMB	Mt. Juliet, TN
Volatile Organic Compounds (GC/MS) by Method 8260B	WG1445267	1	03/16/20 09:14	03/18/20 12:24	BMB	Mt. Juliet, TN
Semi-Volatile Organic Compounds (GC) by Method 8015	WG1447675	1	03/20/20 15:35	03/21/20 02:29	JDG	Mt. Juliet, TN

AH-10W (0-1') L1199114-47 Solid

Collected by Adrian
Collected date/time 03/09/20 11:20
Received date/time 03/13/20 08:00

Method	Batch	Dilution	Preparation date/time	Analysis date/time	Analyst	Location
Total Solids by Method 2540 G-2011	WG1445649	1	03/19/20 00:46	03/19/20 00:54	KBC	Mt. Juliet, TN
Wet Chemistry by Method 300.0	WG1445292	1	03/17/20 20:08	03/18/20 02:09	ELN	Mt. Juliet, TN
Volatile Organic Compounds (GC) by Method 8015D/GRO	WG1445128	1	03/16/20 09:14	03/17/20 10:20	BMB	Mt. Juliet, TN
Volatile Organic Compounds (GC/MS) by Method 8260B	WG1445267	1	03/16/20 09:14	03/18/20 12:45	BMB	Mt. Juliet, TN
Semi-Volatile Organic Compounds (GC) by Method 8015	WG1447675	1	03/20/20 15:35	03/21/20 01:51	JDG	Mt. Juliet, TN

AH-10W (3-4') L1199114-48 Solid

Collected by Adrian
Collected date/time 03/09/20 11:30
Received date/time 03/13/20 08:00

Method	Batch	Dilution	Preparation date/time	Analysis date/time	Analyst	Location
Total Solids by Method 2540 G-2011	WG1445651	1	03/19/20 00:34	03/19/20 00:43	KBC	Mt. Juliet, TN
Wet Chemistry by Method 300.0	WG1445292	1	03/17/20 20:08	03/18/20 02:27	ELN	Mt. Juliet, TN
Volatile Organic Compounds (GC) by Method 8015D/GRO	WG1445128	1	03/16/20 09:14	03/17/20 10:42	BMB	Mt. Juliet, TN
Volatile Organic Compounds (GC/MS) by Method 8260B	WG1445267	1	03/16/20 09:14	03/18/20 13:06	BMB	Mt. Juliet, TN
Semi-Volatile Organic Compounds (GC) by Method 8015	WG1447675	1	03/20/20 15:35	03/21/20 02:03	JDG	Mt. Juliet, TN

T-10 (1-2') L1199114-49 Solid

Collected by Adrian
Collected date/time 03/09/20 11:50
Received date/time 03/13/20 08:00

Method	Batch	Dilution	Preparation date/time	Analysis date/time	Analyst	Location
Total Solids by Method 2540 G-2011	WG1445651	1	03/19/20 00:34	03/19/20 00:43	KBC	Mt. Juliet, TN
Wet Chemistry by Method 300.0	WG1445292	5	03/17/20 20:08	03/18/20 02:45	ELN	Mt. Juliet, TN
Volatile Organic Compounds (GC) by Method 8015D/GRO	WG1445128	1	03/16/20 09:14	03/17/20 11:03	BMB	Mt. Juliet, TN
Volatile Organic Compounds (GC/MS) by Method 8260B	WG1445267	1	03/16/20 09:14	03/18/20 13:26	BMB	Mt. Juliet, TN
Semi-Volatile Organic Compounds (GC) by Method 8015	WG1447675	1	03/20/20 15:35	03/21/20 02:16	JDG	Mt. Juliet, TN

T-10 (14-15') L1199114-50 Solid

Collected by Adrian
Collected date/time 03/09/20 12:20
Received date/time 03/13/20 08:00

Method	Batch	Dilution	Preparation date/time	Analysis date/time	Analyst	Location
Total Solids by Method 2540 G-2011	WG1445651	1	03/19/20 00:34	03/19/20 00:43	KBC	Mt. Juliet, TN
Wet Chemistry by Method 300.0	WG1445292	1	03/17/20 20:08	03/18/20 03:03	ELN	Mt. Juliet, TN
Volatile Organic Compounds (GC) by Method 8015D/GRO	WG1445199	1	03/16/20 09:14	03/17/20 11:14	ACG	Mt. Juliet, TN
Volatile Organic Compounds (GC/MS) by Method 8260B	WG1445267	1	03/16/20 09:14	03/18/20 13:47	BMB	Mt. Juliet, TN
Semi-Volatile Organic Compounds (GC) by Method 8015	WG1447038	1	03/19/20 16:24	03/20/20 00:31	KME	Mt. Juliet, TN

1 Cp

2 Tc

3 Ss

4 Cn

5 Sr

6 Qc

7 Gl

8 Al

9 Sc

T-9 (16'-17') L1199114-51 Solid

Collected by Adrian
Collected date/time 03/09/20 13:00
Received date/time 03/13/20 08:00

Method	Batch	Dilution	Preparation date/time	Analysis date/time	Analyst	Location
Total Solids by Method 2540 G-2011	WG1445651	1	03/19/20 00:34	03/19/20 00:43	KBC	Mt. Juliet, TN
Wet Chemistry by Method 300.0	WG1445292	10	03/17/20 20:08	03/18/20 03:57	ELN	Mt. Juliet, TN
Volatile Organic Compounds (GC) by Method 8015D/GRO	WG1445199	1	03/16/20 09:14	03/17/20 11:38	ACG	Mt. Juliet, TN
Volatile Organic Compounds (GC/MS) by Method 8260B	WG1445267	1	03/16/20 09:14	03/18/20 14:07	BMB	Mt. Juliet, TN
Semi-Volatile Organic Compounds (GC) by Method 8015	WG1447038	1	03/19/20 16:24	03/20/20 00:45	KME	Mt. Juliet, TN

AH-11W (0-1') L1199114-52 Solid

Collected by Adrian
Collected date/time 03/10/20 10:50
Received date/time 03/13/20 08:00

Method	Batch	Dilution	Preparation date/time	Analysis date/time	Analyst	Location
Total Solids by Method 2540 G-2011	WG1445651	1	03/19/20 00:34	03/19/20 00:43	KBC	Mt. Juliet, TN
Wet Chemistry by Method 300.0	WG1445292	10	03/17/20 20:08	03/18/20 04:15	ELN	Mt. Juliet, TN
Volatile Organic Compounds (GC) by Method 8015D/GRO	WG1445199	1	03/16/20 09:14	03/17/20 12:14	ACG	Mt. Juliet, TN
Volatile Organic Compounds (GC/MS) by Method 8260B	WG1445267	1	03/16/20 09:14	03/18/20 14:28	BMB	Mt. Juliet, TN
Semi-Volatile Organic Compounds (GC) by Method 8015	WG1447038	1	03/19/20 16:24	03/20/20 10:45	FM	Mt. Juliet, TN

AH-11W (3-4') L1199114-53 Solid

Collected by Adrian
Collected date/time 03/10/20 11:00
Received date/time 03/13/20 08:00

Method	Batch	Dilution	Preparation date/time	Analysis date/time	Analyst	Location
Total Solids by Method 2540 G-2011	WG1445651	1	03/19/20 00:34	03/19/20 00:43	KBC	Mt. Juliet, TN
Wet Chemistry by Method 300.0	WG1445292	1	03/17/20 20:08	03/18/20 04:32	ELN	Mt. Juliet, TN
Volatile Organic Compounds (GC) by Method 8015D/GRO	WG1446150	1	03/16/20 09:14	03/18/20 17:19	JAH	Mt. Juliet, TN
Volatile Organic Compounds (GC/MS) by Method 8260B	WG1445267	1	03/16/20 09:14	03/18/20 14:48	BMB	Mt. Juliet, TN
Semi-Volatile Organic Compounds (GC) by Method 8015	WG1447038	1	03/19/20 16:24	03/20/20 10:59	FM	Mt. Juliet, TN

AH-11E (0-1') L1199114-54 Solid

Collected by Adrian
Collected date/time 03/10/20 11:10
Received date/time 03/13/20 08:00

Method	Batch	Dilution	Preparation date/time	Analysis date/time	Analyst	Location
Total Solids by Method 2540 G-2011	WG1445651	1	03/19/20 00:34	03/19/20 00:43	KBC	Mt. Juliet, TN
Wet Chemistry by Method 300.0	WG1445292	1	03/17/20 20:08	03/18/20 05:26	ELN	Mt. Juliet, TN
Volatile Organic Compounds (GC) by Method 8015D/GRO	WG1445199	1	03/16/20 09:14	03/17/20 13:02	ACG	Mt. Juliet, TN
Volatile Organic Compounds (GC/MS) by Method 8260B	WG1445419	1	03/16/20 09:14	03/17/20 17:30	JHH	Mt. Juliet, TN
Semi-Volatile Organic Compounds (GC) by Method 8015	WG1447038	1	03/19/20 16:24	03/20/20 10:32	FM	Mt. Juliet, TN

AH-11E (3-4') L1199114-55 Solid

Collected by Adrian
Collected date/time 03/10/20 11:20
Received date/time 03/13/20 08:00

Method	Batch	Dilution	Preparation date/time	Analysis date/time	Analyst	Location
Total Solids by Method 2540 G-2011	WG1445651	1	03/19/20 00:34	03/19/20 00:43	KBC	Mt. Juliet, TN
Wet Chemistry by Method 300.0	WG1445292	1	03/17/20 20:08	03/18/20 05:44	ELN	Mt. Juliet, TN
Volatile Organic Compounds (GC) by Method 8015D/GRO	WG1445199	1	03/16/20 09:14	03/17/20 13:26	ACG	Mt. Juliet, TN
Volatile Organic Compounds (GC/MS) by Method 8260B	WG1445419	1	03/16/20 09:14	03/17/20 17:49	JHH	Mt. Juliet, TN
Semi-Volatile Organic Compounds (GC) by Method 8015	WG1447038	1	03/19/20 16:24	03/20/20 10:18	FM	Mt. Juliet, TN

1 Cp

2 Tc

3 Ss

4 Cn

5 Sr

6 Qc

7 Gl

8 Al

9 Sc

T-11 (1-2') L1199114-56 Solid

Collected by Adrian
Collected date/time 03/10/20 11:30
Received date/time 03/13/20 08:00

Method	Batch	Dilution	Preparation date/time	Analysis date/time	Analyst	Location
Total Solids by Method 2540 G-2011	WG1445651	1	03/19/20 00:34	03/19/20 00:43	KBC	Mt. Juliet, TN
Wet Chemistry by Method 300.0	WG1445292	5	03/17/20 20:08	03/18/20 06:02	ELN	Mt. Juliet, TN
Volatile Organic Compounds (GC) by Method 8015D/GRO	WG1445199	1	03/16/20 09:14	03/17/20 13:50	ACG	Mt. Juliet, TN
Volatile Organic Compounds (GC/MS) by Method 8260B	WG1445419	1	03/16/20 09:14	03/17/20 18:08	JHH	Mt. Juliet, TN
Semi-Volatile Organic Compounds (GC) by Method 8015	WG1447038	1	03/19/20 16:24	03/20/20 00:58	KME	Mt. Juliet, TN

T-11 (14-15') L1199114-57 Solid

Collected by Adrian
Collected date/time 03/10/20 12:10
Received date/time 03/13/20 08:00

Method	Batch	Dilution	Preparation date/time	Analysis date/time	Analyst	Location
Total Solids by Method 2540 G-2011	WG1445651	1	03/19/20 00:34	03/19/20 00:43	KBC	Mt. Juliet, TN
Wet Chemistry by Method 300.0	WG1445292	1	03/17/20 20:08	03/18/20 06:20	ELN	Mt. Juliet, TN
Volatile Organic Compounds (GC) by Method 8015D/GRO	WG1445128	1	03/16/20 09:14	03/17/20 09:35	BMB	Mt. Juliet, TN
Volatile Organic Compounds (GC/MS) by Method 8260B	WG1445419	1	03/16/20 09:14	03/17/20 18:27	JHH	Mt. Juliet, TN
Semi-Volatile Organic Compounds (GC) by Method 8015	WG1447038	1	03/19/20 16:24	03/20/20 09:52	FM	Mt. Juliet, TN

1 Cp

2 Tc

3 Ss

4 Cn

5 Sr

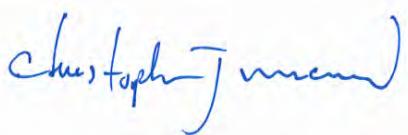
6 Qc

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

- ¹ Cp
- ² Tc
- ³ Ss
- ⁴ Cn
- ⁵ Sr
- ⁶ Qc
- ⁷ GI
- ⁸ AI
- ⁹ SC

Total Solids by Method 2540 G-2011

Analyte	Result %	<u>Qualifier</u>	Dilution	Analysis date / time	<u>Batch</u>
Total Solids	95.9		1	03/19/2020 01:48	WG1445642

¹ Cp² Tc³ Ss⁴ Cn⁵ Sr⁶ Qc⁷ GI⁸ Al⁹ Sc

Wet Chemistry by Method 300.0

Analyte	Result (dry) mg/kg	<u>Qualifier</u>	MDL (dry) mg/kg	RDL (dry) mg/kg	Dilution	Analysis date / time	<u>Batch</u>
Chloride	2.79	<u>B J</u>	0.829	10.4	1	03/18/2020 20:10	WG1444779

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

Analyte	Result (dry) mg/kg	<u>Qualifier</u>	MDL (dry) mg/kg	RDL (dry) mg/kg	Dilution	Analysis date / time	<u>Batch</u>
TPH (GC/FID) Low Fraction	0.0568	<u>B J</u>	0.0226	0.104	1	03/17/2020 00:27	WG1445119
(S) a,a,a-Trifluorotoluene(FID)	93.3			77.0-120		03/17/2020 00:27	WG1445119

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

Analyte	Result (dry) mg/kg	<u>Qualifier</u>	MDL (dry) mg/kg	RDL (dry) mg/kg	Dilution	Analysis date / time	<u>Batch</u>
Benzene	U		0.000417	0.00104	1	03/17/2020 00:32	WG1445122
Toluene	U		0.00130	0.00521	1	03/17/2020 00:32	WG1445122
Ethylbenzene	U		0.000553	0.00261	1	03/17/2020 00:32	WG1445122
Total Xylenes	U		0.00498	0.00678	1	03/17/2020 00:32	WG1445122
(S) Toluene-d8	98.4			75.0-131		03/17/2020 00:32	WG1445122
(S) 4-Bromofluorobenzene	109			67.0-138		03/17/2020 00:32	WG1445122
(S) 1,2-Dichloroethane-d4	132	<u>J1</u>		70.0-130		03/17/2020 00:32	WG1445122

Semi-Volatile Organic Compounds (GC) by Method 8015

Analyte	Result (dry) mg/kg	<u>Qualifier</u>	MDL (dry) mg/kg	RDL (dry) mg/kg	Dilution	Analysis date / time	<u>Batch</u>
C10-C28 Diesel Range	7.86		1.68	4.17	1	03/18/2020 21:53	WG1445151
C28-C40 Oil Range	29.7		0.286	4.17	1	03/18/2020 21:53	WG1445151
(S) o-Terphenyl	66.7			18.0-148		03/18/2020 21:53	WG1445151

Total Solids by Method 2540 G-2011

Analyte	Result %	<u>Qualifier</u>	Dilution	Analysis date / time	<u>Batch</u>
Total Solids	95.1		1	03/19/2020 01:48	WG1445642

¹ Cp² Tc³ Ss⁴ Cn⁵ Sr⁶ Qc⁷ GI⁸ Al⁹ Sc

Wet Chemistry by Method 300.0

Analyte	Result (dry) mg/kg	<u>Qualifier</u>	MDL (dry) mg/kg	RDL (dry) mg/kg	Dilution	Analysis date / time	<u>Batch</u>
Chloride	106		0.836	10.5	1	03/18/2020 20:20	WG1444779

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

Analyte	Result (dry) mg/kg	<u>Qualifier</u>	MDL (dry) mg/kg	RDL (dry) mg/kg	Dilution	Analysis date / time	<u>Batch</u>
TPH (GC/FID) Low Fraction	0.0258	<u>J</u>	0.0228	0.105	1	03/17/2020 13:18	WG1445448
(S) a,a,a-Trifluorotoluene(FID)	94.6			77.0-120		03/17/2020 13:18	WG1445448

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

Analyte	Result (dry) mg/kg	<u>Qualifier</u>	MDL (dry) mg/kg	RDL (dry) mg/kg	Dilution	Analysis date / time	<u>Batch</u>
Benzene	U		0.000421	0.00105	1	03/17/2020 00:52	WG1445122
Toluene	U		0.00131	0.00526	1	03/17/2020 00:52	WG1445122
Ethylbenzene	U		0.000557	0.00263	1	03/17/2020 00:52	WG1445122
Total Xylenes	U		0.00503	0.00683	1	03/17/2020 00:52	WG1445122
(S) Toluene-d8	101			75.0-131		03/17/2020 00:52	WG1445122
(S) 4-Bromofluorobenzene	117			67.0-138		03/17/2020 00:52	WG1445122
(S) 1,2-Dichloroethane-d4	122			70.0-130		03/17/2020 00:52	WG1445122

Semi-Volatile Organic Compounds (GC) by Method 8015

Analyte	Result (dry) mg/kg	<u>Qualifier</u>	MDL (dry) mg/kg	RDL (dry) mg/kg	Dilution	Analysis date / time	<u>Batch</u>
C10-C28 Diesel Range	8.59		1.69	4.21	1	03/18/2020 22:05	WG1445151
C28-C40 Oil Range	30.2		0.288	4.21	1	03/18/2020 22:05	WG1445151
(S) o-Terphenyl	75.5			18.0-148		03/18/2020 22:05	WG1445151

Total Solids by Method 2540 G-2011

Analyte	Result %	<u>Qualifier</u>	Dilution	Analysis date / time	<u>Batch</u>
Total Solids	96.0		1	03/19/2020 01:48	WG1445642

¹ Cp² Tc³ Ss⁴ Cn⁵ Sr⁶ Qc⁷ GI⁸ Al⁹ Sc

Wet Chemistry by Method 300.0

Analyte	Result (dry) mg/kg	<u>Qualifier</u>	MDL (dry) mg/kg	RDL (dry) mg/kg	Dilution	Analysis date / time	<u>Batch</u>
Chloride	2.64	<u>B J</u>	0.828	10.4	1	03/18/2020 20:29	WG1444779

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

Analyte	Result (dry) mg/kg	<u>Qualifier</u>	MDL (dry) mg/kg	RDL (dry) mg/kg	Dilution	Analysis date / time	<u>Batch</u>
TPH (GC/FID) Low Fraction	0.0422	<u>B J</u>	0.0226	0.104	1	03/17/2020 01:09	WG1445119
(S) a,a,a-Trifluorotoluene(FID)	95.2			77.0-120		03/17/2020 01:09	WG1445119

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

Analyte	Result (dry) mg/kg	<u>Qualifier</u>	MDL (dry) mg/kg	RDL (dry) mg/kg	Dilution	Analysis date / time	<u>Batch</u>
Benzene	U		0.000417	0.00104	1	03/17/2020 01:12	WG1445122
Toluene	U		0.00130	0.00521	1	03/17/2020 01:12	WG1445122
Ethylbenzene	U		0.000552	0.00260	1	03/17/2020 01:12	WG1445122
Total Xylenes	U		0.00498	0.00677	1	03/17/2020 01:12	WG1445122
(S) Toluene-d8	99.6			75.0-131		03/17/2020 01:12	WG1445122
(S) 4-Bromofluorobenzene	115			67.0-138		03/17/2020 01:12	WG1445122
(S) 1,2-Dichloroethane-d4	119			70.0-130		03/17/2020 01:12	WG1445122

Semi-Volatile Organic Compounds (GC) by Method 8015

Analyte	Result (dry) mg/kg	<u>Qualifier</u>	MDL (dry) mg/kg	RDL (dry) mg/kg	Dilution	Analysis date / time	<u>Batch</u>
C10-C28 Diesel Range	7.90		1.68	4.17	1	03/18/2020 21:40	WG1445151
C28-C40 Oil Range	28.0		0.285	4.17	1	03/18/2020 21:40	WG1445151
(S) o-Terphenyl	69.6			18.0-148		03/18/2020 21:40	WG1445151

Total Solids by Method 2540 G-2011

Analyte	Result %	<u>Qualifier</u>	Dilution	Analysis date / time	<u>Batch</u>
Total Solids	94.3		1	03/19/2020 01:48	WG1445642

¹ Cp² Tc³ Ss⁴ Cn⁵ Sr⁶ Qc⁷ GI⁸ Al⁹ Sc

Wet Chemistry by Method 300.0

Analyte	Result (dry) mg/kg	<u>Qualifier</u>	MDL (dry) mg/kg	RDL (dry) mg/kg	Dilution	Analysis date / time	<u>Batch</u>
Chloride	285		0.843	10.6	1	03/18/2020 20:39	WG1444779

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

Analyte	Result (dry) mg/kg	<u>Qualifier</u>	MDL (dry) mg/kg	RDL (dry) mg/kg	Dilution	Analysis date / time	<u>Batch</u>
TPH (GC/FID) Low Fraction	U		0.0230	0.106	1	03/17/2020 13:39	WG1445448
(S) a,a,a-Trifluorotoluene(FID)	94.5			77.0-120		03/17/2020 13:39	WG1445448

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

Analyte	Result (dry) mg/kg	<u>Qualifier</u>	MDL (dry) mg/kg	RDL (dry) mg/kg	Dilution	Analysis date / time	<u>Batch</u>
Benzene	U		0.000424	0.00106	1	03/17/2020 01:32	WG1445122
Toluene	U		0.00133	0.00530	1	03/17/2020 01:32	WG1445122
Ethylbenzene	U		0.000562	0.00265	1	03/17/2020 01:32	WG1445122
Total Xylenes	U		0.00507	0.00689	1	03/17/2020 01:32	WG1445122
(S) Toluene-d8	101			75.0-131		03/17/2020 01:32	WG1445122
(S) 4-Bromofluorobenzene	112			67.0-138		03/17/2020 01:32	WG1445122
(S) 1,2-Dichloroethane-d4	117			70.0-130		03/17/2020 01:32	WG1445122

Semi-Volatile Organic Compounds (GC) by Method 8015

Analyte	Result (dry) mg/kg	<u>Qualifier</u>	MDL (dry) mg/kg	RDL (dry) mg/kg	Dilution	Analysis date / time	<u>Batch</u>
C10-C28 Diesel Range	2.16	U	1.71	4.24	1	03/17/2020 22:04	WG1445151
C28-C40 Oil Range	7.64		0.291	4.24	1	03/17/2020 22:04	WG1445151
(S) o-Terphenyl	59.0			18.0-148		03/17/2020 22:04	WG1445151

Collected date/time: 03/05/20 11:50

L1199114

Total Solids by Method 2540 G-2011

Analyte	Result %	<u>Qualifier</u>	Dilution	Analysis date / time	<u>Batch</u>
Total Solids	95.1		1	03/19/2020 01:48	WG1445642

¹Cp²Tc³Ss⁴Cn⁵Sr⁶Qc⁷Gl⁸Al⁹Sc

Wet Chemistry by Method 300.0

Analyte	Result (dry) mg/kg	<u>Qualifier</u>	MDL (dry) mg/kg	RDL (dry) mg/kg	Dilution	Analysis date / time	<u>Batch</u>
Chloride	38.0		0.836	10.5	1	03/18/2020 20:48	WG1444779

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

Analyte	Result (dry) mg/kg	<u>Qualifier</u>	MDL (dry) mg/kg	RDL (dry) mg/kg	Dilution	Analysis date / time	<u>Batch</u>
TPH (GC/FID) Low Fraction	0.0350	<u>B J</u>	0.0228	0.105	1	03/17/2020 01:50	WG1445119
(S)-a,a,a-Trifluorotoluene(FID)	94.8			77.0-120		03/17/2020 01:50	WG1445119

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

Analyte	Result (dry) mg/kg	<u>Qualifier</u>	MDL (dry) mg/kg	RDL (dry) mg/kg	Dilution	Analysis date / time	<u>Batch</u>
Benzene	U		0.000421	0.00105	1	03/17/2020 01:52	WG1445122
Toluene	U		0.00131	0.00526	1	03/17/2020 01:52	WG1445122
Ethylbenzene	U		0.000557	0.00263	1	03/17/2020 01:52	WG1445122
Total Xylenes	U		0.00503	0.00684	1	03/17/2020 01:52	WG1445122
(S)-Toluene-d8	102			75.0-131		03/17/2020 01:52	WG1445122
(S)-4-Bromofluorobenzene	109			67.0-138		03/17/2020 01:52	WG1445122
(S)-1,2-Dichloroethane-d4	115			70.0-130		03/17/2020 01:52	WG1445122

Semi-Volatile Organic Compounds (GC) by Method 8015

Analyte	Result (dry) mg/kg	<u>Qualifier</u>	MDL (dry) mg/kg	RDL (dry) mg/kg	Dilution	Analysis date / time	<u>Batch</u>
C10-C28 Diesel Range	U		1.69	4.21	1	03/17/2020 21:00	WG1445151
C28-C40 Oil Range	4.04	<u>J</u>	0.288	4.21	1	03/17/2020 21:00	WG1445151
(S)-o-Terphenyl	64.4			18.0-148		03/17/2020 21:00	WG1445151

Collected date/time: 03/05/20 12:00

L1199114

Total Solids by Method 2540 G-2011

Analyte	Result %	<u>Qualifier</u>	Dilution	Analysis date / time	<u>Batch</u>
Total Solids	91.1		1	03/19/2020 01:48	WG1445642

¹Cp²Tc³Ss⁴Cn⁵Sr⁶Qc⁷Gl⁸Al⁹Sc

Wet Chemistry by Method 300.0

Analyte	Result (dry) mg/kg	<u>Qualifier</u>	MDL (dry) mg/kg	RDL (dry) mg/kg	Dilution	Analysis date / time	<u>Batch</u>
Chloride	628		0.873	11.0	1	03/18/2020 10:55	WG1444780

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

Analyte	Result (dry) mg/kg	<u>Qualifier</u>	MDL (dry) mg/kg	RDL (dry) mg/kg	Dilution	Analysis date / time	<u>Batch</u>
TPH (GC/FID) Low Fraction	0.0649	<u>B J</u>	0.0238	0.110	1	03/17/2020 02:10	WG1445119
(S)-a,a,a-Trifluorotoluene(FID)	93.5			77.0-120		03/17/2020 02:10	WG1445119

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

Analyte	Result (dry) mg/kg	<u>Qualifier</u>	MDL (dry) mg/kg	RDL (dry) mg/kg	Dilution	Analysis date / time	<u>Batch</u>
Benzene	U		0.000457	0.00114	1.04	03/17/2020 02:13	WG1445122
Toluene	U		0.00143	0.00571	1.04	03/17/2020 02:13	WG1445122
Ethylbenzene	U		0.000605	0.00285	1.04	03/17/2020 02:13	WG1445122
Total Xylenes	U		0.00546	0.00742	1.04	03/17/2020 02:13	WG1445122
(S)-Toluene-d8	99.4			75.0-131		03/17/2020 02:13	WG1445122
(S)-4-Bromofluorobenzene	113			67.0-138		03/17/2020 02:13	WG1445122
(S)-1,2-Dichloroethane-d4	115			70.0-130		03/17/2020 02:13	WG1445122

Semi-Volatile Organic Compounds (GC) by Method 8015

Analyte	Result (dry) mg/kg	<u>Qualifier</u>	MDL (dry) mg/kg	RDL (dry) mg/kg	Dilution	Analysis date / time	<u>Batch</u>
C10-C28 Diesel Range	U		1.77	4.39	1	03/17/2020 21:13	WG1445151
C28-C40 Oil Range	3.13	<u>J</u>	0.301	4.39	1	03/17/2020 21:13	WG1445151
(S)-o-Terphenyl	70.9			18.0-148		03/17/2020 21:13	WG1445151

Total Solids by Method 2540 G-2011

Analyte	Result %	<u>Qualifier</u>	Dilution	Analysis date / time	<u>Batch</u>
Total Solids	90.7		1	03/19/2020 01:48	WG1445642

¹ Cp² Tc³ Ss⁴ Cn⁵ Sr⁶ Qc⁷ GI⁸ Al⁹ Sc

Wet Chemistry by Method 300.0

Analyte	Result (dry) mg/kg	<u>Qualifier</u>	MDL (dry) mg/kg	RDL (dry) mg/kg	Dilution	Analysis date / time	<u>Batch</u>
Chloride	2630		4.39	55.1	5	03/18/2020 11:14	WG1444780

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

Analyte	Result (dry) mg/kg	<u>Qualifier</u>	MDL (dry) mg/kg	RDL (dry) mg/kg	Dilution	Analysis date / time	<u>Batch</u>
TPH (GC/FID) Low Fraction	0.0670	J	0.0239	0.110	1	03/17/2020 13:59	WG1445448
(S) a,a,a-Trifluorotoluene(FID)	92.1			77.0-120		03/17/2020 13:59	WG1445448

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

Analyte	Result (dry) mg/kg	<u>Qualifier</u>	MDL (dry) mg/kg	RDL (dry) mg/kg	Dilution	Analysis date / time	<u>Batch</u>
Benzene	U		0.000441	0.00110	1	03/17/2020 02:33	WG1445122
Toluene	U		0.00138	0.00551	1	03/17/2020 02:33	WG1445122
Ethylbenzene	U		0.000584	0.00276	1	03/17/2020 02:33	WG1445122
Total Xylenes	U		0.00527	0.00717	1	03/17/2020 02:33	WG1445122
(S) Toluene-d8	102			75.0-131		03/17/2020 02:33	WG1445122
(S) 4-Bromofluorobenzene	112			67.0-138		03/17/2020 02:33	WG1445122
(S) 1,2-Dichloroethane-d4	118			70.0-130		03/17/2020 02:33	WG1445122

Semi-Volatile Organic Compounds (GC) by Method 8015

Analyte	Result (dry) mg/kg	<u>Qualifier</u>	MDL (dry) mg/kg	RDL (dry) mg/kg	Dilution	Analysis date / time	<u>Batch</u>
C10-C28 Diesel Range	U		1.78	4.41	1	03/17/2020 20:35	WG1445151
C28-C40 Oil Range	7.83		0.302	4.41	1	03/17/2020 20:35	WG1445151
(S) o-Terphenyl	68.8			18.0-148		03/17/2020 20:35	WG1445151

Collected date/time: 03/05/20 12:20

L1199114

Total Solids by Method 2540 G-2011

Analyte	Result %	<u>Qualifier</u>	Dilution	Analysis date / time	<u>Batch</u>
Total Solids	90.6		1	03/19/2020 01:48	WG1445642

¹Cp²Tc³Ss⁴Cn⁵Sr⁶Qc⁷Gl⁸Al⁹Sc

Wet Chemistry by Method 300.0

Analyte	Result (dry) mg/kg	<u>Qualifier</u>	MDL (dry) mg/kg	RDL (dry) mg/kg	Dilution	Analysis date / time	<u>Batch</u>
Chloride	233		0.877	11.0	1	03/18/2020 11:23	WG1444780

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

Analyte	Result (dry) mg/kg	<u>Qualifier</u>	MDL (dry) mg/kg	RDL (dry) mg/kg	Dilution	Analysis date / time	<u>Batch</u>
TPH (GC/FID) Low Fraction	0.0347	<u>B J</u>	0.0240	0.110	1	03/17/2020 02:52	WG1445119
(S)-a,a,a-Trifluorotoluene(FID)	93.8			77.0-120		03/17/2020 02:52	WG1445119

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

Analyte	Result (dry) mg/kg	<u>Qualifier</u>	MDL (dry) mg/kg	RDL (dry) mg/kg	Dilution	Analysis date / time	<u>Batch</u>
Benzene	U		0.000442	0.00110	1	03/17/2020 02:53	WG1445122
Toluene	U		0.00138	0.00552	1	03/17/2020 02:53	WG1445122
Ethylbenzene	U		0.000585	0.00276	1	03/17/2020 02:53	WG1445122
Total Xylenes	U		0.00528	0.00717	1	03/17/2020 02:53	WG1445122
(S)-Toluene-d8	102			75.0-131		03/17/2020 02:53	WG1445122
(S)-4-Bromofluorobenzene	113			67.0-138		03/17/2020 02:53	WG1445122
(S)-1,2-Dichloroethane-d4	114			70.0-130		03/17/2020 02:53	WG1445122

Semi-Volatile Organic Compounds (GC) by Method 8015

Analyte	Result (dry) mg/kg	<u>Qualifier</u>	MDL (dry) mg/kg	RDL (dry) mg/kg	Dilution	Analysis date / time	<u>Batch</u>
C10-C28 Diesel Range	U		1.78	4.42	1	03/17/2020 20:48	WG1445151
C28-C40 Oil Range	1.56	<u>J</u>	0.302	4.42	1	03/17/2020 20:48	WG1445151
(S)-o-Terphenyl	65.5			18.0-148		03/17/2020 20:48	WG1445151

Total Solids by Method 2540 G-2011

Analyte	Result %	<u>Qualifier</u>	Dilution	Analysis date / time	<u>Batch</u>
Total Solids	97.0		1	03/19/2020 01:36	WG1445643

¹ Cp² Tc³ Ss⁴ Cn⁵ Sr⁶ Qc⁷ Gl⁸ Al⁹ Sc

Wet Chemistry by Method 300.0

Analyte	Result (dry) mg/kg	<u>Qualifier</u>	MDL (dry) mg/kg	RDL (dry) mg/kg	Dilution	Analysis date / time	<u>Batch</u>
Chloride	38.2		0.820	10.3	1	03/18/2020 11:33	WG1444780

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

Analyte	Result (dry) mg/kg	<u>Qualifier</u>	MDL (dry) mg/kg	RDL (dry) mg/kg	Dilution	Analysis date / time	<u>Batch</u>
TPH (GC/FID) Low Fraction	0.0321	<u>B J</u>	0.0224	0.103	1	03/17/2020 03:12	WG1445119
(S) a,a,a-Trifluorotoluene(FID)	94.5			77.0-120		03/17/2020 03:12	WG1445119

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

Analyte	Result (dry) mg/kg	<u>Qualifier</u>	MDL (dry) mg/kg	RDL (dry) mg/kg	Dilution	Analysis date / time	<u>Batch</u>
Benzene	U		0.000412	0.00103	1	03/17/2020 03:13	WG1445122
Toluene	U		0.00129	0.00515	1	03/17/2020 03:13	WG1445122
Ethylbenzene	U		0.000546	0.00258	1	03/17/2020 03:13	WG1445122
Total Xylenes	U		0.00493	0.00670	1	03/17/2020 03:13	WG1445122
(S) Toluene-d8	104			75.0-131		03/17/2020 03:13	WG1445122
(S) 4-Bromofluorobenzene	120			67.0-138		03/17/2020 03:13	WG1445122
(S) 1,2-Dichloroethane-d4	113			70.0-130		03/17/2020 03:13	WG1445122

Semi-Volatile Organic Compounds (GC) by Method 8015

Analyte	Result (dry) mg/kg	<u>Qualifier</u>	MDL (dry) mg/kg	RDL (dry) mg/kg	Dilution	Analysis date / time	<u>Batch</u>
C10-C28 Diesel Range	133		33.2	82.5	20	03/17/2020 23:32	WG1445151
C28-C40 Oil Range	391		5.65	82.5	20	03/17/2020 23:32	WG1445151
(S) o-Terphenyl	0.000	<u>J7</u>		18.0-148		03/17/2020 23:32	WG1445151

Total Solids by Method 2540 G-2011

Analyte	Result %	<u>Qualifier</u>	Dilution	Analysis date / time	<u>Batch</u>
Total Solids	90.6		1	03/19/2020 01:36	WG1445643

¹ Cp² Tc³ Ss⁴ Cn⁵ Sr⁶ Qc⁷ GI⁸ Al⁹ Sc

Wet Chemistry by Method 300.0

Analyte	Result (dry) mg/kg	<u>Qualifier</u>	MDL (dry) mg/kg	RDL (dry) mg/kg	Dilution	Analysis date / time	<u>Batch</u>
Chloride	84.6		0.878	11.0	1	03/18/2020 11:42	WG1444780

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

Analyte	Result (dry) mg/kg	<u>Qualifier</u>	MDL (dry) mg/kg	RDL (dry) mg/kg	Dilution	Analysis date / time	<u>Batch</u>
TPH (GC/FID) Low Fraction	U		0.0240	0.110	1	03/17/2020 14:20	WG1445448
(S)-a,a,a-Trifluorotoluene(FID)	94.0			77.0-120		03/17/2020 14:20	WG1445448

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

Analyte	Result (dry) mg/kg	<u>Qualifier</u>	MDL (dry) mg/kg	RDL (dry) mg/kg	Dilution	Analysis date / time	<u>Batch</u>
Benzene	U		0.000442	0.00110	1	03/17/2020 03:34	WG1445122
Toluene	U		0.00138	0.00552	1	03/17/2020 03:34	WG1445122
Ethylbenzene	U		0.000585	0.00276	1	03/17/2020 03:34	WG1445122
Total Xylenes	U		0.00528	0.00717	1	03/17/2020 03:34	WG1445122
(S)-Toluene-d8	103			75.0-131		03/17/2020 03:34	WG1445122
(S)-4-Bromofluorobenzene	113			67.0-138		03/17/2020 03:34	WG1445122
(S)-1,2-Dichloroethane-d4	107			70.0-130		03/17/2020 03:34	WG1445122

Semi-Volatile Organic Compounds (GC) by Method 8015

Analyte	Result (dry) mg/kg	<u>Qualifier</u>	MDL (dry) mg/kg	RDL (dry) mg/kg	Dilution	Analysis date / time	<u>Batch</u>
C10-C28 Diesel Range	309		35.5	88.3	20	03/17/2020 23:57	WG1445151
C28-C40 Oil Range	793		6.05	88.3	20	03/17/2020 23:57	WG1445151
(S)-o-Terphenyl	0.000	J7		18.0-148		03/17/2020 23:57	WG1445151

Total Solids by Method 2540 G-2011

Analyte	Result %	<u>Qualifier</u>	Dilution	Analysis date / time	<u>Batch</u>
Total Solids	95.9		1	03/19/2020 01:36	WG1445643

¹ Cp² Tc³ Ss⁴ Cn⁵ Sr⁶ Qc⁷ GI⁸ Al⁹ Sc

Wet Chemistry by Method 300.0

Analyte	Result (dry) mg/kg	<u>Qualifier</u>	MDL (dry) mg/kg	RDL (dry) mg/kg	Dilution	Analysis date / time	<u>Batch</u>
Chloride	2.50	<u>J</u>	0.829	10.4	1	03/18/2020 11:52	WG1444780

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

Analyte	Result (dry) mg/kg	<u>Qualifier</u>	MDL (dry) mg/kg	RDL (dry) mg/kg	Dilution	Analysis date / time	<u>Batch</u>
TPH (GC/FID) Low Fraction	0.0312	<u>B J</u>	0.0226	0.104	1	03/17/2020 03:53	WG1445119
(S) a,a,a-Trifluorotoluene(FID)	95.4			77.0-120		03/17/2020 03:53	WG1445119

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

Analyte	Result (dry) mg/kg	<u>Qualifier</u>	MDL (dry) mg/kg	RDL (dry) mg/kg	Dilution	Analysis date / time	<u>Batch</u>
Benzene	U		0.000417	0.00104	1	03/17/2020 03:54	WG1445122
Toluene	U		0.00130	0.00521	1	03/17/2020 03:54	WG1445122
Ethylbenzene	U		0.000553	0.00261	1	03/17/2020 03:54	WG1445122
Total Xylenes	U		0.00498	0.00678	1	03/17/2020 03:54	WG1445122
(S) Toluene-d8	104			75.0-131		03/17/2020 03:54	WG1445122
(S) 4-Bromofluorobenzene	117			67.0-138		03/17/2020 03:54	WG1445122
(S) 1,2-Dichloroethane-d4	112			70.0-130		03/17/2020 03:54	WG1445122

Semi-Volatile Organic Compounds (GC) by Method 8015

Analyte	Result (dry) mg/kg	<u>Qualifier</u>	MDL (dry) mg/kg	RDL (dry) mg/kg	Dilution	Analysis date / time	<u>Batch</u>
C10-C28 Diesel Range	9.00		1.68	4.17	1	03/18/2020 22:18	WG1445151
C28-C40 Oil Range	33.3		0.286	4.17	1	03/18/2020 22:18	WG1445151
(S) o-Terphenyl	73.7			18.0-148		03/18/2020 22:18	WG1445151

Total Solids by Method 2540 G-2011

Analyte	Result %	<u>Qualifier</u>	Dilution	Analysis date / time	<u>Batch</u>
Total Solids	94.6		1	03/19/2020 01:36	WG1445643

¹ Cp² Tc³ Ss⁴ Cn⁵ Sr⁶ Qc⁷ GI⁸ Al⁹ Sc

Wet Chemistry by Method 300.0

Analyte	Result (dry) mg/kg	<u>Qualifier</u>	MDL (dry) mg/kg	RDL (dry) mg/kg	Dilution	Analysis date / time	<u>Batch</u>
Chloride	209		0.841	10.6	1	03/18/2020 12:01	WG1444780

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

Analyte	Result (dry) mg/kg	<u>Qualifier</u>	MDL (dry) mg/kg	RDL (dry) mg/kg	Dilution	Analysis date / time	<u>Batch</u>
TPH (GC/FID) Low Fraction	U		0.0230	0.106	1	03/17/2020 14:41	WG1445448
(S)-a,a,a-Trifluorotoluene(FID)	94.3			77.0-120		03/17/2020 14:41	WG1445448

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

Analyte	Result (dry) mg/kg	<u>Qualifier</u>	MDL (dry) mg/kg	RDL (dry) mg/kg	Dilution	Analysis date / time	<u>Batch</u>
Benzene	U		0.000423	0.00106	1	03/17/2020 04:14	WG1445122
Toluene	U		0.00132	0.00529	1	03/17/2020 04:14	WG1445122
Ethylbenzene	U		0.000561	0.00264	1	03/17/2020 04:14	WG1445122
Total Xylenes	U		0.00506	0.00687	1	03/17/2020 04:14	WG1445122
(S)-Toluene-d8	102			75.0-131		03/17/2020 04:14	WG1445122
(S)-4-Bromofluorobenzene	115			67.0-138		03/17/2020 04:14	WG1445122
(S)-1,2-Dichloroethane-d4	110			70.0-130		03/17/2020 04:14	WG1445122

Semi-Volatile Organic Compounds (GC) by Method 8015

Analyte	Result (dry) mg/kg	<u>Qualifier</u>	MDL (dry) mg/kg	RDL (dry) mg/kg	Dilution	Analysis date / time	<u>Batch</u>
C10-C28 Diesel Range	3.18	U	1.70	4.23	1	03/18/2020 19:46	WG1445151
C28-C40 Oil Range	8.05		0.290	4.23	1	03/18/2020 19:46	WG1445151
(S)-o-Terphenyl	69.3			18.0-148		03/18/2020 19:46	WG1445151

Total Solids by Method 2540 G-2011

Analyte	Result %	<u>Qualifier</u>	Dilution	Analysis date / time	<u>Batch</u>
Total Solids	97.8		1	03/19/2020 01:36	WG1445643

¹ Cp² Tc³ Ss⁴ Cn⁵ Sr⁶ Qc⁷ GI⁸ Al⁹ Sc

Wet Chemistry by Method 300.0

Analyte	Result (dry) mg/kg	<u>Qualifier</u>	MDL (dry) mg/kg	RDL (dry) mg/kg	Dilution	Analysis date / time	<u>Batch</u>
Chloride	19.2		0.813	10.2	1	03/18/2020 12:49	WG1444780

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

Analyte	Result (dry) mg/kg	<u>Qualifier</u>	MDL (dry) mg/kg	RDL (dry) mg/kg	Dilution	Analysis date / time	<u>Batch</u>
TPH (GC/FID) Low Fraction	0.0273	<u>B J</u>	0.0222	0.102	1	03/17/2020 04:34	WG1445119
(S) a,a,a-Trifluorotoluene(FID)	95.4			77.0-120		03/17/2020 04:34	WG1445119

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

Analyte	Result (dry) mg/kg	<u>Qualifier</u>	MDL (dry) mg/kg	RDL (dry) mg/kg	Dilution	Analysis date / time	<u>Batch</u>
Benzene	U		0.000409	0.00102	1	03/17/2020 04:35	WG1445122
Toluene	U		0.00128	0.00511	1	03/17/2020 04:35	WG1445122
Ethylbenzene	U		0.000542	0.00256	1	03/17/2020 04:35	WG1445122
Total Xylenes	U		0.00489	0.00665	1	03/17/2020 04:35	WG1445122
(S) Toluene-d8	102			75.0-131		03/17/2020 04:35	WG1445122
(S) 4-Bromofluorobenzene	115			67.0-138		03/17/2020 04:35	WG1445122
(S) 1,2-Dichloroethane-d4	115			70.0-130		03/17/2020 04:35	WG1445122

Semi-Volatile Organic Compounds (GC) by Method 8015

Analyte	Result (dry) mg/kg	<u>Qualifier</u>	MDL (dry) mg/kg	RDL (dry) mg/kg	Dilution	Analysis date / time	<u>Batch</u>
C10-C28 Diesel Range	23.8		1.65	4.09	1	03/18/2020 19:59	WG1445151
C28-C40 Oil Range	63.4		0.280	4.09	1	03/18/2020 19:59	WG1445151
(S) o-Terphenyl	61.3			18.0-148		03/18/2020 19:59	WG1445151

Total Solids by Method 2540 G-2011

Analyte	Result %	<u>Qualifier</u>	Dilution	Analysis date / time	<u>Batch</u>
Total Solids	96.1		1	03/19/2020 01:36	WG1445643

¹ Cp² Tc³ Ss⁴ Cn⁵ Sr⁶ Qc⁷ GI⁸ Al⁹ Sc

Wet Chemistry by Method 300.0

Analyte	Result (dry) mg/kg	<u>Qualifier</u>	MDL (dry) mg/kg	RDL (dry) mg/kg	Dilution	Analysis date / time	<u>Batch</u>
Chloride	33.7		0.827	10.4	1	03/18/2020 12:58	WG1444780

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

Analyte	Result (dry) mg/kg	<u>Qualifier</u>	MDL (dry) mg/kg	RDL (dry) mg/kg	Dilution	Analysis date / time	<u>Batch</u>
TPH (GC/FID) Low Fraction	0.0362	<u>B J</u>	0.0226	0.104	1	03/17/2020 04:55	WG1445119
(S) a,a,a-Trifluorotoluene(FID)	95.9			77.0-120		03/17/2020 04:55	WG1445119

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

Analyte	Result (dry) mg/kg	<u>Qualifier</u>	MDL (dry) mg/kg	RDL (dry) mg/kg	Dilution	Analysis date / time	<u>Batch</u>
Benzene	U		0.000416	0.00104	1	03/17/2020 04:55	WG1445122
Toluene	U		0.00130	0.00520	1	03/17/2020 04:55	WG1445122
Ethylbenzene	U		0.000551	0.00260	1	03/17/2020 04:55	WG1445122
Total Xylenes	U		0.00497	0.00676	1	03/17/2020 04:55	WG1445122
(S) Toluene-d8	103			75.0-131		03/17/2020 04:55	WG1445122
(S) 4-Bromofluorobenzene	119			67.0-138		03/17/2020 04:55	WG1445122
(S) 1,2-Dichloroethane-d4	113			70.0-130		03/17/2020 04:55	WG1445122

Semi-Volatile Organic Compounds (GC) by Method 8015

Analyte	Result (dry) mg/kg	<u>Qualifier</u>	MDL (dry) mg/kg	RDL (dry) mg/kg	Dilution	Analysis date / time	<u>Batch</u>
C10-C28 Diesel Range	18.5		1.67	4.16	1	03/17/2020 21:26	WG1445151
C28-C40 Oil Range	6.18		0.285	4.16	1	03/17/2020 21:26	WG1445151
(S) o-Terphenyl	40.4			18.0-148		03/17/2020 21:26	WG1445151

Collected date/time: 03/05/20 11:50

L1199114

Total Solids by Method 2540 G-2011

Analyte	Result %	<u>Qualifier</u>	Dilution	Analysis date / time	<u>Batch</u>
Total Solids	90.4		1	03/19/2020 01:36	WG1445643

¹Cp²Tc³Ss⁴Cn⁵Sr⁶Qc⁷Gl⁸Al⁹Sc

Wet Chemistry by Method 300.0

Analyte	Result (dry) mg/kg	<u>Qualifier</u>	MDL (dry) mg/kg	RDL (dry) mg/kg	Dilution	Analysis date / time	<u>Batch</u>
Chloride	569		4.40	55.3	5	03/18/2020 13:08	WG1444780

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

Analyte	Result (dry) mg/kg	<u>Qualifier</u>	MDL (dry) mg/kg	RDL (dry) mg/kg	Dilution	Analysis date / time	<u>Batch</u>
TPH (GC/FID) Low Fraction	0.0265	<u>B J</u>	0.0240	0.111	1	03/17/2020 05:15	WG1445119
(S) a,a,a-Trifluorotoluene(FID)	95.0			77.0-120		03/17/2020 05:15	WG1445119

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

Analyte	Result (dry) mg/kg	<u>Qualifier</u>	MDL (dry) mg/kg	RDL (dry) mg/kg	Dilution	Analysis date / time	<u>Batch</u>
Benzene	U		0.000442	0.00111	1	03/17/2020 05:15	WG1445122
Toluene	U		0.00138	0.00553	1	03/17/2020 05:15	WG1445122
Ethylbenzene	U		0.000586	0.00277	1	03/17/2020 05:15	WG1445122
Total Xylenes	U		0.00529	0.00719	1	03/17/2020 05:15	WG1445122
(S) Toluene-d8	103			75.0-131		03/17/2020 05:15	WG1445122
(S) 4-Bromofluorobenzene	115			67.0-138		03/17/2020 05:15	WG1445122
(S) 1,2-Dichloroethane-d4	116			70.0-130		03/17/2020 05:15	WG1445122

Semi-Volatile Organic Compounds (GC) by Method 8015

Analyte	Result (dry) mg/kg	<u>Qualifier</u>	MDL (dry) mg/kg	RDL (dry) mg/kg	Dilution	Analysis date / time	<u>Batch</u>
C10-C28 Diesel Range	1250		35.6	88.5	20	03/18/2020 00:15	WG1445151
C28-C40 Oil Range	969		6.06	88.5	20	03/18/2020 00:15	WG1445151
(S) o-Terphenyl	0.000	<u>J7</u>		18.0-148		03/18/2020 00:15	WG1445151

Total Solids by Method 2540 G-2011

Analyte	Result %	<u>Qualifier</u>	Dilution	Analysis date / time	<u>Batch</u>
Total Solids	93.4		1	03/19/2020 01:36	WG1445643

¹ Cp² Tc³ Ss⁴ Cn⁵ Sr⁶ Qc⁷ GI⁸ Al⁹ Sc

Wet Chemistry by Method 300.0

Analyte	Result (dry) mg/kg	<u>Qualifier</u>	MDL (dry) mg/kg	RDL (dry) mg/kg	Dilution	Analysis date / time	<u>Batch</u>
Chloride	722		0.851	10.7	1	03/18/2020 13:17	WG1444780

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

Analyte	Result (dry) mg/kg	<u>Qualifier</u>	MDL (dry) mg/kg	RDL (dry) mg/kg	Dilution	Analysis date / time	<u>Batch</u>
TPH (GC/FID) Low Fraction	0.0251	J	0.0232	0.107	1	03/17/2020 15:01	WG1445448
(S) a,a,a-Trifluorotoluene(FID)	95.1			77.0-120		03/17/2020 15:01	WG1445448

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

Analyte	Result (dry) mg/kg	<u>Qualifier</u>	MDL (dry) mg/kg	RDL (dry) mg/kg	Dilution	Analysis date / time	<u>Batch</u>
Benzene	U		0.000428	0.00107	1	03/17/2020 05:35	WG1445122
Toluene	U		0.00134	0.00535	1	03/17/2020 05:35	WG1445122
Ethylbenzene	U		0.000568	0.00268	1	03/17/2020 05:35	WG1445122
Total Xylenes	U		0.00512	0.00696	1	03/17/2020 05:35	WG1445122
(S) Toluene-d8	103			75.0-131		03/17/2020 05:35	WG1445122
(S) 4-Bromofluorobenzene	114			67.0-138		03/17/2020 05:35	WG1445122
(S) 1,2-Dichloroethane-d4	114			70.0-130		03/17/2020 05:35	WG1445122

Semi-Volatile Organic Compounds (GC) by Method 8015

Analyte	Result (dry) mg/kg	<u>Qualifier</u>	MDL (dry) mg/kg	RDL (dry) mg/kg	Dilution	Analysis date / time	<u>Batch</u>
C10-C28 Diesel Range	215		1.72	4.28	1	03/17/2020 21:38	WG1445151
C28-C40 Oil Range	156		0.293	4.28	1	03/17/2020 21:38	WG1445151
(S) o-Terphenyl	71.0			18.0-148		03/17/2020 21:38	WG1445151

Total Solids by Method 2540 G-2011

Analyte	Result %	<u>Qualifier</u>	Dilution	Analysis date / time	<u>Batch</u>
Total Solids	95.7		1	03/19/2020 01:36	WG1445643

¹ Cp² Tc³ Ss⁴ Cn⁵ Sr⁶ Qc⁷ Gl⁸ Al⁹ Sc

Wet Chemistry by Method 300.0

Analyte	Result (dry) mg/kg	<u>Qualifier</u>	MDL (dry) mg/kg	RDL (dry) mg/kg	Dilution	Analysis date / time	<u>Batch</u>
Chloride	1.38	<u>J</u>	0.830	10.4	1	03/18/2020 13:27	WG1444780

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

Analyte	Result (dry) mg/kg	<u>Qualifier</u>	MDL (dry) mg/kg	RDL (dry) mg/kg	Dilution	Analysis date / time	<u>Batch</u>
TPH (GC/FID) Low Fraction	0.0323	<u>B J</u>	0.0227	0.104	1	03/17/2020 07:01	WG1445119
(S) a,a,a-Trifluorotoluene(FID)	96.4			77.0-120		03/17/2020 07:01	WG1445119

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

Analyte	Result (dry) mg/kg	<u>Qualifier</u>	MDL (dry) mg/kg	RDL (dry) mg/kg	Dilution	Analysis date / time	<u>Batch</u>
Benzene	U		0.000418	0.00104	1	03/17/2020 05:56	WG1445122
Toluene	U		0.00131	0.00522	1	03/17/2020 05:56	WG1445122
Ethylbenzene	U		0.000554	0.00261	1	03/17/2020 05:56	WG1445122
Total Xylenes	U		0.00499	0.00679	1	03/17/2020 05:56	WG1445122
(S) Toluene-d8	102			75.0-131		03/17/2020 05:56	WG1445122
(S) 4-Bromofluorobenzene	115			67.0-138		03/17/2020 05:56	WG1445122
(S) 1,2-Dichloroethane-d4	107			70.0-130		03/17/2020 05:56	WG1445122

Semi-Volatile Organic Compounds (GC) by Method 8015

Analyte	Result (dry) mg/kg	<u>Qualifier</u>	MDL (dry) mg/kg	RDL (dry) mg/kg	Dilution	Analysis date / time	<u>Batch</u>
C10-C28 Diesel Range	2.54	<u>J</u>	1.68	4.18	1	03/19/2020 23:30	WG1446556
C28-C40 Oil Range	9.51		0.286	4.18	1	03/19/2020 23:30	WG1446556
(S) o-Terphenyl	66.8			18.0-148		03/19/2020 23:30	WG1446556

Total Solids by Method 2540 G-2011

Analyte	Result %	<u>Qualifier</u>	Dilution	Analysis date / time	<u>Batch</u>
Total Solids	95.6		1	03/19/2020 01:36	WG1445643

¹ Cp² Tc³ Ss⁴ Cn⁵ Sr⁶ Qc⁷ GI⁸ Al⁹ Sc

Wet Chemistry by Method 300.0

Analyte	Result (dry) mg/kg	<u>Qualifier</u>	MDL (dry) mg/kg	RDL (dry) mg/kg	Dilution	Analysis date / time	<u>Batch</u>
Chloride	3.41	<u>J</u>	0.832	10.5	1	03/18/2020 13:36	WG1444780

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

Analyte	Result (dry) mg/kg	<u>Qualifier</u>	MDL (dry) mg/kg	RDL (dry) mg/kg	Dilution	Analysis date / time	<u>Batch</u>
TPH (GC/FID) Low Fraction	0.0247	<u>B J</u>	0.0227	0.105	1	03/17/2020 07:22	WG1445119
(S) a,a,a-Trifluorotoluene(FID)	95.3			77.0-120		03/17/2020 07:22	WG1445119

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

Analyte	Result (dry) mg/kg	<u>Qualifier</u>	MDL (dry) mg/kg	RDL (dry) mg/kg	Dilution	Analysis date / time	<u>Batch</u>
Benzene	U		0.000419	0.00105	1	03/17/2020 06:16	WG1445122
Toluene	U		0.00131	0.00523	1	03/17/2020 06:16	WG1445122
Ethylbenzene	U		0.000555	0.00262	1	03/17/2020 06:16	WG1445122
Total Xylenes	U		0.00500	0.00680	1	03/17/2020 06:16	WG1445122
(S) Toluene-d8	103			75.0-131		03/17/2020 06:16	WG1445122
(S) 4-Bromofluorobenzene	119			67.0-138		03/17/2020 06:16	WG1445122
(S) 1,2-Dichloroethane-d4	110			70.0-130		03/17/2020 06:16	WG1445122

Semi-Volatile Organic Compounds (GC) by Method 8015

Analyte	Result (dry) mg/kg	<u>Qualifier</u>	MDL (dry) mg/kg	RDL (dry) mg/kg	Dilution	Analysis date / time	<u>Batch</u>
C10-C28 Diesel Range	U		1.68	4.19	1	03/19/2020 21:32	WG1446556
C28-C40 Oil Range	3.52	<u>J</u>	0.287	4.19	1	03/19/2020 21:32	WG1446556
(S) o-Terphenyl	66.5			18.0-148		03/19/2020 21:32	WG1446556

Total Solids by Method 2540 G-2011

Analyte	Result %	<u>Qualifier</u>	Dilution	Analysis date / time	<u>Batch</u>
Total Solids	93.4		1	03/19/2020 01:27	WG1445647

¹ Cp² Tc³ Ss⁴ Cn⁵ Sr⁶ Qc⁷ GI⁸ Al⁹ Sc

Wet Chemistry by Method 300.0

Analyte	Result (dry) mg/kg	<u>Qualifier</u>	MDL (dry) mg/kg	RDL (dry) mg/kg	Dilution	Analysis date / time	<u>Batch</u>
Chloride	1.27	<u>J</u>	0.851	10.7	1	03/18/2020 13:46	WG1444780

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

Analyte	Result (dry) mg/kg	<u>Qualifier</u>	MDL (dry) mg/kg	RDL (dry) mg/kg	Dilution	Analysis date / time	<u>Batch</u>
TPH (GC/FID) Low Fraction	0.0324	<u>B J</u>	0.0232	0.107	1	03/17/2020 07:42	WG1445119
(S) a,a,a-Trifluorotoluene(FID)	94.5			77.0-120		03/17/2020 07:42	WG1445119

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

Analyte	Result (dry) mg/kg	<u>Qualifier</u>	MDL (dry) mg/kg	RDL (dry) mg/kg	Dilution	Analysis date / time	<u>Batch</u>
Benzene	U		0.000428	0.00107	1	03/17/2020 06:36	WG1445122
Toluene	U		0.00134	0.00535	1	03/17/2020 06:36	WG1445122
Ethylbenzene	U		0.000567	0.00268	1	03/17/2020 06:36	WG1445122
Total Xylenes	U		0.00512	0.00696	1	03/17/2020 06:36	WG1445122
(S) Toluene-d8	101			75.0-131		03/17/2020 06:36	WG1445122
(S) 4-Bromofluorobenzene	115			67.0-138		03/17/2020 06:36	WG1445122
(S) 1,2-Dichloroethane-d4	111			70.0-130		03/17/2020 06:36	WG1445122

Semi-Volatile Organic Compounds (GC) by Method 8015

Analyte	Result (dry) mg/kg	<u>Qualifier</u>	MDL (dry) mg/kg	RDL (dry) mg/kg	Dilution	Analysis date / time	<u>Batch</u>
C10-C28 Diesel Range	U		1.72	4.28	1	03/19/2020 21:45	WG1446556
C28-C40 Oil Range	3.00	<u>J</u>	0.293	4.28	1	03/19/2020 21:45	WG1446556
(S) o-Terphenyl	62.9			18.0-148		03/19/2020 21:45	WG1446556

Total Solids by Method 2540 G-2011

Analyte	Result %	<u>Qualifier</u>	Dilution	Analysis date / time	<u>Batch</u>
Total Solids	92.2		1	03/19/2020 01:27	WG1445647

¹ Cp² Tc³ Ss⁴ Cn⁵ Sr⁶ Qc⁷ GI⁸ Al⁹ Sc

Wet Chemistry by Method 300.0

Analyte	Result (dry) mg/kg	<u>Qualifier</u>	MDL (dry) mg/kg	RDL (dry) mg/kg	Dilution	Analysis date / time	<u>Batch</u>
Chloride	24.0		0.862	10.8	1	03/18/2020 13:55	WG1444780

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

Analyte	Result (dry) mg/kg	<u>Qualifier</u>	MDL (dry) mg/kg	RDL (dry) mg/kg	Dilution	Analysis date / time	<u>Batch</u>
TPH (GC/FID) Low Fraction	0.0788	<u>B J</u>	0.0235	0.108	1	03/17/2020 08:03	WG1445119
(S) a,a,a-Trifluorotoluene(FID)	92.8			77.0-120		03/17/2020 08:03	WG1445119

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

Analyte	Result (dry) mg/kg	<u>Qualifier</u>	MDL (dry) mg/kg	RDL (dry) mg/kg	Dilution	Analysis date / time	<u>Batch</u>
Benzene	U		0.000434	0.00108	1	03/17/2020 06:56	WG1445122
Toluene	U		0.00136	0.00542	1	03/17/2020 06:56	WG1445122
Ethylbenzene	U		0.000575	0.00271	1	03/17/2020 06:56	WG1445122
Total Xylenes	U		0.00518	0.00705	1	03/17/2020 06:56	WG1445122
(S) Toluene-d8	103			75.0-131		03/17/2020 06:56	WG1445122
(S) 4-Bromofluorobenzene	114			67.0-138		03/17/2020 06:56	WG1445122
(S) 1,2-Dichloroethane-d4	106			70.0-130		03/17/2020 06:56	WG1445122

Semi-Volatile Organic Compounds (GC) by Method 8015

Analyte	Result (dry) mg/kg	<u>Qualifier</u>	MDL (dry) mg/kg	RDL (dry) mg/kg	Dilution	Analysis date / time	<u>Batch</u>
C10-C28 Diesel Range	U		1.75	4.34	1	03/19/2020 21:57	WG1446556
C28-C40 Oil Range	4.33	<u>J</u>	0.297	4.34	1	03/19/2020 21:57	WG1446556
(S) o-Terphenyl	63.0			18.0-148		03/19/2020 21:57	WG1446556

Total Solids by Method 2540 G-2011

Analyte	Result %	<u>Qualifier</u>	Dilution	Analysis date / time	<u>Batch</u>
Total Solids	94.5		1	03/19/2020 01:27	WG1445647

¹ Cp² Tc³ Ss⁴ Cn⁵ Sr⁶ Qc⁷ Gl⁸ Al⁹ Sc

Wet Chemistry by Method 300.0

Analyte	Result (dry) mg/kg	<u>Qualifier</u>	MDL (dry) mg/kg	RDL (dry) mg/kg	Dilution	Analysis date / time	<u>Batch</u>
Chloride	3.62	<u>J</u>	0.841	10.6	1	03/18/2020 14:24	WG1444780

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

Analyte	Result (dry) mg/kg	<u>Qualifier</u>	MDL (dry) mg/kg	RDL (dry) mg/kg	Dilution	Analysis date / time	<u>Batch</u>
TPH (GC/FID) Low Fraction	0.0546	<u>B J</u>	0.0230	0.106	1	03/17/2020 01:23	WG1445120
(S) a,a,a-Trifluorotoluene(FID)	96.0			77.0-120		03/17/2020 01:23	WG1445120

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

Analyte	Result (dry) mg/kg	<u>Qualifier</u>	MDL (dry) mg/kg	RDL (dry) mg/kg	Dilution	Analysis date / time	<u>Batch</u>
Benzene	U		0.000423	0.00106	1	03/17/2020 15:22	WG1445259
Toluene	U		0.00132	0.00529	1	03/17/2020 15:22	WG1445259
Ethylbenzene	U		0.000561	0.00264	1	03/17/2020 15:22	WG1445259
Total Xylenes	U		0.00506	0.00688	1	03/17/2020 15:22	WG1445259
(S) Toluene-d8	105			75.0-131		03/17/2020 15:22	WG1445259
(S) 4-Bromofluorobenzene	103			67.0-138		03/17/2020 15:22	WG1445259
(S) 1,2-Dichloroethane-d4	99.2			70.0-130		03/17/2020 15:22	WG1445259

Semi-Volatile Organic Compounds (GC) by Method 8015

Analyte	Result (dry) mg/kg	<u>Qualifier</u>	MDL (dry) mg/kg	RDL (dry) mg/kg	Dilution	Analysis date / time	<u>Batch</u>
C10-C28 Diesel Range	16.4		1.70	4.23	1	03/20/2020 07:45	WG1446556
C28-C40 Oil Range	53.2		0.290	4.23	1	03/20/2020 07:45	WG1446556
(S) o-Terphenyl	47.2			18.0-148		03/20/2020 07:45	WG1446556

Total Solids by Method 2540 G-2011

Analyte	Result %	<u>Qualifier</u>	Dilution	Analysis date / time	<u>Batch</u>
Total Solids	87.5		1	03/19/2020 01:27	WG1445647

¹ Cp² Tc

Wet Chemistry by Method 300.0

Analyte	Result (dry) mg/kg	<u>Qualifier</u>	MDL (dry) mg/kg	RDL (dry) mg/kg	Dilution	Analysis date / time	<u>Batch</u>
Chloride	1950		4.55	57.1	5	03/18/2020 14:34	WG1444780

³ Ss⁴ Cn⁵ Sr⁶ Qc⁷ Gl⁸ Al

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

Analyte	Result (dry) mg/kg	<u>Qualifier</u>	MDL (dry) mg/kg	RDL (dry) mg/kg	Dilution	Analysis date / time	<u>Batch</u>
TPH (GC/FID) Low Fraction	0.0493	<u>B J</u>	0.0248	0.114	1	03/17/2020 01:44	WG1445120
(S)-a,a,a-Trifluorotoluene(FID)	96.7			77.0-120		03/17/2020 01:44	WG1445120

⁹ Sc

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

Analyte	Result (dry) mg/kg	<u>Qualifier</u>	MDL (dry) mg/kg	RDL (dry) mg/kg	Dilution	Analysis date / time	<u>Batch</u>
Benzene	U		0.000457	0.00114	1	03/17/2020 15:41	WG1445259
Toluene	U		0.00143	0.00571	1	03/17/2020 15:41	WG1445259
Ethylbenzene	U		0.000606	0.00286	1	03/17/2020 15:41	WG1445259
Total Xylenes	U		0.00546	0.00743	1	03/17/2020 15:41	WG1445259
(S)-Toluene-d8	105			75.0-131		03/17/2020 15:41	WG1445259
(S)-4-Bromofluorobenzene	99.6			67.0-138		03/17/2020 15:41	WG1445259
(S)-1,2-Dichloroethane-d4	100			70.0-130		03/17/2020 15:41	WG1445259

Semi-Volatile Organic Compounds (GC) by Method 8015

Analyte	Result (dry) mg/kg	<u>Qualifier</u>	MDL (dry) mg/kg	RDL (dry) mg/kg	Dilution	Analysis date / time	<u>Batch</u>
C10-C28 Diesel Range	8.71		1.84	4.57	1	03/19/2020 23:56	WG1446556
C28-C40 Oil Range	18.5		0.313	4.57	1	03/19/2020 23:56	WG1446556
(S)-o-Terphenyl	67.5			18.0-148		03/19/2020 23:56	WG1446556

Collected date/time: 03/05/20 11:50

L1199114

Total Solids by Method 2540 G-2011

Analyte	Result %	<u>Qualifier</u>	Dilution	Analysis date / time	<u>Batch</u>
Total Solids	90.9		1	03/19/2020 01:27	WG1445647

¹Cp²Tc³Ss⁴Cn⁵Sr⁶Qc⁷Gl⁸Al⁹Sc

Wet Chemistry by Method 300.0

Analyte	Result (dry) mg/kg	<u>Qualifier</u>	MDL (dry) mg/kg	RDL (dry) mg/kg	Dilution	Analysis date / time	<u>Batch</u>
Chloride	1100		4.38	55.0	5	03/18/2020 14:43	WG1444780

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

Analyte	Result (dry) mg/kg	<u>Qualifier</u>	MDL (dry) mg/kg	RDL (dry) mg/kg	Dilution	Analysis date / time	<u>Batch</u>
TPH (GC/FID) Low Fraction	0.0522	<u>B J</u>	0.0239	0.110	1	03/17/2020 02:04	WG1445120
(S)-a,a,a-Trifluorotoluene(FID)	96.3			77.0-120		03/17/2020 02:04	WG1445120

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

Analyte	Result (dry) mg/kg	<u>Qualifier</u>	MDL (dry) mg/kg	RDL (dry) mg/kg	Dilution	Analysis date / time	<u>Batch</u>
Benzene	U		0.000440	0.00110	1	03/17/2020 16:00	WG1445259
Toluene	U		0.00138	0.00550	1	03/17/2020 16:00	WG1445259
Ethylbenzene	U		0.000583	0.00275	1	03/17/2020 16:00	WG1445259
Total Xylenes	U		0.00526	0.00715	1	03/17/2020 16:00	WG1445259
(S)-Toluene-d8	105			75.0-131		03/17/2020 16:00	WG1445259
(S)-4-Bromofluorobenzene	98.8			67.0-138		03/17/2020 16:00	WG1445259
(S)-1,2-Dichloroethane-d4	101			70.0-130		03/17/2020 16:00	WG1445259

Semi-Volatile Organic Compounds (GC) by Method 8015

Analyte	Result (dry) mg/kg	<u>Qualifier</u>	MDL (dry) mg/kg	RDL (dry) mg/kg	Dilution	Analysis date / time	<u>Batch</u>
C10-C28 Diesel Range	2.45	<u>J</u>	1.77	4.40	1	03/19/2020 22:40	WG1446556
C28-C40 Oil Range	8.45		0.302	4.40	1	03/19/2020 22:40	WG1446556
(S)-o-Terphenyl	68.2			18.0-148		03/19/2020 22:40	WG1446556

Total Solids by Method 2540 G-2011

Analyte	Result %	<u>Qualifier</u>	Dilution	Analysis date / time	<u>Batch</u>
Total Solids	95.6		1	03/19/2020 01:27	WG1445647

¹ Cp² Tc³ Ss⁴ Cn⁵ Sr⁶ Qc⁷ GI⁸ Al⁹ Sc

Wet Chemistry by Method 300.0

Analyte	Result (dry) mg/kg	<u>Qualifier</u>	MDL (dry) mg/kg	RDL (dry) mg/kg	Dilution	Analysis date / time	<u>Batch</u>
Chloride	446		0.832	10.5	1	03/18/2020 14:53	WG1444780

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

Analyte	Result (dry) mg/kg	<u>Qualifier</u>	MDL (dry) mg/kg	RDL (dry) mg/kg	Dilution	Analysis date / time	<u>Batch</u>
TPH (GC/FID) Low Fraction	0.0392	<u>B J</u>	0.0227	0.105	1	03/17/2020 02:25	WG1445120
(S) a,a,a-Trifluorotoluene(FID)	96.6			77.0-120		03/17/2020 02:25	WG1445120

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

Analyte	Result (dry) mg/kg	<u>Qualifier</u>	MDL (dry) mg/kg	RDL (dry) mg/kg	Dilution	Analysis date / time	<u>Batch</u>
Benzene	U		0.000419	0.00105	1	03/17/2020 16:19	WG1445259
Toluene	U		0.00131	0.00523	1	03/17/2020 16:19	WG1445259
Ethylbenzene	U		0.000555	0.00262	1	03/17/2020 16:19	WG1445259
Total Xylenes	U		0.00500	0.00680	1	03/17/2020 16:19	WG1445259
(S) Toluene-d8	107			75.0-131		03/17/2020 16:19	WG1445259
(S) 4-Bromofluorobenzene	100			67.0-138		03/17/2020 16:19	WG1445259
(S) 1,2-Dichloroethane-d4	98.8			70.0-130		03/17/2020 16:19	WG1445259

Semi-Volatile Organic Compounds (GC) by Method 8015

Analyte	Result (dry) mg/kg	<u>Qualifier</u>	MDL (dry) mg/kg	RDL (dry) mg/kg	Dilution	Analysis date / time	<u>Batch</u>
C10-C28 Diesel Range	1.76	<u>J</u>	1.68	4.19	1	03/20/2020 07:19	WG1446556
C28-C40 Oil Range	1.61	<u>J</u>	0.287	4.19	1	03/20/2020 07:19	WG1446556
(S) o-Terphenyl	74.3			18.0-148		03/20/2020 07:19	WG1446556

Total Solids by Method 2540 G-2011

Analyte	Result %	<u>Qualifier</u>	Dilution	Analysis date / time	<u>Batch</u>
Total Solids	94.7		1	03/19/2020 01:27	WG1445647

¹ Cp² Tc³ Ss⁴ Cn⁵ Sr⁶ Qc⁷ Gl⁸ Al⁹ Sc

Wet Chemistry by Method 300.0

Analyte	Result (dry) mg/kg	<u>Qualifier</u>	MDL (dry) mg/kg	RDL (dry) mg/kg	Dilution	Analysis date / time	<u>Batch</u>
Chloride	3.69	<u>J</u>	0.839	10.6	1	03/18/2020 15:02	WG1444780

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

Analyte	Result (dry) mg/kg	<u>Qualifier</u>	MDL (dry) mg/kg	RDL (dry) mg/kg	Dilution	Analysis date / time	<u>Batch</u>
TPH (GC/FID) Low Fraction	0.0548	<u>B J</u>	0.0229	0.106	1	03/17/2020 18:13	WG1445660
(S) a,a,a-Trifluorotoluene(FID)	96.5			77.0-120		03/17/2020 18:13	WG1445660

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

Analyte	Result (dry) mg/kg	<u>Qualifier</u>	MDL (dry) mg/kg	RDL (dry) mg/kg	Dilution	Analysis date / time	<u>Batch</u>
Benzene	U		0.000422	0.00106	1	03/17/2020 16:38	WG1445259
Toluene	U		0.00132	0.00528	1	03/17/2020 16:38	WG1445259
Ethylbenzene	U		0.000560	0.00264	1	03/17/2020 16:38	WG1445259
Total Xylenes	U		0.00505	0.00686	1	03/17/2020 16:38	WG1445259
(S) Toluene-d8	105			75.0-131		03/17/2020 16:38	WG1445259
(S) 4-Bromofluorobenzene	98.1			67.0-138		03/17/2020 16:38	WG1445259
(S) 1,2-Dichloroethane-d4	101			70.0-130		03/17/2020 16:38	WG1445259

Semi-Volatile Organic Compounds (GC) by Method 8015

Analyte	Result (dry) mg/kg	<u>Qualifier</u>	MDL (dry) mg/kg	RDL (dry) mg/kg	Dilution	Analysis date / time	<u>Batch</u>
C10-C28 Diesel Range	9.98		1.70	4.22	1	03/20/2020 00:59	WG1446556
C28-C40 Oil Range	28.0		0.289	4.22	1	03/20/2020 00:59	WG1446556
(S) o-Terphenyl	62.5			18.0-148		03/20/2020 00:59	WG1446556

Total Solids by Method 2540 G-2011

Analyte	Result %	<u>Qualifier</u>	Dilution	Analysis date / time	<u>Batch</u>
Total Solids	87.1		1	03/19/2020 01:27	WG1445647

¹ Cp² Tc³ Ss⁴ Cn⁵ Sr⁶ Qc⁷ Gl⁸ Al⁹ Sc

Wet Chemistry by Method 300.0

Analyte	Result (dry) mg/kg	<u>Qualifier</u>	MDL (dry) mg/kg	RDL (dry) mg/kg	Dilution	Analysis date / time	<u>Batch</u>
Chloride	1780		9.13	115	10	03/18/2020 00:06	WG1445291

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

Analyte	Result (dry) mg/kg	<u>Qualifier</u>	MDL (dry) mg/kg	RDL (dry) mg/kg	Dilution	Analysis date / time	<u>Batch</u>
TPH (GC/FID) Low Fraction	0.0422	<u>B J</u>	0.0249	0.115	1	03/17/2020 06:54	WG1445120
(S) a,a,a-Trifluorotoluene(FID)	96.9			77.0-120		03/17/2020 06:54	WG1445120

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

Analyte	Result (dry) mg/kg	<u>Qualifier</u>	MDL (dry) mg/kg	RDL (dry) mg/kg	Dilution	Analysis date / time	<u>Batch</u>
Benzene	U		0.000459	0.00115	1	03/17/2020 16:57	WG1445259
Toluene	U		0.00144	0.00574	1	03/17/2020 16:57	WG1445259
Ethylbenzene	U		0.000608	0.00287	1	03/17/2020 16:57	WG1445259
Total Xylenes	U		0.00549	0.00746	1	03/17/2020 16:57	WG1445259
(S) Toluene-d8	106			75.0-131		03/17/2020 16:57	WG1445259
(S) 4-Bromofluorobenzene	100			67.0-138		03/17/2020 16:57	WG1445259
(S) 1,2-Dichloroethane-d4	100			70.0-130		03/17/2020 16:57	WG1445259

Semi-Volatile Organic Compounds (GC) by Method 8015

Analyte	Result (dry) mg/kg	<u>Qualifier</u>	MDL (dry) mg/kg	RDL (dry) mg/kg	Dilution	Analysis date / time	<u>Batch</u>
C10-C28 Diesel Range	7.51		1.85	4.59	1	03/20/2020 00:08	WG1446556
C28-C40 Oil Range	16.9		0.315	4.59	1	03/20/2020 00:08	WG1446556
(S) o-Terphenyl	66.7			18.0-148		03/20/2020 00:08	WG1446556

Total Solids by Method 2540 G-2011

Analyte	Result %	<u>Qualifier</u>	Dilution	Analysis date / time	<u>Batch</u>
Total Solids	97.4		1	03/19/2020 01:27	WG1445647

¹ Cp² Tc³ Ss⁴ Cn⁵ Sr⁶ Qc⁷ GI⁸ Al⁹ Sc

Wet Chemistry by Method 300.0

Analyte	Result (dry) mg/kg	<u>Qualifier</u>	MDL (dry) mg/kg	RDL (dry) mg/kg	Dilution	Analysis date / time	<u>Batch</u>
Chloride	40.3		0.816	10.3	1	03/18/2020 00:15	WG1445291

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

Analyte	Result (dry) mg/kg	<u>Qualifier</u>	MDL (dry) mg/kg	RDL (dry) mg/kg	Dilution	Analysis date / time	<u>Batch</u>
TPH (GC/FID) Low Fraction	0.0408	<u>B J</u>	0.0223	0.103	1	03/17/2020 07:14	WG1445120
(S) a,a,a-Trifluorotoluene(FID)	96.9			77.0-120		03/17/2020 07:14	WG1445120

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

Analyte	Result (dry) mg/kg	<u>Qualifier</u>	MDL (dry) mg/kg	RDL (dry) mg/kg	Dilution	Analysis date / time	<u>Batch</u>
Benzene	U		0.000411	0.00103	1	03/17/2020 17:16	WG1445259
Toluene	U		0.00128	0.00514	1	03/17/2020 17:16	WG1445259
Ethylbenzene	U		0.000544	0.00257	1	03/17/2020 17:16	WG1445259
Total Xylenes	U		0.00491	0.00668	1	03/17/2020 17:16	WG1445259
(S) Toluene-d8	106			75.0-131		03/17/2020 17:16	WG1445259
(S) 4-Bromofluorobenzene	96.7			67.0-138		03/17/2020 17:16	WG1445259
(S) 1,2-Dichloroethane-d4	102			70.0-130		03/17/2020 17:16	WG1445259

Semi-Volatile Organic Compounds (GC) by Method 8015

Analyte	Result (dry) mg/kg	<u>Qualifier</u>	MDL (dry) mg/kg	RDL (dry) mg/kg	Dilution	Analysis date / time	<u>Batch</u>
C10-C28 Diesel Range	2.19	<u>J</u>	1.65	4.11	1	03/19/2020 23:05	WG1446556
C28-C40 Oil Range	7.68		0.281	4.11	1	03/19/2020 23:05	WG1446556
(S) o-Terphenyl	66.0			18.0-148		03/19/2020 23:05	WG1446556

Total Solids by Method 2540 G-2011

Analyte	Result %	<u>Qualifier</u>	Dilution	Analysis date / time	<u>Batch</u>
Total Solids	95.2		1	03/19/2020 01:04	WG1445648

¹ Cp² Tc³ Ss⁴ Cn⁵ Sr⁶ Qc⁷ GI⁸ Al⁹ Sc

Wet Chemistry by Method 300.0

Analyte	Result (dry) mg/kg	<u>Qualifier</u>	MDL (dry) mg/kg	RDL (dry) mg/kg	Dilution	Analysis date / time	<u>Batch</u>
Chloride	174		4.18	52.5	5	03/18/2020 00:24	WG1445291

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

Analyte	Result (dry) mg/kg	<u>Qualifier</u>	MDL (dry) mg/kg	RDL (dry) mg/kg	Dilution	Analysis date / time	<u>Batch</u>
TPH (GC/FID) Low Fraction	0.0377	<u>B J</u>	0.0228	0.105	1	03/17/2020 07:35	WG1445120
(S) a,a,a-Trifluorotoluene(FID)	96.9			77.0-120		03/17/2020 07:35	WG1445120

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

Analyte	Result (dry) mg/kg	<u>Qualifier</u>	MDL (dry) mg/kg	RDL (dry) mg/kg	Dilution	Analysis date / time	<u>Batch</u>
Benzene	U		0.000420	0.00105	1	03/17/2020 17:35	WG1445259
Toluene	U		0.00131	0.00525	1	03/17/2020 17:35	WG1445259
Ethylbenzene	U		0.000556	0.00262	1	03/17/2020 17:35	WG1445259
Total Xylenes	U		0.00502	0.00682	1	03/17/2020 17:35	WG1445259
(S) Toluene-d8	104			75.0-131		03/17/2020 17:35	WG1445259
(S) 4-Bromofluorobenzene	100			67.0-138		03/17/2020 17:35	WG1445259
(S) 1,2-Dichloroethane-d4	99.3			70.0-130		03/17/2020 17:35	WG1445259

Semi-Volatile Organic Compounds (GC) by Method 8015

Analyte	Result (dry) mg/kg	<u>Qualifier</u>	MDL (dry) mg/kg	RDL (dry) mg/kg	Dilution	Analysis date / time	<u>Batch</u>
C10-C28 Diesel Range	U		1.69	4.20	1	03/20/2020 07:32	WG1446556
C28-C40 Oil Range	3.30	<u>J</u>	0.288	4.20	1	03/20/2020 07:32	WG1446556
(S) o-Terphenyl	60.6			18.0-148		03/20/2020 07:32	WG1446556

Collected date/time: 03/06/20 11:50

L1199114

Total Solids by Method 2540 G-2011

Analyte	Result %	<u>Qualifier</u>	Dilution	Analysis date / time	<u>Batch</u>
Total Solids	87.1		1	03/19/2020 01:04	WG1445648

¹Cp²Tc³Ss⁴Cn⁵Sr⁶Qc⁷Gl⁸Al⁹Sc

Wet Chemistry by Method 300.0

Analyte	Result (dry) mg/kg	<u>Qualifier</u>	MDL (dry) mg/kg	RDL (dry) mg/kg	Dilution	Analysis date / time	<u>Batch</u>
Chloride	1080		4.57	57.4	5	03/18/2020 00:34	WG1445291

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

Analyte	Result (dry) mg/kg	<u>Qualifier</u>	MDL (dry) mg/kg	RDL (dry) mg/kg	Dilution	Analysis date / time	<u>Batch</u>
TPH (GC/FID) Low Fraction	0.0556	<u>B J</u>	0.0249	0.115	1	03/17/2020 18:34	WG1445660
(S)-a,a,a-Trifluorotoluene(FID)	95.1			77.0-120		03/17/2020 18:34	WG1445660

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

Analyte	Result (dry) mg/kg	<u>Qualifier</u>	MDL (dry) mg/kg	RDL (dry) mg/kg	Dilution	Analysis date / time	<u>Batch</u>
Benzene	U		0.000459	0.00115	1	03/17/2020 17:54	WG1445259
Toluene	U		0.00144	0.00574	1	03/17/2020 17:54	WG1445259
Ethylbenzene	U		0.000609	0.00287	1	03/17/2020 17:54	WG1445259
Total Xylenes	U		0.00549	0.00746	1	03/17/2020 17:54	WG1445259
(S)-Toluene-d8	104			75.0-131		03/17/2020 17:54	WG1445259
(S)-4-Bromofluorobenzene	96.8			67.0-138		03/17/2020 17:54	WG1445259
(S)-1,2-Dichloroethane-d4	98.9			70.0-130		03/17/2020 17:54	WG1445259

Semi-Volatile Organic Compounds (GC) by Method 8015

Analyte	Result (dry) mg/kg	<u>Qualifier</u>	MDL (dry) mg/kg	RDL (dry) mg/kg	Dilution	Analysis date / time	<u>Batch</u>
C10-C28 Diesel Range	324		37.0	91.9	20	03/20/2020 02:28	WG1446556
C28-C40 Oil Range	633		6.29	91.9	20	03/20/2020 02:28	WG1446556
(S)-o-Terphenyl	67.4	<u>J7</u>		18.0-148		03/20/2020 02:28	WG1446556

Total Solids by Method 2540 G-2011

Analyte	Result %	<u>Qualifier</u>	Dilution	Analysis date / time	<u>Batch</u>
Total Solids	89.8		1	03/19/2020 01:04	WG1445648

¹ Cp² Tc³ Ss⁴ Cn⁵ Sr⁶ Qc⁷ GI⁸ Al⁹ Sc

Wet Chemistry by Method 300.0

Analyte	Result (dry) mg/kg	<u>Qualifier</u>	MDL (dry) mg/kg	RDL (dry) mg/kg	Dilution	Analysis date / time	<u>Batch</u>
Chloride	1580		4.43	55.7	5	03/18/2020 00:53	WG1445291

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

Analyte	Result (dry) mg/kg	<u>Qualifier</u>	MDL (dry) mg/kg	RDL (dry) mg/kg	Dilution	Analysis date / time	<u>Batch</u>
TPH (GC/FID) Low Fraction	0.0442	<u>B J</u>	0.0242	0.111	1	03/17/2020 08:16	WG1445120
(S)-a,a,a-Trifluorotoluene(FID)	93.0			77.0-120		03/17/2020 08:16	WG1445120

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

Analyte	Result (dry) mg/kg	<u>Qualifier</u>	MDL (dry) mg/kg	RDL (dry) mg/kg	Dilution	Analysis date / time	<u>Batch</u>
Benzene	U		0.000445	0.00111	1	03/17/2020 18:13	WG1445259
Toluene	U		0.00139	0.00557	1	03/17/2020 18:13	WG1445259
Ethylbenzene	U		0.000590	0.00278	1	03/17/2020 18:13	WG1445259
Total Xylenes	U		0.00532	0.00724	1	03/17/2020 18:13	WG1445259
(S)-Toluene-d8	104			75.0-131		03/17/2020 18:13	WG1445259
(S)-4-Bromofluorobenzene	99.3			67.0-138		03/17/2020 18:13	WG1445259
(S)-1,2-Dichloroethane-d4	99.1			70.0-130		03/17/2020 18:13	WG1445259

Semi-Volatile Organic Compounds (GC) by Method 8015

Analyte	Result (dry) mg/kg	<u>Qualifier</u>	MDL (dry) mg/kg	RDL (dry) mg/kg	Dilution	Analysis date / time	<u>Batch</u>
C10-C28 Diesel Range	416		35.9	89.1	20	03/21/2020 04:09	WG1447675
C28-C40 Oil Range	725		6.10	89.1	20	03/21/2020 04:09	WG1447675
(S)-o-Terphenyl	60.3	<u>J7</u>		18.0-148		03/21/2020 04:09	WG1447675

Collected date/time: 03/06/20 12:10

L1199114

Total Solids by Method 2540 G-2011

Analyte	Result %	<u>Qualifier</u>	Dilution	Analysis date / time	<u>Batch</u>
Total Solids	93.0		1	03/19/2020 01:04	WG1445648

¹Cp²Tc³Ss⁴Cn⁵Sr⁶Qc⁷Gl⁸Al⁹Sc

Wet Chemistry by Method 300.0

Analyte	Result (dry) mg/kg	<u>Qualifier</u>	MDL (dry) mg/kg	RDL (dry) mg/kg	Dilution	Analysis date / time	<u>Batch</u>
Chloride	1360		4.28	53.8	5	03/18/2020 01:02	WG1445291

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

Analyte	Result (dry) mg/kg	<u>Qualifier</u>	MDL (dry) mg/kg	RDL (dry) mg/kg	Dilution	Analysis date / time	<u>Batch</u>
TPH (GC/FID) Low Fraction	0.0372	<u>B J</u>	0.0233	0.108	1	03/17/2020 18:54	WG1445660
(S)-a,a,a-Trifluorotoluene(FID)	97.3			77.0-120		03/17/2020 18:54	WG1445660

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

Analyte	Result (dry) mg/kg	<u>Qualifier</u>	MDL (dry) mg/kg	RDL (dry) mg/kg	Dilution	Analysis date / time	<u>Batch</u>
Benzene	U		0.000430	0.00108	1	03/17/2020 18:32	WG1445259
Toluene	U		0.00134	0.00538	1	03/17/2020 18:32	WG1445259
Ethylbenzene	U		0.000570	0.00269	1	03/17/2020 18:32	WG1445259
Total Xylenes	U		0.00514	0.00699	1	03/17/2020 18:32	WG1445259
(S)-Toluene-d8	107			75.0-131		03/17/2020 18:32	WG1445259
(S)-4-Bromofluorobenzene	102			67.0-138		03/17/2020 18:32	WG1445259
(S)-1,2-Dichloroethane-d4	99.3			70.0-130		03/17/2020 18:32	WG1445259

Semi-Volatile Organic Compounds (GC) by Method 8015

Analyte	Result (dry) mg/kg	<u>Qualifier</u>	MDL (dry) mg/kg	RDL (dry) mg/kg	Dilution	Analysis date / time	<u>Batch</u>
C10-C28 Diesel Range	6.49		1.73	4.30	1	03/21/2020 13:28	WG1447675
C28-C40 Oil Range	7.75		0.295	4.30	1	03/21/2020 13:28	WG1447675
(S)-o-Terphenyl	55.6			18.0-148		03/21/2020 13:28	WG1447675

Total Solids by Method 2540 G-2011

Analyte	Result %	<u>Qualifier</u>	Dilution	Analysis date / time	<u>Batch</u>
Total Solids	91.7		1	03/19/2020 01:04	WG1445648

¹ Cp² Tc³ Ss⁴ Cn⁵ Sr⁶ Qc⁷ GI⁸ Al⁹ Sc

Wet Chemistry by Method 300.0

Analyte	Result (dry) mg/kg	<u>Qualifier</u>	MDL (dry) mg/kg	RDL (dry) mg/kg	Dilution	Analysis date / time	<u>Batch</u>
Chloride	1320		4.34	54.5	5	03/18/2020 01:12	WG1445291

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

Analyte	Result (dry) mg/kg	<u>Qualifier</u>	MDL (dry) mg/kg	RDL (dry) mg/kg	Dilution	Analysis date / time	<u>Batch</u>
TPH (GC/FID) Low Fraction	0.0379	<u>B J</u>	0.0237	0.109	1	03/17/2020 08:57	WG1445120
(S)-a,a,a-Trifluorotoluene(FID)	96.8			77.0-120		03/17/2020 08:57	WG1445120

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

Analyte	Result (dry) mg/kg	<u>Qualifier</u>	MDL (dry) mg/kg	RDL (dry) mg/kg	Dilution	Analysis date / time	<u>Batch</u>
Benzene	U		0.000436	0.00109	1	03/17/2020 18:51	WG1445259
Toluene	U		0.00136	0.00545	1	03/17/2020 18:51	WG1445259
Ethylbenzene	U		0.000578	0.00273	1	03/17/2020 18:51	WG1445259
Total Xylenes	U		0.00521	0.00709	1	03/17/2020 18:51	WG1445259
(S)-Toluene-d8	105			75.0-131		03/17/2020 18:51	WG1445259
(S)-4-Bromofluorobenzene	98.1			67.0-138		03/17/2020 18:51	WG1445259
(S)-1,2-Dichloroethane-d4	98.2			70.0-130		03/17/2020 18:51	WG1445259

Semi-Volatile Organic Compounds (GC) by Method 8015

Analyte	Result (dry) mg/kg	<u>Qualifier</u>	MDL (dry) mg/kg	RDL (dry) mg/kg	Dilution	Analysis date / time	<u>Batch</u>
C10-C28 Diesel Range	24.2		1.76	4.36	1	03/21/2020 02:54	WG1447675
C28-C40 Oil Range	44.4		0.299	4.36	1	03/21/2020 02:54	WG1447675
(S)-o-Terphenyl	55.3			18.0-148		03/21/2020 02:54	WG1447675

Total Solids by Method 2540 G-2011

Analyte	Result %	<u>Qualifier</u>	Dilution	Analysis date / time	<u>Batch</u>
Total Solids	94.7		1	03/19/2020 01:04	WG1445648

¹ Cp² Tc³ Ss⁴ Cn⁵ Sr⁶ Qc⁷ GI⁸ Al⁹ Sc

Wet Chemistry by Method 300.0

Analyte	Result (dry) mg/kg	<u>Qualifier</u>	MDL (dry) mg/kg	RDL (dry) mg/kg	Dilution	Analysis date / time	<u>Batch</u>
Chloride	381		0.840	10.6	1	03/18/2020 01:40	WG1445291

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

Analyte	Result (dry) mg/kg	<u>Qualifier</u>	MDL (dry) mg/kg	RDL (dry) mg/kg	Dilution	Analysis date / time	<u>Batch</u>
TPH (GC/FID) Low Fraction	0.0440	<u>B J</u>	0.0229	0.106	1	03/17/2020 09:17	WG1445120
(S)-a,a,a-Trifluorotoluene(FID)	96.6			77.0-120		03/17/2020 09:17	WG1445120

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

Analyte	Result (dry) mg/kg	<u>Qualifier</u>	MDL (dry) mg/kg	RDL (dry) mg/kg	Dilution	Analysis date / time	<u>Batch</u>
Benzene	U		0.000423	0.00106	1	03/17/2020 19:10	WG1445259
Toluene	U		0.00132	0.00528	1	03/17/2020 19:10	WG1445259
Ethylbenzene	U		0.000560	0.00264	1	03/17/2020 19:10	WG1445259
Total Xylenes	U		0.00505	0.00687	1	03/17/2020 19:10	WG1445259
(S)-Toluene-d8	105			75.0-131		03/17/2020 19:10	WG1445259
(S)-4-Bromofluorobenzene	101			67.0-138		03/17/2020 19:10	WG1445259
(S)-1,2-Dichloroethane-d4	98.6			70.0-130		03/17/2020 19:10	WG1445259

Semi-Volatile Organic Compounds (GC) by Method 8015

Analyte	Result (dry) mg/kg	<u>Qualifier</u>	MDL (dry) mg/kg	RDL (dry) mg/kg	Dilution	Analysis date / time	<u>Batch</u>
C10-C28 Diesel Range	10.3		1.70	4.23	1	03/21/2020 03:07	WG1447675
C28-C40 Oil Range	30.8		0.289	4.23	1	03/21/2020 03:07	WG1447675
(S)-o-Terphenyl	71.3			18.0-148		03/21/2020 03:07	WG1447675

Total Solids by Method 2540 G-2011

Analyte	Result %	<u>Qualifier</u>	Dilution	Analysis date / time	<u>Batch</u>
Total Solids	89.4		1	03/19/2020 01:04	WG1445648

¹ Cp² Tc³ Ss⁴ Cn⁵ Sr⁶ Qc⁷ GI⁸ Al⁹ Sc

Wet Chemistry by Method 300.0

Analyte	Result (dry) mg/kg	<u>Qualifier</u>	MDL (dry) mg/kg	RDL (dry) mg/kg	Dilution	Analysis date / time	<u>Batch</u>
Chloride	71.0		0.889	11.2	1	03/18/2020 02:09	WG1445291

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

Analyte	Result (dry) mg/kg	<u>Qualifier</u>	MDL (dry) mg/kg	RDL (dry) mg/kg	Dilution	Analysis date / time	<u>Batch</u>
TPH (GC/FID) Low Fraction	0.0439	<u>B J</u>	0.0243	0.112	1	03/17/2020 09:38	WG1445120
(S) a,a,a-Trifluorotoluene(FID)	96.0			77.0-120		03/17/2020 09:38	WG1445120

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

Analyte	Result (dry) mg/kg	<u>Qualifier</u>	MDL (dry) mg/kg	RDL (dry) mg/kg	Dilution	Analysis date / time	<u>Batch</u>
Benzene	U		0.000447	0.00112	1	03/18/2020 08:16	WG1445267
Toluene	U		0.00140	0.00559	1	03/18/2020 08:16	WG1445267
Ethylbenzene	U		0.000593	0.00280	1	03/18/2020 08:16	WG1445267
Total Xylenes	U		0.00534	0.00727	1	03/18/2020 08:16	WG1445267
(S) Toluene-d8	106			75.0-131		03/18/2020 08:16	WG1445267
(S) 4-Bromofluorobenzene	106			67.0-138		03/18/2020 08:16	WG1445267
(S) 1,2-Dichloroethane-d4	103			70.0-130		03/18/2020 08:16	WG1445267

Semi-Volatile Organic Compounds (GC) by Method 8015

Analyte	Result (dry) mg/kg	<u>Qualifier</u>	MDL (dry) mg/kg	RDL (dry) mg/kg	Dilution	Analysis date / time	<u>Batch</u>
C10-C28 Diesel Range	10.6		1.80	4.47	1	03/21/2020 02:41	WG1447675
C28-C40 Oil Range	31.3		0.306	4.47	1	03/21/2020 02:41	WG1447675
(S) o-Terphenyl	58.7			18.0-148		03/21/2020 02:41	WG1447675

Total Solids by Method 2540 G-2011

Analyte	Result %	<u>Qualifier</u>	Dilution	Analysis date / time	<u>Batch</u>
Total Solids	89.2		1	03/19/2020 01:04	WG1445648

¹ Cp² Tc³ Ss⁴ Cn⁵ Sr⁶ Qc⁷ GI⁸ Al⁹ Sc

Wet Chemistry by Method 300.0

Analyte	Result (dry) mg/kg	<u>Qualifier</u>	MDL (dry) mg/kg	RDL (dry) mg/kg	Dilution	Analysis date / time	<u>Batch</u>
Chloride	158		0.891	11.2	1	03/18/2020 02:18	WG1445291

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

Analyte	Result (dry) mg/kg	<u>Qualifier</u>	MDL (dry) mg/kg	RDL (dry) mg/kg	Dilution	Analysis date / time	<u>Batch</u>
TPH (GC/FID) Low Fraction	0.0381	<u>B J</u>	0.0243	0.112	1	03/17/2020 09:58	WG1445120
(S) a,a,a-Trifluorotoluene(FID)	92.0			77.0-120		03/17/2020 09:58	WG1445120

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

Analyte	Result (dry) mg/kg	<u>Qualifier</u>	MDL (dry) mg/kg	RDL (dry) mg/kg	Dilution	Analysis date / time	<u>Batch</u>
Benzene	U		0.000448	0.00112	1	03/18/2020 08:37	WG1445267
Toluene	U		0.00140	0.00561	1	03/18/2020 08:37	WG1445267
Ethylbenzene	U		0.000594	0.00280	1	03/18/2020 08:37	WG1445267
Total Xylenes	U		0.00536	0.00729	1	03/18/2020 08:37	WG1445267
(S) Toluene-d8	105			75.0-131		03/18/2020 08:37	WG1445267
(S) 4-Bromofluorobenzene	93.1			67.0-138		03/18/2020 08:37	WG1445267
(S) 1,2-Dichloroethane-d4	114			70.0-130		03/18/2020 08:37	WG1445267

Semi-Volatile Organic Compounds (GC) by Method 8015

Analyte	Result (dry) mg/kg	<u>Qualifier</u>	MDL (dry) mg/kg	RDL (dry) mg/kg	Dilution	Analysis date / time	<u>Batch</u>
C10-C28 Diesel Range	726		36.1	89.7	20	03/21/2020 03:57	WG1447675
C28-C40 Oil Range	1260		6.14	89.7	20	03/21/2020 03:57	WG1447675
(S) o-Terphenyl	82.1	<u>J7</u>		18.0-148		03/21/2020 03:57	WG1447675

Total Solids by Method 2540 G-2011

Analyte	Result %	<u>Qualifier</u>	Dilution	Analysis date / time	<u>Batch</u>
Total Solids	89.4		1	03/19/2020 01:04	WG1445648

¹ Cp² Tc³ Ss⁴ Cn⁵ Sr⁶ Qc⁷ GI⁸ Al⁹ Sc

Wet Chemistry by Method 300.0

Analyte	Result (dry) mg/kg	<u>Qualifier</u>	MDL (dry) mg/kg	RDL (dry) mg/kg	Dilution	Analysis date / time	<u>Batch</u>
Chloride	40.3		0.889	11.2	1	03/18/2020 02:28	WG1445291

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

Analyte	Result (dry) mg/kg	<u>Qualifier</u>	MDL (dry) mg/kg	RDL (dry) mg/kg	Dilution	Analysis date / time	<u>Batch</u>
TPH (GC/FID) Low Fraction	0.0422	<u>B J</u>	0.0243	0.112	1	03/17/2020 10:18	WG1445120
(S) a,a,a-Trifluorotoluene(FID)	96.9			77.0-120		03/17/2020 10:18	WG1445120

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

Analyte	Result (dry) mg/kg	<u>Qualifier</u>	MDL (dry) mg/kg	RDL (dry) mg/kg	Dilution	Analysis date / time	<u>Batch</u>
Benzene	U		0.000447	0.00112	1	03/18/2020 08:58	WG1445267
Toluene	U		0.00140	0.00559	1	03/18/2020 08:58	WG1445267
Ethylbenzene	U		0.000593	0.00280	1	03/18/2020 08:58	WG1445267
Total Xylenes	U		0.00535	0.00727	1	03/18/2020 08:58	WG1445267
(S) Toluene-d8	105			75.0-131		03/18/2020 08:58	WG1445267
(S) 4-Bromofluorobenzene	92.9			67.0-138		03/18/2020 08:58	WG1445267
(S) 1,2-Dichloroethane-d4	113			70.0-130		03/18/2020 08:58	WG1445267

Semi-Volatile Organic Compounds (GC) by Method 8015

Analyte	Result (dry) mg/kg	<u>Qualifier</u>	MDL (dry) mg/kg	RDL (dry) mg/kg	Dilution	Analysis date / time	<u>Batch</u>
C10-C28 Diesel Range	2.08	<u>J</u>	1.80	4.47	1	03/21/2020 13:02	WG1447675
C28-C40 Oil Range	2.72	<u>J</u>	0.306	4.47	1	03/21/2020 13:02	WG1447675
(S) o-Terphenyl	48.9			18.0-148		03/21/2020 13:02	WG1447675

Total Solids by Method 2540 G-2011

Analyte	Result %	<u>Qualifier</u>	Dilution	Analysis date / time	<u>Batch</u>
Total Solids	98.0		1	03/19/2020 01:04	WG1445648

¹ Cp² Tc³ Ss⁴ Cn⁵ Sr⁶ Qc⁷ GI⁸ Al⁹ Sc

Wet Chemistry by Method 300.0

Analyte	Result (dry) mg/kg	<u>Qualifier</u>	MDL (dry) mg/kg	RDL (dry) mg/kg	Dilution	Analysis date / time	<u>Batch</u>
Chloride	69.4		0.811	10.2	1	03/18/2020 02:37	WG1445291

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

Analyte	Result (dry) mg/kg	<u>Qualifier</u>	MDL (dry) mg/kg	RDL (dry) mg/kg	Dilution	Analysis date / time	<u>Batch</u>
TPH (GC/FID) Low Fraction	0.189	<u>B</u>	0.0221	0.102	1	03/17/2020 10:39	WG1445120
(S) a,a,a-Trifluorotoluene(FID)	96.3			77.0-120		03/17/2020 10:39	WG1445120

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

Analyte	Result (dry) mg/kg	<u>Qualifier</u>	MDL (dry) mg/kg	RDL (dry) mg/kg	Dilution	Analysis date / time	<u>Batch</u>
Benzene	U		0.000408	0.00102	1	03/18/2020 09:18	WG1445267
Toluene	U		0.00128	0.00510	1	03/18/2020 09:18	WG1445267
Ethylbenzene	U		0.000541	0.00255	1	03/18/2020 09:18	WG1445267
Total Xylenes	U		0.00488	0.00663	1	03/18/2020 09:18	WG1445267
(S) Toluene-d8	108			75.0-131		03/18/2020 09:18	WG1445267
(S) 4-Bromofluorobenzene	94.4			67.0-138		03/18/2020 09:18	WG1445267
(S) 1,2-Dichloroethane-d4	97.8			70.0-130		03/18/2020 09:18	WG1445267

Semi-Volatile Organic Compounds (GC) by Method 8015

Analyte	Result (dry) mg/kg	<u>Qualifier</u>	MDL (dry) mg/kg	RDL (dry) mg/kg	Dilution	Analysis date / time	<u>Batch</u>
C10-C28 Diesel Range	U		1.64	4.08	1	03/21/2020 00:48	WG1447675
C28-C40 Oil Range	5.53		0.280	4.08	1	03/21/2020 00:48	WG1447675
(S) o-Terphenyl	61.1			18.0-148		03/21/2020 00:48	WG1447675

Total Solids by Method 2540 G-2011

Analyte	Result %	<u>Qualifier</u>	Dilution	Analysis date / time	<u>Batch</u>
Total Solids	96.7		1	03/19/2020 00:54	WG1445649

¹ Cp² Tc³ Ss⁴ Cn⁵ Sr⁶ Qc⁷ GI⁸ Al⁹ Sc

Wet Chemistry by Method 300.0

Analyte	Result (dry) mg/kg	<u>Qualifier</u>	MDL (dry) mg/kg	RDL (dry) mg/kg	Dilution	Analysis date / time	<u>Batch</u>
Chloride	248		0.822	10.3	1	03/18/2020 02:47	WG1445291

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

Analyte	Result (dry) mg/kg	<u>Qualifier</u>	MDL (dry) mg/kg	RDL (dry) mg/kg	Dilution	Analysis date / time	<u>Batch</u>
TPH (GC/FID) Low Fraction	0.0414	<u>B J</u>	0.0224	0.103	1	03/17/2020 10:59	WG1445120
(S) a,a,a-Trifluorotoluene(FID)	96.9			77.0-120		03/17/2020 10:59	WG1445120

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

Analyte	Result (dry) mg/kg	<u>Qualifier</u>	MDL (dry) mg/kg	RDL (dry) mg/kg	Dilution	Analysis date / time	<u>Batch</u>
Benzene	U		0.000414	0.00103	1	03/18/2020 09:39	WG1445267
Toluene	U		0.00129	0.00517	1	03/18/2020 09:39	WG1445267
Ethylbenzene	U		0.000548	0.00259	1	03/18/2020 09:39	WG1445267
Total Xylenes	U		0.00494	0.00672	1	03/18/2020 09:39	WG1445267
(S) Toluene-d8	107			75.0-131		03/18/2020 09:39	WG1445267
(S) 4-Bromofluorobenzene	94.9			67.0-138		03/18/2020 09:39	WG1445267
(S) 1,2-Dichloroethane-d4	103			70.0-130		03/18/2020 09:39	WG1445267

Semi-Volatile Organic Compounds (GC) by Method 8015

Analyte	Result (dry) mg/kg	<u>Qualifier</u>	MDL (dry) mg/kg	RDL (dry) mg/kg	Dilution	Analysis date / time	<u>Batch</u>
C10-C28 Diesel Range	U		1.66	4.14	1	03/21/2020 13:15	WG1447675
C28-C40 Oil Range	2.71	<u>J</u>	0.283	4.14	1	03/21/2020 13:15	WG1447675
(S) o-Terphenyl	63.0			18.0-148		03/21/2020 13:15	WG1447675

Collected date/time: 03/06/20 11:50

L1199114

Total Solids by Method 2540 G-2011

Analyte	Result %	<u>Qualifier</u>	Dilution	Analysis date / time	<u>Batch</u>
Total Solids	93.1		1	03/19/2020 00:54	WG1445649

¹ Cp² Tc³ Ss⁴ Cn⁵ Sr⁶ Qc⁷ GI⁸ Al⁹ Sc

Wet Chemistry by Method 300.0

Analyte	Result (dry) mg/kg	<u>Qualifier</u>	MDL (dry) mg/kg	RDL (dry) mg/kg	Dilution	Analysis date / time	<u>Batch</u>
Chloride	4360		17.1	215	20	03/18/2020 02:57	WG1445291

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

Analyte	Result (dry) mg/kg	<u>Qualifier</u>	MDL (dry) mg/kg	RDL (dry) mg/kg	Dilution	Analysis date / time	<u>Batch</u>
TPH (GC/FID) Low Fraction	0.0496	<u>B J</u>	0.0233	0.107	1	03/17/2020 19:15	WG1445660
(S) a,a,a-Trifluorotoluene(FID)	94.7			77.0-120		03/17/2020 19:15	WG1445660

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

Analyte	Result (dry) mg/kg	<u>Qualifier</u>	MDL (dry) mg/kg	RDL (dry) mg/kg	Dilution	Analysis date / time	<u>Batch</u>
Benzene	U		0.000429	0.00107	1	03/18/2020 10:00	WG1445267
Toluene	U		0.00134	0.00537	1	03/18/2020 10:00	WG1445267
Ethylbenzene	U		0.000569	0.00268	1	03/18/2020 10:00	WG1445267
Total Xylenes	U		0.00513	0.00698	1	03/18/2020 10:00	WG1445267
(S) Toluene-d8	107			75.0-131		03/18/2020 10:00	WG1445267
(S) 4-Bromofluorobenzene	92.8			67.0-138		03/18/2020 10:00	WG1445267
(S) 1,2-Dichloroethane-d4	101			70.0-130		03/18/2020 10:00	WG1445267

Semi-Volatile Organic Compounds (GC) by Method 8015

Analyte	Result (dry) mg/kg	<u>Qualifier</u>	MDL (dry) mg/kg	RDL (dry) mg/kg	Dilution	Analysis date / time	<u>Batch</u>
C10-C28 Diesel Range	176		34.6	85.9	20	03/21/2020 03:32	WG1447675
C28-C40 Oil Range	390		5.88	85.9	20	03/21/2020 03:32	WG1447675
(S) o-Terphenyl	77.6	<u>J7</u>		18.0-148		03/21/2020 03:32	WG1447675

Collected date/time: 03/06/20 12:00

L1199114

Total Solids by Method 2540 G-2011

Analyte	Result %	<u>Qualifier</u>	Dilution	Analysis date / time	<u>Batch</u>
Total Solids	93.4		1	03/19/2020 00:54	WG1445649

¹ Cp² Tc³ Ss⁴ Cn⁵ Sr⁶ Qc⁷ GI⁸ Al⁹ Sc

Wet Chemistry by Method 300.0

Analyte	Result (dry) mg/kg	<u>Qualifier</u>	MDL (dry) mg/kg	RDL (dry) mg/kg	Dilution	Analysis date / time	<u>Batch</u>
Chloride	3800		17.0	214	20	03/18/2020 03:06	WG1445291

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

Analyte	Result (dry) mg/kg	<u>Qualifier</u>	MDL (dry) mg/kg	RDL (dry) mg/kg	Dilution	Analysis date / time	<u>Batch</u>
TPH (GC/FID) Low Fraction	0.0451	<u>B J</u>	0.0232	0.107	1	03/17/2020 19:35	WG1445660
(S) a,a,a-Trifluorotoluene(FID)	93.4			77.0-120		03/17/2020 19:35	WG1445660

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

Analyte	Result (dry) mg/kg	<u>Qualifier</u>	MDL (dry) mg/kg	RDL (dry) mg/kg	Dilution	Analysis date / time	<u>Batch</u>
Benzene	U		0.000428	0.00107	1	03/18/2020 10:21	WG1445267
Toluene	U		0.00134	0.00535	1	03/18/2020 10:21	WG1445267
Ethylbenzene	U		0.000567	0.00268	1	03/18/2020 10:21	WG1445267
Total Xylenes	U		0.00512	0.00696	1	03/18/2020 10:21	WG1445267
(S) Toluene-d8	107			75.0-131		03/18/2020 10:21	WG1445267
(S) 4-Bromofluorobenzene	95.2			67.0-138		03/18/2020 10:21	WG1445267
(S) 1,2-Dichloroethane-d4	100			70.0-130		03/18/2020 10:21	WG1445267

Semi-Volatile Organic Compounds (GC) by Method 8015

Analyte	Result (dry) mg/kg	<u>Qualifier</u>	MDL (dry) mg/kg	RDL (dry) mg/kg	Dilution	Analysis date / time	<u>Batch</u>
C10-C28 Diesel Range	80.3		17.2	42.8	10	03/21/2020 03:44	WG1447675
C28-C40 Oil Range	172		2.93	42.8	10	03/21/2020 03:44	WG1447675
(S) o-Terphenyl	35.5			18.0-148		03/21/2020 03:44	WG1447675

Collected date/time: 03/06/20 12:10

L1199114

Total Solids by Method 2540 G-2011

Analyte	Result %	<u>Qualifier</u>	Dilution	Analysis date / time	<u>Batch</u>
Total Solids	93.3		1	03/19/2020 00:54	WG1445649

¹Cp²Tc³Ss⁴Cn⁵Sr⁶Qc⁷Gl⁸Al⁹Sc

Wet Chemistry by Method 300.0

Analyte	Result (dry) mg/kg	<u>Qualifier</u>	MDL (dry) mg/kg	RDL (dry) mg/kg	Dilution	Analysis date / time	<u>Batch</u>
Chloride	6720		17.0	214	20	03/18/2020 03:35	WG1445291

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

Analyte	Result (dry) mg/kg	<u>Qualifier</u>	MDL (dry) mg/kg	RDL (dry) mg/kg	Dilution	Analysis date / time	<u>Batch</u>
TPH (GC/FID) Low Fraction	0.0327	<u>B J</u>	0.0233	0.107	1	03/20/2020 16:07	WG1447538
(S)-a,a,a-Trifluorotoluene(FID)	98.6			77.0-120		03/20/2020 16:07	WG1447538

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

Analyte	Result (dry) mg/kg	<u>Qualifier</u>	MDL (dry) mg/kg	RDL (dry) mg/kg	Dilution	Analysis date / time	<u>Batch</u>
Benzene	U		0.000429	0.00107	1	03/18/2020 10:41	WG1445267
Toluene	U		0.00134	0.00536	1	03/18/2020 10:41	WG1445267
Ethylbenzene	U		0.000568	0.00268	1	03/18/2020 10:41	WG1445267
Total Xylenes	U		0.00512	0.00697	1	03/18/2020 10:41	WG1445267
(S)-Toluene-d8	107			75.0-131		03/18/2020 10:41	WG1445267
(S)-4-Bromofluorobenzene	93.4			67.0-138		03/18/2020 10:41	WG1445267
(S)-1,2-Dichloroethane-d4	101			70.0-130		03/18/2020 10:41	WG1445267

Semi-Volatile Organic Compounds (GC) by Method 8015

Analyte	Result (dry) mg/kg	<u>Qualifier</u>	MDL (dry) mg/kg	RDL (dry) mg/kg	Dilution	Analysis date / time	<u>Batch</u>
C10-C28 Diesel Range	7.34		1.73	4.29	1	03/21/2020 01:00	WG1447675
C28-C40 Oil Range	13.7		0.294	4.29	1	03/21/2020 01:00	WG1447675
(S)-o-Terphenyl	53.5			18.0-148		03/21/2020 01:00	WG1447675

Total Solids by Method 2540 G-2011

Analyte	Result %	<u>Qualifier</u>	Dilution	Analysis date / time	<u>Batch</u>
Total Solids	94.2		1	03/19/2020 00:54	WG1445649

¹ Cp² Tc³ Ss⁴ Cn⁵ Sr⁶ Qc⁷ GI⁸ Al⁹ Sc

Wet Chemistry by Method 300.0

Analyte	Result (dry) mg/kg	<u>Qualifier</u>	MDL (dry) mg/kg	RDL (dry) mg/kg	Dilution	Analysis date / time	<u>Batch</u>
Chloride	4830		16.9	212	20	03/18/2020 03:44	WG1445291

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

Analyte	Result (dry) mg/kg	<u>Qualifier</u>	MDL (dry) mg/kg	RDL (dry) mg/kg	Dilution	Analysis date / time	<u>Batch</u>
TPH (GC/FID) Low Fraction	0.0665	<u>B J</u>	0.0230	0.106	1	03/17/2020 07:31	WG1445128
(S)-a,a,a-Trifluorotoluene(FID)	101			77.0-120		03/17/2020 07:31	WG1445128

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

Analyte	Result (dry) mg/kg	<u>Qualifier</u>	MDL (dry) mg/kg	RDL (dry) mg/kg	Dilution	Analysis date / time	<u>Batch</u>
Benzene	U		0.000424	0.00106	1	03/18/2020 11:02	WG1445267
Toluene	U		0.00133	0.00531	1	03/18/2020 11:02	WG1445267
Ethylbenzene	U		0.000562	0.00265	1	03/18/2020 11:02	WG1445267
Total Xylenes	U		0.00507	0.00690	1	03/18/2020 11:02	WG1445267
(S)-Toluene-d8	105			75.0-131		03/18/2020 11:02	WG1445267
(S)-4-Bromofluorobenzene	91.9			67.0-138		03/18/2020 11:02	WG1445267
(S)-1,2-Dichloroethane-d4	103			70.0-130		03/18/2020 11:02	WG1445267

Semi-Volatile Organic Compounds (GC) by Method 8015

Analyte	Result (dry) mg/kg	<u>Qualifier</u>	MDL (dry) mg/kg	RDL (dry) mg/kg	Dilution	Analysis date / time	<u>Batch</u>
C10-C28 Diesel Range	6.42		1.71	4.24	1	03/21/2020 01:13	WG1447675
C28-C40 Oil Range	12.8		0.291	4.24	1	03/21/2020 01:13	WG1447675
(S)-o-Terphenyl	61.2			18.0-148		03/21/2020 01:13	WG1447675

Total Solids by Method 2540 G-2011

Analyte	Result %	<u>Qualifier</u>	Dilution	Analysis date / time	<u>Batch</u>
Total Solids	94.4		1	03/19/2020 00:54	WG1445649

¹ Cp² Tc³ Ss⁴ Cn⁵ Sr⁶ Qc⁷ GI⁸ Al⁹ Sc

Wet Chemistry by Method 300.0

Analyte	Result (dry) mg/kg	<u>Qualifier</u>	MDL (dry) mg/kg	RDL (dry) mg/kg	Dilution	Analysis date / time	<u>Batch</u>
Chloride	295		0.842	10.6	1	03/18/2020 03:54	WG1445291

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

Analyte	Result (dry) mg/kg	<u>Qualifier</u>	MDL (dry) mg/kg	RDL (dry) mg/kg	Dilution	Analysis date / time	<u>Batch</u>
TPH (GC/FID) Low Fraction	0.0606	<u>B J</u>	0.0230	0.106	1	03/17/2020 07:53	WG1445128
(S) a,a,a-Trifluorotoluene(FID)	95.0			77.0-120		03/17/2020 07:53	WG1445128

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

Analyte	Result (dry) mg/kg	<u>Qualifier</u>	MDL (dry) mg/kg	RDL (dry) mg/kg	Dilution	Analysis date / time	<u>Batch</u>
Benzene	U		0.000424	0.00106	1	03/18/2020 11:23	WG1445267
Toluene	U		0.00132	0.00530	1	03/18/2020 11:23	WG1445267
Ethylbenzene	U		0.000561	0.00265	1	03/18/2020 11:23	WG1445267
Total Xylenes	U		0.00506	0.00689	1	03/18/2020 11:23	WG1445267
(S) Toluene-d8	91.5			75.0-131		03/18/2020 11:23	WG1445267
(S) 4-Bromofluorobenzene	95.3			67.0-138		03/18/2020 11:23	WG1445267
(S) 1,2-Dichloroethane-d4	116			70.0-130		03/18/2020 11:23	WG1445267

Semi-Volatile Organic Compounds (GC) by Method 8015

Analyte	Result (dry) mg/kg	<u>Qualifier</u>	MDL (dry) mg/kg	RDL (dry) mg/kg	Dilution	Analysis date / time	<u>Batch</u>
C10-C28 Diesel Range	949		85.3	212	50	03/21/2020 03:19	WG1447675
C28-C40 Oil Range	1920		14.5	212	50	03/21/2020 03:19	WG1447675
(S) o-Terphenyl	77.8	<u>J7</u>		18.0-148		03/21/2020 03:19	WG1447675

Total Solids by Method 2540 G-2011

Analyte	Result %	<u>Qualifier</u>	Dilution	Analysis date / time	<u>Batch</u>
Total Solids	96.4		1	03/19/2020 00:54	WG1445649

¹ Cp² Tc³ Ss⁴ Cn⁵ Sr⁶ Qc⁷ GI⁸ Al⁹ Sc

Wet Chemistry by Method 300.0

Analyte	Result (dry) mg/kg	<u>Qualifier</u>	MDL (dry) mg/kg	RDL (dry) mg/kg	Dilution	Analysis date / time	<u>Batch</u>
Chloride	302		0.825	10.4	1	03/18/2020 04:03	WG1445291

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

Analyte	Result (dry) mg/kg	<u>Qualifier</u>	MDL (dry) mg/kg	RDL (dry) mg/kg	Dilution	Analysis date / time	<u>Batch</u>
TPH (GC/FID) Low Fraction	0.0505	<u>B J</u>	0.0225	0.104	1	03/17/2020 08:25	WG1445128
(S)-a,a,a-Trifluorotoluene(FID)	101			77.0-120		03/17/2020 08:25	WG1445128

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

Analyte	Result (dry) mg/kg	<u>Qualifier</u>	MDL (dry) mg/kg	RDL (dry) mg/kg	Dilution	Analysis date / time	<u>Batch</u>
Benzene	U		0.000415	0.00104	1	03/18/2020 11:43	WG1445267
Toluene	U		0.00130	0.00519	1	03/18/2020 11:43	WG1445267
Ethylbenzene	U		0.000550	0.00259	1	03/18/2020 11:43	WG1445267
Total Xylenes	U		0.00496	0.00675	1	03/18/2020 11:43	WG1445267
(S)-Toluene-d8	89.9			75.0-131		03/18/2020 11:43	WG1445267
(S)-4-Bromofluorobenzene	89.3			67.0-138		03/18/2020 11:43	WG1445267
(S)-1,2-Dichloroethane-d4	110			70.0-130		03/18/2020 11:43	WG1445267

Semi-Volatile Organic Compounds (GC) by Method 8015

Analyte	Result (dry) mg/kg	<u>Qualifier</u>	MDL (dry) mg/kg	RDL (dry) mg/kg	Dilution	Analysis date / time	<u>Batch</u>
C10-C28 Diesel Range	1.94	<u>J</u>	1.67	4.15	1	03/21/2020 01:26	WG1447675
C28-C40 Oil Range	7.12		0.284	4.15	1	03/21/2020 01:26	WG1447675
(S)-o-Terphenyl	69.6			18.0-148		03/21/2020 01:26	WG1447675

Total Solids by Method 2540 G-2011

Analyte	Result %	<u>Qualifier</u>	Dilution	Analysis date / time	<u>Batch</u>
Total Solids	98.9		1	03/19/2020 00:54	WG1445649

¹ Cp² Tc³ Ss⁴ Cn⁵ Sr⁶ Qc⁷ GI⁸ Al⁹ Sc

Wet Chemistry by Method 300.0

Analyte	Result (dry) mg/kg	<u>Qualifier</u>	MDL (dry) mg/kg	RDL (dry) mg/kg	Dilution	Analysis date / time	<u>Batch</u>
Chloride	2.92	<u>B J</u>	0.804	10.1	1	03/18/2020 00:58	WG1445292

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

Analyte	Result (dry) mg/kg	<u>Qualifier</u>	MDL (dry) mg/kg	RDL (dry) mg/kg	Dilution	Analysis date / time	<u>Batch</u>
TPH (GC/FID) Low Fraction	0.0670	<u>B J</u>	0.0219	0.101	1	03/17/2020 09:13	WG1445128
(S) a,a,a-Trifluorotoluene(FID)	102			77.0-120		03/17/2020 09:13	WG1445128

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

Analyte	Result (dry) mg/kg	<u>Qualifier</u>	MDL (dry) mg/kg	RDL (dry) mg/kg	Dilution	Analysis date / time	<u>Batch</u>
Benzene	U		0.000405	0.00101	1	03/18/2020 12:04	WG1445267
Toluene	U		0.00126	0.00506	1	03/18/2020 12:04	WG1445267
Ethylbenzene	U		0.000536	0.00253	1	03/18/2020 12:04	WG1445267
Total Xylenes	U		0.00483	0.00657	1	03/18/2020 12:04	WG1445267
(S) Toluene-d8	101			75.0-131		03/18/2020 12:04	WG1445267
(S) 4-Bromofluorobenzene	92.1			67.0-138		03/18/2020 12:04	WG1445267
(S) 1,2-Dichloroethane-d4	98.6			70.0-130		03/18/2020 12:04	WG1445267

Semi-Volatile Organic Compounds (GC) by Method 8015

Analyte	Result (dry) mg/kg	<u>Qualifier</u>	MDL (dry) mg/kg	RDL (dry) mg/kg	Dilution	Analysis date / time	<u>Batch</u>
C10-C28 Diesel Range	U		1.63	4.05	1	03/21/2020 01:38	WG1447675
C28-C40 Oil Range	7.73		0.277	4.05	1	03/21/2020 01:38	WG1447675
(S) o-Terphenyl	60.1			18.0-148		03/21/2020 01:38	WG1447675

Total Solids by Method 2540 G-2011

Analyte	Result %	<u>Qualifier</u>	Dilution	Analysis date / time	<u>Batch</u>
Total Solids	96.6		1	03/19/2020 00:54	WG1445649

¹ Cp² Tc³ Ss⁴ Cn⁵ Sr⁶ Qc⁷ GI⁸ Al⁹ Sc

Wet Chemistry by Method 300.0

Analyte	Result (dry) mg/kg	<u>Qualifier</u>	MDL (dry) mg/kg	RDL (dry) mg/kg	Dilution	Analysis date / time	<u>Batch</u>
Chloride	3.32	<u>B</u> <u>J</u>	0.823	10.3	1	03/18/2020 01:51	WG1445292

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

Analyte	Result (dry) mg/kg	<u>Qualifier</u>	MDL (dry) mg/kg	RDL (dry) mg/kg	Dilution	Analysis date / time	<u>Batch</u>
TPH (GC/FID) Low Fraction	0.0556	<u>B</u> <u>J</u>	0.0225	0.103	1	03/17/2020 09:57	WG1445128
(S) a,a,a-Trifluorotoluene(FID)	101			77.0-120		03/17/2020 09:57	WG1445128

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

Analyte	Result (dry) mg/kg	<u>Qualifier</u>	MDL (dry) mg/kg	RDL (dry) mg/kg	Dilution	Analysis date / time	<u>Batch</u>
Benzene	U		0.000414	0.00103	1	03/18/2020 12:24	WG1445267
Toluene	U		0.00129	0.00517	1	03/18/2020 12:24	WG1445267
Ethylbenzene	U		0.000549	0.00259	1	03/18/2020 12:24	WG1445267
Total Xylenes	U		0.00495	0.00673	1	03/18/2020 12:24	WG1445267
(S) Toluene-d8	124			75.0-131		03/18/2020 12:24	WG1445267
(S) 4-Bromofluorobenzene	94.6			67.0-138		03/18/2020 12:24	WG1445267
(S) 1,2-Dichloroethane-d4	115			70.0-130		03/18/2020 12:24	WG1445267

Semi-Volatile Organic Compounds (GC) by Method 8015

Analyte	Result (dry) mg/kg	<u>Qualifier</u>	MDL (dry) mg/kg	RDL (dry) mg/kg	Dilution	Analysis date / time	<u>Batch</u>
C10-C28 Diesel Range	3.79	<u>J</u>	1.67	4.14	1	03/21/2020 02:29	WG1447675
C28-C40 Oil Range	18.2		0.284	4.14	1	03/21/2020 02:29	WG1447675
(S) o-Terphenyl	72.1			18.0-148		03/21/2020 02:29	WG1447675

Total Solids by Method 2540 G-2011

Analyte	Result %	<u>Qualifier</u>	Dilution	Analysis date / time	<u>Batch</u>
Total Solids	98.6		1	03/19/2020 00:54	WG1445649

¹ Cp² Tc³ Ss⁴ Cn⁵ Sr⁶ Qc⁷ GI⁸ Al⁹ Sc

Wet Chemistry by Method 300.0

Analyte	Result (dry) mg/kg	<u>Qualifier</u>	MDL (dry) mg/kg	RDL (dry) mg/kg	Dilution	Analysis date / time	<u>Batch</u>
Chloride	2.67	<u>B J</u>	0.806	10.1	1	03/18/2020 02:09	WG1445292

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

Analyte	Result (dry) mg/kg	<u>Qualifier</u>	MDL (dry) mg/kg	RDL (dry) mg/kg	Dilution	Analysis date / time	<u>Batch</u>
TPH (GC/FID) Low Fraction	0.0675	<u>B J</u>	0.0220	0.101	1	03/17/2020 10:20	WG1445128
(S) a,a,a-Trifluorotoluene(FID)	101			77.0-120		03/17/2020 10:20	WG1445128

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

Analyte	Result (dry) mg/kg	<u>Qualifier</u>	MDL (dry) mg/kg	RDL (dry) mg/kg	Dilution	Analysis date / time	<u>Batch</u>
Benzene	U		0.000406	0.00101	1	03/18/2020 12:45	WG1445267
Toluene	U		0.00127	0.00507	1	03/18/2020 12:45	WG1445267
Ethylbenzene	U		0.000537	0.00253	1	03/18/2020 12:45	WG1445267
Total Xylenes	U		0.00485	0.00659	1	03/18/2020 12:45	WG1445267
(S) Toluene-d8	105			75.0-131		03/18/2020 12:45	WG1445267
(S) 4-Bromofluorobenzene	91.0			67.0-138		03/18/2020 12:45	WG1445267
(S) 1,2-Dichloroethane-d4	104			70.0-130		03/18/2020 12:45	WG1445267

Semi-Volatile Organic Compounds (GC) by Method 8015

Analyte	Result (dry) mg/kg	<u>Qualifier</u>	MDL (dry) mg/kg	RDL (dry) mg/kg	Dilution	Analysis date / time	<u>Batch</u>
C10-C28 Diesel Range	1.91	<u>J</u>	1.63	4.06	1	03/21/2020 01:51	WG1447675
C28-C40 Oil Range	8.03		0.278	4.06	1	03/21/2020 01:51	WG1447675
(S) o-Terphenyl	67.3			18.0-148		03/21/2020 01:51	WG1447675

Total Solids by Method 2540 G-2011

Analyte	Result %	<u>Qualifier</u>	Dilution	Analysis date / time	<u>Batch</u>
Total Solids	96.0		1	03/19/2020 00:43	WG1445651

¹ Cp² Tc³ Ss⁴ Cn⁵ Sr⁶ Qc⁷ GI⁸ Al⁹ Sc

Wet Chemistry by Method 300.0

Analyte	Result (dry) mg/kg	<u>Qualifier</u>	MDL (dry) mg/kg	RDL (dry) mg/kg	Dilution	Analysis date / time	<u>Batch</u>
Chloride	3.96	<u>B J</u>	0.828	10.4	1	03/18/2020 02:27	WG1445292

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

Analyte	Result (dry) mg/kg	<u>Qualifier</u>	MDL (dry) mg/kg	RDL (dry) mg/kg	Dilution	Analysis date / time	<u>Batch</u>
TPH (GC/FID) Low Fraction	0.0729	<u>B J</u>	0.0226	0.104	1	03/17/2020 10:42	WG1445128
(S) a,a,a-Trifluorotoluene(FID)	101			77.0-120		03/17/2020 10:42	WG1445128

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

Analyte	Result (dry) mg/kg	<u>Qualifier</u>	MDL (dry) mg/kg	RDL (dry) mg/kg	Dilution	Analysis date / time	<u>Batch</u>
Benzene	U		0.000417	0.00104	1	03/18/2020 13:06	WG1445267
Toluene	U		0.00130	0.00521	1	03/18/2020 13:06	WG1445267
Ethylbenzene	U		0.000552	0.00261	1	03/18/2020 13:06	WG1445267
Total Xylenes	U		0.00498	0.00677	1	03/18/2020 13:06	WG1445267
(S) Toluene-d8	105			75.0-131		03/18/2020 13:06	WG1445267
(S) 4-Bromofluorobenzene	89.9			67.0-138		03/18/2020 13:06	WG1445267
(S) 1,2-Dichloroethane-d4	115			70.0-130		03/18/2020 13:06	WG1445267

Semi-Volatile Organic Compounds (GC) by Method 8015

Analyte	Result (dry) mg/kg	<u>Qualifier</u>	MDL (dry) mg/kg	RDL (dry) mg/kg	Dilution	Analysis date / time	<u>Batch</u>
C10-C28 Diesel Range	2.15	<u>J</u>	1.68	4.17	1	03/21/2020 02:03	WG1447675
C28-C40 Oil Range	8.49		0.286	4.17	1	03/21/2020 02:03	WG1447675
(S) o-Terphenyl	71.7			18.0-148		03/21/2020 02:03	WG1447675

Total Solids by Method 2540 G-2011

Analyte	Result %	<u>Qualifier</u>	Dilution	Analysis date / time	<u>Batch</u>
Total Solids	91.9		1	03/19/2020 00:43	WG1445651

¹ Cp² Tc³ Ss⁴ Cn⁵ Sr⁶ Qc⁷ GI⁸ Al⁹ Sc

Wet Chemistry by Method 300.0

Analyte	Result (dry) mg/kg	<u>Qualifier</u>	MDL (dry) mg/kg	RDL (dry) mg/kg	Dilution	Analysis date / time	<u>Batch</u>
Chloride	838		4.33	54.4	5	03/18/2020 02:45	WG1445292

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

Analyte	Result (dry) mg/kg	<u>Qualifier</u>	MDL (dry) mg/kg	RDL (dry) mg/kg	Dilution	Analysis date / time	<u>Batch</u>
TPH (GC/FID) Low Fraction	0.0648	<u>B J</u>	0.0236	0.109	1	03/17/2020 11:03	WG1445128
(S) a,a,a-Trifluorotoluene(FID)	102			77.0-120		03/17/2020 11:03	WG1445128

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

Analyte	Result (dry) mg/kg	<u>Qualifier</u>	MDL (dry) mg/kg	RDL (dry) mg/kg	Dilution	Analysis date / time	<u>Batch</u>
Benzene	U		0.000435	0.00109	1	03/18/2020 13:26	WG1445267
Toluene	U		0.00136	0.00544	1	03/18/2020 13:26	WG1445267
Ethylbenzene	U		0.000577	0.00272	1	03/18/2020 13:26	WG1445267
Total Xylenes	U		0.00520	0.00707	1	03/18/2020 13:26	WG1445267
(S) Toluene-d8	103			75.0-131		03/18/2020 13:26	WG1445267
(S) 4-Bromofluorobenzene	91.1			67.0-138		03/18/2020 13:26	WG1445267
(S) 1,2-Dichloroethane-d4	114			70.0-130		03/18/2020 13:26	WG1445267

Semi-Volatile Organic Compounds (GC) by Method 8015

Analyte	Result (dry) mg/kg	<u>Qualifier</u>	MDL (dry) mg/kg	RDL (dry) mg/kg	Dilution	Analysis date / time	<u>Batch</u>
C10-C28 Diesel Range	20.4		1.75	4.35	1	03/21/2020 02:16	WG1447675
C28-C40 Oil Range	36.3		0.298	4.35	1	03/21/2020 02:16	WG1447675
(S) o-Terphenyl	50.5			18.0-148		03/21/2020 02:16	WG1447675

Total Solids by Method 2540 G-2011

Analyte	Result %	<u>Qualifier</u>	Dilution	Analysis date / time	<u>Batch</u>
Total Solids	95.6		1	03/19/2020 00:43	WG1445651

¹ Cp² Tc³ Ss⁴ Cn⁵ Sr⁶ Qc⁷ GI⁸ Al⁹ Sc

Wet Chemistry by Method 300.0

Analyte	Result (dry) mg/kg	<u>Qualifier</u>	MDL (dry) mg/kg	RDL (dry) mg/kg	Dilution	Analysis date / time	<u>Batch</u>
Chloride	432		0.832	10.5	1	03/18/2020 03:03	WG1445292

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

Analyte	Result (dry) mg/kg	<u>Qualifier</u>	MDL (dry) mg/kg	RDL (dry) mg/kg	Dilution	Analysis date / time	<u>Batch</u>
TPH (GC/FID) Low Fraction	U		0.0227	0.105	1	03/17/2020 11:14	WG1445199
(S)-a,a,a-Trifluorotoluene(FID)	98.9			77.0-120		03/17/2020 11:14	WG1445199

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

Analyte	Result (dry) mg/kg	<u>Qualifier</u>	MDL (dry) mg/kg	RDL (dry) mg/kg	Dilution	Analysis date / time	<u>Batch</u>
Benzene	U		0.000419	0.00105	1	03/18/2020 13:47	WG1445267
Toluene	U		0.00131	0.00523	1	03/18/2020 13:47	WG1445267
Ethylbenzene	U		0.000555	0.00262	1	03/18/2020 13:47	WG1445267
Total Xylenes	U		0.00500	0.00680	1	03/18/2020 13:47	WG1445267
(S)-Toluene-d8	103			75.0-131		03/18/2020 13:47	WG1445267
(S)-4-Bromofluorobenzene	90.9			67.0-138		03/18/2020 13:47	WG1445267
(S)-1,2-Dichloroethane-d4	111			70.0-130		03/18/2020 13:47	WG1445267

Semi-Volatile Organic Compounds (GC) by Method 8015

Analyte	Result (dry) mg/kg	<u>Qualifier</u>	MDL (dry) mg/kg	RDL (dry) mg/kg	Dilution	Analysis date / time	<u>Batch</u>
C10-C28 Diesel Range	U		1.68	4.19	1	03/20/2020 00:31	WG1447038
C28-C40 Oil Range	1.57	J	0.287	4.19	1	03/20/2020 00:31	WG1447038
(S)-o-Terphenyl	72.0			18.0-148		03/20/2020 00:31	WG1447038

Collected date/time: 03/09/20 13:00

L1199114

Total Solids by Method 2540 G-2011

Analyte	Result %	<u>Qualifier</u>	Dilution	Analysis date / time	<u>Batch</u>
Total Solids	90.5		1	03/19/2020 00:43	WG1445651

¹Cp²Tc³Ss⁴Cn⁵Sr⁶Qc⁷Gl⁸Al⁹Sc

Wet Chemistry by Method 300.0

Analyte	Result (dry) mg/kg	<u>Qualifier</u>	MDL (dry) mg/kg	RDL (dry) mg/kg	Dilution	Analysis date / time	<u>Batch</u>
Chloride	2690		8.78	110	10	03/18/2020 03:57	WG1445292

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

Analyte	Result (dry) mg/kg	<u>Qualifier</u>	MDL (dry) mg/kg	RDL (dry) mg/kg	Dilution	Analysis date / time	<u>Batch</u>
TPH (GC/FID) Low Fraction	U		0.0240	0.110	1	03/17/2020 11:38	WG1445199
(S)-a,a,a-Trifluorotoluene(FID)	99.9			77.0-120		03/17/2020 11:38	WG1445199

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

Analyte	Result (dry) mg/kg	<u>Qualifier</u>	MDL (dry) mg/kg	RDL (dry) mg/kg	Dilution	Analysis date / time	<u>Batch</u>
Benzene	U		0.000442	0.00110	1	03/18/2020 14:07	WG1445267
Toluene	U		0.00138	0.00552	1	03/18/2020 14:07	WG1445267
Ethylbenzene	U		0.000585	0.00276	1	03/18/2020 14:07	WG1445267
Total Xylenes	U		0.00528	0.00718	1	03/18/2020 14:07	WG1445267
(S)-Toluene-d8	105			75.0-131		03/18/2020 14:07	WG1445267
(S)-4-Bromofluorobenzene	91.4			67.0-138		03/18/2020 14:07	WG1445267
(S)-1,2-Dichloroethane-d4	113			70.0-130		03/18/2020 14:07	WG1445267

Semi-Volatile Organic Compounds (GC) by Method 8015

Analyte	Result (dry) mg/kg	<u>Qualifier</u>	MDL (dry) mg/kg	RDL (dry) mg/kg	Dilution	Analysis date / time	<u>Batch</u>
C10-C28 Diesel Range	U		1.78	4.42	1	03/20/2020 00:45	WG1447038
C28-C40 Oil Range	1.60	J	0.303	4.42	1	03/20/2020 00:45	WG1447038
(S)-o-Terphenyl	72.6			18.0-148		03/20/2020 00:45	WG1447038

Total Solids by Method 2540 G-2011

Analyte	Result %	<u>Qualifier</u>	Dilution	Analysis date / time	<u>Batch</u>
Total Solids	93.6		1	03/19/2020 00:43	WG1445651

¹ Cp² Tc³ Ss⁴ Cn⁵ Sr⁶ Qc⁷ GI⁸ Al⁹ Sc

Wet Chemistry by Method 300.0

Analyte	Result (dry) mg/kg	<u>Qualifier</u>	MDL (dry) mg/kg	RDL (dry) mg/kg	Dilution	Analysis date / time	<u>Batch</u>
Chloride	3030		8.50	107	10	03/18/2020 04:15	WG1445292

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

Analyte	Result (dry) mg/kg	<u>Qualifier</u>	MDL (dry) mg/kg	RDL (dry) mg/kg	Dilution	Analysis date / time	<u>Batch</u>
TPH (GC/FID) Low Fraction	U		0.0232	0.107	1	03/17/2020 12:14	WG1445199
(S)-a,a,a-Trifluorotoluene(FID)	99.2			77.0-120		03/17/2020 12:14	WG1445199

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

Analyte	Result (dry) mg/kg	<u>Qualifier</u>	MDL (dry) mg/kg	RDL (dry) mg/kg	Dilution	Analysis date / time	<u>Batch</u>
Benzene	U		0.000428	0.00107	1	03/18/2020 14:28	WG1445267
Toluene	U		0.00134	0.00534	1	03/18/2020 14:28	WG1445267
Ethylbenzene	U		0.000567	0.00267	1	03/18/2020 14:28	WG1445267
Total Xylenes	U		0.00511	0.00695	1	03/18/2020 14:28	WG1445267
(S)-Toluene-d8	107			75.0-131		03/18/2020 14:28	WG1445267
(S)-4-Bromofluorobenzene	93.2			67.0-138		03/18/2020 14:28	WG1445267
(S)-1,2-Dichloroethane-d4	99.1			70.0-130		03/18/2020 14:28	WG1445267

Semi-Volatile Organic Compounds (GC) by Method 8015

Analyte	Result (dry) mg/kg	<u>Qualifier</u>	MDL (dry) mg/kg	RDL (dry) mg/kg	Dilution	Analysis date / time	<u>Batch</u>
C10-C28 Diesel Range	2.46	U	1.72	4.28	1	03/20/2020 10:45	WG1447038
C28-C40 Oil Range	10.8		0.293	4.28	1	03/20/2020 10:45	WG1447038
(S)-o-Terphenyl	77.0			18.0-148		03/20/2020 10:45	WG1447038

Total Solids by Method 2540 G-2011

Analyte	Result %	<u>Qualifier</u>	Dilution	Analysis date / time	<u>Batch</u>
Total Solids	93.2		1	03/19/2020 00:43	WG1445651

¹ Cp² Tc³ Ss⁴ Cn⁵ Sr⁶ Qc⁷ GI⁸ Al⁹ Sc

Wet Chemistry by Method 300.0

Analyte	Result (dry) mg/kg	<u>Qualifier</u>	MDL (dry) mg/kg	RDL (dry) mg/kg	Dilution	Analysis date / time	<u>Batch</u>
Chloride	42.6		0.853	10.7	1	03/18/2020 04:32	WG1445292

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

Analyte	Result (dry) mg/kg	<u>Qualifier</u>	MDL (dry) mg/kg	RDL (dry) mg/kg	Dilution	Analysis date / time	<u>Batch</u>
TPH (GC/FID) Low Fraction	U		0.0233	0.107	1	03/18/2020 17:19	WG1446150
(S)-a,a,a-Trifluorotoluene(FID)	97.0			77.0-120		03/18/2020 17:19	WG1446150

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

Analyte	Result (dry) mg/kg	<u>Qualifier</u>	MDL (dry) mg/kg	RDL (dry) mg/kg	Dilution	Analysis date / time	<u>Batch</u>
Benzene	U	J3	0.000429	0.00107	1	03/18/2020 14:48	WG1445267
Toluene	U	J3	0.00134	0.00537	1	03/18/2020 14:48	WG1445267
Ethylbenzene	U	J3	0.000569	0.00268	1	03/18/2020 14:48	WG1445267
Total Xylenes	U	J3	0.00513	0.00697	1	03/18/2020 14:48	WG1445267
(S)-Toluene-d8	107			75.0-131		03/18/2020 14:48	WG1445267
(S)-4-Bromofluorobenzene	93.1			67.0-138		03/18/2020 14:48	WG1445267
(S)-1,2-Dichloroethane-d4	107			70.0-130		03/18/2020 14:48	WG1445267

Semi-Volatile Organic Compounds (GC) by Method 8015

Analyte	Result (dry) mg/kg	<u>Qualifier</u>	MDL (dry) mg/kg	RDL (dry) mg/kg	Dilution	Analysis date / time	<u>Batch</u>
C10-C28 Diesel Range	U		1.73	4.29	1	03/20/2020 10:59	WG1447038
C28-C40 Oil Range	5.92		0.294	4.29	1	03/20/2020 10:59	WG1447038
(S)-o-Terphenyl	68.7			18.0-148		03/20/2020 10:59	WG1447038

Total Solids by Method 2540 G-2011

Analyte	Result %	<u>Qualifier</u>	Dilution	Analysis date / time	<u>Batch</u>
Total Solids	95.5		1	03/19/2020 00:43	WG1445651

¹ Cp² Tc³ Ss⁴ Cn⁵ Sr⁶ Qc⁷ GI⁸ Al⁹ Sc

Wet Chemistry by Method 300.0

Analyte	Result (dry) mg/kg	<u>Qualifier</u>	MDL (dry) mg/kg	RDL (dry) mg/kg	Dilution	Analysis date / time	<u>Batch</u>
Chloride	3.39	<u>B</u> <u>J</u>	0.833	10.5	1	03/18/2020 05:26	WG1445292

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

Analyte	Result (dry) mg/kg	<u>Qualifier</u>	MDL (dry) mg/kg	RDL (dry) mg/kg	Dilution	Analysis date / time	<u>Batch</u>
TPH (GC/FID) Low Fraction	U		0.0227	0.105	1	03/17/2020 13:02	WG1445199
(S) a,a,a-Trifluorotoluene(FID)	99.1			77.0-120		03/17/2020 13:02	WG1445199

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

Analyte	Result (dry) mg/kg	<u>Qualifier</u>	MDL (dry) mg/kg	RDL (dry) mg/kg	Dilution	Analysis date / time	<u>Batch</u>
Benzene	U		0.000419	0.00105	1	03/17/2020 17:30	WG1445419
Toluene	U		0.00131	0.00524	1	03/17/2020 17:30	WG1445419
Ethylbenzene	U		0.000555	0.00262	1	03/17/2020 17:30	WG1445419
Total Xylenes	U		0.00501	0.00681	1	03/17/2020 17:30	WG1445419
(S) Toluene-d8	102			75.0-131		03/17/2020 17:30	WG1445419
(S) 4-Bromofluorobenzene	100			67.0-138		03/17/2020 17:30	WG1445419
(S) 1,2-Dichloroethane-d4	99.1			70.0-130		03/17/2020 17:30	WG1445419

Semi-Volatile Organic Compounds (GC) by Method 8015

Analyte	Result (dry) mg/kg	<u>Qualifier</u>	MDL (dry) mg/kg	RDL (dry) mg/kg	Dilution	Analysis date / time	<u>Batch</u>
C10-C28 Diesel Range	8.83		1.69	4.19	1	03/20/2020 10:32	WG1447038
C28-C40 Oil Range	28.8		0.287	4.19	1	03/20/2020 10:32	WG1447038
(S) o-Terphenyl	73.9			18.0-148		03/20/2020 10:32	WG1447038

Total Solids by Method 2540 G-2011

Analyte	Result %	<u>Qualifier</u>	Dilution	Analysis date / time	<u>Batch</u>
Total Solids	93.5		1	03/19/2020 00:43	WG1445651

¹ Cp² Tc³ Ss⁴ Cn⁵ Sr⁶ Qc⁷ GI⁸ Al⁹ Sc

Wet Chemistry by Method 300.0

Analyte	Result (dry) mg/kg	<u>Qualifier</u>	MDL (dry) mg/kg	RDL (dry) mg/kg	Dilution	Analysis date / time	<u>Batch</u>
Chloride	45.7		0.850	10.7	1	03/18/2020 05:44	WG1445292

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

Analyte	Result (dry) mg/kg	<u>Qualifier</u>	MDL (dry) mg/kg	RDL (dry) mg/kg	Dilution	Analysis date / time	<u>Batch</u>
TPH (GC/FID) Low Fraction	U		0.0232	0.107	1	03/17/2020 13:26	WG1445199
(S)-a,a,a-Trifluorotoluene(FID)	100			77.0-120		03/17/2020 13:26	WG1445199

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

Analyte	Result (dry) mg/kg	<u>Qualifier</u>	MDL (dry) mg/kg	RDL (dry) mg/kg	Dilution	Analysis date / time	<u>Batch</u>
Benzene	U		0.000428	0.00107	1	03/17/2020 17:49	WG1445419
Toluene	U		0.00134	0.00535	1	03/17/2020 17:49	WG1445419
Ethylbenzene	U		0.000567	0.00267	1	03/17/2020 17:49	WG1445419
Total Xylenes	U		0.00511	0.00695	1	03/17/2020 17:49	WG1445419
(S)-Toluene-d8	101			75.0-131		03/17/2020 17:49	WG1445419
(S)-4-Bromofluorobenzene	101			67.0-138		03/17/2020 17:49	WG1445419
(S)-1,2-Dichloroethane-d4	97.3			70.0-130		03/17/2020 17:49	WG1445419

Semi-Volatile Organic Compounds (GC) by Method 8015

Analyte	Result (dry) mg/kg	<u>Qualifier</u>	MDL (dry) mg/kg	RDL (dry) mg/kg	Dilution	Analysis date / time	<u>Batch</u>
C10-C28 Diesel Range	2.82	U	1.72	4.28	1	03/20/2020 10:18	WG1447038
C28-C40 Oil Range	16.5		0.293	4.28	1	03/20/2020 10:18	WG1447038
(S)-o-Terphenyl	76.7			18.0-148		03/20/2020 10:18	WG1447038

Collected date/time: 03/10/20 11:30

L1199114

Total Solids by Method 2540 G-2011

Analyte	Result %	<u>Qualifier</u>	Dilution	Analysis date / time	<u>Batch</u>
Total Solids	82.9		1	03/19/2020 00:43	WG1445651

¹Cp²Tc³Ss⁴Cn⁵Sr⁶Qc⁷Gl⁸Al⁹Sc

Wet Chemistry by Method 300.0

Analyte	Result (dry) mg/kg	<u>Qualifier</u>	MDL (dry) mg/kg	RDL (dry) mg/kg	Dilution	Analysis date / time	<u>Batch</u>
Chloride	225		4.80	60.3	5	03/18/2020 06:02	WG1445292

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

Analyte	Result (dry) mg/kg	<u>Qualifier</u>	MDL (dry) mg/kg	RDL (dry) mg/kg	Dilution	Analysis date / time	<u>Batch</u>
TPH (GC/FID) Low Fraction	0.177		0.0262	0.121	1	03/17/2020 13:50	WG1445199
(S)-a,a,a-Trifluorotoluene(FID)	101			77.0-120		03/17/2020 13:50	WG1445199

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

Analyte	Result (dry) mg/kg	<u>Qualifier</u>	MDL (dry) mg/kg	RDL (dry) mg/kg	Dilution	Analysis date / time	<u>Batch</u>
Benzene	U		0.000483	0.00121	1	03/17/2020 18:08	WG1445419
Toluene	U		0.00151	0.00603	1	03/17/2020 18:08	WG1445419
Ethylbenzene	U		0.000640	0.00302	1	03/17/2020 18:08	WG1445419
Total Xylenes	U		0.00577	0.00784	1	03/17/2020 18:08	WG1445419
(S)-Toluene-d8	103			75.0-131		03/17/2020 18:08	WG1445419
(S)-4-Bromofluorobenzene	99.5			67.0-138		03/17/2020 18:08	WG1445419
(S)-1,2-Dichloroethane-d4	98.2			70.0-130		03/17/2020 18:08	WG1445419

Semi-Volatile Organic Compounds (GC) by Method 8015

Analyte	Result (dry) mg/kg	<u>Qualifier</u>	MDL (dry) mg/kg	RDL (dry) mg/kg	Dilution	Analysis date / time	<u>Batch</u>
C10-C28 Diesel Range	11.8		1.94	4.83	1	03/20/2020 00:58	WG1447038
C28-C40 Oil Range	14.2		0.331	4.83	1	03/20/2020 00:58	WG1447038
(S)-o-Terphenyl	45.0			18.0-148		03/20/2020 00:58	WG1447038

Total Solids by Method 2540 G-2011

Analyte	Result %	<u>Qualifier</u>	Dilution	Analysis date / time	<u>Batch</u>
Total Solids	95.1		1	03/19/2020 00:43	WG1445651

¹ Cp² Tc³ Ss⁴ Cn⁵ Sr⁶ Qc⁷ GI⁸ Al⁹ Sc

Wet Chemistry by Method 300.0

Analyte	Result (dry) mg/kg	<u>Qualifier</u>	MDL (dry) mg/kg	RDL (dry) mg/kg	Dilution	Analysis date / time	<u>Batch</u>
Chloride	545		0.836	10.5	1	03/18/2020 06:20	WG1445292

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

Analyte	Result (dry) mg/kg	<u>Qualifier</u>	MDL (dry) mg/kg	RDL (dry) mg/kg	Dilution	Analysis date / time	<u>Batch</u>
TPH (GC/FID) Low Fraction	0.0631	<u>B J</u>	0.0228	0.105	1	03/17/2020 09:35	WG1445128
(S) a,a,a-Trifluorotoluene(FID)	103			77.0-120		03/17/2020 09:35	WG1445128

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

Analyte	Result (dry) mg/kg	<u>Qualifier</u>	MDL (dry) mg/kg	RDL (dry) mg/kg	Dilution	Analysis date / time	<u>Batch</u>
Benzene	U		0.000420	0.00105	1	03/17/2020 18:27	WG1445419
Toluene	U		0.00131	0.00526	1	03/17/2020 18:27	WG1445419
Ethylbenzene	U		0.000557	0.00263	1	03/17/2020 18:27	WG1445419
Total Xylenes	U		0.00502	0.00683	1	03/17/2020 18:27	WG1445419
(S) Toluene-d8	102			75.0-131		03/17/2020 18:27	WG1445419
(S) 4-Bromofluorobenzene	101			67.0-138		03/17/2020 18:27	WG1445419
(S) 1,2-Dichloroethane-d4	97.9			70.0-130		03/17/2020 18:27	WG1445419

Semi-Volatile Organic Compounds (GC) by Method 8015

Analyte	Result (dry) mg/kg	<u>Qualifier</u>	MDL (dry) mg/kg	RDL (dry) mg/kg	Dilution	Analysis date / time	<u>Batch</u>
C10-C28 Diesel Range	U		1.69	4.20	1	03/20/2020 09:52	WG1447038
C28-C40 Oil Range	0.557	<u>J</u>	0.288	4.20	1	03/20/2020 09:52	WG1447038
(S) o-Terphenyl	79.6			18.0-148		03/20/2020 09:52	WG1447038

QUALITY CONTROL SUMMARY

Method Blank (MB)

(MB) R3510267-1 03/19/20 01:48

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

¹Cp²Tc³Ss⁴Cn⁵Sr⁶Qc⁷Gl⁸Al⁹Sc

L1199114-01 Original Sample (OS) • Duplicate (DUP)

(OS) L1199114-01 03/19/20 01:48 • (DUP) R3510267-3 03/19/20 01:48

Analyte	Original Result %	DUP Result %	Dilution %	DUP RPD %	<u>DUP Qualifier</u>	DUP RPD Limits %
Total Solids	95.9	96.0	1	0.114		10

Laboratory Control Sample (LCS)

(LCS) R3510267-2 03/19/20 01:48

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

QUALITY CONTROL SUMMARY

Method Blank (MB)

(MB) R3510263-1 03/19/20 01:36

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

¹Cp²Tc³Ss⁴Cn⁵Sr⁶Qc⁷Gl⁸Al⁹Sc

L1199114-12 Original Sample (OS) • Duplicate (DUP)

(OS) L1199114-12 03/19/20 01:36 • (DUP) R3510263-3 03/19/20 01:36

Analyte	Original Result %	DUP Result %	Dilution %	DUP RPD %	<u>DUP Qualifier</u>	DUP RPD Limits %
Total Solids	94.6	94.5	1	0.0688		10

Laboratory Control Sample (LCS)

(LCS) R3510263-2 03/19/20 01:36

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

QUALITY CONTROL SUMMARY

Method Blank (MB)

(MB) R3510262-1 03/19/20 01:27

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

¹Cp²Tc³Ss⁴Cn⁵Sr⁶Qc⁷Gl⁸Al⁹Sc

L1199114-20 Original Sample (OS) • Duplicate (DUP)

(OS) L1199114-20 03/19/20 01:27 • (DUP) R3510262-3 03/19/20 01:27

Analyte	Original Result %	DUP Result %	Dilution %	DUP RPD %	<u>DUP Qualifier</u>	DUP RPD Limits %
Total Solids	92.2	92.5	1	0.225		10

Laboratory Control Sample (LCS)

(LCS) R3510262-2 03/19/20 01:27

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

⁷Gl⁸Al⁹Sc

QUALITY CONTROL SUMMARY

Method Blank (MB)

(MB) R3510259-1 03/19/20 01:04

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

¹Cp²Tc³Ss⁴Cn⁵Sr⁶Qc⁷Gl⁸Al⁹Sc

L1199114-30 Original Sample (OS) • Duplicate (DUP)

(OS) L1199114-30 03/19/20 01:04 • (DUP) R3510259-3 03/19/20 01:04

Analyte	Original Result %	DUP Result %	Dilution %	DUP RPD 0.144	<u>DUP Qualifier</u>	DUP RPD Limits %
Total Solids	89.8	89.7	1			10

Laboratory Control Sample (LCS)

(LCS) R3510259-2 03/19/20 01:04

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

QUALITY CONTROL SUMMARY

Method Blank (MB)

(MB) R3510249-1 03/19/20 00:54

Analyte	MB Result %	<u>MB Qualifier</u>	MB MDL %	MB RDL %
Total Solids	0.00100			

¹Cp²Tc³Ss⁴Cn⁵Sr⁶Qc⁷Gl⁸Al⁹Sc

L1199114-47 Original Sample (OS) • Duplicate (DUP)

(OS) L1199114-47 03/19/20 00:54 • (DUP) R3510249-3 03/19/20 00:54

Analyte	Original Result %	DUP Result %	Dilution %	DUP RPD 0.00943	<u>DUP Qualifier</u>	DUP RPD Limits 10
Total Solids	98.6	98.6	1			

Laboratory Control Sample (LCS)

(LCS) R3510249-2 03/19/20 00:54

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

QUALITY CONTROL SUMMARY

Method Blank (MB)

(MB) R3510245-1 03/19/20 00:43

Analyte	MB Result %	<u>MB Qualifier</u>	MB MDL %	MB RDL %
Total Solids	0.0160			

¹Cp²Tc³Ss⁴Cn⁵Sr⁶Qc⁷Gl⁸Al⁹Sc

L1199114-49 Original Sample (OS) • Duplicate (DUP)

(OS) L1199114-49 03/19/20 00:43 • (DUP) R3510245-3 03/19/20 00:43

Analyte	Original Result %	DUP Result %	Dilution %	DUP RPD 0.0850	<u>DUP Qualifier</u>	DUP RPD Limits 10
Total Solids	91.9	92.0	1			

Laboratory Control Sample (LCS)

(LCS) R3510245-2 03/19/20 00:43

Analyte	Spike Amount %	LCS Result %	LCS Rec. %	Rec. Limits %	<u>LCS Qualifier</u>
Total Solids	50.0	49.8	99.7	85.0-115	

QUALITY CONTROL SUMMARY

Method Blank (MB)

(MB) R3510072-1 03/18/20 16:03

Analyte	MB Result mg/kg	<u>MB Qualifier</u>	MB MDL mg/kg	MB RDL mg/kg
Chloride	1.57	J	0.795	10.0

¹Cp²Tc³Ss⁴Cn⁵Sr⁶Qc⁷Gl⁸Al⁹Sc

L1199114-05 Original Sample (OS) • Duplicate (DUP)

(OS) L1199114-05 03/18/20 20:48 • (DUP) R3510072-6 03/18/20 20:58

Analyte	Original Result mg/kg	DUP Result mg/kg	Dilution	DUP RPD %	<u>DUP Qualifier</u>	DUP RPD Limits %
Chloride	38.0	39.9	1	4.81		20

L1199095-34 Original Sample (OS) • Duplicate (DUP)

(OS) L1199095-34 03/18/20 21:08 • (DUP) R3510072-7 03/18/20 21:17

Analyte	Original Result mg/kg	DUP Result mg/kg	Dilution	DUP RPD %	<u>DUP Qualifier</u>	DUP RPD Limits %
Chloride	12800	13000	20	1.24		20

Laboratory Control Sample (LCS)

(LCS) R3510072-2 03/18/20 16:12

Analyte	Spike Amount mg/kg	LCS Result mg/kg	LCS Rec. %	Rec. Limits %	<u>LCS Qualifier</u>
Chloride	200	188	94.0	90.0-110	

L1199095-46 Original Sample (OS) • Matrix Spike (MS) • Matrix Spike Duplicate (MSD)

(OS) L1199095-46 03/18/20 18:54 • (MS) R3510072-4 03/18/20 19:04 • (MSD) R3510072-5 03/18/20 19:13

Analyte	Spike Amount mg/kg	Original Result mg/kg	MS Result mg/kg	MSD Result mg/kg	MS Rec. %	MSD Rec. %	Dilution	Rec. Limits %	<u>MS Qualifier</u>	<u>MSD Qualifier</u>	RPD %	RPD Limits %
Chloride	500	11200	12900	12900	328	335	1	80.0-120	E V	E V	0.270	20

QUALITY CONTROL SUMMARY

L1199114-06,07,08,09,10,11,12,13,14,15,16,17,18,19,20,21,22,23,24,25

Method Blank (MB)

(MB) R3509981-1 03/18/20 10:14

Analyte	MB Result	<u>MB Qualifier</u>	MB MDL	MB RDL
	mg/kg		mg/kg	mg/kg
Chloride	U		0.795	10.0

¹Cp²Tc³Ss⁴Cn⁵Sr⁶Qc⁷Gl⁸Al⁹Sc

L1199114-06 Original Sample (OS) • Duplicate (DUP)

(OS) L1199114-06 03/18/20 10:55 • (DUP) R3509981-3 03/18/20 11:04

Analyte	Original Result	DUP Result	Dilution	DUP RPD	<u>DUP Qualifier</u>	DUP RPD Limits
	(dry) mg/kg	(dry) mg/kg		%		%
Chloride	628	672	1	6.75		20

L1199114-25 Original Sample (OS) • Duplicate (DUP)

(OS) L1199114-25 03/18/20 15:02 • (DUP) R3509981-6 03/18/20 15:12

Analyte	Original Result	DUP Result	Dilution	DUP RPD	<u>DUP Qualifier</u>	DUP RPD Limits
	(dry) mg/kg	(dry) mg/kg		%		%
Chloride	3.69	3.75	1	1.62	J	20

Laboratory Control Sample (LCS)

(LCS) R3509981-2 03/18/20 10:24

Analyte	Spike Amount	LCS Result	LCS Rec.	Rec. Limits	<u>LCS Qualifier</u>
	mg/kg	mg/kg	%	%	
Chloride	200	185	92.7	90.0-110	

L1199114-12 Original Sample (OS) • Matrix Spike (MS) • Matrix Spike Duplicate (MSD)

(OS) L1199114-12 03/18/20 12:01 • (MS) R3509981-4 03/18/20 12:30 • (MSD) R3509981-5 03/18/20 12:39

Analyte	Spike Amount	Original Result	MS Result (dry)	MSD Result	MS Rec.	MSD Rec.	Dilution	Rec. Limits	<u>MS Qualifier</u>	<u>MSD Qualifier</u>	RPD	RPD Limits
	(dry) mg/kg	(dry) mg/kg	mg/kg	mg/kg	%	%		%			%	%
Chloride	529	209	797	737	111	99.8	1	80.0-120			7.77	20

QUALITY CONTROL SUMMARY

Method Blank (MB)

(MB) R3509647-1 03/17/20 23:34

Analyte	MB Result mg/kg	<u>MB Qualifier</u>	MB MDL mg/kg	MB RDL mg/kg
Chloride	2.44	J	0.795	10.0

¹Cp²Tc³Ss⁴Cn⁵Sr⁶Qc⁷Gl⁸Al⁹Sc

L1199114-29 Original Sample (OS) • Duplicate (DUP)

(OS) L1199114-29 03/18/20 00:34 • (DUP) R3509647-3 03/18/20 00:43

Analyte	Original Result (dry) mg/kg	DUP Result (dry) mg/kg	Dilution	DUP RPD %	<u>DUP Qualifier</u>	DUP RPD Limits %
Chloride	1080	1080	5	0.547		20

L1199596-01 Original Sample (OS) • Duplicate (DUP)

(OS) L1199596-01 03/18/20 04:13 • (DUP) R3509647-6 03/18/20 04:22

Analyte	Original Result mg/kg	DUP Result mg/kg	Dilution	DUP RPD %	<u>DUP Qualifier</u>	DUP RPD Limits %
Chloride	12.9	12.0	1	7.33		20

Laboratory Control Sample (LCS)

(LCS) R3509647-2 03/17/20 23:44

Analyte	Spike Amount mg/kg	LCS Result mg/kg	LCS Rec. %	Rec. Limits %	<u>LCS Qualifier</u>
Chloride	200	192	96.2	90.0-110	

L1199114-33 Original Sample (OS) • Matrix Spike (MS) • Matrix Spike Duplicate (MSD)

(OS) L1199114-33 03/18/20 01:40 • (MS) R3509647-4 03/18/20 01:50 • (MSD) R3509647-5 03/18/20 01:59

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 %	<u>MS Qualifier</u>	<u>MSD Qualifier</u>	RPD %	RPD Limits %
Chloride	528	381	901	886	98.5	95.6	1	80.0-120			1.68	20

QUALITY CONTROL SUMMARY

Method Blank (MB)

(MB) R3509727-1 03/17/20 21:56

Analyte	MB Result mg/kg	<u>MB Qualifier</u>	MB MDL mg/kg	MB RDL mg/kg
Chloride	2.37	J	0.795	10.0

¹Cp²Tc³Ss⁴Cn⁵Sr⁶Qc⁷Gl⁸Al⁹Sc

L1198966-01 Original Sample (OS) • Duplicate (DUP)

(OS) L1198966-01 03/17/20 23:46 • (DUP) R3509727-3 03/18/20 00:04

Analyte	Original Result (dry) mg/kg	DUP Result (dry) mg/kg	Dilution	DUP RPD %	<u>DUP Qualifier</u>	DUP RPD Limits %
Chloride	1.66	0.000	1	200	P1	20

L1199114-57 Original Sample (OS) • Duplicate (DUP)

(OS) L1199114-57 03/18/20 06:20 • (DUP) R3509727-6 03/18/20 06:38

Analyte	Original Result (dry) mg/kg	DUP Result (dry) mg/kg	Dilution	DUP RPD %	<u>DUP Qualifier</u>	DUP RPD Limits %
Chloride	545	548	1	0.624		20

Laboratory Control Sample (LCS)

(LCS) R3509727-2 03/17/20 22:14

Analyte	Spike Amount mg/kg	LCS Result mg/kg	LCS Rec. %	Rec. Limits %	<u>LCS Qualifier</u>
Chloride	200	205	103	90.0-110	

L1199114-50 Original Sample (OS) • Matrix Spike (MS) • Matrix Spike Duplicate (MSD)

(OS) L1199114-50 03/18/20 03:03 • (MS) R3509727-4 03/18/20 03:21 • (MSD) R3509727-5 03/18/20 03:39

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 %	<u>MS Qualifier</u>	<u>MSD Qualifier</u>	RPD %	RPD Limits %
Chloride	523	432	975	978	104	104	1	80.0-120			0.271	20

QUALITY CONTROL SUMMARY

Method Blank (MB)

(MB) R3509356-2 03/16/20 23:51

Analyte	MB Result mg/kg	<u>MB Qualifier</u>	MB MDL mg/kg	MB RDL mg/kg
TPH (GC/FID) Low Fraction	0.0529	J	0.0217	0.100
(S) <i>a,a,a-Trifluorotoluene(FID)</i>	97.8			77.0-120

¹Cp²Tc³Ss⁴Cn⁵Sr⁶Qc⁷Gl⁸Al⁹Sc

Laboratory Control Sample (LCS)

(LCS) R3509356-1 03/16/20 23:09

Analyte	Spike Amount mg/kg	LCS Result mg/kg	LCS Rec. %	Rec. Limits %	<u>LCS Qualifier</u>
TPH (GC/FID) Low Fraction	5.50	5.60	102	72.0-127	
(S) <i>a,a,a-Trifluorotoluene(FID)</i>		112		77.0-120	

QUALITY CONTROL SUMMARY

[L1199114-21,22,23,24,26,27,28,30,32,33,34,35,36,37,38](#)ONE LAB. [N/A](#) Page [168 of 309](#)

Method Blank (MB)

(MB) R3509468-3 03/17/20 00:31

Analyte	MB Result mg/kg	<u>MB Qualifier</u>	MB MDL mg/kg	MB RDL mg/kg
TPH (GC/FID) Low Fraction	0.0315	J	0.0217	0.100
(S) <i>a,a,a-Trifluorotoluene(FID)</i>	97.8			77.0-120

¹Cp²Tc³Ss⁴Cn⁵Sr⁶Qc⁷Gl⁸Al⁹Sc

Laboratory Control Sample (LCS)

(LCS) R3509468-2 03/16/20 23:50

Analyte	Spike Amount mg/kg	LCS Result mg/kg	LCS Rec. %	Rec. Limits %	<u>LCS Qualifier</u>
TPH (GC/FID) Low Fraction	5.50	5.76	105	72.0-127	
(S) <i>a,a,a-Trifluorotoluene(FID)</i>		107		77.0-120	

QUALITY CONTROL SUMMARY

Method Blank (MB)

(MB) R3510670-2 03/17/20 00:47

Analyte	MB Result mg/kg	<u>MB Qualifier</u>	MB MDL mg/kg	MB RDL mg/kg
TPH (GC/FID) Low Fraction	0.0503	J	0.0217	0.100
(S) <i>a,a,a-Trifluorotoluene(FID)</i>	104			77.0-120

¹Cp²Tc³Ss⁴Cn⁵Sr⁶Qc⁷Gl⁸Al⁹Sc

Laboratory Control Sample (LCS)

(LCS) R3510670-1 03/17/20 00:02

Analyte	Spike Amount mg/kg	LCS Result mg/kg	LCS Rec. %	Rec. Limits %	<u>LCS Qualifier</u>
TPH (GC/FID) Low Fraction	5.50	5.51	100	72.0-127	
(S) <i>a,a,a-Trifluorotoluene(FID)</i>		101		77.0-120	

QUALITY CONTROL SUMMARY

Method Blank (MB)

(MB) R3509759-3 03/17/20 10:26

Analyte	MB Result mg/kg	<u>MB Qualifier</u>	MB MDL mg/kg	MB RDL mg/kg
TPH (GC/FID) Low Fraction	U		0.0217	0.100
(S) <i>a,a,a-Trifluorotoluene(FID)</i>	101			77.0-120

¹Cp²Tc³Ss⁴Cn⁵Sr⁶Qc⁷Gl⁸Al⁹Sc

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

(LCS) R3509759-1 03/17/20 08:20 • (LCSD) R3509759-2 03/17/20 09:39

Analyte	Spike Amount mg/kg	LCS Result mg/kg	LCSD Result mg/kg	LCS Rec. %	LCSD Rec. %	Rec. Limits %	<u>LCS Qualifier</u>	<u>LCSD Qualifier</u>	RPD %	RPD Limits %
TPH (GC/FID) Low Fraction	5.50	4.80	4.22	87.3	76.7	72.0-127			12.9	20
(S) <i>a,a,a-Trifluorotoluene(FID)</i>			105	104		77.0-120				

QUALITY CONTROL SUMMARY

Method Blank (MB)

(MB) R3509541-2 03/17/20 11:39

Analyte	MB Result mg/kg	<u>MB Qualifier</u>	MB MDL mg/kg	MB RDL mg/kg
TPH (GC/FID) Low Fraction	U		0.0217	0.100
(S) <i>a,a,a-Trifluorotoluene(FID)</i>	98.6			77.0-120

¹Cp²Tc³Ss⁴Cn⁵Sr⁶Qc⁷Gl⁸Al⁹Sc

Laboratory Control Sample (LCS)

(LCS) R3509541-1 03/17/20 10:58

Analyte	Spike Amount mg/kg	LCS Result mg/kg	LCS Rec. %	Rec. Limits %	<u>LCS Qualifier</u>
TPH (GC/FID) Low Fraction	5.50	5.10	92.7	72.0-127	
(S) <i>a,a,a-Trifluorotoluene(FID)</i>		108		77.0-120	

QUALITY CONTROL SUMMARY

[L1199114-25,29,31,39,40](#)

ONE LAB. NO Page 172 of 309

Method Blank (MB)

(MB) R3510206-3 03/17/20 16:17

Analyte	MB Result mg/kg	<u>MB Qualifier</u>	MB MDL mg/kg	MB RDL mg/kg
TPH (GC/FID) Low Fraction	0.0249	J	0.0217	0.100
(S) <i>a,a,a-Trifluorotoluene(FID)</i>	102			77.0-120

¹Cp²Tc³Ss⁴Cn⁵Sr⁶Qc⁷Gl⁸Al⁹Sc

Laboratory Control Sample (LCS)

(LCS) R3510206-1 03/17/20 15:15

Analyte	Spike Amount mg/kg	LCS Result mg/kg	LCS Rec. %	Rec. Limits %	<u>LCS Qualifier</u>
TPH (GC/FID) Low Fraction	5.50	5.30	96.4	72.0-127	
(S) <i>a,a,a-Trifluorotoluene(FID)</i>		110		77.0-120	

QUALITY CONTROL SUMMARY

[L1199114-53](#)ONE LAB.  Page 173 of 309

Method Blank (MB)

(MB) R3511077-2 03/18/20 00:09

Analyte	MB Result mg/kg	<u>MB Qualifier</u>	MB MDL mg/kg	MB RDL mg/kg
TPH (GC/FID) Low Fraction	U		0.0217	0.100
(S) <i>a,a,a-Trifluorotoluene(FID)</i>	98.9			77.0-120

¹Cp²Tc³Ss⁴Cn⁵Sr⁶Qc⁷Gl⁸Al⁹Sc

Laboratory Control Sample (LCS)

(LCS) R3511077-1 03/17/20 22:54

Analyte	Spike Amount mg/kg	LCS Result mg/kg	LCS Rec. %	Rec. Limits %	<u>LCS Qualifier</u>
TPH (GC/FID) Low Fraction	5.50	4.15	75.5	72.0-127	
(S) <i>a,a,a-Trifluorotoluene(FID)</i>		106		77.0-120	

QUALITY CONTROL SUMMARY

[L1199114-41](#)

Method Blank (MB)

(MB) R3510978-3 03/20/20 14:34

Analyte	MB Result mg/kg	<u>MB Qualifier</u>	MB MDL mg/kg	MB RDL mg/kg
TPH (GC/FID) Low Fraction	0.0254	J	0.0217	0.100
(S) <i>a,a,a-Trifluorotoluene(FID)</i>	99.4			77.0-120

¹Cp²Tc³Ss⁴Cn⁵Sr⁶Qc⁷Gl⁸Al⁹Sc

Laboratory Control Sample (LCS)

(LCS) R3510978-2 03/20/20 13:53

Analyte	Spike Amount mg/kg	LCS Result mg/kg	LCS Rec. %	Rec. Limits %	<u>LCS Qualifier</u>
TPH (GC/FID) Low Fraction	5.50	5.15	93.6	72.0-127	
(S) <i>a,a,a-Trifluorotoluene(FID)</i>		111		77.0-120	

QUALITY CONTROL SUMMARY

L1199114-01,02,03,04,05,06,07,08,09,10,11,12,13,14,15,16,17,18,19,20

Method Blank (MB)

(MB) R3509307-3 03/16/20 23:31

Analyte	MB Result mg/kg	MB Qualifier	MB MDL mg/kg	MB RDL mg/kg
Benzene	U		0.000400	0.00100
Ethylbenzene	U		0.000530	0.00250
Toluene	U		0.00125	0.00500
Xylenes, Total	U		0.00478	0.00650
(S) Toluene-d8	100		75.0-131	
(S) 4-Bromofluorobenzene	112		67.0-138	
(S) 1,2-Dichloroethane-d4	127		70.0-130	

¹Cp²Tc³Ss⁴Cn⁵Sr⁶Qc⁷Gl⁸Al⁹Sc

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

(LCS) R3509307-1 03/16/20 21:16 • (LCSD) R3509307-2 03/16/20 22:30

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	0.112	0.113	89.6	90.4	70.0-123			0.889	20
Ethylbenzene	0.125	0.108	0.102	86.4	81.6	74.0-126			5.71	20
Toluene	0.125	0.100	0.0953	80.0	76.2	75.0-121			4.81	20
Xylenes, Total	0.375	0.289	0.278	77.1	74.1	72.0-127			3.88	20
(S) Toluene-d8			99.3	94.1	75.0-131					
(S) 4-Bromofluorobenzene			114	104	67.0-138					
(S) 1,2-Dichloroethane-d4			126	129	70.0-130					

L1199114-20 Original Sample (OS) • Matrix Spike (MS) • Matrix Spike Duplicate (MSD)

(OS) L1199114-20 03/17/20 06:56 • (MS) R3509307-4 03/17/20 07:16 • (MSD) R3509307-5 03/17/20 07:37

Analyte	Spike Amount (dry) mg/kg	Original Result (dry) mg/kg	MS Result (dry) mg/kg	MSD Result (dry) mg/kg	MS Rec. %	MSD Rec. %	Dilution	Rec. Limits	MS Qualifier	MSD Qualifier	RPD	RPD Limits
Benzene	0.136	U	0.113	0.113	83.2	83.2	1	10.0-149			0.000	37
Ethylbenzene	0.136	U	0.127	0.138	93.6	102	1	10.0-160			8.20	38
Toluene	0.136	U	0.108	0.116	80.0	85.6	1	10.0-156			6.76	38
Xylenes, Total	0.407	U	0.337	0.357	82.9	87.7	1	10.0-160			5.63	38
(S) Toluene-d8				102	101			75.0-131				
(S) 4-Bromofluorobenzene				119	120			67.0-138				
(S) 1,2-Dichloroethane-d4				117	116			70.0-130				

QUALITY CONTROL SUMMARY

Method Blank (MB)

(MB) R3509519-2 03/17/20 11:20

Analyte	MB Result mg/kg	<u>MB Qualifier</u>	MB MDL mg/kg	MB RDL mg/kg
Benzene	U		0.000400	0.00100
Ethylbenzene	U		0.000530	0.00250
Toluene	U		0.00125	0.00500
Xylenes, Total	U		0.00478	0.00650
(S) Toluene-d8	107		75.0-131	
(S) 4-Bromofluorobenzene	101		67.0-138	
(S) 1,2-Dichloroethane-d4	101		70.0-130	

¹Cp²Tc³Ss⁴Cn⁵Sr⁶Qc⁷Gl⁸Al⁹Sc

Laboratory Control Sample (LCS)

(LCS) R3509519-1 03/17/20 08:50

Analyte	Spike Amount mg/kg	LCS Result mg/kg	LCS Rec. %	Rec. Limits %	<u>LCS Qualifier</u>
Benzene	0.125	0.110	88.0	70.0-123	
Ethylbenzene	0.125	0.139	111	74.0-126	
Toluene	0.125	0.115	92.0	75.0-121	
Xylenes, Total	0.375	0.423	113	72.0-127	
(S) Toluene-d8		104	75.0-131		
(S) 4-Bromofluorobenzene		103	67.0-138		
(S) 1,2-Dichloroethane-d4		104	70.0-130		

L1199073-16 Original Sample (OS) • Matrix Spike (MS) • Matrix Spike Duplicate (MSD)

(OS) L1199073-16 03/17/20 13:47 • (MS) R3509519-3 03/17/20 19:29 • (MSD) R3509519-4 03/17/20 19:47

Analyte	Spike Amount mg/kg	Original Result mg/kg	MS Result mg/kg	MS Rec. %	MSD Rec. %	Dilution	Rec. Limits %	<u>MS Qualifier</u>	<u>MSD Qualifier</u>	RPD %	RPD Limits
Benzene	0.125	ND	0.0649	0.0396	51.9	31.7	1	10.0-149	J3	48.4	37
Ethylbenzene	0.125	ND	0.0789	0.0451	63.1	36.1	1	10.0-160	J3	54.5	38
Toluene	0.125	ND	0.0678	0.0410	54.2	32.8	1	10.0-156	J3	49.3	38
Xylenes, Total	0.375	ND	0.243	0.151	64.8	40.3	1	10.0-160	J3	46.7	38
(S) Toluene-d8			105	101			75.0-131				
(S) 4-Bromofluorobenzene			97.9	106			67.0-138				
(S) 1,2-Dichloroethane-d4			103	108			70.0-130				

QUALITY CONTROL SUMMARY

L1199114-34,35,36,37,38,39,40,41,42,43,44,45,46,47,48,49,50,51,52,53

Method Blank (MB)

(MB) R3510640-3 03/18/20 07:56

Analyte	MB Result mg/kg	MB Qualifier	MB MDL mg/kg	MB RDL mg/kg
Benzene	U		0.000400	0.00100
Ethylbenzene	U		0.000530	0.00250
Toluene	U		0.00125	0.00500
Xylenes, Total	U		0.00478	0.00650
(S) Toluene-d8	104		75.0-131	
(S) 4-Bromofluorobenzene	91.8		67.0-138	
(S) 1,2-Dichloroethane-d4	98.6		70.0-130	

¹Cp²Tc³Ss⁴Cn⁵Sr⁶Qc⁷Gl⁸Al⁹Sc

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

(LCS) R3510640-1 03/18/20 06:33 • (LCSD) R3510640-2 03/18/20 06:54

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	0.122	0.119	97.6	95.2	70.0-123			2.49	20
Ethylbenzene	0.125	0.111	0.116	88.8	92.8	74.0-126			4.41	20
Toluene	0.125	0.122	0.143	97.6	114	75.0-121			15.8	20
Xylenes, Total	0.375	0.323	0.338	86.1	90.1	72.0-127			4.54	20
(S) Toluene-d8				101	124	75.0-131				
(S) 4-Bromofluorobenzene				76.1	92.4	67.0-138				
(S) 1,2-Dichloroethane-d4				120	122	70.0-130				

L1199114-53 Original Sample (OS) • Matrix Spike (MS) • Matrix Spike Duplicate (MSD)

(OS) L1199114-53 03/18/20 14:48 • (MS) R3510640-4 03/18/20 15:08 • (MSD) R3510640-5 03/18/20 15:29

Analyte	Spike Amount (dry) mg/kg	Original Result (dry) mg/kg	MS Result (dry) mg/kg	MSD Result (dry) mg/kg	MS Rec. %	MSD Rec. %	Dilution	Rec. Limits	MS Qualifier	MSD Qualifier	RPD	RPD Limits
Benzene	0.134	U	0.0913	0.0378	68.1	28.2	1	10.0-149	J3		83.0	37
Ethylbenzene	0.134	U	0.0880	0.0349	65.6	26.0	1	10.0-160	J3		86.5	38
Toluene	0.134	U	0.0954	0.0388	71.1	29.0	1	10.0-156	J3		84.3	38
Xylenes, Total	0.402	U	0.269	0.113	66.9	28.0	1	10.0-160	J3		82.0	38
(S) Toluene-d8				106	103			75.0-131				
(S) 4-Bromofluorobenzene				92.9	94.9			67.0-138				
(S) 1,2-Dichloroethane-d4				107	104			70.0-130				

QUALITY CONTROL SUMMARY

Method Blank (MB)

(MB) R3511093-2 03/17/20 17:11

Analyte	MB Result mg/kg	MB Qualifier	MB MDL mg/kg	MB RDL mg/kg
Benzene	U		0.000400	0.00100
Ethylbenzene	U		0.000530	0.00250
Toluene	U		0.00125	0.00500
Xylenes, Total	U		0.00478	0.00650
(S) Toluene-d8	103		75.0-131	
(S) 4-Bromofluorobenzene	102		67.0-138	
(S) 1,2-Dichloroethane-d4	97.4		70.0-130	

¹Cp²Tc³Ss⁴Cn⁵Sr⁶Qc⁷Gl⁸Al⁹Sc

Laboratory Control Sample (LCS)

(LCS) R3511093-1 03/17/20 16:14

Analyte	Spike Amount mg/kg	LCS Result mg/kg	LCS Rec. %	Rec. Limits %	LCS Qualifier
Benzene	0.125	0.109	87.2	70.0-123	
Ethylbenzene	0.125	0.114	91.2	74.0-126	
Toluene	0.125	0.107	85.6	75.0-121	
Xylenes, Total	0.375	0.366	97.6	72.0-127	
(S) Toluene-d8		102	75.0-131		
(S) 4-Bromofluorobenzene		101	67.0-138		
(S) 1,2-Dichloroethane-d4		102	70.0-130		

L1199114-57 Original Sample (OS) • Matrix Spike (MS) • Matrix Spike Duplicate (MSD)

(OS) L1199114-57 03/17/20 18:27 • (MS) R3511093-3 03/17/20 23:48 • (MSD) R3511093-4 03/18/20 00:07

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
Benzene	0.131	U	0.127	0.121	96.8	92.0	1	10.0-149			5.08	37
Ethylbenzene	0.131	U	0.125	0.119	95.2	90.4	1	10.0-160			5.17	38
Toluene	0.131	U	0.125	0.121	95.2	92.0	1	10.0-156			3.42	38
Xylenes, Total	0.394	U	0.402	0.383	102	97.1	1	10.0-160			4.83	38
(S) Toluene-d8				100	101			75.0-131				
(S) 4-Bromofluorobenzene				97.2	98.6			67.0-138				
(S) 1,2-Dichloroethane-d4				97.0	97.1			70.0-130				

QUALITY CONTROL SUMMARY

L1199114-01,02,03,04,05,06,07,08,09,10,11,12,13,14,15,16

ONE LAB. NO Page 179 of 309

Method Blank (MB)

(MB) R3509778-1 03/17/20 20:10

Analyte	MB Result mg/kg	<u>MB Qualifier</u>	MB MDL mg/kg	MB RDL mg/kg
C10-C28 Diesel Range	U		1.61	4.00
C28-C40 Oil Range	U		0.274	4.00
(S) o-Terphenyl	70.1			18.0-148

¹Cp²Tc³Ss⁴Cn⁵Sr⁶Qc⁷Gl⁸Al⁹Sc

Laboratory Control Sample (LCS)

(LCS) R3509778-2 03/17/20 20:23

Analyte	Spike Amount mg/kg	LCS Result mg/kg	LCS Rec. %	Rec. Limits %	<u>LCS Qualifier</u>
C10-C28 Diesel Range	50.0	37.5	75.0	50.0-150	
(S) o-Terphenyl		77.2		18.0-148	

L1199114-04 Original Sample (OS) • Matrix Spike (MS) • Matrix Spike Duplicate (MSD)

(OS) L1199114-04 03/17/20 22:04 • (MS) R3509778-3 03/17/20 22:16 • (MSD) R3509778-4 03/17/20 22:29

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 %	<u>MS Qualifier</u>	<u>MSD Qualifier</u>	RPD	RPD Limits
C10-C28 Diesel Range	50.7	2.16	35.2	38.0	65.2	70.0	1	50.0-150			7.54	20
(S) o-Terphenyl					65.5	60.0		18.0-148				

QUALITY CONTROL SUMMARY

L1199114-17,18,19,20,21,22,23,24,25,26,27,28,29

ONE LAB. NO PAGE 180 of 309

Method Blank (MB)

(MB) R3510563-1 03/19/20 21:00

Analyte	MB Result mg/kg	<u>MB Qualifier</u>	MB MDL mg/kg	MB RDL mg/kg
C10-C28 Diesel Range	U		1.61	4.00
C28-C40 Oil Range	U		0.274	4.00
(S) o-Terphenyl	64.3			18.0-148

¹Cp²Tc³Ss⁴Cn⁵Sr⁶Qc⁷Gl⁸Al⁹Sc

Laboratory Control Sample (LCS)

(LCS) R3510563-2 03/19/20 21:19

Analyte	Spike Amount mg/kg	LCS Result mg/kg	LCS Rec. %	Rec. Limits %	<u>LCS Qualifier</u>
C10-C28 Diesel Range	50.0	36.5	73.0	50.0-150	
(S) o-Terphenyl			83.2	18.0-148	

L1199114-20 Original Sample (OS) • Matrix Spike (MS) • Matrix Spike Duplicate (MSD)

(OS) L1199114-20 03/19/20 21:57 • (MS) R3510563-3 03/19/20 22:14 • (MSD) R3510563-4 03/19/20 22:27

Analyte	Spike Amount (dry) mg/kg	Original Result (dry) mg/kg	MS Result (dry) mg/kg	MSD Result (dry) mg/kg	MS Rec. %	MSD Rec. %	Dilution	Rec. Limits %	<u>MS Qualifier</u>	<u>MSD Qualifier</u>	RPD	RPD Limits
C10-C28 Diesel Range	53.3	U	36.4	36.8	68.3	69.5	1	50.0-150			0.889	20
(S) o-Terphenyl					65.7	65.8		18.0-148				

QUALITY CONTROL SUMMARY

Method Blank (MB)

(MB) R3510569-1 03/19/20 22:30

Analyte	MB Result mg/kg	<u>MB Qualifier</u>	MB MDL mg/kg	MB RDL mg/kg
C10-C28 Diesel Range	U		1.61	4.00
C28-C40 Oil Range	U		0.274	4.00
(S) o-Terphenyl	75.4			18.0-148

¹Cp²Tc³Ss⁴Cn⁵Sr⁶Qc⁷Gl⁸Al⁹Sc

Laboratory Control Sample (LCS)

(LCS) R3510569-2 03/19/20 22:44

Analyte	Spike Amount mg/kg	LCS Result mg/kg	LCS Rec. %	Rec. Limits %	<u>LCS Qualifier</u>
C10-C28 Diesel Range	50.0	43.2	86.4	50.0-150	
(S) o-Terphenyl		95.9		18.0-148	

L1198863-14 Original Sample (OS) • Matrix Spike (MS) • Matrix Spike Duplicate (MSD)

(OS) L1198863-14 03/20/20 03:10 • (MS) R3510569-3 03/20/20 03:23 • (MSD) R3510569-4 03/20/20 03:36

Analyte	Spike Amount mg/kg	Original Result mg/kg	MS Result mg/kg	MS Rec. %	MSD Rec. %	Dilution	Rec. Limits %	<u>MS Qualifier</u>	<u>MSD Qualifier</u>	RPD %	RPD Limits %
C10-C28 Diesel Range	50.0	ND	53.2	48.5	76.4	67.0	5	50.0-150		9.24	20
(S) o-Terphenyl				103	95.8		18.0-148				

Sample Narrative:

OS: Cannot run at lower dilution due to viscosity of extract

QUALITY CONTROL SUMMARY

L1199114-30,31,32,33,34,35,36,37,38,39,40,41,42,43,44,45,46,47,48,49

ONE LAB. NO PAGE 182 of 309

Method Blank (MB)

(MB) R3510943-3 03/21/20 12:37

Analyte	MB Result mg/kg	<u>MB Qualifier</u>	MB MDL mg/kg	MB RDL mg/kg
C10-C28 Diesel Range	U		1.61	4.00
C28-C40 Oil Range	U		0.274	4.00
(S) o-Terphenyl	58.7			18.0-148

¹Cp²Tc³Ss⁴Cn⁵Sr⁶Qc⁷Gl⁸Al⁹Sc

Laboratory Control Sample (LCS)

(LCS) R3510943-4 03/21/20 12:50

Analyte	Spike Amount mg/kg	LCS Result mg/kg	LCS Rec. %	Rec. Limits %	<u>LCS Qualifier</u>
C10-C28 Diesel Range	50.0	36.1	72.2	50.0-150	
(S) o-Terphenyl		81.2		18.0-148	

L1199114-30 Original Sample (OS) • Matrix Spike (MS) • Matrix Spike Duplicate (MSD)

(OS) L1199114-30 03/21/20 04:09 • (MS) R3510943-1 03/21/20 04:22 • (MSD) R3510943-2 03/21/20 04:35

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 %	<u>MS Qualifier</u>	<u>MSD Qualifier</u>	RPD	RPD Limits
C10-C28 Diesel Range	55.3	416	452	488	64.4	129	20	50.0-150			7.58	20
(S) o-Terphenyl					63.9	57.6		18.0-148	J7	J7		

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].	1 Cp
MDL	Method Detection Limit.	2 Tc
MDL (dry)	Method Detection Limit.	3 Ss
ND	Not detected at the Reporting Limit (or MDL where applicable).	4 Cn
RDL	Reported Detection Limit.	5 Sr
RDL (dry)	Reported Detection Limit.	6 Qc
Rec.	Recovery.	7 GI
RPD	Relative Percent Difference.	8 AI
SDG	Sample Delivery Group.	9 SC
(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.
J7	Surrogate recovery cannot be used for control limit evaluation due to dilution.
P1	RPD value not applicable for sample concentrations less than 5 times the reporting limit.
V	The sample concentration is too high to evaluate accurate spike recoveries.

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

- * Not all certifications held by the laboratory are applicable to the results reported in the attached report.
- * Accreditation is only applicable to the test methods specified on each scope of accreditation held by Pace National.

State Accreditations

Alabama	40660
Alaska	17-026
Arizona	AZ0612
Arkansas	88-0469
California	2932
Colorado	TN00003
Connecticut	PH-0197
Florida	E87487
Georgia	NELAP
Georgia ¹	923
Idaho	TN00003
Illinois	200008
Indiana	C-TN-01
Iowa	364
Kansas	E-10277
Kentucky ¹⁶	90010
Kentucky ²	16
Louisiana	AI30792
Louisiana ¹	LA180010
Maine	TN0002
Maryland	324
Massachusetts	M-TN003
Michigan	9958
Minnesota	047-999-395
Mississippi	TN00003
Missouri	340
Montana	CERT0086

Nebraska	NE-OS-15-05
Nevada	TN-03-2002-34
New Hampshire	2975
New Jersey-NELAP	TN002
New Mexico ¹	n/a
New York	11742
North Carolina	Env375
North Carolina ¹	DW21704
North Carolina ³	41
North Dakota	R-140
Ohio-VAP	CL0069
Oklahoma	9915
Oregon	TN200002
Pennsylvania	68-02979
Rhode Island	LA000356
South Carolina	84004
South Dakota	n/a
Tennessee ¹⁴	2006
Texas	T104704245-18-15
Texas ⁵	LAB0152
Utah	TN00003
Vermont	VT2006
Virginia	460132
Washington	C847
West Virginia	233
Wisconsin	9980939910
Wyoming	A2LA

Third Party Federal Accreditations

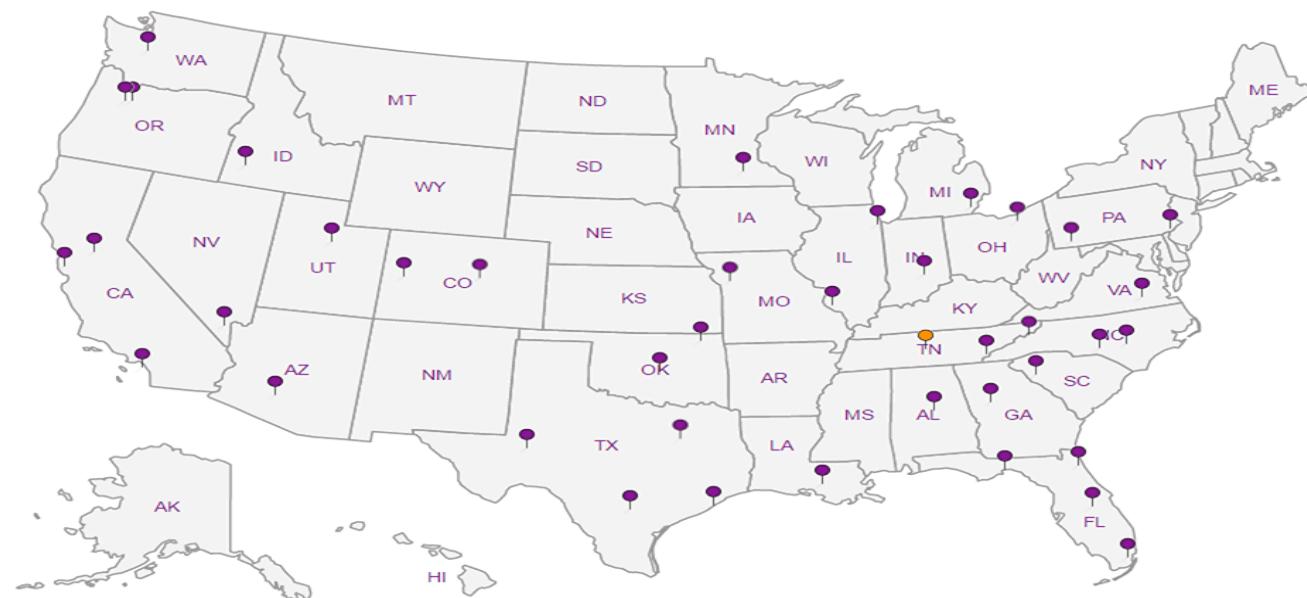
A2LA – ISO 17025	1461.01
A2LA – ISO 17025 ⁵	1461.02
Canada	1461.01
EPA-Crypto	TN00003

AIHA-LAP,LLC EMLAP	100789
DOD	1461.01
USDA	P330-15-00234

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

Our Locations

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



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



Tetra Tech, Inc.

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

1199114

Client Name:	Conoco Phillips	Site Manager:	Christian Llull
Project Name:	COP MCA 2 C Header Release	Contact Info:	Email: christian.llull@tetrtech.com Phone: (512) 338-1667
Project Location: (county, state)	Lea County, New Mexico	Project #:	212C-MD-02119
Invoice to:	Accounts Payable 901 West Wall Street, Suite 100 Midland, Texas 79701		
Receiving Laboratory:	Pace Analytical	Sampler Signature:	Adrian
Comments:	COPTETRA Acctnum		

LAB # (LAB USE ONLY)	SAMPLE IDENTIFICATION	SAMPLING		MATRIX	PRESERVATIVE METHOD		# CONTAINERS	FILTERED (Y/N)
		DATE	TIME		WATER	SOIL		
		YEAR: 2020		ICE	NONE			
-01	AH-4E (0-1')	3/3/2020	1100	X		X	1	N
02	AH-4E (3-4')	3/3/2020	1110	X		X	1	N
03	AH-4W (0-1')	3/3/2020	1120	X		X	1	N
04	AH-4W (3-4')	3/3/2020	1130	X		X	1	N
05	T-5 (1-2')	3/5/2020	1150	X		X	1	N
06	T-5 (3-4')	3/5/2020	1200	X		X	1	N
07	T-5 (5-6')	3/5/2020	1210	X		X	1	N
08	T-5 (7-8')	3/5/2020	1220	X		X	1	N
09	AH-5S (0-1')	3/5/2020	1300	X		X	1	N
10	AH-5S (3-4')	3/5/2020	1310	X		X	1	N

Relinquished by: Date: Time: Received by: Date: Time:

Adrian Darr 3/12/20 14:15 *W. Taylor* 3/12/20 14:15

Relinquished by: Date: Time: Received by: Date: Time:

Adrian Darr 3/12/20 17:00 *Scot* 3/12/20 17:00

Relinquished by: Date: Time: Received by: Date: Time:

Adrian Darr 3/12/20 17:00 *W. Taylor* 3/12/20 17:00

M PAB
5+2-17

RAD SCREEN: <0.5 mR/hr

Released to Imaging: 7/28/2021 1:49:41 PM

ORIGINAL COPY
Containers Received 66

ANALYSIS REQUEST (Circle or Specify Method No.)									
BTEX	8021B	BTEX	8260B	TPH TX1005 (Ext to C35)	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
									PCBs 8082 / 608
									NORM
									PLM (Asbestos)
									Chloride 300.0
									Sulfate TDS
									General Water Chemistry (see attached list)
									Anion/Cation Balance
									TPH 8015R
									HOLD
REMARKS:									
<input checked="" type="checkbox"/> Standard <input type="checkbox"/> RUSH: Same Day 24 hr. 48 hr. 72 hr. <input type="checkbox"/> Rush Charges Authorized <input type="checkbox"/> Special Report Limits or TRRP Report									
Sample Temperature									
(Circle) HAND DELIVERED FEDEX UPS Tracking #: _____									

(Circle) HAND DELIVERED FEDEX UPS Tracking #: _____

03-132



Tetra Tech, Inc.

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

1199114

Client Name:	Conoco Phillips	Site Manager:	Christian Llull	ANALYSIS REQUEST (Circle or Specify Method No.)																										
Project Name:	COP MCA 2 C Header Release	Contact Info:	Email: christian.llull@tetrtech.com Phone: (512) 338-1667																											
Project Location: (county, state)	Lea County, New Mexico	Project #:	212C-MD-02119																											
Invoice to:	Accounts Payable 901 West Wall Street, Suite 100 Midland, Texas 79701																													
Receiving Laboratory:	Pace Analytical	Sampler Signature:	Adrian																											
Comments:	COPTETRA Acctnum																													
LAB # (LAB USE ONLY)	SAMPLE IDENTIFICATION	SAMPLING		MATRIX	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	PCBs 8082 / 608	NORM	PLM (Asbestos)	Chloride 300.0	Chloride Sulfate TDS	General Water Chemistry (see attached list)	Anion/Cation Balance	TPH 8015R	HOLD
		DATE	TIME		WATER	SOIL	HCl																							
		YEAR: 2020																												
11	AH-5E (0-1')	3/5/2020	1100	X		X				1	N	X	X	X																
12	AH-5E (3-4')	3/5/2020	1110	X		X				1	N	X	X	X																
13	AH-5W (0-1')	3/5/2020	1120	X		X				1	N	X	X																	
14	AH-5W (3-4')	3/5/2020	1130	X		X				1	N	X	X																	
15	T-6(1-2')	3/5/2020	1150	X		X				1	N	X	X																	
	T-6 (3-4')	3/5/2020	1200	X		X				1	N	X	X																	
	T-6 (7-8')	3/5/2020	1210	X		X				1	N	X	X																	
16	T-6(9-10')	3/5/2020	1220	X		X				1	N	X	X																	
17	AH-6E (0-1')	3/5/2020	1300	X		X				1	N	X	X																	
18	AH-6E (3-4')	3/5/2020	1310	X		X				1	N	X	X																	
elinquished by:	Date: Time:	Received by:	Date: Time:	LAB USE ONLY	REMARKS:																									
<i>Adrian</i>	3/12/20 14:15	<i>Adrian</i>	3/12/20 14:15	<input checked="" type="checkbox"/> Standard																										
elinquished by:	Date: Time:	Received by:	Date: Time:	<input type="checkbox"/> RUSH: Same Day 24 hr. 48 hr. 72 hr.																										
<i>Adrian</i>	3/12/20 17:00	<i>Swa</i>	3/12/20 17:00	<input type="checkbox"/> Rush Charges Authorized																										
linquished by:	Date: Time:	Received by:	Date: Time:	<input type="checkbox"/> Special Report Limits or TRRP Report																										
		<i>W Taylor</i>	3/13/20 8:00																											
ORIGINAL COPY															(Circle) HAND DELIVERED FEDEX UPS Tracking #:															

ORIGINAL COPY

(Circle) HAND DELIVERED FEDEX UPS Tracking #:



Tetra Tech, Inc.

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

119 9114

Client Name:	Conoco Phillips	Site Manager:	Fax (432) 682-3946 Christian Llull
Project Name:	COP MCA 2 C Header Release	Contact Info:	Email: christian.llull@tetrtech.com Phone: (512) 338-1667
Project Location: (county, state)	Lea County, New Mexico	Project #:	212C-MD-02119
Invoice to:	Accounts Payable 901 West Wall Street, Suite 100 Midland, Texas 79701		
Receiving Laboratory:	Pace Analytical	Sampler Signature:	Adrian
Comments:	COPTETRA Acctnum		

ANALYSIS REQUEST

(Circle or Specify Method No.)

ORIGINAL COPY

Containers Received 66



Tetra Tech, Inc.

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

1199114

Client Name: Conoco Phillips
Project Name: COP MCA 2 C Header Release
Project Location: (county, state) Lea County, New Mexico
Invoice to: Accounts Payable
901 West Wall Street, Suite 100 Midland, Texas 79701
Receiving Laboratory: Pace Analytical
Comments: COPTETRA Acctnum

Site Manager: Christian Llull**Contact Info:** Email: christian.llull@tetrtech.com
Phone: (512) 338-1667**Project #:** 212C-MD-02119**Sampler Signature:** Adrian

ANALYSIS REQUEST

(Circle or Specify Method No.)

LAB # (LAB USE ONLY)	SAMPLE IDENTIFICATION	SAMPLING		WATER	SOIL	HCL	HNO ₃	ICE	NONE	# CONTAINERS	FILTERED (Y/N)	BTEX 8021B	BTEX 8260B	TPH TX105 (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	GCMS Vol. 8260B / 624	GCMS Semi. Vol. 8270C/625	PCBs 8082 / 608	NORM	PLM (Asbestos)	Chloride 300.0	Chloride Sulfate	TDS	General Water Chemistry (see attached list)	Anion/Cation Balance	TPH 8015R	HOLD
		YEAR: 2020																															
		DATE	TIME																														
26	AH-7E (3-4')	3/5/2020	1100	X				X			1	N	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X					
27	AH-8N (0-1')	3/6/2020	1120	X					X		1	N	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X					
28	AH-8N (3-4')	3/6/2020	1130	X					X		1	N	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X					
29	T-8(1-2')	3/6/2020	1150	X					X		1	N	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X					
30	T-8 (3-4')	3/6/2020	1200	X					X		1	N	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X					
31	T-8 (7-8')	3/6/2020	1210	X					X		1	N	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X					
32	T-8(9-10')	3/6/2020	1220	X					X		1	N	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X					
33	AH-8E (0-1')	3/6/2020	1300	X					X		1	N	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X					
34	AH-8E (3-4')	3/6/2020	1310	X					X		1	N	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X					
Relinquished by:		Date:	Time:	Received by:		Date:		Time:		LAB USE ONLY		Sample Temperature		REMARKS:																			
<i>Adrian Da</i>		3/12/20	14:15	<i>Calvin</i>		3/12/20 14:15								<input checked="" type="checkbox"/> Standard																			
<i>Calvin</i>		3/12/20	17:00	<i>Sean</i>		3/12/20 17:00								<input type="checkbox"/> RUSH: Same Day 24 hr. 48 hr. 72 hr.																			
<i>Sean</i>				Received by:		Date:		Time:						<input type="checkbox"/> Rush Charges Authorized																			
<i>W Taft</i>		3/13/20 8:00		Received by:		Date:		Time:						<input type="checkbox"/> Special Report Limits or TRRP Report																			
(Circle) HAND DELIVERED FEDEX UPS Tracking #:																																	

ORIGINAL COPY
Container Received 66



Tetra Tech, Inc.

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

1199114

Client Name: Conoco Phillips **Site Manager:** Christian Llull

Project Name: COP MCA 2 C Header Release **Contact Info:** Email: christian.llull@tetrtech.com
Phone: (512) 338-1667

Project Location: Lea County, New Mexico **Project #:** 212C-MD-02119

Invoice to: Accounts Payable
901 West Wall Street, Suite 100 Midland, Texas 79701

Receiving Laboratory: Pace Analytical **Sampler Signature:** Adrian

Comments: COPTETRA Acctnum

LAB # (LAB USE ONLY)	SAMPLE IDENTIFICATION	SAMPLING		MATRIX	PRESERVATIVE METHOD			# CONTAINERS	# FILTERED (Y/N)	BT/EX 8021B	BT/EX 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 Volatiles	TCLP Semi Volatiles	RCI	GC/MS Vol. 8260B / 624	GC/MS Semi. Vol. 8270C/625	PCBs 8082 / 608	NORM	PLM (Asbestos)	Chloride 300.0	Chloride Sulfate TDS	General Water Chemistry (see attached list)	Anion/Cation Balance	TPH 8015R	HOLD
		YEAR: 2020			WATER	SOIL	HCl																						
		DATE	TIME																										
35	AH-8W (0-1')	3/6/2020	1100	X		X		X		1	N	X	X	X															
36	AH-8W (3-4')	3/6/2020	1110	X		X		X		1	N	X	X	X															
37	AH-9E (0-1')	3/6/2020	1120	X		X		X		1	N	X	X	X															
38	AH-9E (3-4')	3/6/2020	1130	X		X		X		1	N	X	X	X															
39	T-9 (1-2')	3/6/2020	1150	X		X		X		1	N	X	X	X															
40	T-9 (3-4')	3/6/2020	1200	X		X		X		1	N	X	X	X															
41	T-9 (7-8')	3/6/2020	1210	X		X		X		1	N	X	X	X															
42	T-9(9-10')	3/6/2020	1220	X		X		X		1	N	X	X	X															
43	AH-9W (0-1')	3/6/2020	1300	X		X		X		1	N	X	X	X															
44	AH-9W (3-4')	3/6/2020	1310	X		X		X		1	N	X	X	X															

Relinquished by:

Edwin Dray Date: 3/12/20 Time: 14:15

Received by: *John Llull* Date: 3/12/20 Time: 14:15

LAB USE ONLY **REMARKS:**

- Standard
- RUSH: Same Day 24 hr. 48 hr. 72 hr.
- Rush Charges Authorized
- Special Report Limits or TRRP Report

Relinquished by:

John Llull Date: 3/12/20 Time: 17:00

Received by: *Scot* Date: 3/12/20 Time: 17:00

Sample Temperature

Relinquished by:

Date: Time:

Received by: *W. Taylor* Date: 3/13/20 Time: 8:00

(Circle) HAND DELIVERED FEDEX UPS Tracking #:



Tetra Tech, Inc.

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

1199114

Client Name:	Conoco Phillips	Site Manager:	Christian Llull
Project Name:	COP MCA 2 C Header Release	Contact Info:	Email: christian.llull@tetrtech.com Phone: (512) 338-1667
Project Location: (county, state)	Lea County, New Mexico	Project #:	212C-MD-02119
Invoice to:	Accounts Payable 901 West Wall Street, Suite 100 Midland, Texas 79701		
Receiving Laboratory:	Pace Analytical	Sampler Signature:	Adrian
Comments:	COPTETRA Acctnum		

LAB # (LAB USE ONLY)	SAMPLE IDENTIFICATION	SAMPLING		MATRIX	PRESERVATIVE METHOD			# CONTAINERS	FILTERED (Y/N)	
		DATE	TIME		WATER	SOIL	HCl	HNO ₃	ICE	
		YEAR: 2020								
45	AH-10E (0-1')	3/9/2020	1100	X			X			1 N X X
46	AH-10E (3-4')	3/9/2020	1110	X			X			1 N X X
47	AH-10W (0-1')	3/9/2020	1120	X			X			1 N X X
48	AH-10W (3-4')	3/9/2020	1130	X			X			1 N X X
49	T-10 (1-2')	3/9/2020	1150	X			X			1 N X X
	T-10 (5-6')	3/9/2020	1200	X			X			1 N X X
	T-10 (9-10')	3/9/2020	1210	X			X			1 N X X
50	T-10(14-15')	3/9/2020	1220	X			X			1 N X X
51	T-9(16'-17')	3/10/2020	1300	X			X			1 N X X
52	AH-11W(0-1')	3/10/2020	1050	X			X			1 N X X

Relinquished by:	Date:	Time:	Received by:	Date:	Time:
	3/12/20	14:15		3/12/20	14:15
Relinquished by:	Date:	Time:	Received by:	Date:	Time:
	3/12/20	17:00	Scott	3/12/20	17:00

Relinquished by:	Date:	Time:	Received by:	Date:	Time:
				3/13/20	8:00

ORIGINAL COPY

Central Texas Received 60

ANALYSIS REQUEST (Circle or Specify Method No.)										
BT EX 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	RCl	PLM (Asbestos)
										Chloride 300.0
										Sulfate TDS
										General Water Chemistry (see attached list)
										Anion/Cation Balance
										TPH 8015R
										HOLD
REMARKS:										
<input checked="" type="checkbox"/> Standard <input type="checkbox"/> RUSH: Same Day 24 hr. 48 hr. 72 hr. <input type="checkbox"/> Rush Charges Authorized <input type="checkbox"/> Special Report Limits or TRRP Report										
(Circle) HAND DELIVERED FEDEX UPS Tracking #:										



Tetra Tech, Inc.

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

1199114

Client Name:	Conoco Phillips	Site Manager:	Christian Llull
Project Name:	COP MCA 2 C Header Release	Contact Info:	Email: christian.llull@tetrtech.com Phone: (512) 338-1667
Project Location: (county, state)	Lea County, New Mexico	Project #:	212C-MD-02119
Invoice to:	Accounts Payable 901 West Wall Street, Suite 100 Midland, Texas 79701		
Receiving Laboratory:	Pace Analytical	Sampler Signature:	Adrian
Comments:	COPTETRA Acctnum		

Relinquished by:

Date: Time

Received by:

Date: Time

LAB USE
ONLY

REMARKS

- Standard
 - RUSH: Same Day 24 hr. 48 hr. 72 hr.
 - Rush Charges Authorized
 - Special Report Limits or TRRP Report

 Belin

Date: _____ Time: _____

Received by:

Date: Time

Sample Temperature

Relinquished by

Date: Time

Received by:

Date: Time

ORIGINAL COP

(Circle) HAND DELIVERED FEDEX UPS Tracking #: _____

Pace Analytical National Center for Testing & Innovation
Cooler Receipt Form

Client:	<i>COPPETRA</i>		1199114
Cooler Received/Opened On:	3 / 13 / 20	Temperature:	-7
Received By:	Willie Taylor	<i>8:00</i>	
Signature:	<i>Willie Taylor</i>		
Receipt Check List	NP	Yes	No
COC Seal Present / Intact?	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
COC Signed / Accurate?	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Bottles arrive intact?	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Correct bottles used?	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Sufficient volume sent?	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
If Applicable	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
VOA Zero headspace?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Preservation Correct / Checked?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>



ANALYTICAL REPORT

July 28, 2020

Revised Report

ConocoPhillips - Tetra Tech

Sample Delivery Group: L1238345
Samples Received: 07/10/2020
Project Number: 212C-MD-02119
Description: COP MCA 2-C Header Release
Site: LEA COUNTY, NEW MEXICO
Report To: Christian Llull
901 West Wall
Suite 100
Midland, TX 79701

Entire Report Reviewed By:

Chris McCord
Project Manager

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

1 Cp

2 Tc

3 Ss

4 Cn

5 Sr

6 Qc

7 Gl

8 Al

9 Sc

Cp: Cover Page	1	 ¹ Cp
Tc: Table of Contents	2	 ² Tc
Ss: Sample Summary	3	 ³ Ss
Cn: Case Narrative	6	 ⁴ Cn
Sr: Sample Results	7	 ⁵ Sr
AH-1S-2 0-1FT L1238345-01	7	 ⁶ Qc
AH-1S-2 2-3FT L1238345-02	8	 ⁷ Gl
AH-5S-2 0-1FT L1238345-03	9	 ⁸ Al
AH-5S-2 2-3FT L1238345-04	10	 ⁹ Sc
AH-7W-2 0-1FT L1238345-05	11	
AH-7W-2 2-3FT L1238345-06	12	
AH-7E-2 0-1FT L1238345-07	13	
AH-7E-2 2-3FT L1238345-08	14	
AH-11W-2 0-1FT L1238345-09	15	
AH-11W-2 2-3FT L1238345-10	16	
AH-9W-2 0-1FT L1238345-11	17	
AH-9N 0-1FT L1238345-13	18	
AH-9N 2-3FT L1238345-14	19	
AH-8W-2 0-1FT L1238345-15	20	
AH-8W-2 2-3FT L1238345-16	21	
Qc: Quality Control Summary	22	
Total Solids by Method 2540 G-2011	22	
Wet Chemistry by Method 300.0	24	
Volatile Organic Compounds (GC) by Method 8015D/GRO	25	
Volatile Organic Compounds (GC/MS) by Method 8260B	27	
Semi-Volatile Organic Compounds (GC) by Method 8015	29	
Gl: Glossary of Terms	30	
Al: Accreditations & Locations	31	
Sc: Sample Chain of Custody	32	

SAMPLE SUMMARY

AH-1S-2 0-1FT L1238345-01 Solid

Collected by John Myler
Collected date/time 07/08/20 12:00
Received date/time 07/10/20 08:30

Method	Batch	Dilution	Preparation date/time	Analysis date/time	Analyst	Location
Total Solids by Method 2540 G-2011	WG1508708	1	07/14/20 23:25	07/14/20 23:35	KBC	Mt. Juliet, TN
Wet Chemistry by Method 300.0	WG1507969	1	07/13/20 21:00	07/13/20 23:32	ELN	Mt. Juliet, TN
Volatile Organic Compounds (GC) by Method 8015D/GRO	WG1507601	1	07/10/20 21:04	07/12/20 00:21	AV	Mt. Juliet, TN
Volatile Organic Compounds (GC/MS) by Method 8260B	WG1507711	1	07/10/20 21:04	07/12/20 13:59	DWR	Mt. Juliet, TN
Semi-Volatile Organic Compounds (GC) by Method 8015	WG1507584	1	07/15/20 09:09	07/16/20 13:15	KLM	Mt. Juliet, TN

AH-1S-2 2-3FT L1238345-02 Solid

Collected by John Myler
Collected date/time 07/08/20 12:30
Received date/time 07/10/20 08:30

Method	Batch	Dilution	Preparation date/time	Analysis date/time	Analyst	Location
Total Solids by Method 2540 G-2011	WG1508708	1	07/14/20 23:25	07/14/20 23:35	KBC	Mt. Juliet, TN
Wet Chemistry by Method 300.0	WG1507969	1	07/13/20 21:00	07/13/20 23:50	ELN	Mt. Juliet, TN
Volatile Organic Compounds (GC) by Method 8015D/GRO	WG1507601	1	07/10/20 21:04	07/12/20 00:41	AV	Mt. Juliet, TN
Volatile Organic Compounds (GC/MS) by Method 8260B	WG1507711	1	07/10/20 21:04	07/12/20 14:19	DWR	Mt. Juliet, TN
Semi-Volatile Organic Compounds (GC) by Method 8015	WG1507584	1	07/15/20 09:09	07/16/20 12:33	KLM	Mt. Juliet, TN

AH-5S-2 0-1FT L1238345-03 Solid

Collected by John Myler
Collected date/time 07/08/20 13:30
Received date/time 07/10/20 08:30

Method	Batch	Dilution	Preparation date/time	Analysis date/time	Analyst	Location
Total Solids by Method 2540 G-2011	WG1508708	1	07/14/20 23:25	07/14/20 23:35	KBC	Mt. Juliet, TN
Wet Chemistry by Method 300.0	WG1507969	1	07/13/20 21:00	07/14/20 00:09	ELN	Mt. Juliet, TN
Volatile Organic Compounds (GC) by Method 8015D/GRO	WG1507601	1	07/10/20 21:04	07/12/20 01:02	AV	Mt. Juliet, TN
Volatile Organic Compounds (GC/MS) by Method 8260B	WG1507711	1	07/10/20 21:04	07/12/20 14:39	DWR	Mt. Juliet, TN
Semi-Volatile Organic Compounds (GC) by Method 8015	WG1507584	1	07/15/20 09:09	07/16/20 11:19	KLM	Mt. Juliet, TN

AH-5S-2 2-3FT L1238345-04 Solid

Collected by John Myler
Collected date/time 07/08/20 14:00
Received date/time 07/10/20 08:30

Method	Batch	Dilution	Preparation date/time	Analysis date/time	Analyst	Location
Total Solids by Method 2540 G-2011	WG1508708	1	07/14/20 23:25	07/14/20 23:35	KBC	Mt. Juliet, TN
Wet Chemistry by Method 300.0	WG1507969	1	07/13/20 21:00	07/14/20 00:27	ELN	Mt. Juliet, TN
Volatile Organic Compounds (GC) by Method 8015D/GRO	WG1507601	1	07/10/20 21:04	07/12/20 01:22	AV	Mt. Juliet, TN
Volatile Organic Compounds (GC/MS) by Method 8260B	WG1507711	1	07/10/20 21:04	07/12/20 14:59	DWR	Mt. Juliet, TN
Semi-Volatile Organic Compounds (GC) by Method 8015	WG1507584	1	07/15/20 09:09	07/17/20 16:09	FM	Mt. Juliet, TN

AH-7W-2 0-1FT L1238345-05 Solid

Collected by John Myler
Collected date/time 07/08/20 14:30
Received date/time 07/10/20 08:30

Method	Batch	Dilution	Preparation date/time	Analysis date/time	Analyst	Location
Total Solids by Method 2540 G-2011	WG1508708	1	07/14/20 23:25	07/14/20 23:35	KBC	Mt. Juliet, TN
Wet Chemistry by Method 300.0	WG1507969	1	07/13/20 21:00	07/14/20 01:04	ELN	Mt. Juliet, TN
Volatile Organic Compounds (GC) by Method 8015D/GRO	WG1507601	1	07/10/20 21:04	07/12/20 01:43	AV	Mt. Juliet, TN
Volatile Organic Compounds (GC/MS) by Method 8260B	WG1507711	1	07/10/20 21:04	07/12/20 15:19	DWR	Mt. Juliet, TN
Semi-Volatile Organic Compounds (GC) by Method 8015	WG1507584	1	07/15/20 09:09	07/16/20 13:28	KLM	Mt. Juliet, TN

1 Cp

2 Tc

3 Ss

4 Cn

5 Sr

6 Qc

7 Gl

8 Al

9 Sc

SAMPLE SUMMARY

AH-7W-2 2-3FT L1238345-06 Solid

Collected by John Myler
Collected date/time 07/08/20 15:00
Received date/time 07/10/20 08:30

1 Cp

Method	Batch	Dilution	Preparation date/time	Analysis date/time	Analyst	Location
Total Solids by Method 2540 G-2011	WG1508708	1	07/14/20 23:25	07/14/20 23:35	KBC	Mt. Juliet, TN
Wet Chemistry by Method 300.0	WG1507969	1	07/13/20 21:00	07/14/20 01:22	ELN	Mt. Juliet, TN
Volatile Organic Compounds (GC) by Method 8015D/GRO	WG1507601	1	07/10/20 21:04	07/12/20 02:03	AV	Mt. Juliet, TN
Volatile Organic Compounds (GC/MS) by Method 8260B	WG1507711	1	07/10/20 21:04	07/12/20 15:39	DWR	Mt. Juliet, TN
Semi-Volatile Organic Compounds (GC) by Method 8015	WG1507584	1	07/15/20 09:09	07/16/20 14:01	KLM	Mt. Juliet, TN

AH-7E-2 0-1FT L1238345-07 Solid

Collected by John Myler
Collected date/time 07/08/20 15:30
Received date/time 07/10/20 08:30

2 Tc

Method	Batch	Dilution	Preparation date/time	Analysis date/time	Analyst	Location
Total Solids by Method 2540 G-2011	WG1508708	1	07/14/20 23:25	07/14/20 23:35	KBC	Mt. Juliet, TN
Wet Chemistry by Method 300.0	WG1507969	1	07/13/20 21:00	07/14/20 02:54	ELN	Mt. Juliet, TN
Volatile Organic Compounds (GC) by Method 8015D/GRO	WG1507614	1	07/10/20 21:04	07/12/20 03:45	BMB	Mt. Juliet, TN
Volatile Organic Compounds (GC/MS) by Method 8260B	WG1507711	1	07/10/20 21:04	07/12/20 15:59	DWR	Mt. Juliet, TN
Semi-Volatile Organic Compounds (GC) by Method 8015	WG1507584	1	07/15/20 09:09	07/17/20 00:20	KLM	Mt. Juliet, TN

AH-7E-2 2-3FT L1238345-08 Solid

Collected by John Myler
Collected date/time 07/08/20 16:00
Received date/time 07/10/20 08:30

3 Ss

Method	Batch	Dilution	Preparation date/time	Analysis date/time	Analyst	Location
Total Solids by Method 2540 G-2011	WG1508708	1	07/14/20 23:25	07/14/20 23:35	KBC	Mt. Juliet, TN
Wet Chemistry by Method 300.0	WG1507969	1	07/13/20 21:00	07/14/20 03:13	ELN	Mt. Juliet, TN
Volatile Organic Compounds (GC) by Method 8015D/GRO	WG1507614	1	07/10/20 21:04	07/12/20 04:07	BMB	Mt. Juliet, TN
Volatile Organic Compounds (GC/MS) by Method 8260B	WG1507711	1	07/10/20 21:04	07/12/20 16:18	DWR	Mt. Juliet, TN
Semi-Volatile Organic Compounds (GC) by Method 8015	WG1507584	1	07/15/20 09:09	07/16/20 12:19	KLM	Mt. Juliet, TN

AH-11W-2 0-1FT L1238345-09 Solid

Collected by John Myler
Collected date/time 07/08/20 16:30
Received date/time 07/10/20 08:30

4 Cn

Method	Batch	Dilution	Preparation date/time	Analysis date/time	Analyst	Location
Total Solids by Method 2540 G-2011	WG1508709	1	07/14/20 23:12	07/14/20 23:22	KBC	Mt. Juliet, TN
Wet Chemistry by Method 300.0	WG1507969	1	07/13/20 21:00	07/14/20 03:31	ELN	Mt. Juliet, TN
Volatile Organic Compounds (GC) by Method 8015D/GRO	WG1507614	1	07/10/20 21:04	07/12/20 04:29	BMB	Mt. Juliet, TN
Volatile Organic Compounds (GC/MS) by Method 8260B	WG1507711	1	07/10/20 21:04	07/12/20 16:38	DWR	Mt. Juliet, TN
Semi-Volatile Organic Compounds (GC) by Method 8015	WG1507584	1	07/15/20 09:09	07/16/20 23:39	KLM	Mt. Juliet, TN

AH-11W-2 2-3FT L1238345-10 Solid

Collected by John Myler
Collected date/time 07/08/20 17:00
Received date/time 07/10/20 08:30

5 Sr

Method	Batch	Dilution	Preparation date/time	Analysis date/time	Analyst	Location
Total Solids by Method 2540 G-2011	WG1508709	1	07/14/20 23:12	07/14/20 23:22	KBC	Mt. Juliet, TN
Wet Chemistry by Method 300.0	WG1507969	1	07/13/20 21:00	07/14/20 03:50	ELN	Mt. Juliet, TN
Volatile Organic Compounds (GC) by Method 8015D/GRO	WG1507614	1	07/10/20 21:04	07/12/20 04:52	BMB	Mt. Juliet, TN
Volatile Organic Compounds (GC/MS) by Method 8260B	WG1507711	1	07/10/20 21:04	07/12/20 16:58	DWR	Mt. Juliet, TN
Semi-Volatile Organic Compounds (GC) by Method 8015	WG1507584	1	07/15/20 09:09	07/16/20 23:53	KLM	Mt. Juliet, TN

6 Qc

7 Gl

8 Al

9 Sc

SAMPLE SUMMARY

AH-9W-2 0-1FT L1238345-11 Solid

Collected by John Myler
Collected date/time 07/08/20 17:30
Received date/time 07/10/20 08:30

1 Cp

Method	Batch	Dilution	Preparation date/time	Analysis date/time	Analyst	Location
Total Solids by Method 2540 G-2011	WG1508709	1	07/14/20 23:12	07/14/20 23:22	KBC	Mt. Juliet, TN
Wet Chemistry by Method 300.0	WG1507969	1	07/13/20 21:00	07/14/20 04:08	ELN	Mt. Juliet, TN
Volatile Organic Compounds (GC) by Method 8015D/GRO	WG1507614	1	07/10/20 21:04	07/12/20 05:14	BMB	Mt. Juliet, TN
Volatile Organic Compounds (GC/MS) by Method 8260B	WG1507711	1	07/10/20 21:04	07/12/20 17:18	DWR	Mt. Juliet, TN
Semi-Volatile Organic Compounds (GC) by Method 8015	WG1507584	1	07/15/20 09:09	07/17/20 00:06	KLM	Mt. Juliet, TN

AH-9N 0-1FT L1238345-13 Solid

Collected by John Myler
Collected date/time 07/08/20 18:30
Received date/time 07/10/20 08:30

2 Tc

Method	Batch	Dilution	Preparation date/time	Analysis date/time	Analyst	Location
Total Solids by Method 2540 G-2011	WG1508709	1	07/14/20 23:12	07/14/20 23:22	KBC	Mt. Juliet, TN
Wet Chemistry by Method 300.0	WG1507969	1	07/13/20 21:00	07/14/20 04:27	ELN	Mt. Juliet, TN
Volatile Organic Compounds (GC) by Method 8015D/GRO	WG1507614	1	07/10/20 21:04	07/12/20 05:36	BMB	Mt. Juliet, TN
Volatile Organic Compounds (GC/MS) by Method 8260B	WG1507711	1	07/10/20 21:04	07/12/20 17:38	DWR	Mt. Juliet, TN
Semi-Volatile Organic Compounds (GC) by Method 8015	WG1507584	1	07/15/20 09:09	07/16/20 22:31	KLM	Mt. Juliet, TN

AH-9N 2-3FT L1238345-14 Solid

Collected by John Myler
Collected date/time 07/08/20 19:00
Received date/time 07/10/20 08:30

3 Ss

Method	Batch	Dilution	Preparation date/time	Analysis date/time	Analyst	Location
Total Solids by Method 2540 G-2011	WG1508709	1	07/14/20 23:12	07/14/20 23:22	KBC	Mt. Juliet, TN
Wet Chemistry by Method 300.0	WG1507969	1	07/13/20 21:00	07/14/20 04:45	ELN	Mt. Juliet, TN
Volatile Organic Compounds (GC) by Method 8015D/GRO	WG1507614	1	07/10/20 21:04	07/12/20 05:58	BMB	Mt. Juliet, TN
Volatile Organic Compounds (GC/MS) by Method 8260B	WG1507711	1	07/10/20 21:04	07/12/20 17:58	DWR	Mt. Juliet, TN
Semi-Volatile Organic Compounds (GC) by Method 8015	WG1507584	1	07/15/20 09:09	07/16/20 14:14	KLM	Mt. Juliet, TN

AH-8W-2 0-1FT L1238345-15 Solid

Collected by John Myler
Collected date/time 07/08/20 19:30
Received date/time 07/10/20 08:30

4 Cn

Method	Batch	Dilution	Preparation date/time	Analysis date/time	Analyst	Location
Total Solids by Method 2540 G-2011	WG1508709	1	07/14/20 23:12	07/14/20 23:22	KBC	Mt. Juliet, TN
Wet Chemistry by Method 300.0	WG1507969	1	07/13/20 21:00	07/14/20 05:03	ELN	Mt. Juliet, TN
Volatile Organic Compounds (GC) by Method 8015D/GRO	WG1507614	1	07/10/20 21:04	07/12/20 06:21	BMB	Mt. Juliet, TN
Volatile Organic Compounds (GC/MS) by Method 8260B	WG1507711	1	07/10/20 21:04	07/12/20 18:18	DWR	Mt. Juliet, TN
Semi-Volatile Organic Compounds (GC) by Method 8015	WG1507584	1	07/15/20 09:09	07/16/20 22:45	KLM	Mt. Juliet, TN

AH-8W-2 2-3FT L1238345-16 Solid

Collected by John Myler
Collected date/time 07/08/20 20:00
Received date/time 07/10/20 08:30

5 Sr

Method	Batch	Dilution	Preparation date/time	Analysis date/time	Analyst	Location
Total Solids by Method 2540 G-2011	WG1508709	1	07/14/20 23:12	07/14/20 23:22	KBC	Mt. Juliet, TN
Wet Chemistry by Method 300.0	WG1507969	1	07/13/20 21:00	07/14/20 05:22	ELN	Mt. Juliet, TN
Volatile Organic Compounds (GC) by Method 8015D/GRO	WG1507614	1	07/10/20 21:04	07/12/20 06:43	BMB	Mt. Juliet, TN
Volatile Organic Compounds (GC/MS) by Method 8260B	WG1507972	1	07/10/20 21:04	07/14/20 13:17	BMB	Mt. Juliet, TN
Semi-Volatile Organic Compounds (GC) by Method 8015	WG1507584	1	07/15/20 09:09	07/16/20 22:58	KLM	Mt. Juliet, TN

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

- ¹ Cp
- ² Tc
- ³ Ss
- ⁴ Cn
- ⁵ Sr
- ⁶ Qc
- ⁷ GI
- ⁸ AI
- ⁹ SC

Report Revision History

Level II Report - Version 1: 07/20/20 17:24

Total Solids by Method 2540 G-2011

Analyte	Result %	<u>Qualifier</u>	Dilution	Analysis date / time	<u>Batch</u>
Total Solids	93.4		1	07/14/2020 23:35	WG1508708

¹ Cp² Tc³ Ss⁴ Cn⁵ Sr⁶ Qc⁷ GI⁸ Al⁹ Sc

Wet Chemistry by Method 300.0

Analyte	Result (dry) mg/kg	<u>Qualifier</u>	MDL (dry) mg/kg	RDL (dry) mg/kg	Dilution	Analysis date / time	<u>Batch</u>
Chloride	U		9.85	21.4	1	07/13/2020 23:32	WG1507969

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

Analyte	Result (dry) mg/kg	<u>Qualifier</u>	MDL (dry) mg/kg	RDL (dry) mg/kg	Dilution	Analysis date / time	<u>Batch</u>
TPH (GC/FID) Low Fraction	U		0.0232	0.107	1	07/12/2020 00:21	WG1507601
(S)-a,a,a-Trifluorotoluene(FID)	89.2			77.0-120		07/12/2020 00:21	WG1507601

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

Analyte	Result (dry) mg/kg	<u>Qualifier</u>	MDL (dry) mg/kg	RDL (dry) mg/kg	Dilution	Analysis date / time	<u>Batch</u>
Benzene	U		0.000500	0.00107	1	07/12/2020 13:59	WG1507711
Toluene	U		0.00139	0.00535	1	07/12/2020 13:59	WG1507711
Ethylbenzene	U		0.000789	0.00268	1	07/12/2020 13:59	WG1507711
Total Xylenes	U		0.000942	0.00696	1	07/12/2020 13:59	WG1507711
(S)-Toluene-d8	104			75.0-131		07/12/2020 13:59	WG1507711
(S)-4-Bromofluorobenzene	101			67.0-138		07/12/2020 13:59	WG1507711
(S)-1,2-Dichloroethane-d4	108			70.0-130		07/12/2020 13:59	WG1507711

Semi-Volatile Organic Compounds (GC) by Method 8015

Analyte	Result (dry) mg/kg	<u>Qualifier</u>	MDL (dry) mg/kg	RDL (dry) mg/kg	Dilution	Analysis date / time	<u>Batch</u>
C10-C28 Diesel Range	3.23	U	1.72	4.28	1	07/16/2020 13:15	WG1507584
C28-C40 Oil Range	14.3		0.293	4.28	1	07/16/2020 13:15	WG1507584
(S)-o-Terphenyl	52.4			18.0-148		07/16/2020 13:15	WG1507584

Total Solids by Method 2540 G-2011

Analyte	Result %	<u>Qualifier</u>	Dilution	Analysis date / time	<u>Batch</u>
Total Solids	96.4		1	07/14/2020 23:35	WG1508708

¹ Cp² Tc³ Ss⁴ Cn⁵ Sr⁶ Qc⁷ GI⁸ Al⁹ Sc

Wet Chemistry by Method 300.0

Analyte	Result (dry) mg/kg	<u>Qualifier</u>	MDL (dry) mg/kg	RDL (dry) mg/kg	Dilution	Analysis date / time	<u>Batch</u>
Chloride	U		9.54	20.7	1	07/13/2020 23:50	WG1507969

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

Analyte	Result (dry) mg/kg	<u>Qualifier</u>	MDL (dry) mg/kg	RDL (dry) mg/kg	Dilution	Analysis date / time	<u>Batch</u>
TPH (GC/FID) Low Fraction	U		0.0225	0.104	1	07/12/2020 00:41	WG1507601
(S)-a,a,a-Trifluorotoluene(FID)	88.7			77.0-120		07/12/2020 00:41	WG1507601

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

Analyte	Result (dry) mg/kg	<u>Qualifier</u>	MDL (dry) mg/kg	RDL (dry) mg/kg	Dilution	Analysis date / time	<u>Batch</u>
Benzene	U		0.000484	0.00104	1	07/12/2020 14:19	WG1507711
Toluene	U		0.00135	0.00519	1	07/12/2020 14:19	WG1507711
Ethylbenzene	U		0.000764	0.00259	1	07/12/2020 14:19	WG1507711
Total Xylenes	U		0.000913	0.00674	1	07/12/2020 14:19	WG1507711
(S)-Toluene-d8	104			75.0-131		07/12/2020 14:19	WG1507711
(S)-4-Bromofluorobenzene	103			67.0-138		07/12/2020 14:19	WG1507711
(S)-1,2-Dichloroethane-d4	111			70.0-130		07/12/2020 14:19	WG1507711

Semi-Volatile Organic Compounds (GC) by Method 8015

Analyte	Result (dry) mg/kg	<u>Qualifier</u>	MDL (dry) mg/kg	RDL (dry) mg/kg	Dilution	Analysis date / time	<u>Batch</u>
C10-C28 Diesel Range	2.53	<u>J</u>	1.67	4.15	1	07/16/2020 12:33	WG1507584
C28-C40 Oil Range	11.7		0.284	4.15	1	07/16/2020 12:33	WG1507584
(S)-o-Terphenyl	52.0			18.0-148		07/16/2020 12:33	WG1507584

Total Solids by Method 2540 G-2011

Analyte	Result %	<u>Qualifier</u>	Dilution	Analysis date / time	<u>Batch</u>
Total Solids	82.9		1	07/14/2020 23:35	WG1508708

¹ Cp² Tc³ Ss⁴ Cn⁵ Sr⁶ Qc⁷ GI⁸ Al⁹ Sc

Wet Chemistry by Method 300.0

Analyte	Result (dry) mg/kg	<u>Qualifier</u>	MDL (dry) mg/kg	RDL (dry) mg/kg	Dilution	Analysis date / time	<u>Batch</u>
Chloride	11.8	<u>J</u>	11.1	24.1	1	07/14/2020 00:09	WG1507969

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

Analyte	Result (dry) mg/kg	<u>Qualifier</u>	MDL (dry) mg/kg	RDL (dry) mg/kg	Dilution	Analysis date / time	<u>Batch</u>
TPH (GC/FID) Low Fraction	0.0282	<u>J</u>	0.0262	0.121	1	07/12/2020 01:02	WG1507601
(S) a,a,a-Trifluorotoluene(FID)	87.5			77.0-120		07/12/2020 01:02	WG1507601

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

Analyte	Result (dry) mg/kg	<u>Qualifier</u>	MDL (dry) mg/kg	RDL (dry) mg/kg	Dilution	Analysis date / time	<u>Batch</u>
Benzene	U		0.000661	0.00141	1	07/12/2020 14:39	WG1507711
Toluene	U		0.00184	0.00707	1	07/12/2020 14:39	WG1507711
Ethylbenzene	U		0.00104	0.00354	1	07/12/2020 14:39	WG1507711
Total Xylenes	U		0.00125	0.00920	1	07/12/2020 14:39	WG1507711
(S) Toluene-d8	104			75.0-131		07/12/2020 14:39	WG1507711
(S) 4-Bromofluorobenzene	100			67.0-138		07/12/2020 14:39	WG1507711
(S) 1,2-Dichloroethane-d4	110			70.0-130		07/12/2020 14:39	WG1507711

Semi-Volatile Organic Compounds (GC) by Method 8015

Analyte	Result (dry) mg/kg	<u>Qualifier</u>	MDL (dry) mg/kg	RDL (dry) mg/kg	Dilution	Analysis date / time	<u>Batch</u>
C10-C28 Diesel Range	U		1.94	4.83	1	07/16/2020 11:19	WG1507584
C28-C40 Oil Range	4.44	<u>B J</u>	0.331	4.83	1	07/16/2020 11:19	WG1507584
(S) o-Terphenyl	46.9			18.0-148		07/16/2020 11:19	WG1507584

Total Solids by Method 2540 G-2011

Analyte	Result %	<u>Qualifier</u>	Dilution	Analysis date / time	<u>Batch</u>
Total Solids	93.6		1	07/14/2020 23:35	WG1508708

¹ Cp² Tc³ Ss⁴ Cn⁵ Sr⁶ Qc⁷ GI⁸ Al⁹ Sc

Wet Chemistry by Method 300.0

Analyte	Result (dry) mg/kg	<u>Qualifier</u>	MDL (dry) mg/kg	RDL (dry) mg/kg	Dilution	Analysis date / time	<u>Batch</u>
Chloride	U		9.83	21.4	1	07/14/2020 00:27	WG1507969

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

Analyte	Result (dry) mg/kg	<u>Qualifier</u>	MDL (dry) mg/kg	RDL (dry) mg/kg	Dilution	Analysis date / time	<u>Batch</u>
TPH (GC/FID) Low Fraction	U		0.0232	0.107	1	07/12/2020 01:22	WG1507601
(S)-a,a,a-Trifluorotoluene(FID)	89.1			77.0-120		07/12/2020 01:22	WG1507601

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

Analyte	Result (dry) mg/kg	<u>Qualifier</u>	MDL (dry) mg/kg	RDL (dry) mg/kg	Dilution	Analysis date / time	<u>Batch</u>
Benzene	U		0.000499	0.00107	1	07/12/2020 14:59	WG1507711
Toluene	U		0.00139	0.00534	1	07/12/2020 14:59	WG1507711
Ethylbenzene	U		0.000788	0.00267	1	07/12/2020 14:59	WG1507711
Total Xylenes	U		0.000940	0.00695	1	07/12/2020 14:59	WG1507711
(S)-Toluene-d8	107			75.0-131		07/12/2020 14:59	WG1507711
(S)-4-Bromofluorobenzene	103			67.0-138		07/12/2020 14:59	WG1507711
(S)-1,2-Dichloroethane-d4	98.8			70.0-130		07/12/2020 14:59	WG1507711

Semi-Volatile Organic Compounds (GC) by Method 8015

Analyte	Result (dry) mg/kg	<u>Qualifier</u>	MDL (dry) mg/kg	RDL (dry) mg/kg	Dilution	Analysis date / time	<u>Batch</u>
C10-C28 Diesel Range	4.78		1.72	4.27	1	07/17/2020 16:09	WG1507584
C28-C40 Oil Range	13.8		0.293	4.27	1	07/17/2020 16:09	WG1507584
(S)-o-Terphenyl	48.5			18.0-148		07/17/2020 16:09	WG1507584

Total Solids by Method 2540 G-2011

Analyte	Result %	<u>Qualifier</u>	Dilution	Analysis date / time	<u>Batch</u>
Total Solids	99.6		1	07/14/2020 23:35	WG1508708

¹ Cp² Tc³ Ss⁴ Cn⁵ Sr⁶ Qc⁷ GI⁸ Al⁹ Sc

Wet Chemistry by Method 300.0

Analyte	Result (dry) mg/kg	<u>Qualifier</u>	MDL (dry) mg/kg	RDL (dry) mg/kg	Dilution	Analysis date / time	<u>Batch</u>
Chloride	U		9.23	20.1	1	07/14/2020 01:04	WG1507969

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

Analyte	Result (dry) mg/kg	<u>Qualifier</u>	MDL (dry) mg/kg	RDL (dry) mg/kg	Dilution	Analysis date / time	<u>Batch</u>
TPH (GC/FID) Low Fraction	0.0251	J	0.0218	0.100	1	07/12/2020 01:43	WG1507601
(S) a,a,a-Trifluorotoluene(FID)	89.2			77.0-120		07/12/2020 01:43	WG1507601

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

Analyte	Result (dry) mg/kg	<u>Qualifier</u>	MDL (dry) mg/kg	RDL (dry) mg/kg	Dilution	Analysis date / time	<u>Batch</u>
Benzene	U		0.000469	0.00100	1	07/12/2020 15:19	WG1507711
Toluene	U		0.00130	0.00502	1	07/12/2020 15:19	WG1507711
Ethylbenzene	U		0.000740	0.00251	1	07/12/2020 15:19	WG1507711
Total Xylenes	U		0.000883	0.00652	1	07/12/2020 15:19	WG1507711
(S) Toluene-d8	105			75.0-131		07/12/2020 15:19	WG1507711
(S) 4-Bromofluorobenzene	98.1			67.0-138		07/12/2020 15:19	WG1507711
(S) 1,2-Dichloroethane-d4	97.3			70.0-130		07/12/2020 15:19	WG1507711

Semi-Volatile Organic Compounds (GC) by Method 8015

Analyte	Result (dry) mg/kg	<u>Qualifier</u>	MDL (dry) mg/kg	RDL (dry) mg/kg	Dilution	Analysis date / time	<u>Batch</u>
C10-C28 Diesel Range	3.57	J	1.62	4.01	1	07/16/2020 13:28	WG1507584
C28-C40 Oil Range	23.9		0.275	4.01	1	07/16/2020 13:28	WG1507584
(S) o-Terphenyl	61.0			18.0-148		07/16/2020 13:28	WG1507584

Total Solids by Method 2540 G-2011

Analyte	Result %	<u>Qualifier</u>	Dilution	Analysis date / time	<u>Batch</u>
Total Solids	85.8		1	07/14/2020 23:35	WG1508708

¹ Cp² Tc³ Ss⁴ Cn⁵ Sr⁶ Qc⁷ GI⁸ Al⁹ Sc

Wet Chemistry by Method 300.0

Analyte	Result (dry) mg/kg	<u>Qualifier</u>	MDL (dry) mg/kg	RDL (dry) mg/kg	Dilution	Analysis date / time	<u>Batch</u>
Chloride	U		10.7	23.3	1	07/14/2020 01:22	WG1507969

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

Analyte	Result (dry) mg/kg	<u>Qualifier</u>	MDL (dry) mg/kg	RDL (dry) mg/kg	Dilution	Analysis date / time	<u>Batch</u>
TPH (GC/FID) Low Fraction	0.0304	J	0.0253	0.117	1	07/12/2020 02:03	WG1507601
(S) a,a,a-Trifluorotoluene(FID)	86.2			77.0-120		07/12/2020 02:03	WG1507601

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

Analyte	Result (dry) mg/kg	<u>Qualifier</u>	MDL (dry) mg/kg	RDL (dry) mg/kg	Dilution	Analysis date / time	<u>Batch</u>
Benzene	U		0.000623	0.00133	1	07/12/2020 15:39	WG1507711
Toluene	U		0.00173	0.00667	1	07/12/2020 15:39	WG1507711
Ethylbenzene	U		0.000982	0.00333	1	07/12/2020 15:39	WG1507711
Total Xylenes	U		0.00117	0.00866	1	07/12/2020 15:39	WG1507711
(S) Toluene-d8	105			75.0-131		07/12/2020 15:39	WG1507711
(S) 4-Bromofluorobenzene	100			67.0-138		07/12/2020 15:39	WG1507711
(S) 1,2-Dichloroethane-d4	110			70.0-130		07/12/2020 15:39	WG1507711

Semi-Volatile Organic Compounds (GC) by Method 8015

Analyte	Result (dry) mg/kg	<u>Qualifier</u>	MDL (dry) mg/kg	RDL (dry) mg/kg	Dilution	Analysis date / time	<u>Batch</u>
C10-C28 Diesel Range	2.80	J	1.88	4.66	1	07/16/2020 14:01	WG1507584
C28-C40 Oil Range	14.7		0.320	4.66	1	07/16/2020 14:01	WG1507584
(S) o-Terphenyl	54.5			18.0-148		07/16/2020 14:01	WG1507584

Collected date/time: 07/08/20 15:30

L1238345

Total Solids by Method 2540 G-2011

Analyte	Result %	<u>Qualifier</u>	Dilution	Analysis date / time	<u>Batch</u>
Total Solids	81.3		1	07/14/2020 23:35	WG1508708

¹Cp²Tc³Ss⁴Cn⁵Sr⁶Qc⁷Gl⁸Al⁹Sc

Wet Chemistry by Method 300.0

Analyte	Result (dry) mg/kg	<u>Qualifier</u>	MDL (dry) mg/kg	RDL (dry) mg/kg	Dilution	Analysis date / time	<u>Batch</u>
Chloride	U		11.3	24.6	1	07/14/2020 02:54	WG1507969

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

Analyte	Result (dry) mg/kg	<u>Qualifier</u>	MDL (dry) mg/kg	RDL (dry) mg/kg	Dilution	Analysis date / time	<u>Batch</u>
TPH (GC/FID) Low Fraction	U		0.0267	0.123	1	07/12/2020 03:45	WG1507614
(S)- <i>a,a,a</i> -Trifluorotoluene(FID)	97.9			77.0-120		07/12/2020 03:45	WG1507614

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

Analyte	Result (dry) mg/kg	<u>Qualifier</u>	MDL (dry) mg/kg	RDL (dry) mg/kg	Dilution	Analysis date / time	<u>Batch</u>
Benzene	U		0.000682	0.00146	1	07/12/2020 15:59	WG1507711
Toluene	U		0.00190	0.00730	1	07/12/2020 15:59	WG1507711
Ethylbenzene	U		0.00108	0.00365	1	07/12/2020 15:59	WG1507711
Total Xylenes	U		0.00129	0.00949	1	07/12/2020 15:59	WG1507711
(S)-Toluene-d8	103			75.0-131		07/12/2020 15:59	WG1507711
(S)-4-Bromofluorobenzene	102			67.0-138		07/12/2020 15:59	WG1507711
(S)-1,2-Dichloroethane-d4	110			70.0-130		07/12/2020 15:59	WG1507711

Semi-Volatile Organic Compounds (GC) by Method 8015

Analyte	Result (dry) mg/kg	<u>Qualifier</u>	MDL (dry) mg/kg	RDL (dry) mg/kg	Dilution	Analysis date / time	<u>Batch</u>
C10-C28 Diesel Range	9.48		1.98	4.92	1	07/17/2020 00:20	WG1507584
C28-C40 Oil Range	49.5		0.337	4.92	1	07/17/2020 00:20	WG1507584
(S)- <i>o</i> -Terphenyl	55.2			18.0-148		07/17/2020 00:20	WG1507584

Total Solids by Method 2540 G-2011

Analyte	Result %	<u>Qualifier</u>	Dilution	Analysis date / time	<u>Batch</u>
Total Solids	99.2		1	07/14/2020 23:35	WG1508708

¹Cp
²Tc
³Ss
⁴Cn
⁵Sr
⁶Qc
⁷Gl
⁸Al
⁹Sc

Wet Chemistry by Method 300.0

Analyte	Result (dry) mg/kg	<u>Qualifier</u>	MDL (dry) mg/kg	RDL (dry) mg/kg	Dilution	Analysis date / time	<u>Batch</u>
Chloride	U		9.27	20.2	1	07/14/2020 03:13	WG1507969

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

Analyte	Result (dry) mg/kg	<u>Qualifier</u>	MDL (dry) mg/kg	RDL (dry) mg/kg	Dilution	Analysis date / time	<u>Batch</u>
TPH (GC/FID) Low Fraction	U		0.0219	0.101	1	07/12/2020 04:07	WG1507614
(S)-a,a,a-Trifluorotoluene(FID)	97.8			77.0-120		07/12/2020 04:07	WG1507614

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

Analyte	Result (dry) mg/kg	<u>Qualifier</u>	MDL (dry) mg/kg	RDL (dry) mg/kg	Dilution	Analysis date / time	<u>Batch</u>
Benzene	U		0.000471	0.00101	1	07/12/2020 16:18	WG1507711
Toluene	U		0.00131	0.00504	1	07/12/2020 16:18	WG1507711
Ethylbenzene	U		0.000743	0.00252	1	07/12/2020 16:18	WG1507711
Total Xylenes	U		0.000887	0.00655	1	07/12/2020 16:18	WG1507711
(S)-Toluene-d8	105			75.0-131		07/12/2020 16:18	WG1507711
(S)-4-Bromofluorobenzene	98.6			67.0-138		07/12/2020 16:18	WG1507711
(S)-1,2-Dichloroethane-d4	103			70.0-130		07/12/2020 16:18	WG1507711

Semi-Volatile Organic Compounds (GC) by Method 8015

Analyte	Result (dry) mg/kg	<u>Qualifier</u>	MDL (dry) mg/kg	RDL (dry) mg/kg	Dilution	Analysis date / time	<u>Batch</u>
C10-C28 Diesel Range	1.86	U	1.62	4.03	1	07/16/2020 12:19	WG1507584
C28-C40 Oil Range	9.44		0.276	4.03	1	07/16/2020 12:19	WG1507584
(S)-o-Terphenyl	46.7			18.0-148		07/16/2020 12:19	WG1507584

Collected date/time: 07/08/2020 16:30

L1238345

Total Solids by Method 2540 G-2011

Analyte	Result %	<u>Qualifier</u>	Dilution	Analysis date / time	<u>Batch</u>
Total Solids	99.7		1	07/14/2020 23:22	WG1508709

¹Cp²Tc³Ss⁴Cn⁵Sr⁶Qc⁷Gl⁸Al⁹Sc

Wet Chemistry by Method 300.0

Analyte	Result (dry) mg/kg	<u>Qualifier</u>	MDL (dry) mg/kg	RDL (dry) mg/kg	Dilution	Analysis date / time	<u>Batch</u>
Chloride	U		9.23	20.1	1	07/14/2020 03:31	WG1507969

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

Analyte	Result (dry) mg/kg	<u>Qualifier</u>	MDL (dry) mg/kg	RDL (dry) mg/kg	Dilution	Analysis date / time	<u>Batch</u>
TPH (GC/FID) Low Fraction	U		0.0218	0.100	1	07/12/2020 04:29	WG1507614
(S)-a,a,a-Trifluorotoluene(FID)	99.0			77.0-120		07/12/2020 04:29	WG1507614

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

Analyte	Result (dry) mg/kg	<u>Qualifier</u>	MDL (dry) mg/kg	RDL (dry) mg/kg	Dilution	Analysis date / time	<u>Batch</u>
Benzene	U		0.000468	0.00100	1	07/12/2020 16:38	WG1507711
Toluene	U		0.00130	0.00501	1	07/12/2020 16:38	WG1507711
Ethylbenzene	U		0.000739	0.00251	1	07/12/2020 16:38	WG1507711
Total Xylenes	U		0.000883	0.00652	1	07/12/2020 16:38	WG1507711
(S)-Toluene-d8	105			75.0-131		07/12/2020 16:38	WG1507711
(S)-4-Bromofluorobenzene	101			67.0-138		07/12/2020 16:38	WG1507711
(S)-1,2-Dichloroethane-d4	108			70.0-130		07/12/2020 16:38	WG1507711

Semi-Volatile Organic Compounds (GC) by Method 8015

Analyte	Result (dry) mg/kg	<u>Qualifier</u>	MDL (dry) mg/kg	RDL (dry) mg/kg	Dilution	Analysis date / time	<u>Batch</u>
C10-C28 Diesel Range	6.11		1.61	4.01	1	07/16/2020 23:39	WG1507584
C28-C40 Oil Range	33.6		0.275	4.01	1	07/16/2020 23:39	WG1507584
(S)-o-Terphenyl	66.8			18.0-148		07/16/2020 23:39	WG1507584

Total Solids by Method 2540 G-2011

Analyte	Result %	<u>Qualifier</u>	Dilution	Analysis date / time	<u>Batch</u>
Total Solids	87.5		1	07/14/2020 23:22	WG1508709

¹ Cp² Tc³ Ss⁴ Cn⁵ Sr⁶ Qc⁷ GI⁸ Al⁹ Sc

Wet Chemistry by Method 300.0

Analyte	Result (dry) mg/kg	<u>Qualifier</u>	MDL (dry) mg/kg	RDL (dry) mg/kg	Dilution	Analysis date / time	<u>Batch</u>
Chloride	U		10.5	22.8	1	07/14/2020 03:50	WG1507969

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

Analyte	Result (dry) mg/kg	<u>Qualifier</u>	MDL (dry) mg/kg	RDL (dry) mg/kg	Dilution	Analysis date / time	<u>Batch</u>
TPH (GC/FID) Low Fraction	U		0.0248	0.114	1	07/12/2020 04:52	WG1507614
(S)- <i>a,a,a</i> -Trifluorotoluene(FID)	98.4			77.0-120		07/12/2020 04:52	WG1507614

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

Analyte	Result (dry) mg/kg	<u>Qualifier</u>	MDL (dry) mg/kg	RDL (dry) mg/kg	Dilution	Analysis date / time	<u>Batch</u>
Benzene	U		0.000601	0.00129	1	07/12/2020 16:58	WG1507711
Toluene	U		0.00167	0.00643	1	07/12/2020 16:58	WG1507711
Ethylbenzene	U		0.000948	0.00322	1	07/12/2020 16:58	WG1507711
Total Xylenes	U		0.00113	0.00836	1	07/12/2020 16:58	WG1507711
(S)-Toluene-d8	106			75.0-131		07/12/2020 16:58	WG1507711
(S)-4-Bromofluorobenzene	101			67.0-138		07/12/2020 16:58	WG1507711
(S)-1,2-Dichloroethane-d4	106			70.0-130		07/12/2020 16:58	WG1507711

Semi-Volatile Organic Compounds (GC) by Method 8015

Analyte	Result (dry) mg/kg	<u>Qualifier</u>	MDL (dry) mg/kg	RDL (dry) mg/kg	Dilution	Analysis date / time	<u>Batch</u>
C10-C28 Diesel Range	5.65		1.84	4.57	1	07/16/2020 23:53	WG1507584
C28-C40 Oil Range	23.5		0.313	4.57	1	07/16/2020 23:53	WG1507584
(S)- <i>o</i> -Terphenyl	47.7			18.0-148		07/16/2020 23:53	WG1507584

Total Solids by Method 2540 G-2011

Analyte	Result %	<u>Qualifier</u>	Dilution	Analysis date / time	<u>Batch</u>
Total Solids	99.6		1	07/14/2020 23:22	WG1508709

¹ Cp² Tc³ Ss⁴ Cn⁵ Sr⁶ Qc⁷ GI⁸ Al⁹ Sc

Wet Chemistry by Method 300.0

Analyte	Result (dry) mg/kg	<u>Qualifier</u>	MDL (dry) mg/kg	RDL (dry) mg/kg	Dilution	Analysis date / time	<u>Batch</u>
Chloride	49.4		9.23	20.1	1	07/14/2020 04:08	WG1507969

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

Analyte	Result (dry) mg/kg	<u>Qualifier</u>	MDL (dry) mg/kg	RDL (dry) mg/kg	Dilution	Analysis date / time	<u>Batch</u>
TPH (GC/FID) Low Fraction	U		0.0218	0.100	1	07/12/2020 05:14	WG1507614
(S)- <i>a,a,a</i> -Trifluorotoluene(FID)	99.0			77.0-120		07/12/2020 05:14	WG1507614

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

Analyte	Result (dry) mg/kg	<u>Qualifier</u>	MDL (dry) mg/kg	RDL (dry) mg/kg	Dilution	Analysis date / time	<u>Batch</u>
Benzene	U		0.000469	0.00100	1	07/12/2020 17:18	WG1507711
Toluene	U		0.00130	0.00502	1	07/12/2020 17:18	WG1507711
Ethylbenzene	U		0.000740	0.00251	1	07/12/2020 17:18	WG1507711
Total Xylenes	U		0.000883	0.00652	1	07/12/2020 17:18	WG1507711
(S)-Toluene-d8	106			75.0-131		07/12/2020 17:18	WG1507711
(S)-4-Bromofluorobenzene	101			67.0-138		07/12/2020 17:18	WG1507711
(S)-1,2-Dichloroethane-d4	97.7			70.0-130		07/12/2020 17:18	WG1507711

Semi-Volatile Organic Compounds (GC) by Method 8015

Analyte	Result (dry) mg/kg	<u>Qualifier</u>	MDL (dry) mg/kg	RDL (dry) mg/kg	Dilution	Analysis date / time	<u>Batch</u>
C10-C28 Diesel Range	21.6		1.62	4.01	1	07/17/2020 00:06	WG1507584
C28-C40 Oil Range	97.3		0.275	4.01	1	07/17/2020 00:06	WG1507584
(S)- <i>o</i> -Terphenyl	59.0			18.0-148		07/17/2020 00:06	WG1507584

Total Solids by Method 2540 G-2011

Analyte	Result %	<u>Qualifier</u>	Dilution	Analysis date / time	<u>Batch</u>
Total Solids	92.9		1	07/14/2020 23:22	WG1508709

¹ Cp² Tc³ Ss⁴ Cn⁵ Sr⁶ Qc⁷ GI⁸ Al⁹ Sc

Wet Chemistry by Method 300.0

Analyte	Result (dry) mg/kg	<u>Qualifier</u>	MDL (dry) mg/kg	RDL (dry) mg/kg	Dilution	Analysis date / time	<u>Batch</u>
Chloride	U		9.90	21.5	1	07/14/2020 04:27	WG1507969

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

Analyte	Result (dry) mg/kg	<u>Qualifier</u>	MDL (dry) mg/kg	RDL (dry) mg/kg	Dilution	Analysis date / time	<u>Batch</u>
TPH (GC/FID) Low Fraction	U		0.0234	0.108	1	07/12/2020 05:36	WG1507614
(S)-a,a,a-Trifluorotoluene(FID)	98.6			77.0-120		07/12/2020 05:36	WG1507614

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

Analyte	Result (dry) mg/kg	<u>Qualifier</u>	MDL (dry) mg/kg	RDL (dry) mg/kg	Dilution	Analysis date / time	<u>Batch</u>
Benzene	U		0.000503	0.00108	1	07/12/2020 17:38	WG1507711
Toluene	U		0.00140	0.00538	1	07/12/2020 17:38	WG1507711
Ethylbenzene	U		0.000793	0.00269	1	07/12/2020 17:38	WG1507711
Total Xylenes	U		0.000947	0.00700	1	07/12/2020 17:38	WG1507711
(S)-Toluene-d8	106			75.0-131		07/12/2020 17:38	WG1507711
(S)-4-Bromofluorobenzene	99.1			67.0-138		07/12/2020 17:38	WG1507711
(S)-1,2-Dichloroethane-d4	103			70.0-130		07/12/2020 17:38	WG1507711

Semi-Volatile Organic Compounds (GC) by Method 8015

Analyte	Result (dry) mg/kg	<u>Qualifier</u>	MDL (dry) mg/kg	RDL (dry) mg/kg	Dilution	Analysis date / time	<u>Batch</u>
C10-C28 Diesel Range	10.1		1.73	4.31	1	07/16/2020 22:31	WG1507584
C28-C40 Oil Range	36.3		0.295	4.31	1	07/16/2020 22:31	WG1507584
(S)-o-Terphenyl	61.7			18.0-148		07/16/2020 22:31	WG1507584

Total Solids by Method 2540 G-2011

Analyte	Result %	<u>Qualifier</u>	Dilution	Analysis date / time	<u>Batch</u>
Total Solids	99.1		1	07/14/2020 23:22	WG1508709

¹ Cp² Tc³ Ss⁴ Cn⁵ Sr⁶ Qc⁷ Gl⁸ Al⁹ Sc

Wet Chemistry by Method 300.0

Analyte	Result (dry) mg/kg	<u>Qualifier</u>	MDL (dry) mg/kg	RDL (dry) mg/kg	Dilution	Analysis date / time	<u>Batch</u>
Chloride	13.1	<u>L</u>	9.29	20.2	1	07/14/2020 04:45	WG1507969

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

Analyte	Result (dry) mg/kg	<u>Qualifier</u>	MDL (dry) mg/kg	RDL (dry) mg/kg	Dilution	Analysis date / time	<u>Batch</u>
TPH (GC/FID) Low Fraction	U		0.0219	0.101	1	07/12/2020 05:58	WG1507614
(S)-a,a,a-Trifluorotoluene(FID)	98.5			77.0-120		07/12/2020 05:58	WG1507614

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

Analyte	Result (dry) mg/kg	<u>Qualifier</u>	MDL (dry) mg/kg	RDL (dry) mg/kg	Dilution	Analysis date / time	<u>Batch</u>
Benzene	U		0.000471	0.00101	1	07/12/2020 17:58	WG1507711
Toluene	U		0.00131	0.00505	1	07/12/2020 17:58	WG1507711
Ethylbenzene	U		0.000744	0.00252	1	07/12/2020 17:58	WG1507711
Total Xylenes	U		0.000888	0.00656	1	07/12/2020 17:58	WG1507711
(S)-Toluene-d8	107			75.0-131		07/12/2020 17:58	WG1507711
(S)-4-Bromofluorobenzene	98.9			67.0-138		07/12/2020 17:58	WG1507711
(S)-1,2-Dichloroethane-d4	97.5			70.0-130		07/12/2020 17:58	WG1507711

Semi-Volatile Organic Compounds (GC) by Method 8015

Analyte	Result (dry) mg/kg	<u>Qualifier</u>	MDL (dry) mg/kg	RDL (dry) mg/kg	Dilution	Analysis date / time	<u>Batch</u>
C10-C28 Diesel Range	4.35		1.63	4.04	1	07/16/2020 14:14	WG1507584
C28-C40 Oil Range	28.2		0.277	4.04	1	07/16/2020 14:14	WG1507584
(S)-o-Terphenyl	51.8			18.0-148		07/16/2020 14:14	WG1507584

Total Solids by Method 2540 G-2011

Analyte	Result %	<u>Qualifier</u>	Dilution	Analysis date / time	<u>Batch</u>
Total Solids	99.3		1	07/14/2020 23:22	WG1508709

¹ Cp² Tc³ Ss⁴ Cn⁵ Sr⁶ Qc⁷ GI⁸ Al⁹ Sc

Wet Chemistry by Method 300.0

Analyte	Result (dry) mg/kg	<u>Qualifier</u>	MDL (dry) mg/kg	RDL (dry) mg/kg	Dilution	Analysis date / time	<u>Batch</u>
Chloride	16.6	<u>L</u>	9.27	20.1	1	07/14/2020 05:03	WG1507969

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

Analyte	Result (dry) mg/kg	<u>Qualifier</u>	MDL (dry) mg/kg	RDL (dry) mg/kg	Dilution	Analysis date / time	<u>Batch</u>
TPH (GC/FID) Low Fraction	U		0.0219	0.101	1	07/12/2020 06:21	WG1507614
(S)-a,a,a-Trifluorotoluene(FID)	98.2			77.0-120		07/12/2020 06:21	WG1507614

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

Analyte	Result (dry) mg/kg	<u>Qualifier</u>	MDL (dry) mg/kg	RDL (dry) mg/kg	Dilution	Analysis date / time	<u>Batch</u>
Benzene	U		0.000470	0.00101	1	07/12/2020 18:18	WG1507711
Toluene	U		0.00131	0.00504	1	07/12/2020 18:18	WG1507711
Ethylbenzene	U		0.000742	0.00252	1	07/12/2020 18:18	WG1507711
Total Xylenes	U		0.000886	0.00655	1	07/12/2020 18:18	WG1507711
(S)-Toluene-d8	104			75.0-131		07/12/2020 18:18	WG1507711
(S)-4-Bromofluorobenzene	101			67.0-138		07/12/2020 18:18	WG1507711
(S)-1,2-Dichloroethane-d4	108			70.0-130		07/12/2020 18:18	WG1507711

Semi-Volatile Organic Compounds (GC) by Method 8015

Analyte	Result (dry) mg/kg	<u>Qualifier</u>	MDL (dry) mg/kg	RDL (dry) mg/kg	Dilution	Analysis date / time	<u>Batch</u>
C10-C28 Diesel Range	7.36		1.62	4.03	1	07/16/2020 22:45	WG1507584
C28-C40 Oil Range	40.1		0.276	4.03	1	07/16/2020 22:45	WG1507584
(S)-o-Terphenyl	48.2			18.0-148		07/16/2020 22:45	WG1507584

Total Solids by Method 2540 G-2011

Analyte	Result %	<u>Qualifier</u>	Dilution	Analysis date / time	<u>Batch</u>
Total Solids	97.7		1	07/14/2020 23:22	WG1508709

¹ Cp² Tc³ Ss⁴ Cn⁵ Sr⁶ Qc⁷ GI⁸ Al⁹ Sc

Wet Chemistry by Method 300.0

Analyte	Result (dry) mg/kg	<u>Qualifier</u>	MDL (dry) mg/kg	RDL (dry) mg/kg	Dilution	Analysis date / time	<u>Batch</u>
Chloride	53.9		9.42	20.5	1	07/14/2020 05:22	WG1507969

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

Analyte	Result (dry) mg/kg	<u>Qualifier</u>	MDL (dry) mg/kg	RDL (dry) mg/kg	Dilution	Analysis date / time	<u>Batch</u>
TPH (GC/FID) Low Fraction	U		0.0222	0.102	1	07/12/2020 06:43	WG1507614
(S)-a,a,a-Trifluorotoluene(FID)	99.2			77.0-120		07/12/2020 06:43	WG1507614

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

Analyte	Result (dry) mg/kg	<u>Qualifier</u>	MDL (dry) mg/kg	RDL (dry) mg/kg	Dilution	Analysis date / time	<u>Batch</u>
Benzene	0.000717	J	0.000478	0.00102	1	07/14/2020 13:17	WG1507972
Toluene	0.00141	J	0.00133	0.00512	1	07/14/2020 13:17	WG1507972
Ethylbenzene	U		0.000755	0.00256	1	07/14/2020 13:17	WG1507972
Total Xylenes	0.00102	J	0.000901	0.00665	1	07/14/2020 13:17	WG1507972
(S)-Toluene-d8	103			75.0-131		07/14/2020 13:17	WG1507972
(S)-4-Bromofluorobenzene	94.9			67.0-138		07/14/2020 13:17	WG1507972
(S)-1,2-Dichloroethane-d4	94.2			70.0-130		07/14/2020 13:17	WG1507972

Semi-Volatile Organic Compounds (GC) by Method 8015

Analyte	Result (dry) mg/kg	<u>Qualifier</u>	MDL (dry) mg/kg	RDL (dry) mg/kg	Dilution	Analysis date / time	<u>Batch</u>
C10-C28 Diesel Range	7.58		1.65	4.10	1	07/16/2020 22:58	WG1507584
C28-C40 Oil Range	37.6		0.281	4.10	1	07/16/2020 22:58	WG1507584
(S)-o-Terphenyl	60.3			18.0-148		07/16/2020 22:58	WG1507584

QUALITY CONTROL SUMMARY

L1238345-01,02,03,04,05,06,07,08

ONE LAB. N/A Page 214 of 309

Method Blank (MB)

(MB) R3549748-1 07/14/20 23:35

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

¹Cp²Tc³Ss⁴Cn⁵Sr⁶Qc⁷Gl⁸Al⁹Sc

L1238345-01 Original Sample (OS) • Duplicate (DUP)

(OS) L1238345-01 07/14/20 23:35 • (DUP) R3549748-3 07/14/20 23:35

Analyte	Original Result %	DUP Result %	Dilution %	DUP RPD %	<u>DUP Qualifier</u>	DUP RPD Limits %
Total Solids	93.4	93.4	1	0.00139		10

Laboratory Control Sample (LCS)

(LCS) R3549748-2 07/14/20 23:35

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

⁷Gl⁸Al⁹Sc

QUALITY CONTROL SUMMARY

L1238345-09,10,11,13,14,15,16

ONE LAB. N/A Page 215 of 309

Method Blank (MB)

(MB) R3549745-1 07/14/20 23:22

Analyte	MB Result %	<u>MB Qualifier</u>	MB MDL %	MB RDL %
Total Solids	0.00100			

¹Cp²Tc³Ss⁴Cn⁵Sr⁶Qc⁷Gl⁸Al⁹Sc

L1238345-13 Original Sample (OS) • Duplicate (DUP)

(OS) L1238345-13 07/14/20 23:22 • (DUP) R3549745-3 07/14/20 23:22

Analyte	Original Result %	DUP Result %	Dilution %	DUP RPD %	<u>DUP Qualifier</u>	DUP RPD Limits %
Total Solids	92.9	93.2	1	0.341		10

Laboratory Control Sample (LCS)

(LCS) R3549745-2 07/14/20 23:22

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

⁷Gl⁸Al⁹Sc

QUALITY CONTROL SUMMARY

[L1238345-01,02,03,04,05,06,07,08,09,10,11,13,14,15,16](#)

Method Blank (MB)

(MB) R3549168-1 07/13/20 22:36

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

¹Cp²Tc³Ss⁴Cn⁵Sr⁶Qc⁷Gl⁸Al⁹Sc

L1238345-04 Original Sample (OS) • Duplicate (DUP)

(OS) L1238345-04 07/14/20 00:27 • (DUP) R3549168-3 07/14/20 00:45

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

L1238345-16 Original Sample (OS) • Duplicate (DUP)

(OS) L1238345-16 07/14/20 05:22 • (DUP) R3549168-6 07/14/20 06:17

Analyte	Original Result	DUP Result	Dilution	DUP RPD	<u>DUP Qualifier</u>	DUP RPD Limits
	(dry) mg/kg	(dry) mg/kg		%		%
Chloride	53.9	54.0	1	0.178		20

Laboratory Control Sample (LCS)

(LCS) R3549168-2 07/13/20 22:55

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

L1238345-06 Original Sample (OS) • Matrix Spike (MS) • Matrix Spike Duplicate (MSD)

(OS) L1238345-06 07/14/20 01:22 • (MS) R3549168-4 07/14/20 01:41 • (MSD) R3549168-5 07/14/20 02:36

Analyte	Spike Amount	Original Result	MS Result (dry)	MSD Result	MS Rec.	MSD Rec.	Dilution	Rec. Limits	<u>MS Qualifier</u>	<u>MSD Qualifier</u>	RPD	RPD Limits
	(dry) mg/kg	(dry) mg/kg	mg/kg	mg/kg	%	%		%			%	%
Chloride	583	U	591	596	101	102	1	80.0-120			0.871	20

QUALITY CONTROL SUMMARY

Method Blank (MB)

(MB) R3550217-2 07/11/20 23:40

Analyte	MB Result mg/kg	<u>MB Qualifier</u>	MB MDL mg/kg	MB RDL mg/kg
TPH (GC/FID) Low Fraction	U		0.0217	0.100
(S) <i>a,a,a-Trifluorotoluene(FID)</i>	92.6			77.0-120

¹Cp²Tc³Ss⁴Cn⁵Sr⁶Qc⁷Gl⁸Al⁹Sc

Laboratory Control Sample (LCS)

(LCS) R3550217-1 07/11/20 22:58

Analyte	Spike Amount mg/kg	LCS Result mg/kg	LCS Rec. %	Rec. Limits %	<u>LCS Qualifier</u>
TPH (GC/FID) Low Fraction	5.50	5.48	99.6	72.0-127	
(S) <i>a,a,a-Trifluorotoluene(FID)</i>		108		77.0-120	

QUALITY CONTROL SUMMARY

L1238345-07,08,09,10,11,13,14,15,16

ONE LAB. NO Page 218 of 309

Method Blank (MB)

(MB) R3550799-3 07/12/20 03:23

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) <i>a,a,a-Trifluorotoluene(FID)</i>	99.8			77.0-120

¹Cp²Tc³Ss⁴Cn⁵Sr⁶Qc⁷Gl⁸Al⁹Sc

Laboratory Control Sample (LCS)

(LCS) R3550799-2 07/12/20 02:14

Analyte	Spike Amount mg/kg	LCS Result mg/kg	LCS Rec. %	Rec. Limits %	LCS Qualifier
TPH (GC/FID) Low Fraction	5.50	4.71	85.6	72.0-127	
(S) <i>a,a,a-Trifluorotoluene(FID)</i>		101		77.0-120	

QUALITY CONTROL SUMMARY

[L1238345-01,02,03,04,05,06,07,08,09,10,11,13,14,15](#)

Method Blank (MB)

(MB) R3549987-2 07/12/20 12:46

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	103		75.0-131	
(S) 4-Bromofluorobenzene	101		67.0-138	
(S) 1,2-Dichloroethane-d4	105		70.0-130	

¹Cp²Tc³Ss⁴Cn⁵Sr⁶Qc⁷Gl⁸Al⁹Sc

Laboratory Control Sample (LCS)

(LCS) R3549987-1 07/12/20 11:46

Analyte	Spike Amount mg/kg	LCS Result mg/kg	LCS Rec. %	Rec. Limits %	LCS Qualifier
Benzene	0.125	0.113	90.4	70.0-123	
Ethylbenzene	0.125	0.134	107	74.0-126	
Toluene	0.125	0.106	84.8	75.0-121	
Xylenes, Total	0.375	0.347	92.5	72.0-127	
(S) Toluene-d8		103		75.0-131	
(S) 4-Bromofluorobenzene		102		67.0-138	
(S) 1,2-Dichloroethane-d4		105		70.0-130	

QUALITY CONTROL SUMMARY

Method Blank (MB)

(MB) R3550795-2 07/14/20 10:15

Analyte	MB Result mg/kg	<u>MB Qualifier</u>	MB MDL mg/kg	MB RDL mg/kg
Benzene	U		0.000467	0.00100
Ethylbenzene	U		0.000737	0.00250
Toluene	U		0.00130	0.00500
Xylenes, Total	U		0.000880	0.00650
(S) Toluene-d8	102		75.0-131	
(S) 4-Bromofluorobenzene	97.2		67.0-138	
(S) 1,2-Dichloroethane-d4	91.0		70.0-130	

¹Cp²Tc³Ss⁴Cn⁵Sr⁶Qc⁷Gl⁸Al⁹Sc

Laboratory Control Sample (LCS)

(LCS) R3550795-1 07/14/20 09:18

Analyte	Spike Amount mg/kg	LCS Result mg/kg	LCS Rec. %	Rec. Limits %	<u>LCS Qualifier</u>
Benzene	0.125	0.122	97.6	70.0-123	
Ethylbenzene	0.125	0.118	94.4	74.0-126	
Toluene	0.125	0.116	92.8	75.0-121	
Xylenes, Total	0.375	0.382	102	72.0-127	
(S) Toluene-d8		94.7	75.0-131		
(S) 4-Bromofluorobenzene		103	67.0-138		
(S) 1,2-Dichloroethane-d4		101	70.0-130		

⁹Sc

L1238436-03 Original Sample (OS) • Matrix Spike (MS) • Matrix Spike Duplicate (MSD)

(OS) L1238436-03 07/14/20 16:46 • (MS) R3550795-3 07/14/20 19:36 • (MSD) R3550795-4 07/14/20 19:55

Analyte	Spike Amount (dry) mg/kg	Original Result (dry) 0.00130	MS Result (dry) 0.187	MSD Result (dry) 0.183	MS Rec. %	MSD Rec. %	Dilution 1	Rec. Limits 10.0-149	<u>MS Qualifier</u>	<u>MSD Qualifier</u>	RPD %	RPD Limits %
Benzene	0.125	0.00130	0.187	0.183	96.9	94.5	1	10.0-149			2.49	37
Ethylbenzene	0.125	U	0.181	0.175	94.4	91.2	1	10.0-160			3.45	38
Toluene	0.125	U	0.193	0.189	101	98.4	1	10.0-156			2.41	38
Xylenes, Total	0.375	U	0.560	0.430	97.3	74.7	1	10.0-160			26.4	38
(S) Toluene-d8				99.2	99.3			75.0-131				
(S) 4-Bromofluorobenzene				93.9	93.4			67.0-138				
(S) 1,2-Dichloroethane-d4				101	102			70.0-130				

QUALITY CONTROL SUMMARY

[L1238345-01,02,03,04,05,06,07,08,09,10,11,13,14,15,16](#)

ONE LAB. NO Page 221 of 309

Method Blank (MB)

(MB) R3550539-1 07/16/20 10:51

Analyte	MB Result mg/kg	<u>MB Qualifier</u>	MB MDL mg/kg	MB RDL mg/kg
C10-C28 Diesel Range	U		1.61	4.00
C28-C40 Oil Range	0.442	J	0.274	4.00
(S) o-Terphenyl	49.4			18.0-148

¹Cp²Tc³Ss⁴Cn⁵Sr⁶Qc⁷Gl⁸Al

Laboratory Control Sample (LCS)

(LCS) R3550539-2 07/16/20 11:06

Analyte	Spike Amount mg/kg	LCS Result mg/kg	LCS Rec. %	Rec. Limits %	<u>LCS Qualifier</u>
C10-C28 Diesel Range	50.0	33.0	66.0	50.0-150	
(S) o-Terphenyl			82.3	18.0-148	

⁹Sc

L1238345-03 Original Sample (OS) • Matrix Spike (MS) • Matrix Spike Duplicate (MSD)

(OS) L1238345-03 07/16/20 11:19 • (MS) R3550539-3 07/16/20 11:34 • (MSD) R3550539-4 07/16/20 11:52

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 %	<u>MS Qualifier</u>	<u>MSD Qualifier</u>	RPD	RPD Limits
C10-C28 Diesel Range	59.0	U	32.9	39.2	55.8	66.3	1	50.0-150			17.4	20
(S) o-Terphenyl					59.2	116		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.

1 Cp

2 Tc

3 Ss

4 Cn

5 Sr

6 Qc

7 Gl

8 Al

9 Sc

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

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

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

State Accreditations

Alabama	40660
Alaska	17-026
Arizona	AZ0612
Arkansas	88-0469
California	2932
Colorado	TN00003
Connecticut	PH-0197
Florida	E87487
Georgia	NELAP
Georgia ¹	923
Idaho	TN00003
Illinois	200008
Indiana	C-TN-01
Iowa	364
Kansas	E-10277
Kentucky ^{1,6}	90010
Kentucky ²	16
Louisiana	AI30792
Louisiana ¹	LA180010
Maine	TN0002
Maryland	324
Massachusetts	M-TN003
Michigan	9958
Minnesota	047-999-395
Mississippi	TN00003
Missouri	340
Montana	CERT0086

Nebraska	NE-OS-15-05
Nevada	TN-03-2002-34
New Hampshire	2975
New Jersey—NELAP	TN002
New Mexico ¹	n/a
New York	11742
North Carolina	Env375
North Carolina ¹	DW21704
North Carolina ³	41
North Dakota	R-140
Ohio—VAP	CL0069
Oklahoma	9915
Oregon	TN200002
Pennsylvania	68-02979
Rhode Island	LA000356
South Carolina	84004
South Dakota	n/a
Tennessee ^{1,4}	2006
Texas	T104704245-18-15
Texas ⁵	LAB0152
Utah	TN00003
Vermont	VT2006
Virginia	460132
Washington	C847
West Virginia	233
Wisconsin	9980939910
Wyoming	A2LA

Third Party Federal Accreditations

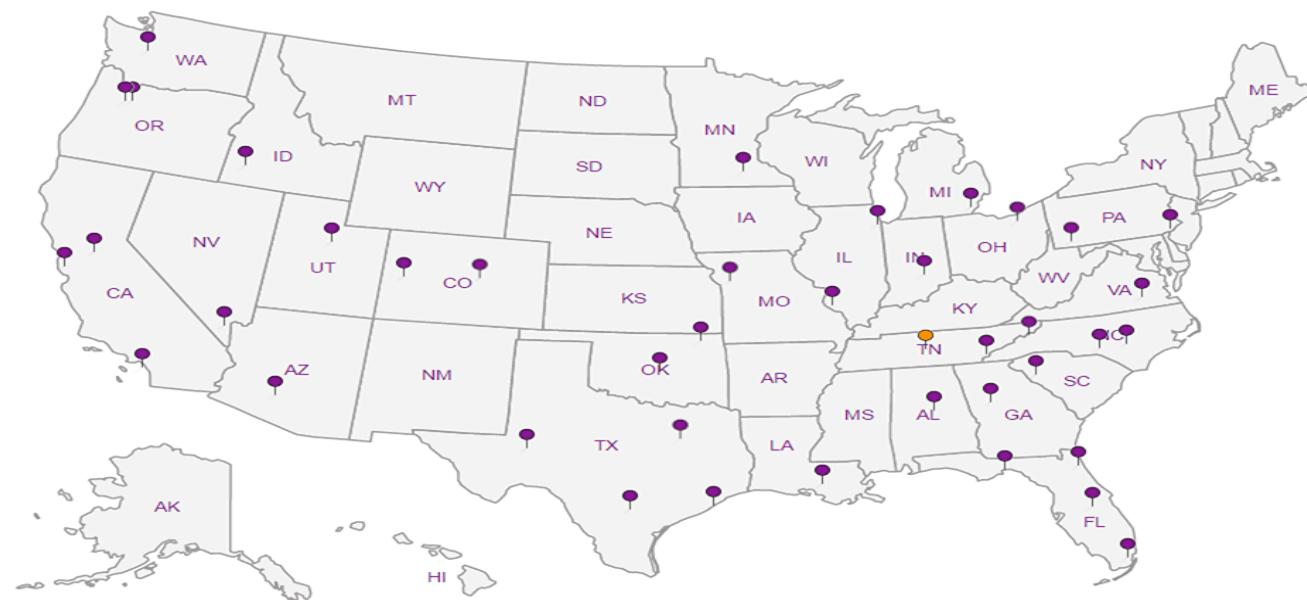
A2LA – ISO 17025	1461.01
A2LA – ISO 17025 ⁵	1461.02
Canada	1461.01
EPA-Crypto	TN00003

AIHA-LAP,LLC EMLAP	100789
DOD	1461.01
USDA	P330-15-00234

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

Our Locations

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



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

ConocoPhillips - Tetra Tech			Billing Information: Accounts Payable 901 West Wall Suite 100 Midland, TX 79701			Pres Chk	Analysis / Container / Preservative						Chain of Custody			
901 West Wall Suite 100 Midland, TX 79701			Report to: Christian Llull										Pace Analytical® National Center for Testing & Innovation			
Project Description: COP MCA 2-C Header Release			City/State Collected: Hobbs, NM		Please Circle: PT MT CT ET								12065 Lebanon Rd Mount Juliet, TN 37122 Phone: 615-758-5858 Phone: 800-767-5859 Fax: 615-758-5859			
Phone: 512-338-1667		Client Project # 212C-MD-02119		Lab Project # COPTETRA-212CMD02119								D135				
Collected by (print): <i>John Myler</i>		Site/Facility ID # LEA COUNTY, NEW MEXICO		P.O. #								Table #: 11238345				
Collected by (signature): <i>John Myler</i>		Rush? (Lab MUST Be Notified) Same Day Five Day Next Day 5 Day (Rad Only) Two Day 10 Day (Rad Only) Three Day		Quote #		Date Results Needed	No. of Cntrs							Acctnum: COPTETRA		
Immediately Packed on Ice N Y X		Standard, No Rush													Template: T170394	
Sample ID	Comp/Grab	Matrix *	Depth	Date	Time								Prelogin: P784175			
AH-1S	Grab	SS	0'-1'	7/18/20	12:00	1	X	X					PM: 526 - Chris McCord			
AH-1S		SS	2'-3'		12:30	1							PB: 7/11/20 MB			
AH-5S		SS	0'-1'		13:30								Shipped Via: FedEx Ground			
AH-5S		SS	2'-3'		14:00								Remarks Sample # (lab only)			
AH-7W		SS	0'-1'		14:30											
AH-7W		SS	2'-3'		15:00											
AH-7E		SS	0'-1'		15:30											
AH-7E		SS	2'-3'		16:00											
AH-11W		SS	0'-1'		16:30											
AH-11W	↓	SS	2'-3'	↓	17:00	↓	↓	↓					-01			
* Matrix: SS - Soil AIR - Air F - Filter GW - Groundwater B - Bioassay WW - WasteWater DW - Drinking Water OT - Other _____	Remarks: RED COOLER						pH _____	Temp _____	Sample Receipt Checklist							
							Flow _____	Other _____	COC Seal Present/Intact: <input checked="" type="checkbox"/> NP <input type="checkbox"/> N	If Applicable						
									COC Signed/Accurate: <input checked="" type="checkbox"/> Y <input type="checkbox"/> N							
									Bottles arrive intact: <input checked="" type="checkbox"/> Y <input type="checkbox"/> N							
									Correct bottles used: <input checked="" type="checkbox"/> Y <input type="checkbox"/> N							
									Sufficient volume sent: <input checked="" type="checkbox"/> Y <input type="checkbox"/> N							
									VOA Zero Headspace: <input checked="" type="checkbox"/> Y <input type="checkbox"/> N							
									Preservation Correct/Checked: <input checked="" type="checkbox"/> Y <input type="checkbox"/> N							
									RAD Screen < 0.5 mR/hr: <input checked="" type="checkbox"/> Y <input type="checkbox"/> N							
Samples returned via: UPS FedEx Courier _____			Tracking # 451016595120			If preservation required by Login: Date/Time										
Relinquished by : (Signature) <i>John Myler</i>		Date: 7/19/20	Time: 10:30	Received by: (Signature) Luisa Phillips			Trip Blank Received: Yes <input checked="" type="checkbox"/> No HCl / MeOH TBR									
Relinquished by : (Signature)		Date:	Time:	Received by: (Signature)			Temp: 27°C 27/02/27			Bottles Received: 16						
Relinquished by : (Signature)		Date:	Time:	Received for lab by: (Signature)			Date: 7/10/20	Time: 08:30	Hold:			Condition: NCF <input checked="" type="checkbox"/> OK				

Released to Imaging: 7/28/2021 1:49:41 PM

ConocoPhillips - Tetra Tech				Billing Information:			Analysis / Container / Preservative						Chain of Custody				
901 West Wall Suite 100 Midland TX 79701				Accounts Payable 901 West Wall Suite 100 Midland, TX 79701			Pres Chk									Page 2 of 2	
Report to: Christian Llull				Email To: christian.llull@tetrtech.com													
Project Description: COP MCA 2-C Header Release			City/State Collected:	<i>Hobbs, NM</i>		Please Circle: PT MT CT ET											
Phone: 512-338-1667		Client Project # 212C-MD-02119		Lab Project # COPTETRA-212CMD02119													
Collected by (print): <i>JOHN MYLER</i>		Site/Facility ID # LEA COUNTY, NEW MEXICO		P.O. #													
Collected by (signature): <i>Todd</i>		Rush? (Lab MUST Be Notified)		Quote #													
Immediately Packed on Ice N <input checked="" type="checkbox"/> Y <input type="checkbox"/>		Same Day <input type="checkbox"/> Five Day <input type="checkbox"/> Next Day <input type="checkbox"/> 5 Day (Rad Only) <input type="checkbox"/> Two Day <input type="checkbox"/> 10 Day (Rad Only) <input type="checkbox"/> Three Day <input type="checkbox"/>		Date Results Needed		No. of Cntrs											
				<i>Standard, No Rush</i>													
Sample ID	Comp/Grab	Matrix *	Depth	Date	Time		CHLORIDE-300 4ozCl-Nopres	GRD, W826081EX 4ozCl-Nopres	TPH-DR90/DR90 4ozCl-Nopres								
AH-9W	Grab	SS	0'-1'	7/18/20	17:30	1	X	X	X						-11		
AH-9W		SS	2'-3'		18:00										-12		
AH-9N		SS	0'-1'		18:30										-13		
AH-9N		SS	2'-3'		19:00										-14		
AH-8W		SS	0'-1		19:30										-15		
AH-8W	↓	SS	2'-3'	↓	20:00	↓	↓	↓	↓						-16		
Trip-Blank-1	-	SS	-	-	-	↓									-17		
		SS															
		SS															
		SS															
* Matrix: SS - Soil AIR - Air F - Filter GW - Groundwater B - Bioassay WW - WasteWater DW - Drinking Water OT - Other _____	Remarks: <i>RED - COOLER</i>						pH _____	Temp _____									
							Flow _____	Other _____									
Samples returned via: UPS FedEx Courier _____						Tracking # _____						Sample Receipt Checklist					
Relinquished by : (Signature) <i>John Llull</i>		Date: 7/19/20	Time: 10:30	Received by: (Signature) <i>Rekey Kilewicz</i>			Trip Blank Received: Yes <input checked="" type="checkbox"/> No <input type="checkbox"/> HCl / MeOH TBR			COC Seal Present/Intact: NP <input checked="" type="checkbox"/> Y <input type="checkbox"/> N COC Signed/Accurate: <input checked="" type="checkbox"/> Y <input type="checkbox"/> N Bottles arrive intact: <input checked="" type="checkbox"/> Y <input type="checkbox"/> N Correct bottles used: <input checked="" type="checkbox"/> Y <input type="checkbox"/> N Sufficient volume sent: <input checked="" type="checkbox"/> Y <input type="checkbox"/> N <i>If Applicable</i> VOA Zero Headspace: <input checked="" type="checkbox"/> Y <input type="checkbox"/> N Preservation Correct/Checked: <input checked="" type="checkbox"/> Y <input type="checkbox"/> N RAD Screen < 0.5 mR/hr: <input checked="" type="checkbox"/> Y <input type="checkbox"/> N							
Relinquished by : (Signature) <i>John Llull</i>		Date: _____	Time: _____	Received by: (Signature)			Temp: <i>44.5°C</i> Bottles Received: <i>27±0.27</i> <i>K</i>			If preservation required by Login: Date/Time _____							
Relinquished by : (Signature)		Date: _____	Time: _____	Received for lab by: (Signature)			Date: 7-18-20	Time: 08:00	Hold: _____		Condition: NCF <input checked="" type="checkbox"/> OK <input type="checkbox"/>						



Login #: L1238345 Client: COPTETRA

Date: 7/10/20

Evaluated by: Troy Dunlap

Non-Conformance (check applicable items)

Sample Integrity	Chain of Custody Clarification	If Broken Container:
Parameter(s) past holding time	X Login Clarification Needed	
Temperature not in range	Chain of custody is incomplete	Insufficient packing material around container
Improper container type	Please specify Metals requested.	Insufficient packing material inside cooler
pH not in range.	Please specify TCLP requested.	Improper handling by carrier (FedEx / UPS / Courier)
Insufficient sample volume.	Received additional samples not listed on coc.	Sample was frozen
Sample is biphasic.	Sample ids on containers do not match ids on coc	Container lid not intact
Vials received with headspace.	Trip Blank not received.	
Broken container	Client did not "X" analysis.	Received by:
Broken container:	Chain of Custody is missing	Date/Time:
Sufficient sample remains		Temp./Cont. Rec./pH:
		Carrier:
		Tracking#

Login Comments: Sample AH-9W 2-3FT received empty.

Client informed by:	Call	Email	Voice Mail	Date: 7/13/20	14:01
TSR Initials: CM	LJD	Client Contact:			

Client notified.

ConocoPhillips - Tetra Tech 901 West Wall Suite 100 Midland TX 79701			Billing Information: Accounts Payable 901 West Wall Suite 100 Midland, TX 79701			Pres Chk	Analysis / Container / Preservative			Chain of Custody	Page 1 of 3
Report to: Christian Llull			Email To: christian.llull@tetrtech.com								
Project Description: COP MCA 2-C Header Release		City/State Collected:	Hobbs, NM		Please Circle: PT MT CT ET						
Phone: 512-338-1667		Client Project # 212C-MD-02119		Lab Project # COPTETRA-212CMD02119							
Collected by (print): <i>John Meyer</i>		Site/Facility ID # LEA COUNTY, NEW MEXICO		P.O. #							
Collected by (signature): <i>John Meyer</i>		Rush? (Lab MUST Be Notified) Same Day Five Day Next Day 5 Day (Rad Only) Two Day 10 Day (Rad Only) Three Day		Quote #		Date Results Needed	No. of Cntrs				
Immediately Packed on Ice N Y X				Standard, No Rush							
Sample ID	Comp/Grab	Matrix *	Depth	Date	Time	No. of Cntrs	CHLORIDE-300 40ZCL-Nopres	TPH-DRO/ORO 40ZCL-Nopres	GR0,V8260TEX 40ZCL-Nopres		
AH-1S-2	Grab	SS	0'-1'	7/18/20	12:00	1	X	X	X		-01
AH-1S-2		SS	2'-3'		12:30	1					-02
AH-5S-2		SS	0'-1'			13:30					-03
AH-5S-2		SS	2'-3'			14:00					-04
AH-7W-2		SS	0'-1'			14:30					-05
AH-7W-2		SS	2'-3'			15:00					-06
AH-7E-2		SS	0'-1'			15:30					-07
AH-7E-2		SS	2'-3'			16:00					-08
AH-11W-2		SS	0'-1'			16:30					-09
AH-11W-2	▼	SS	2'-3'	▼	17:00	▼	▼	▼	▼		-10
* Matrix: SS - Soil AIR - Air F - Filter GW - Groundwater B - Bioassay WW - WasteWater DW - Drinking Water OT - Other _____	Remarks: RED COOLER						pH _____	Temp _____	Sample Receipt Checklist		
	Samples returned via: UPS FedEx Courier						Flow _____	Other _____	COC Seal Present/Intact: <input checked="" type="checkbox"/> N <input type="checkbox"/> Y	VOA Zero Headspace: <input checked="" type="checkbox"/> Y <input type="checkbox"/> N	
	Tracking # 451016595120						COC Signed/Accurate: <input checked="" type="checkbox"/> Y <input type="checkbox"/> N			Preservation Correct/Checked: <input checked="" type="checkbox"/> Y <input type="checkbox"/> N	
Relinquished by : (Signature) <i>John Meyer</i>		Date: 7/19/20	Time: 10:30	Received by: (Signature) <i>John Meyer Increase</i>		Trip Blank Received: Yes <input checked="" type="checkbox"/> No <input type="checkbox"/> HCl / MeOH TBR		Bottles arrive intact: <input checked="" type="checkbox"/> Y <input type="checkbox"/> N			
Relinquished by : (Signature)		Date:	Time:	Received by: (Signature)		Temp: 77.2°C Bottles Received: 16		Correct bottles used: <input checked="" type="checkbox"/> Y <input type="checkbox"/> N			
Relinquished by : (Signature)		Date:	Time:	Received for lab by: (Signature)		Date: 7-10-20	Time: 0830	Sufficient volume sent: <input checked="" type="checkbox"/> Y <input type="checkbox"/> N			
								If applicable			
								VOA Zero Headspace: <input checked="" type="checkbox"/> Y <input type="checkbox"/> N			
								Preservation Correct/Checked: <input checked="" type="checkbox"/> Y <input type="checkbox"/> N			
								RAD Screen <0.5 mR/hr: <input checked="" type="checkbox"/> Y <input type="checkbox"/> N			
								If preservation required by Login: Date/Time			
								Hold: _____			
								Condition: NCF <input checked="" type="checkbox"/> OK			

ConocoPhillips - Tetra Tech				Billing Information:			Analysis / Container / Preservative						Chain of Custody			
901 West Wall Suite 100 Midland TX 79701				Accounts Payable 901 West Wall Suite 100 Midland, TX 79701			Pres Chk									Page 2 of 2
Report to: Christian Llull				Email To: christian.llull@tetrtech.com												
Project Description: COP MCA 2-C Header Release			City/State Collected:	<i>Hobbs, NM</i>		Please Circle: PT MT CT ET										
Phone: 512-338-1667		Client Project # 212C-MD-02119		Lab Project # COPTETRA-212CMD02119												
Collected by (print): <i>JOHN MYLER</i>		Site/Facility ID # LEA COUNTY, NEW MEXICO		P.O. #												
Collected by (signature): <i>Todd</i>		Rush? (Lab MUST Be Notified)		Quote #												
Immediately Packed on Ice N <input checked="" type="checkbox"/> Y <input type="checkbox"/>		Same Day <input type="checkbox"/> Five Day <input type="checkbox"/> Next Day <input type="checkbox"/> 5 Day (Rad Only) <input type="checkbox"/> Two Day <input type="checkbox"/> 10 Day (Rad Only) <input type="checkbox"/> Three Day <input type="checkbox"/>		Date Results Needed <i>Standard, No Rush</i>		No. of Cntrs										
Sample ID	Comp/Grab	Matrix *	Depth	Date	Time		CHLORIDE-300 4ozCl-Nopres	GRD, W826081EX 4ozCl-Nopres	TPH-DRO/RORO 4ozCl-Nopres							
AH-9W-2	Grab	SS	0'-1'	7/18/20	17:30	1	X	X	X						-11	
AH-9W-2		SS	2'-3'		18:00										-12	
AH-9N		SS	0'-1'		18:30										-13	
AH-9N		SS	2'-3'		19:00										-14	
AH-8W-2		SS	0'-1		19:30										-15	
AH-8W-2	↓	SS	2'-3'	↓	20:00	↓	↓	↓	↓						-16	
Trip-Blank-1	-	SS	-	-	-	↓									-17	
		SS														
		SS														
* Matrix: SS - Soil AIR - Air F - Filter GW - Groundwater B - Bioassay WW - WasteWater DW - Drinking Water OT - Other _____	Remarks: <i>RED - COOLER</i>						pH _____	Temp _____							Sample Receipt Checklist	
							Flow _____	Other _____							COC Seal Present/Intact: <input checked="" type="checkbox"/> NP <input type="checkbox"/> N COC Signed/Accurate: <input checked="" type="checkbox"/> Y <input type="checkbox"/> N Bottles arrive intact: <input checked="" type="checkbox"/> Y <input type="checkbox"/> N Correct bottles used: <input checked="" type="checkbox"/> Y <input type="checkbox"/> N Sufficient volume sent: <input checked="" type="checkbox"/> Y <input type="checkbox"/> N <i>If Applicable</i>	
	Samples returned via: UPS <input type="checkbox"/> FedEx <input type="checkbox"/> Courier <input type="checkbox"/>						Tracking #							VOA Zero Headspace: <input checked="" type="checkbox"/> Y <input type="checkbox"/> N Preservation Correct/Checked: <input checked="" type="checkbox"/> Y <input type="checkbox"/> N RAD Screen <0.5 mR/hr: <input checked="" type="checkbox"/> Y <input type="checkbox"/> N		
Relinquished by : (Signature) <i>John Llull</i>	Date: 7/19/20	Time: 10:30	Received by: (Signature) <i>Rekey Kilewicz</i>			Trip Blank Received: <input checked="" type="checkbox"/> Yes <input type="checkbox"/> No HCl / MeOH TBR										
Relinquished by : (Signature)	Date:	Time:	Received by: (Signature)			Temp: <i>44.5°C</i>	Bottles Received: <i>27±0.27</i> <i>K</i>							If preservation required by Login: Date/Time		
Relinquished by : (Signature)	Date:	Time:	Received for lab by: (Signature)			Date: 7-18-20	Time: 08:00	Hold:						Condition: NCF / OK		

Chris McCord

From: Dickerson, Ryan <Ryan.Dickerson@tetratech.com>
Sent: Tuesday, July 21, 2020 1:37 PM
To: Chris McCord
Cc: Llull, Christian
Subject: L1238345 COC Revision
Attachments: COC edits_L1238345.pdf

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

Chris,
Can you revise the L1238345 Report to match the attached revised COC? Add "-2" to all samples except AH-9N. We have samples from the site with those sample IDs and need to distinguish the latest samples.

Thanks,

Ryan Dickerson | Senior Staff Geologist
Direct +1 (512) 338-2889 | Main +1 (512) 338-1667 | Cell +1 (512) 217-7254 | ryan.dickerson@tetratech.com

Tetra Tech | *Leading with Science®* | OGA
8911 N. Capital of TX Hwy. | Bldg. 2, Ste 2310 | Austin, TX 78759 | tetratech.com

This message, including any attachments, may include privileged, confidential and/or inside information. Any distribution or use of this communication by anyone other than the intended recipient is strictly prohibited and may be unlawful. If you are not the intended recipient, please notify the sender by replying to this message and then delete it from your system.



TETRA TECH

Please consider the environment before printing. [Read more](#)



ANALYTICAL REPORT

August 07, 2020

Revised Report

ConocoPhillips - Tetra Tech

Sample Delivery Group: L1243725
Samples Received: 07/25/2020
Project Number: 212C-MD-02119
Description: COP MCA 2-C Header Release
Site: LEA COUNTY, NEW MEXICO
Report To: Christian Llull
901 West Wall
Suite 100
Midland, TX 79701

Entire Report Reviewed By:

Erica McNeese
Project Manager

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

1 Cp

2 Tc

3 Ss

4 Cn

5 Sr

6 Qc

7 Gl

8 Al

9 Sc

Cp: Cover Page	1	 ¹ Cp
Tc: Table of Contents	2	 ² Tc
Ss: Sample Summary	3	 ³ Ss
Cn: Case Narrative	6	 ⁴ Cn
Sr: Sample Results	7	 ⁵ Sr
AH-1E-2 (0-1') L1243725-01	7	 ⁶ Qc
AH-1E-2 (2-3') L1243725-02	8	 ⁷ Gl
AH-1S-3 (0-1') L1243725-03	9	 ⁸ Al
AH-1S-3 (2-3') L1243725-04	10	 ⁹ Sc
AH-1S-3 (4-5') L1243725-05	11	
AH-3W (0-1') L1243725-06	12	
AH-3W (2-3') L1243725-07	13	
AH-5W-2 (0-1') L1243725-08	14	
AH-5W-2 (2-3') L1243725-09	15	
AH-9W-3 (0-1') L1243725-10	16	
AH-9W-3 (2-3') L1243725-11	17	
AH-1S-4 (0-1') L1243725-12	18	
AH-1S-4 (2-3') L1243725-13	19	
AH-1S-4 (4-5') L1243725-14	20	
Qc: Quality Control Summary	21	
Total Solids by Method 2540 G-2011	21	
Wet Chemistry by Method 300.0	24	
Volatile Organic Compounds (GC) by Method 8015D/GRO	25	
Volatile Organic Compounds (GC/MS) by Method 8260B	30	
Semi-Volatile Organic Compounds (GC) by Method 8015	32	
Gl: Glossary of Terms	35	
Al: Accreditations & Locations	36	
Sc: Sample Chain of Custody	37	

SAMPLE SUMMARY

AH-1E-2 (0-1') L1243725-01 Solid

Collected by Devin Dominguez
Collected date/time 07/23/20 00:00
Received date/time 07/25/20 09:00

Method	Batch	Dilution	Preparation date/time	Analysis date/time	Analyst	Location
Total Solids by Method 2540 G-2011	WG1518215	1	07/31/20 23:47	07/31/20 23:56	KDW	Mt. Juliet, TN
Wet Chemistry by Method 300.0	WG1516371	1	07/30/20 11:47	07/31/20 00:05	MCG	Mt. Juliet, TN
Volatile Organic Compounds (GC) by Method 8015D/GRO	WG1517753	1	07/28/20 23:31	07/30/20 19:12	ACG	Mt. Juliet, TN
Volatile Organic Compounds (GC/MS) by Method 8260B	WG1517242	1	07/28/20 23:31	07/30/20 01:13	DWR	Mt. Juliet, TN
Semi-Volatile Organic Compounds (GC) by Method 8015	WG1517866	1	08/02/20 09:00	08/02/20 22:48	JN	Mt. Juliet, TN

AH-1E-2 (2-3') L1243725-02 Solid

Collected by Devin Dominguez
Collected date/time 07/23/20 00:00
Received date/time 07/25/20 09:00

Method	Batch	Dilution	Preparation date/time	Analysis date/time	Analyst	Location
Total Solids by Method 2540 G-2011	WG1518215	1	07/31/20 23:47	07/31/20 23:56	KDW	Mt. Juliet, TN
Wet Chemistry by Method 300.0	WG1516371	1	07/30/20 11:47	07/31/20 00:15	MCG	Mt. Juliet, TN
Volatile Organic Compounds (GC) by Method 8015D/GRO	WG1517753	1	07/28/20 23:31	07/30/20 19:35	ACG	Mt. Juliet, TN
Volatile Organic Compounds (GC/MS) by Method 8260B	WG1517242	1	07/28/20 23:31	07/30/20 01:33	DWR	Mt. Juliet, TN
Semi-Volatile Organic Compounds (GC) by Method 8015	WG1517866	1	08/02/20 09:00	08/02/20 23:01	JN	Mt. Juliet, TN

AH-1S-3 (0-1') L1243725-03 Solid

Collected by Devin Dominguez
Collected date/time 07/24/20 00:00
Received date/time 07/25/20 09:00

Method	Batch	Dilution	Preparation date/time	Analysis date/time	Analyst	Location
Total Solids by Method 2540 G-2011	WG1518216	1	07/31/20 23:35	07/31/20 23:44	KDW	Mt. Juliet, TN
Wet Chemistry by Method 300.0	WG1516371	1	07/30/20 11:47	07/31/20 00:34	MCG	Mt. Juliet, TN
Volatile Organic Compounds (GC) by Method 8015D/GRO	WG1518312	1	07/28/20 23:31	07/31/20 19:02	ACG	Mt. Juliet, TN
Volatile Organic Compounds (GC/MS) by Method 8260B	WG1517242	1	07/28/20 23:31	07/30/20 01:54	DWR	Mt. Juliet, TN
Semi-Volatile Organic Compounds (GC) by Method 8015	WG1517866	1	08/02/20 09:00	08/02/20 23:14	JN	Mt. Juliet, TN

AH-1S-3 (2-3') L1243725-04 Solid

Collected by Devin Dominguez
Collected date/time 07/24/20 00:00
Received date/time 07/25/20 09:00

Method	Batch	Dilution	Preparation date/time	Analysis date/time	Analyst	Location
Total Solids by Method 2540 G-2011	WG1518216	1	07/31/20 23:35	07/31/20 23:44	KDW	Mt. Juliet, TN
Wet Chemistry by Method 300.0	WG1516371	1	07/30/20 11:47	07/31/20 00:43	MCG	Mt. Juliet, TN
Volatile Organic Compounds (GC) by Method 8015D/GRO	WG1517753	1	07/28/20 23:31	07/30/20 20:31	ACG	Mt. Juliet, TN
Volatile Organic Compounds (GC/MS) by Method 8260B	WG1517242	1	07/28/20 23:31	07/30/20 02:13	DWR	Mt. Juliet, TN
Semi-Volatile Organic Compounds (GC) by Method 8015	WG1517866	1	08/02/20 09:00	08/02/20 23:27	JN	Mt. Juliet, TN

AH-1S-3 (4-5') L1243725-05 Solid

Collected by Devin Dominguez
Collected date/time 07/24/20 00:00
Received date/time 07/25/20 09:00

Method	Batch	Dilution	Preparation date/time	Analysis date/time	Analyst	Location
Total Solids by Method 2540 G-2011	WG1518216	1	07/31/20 23:35	07/31/20 23:44	KDW	Mt. Juliet, TN
Wet Chemistry by Method 300.0	WG1516371	10	07/30/20 11:47	07/31/20 01:12	MCG	Mt. Juliet, TN
Volatile Organic Compounds (GC) by Method 8015D/GRO	WG1517753	1	07/28/20 23:31	07/30/20 20:54	ACG	Mt. Juliet, TN
Volatile Organic Compounds (GC/MS) by Method 8260B	WG1517242	1.56	07/28/20 23:31	07/30/20 02:33	DWR	Mt. Juliet, TN
Semi-Volatile Organic Compounds (GC) by Method 8015	WG1518501	1	08/01/20 08:47	08/01/20 14:28	JDG	Mt. Juliet, TN

1 Cp

2 Tc

3 Ss

4 Cn

5 Sr

6 Qc

7 Gl

8 Al

9 Sc

SAMPLE SUMMARY

AH-3W (0-1') L1243725-06 Solid

Collected by Devin Dominguez
Collected date/time 07/24/20 00:00
Received date/time 07/25/20 09:00

Method	Batch	Dilution	Preparation date/time	Analysis date/time	Analyst	Location
Total Solids by Method 2540 G-2011	WG1518216	1	07/31/20 23:35	07/31/20 23:44	KDW	Mt. Juliet, TN
Wet Chemistry by Method 300.0	WG1516371	1	07/30/20 11:47	07/31/20 01:40	MCG	Mt. Juliet, TN
Volatile Organic Compounds (GC) by Method 8015D/GRO	WG1517753	1	07/28/20 23:31	07/30/20 21:16	ACG	Mt. Juliet, TN
Volatile Organic Compounds (GC/MS) by Method 8260B	WG1517242	1.11	07/28/20 23:31	07/30/20 02:53	DWR	Mt. Juliet, TN
Semi-Volatile Organic Compounds (GC) by Method 8015	WG1518501	3	08/01/20 08:47	08/03/20 01:48	JN	Mt. Juliet, TN

AH-3W (2-3') L1243725-07 Solid

Collected by Devin Dominguez
Collected date/time 07/24/20 00:00
Received date/time 07/25/20 09:00

Method	Batch	Dilution	Preparation date/time	Analysis date/time	Analyst	Location
Total Solids by Method 2540 G-2011	WG1518216	1	07/31/20 23:35	07/31/20 23:44	KDW	Mt. Juliet, TN
Wet Chemistry by Method 300.0	WG1516371	1	07/30/20 11:47	07/31/20 01:50	MCG	Mt. Juliet, TN
Volatile Organic Compounds (GC) by Method 8015D/GRO	WG1518116	1	07/28/20 23:31	07/31/20 18:36	BMB	Mt. Juliet, TN
Volatile Organic Compounds (GC/MS) by Method 8260B	WG1517242	1	07/28/20 23:31	07/30/20 03:14	DWR	Mt. Juliet, TN
Semi-Volatile Organic Compounds (GC) by Method 8015	WG1518501	2.98	08/01/20 08:47	08/03/20 01:35	JN	Mt. Juliet, TN

AH-5W-2 (0-1') L1243725-08 Solid

Collected by Devin Dominguez
Collected date/time 07/23/20 00:00
Received date/time 07/25/20 09:00

Method	Batch	Dilution	Preparation date/time	Analysis date/time	Analyst	Location
Total Solids by Method 2540 G-2011	WG1518216	1	07/31/20 23:35	07/31/20 23:44	KDW	Mt. Juliet, TN
Wet Chemistry by Method 300.0	WG1516371	1	07/30/20 11:47	07/31/20 01:59	MCG	Mt. Juliet, TN
Volatile Organic Compounds (GC) by Method 8015D/GRO	WG1518116	1	07/28/20 23:31	07/31/20 18:57	BMB	Mt. Juliet, TN
Volatile Organic Compounds (GC/MS) by Method 8260B	WG1517242	1	07/28/20 23:31	07/30/20 03:34	DWR	Mt. Juliet, TN
Semi-Volatile Organic Compounds (GC) by Method 8015	WG1518501	2.91	08/01/20 08:47	08/01/20 17:30	JDG	Mt. Juliet, TN

AH-5W-2 (2-3') L1243725-09 Solid

Collected by Devin Dominguez
Collected date/time 07/23/20 00:00
Received date/time 07/25/20 09:00

Method	Batch	Dilution	Preparation date/time	Analysis date/time	Analyst	Location
Total Solids by Method 2540 G-2011	WG1518216	1	07/31/20 23:35	07/31/20 23:44	KDW	Mt. Juliet, TN
Wet Chemistry by Method 300.0	WG1516371	1	07/30/20 11:47	07/31/20 02:09	MCG	Mt. Juliet, TN
Volatile Organic Compounds (GC) by Method 8015D/GRO	WG1518116	1	07/28/20 23:31	07/31/20 19:18	BMB	Mt. Juliet, TN
Volatile Organic Compounds (GC/MS) by Method 8260B	WG1517242	1	07/28/20 23:31	07/30/20 03:54	DWR	Mt. Juliet, TN
Semi-Volatile Organic Compounds (GC) by Method 8015	WG1518501	2.79	08/01/20 08:47	08/03/20 02:00	JN	Mt. Juliet, TN

AH-9W-3 (0-1') L1243725-10 Solid

Collected by Devin Dominguez
Collected date/time 07/23/20 00:00
Received date/time 07/25/20 09:00

Method	Batch	Dilution	Preparation date/time	Analysis date/time	Analyst	Location
Total Solids by Method 2540 G-2011	WG1518216	1	07/31/20 23:35	07/31/20 23:44	KDW	Mt. Juliet, TN
Wet Chemistry by Method 300.0	WG1516371	1	07/30/20 11:47	07/31/20 02:18	MCG	Mt. Juliet, TN
Volatile Organic Compounds (GC) by Method 8015D/GRO	WG1518152	1	07/28/20 23:31	07/31/20 13:51	ADM	Mt. Juliet, TN
Volatile Organic Compounds (GC/MS) by Method 8260B	WG1517296	1	07/28/20 23:31	07/30/20 07:09	BMB	Mt. Juliet, TN
Semi-Volatile Organic Compounds (GC) by Method 8015	WG1518501	1	08/01/20 08:47	08/01/20 15:33	JDG	Mt. Juliet, TN

1 Cp

2 Tc

3 Ss

4 Cn

5 Sr

6 Qc

7 Gl

8 Al

9 Sc

AH-9W-3 (2-3') L1243725-11 Solid

Collected by Devin Dominguez
Collected date/time 07/23/20 00:00
Received date/time 07/25/20 09:00

Method	Batch	Dilution	Preparation date/time	Analysis date/time	Analyst	Location
Total Solids by Method 2540 G-2011	WG1518216	1	07/31/20 23:35	07/31/20 23:44	KDW	Mt. Juliet, TN
Wet Chemistry by Method 300.0	WG1516371	1	07/30/20 11:47	07/31/20 02:28	MCG	Mt. Juliet, TN
Volatile Organic Compounds (GC) by Method 8015D/GRO	WG1518152	1	07/28/20 23:31	07/31/20 14:13	ADM	Mt. Juliet, TN
Volatile Organic Compounds (GC/MS) by Method 8260B	WG1517296	1	07/28/20 23:31	07/30/20 07:29	BMB	Mt. Juliet, TN
Semi-Volatile Organic Compounds (GC) by Method 8015	WG1518501	2.96	08/01/20 08:47	08/01/20 14:54	JDG	Mt. Juliet, TN

AH-1S-4 (0-1') L1243725-12 Solid

Collected by Devin Dominguez
Collected date/time 07/24/20 00:00
Received date/time 07/25/20 09:00

Method	Batch	Dilution	Preparation date/time	Analysis date/time	Analyst	Location
Total Solids by Method 2540 G-2011	WG1518216	1	07/31/20 23:35	07/31/20 23:44	KDW	Mt. Juliet, TN
Wet Chemistry by Method 300.0	WG1516371	1	07/30/20 11:47	07/31/20 02:37	MCG	Mt. Juliet, TN
Volatile Organic Compounds (GC) by Method 8015D/GRO	WG1518152	1.01	07/28/20 23:31	07/31/20 15:21	BMB	Mt. Juliet, TN
Volatile Organic Compounds (GC/MS) by Method 8260B	WG1517296	1	07/28/20 23:31	07/30/20 07:49	BMB	Mt. Juliet, TN
Semi-Volatile Organic Compounds (GC) by Method 8015	WG1518400	1	07/31/20 12:52	08/01/20 02:00	TH	Mt. Juliet, TN

AH-1S-4 (2-3') L1243725-13 Solid

Collected by Devin Dominguez
Collected date/time 07/24/20 00:00
Received date/time 07/25/20 09:00

Method	Batch	Dilution	Preparation date/time	Analysis date/time	Analyst	Location
Total Solids by Method 2540 G-2011	WG1518217	1	07/31/20 22:59	07/31/20 23:33	KDW	Mt. Juliet, TN
Wet Chemistry by Method 300.0	WG1516371	1	07/30/20 11:47	07/31/20 02:47	MCG	Mt. Juliet, TN
Volatile Organic Compounds (GC) by Method 8015D/GRO	WG1519012	1	07/28/20 23:31	08/02/20 10:41	JHH	Mt. Juliet, TN
Volatile Organic Compounds (GC/MS) by Method 8260B	WG1517296	1	07/28/20 23:31	07/30/20 08:09	BMB	Mt. Juliet, TN
Semi-Volatile Organic Compounds (GC) by Method 8015	WG1518501	1	08/01/20 08:47	08/01/20 14:41	JDG	Mt. Juliet, TN

AH-1S-4 (4-5') L1243725-14 Solid

Collected by Devin Dominguez
Collected date/time 07/24/20 00:00
Received date/time 07/25/20 09:00

Method	Batch	Dilution	Preparation date/time	Analysis date/time	Analyst	Location
Total Solids by Method 2540 G-2011	WG1518217	1	07/31/20 22:59	07/31/20 23:33	KDW	Mt. Juliet, TN
Wet Chemistry by Method 300.0	WG1516371	1	07/30/20 11:47	07/31/20 02:57	MCG	Mt. Juliet, TN
Volatile Organic Compounds (GC) by Method 8015D/GRO	WG1518152	1	07/28/20 23:31	07/31/20 16:05	BMB	Mt. Juliet, TN
Volatile Organic Compounds (GC/MS) by Method 8260B	WG1517296	1	07/28/20 23:31	07/30/20 08:29	BMB	Mt. Juliet, TN
Semi-Volatile Organic Compounds (GC) by Method 8015	WG1518400	1	07/31/20 12:52	07/31/20 22:47	TH	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.



Erica McNeese
Project Manager

- ¹ Cp
- ² Tc
- ³ Ss
- ⁴ Cn
- ⁵ Sr
- ⁶ Qc
- ⁷ GI
- ⁸ AI
- ⁹ SC

Report Revision History

Level II Report - Version 1: 08/04/20 07:50

Total Solids by Method 2540 G-2011

Analyte	Result %	<u>Qualifier</u>	Dilution	Analysis date / time	<u>Batch</u>
Total Solids	94.2		1	07/31/2020 23:56	WG1518215

¹ Cp² Tc³ Ss⁴ Cn⁵ Sr⁶ Qc⁷ GI⁸ Al⁹ Sc

Wet Chemistry by Method 300.0

Analyte	Result (dry) mg/kg	<u>Qualifier</u>	MDL (dry) mg/kg	RDL (dry) mg/kg	Dilution	Analysis date / time	<u>Batch</u>
Chloride	U		9.76	21.2	1	07/31/2020 00:05	WG1516371

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

Analyte	Result (dry) mg/kg	<u>Qualifier</u>	MDL (dry) mg/kg	RDL (dry) mg/kg	Dilution	Analysis date / time	<u>Batch</u>
TPH (GC/FID) Low Fraction	U		0.0230	0.106	1	07/30/2020 19:12	WG1517753
(S)-a,a,a-Trifluorotoluene(FID)	101			77.0-120		07/30/2020 19:12	WG1517753

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

Analyte	Result (dry) mg/kg	<u>Qualifier</u>	MDL (dry) mg/kg	RDL (dry) mg/kg	Dilution	Analysis date / time	<u>Batch</u>
Benzene	U		0.000496	0.00106	1	07/30/2020 01:13	WG1517242
Toluene	U		0.00138	0.00531	1	07/30/2020 01:13	WG1517242
Ethylbenzene	U		0.000782	0.00265	1	07/30/2020 01:13	WG1517242
Total Xylenes	U		0.000934	0.00690	1	07/30/2020 01:13	WG1517242
(S)-Toluene-d8	106			75.0-131		07/30/2020 01:13	WG1517242
(S)-4-Bromofluorobenzene	102			67.0-138		07/30/2020 01:13	WG1517242
(S)-1,2-Dichloroethane-d4	106			70.0-130		07/30/2020 01:13	WG1517242

Semi-Volatile Organic Compounds (GC) by Method 8015

Analyte	Result (dry) mg/kg	<u>Qualifier</u>	MDL (dry) mg/kg	RDL (dry) mg/kg	Dilution	Analysis date / time	<u>Batch</u>
C10-C28 Diesel Range	U		1.71	4.24	1	08/02/2020 22:48	WG1517866
C28-C40 Oil Range	1.59	J	0.291	4.24	1	08/02/2020 22:48	WG1517866
(S)-o-Terphenyl	71.9			18.0-148		08/02/2020 22:48	WG1517866

Total Solids by Method 2540 G-2011

Analyte	Result %	<u>Qualifier</u>	Dilution	Analysis date / time	<u>Batch</u>
Total Solids	95.0		1	07/31/2020 23:56	WG1518215

¹ Cp² Tc³ Ss⁴ Cn⁵ Sr⁶ Qc⁷ GI⁸ Al⁹ Sc

Wet Chemistry by Method 300.0

Analyte	Result (dry) mg/kg	<u>Qualifier</u>	MDL (dry) mg/kg	RDL (dry) mg/kg	Dilution	Analysis date / time	<u>Batch</u>
Chloride	U		9.68	21.0	1	07/31/2020 00:15	WG1516371

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

Analyte	Result (dry) mg/kg	<u>Qualifier</u>	MDL (dry) mg/kg	RDL (dry) mg/kg	Dilution	Analysis date / time	<u>Batch</u>
TPH (GC/FID) Low Fraction	U		0.0228	0.105	1	07/30/2020 19:35	WG1517753
(S)-a,a,a-Trifluorotoluene(FID)	101			77.0-120		07/30/2020 19:35	WG1517753

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

Analyte	Result (dry) mg/kg	<u>Qualifier</u>	MDL (dry) mg/kg	RDL (dry) mg/kg	Dilution	Analysis date / time	<u>Batch</u>
Benzene	U		0.000491	0.00105	1	07/30/2020 01:33	WG1517242
Toluene	U		0.00137	0.00526	1	07/30/2020 01:33	WG1517242
Ethylbenzene	U		0.000775	0.00263	1	07/30/2020 01:33	WG1517242
Total Xylenes	U		0.000926	0.00684	1	07/30/2020 01:33	WG1517242
(S)-Toluene-d8	107			75.0-131		07/30/2020 01:33	WG1517242
(S)-4-Bromofluorobenzene	106			67.0-138		07/30/2020 01:33	WG1517242
(S)-1,2-Dichloroethane-d4	113			70.0-130		07/30/2020 01:33	WG1517242

Semi-Volatile Organic Compounds (GC) by Method 8015

Analyte	Result (dry) mg/kg	<u>Qualifier</u>	MDL (dry) mg/kg	RDL (dry) mg/kg	Dilution	Analysis date / time	<u>Batch</u>
C10-C28 Diesel Range	U		1.69	4.21	1	08/02/2020 23:01	WG1517866
C28-C40 Oil Range	3.96	J	0.288	4.21	1	08/02/2020 23:01	WG1517866
(S)-o-Terphenyl	72.8			18.0-148		08/02/2020 23:01	WG1517866

Total Solids by Method 2540 G-2011

Analyte	Result %	<u>Qualifier</u>	Dilution	Analysis date / time	<u>Batch</u>
Total Solids	82.6		1	07/31/2020 23:44	WG1518216

¹ Cp² Tc³ Ss⁴ Cn⁵ Sr⁶ Qc⁷ GI⁸ Al⁹ Sc

Wet Chemistry by Method 300.0

Analyte	Result (dry) mg/kg	<u>Qualifier</u>	MDL (dry) mg/kg	RDL (dry) mg/kg	Dilution	Analysis date / time	<u>Batch</u>
Chloride	U		11.1	24.2	1	07/31/2020 00:34	WG1516371

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

Analyte	Result (dry) mg/kg	<u>Qualifier</u>	MDL (dry) mg/kg	RDL (dry) mg/kg	Dilution	Analysis date / time	<u>Batch</u>
TPH (GC/FID) Low Fraction	0.0703	<u>J V3</u>	0.0263	0.121	1	07/31/2020 19:02	WG1518312
(S) a,a,a-Trifluorotoluene(FID)	102			77.0-120		07/31/2020 19:02	WG1518312

Sample Narrative:

L1243725-03 WG1518312: Previous run also had low IS/SURR recovery. Matrix effect.

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

Analyte	Result (dry) mg/kg	<u>Qualifier</u>	MDL (dry) mg/kg	RDL (dry) mg/kg	Dilution	Analysis date / time	<u>Batch</u>
Benzene	U		0.000664	0.00142	1	07/30/2020 01:54	WG1517242
Toluene	U		0.00185	0.00711	1	07/30/2020 01:54	WG1517242
Ethylbenzene	U		0.00105	0.00356	1	07/30/2020 01:54	WG1517242
Total Xylenes	U		0.00125	0.00925	1	07/30/2020 01:54	WG1517242
(S) Toluene-d8	105			75.0-131		07/30/2020 01:54	WG1517242
(S) 4-Bromofluorobenzene	103			67.0-138		07/30/2020 01:54	WG1517242
(S) 1,2-Dichloroethane-d4	104			70.0-130		07/30/2020 01:54	WG1517242

Semi-Volatile Organic Compounds (GC) by Method 8015

Analyte	Result (dry) mg/kg	<u>Qualifier</u>	MDL (dry) mg/kg	RDL (dry) mg/kg	Dilution	Analysis date / time	<u>Batch</u>
C10-C28 Diesel Range	U		1.95	4.84	1	08/02/2020 23:14	WG1517866
C28-C40 Oil Range	1.43	<u>J</u>	0.332	4.84	1	08/02/2020 23:14	WG1517866
(S) o-Terphenyl	60.4			18.0-148		08/02/2020 23:14	WG1517866

Total Solids by Method 2540 G-2011

Analyte	Result %	<u>Qualifier</u>	Dilution	Analysis date / time	<u>Batch</u>
Total Solids	97.2		1	07/31/2020 23:44	WG1518216

¹ Cp² Tc³ Ss⁴ Cn⁵ Sr⁶ Qc⁷ GI⁸ Al⁹ Sc

Wet Chemistry by Method 300.0

Analyte	Result (dry) mg/kg	<u>Qualifier</u>	MDL (dry) mg/kg	RDL (dry) mg/kg	Dilution	Analysis date / time	<u>Batch</u>
Chloride	120		9.47	20.6	1	07/31/2020 00:43	WG1516371

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

Analyte	Result (dry) mg/kg	<u>Qualifier</u>	MDL (dry) mg/kg	RDL (dry) mg/kg	Dilution	Analysis date / time	<u>Batch</u>
TPH (GC/FID) Low Fraction	U		0.0223	0.103	1	07/30/2020 20:31	WG1517753
(S)-a,a,a-Trifluorotoluene(FID)	101			77.0-120		07/30/2020 20:31	WG1517753

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

Analyte	Result (dry) mg/kg	<u>Qualifier</u>	MDL (dry) mg/kg	RDL (dry) mg/kg	Dilution	Analysis date / time	<u>Batch</u>
Benzene	U		0.000481	0.00103	1	07/30/2020 02:13	WG1517242
Toluene	U		0.00134	0.00514	1	07/30/2020 02:13	WG1517242
Ethylbenzene	U		0.000758	0.00257	1	07/30/2020 02:13	WG1517242
Total Xylenes	U		0.000905	0.00669	1	07/30/2020 02:13	WG1517242
(S)-Toluene-d8	108			75.0-131		07/30/2020 02:13	WG1517242
(S)-4-Bromofluorobenzene	103			67.0-138		07/30/2020 02:13	WG1517242
(S)-1,2-Dichloroethane-d4	103			70.0-130		07/30/2020 02:13	WG1517242

Semi-Volatile Organic Compounds (GC) by Method 8015

Analyte	Result (dry) mg/kg	<u>Qualifier</u>	MDL (dry) mg/kg	RDL (dry) mg/kg	Dilution	Analysis date / time	<u>Batch</u>
C10-C28 Diesel Range	U		1.66	4.12	1	08/02/2020 23:27	WG1517866
C28-C40 Oil Range	1.75	J	0.282	4.12	1	08/02/2020 23:27	WG1517866
(S)-o-Terphenyl	81.6			18.0-148		08/02/2020 23:27	WG1517866

Total Solids by Method 2540 G-2011

Analyte	Result %	<u>Qualifier</u>	Dilution	Analysis date / time	<u>Batch</u>
Total Solids	90.5		1	07/31/2020 23:44	WG1518216

¹ Cp² Tc³ Ss⁴ Cn⁵ Sr⁶ Qc⁷ GI⁸ Al⁹ Sc

Wet Chemistry by Method 300.0

Analyte	Result (dry) mg/kg	<u>Qualifier</u>	MDL (dry) mg/kg	RDL (dry) mg/kg	Dilution	Analysis date / time	<u>Batch</u>
Chloride	3250		102	221	10	07/31/2020 01:12	WG1516371

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

Analyte	Result (dry) mg/kg	<u>Qualifier</u>	MDL (dry) mg/kg	RDL (dry) mg/kg	Dilution	Analysis date / time	<u>Batch</u>
TPH (GC/FID) Low Fraction	U		0.0240	0.110	1	07/30/2020 20:54	WG1517753
(S)-a,a,a-Trifluorotoluene(FID)	101			77.0-120		07/30/2020 20:54	WG1517753

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

Analyte	Result (dry) mg/kg	<u>Qualifier</u>	MDL (dry) mg/kg	RDL (dry) mg/kg	Dilution	Analysis date / time	<u>Batch</u>
Benzene	U		0.000805	0.00172	1.56	07/30/2020 02:33	WG1517242
Toluene	U		0.00224	0.00861	1.56	07/30/2020 02:33	WG1517242
Ethylbenzene	U		0.00127	0.00431	1.56	07/30/2020 02:33	WG1517242
Total Xylenes	U		0.00151	0.0112	1.56	07/30/2020 02:33	WG1517242
(S)-Toluene-d8	105			75.0-131		07/30/2020 02:33	WG1517242
(S)-4-Bromofluorobenzene	103			67.0-138		07/30/2020 02:33	WG1517242
(S)-1,2-Dichloroethane-d4	105			70.0-130		07/30/2020 02:33	WG1517242

Semi-Volatile Organic Compounds (GC) by Method 8015

Analyte	Result (dry) mg/kg	<u>Qualifier</u>	MDL (dry) mg/kg	RDL (dry) mg/kg	Dilution	Analysis date / time	<u>Batch</u>
C10-C28 Diesel Range	U		1.78	4.42	1	08/01/2020 14:28	WG1518501
C28-C40 Oil Range	4.11	J	0.303	4.42	1	08/01/2020 14:28	WG1518501
(S)-o-Terphenyl	73.8			18.0-148		08/01/2020 14:28	WG1518501

Total Solids by Method 2540 G-2011

Analyte	Result %	<u>Qualifier</u>	Dilution	Analysis date / time	<u>Batch</u>
Total Solids	97.2		1	07/31/2020 23:44	WG1518216

¹ Cp² Tc³ Ss⁴ Cn⁵ Sr⁶ Qc⁷ GI⁸ Al⁹ Sc

Wet Chemistry by Method 300.0

Analyte	Result (dry) mg/kg	<u>Qualifier</u>	MDL (dry) mg/kg	RDL (dry) mg/kg	Dilution	Analysis date / time	<u>Batch</u>
Chloride	U		9.47	20.6	1	07/31/2020 01:40	WG1516371

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

Analyte	Result (dry) mg/kg	<u>Qualifier</u>	MDL (dry) mg/kg	RDL (dry) mg/kg	Dilution	Analysis date / time	<u>Batch</u>
TPH (GC/FID) Low Fraction	U		0.0223	0.103	1	07/30/2020 21:16	WG1517753
(S)-a,a,a-Trifluorotoluene(FID)	100			77.0-120		07/30/2020 21:16	WG1517753

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

Analyte	Result (dry) mg/kg	<u>Qualifier</u>	MDL (dry) mg/kg	RDL (dry) mg/kg	Dilution	Analysis date / time	<u>Batch</u>
Benzene	U		0.000533	0.00114	1.11	07/30/2020 02:53	WG1517242
Toluene	U		0.00148	0.00571	1.11	07/30/2020 02:53	WG1517242
Ethylbenzene	U		0.000842	0.00286	1.11	07/30/2020 02:53	WG1517242
Total Xylenes	U		0.00101	0.00743	1.11	07/30/2020 02:53	WG1517242
(S)-Toluene-d8	106			75.0-131		07/30/2020 02:53	WG1517242
(S)-4-Bromofluorobenzene	104			67.0-138		07/30/2020 02:53	WG1517242
(S)-1,2-Dichloroethane-d4	112			70.0-130		07/30/2020 02:53	WG1517242

Semi-Volatile Organic Compounds (GC) by Method 8015

Analyte	Result (dry) mg/kg	<u>Qualifier</u>	MDL (dry) mg/kg	RDL (dry) mg/kg	Dilution	Analysis date / time	<u>Batch</u>
C10-C28 Diesel Range	5.95	<u>J</u>	4.97	12.3	3	08/03/2020 01:48	WG1518501
C28-C40 Oil Range	31.0		0.846	12.3	3	08/03/2020 01:48	WG1518501
(S)-o-Terphenyl	82.0			18.0-148		08/03/2020 01:48	WG1518501

Total Solids by Method 2540 G-2011

Analyte	Result %	<u>Qualifier</u>	Dilution	Analysis date / time	<u>Batch</u>
Total Solids	97.6		1	07/31/2020 23:44	WG1518216

¹ Cp² Tc³ Ss⁴ Cn⁵ Sr⁶ Qc⁷ GI⁸ Al⁹ Sc

Wet Chemistry by Method 300.0

Analyte	Result (dry) mg/kg	<u>Qualifier</u>	MDL (dry) mg/kg	RDL (dry) mg/kg	Dilution	Analysis date / time	<u>Batch</u>
Chloride	40.0		9.42	20.5	1	07/31/2020 01:50	WG1516371

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

Analyte	Result (dry) mg/kg	<u>Qualifier</u>	MDL (dry) mg/kg	RDL (dry) mg/kg	Dilution	Analysis date / time	<u>Batch</u>
TPH (GC/FID) Low Fraction	U		0.0222	0.102	1	07/31/2020 18:36	WG1518116
(S) a,a,a-Trifluorotoluene(FID)	88.7			77.0-120		07/31/2020 18:36	WG1518116

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

Analyte	Result (dry) mg/kg	<u>Qualifier</u>	MDL (dry) mg/kg	RDL (dry) mg/kg	Dilution	Analysis date / time	<u>Batch</u>
Benzene	U		0.000478	0.00102	1	07/30/2020 03:14	WG1517242
Toluene	U		0.00133	0.00512	1	07/30/2020 03:14	WG1517242
Ethylbenzene	U		0.000755	0.00256	1	07/30/2020 03:14	WG1517242
Total Xylenes	U		0.000901	0.00666	1	07/30/2020 03:14	WG1517242
(S) Toluene-d8	107			75.0-131		07/30/2020 03:14	WG1517242
(S) 4-Bromofluorobenzene	105			67.0-138		07/30/2020 03:14	WG1517242
(S) 1,2-Dichloroethane-d4	103			70.0-130		07/30/2020 03:14	WG1517242

Semi-Volatile Organic Compounds (GC) by Method 8015

Analyte	Result (dry) mg/kg	<u>Qualifier</u>	MDL (dry) mg/kg	RDL (dry) mg/kg	Dilution	Analysis date / time	<u>Batch</u>
C10-C28 Diesel Range	U		4.92	12.2	2.98	08/03/2020 01:35	WG1518501
C28-C40 Oil Range	19.8		0.837	12.2	2.98	08/03/2020 01:35	WG1518501
(S) o-Terphenyl	84.4			18.0-148		08/03/2020 01:35	WG1518501

Total Solids by Method 2540 G-2011

Analyte	Result %	<u>Qualifier</u>	Dilution	Analysis date / time	<u>Batch</u>
Total Solids	95.1		1	07/31/2020 23:44	WG1518216

¹ Cp² Tc³ Ss⁴ Cn⁵ Sr⁶ Qc⁷ GI⁸ Al⁹ Sc

Wet Chemistry by Method 300.0

Analyte	Result (dry) mg/kg	<u>Qualifier</u>	MDL (dry) mg/kg	RDL (dry) mg/kg	Dilution	Analysis date / time	<u>Batch</u>
Chloride	11.4	<u>J</u>	9.67	21.0	1	07/31/2020 01:59	WG1516371

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

Analyte	Result (dry) mg/kg	<u>Qualifier</u>	MDL (dry) mg/kg	RDL (dry) mg/kg	Dilution	Analysis date / time	<u>Batch</u>
TPH (GC/FID) Low Fraction	0.0239	<u>J</u>	0.0228	0.105	1	07/31/2020 18:57	WG1518116
(S) a,a,a-Trifluorotoluene(FID)	89.7			77.0-120		07/31/2020 18:57	WG1518116

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

Analyte	Result (dry) mg/kg	<u>Qualifier</u>	MDL (dry) mg/kg	RDL (dry) mg/kg	Dilution	Analysis date / time	<u>Batch</u>
Benzene	U		0.000491	0.00105	1	07/30/2020 03:34	WG1517242
Toluene	U		0.00137	0.00526	1	07/30/2020 03:34	WG1517242
Ethylbenzene	U		0.000775	0.00263	1	07/30/2020 03:34	WG1517242
Total Xylenes	U		0.000925	0.00683	1	07/30/2020 03:34	WG1517242
(S) Toluene-d8	104			75.0-131		07/30/2020 03:34	WG1517242
(S) 4-Bromofluorobenzene	99.4			67.0-138		07/30/2020 03:34	WG1517242
(S) 1,2-Dichloroethane-d4	105			70.0-130		07/30/2020 03:34	WG1517242

Semi-Volatile Organic Compounds (GC) by Method 8015

Analyte	Result (dry) mg/kg	<u>Qualifier</u>	MDL (dry) mg/kg	RDL (dry) mg/kg	Dilution	Analysis date / time	<u>Batch</u>
C10-C28 Diesel Range	21.4		4.93	12.2	2.91	08/01/2020 17:30	WG1518501
C28-C40 Oil Range	95.5		0.838	12.2	2.91	08/01/2020 17:30	WG1518501
(S) o-Terphenyl	79.4			18.0-148		08/01/2020 17:30	WG1518501

Total Solids by Method 2540 G-2011

Analyte	Result %	<u>Qualifier</u>	Dilution	Analysis date / time	<u>Batch</u>
Total Solids	97.7		1	07/31/2020 23:44	WG1518216

¹ Cp² Tc³ Ss⁴ Cn⁵ Sr⁶ Qc⁷ GI⁸ Al⁹ Sc

Wet Chemistry by Method 300.0

Analyte	Result (dry) mg/kg	<u>Qualifier</u>	MDL (dry) mg/kg	RDL (dry) mg/kg	Dilution	Analysis date / time	<u>Batch</u>
Chloride	33.3		9.41	20.5	1	07/31/2020 02:09	WG1516371

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

Analyte	Result (dry) mg/kg	<u>Qualifier</u>	MDL (dry) mg/kg	RDL (dry) mg/kg	Dilution	Analysis date / time	<u>Batch</u>
TPH (GC/FID) Low Fraction	U		0.0222	0.102	1	07/31/2020 19:18	WG1518116
(S)-a,a,a-Trifluorotoluene(FID)	89.6			77.0-120		07/31/2020 19:18	WG1518116

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

Analyte	Result (dry) mg/kg	<u>Qualifier</u>	MDL (dry) mg/kg	RDL (dry) mg/kg	Dilution	Analysis date / time	<u>Batch</u>
Benzene	U		0.000478	0.00102	1	07/30/2020 03:54	WG1517242
Toluene	U		0.00133	0.00512	1	07/30/2020 03:54	WG1517242
Ethylbenzene	U		0.000754	0.00256	1	07/30/2020 03:54	WG1517242
Total Xylenes	U		0.000901	0.00665	1	07/30/2020 03:54	WG1517242
(S)-Toluene-d8	106			75.0-131		07/30/2020 03:54	WG1517242
(S)-4-Bromofluorobenzene	103			67.0-138		07/30/2020 03:54	WG1517242
(S)-1,2-Dichloroethane-d4	106			70.0-130		07/30/2020 03:54	WG1517242

Semi-Volatile Organic Compounds (GC) by Method 8015

Analyte	Result (dry) mg/kg	<u>Qualifier</u>	MDL (dry) mg/kg	RDL (dry) mg/kg	Dilution	Analysis date / time	<u>Batch</u>
C10-C28 Diesel Range	14.2		4.59	11.5	2.79	08/03/2020 02:00	WG1518501
C28-C40 Oil Range	46.7		0.782	11.5	2.79	08/03/2020 02:00	WG1518501
(S)-o-Terphenyl	83.3			18.0-148		08/03/2020 02:00	WG1518501

Total Solids by Method 2540 G-2011

Analyte	Result %	<u>Qualifier</u>	Dilution	Analysis date / time	<u>Batch</u>
Total Solids	98.4		1	07/31/2020 23:44	WG1518216

¹ Cp² Tc³ Ss⁴ Cn⁵ Sr⁶ Qc⁷ GI⁸ Al⁹ Sc

Wet Chemistry by Method 300.0

Analyte	Result (dry) mg/kg	<u>Qualifier</u>	MDL (dry) mg/kg	RDL (dry) mg/kg	Dilution	Analysis date / time	<u>Batch</u>
Chloride	38.3		9.35	20.3	1	07/31/2020 02:18	WG1516371

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

Analyte	Result (dry) mg/kg	<u>Qualifier</u>	MDL (dry) mg/kg	RDL (dry) mg/kg	Dilution	Analysis date / time	<u>Batch</u>
TPH (GC/FID) Low Fraction	U		0.0221	0.102	1	07/31/2020 13:51	WG1518152
(S)-a,a,a-Trifluorotoluene(FID)	102			77.0-120		07/31/2020 13:51	WG1518152

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

Analyte	Result (dry) mg/kg	<u>Qualifier</u>	MDL (dry) mg/kg	RDL (dry) mg/kg	Dilution	Analysis date / time	<u>Batch</u>
Benzene	U		0.000475	0.00102	1	07/30/2020 07:09	WG1517296
Toluene	U		0.00132	0.00508	1	07/30/2020 07:09	WG1517296
Ethylbenzene	U		0.000749	0.00254	1	07/30/2020 07:09	WG1517296
Total Xylenes	U		0.000894	0.00661	1	07/30/2020 07:09	WG1517296
(S)-Toluene-d8	103			75.0-131		07/30/2020 07:09	WG1517296
(S)-4-Bromofluorobenzene	102			67.0-138		07/30/2020 07:09	WG1517296
(S)-1,2-Dichloroethane-d4	103			70.0-130		07/30/2020 07:09	WG1517296

Semi-Volatile Organic Compounds (GC) by Method 8015

Analyte	Result (dry) mg/kg	<u>Qualifier</u>	MDL (dry) mg/kg	RDL (dry) mg/kg	Dilution	Analysis date / time	<u>Batch</u>
C10-C28 Diesel Range	4.00	U	1.64	4.07	1	08/01/2020 15:33	WG1518501
C28-C40 Oil Range	15.4		0.278	4.07	1	08/01/2020 15:33	WG1518501
(S)-o-Terphenyl	83.5			18.0-148		08/01/2020 15:33	WG1518501

Total Solids by Method 2540 G-2011

Analyte	Result %	<u>Qualifier</u>	Dilution	Analysis date / time	<u>Batch</u>
Total Solids	95.8		1	07/31/2020 23:44	WG1518216

¹ Cp² Tc³ Ss⁴ Cn⁵ Sr⁶ Qc⁷ GI⁸ Al⁹ Sc

Wet Chemistry by Method 300.0

Analyte	Result (dry) mg/kg	<u>Qualifier</u>	MDL (dry) mg/kg	RDL (dry) mg/kg	Dilution	Analysis date / time	<u>Batch</u>
Chloride	121		9.60	20.9	1	07/31/2020 02:28	WG1516371

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

Analyte	Result (dry) mg/kg	<u>Qualifier</u>	MDL (dry) mg/kg	RDL (dry) mg/kg	Dilution	Analysis date / time	<u>Batch</u>
TPH (GC/FID) Low Fraction	U		0.0226	0.104	1	07/31/2020 14:13	WG1518152
(S)-a,a,a-Trifluorotoluene(FID)	102			77.0-120		07/31/2020 14:13	WG1518152

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

Analyte	Result (dry) mg/kg	<u>Qualifier</u>	MDL (dry) mg/kg	RDL (dry) mg/kg	Dilution	Analysis date / time	<u>Batch</u>
Benzene	U		0.000487	0.00104	1	07/30/2020 07:29	WG1517296
Toluene	U		0.00136	0.00522	1	07/30/2020 07:29	WG1517296
Ethylbenzene	U		0.000769	0.00261	1	07/30/2020 07:29	WG1517296
Total Xylenes	U		0.000918	0.00678	1	07/30/2020 07:29	WG1517296
(S)-Toluene-d8	106			75.0-131		07/30/2020 07:29	WG1517296
(S)-4-Bromofluorobenzene	103			67.0-138		07/30/2020 07:29	WG1517296
(S)-1,2-Dichloroethane-d4	114			70.0-130		07/30/2020 07:29	WG1517296

Semi-Volatile Organic Compounds (GC) by Method 8015

Analyte	Result (dry) mg/kg	<u>Qualifier</u>	MDL (dry) mg/kg	RDL (dry) mg/kg	Dilution	Analysis date / time	<u>Batch</u>
C10-C28 Diesel Range	U		4.98	12.3	2.96	08/01/2020 14:54	WG1518501
C28-C40 Oil Range	9.73	J	0.846	12.3	2.96	08/01/2020 14:54	WG1518501
(S)-o-Terphenyl	79.8			18.0-148		08/01/2020 14:54	WG1518501

Total Solids by Method 2540 G-2011

Analyte	Result %	<u>Qualifier</u>	Dilution	Analysis date / time	<u>Batch</u>
Total Solids	90.9		1	07/31/2020 23:44	WG1518216

¹ Cp² Tc³ Ss⁴ Cn⁵ Sr⁶ Qc⁷ GI⁸ Al⁹ Sc

Wet Chemistry by Method 300.0

Analyte	Result (dry) mg/kg	<u>Qualifier</u>	MDL (dry) mg/kg	RDL (dry) mg/kg	Dilution	Analysis date / time	<u>Batch</u>
Chloride	31.1		10.1	22.0	1	07/31/2020 02:37	WG1516371

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

Analyte	Result (dry) mg/kg	<u>Qualifier</u>	MDL (dry) mg/kg	RDL (dry) mg/kg	Dilution	Analysis date / time	<u>Batch</u>
TPH (GC/FID) Low Fraction	U		0.0241	0.111	1.01	07/31/2020 15:21	WG1518152
(S)-a,a,a-Trifluorotoluene(FID)	102			77.0-120		07/31/2020 15:21	WG1518152

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

Analyte	Result (dry) mg/kg	<u>Qualifier</u>	MDL (dry) mg/kg	RDL (dry) mg/kg	Dilution	Analysis date / time	<u>Batch</u>
Benzene	U		0.000514	0.00110	1	07/30/2020 07:49	WG1517296
Toluene	U		0.00143	0.00550	1	07/30/2020 07:49	WG1517296
Ethylbenzene	U		0.000811	0.00275	1	07/30/2020 07:49	WG1517296
Total Xylenes	U		0.000968	0.00715	1	07/30/2020 07:49	WG1517296
(S)-Toluene-d8	104			75.0-131		07/30/2020 07:49	WG1517296
(S)-4-Bromofluorobenzene	101			67.0-138		07/30/2020 07:49	WG1517296
(S)-1,2-Dichloroethane-d4	112			70.0-130		07/30/2020 07:49	WG1517296

Semi-Volatile Organic Compounds (GC) by Method 8015

Analyte	Result (dry) mg/kg	<u>Qualifier</u>	MDL (dry) mg/kg	RDL (dry) mg/kg	Dilution	Analysis date / time	<u>Batch</u>
C10-C28 Diesel Range	8.26		1.77	4.40	1	08/01/2020 02:00	WG1518400
C28-C40 Oil Range	28.2		0.302	4.40	1	08/01/2020 02:00	WG1518400
(S)-o-Terphenyl	76.9			18.0-148		08/01/2020 02:00	WG1518400

Total Solids by Method 2540 G-2011

Analyte	Result %	<u>Qualifier</u>	Dilution	Analysis date / time	<u>Batch</u>
Total Solids	86.9		1	07/31/2020 23:33	WG1518217

¹ Cp² Tc³ Ss⁴ Cn⁵ Sr⁶ Qc⁷ GI⁸ Al⁹ Sc

Wet Chemistry by Method 300.0

Analyte	Result (dry) mg/kg	<u>Qualifier</u>	MDL (dry) mg/kg	RDL (dry) mg/kg	Dilution	Analysis date / time	<u>Batch</u>
Chloride	35.9		10.6	23.0	1	07/31/2020 02:47	WG1516371

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

Analyte	Result (dry) mg/kg	<u>Qualifier</u>	MDL (dry) mg/kg	RDL (dry) mg/kg	Dilution	Analysis date / time	<u>Batch</u>
TPH (GC/FID) Low Fraction	U		0.0250	0.115	1	08/02/2020 10:41	WG1519012
(S)-a,a,a-Trifluorotoluene(FID)	90.1			77.0-120		08/02/2020 10:41	WG1519012

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

Analyte	Result (dry) mg/kg	<u>Qualifier</u>	MDL (dry) mg/kg	RDL (dry) mg/kg	Dilution	Analysis date / time	<u>Batch</u>
Benzene	U		0.000608	0.00130	1	07/30/2020 08:09	WG1517296
Toluene	U		0.00169	0.00651	1	07/30/2020 08:09	WG1517296
Ethylbenzene	U		0.000959	0.00325	1	07/30/2020 08:09	WG1517296
Total Xylenes	U		0.00115	0.00846	1	07/30/2020 08:09	WG1517296
(S)-Toluene-d8	104			75.0-131		07/30/2020 08:09	WG1517296
(S)-4-Bromofluorobenzene	99.7			67.0-138		07/30/2020 08:09	WG1517296
(S)-1,2-Dichloroethane-d4	115			70.0-130		07/30/2020 08:09	WG1517296

Semi-Volatile Organic Compounds (GC) by Method 8015

Analyte	Result (dry) mg/kg	<u>Qualifier</u>	MDL (dry) mg/kg	RDL (dry) mg/kg	Dilution	Analysis date / time	<u>Batch</u>
C10-C28 Diesel Range	U		1.85	4.60	1	08/01/2020 14:41	WG1518501
C28-C40 Oil Range	1.43	J	0.315	4.60	1	08/01/2020 14:41	WG1518501
(S)-o-Terphenyl	75.0			18.0-148		08/01/2020 14:41	WG1518501

Total Solids by Method 2540 G-2011

Analyte	Result %	<u>Qualifier</u>	Dilution	Analysis date / time	<u>Batch</u>
Total Solids	93.9		1	07/31/2020 23:33	WG1518217

¹ Cp² Tc³ Ss⁴ Cn⁵ Sr⁶ Qc⁷ GI⁸ Al⁹ Sc

Wet Chemistry by Method 300.0

Analyte	Result (dry) mg/kg	<u>Qualifier</u>	MDL (dry) mg/kg	RDL (dry) mg/kg	Dilution	Analysis date / time	<u>Batch</u>
Chloride	25.6		9.80	21.3	1	07/31/2020 02:57	WG1516371

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

Analyte	Result (dry) mg/kg	<u>Qualifier</u>	MDL (dry) mg/kg	RDL (dry) mg/kg	Dilution	Analysis date / time	<u>Batch</u>
TPH (GC/FID) Low Fraction	U		0.0231	0.107	1	07/31/2020 16:05	WG1518152
(S)-a,a,a-Trifluorotoluene(FID)	102			77.0-120		07/31/2020 16:05	WG1518152

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

Analyte	Result (dry) mg/kg	<u>Qualifier</u>	MDL (dry) mg/kg	RDL (dry) mg/kg	Dilution	Analysis date / time	<u>Batch</u>
Benzene	U		0.000498	0.00107	1	07/30/2020 08:29	WG1517296
Toluene	U		0.00139	0.00533	1	07/30/2020 08:29	WG1517296
Ethylbenzene	U		0.000785	0.00266	1	07/30/2020 08:29	WG1517296
Total Xylenes	U		0.000938	0.00693	1	07/30/2020 08:29	WG1517296
(S)-Toluene-d8	107			75.0-131		07/30/2020 08:29	WG1517296
(S)-4-Bromofluorobenzene	106			67.0-138		07/30/2020 08:29	WG1517296
(S)-1,2-Dichloroethane-d4	114			70.0-130		07/30/2020 08:29	WG1517296

Semi-Volatile Organic Compounds (GC) by Method 8015

Analyte	Result (dry) mg/kg	<u>Qualifier</u>	MDL (dry) mg/kg	RDL (dry) mg/kg	Dilution	Analysis date / time	<u>Batch</u>
C10-C28 Diesel Range	U		1.72	4.26	1	07/31/2020 22:47	WG1518400
C28-C40 Oil Range	4.00	J	0.292	4.26	1	07/31/2020 22:47	WG1518400
(S)-o-Terphenyl	75.2			18.0-148		07/31/2020 22:47	WG1518400

QUALITY CONTROL SUMMARY

L1243725-01,02

Method Blank (MB)

(MB) R3555383-1 07/31/20 23:56

	MB Result	<u>MB Qualifier</u>	MB MDL	MB RDL
Analyte	%		%	%
Total Solids	0.00100			

¹Cp²Tc³Ss⁴Cn⁵Sr⁶Qc⁷Gl⁸Al⁹Sc

L1243725-01 Original Sample (OS) • Duplicate (DUP)

(OS) L1243725-01 07/31/20 23:56 • (DUP) R3555383-3 07/31/20 23:56

	Original Result	DUP Result	Dilution	DUP RPD	<u>DUP Qualifier</u>	DUP RPD Limits
Analyte	%	%		%		%
Total Solids	94.2	94.3	1	0.0190		10

Laboratory Control Sample (LCS)

(LCS) R3555383-2 07/31/20 23:56

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

⁷Gl⁸Al⁹Sc

QUALITY CONTROL SUMMARY

Method Blank (MB)

(MB) R3555382-1 07/31/20 23:44

Analyte	MB Result %	<u>MB Qualifier</u>	MB MDL %	MB RDL %
Total Solids	0.00300			

¹Cp²Tc³Ss⁴Cn⁵Sr⁶Qc⁷Gl⁸Al⁹Sc

L1243725-03 Original Sample (OS) • Duplicate (DUP)

(OS) L1243725-03 07/31/20 23:44 • (DUP) R3555382-3 07/31/20 23:44

Analyte	Original Result %	DUP Result %	Dilution %	DUP RPD %	<u>DUP Qualifier</u>	DUP RPD Limits %
Total Solids	82.6	82.5	1	0.136		10

Laboratory Control Sample (LCS)

(LCS) R3555382-2 07/31/20 23:44

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

QUALITY CONTROL SUMMARY

L1243725-13,14

Method Blank (MB)

(MB) R3555381-1 07/31/20 23:33

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

¹Cp²Tc³Ss⁴Cn⁵Sr⁶Qc⁷Gl⁸Al⁹Sc

L1243727-01 Original Sample (OS) • Duplicate (DUP)

(OS) L1243727-01 07/31/20 23:33 • (DUP) R3555381-3 07/31/20 23:33

Analyst	Original Result %	DUP Result %	Dilution %	DUP RPD %	<u>DUP Qualifier</u>	DUP RPD Limits %
Total Solids	92.4	92.5	1	0.189		10

Laboratory Control Sample (LCS)

(LCS) R3555381-2 07/31/20 23:33

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

QUALITY CONTROL SUMMARY

Method Blank (MB)

(MB) R3555058-1 07/30/20 23:46

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

¹Cp²Tc³Ss⁴Cn⁵Sr⁶Qc⁷Gl⁸Al⁹Sc

L1243725-02 Original Sample (OS) • Duplicate (DUP)

(OS) L1243725-02 07/31/20 00:15 • (DUP) R3555058-3 07/31/20 00:24

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

L1243727-03 Original Sample (OS) • Duplicate (DUP)

(OS) L1243727-03 07/31/20 03:44 • (DUP) R3555058-6 07/31/20 03:54

Analyte	Original Result (dry) mg/kg	DUP Result (dry) mg/kg	Dilution	DUP RPD %	<u>DUP Qualifier</u>	DUP RPD Limits %
Chloride	11.3	11.1	1	2.37	J	20

Laboratory Control Sample (LCS)

(LCS) R3555058-2 07/30/20 23:56

Analyte	Spike Amount mg/kg	LCS Result mg/kg	LCS Rec. %	Rec. Limits %	<u>LCS Qualifier</u>
Chloride	200	192	96.2	90.0-110	

L1243725-04 Original Sample (OS) • Matrix Spike (MS) • Matrix Spike Duplicate (MSD)

(OS) L1243725-04 07/31/20 00:43 • (MS) R3555058-4 07/31/20 00:53 • (MSD) R3555058-5 07/31/20 01:02

Analyte	Spike Amount (dry) mg/kg	Original Result (dry) mg/kg	MS Result (dry) mg/kg	MSD Result (dry) mg/kg	MS Rec. %	MSD Rec. %	Dilution	Rec. Limits %	<u>MS Qualifier</u>	<u>MSD Qualifier</u>	RPD %	RPD Limits %
Chloride	514	120	626	631	98.4	99.4	1	80.0-120			0.881	20

QUALITY CONTROL SUMMARY

[L1243725-01,02,04,05,06](#)

ONE LAB. N/A Page 254 of 309

Method Blank (MB)

(MB) R3555070-2 07/30/20 13:27

Analyte	MB Result mg/kg	<u>MB Qualifier</u>	MB MDL mg/kg	MB RDL mg/kg
TPH (GC/FID) Low Fraction	U		0.0217	0.100
(S) <i>a,a,a-Trifluorotoluene(FID)</i>	103			77.0-120

¹Cp²Tc³Ss⁴Cn⁵Sr⁶Qc⁷Gl⁸Al⁹Sc

Laboratory Control Sample (LCS)

(LCS) R3555070-1 07/30/20 12:43

Analyte	Spike Amount mg/kg	LCS Result mg/kg	LCS Rec. %	Rec. Limits %	<u>LCS Qualifier</u>
TPH (GC/FID) Low Fraction	5.50	5.38	97.8	72.0-127	
(S) <i>a,a,a-Trifluorotoluene(FID)</i>		102		77.0-120	

QUALITY CONTROL SUMMARY

L1243725-07,08,09

ONE LAB. NO Page 255 of 309

Method Blank (MB)

(MB) R3555175-2 07/31/20 10:18

Analyte	MB Result mg/kg	<u>MB Qualifier</u>	MB MDL mg/kg	MB RDL mg/kg
TPH (GC/FID) Low Fraction	U		0.0217	0.100
(S) <i>a,a,a-Trifluorotoluene(FID)</i>	93.3			77.0-120

¹Cp²Tc³Ss⁴Cn⁵Sr⁶Qc⁷Gl⁸Al⁹Sc

Laboratory Control Sample (LCS)

(LCS) R3555175-1 07/31/20 09:37

Analyte	Spike Amount mg/kg	LCS Result mg/kg	LCS Rec. %	Rec. Limits %	<u>LCS Qualifier</u>
TPH (GC/FID) Low Fraction	5.50	5.38	97.8	72.0-127	
(S) <i>a,a,a-Trifluorotoluene(FID)</i>		108		77.0-120	

L1244447-03 Original Sample (OS) • Matrix Spike (MS) • Matrix Spike Duplicate (MSD)

(OS) L1244447-03 07/31/20 12:25 • (MS) R3555175-3 07/31/20 12:45 • (MSD) R3555175-4 07/31/20 13:06

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 %	<u>MS Qualifier</u>	<u>MSD Qualifier</u>	RPD	RPD Limits
TPH (GC/FID) Low Fraction	1350	60.1	796	825	54.4	56.6	200	10.0-151			3.52	28
(S) <i>a,a,a-Trifluorotoluene(FID)</i>				101	102			77.0-120				

QUALITY CONTROL SUMMARY

Method Blank (MB)

(MB) R3555189-2 07/31/20 11:46

Analyte	MB Result mg/kg	<u>MB Qualifier</u>	MB MDL mg/kg	MB RDL mg/kg
TPH (GC/FID) Low Fraction	U		0.0217	0.100
(S) <i>a,a,a-Trifluorotoluene(FID)</i>	105		77.0-120	

¹Cp²Tc³Ss⁴Cn⁵Sr⁶Qc⁷Gl⁸Al⁹Sc

Laboratory Control Sample (LCS)

(LCS) R3555189-1 07/31/20 11:01

Analyte	Spike Amount mg/kg	LCS Result mg/kg	LCS Rec. %	Rec. Limits %	<u>LCS Qualifier</u>
TPH (GC/FID) Low Fraction	5.50	6.63	121	72.0-127	
(S) <i>a,a,a-Trifluorotoluene(FID)</i>		106		77.0-120	

L1244028-03 Original Sample (OS) • Matrix Spike (MS) • Matrix Spike Duplicate (MSD)

(OS) L1244028-03 07/31/20 20:11 • (MS) R3555189-3 07/31/20 20:55 • (MSD) R3555189-4 07/31/20 21:18

Analyte	Spike Amount mg/kg	Original Result mg/kg	MS Result mg/kg	MSD Result mg/kg	MS Rec. %	MSD Rec. %	Dilution	Rec. Limits %	<u>MS Qualifier</u>	<u>MSD Qualifier</u>	RPD	RPD Limits
TPH (GC/FID) Low Fraction	550	601	998	968	72.2	66.7	100	10.0-151			3.05	28
(S) <i>a,a,a-Trifluorotoluene(FID)</i>				102		99.8		77.0-120				

QUALITY CONTROL SUMMARY

L1243725-03

ONE LAB. N/A Page 257 of 309

Method Blank (MB)

(MB) R3555486-1 07/31/20 09:53

Analyte	MB Result mg/kg	<u>MB Qualifier</u>	MB MDL mg/kg	MB RDL mg/kg
TPH (GC/FID) Low Fraction	U		0.0217	0.100
(S) <i>a,a,a-Trifluorotoluene(FID)</i>	108			77.0-120

¹Cp²Tc³Ss⁴Cn⁵Sr⁶Qc⁷Gl⁸Al⁹Sc

Laboratory Control Sample (LCS)

(LCS) R3555486-2 07/31/20 17:03

Analyte	Spike Amount mg/kg	LCS Result mg/kg	LCS Rec. %	Rec. Limits %	<u>LCS Qualifier</u>
TPH (GC/FID) Low Fraction	5.50	5.78	105	72.0-127	
(S) <i>a,a,a-Trifluorotoluene(FID)</i>		101		77.0-120	

QUALITY CONTROL SUMMARY

L1243725-13

ONE LAB. N/A Page 258 of 309

Method Blank (MB)

(MB) R3555643-3 08/02/20 09:13

Analyte	MB Result mg/kg	<u>MB Qualifier</u>	MB MDL mg/kg	MB RDL mg/kg
TPH (GC/FID) Low Fraction	U		0.0217	0.100
(S) <i>a,a,a-Trifluorotoluene(FID)</i>	94.0			77.0-120

¹Cp²Tc³Ss⁴Cn⁵Sr⁶Qc⁷Gl⁸Al⁹Sc

Laboratory Control Sample (LCS)

(LCS) R3555643-2 08/02/20 08:32

Analyte	Spike Amount mg/kg	LCS Result mg/kg	LCS Rec. %	Rec. Limits %	<u>LCS Qualifier</u>
TPH (GC/FID) Low Fraction	5.50	4.93	89.6	72.0-127	
(S) <i>a,a,a-Trifluorotoluene(FID)</i>		107		77.0-120	

QUALITY CONTROL SUMMARY

Method Blank (MB)

(MB) R3554847-3 07/29/20 22:31

Analyte	MB Result mg/kg	<u>MB Qualifier</u>	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	103		67.0-138	
(S) 1,2-Dichloroethane-d4	111		70.0-130	

¹Cp²Tc³Ss⁴Cn⁵Sr⁶Qc⁷Gl⁸Al⁹Sc

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

(LCS) R3554847-1 07/29/20 21:11 • (LCSD) R3554847-2 07/29/20 21:31

Analyte	Spike Amount mg/kg	LCS Result mg/kg	LCSD Result mg/kg	LCS Rec. %	LCSD Rec. %	Rec. Limits	<u>LCS Qualifier</u>	<u>LCSD Qualifier</u>	RPD	RPD Limits
Benzene	0.125	0.110	0.105	88.0	84.0	70.0-123			4.65	20
Ethylbenzene	0.125	0.113	0.112	90.4	89.6	74.0-126			0.889	20
Toluene	0.125	0.110	0.109	88.0	87.2	75.0-121			0.913	20
Xylenes, Total	0.375	0.348	0.342	92.8	91.2	72.0-127			1.74	20
(S) Toluene-d8				104	103	75.0-131				
(S) 4-Bromofluorobenzene				99.9	104	67.0-138				
(S) 1,2-Dichloroethane-d4				114	116	70.0-130				

QUALITY CONTROL SUMMARY

L1243725-10,11,12,13,14

ONE LAB. N/A Page 260 of 309

Method Blank (MB)

(MB) R3555463-2 07/30/20 05:54

Analyte	MB Result mg/kg	MB Qualifier	MB MDL mg/kg	MB RDL mg/kg
Benzene	U		0.000467	0.00100
Ethylbenzene	U		0.000737	0.00250
Toluene	U		0.00130	0.00500
Xylenes, Total	U		0.000880	0.00650
(S) Toluene-d8	102		75.0-131	
(S) 4-Bromofluorobenzene	102		67.0-138	
(S) 1,2-Dichloroethane-d4	98.4		70.0-130	

¹Cp²Tc³Ss⁴Cn⁵Sr⁶Qc⁷Gl⁸Al⁹Sc

Laboratory Control Sample (LCS)

(LCS) R3555463-1 07/30/20 04:54

Analyte	Spike Amount mg/kg	LCS Result mg/kg	LCS Rec. %	Rec. Limits %	LCS Qualifier
Benzene	0.125	0.113	90.4	70.0-123	
Ethylbenzene	0.125	0.113	90.4	74.0-126	
Toluene	0.125	0.111	88.8	75.0-121	
Xylenes, Total	0.375	0.351	93.6	72.0-127	
(S) Toluene-d8		105	75.0-131		
(S) 4-Bromofluorobenzene		107	67.0-138		
(S) 1,2-Dichloroethane-d4		119	70.0-130		

L1243728-04 Original Sample (OS) • Matrix Spike (MS) • Matrix Spike Duplicate (MSD)

(OS) L1243728-04 07/30/20 09:48 • (MS) R3555463-3 07/30/20 13:28 • (MSD) R3555463-4 07/30/20 13:48

Analyte	Spike Amount (dry) mg/kg	Original Result (dry) mg/kg	MS Result (dry) mg/kg	MSD Result (dry) mg/kg	MS Rec. %	MSD Rec. %	Dilution	Rec. Limits %	MS Qualifier	MSD Qualifier	RPD	RPD Limits
Benzene	0.129	U	0.139	0.127	107	98.4	1	10.0-149			8.63	37
Ethylbenzene	0.129	U	0.145	0.131	112	102	1	10.0-160			9.81	38
Toluene	0.129	U	0.141	0.131	109	102	1	10.0-156			6.90	38
Xylenes, Total	0.387	0.00105	0.430	0.403	111	104	1	10.0-160			6.50	38
(S) Toluene-d8				101	104			75.0-131				
(S) 4-Bromofluorobenzene				103	107			67.0-138				
(S) 1,2-Dichloroethane-d4				102	110			70.0-130				

QUALITY CONTROL SUMMARY

[L1243725-01,02,03,04](#)

ONE LAB. N/A Page 261 of 309

Method Blank (MB)

(MB) R3555610-1 08/02/20 17:10

Analyte	MB Result mg/kg	<u>MB Qualifier</u>	MB MDL mg/kg	MB RDL mg/kg
C10-C28 Diesel Range	U		1.61	4.00
C28-C40 Oil Range	U		0.274	4.00
(S) o-Terphenyl	72.4			18.0-148

¹Cp²Tc³Ss⁴Cn⁵Sr⁶Qc⁷Gl⁸Al⁹Sc

Laboratory Control Sample (LCS)

(LCS) R3555610-2 08/02/20 17:23

Analyte	Spike Amount mg/kg	LCS Result mg/kg	LCS Rec. %	Rec. Limits %	<u>LCS Qualifier</u>
C10-C28 Diesel Range	50.0	34.0	68.0	50.0-150	
(S) o-Terphenyl		77.0	18.0-148		

L1243607-07 Original Sample (OS) • Matrix Spike (MS) • Matrix Spike Duplicate (MSD)

(OS) L1243607-07 08/02/20 21:57 • (MS) R3555610-3 08/02/20 22:10 • (MSD) R3555610-4 08/02/20 22:23

Analyte	Spike Amount mg/kg	Original Result mg/kg	MS Result mg/kg	MS Rec. %	MSD Rec. %	Dilution	Rec. Limits %	<u>MS Qualifier</u>	<u>MSD Qualifier</u>	RPD %	RPD Limits %
C10-C28 Diesel Range	48.6	36.8	66.1	61.8	60.3	51.4	1	50.0-150		6.72	20
(S) o-Terphenyl				75.6	59.6		18.0-148				

QUALITY CONTROL SUMMARY

L1243725-12,14

ONE LAB. N/A Page 262 of 309

Method Blank (MB)

(MB) R3555333-1 07/31/20 16:05

Analyte	MB Result mg/kg	<u>MB Qualifier</u>	MB MDL mg/kg	MB RDL mg/kg
C10-C28 Diesel Range	U		1.61	4.00
C28-C40 Oil Range	U		0.274	4.00
(S) o-Terphenyl	83.8			18.0-148

¹Cp²Tc³Ss⁴Cn⁵Sr⁶Qc⁷Gl⁸Al⁹Sc

Laboratory Control Sample (LCS)

(LCS) R3555333-2 07/31/20 16:19

Analyte	Spike Amount mg/kg	LCS Result mg/kg	LCS Rec. %	Rec. Limits %	<u>LCS Qualifier</u>
C10-C28 Diesel Range	50.0	37.1	74.2	50.0-150	
(S) o-Terphenyl			71.3	18.0-148	

L1243727-03 Original Sample (OS) • Matrix Spike (MS) • Matrix Spike Duplicate (MSD)

(OS) L1243727-03 08/01/20 01:22 • (MS) R3555433-1 08/01/20 01:35 • (MSD) R3555433-2 08/01/20 01:47

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 %	<u>MS Qualifier</u>	<u>MSD Qualifier</u>	RPD	RPD Limits
C10-C28 Diesel Range	50.6	5.41	45.3	39.3	79.0	67.0	1	50.0-150			14.3	20
(S) o-Terphenyl					75.9	67.8		18.0-148				

QUALITY CONTROL SUMMARY

Method Blank (MB)

(MB) R3555544-1 08/01/20 13:49

Analyte	MB Result mg/kg	<u>MB Qualifier</u>	MB MDL mg/kg	MB RDL mg/kg
C10-C28 Diesel Range	U		1.61	4.00
C28-C40 Oil Range	U		0.274	4.00
(S) o-Terphenyl	74.6			18.0-148

¹Cp²Tc³Ss⁴Cn⁵Sr⁶Qc⁷Gl⁸Al⁹Sc

Laboratory Control Sample (LCS)

(LCS) R3555544-2 08/01/20 14:02

Analyte	Spike Amount mg/kg	LCS Result mg/kg	LCS Rec. %	Rec. Limits %	<u>LCS Qualifier</u>
C10-C28 Diesel Range	50.0	41.3	82.6	50.0-150	
(S) o-Terphenyl		89.9	18.0-148		

L1243649-01 Original Sample (OS) • Matrix Spike (MS) • Matrix Spike Duplicate (MSD)

(OS) L1243649-01 08/01/20 16:25 • (MS) R3555544-3 08/01/20 16:38 • (MSD) R3555544-4 08/01/20 16:51

Analyte	Spike Amount mg/kg	Original Result mg/kg	MS Result mg/kg	MS Rec. %	MSD Rec. %	Dilution	Rec. Limits %	<u>MS Qualifier</u>	<u>MSD Qualifier</u>	RPD %	RPD Limits %
C10-C28 Diesel Range	49.8	18.8	50.8	59.1	64.3	80.9	1	50.0-150		15.1	20
(S) o-Terphenyl				57.4	61.4		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].	1 Cp
MDL	Method Detection Limit.	2 Tc
MDL (dry)	Method Detection Limit.	3 Ss
RDL	Reported Detection Limit.	4 Cn
RDL (dry)	Reported Detection Limit.	5 Sr
Rec.	Recovery.	6 Qc
RPD	Relative Percent Difference.	7 GI
SDG	Sample Delivery Group.	8 Al
(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.	9 Sc
U	Not detected at the Reporting Limit (or MDL where applicable).	
Analyte	The name of the particular compound or analysis performed. Some Analyses and Methods will have multiple analytes reported.	
Dilution	If the sample matrix contains an interfering material, the sample preparation volume or weight values differ from the standard, or if concentrations of analytes in the sample are higher than the highest limit of concentration that the laboratory can accurately report, the sample may be diluted for analysis. If a value different than 1 is used in this field, the result reported has already been corrected for this factor.	
Limits	These are the target % recovery ranges or % difference value that the laboratory has historically determined as normal for the method and analyte being reported. Successful QC Sample analysis will target all analytes recovered or duplicated within these ranges.	
Original Sample	The non-spiked sample in the prep batch used to determine the Relative Percent Difference (RPD) from a quality control sample. The Original Sample may not be included within the reported SDG.	
Qualifier	This column provides a letter and/or number designation that corresponds to additional information concerning the result reported. If a Qualifier is present, a definition per Qualifier is provided within the Glossary and Definitions page and potentially a discussion of possible implications of the Qualifier in the Case Narrative if applicable.	
Result	The actual analytical final result (corrected for any sample specific characteristics) reported for your sample. If there was no measurable result returned for a specific analyte, the result in this column may state "ND" (Not Detected) or "BDL" (Below Detectable Levels). The information in the results column should always be accompanied by either an MDL (Method Detection Limit) or RDL (Reporting Detection Limit) that defines the lowest value that the laboratory could detect or report for this analyte.	
Uncertainty (Radiochemistry)	Confidence level of 2 sigma.	
Case Narrative (Cn)	A brief discussion about the included sample results, including a discussion of any non-conformances to protocol observed either at sample receipt by the laboratory from the field or during the analytical process. If present, there will be a section in the Case Narrative to discuss the meaning of any data qualifiers used in the report.	
Quality Control Summary (Qc)	This section of the report includes the results of the laboratory quality control analyses required by procedure or analytical methods to assist in evaluating the validity of the results reported for your samples. These analyses are not being performed on your samples typically, but on laboratory generated material.	
Sample Chain of Custody (Sc)	This is the document created in the field when your samples were initially collected. This is used to verify the time and date of collection, the person collecting the samples, and the analyses that the laboratory is requested to perform. This chain of custody also documents all persons (excluding commercial shippers) that have had control or possession of the samples from the time of collection until delivery to the laboratory for analysis.	
Sample Results (Sr)	This section of your report will provide the results of all testing performed on your samples. These results are provided by sample ID and are separated by the analyses performed on each sample. The header line of each analysis section for each sample will provide the name and method number for the analysis reported.	
Sample Summary (Ss)	This section of the Analytical Report defines the specific analyses performed for each sample ID, including the dates and times of preparation and/or analysis.	

Qualifier Description

J	The identification of the analyte is acceptable; the reported value is an estimate.
V3	The internal standard exhibited poor recovery due to sample matrix interference. The analytical results will be biased high. BDL results will be unaffected.

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

- * Not all certifications held by the laboratory are applicable to the results reported in the attached report.
- * Accreditation is only applicable to the test methods specified on each scope of accreditation held by Pace National.

State Accreditations

Alabama	40660
Alaska	17-026
Arizona	AZ0612
Arkansas	88-0469
California	2932
Colorado	TN00003
Connecticut	PH-0197
Florida	E87487
Georgia	NELAP
Georgia ¹	923
Idaho	TN00003
Illinois	200008
Indiana	C-TN-01
Iowa	364
Kansas	E-10277
Kentucky ^{1,6}	90010
Kentucky ²	16
Louisiana	AI30792
Louisiana ¹	LA180010
Maine	TN0002
Maryland	324
Massachusetts	M-TN003
Michigan	9958
Minnesota	047-999-395
Mississippi	TN00003
Missouri	340
Montana	CERT0086

Nebraska	NE-OS-15-05
Nevada	TN-03-2002-34
New Hampshire	2975
New Jersey—NELAP	TN002
New Mexico ¹	n/a
New York	11742
North Carolina	Env375
North Carolina ¹	DW21704
North Carolina ³	41
North Dakota	R-140
Ohio—VAP	CL0069
Oklahoma	9915
Oregon	TN200002
Pennsylvania	68-02979
Rhode Island	LA000356
South Carolina	84004
South Dakota	n/a
Tennessee ^{1,4}	2006
Texas	T104704245-18-15
Texas ⁵	LAB0152
Utah	TN00003
Vermont	VT2006
Virginia	460132
Washington	C847
West Virginia	233
Wisconsin	9980939910
Wyoming	A2LA

Third Party Federal Accreditations

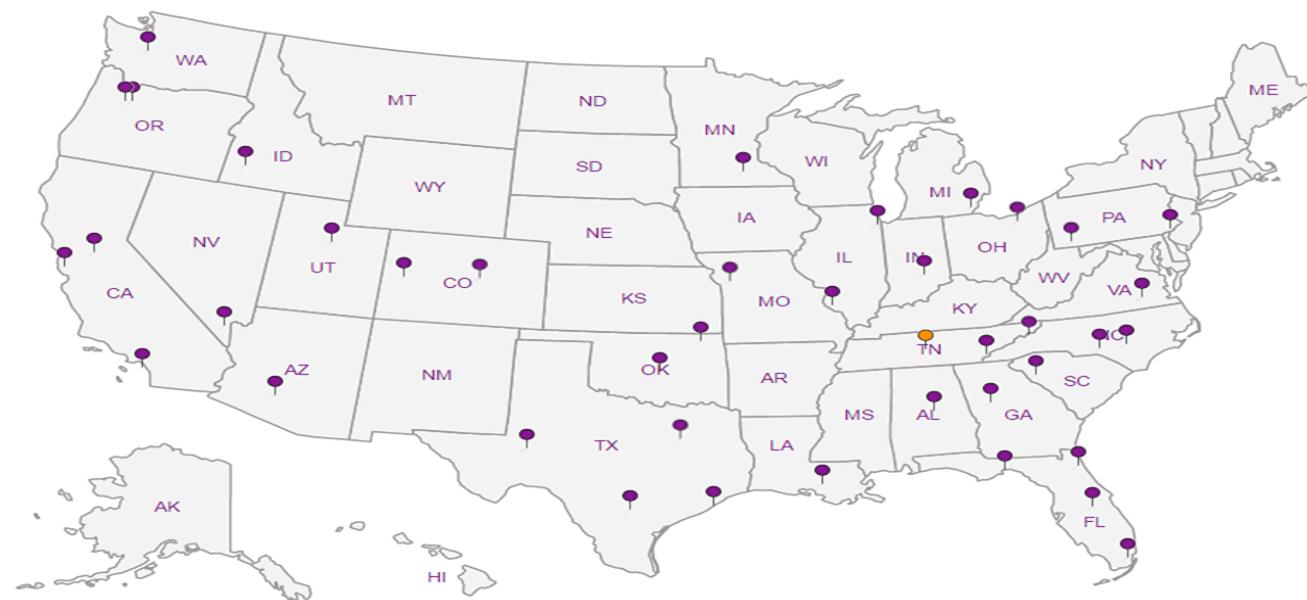
A2LA – ISO 17025	1461.01
A2LA – ISO 17025 ⁵	1461.02
Canada	1461.01
EPA-Crypto	TN00003

AIHA-LAP,LLC EMLAP	100789
DOD	1461.01
USDA	P330-15-00234

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

Our Locations

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



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


Tetra Tech, Inc.

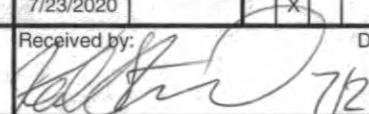
901 West Wall Street, Suite 100
 Midland, Texas 79701
 Tel (432) 682-4559
 Fax (432) 682-3946

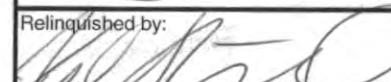
F023

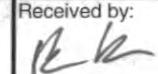
21243725

Client Name:	Conoco Phillips	Site Manager:	Christian Llull
Project Name:	MCA 2-C Header	Contact Info:	Email: christian.llull@tetratech.com Phone: (512) 338-1667
Project Location: (county, state)	Lea County, New Mexico	Project #:	212C-MD-02119
Invoice to:	Accounts Payable 901 West Wall Street, Suite 100 Midland, Texas 79701		
Receiving Laboratory:	Pace Analytical	Sampler Signature:	Devin Dominguez
Comments:	COPTETRA Acctnum		

LAB # (LAB USE ONLY)	SAMPLE IDENTIFICATION	SAMPLING		MATRIX	PRESERVATIVE METHOD	# CONTAINERS	FILTERED (Y/N)	BTEX 8021B BTEX 8260B	TPH TX1005 (Ex10 C35)	TPH 8015M (GRO - DRR0 - ORO0 - MRO0)	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	ICL	GC/MS Vial 8260B / 624	GC/MS Semi. Vial 8270C/825	PCBs 8082 / 6008	NORM	PLM (Asbestos)	Chloride 3000	Sulfate TDS	General Water Chemistry (see attached list)	Union/Cation Balance	TPH 8015R	Hold
		DATE	TIME																								
		YEAR: 2020		WATER	SOL	HCl	HN03	ICP	NONE																		
-01	AH-1E-2 (0-1')	7/23/2020		X		X				1	N	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	
-02	AH-1E-2 (2-3')	7/23/2020		X		X				1	N	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	
-03	AH-1S-3 (0-1')	7/24/2020		X		X				1	N	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	
-04	AH-1S-3 (2-3')	7/24/2020		X		X				1	N	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	
-05	AH-1S-3 (4-5')	7/24/2020		X		X				1	N	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	
-06	AH-3W (0-1')	7/24/2020		X		X				1	N	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	
-07	AH-3W (2-3')	7/24/2020		X		X				1	N	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	
-08	AH-5W (0-1')	7/23/2020		X		X				1	N	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	
-09	AH-5W (2-3')	7/23/2020		X		X				1	N	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	
-10	AH-9W-3 (0-1')	7/23/2020		X		X				1	N	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	

Relinquished by:  Date: 7/24 Time: 15:00 Received by:  Date: 7/24/20 Time: 15:00

Relinquished by:  Date: 7/24/20 Time: 17:00 Received by: FedEx Date: 7/24/20 Time: 17:00

Relinquished by: Date: Time: Received by:  Date: 7-25-20 Time: 10:00

LAB USE
ONLY

Sample Temperature

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

3.4-2=3.2 *ACD*

T

Tetra Tech, Inc.

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

61243725

Client Name:	Conoco Phillips	Site Manager:	Christian Llull
Project Name:	MCA 2-C Header	Contact Info:	Email: christian.llull@tetrtech.com Phone: (512) 338-1667
Project Location: (county, state)	Lea County, New Mexico	Project #:	212C-MD-02119
Invoice to:	Accounts Payable 901 West Wall Street, Suite 100 Midland, Texas 79701		
Receiving Laboratory:	Pace Analytical	Sampler Signature:	Devin Dominguez

Comments: COPTETRA Acctnum

Relinquished by:

Date: Time

Received by:

Date: _____ Time: _____

Belinquished by:

Date: _____ Time: _____

Received by

Date: _____ Time: _____

Relinquished by:

Date: _____ Time: _____

Received by:

Date: _____ Time: _____

**LAB USE
ONLY**

REMARKS:

- 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

$$3.4 \div 2 = 3.2$$

Pace Analytical National Center for Testing & Innovation Cooler Receipt Form			
Client: Tector Tech	L1293725		
Cooler Received/Opened On: 7/15/20	Temperature:	3.2	
Received By: Bryan Burgess			
Signature: 			
Receipt Check List	NP	Yes	No
COC Seal Present / Intact?	<input checked="" type="checkbox"/>		
COC Signed / Accurate?		<input checked="" type="checkbox"/>	
Bottles arrive intact?		<input checked="" type="checkbox"/>	
Correct bottles used?		<input checked="" type="checkbox"/>	
Sufficient volume sent?		<input checked="" type="checkbox"/>	
If Applicable			
VOA Zero headspace?			
Preservation Correct / Checked?			


Tetra Tech, Inc.

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

F023

21243725

Client Name:	Conoco Phillips	Site Manager:	Christian Llull
Project Name:	MCA 2-C Header	Contact Info:	Email: christian.llull@tetratech.com Phone: (512) 338-1667
Project Location: (county, state)	Lea County, New Mexico	Project #:	212C-MD-02119
Invoice to:	Accounts Payable 901 West Wall Street, Suite 100 Midland, Texas 79701		
Receiving Laboratory:	Pace Analytical	Sampler Signature:	Devin Dominguez
Comments:	COPTETRA Acctnum		

LAB # (LAB USE ONLY)	SAMPLE IDENTIFICATION	SAMPLING		MATRIX	PRESERVATIVE METHOD	# CONTAINERS	FILTERED (Y/N)	BTEX 8021B BTEX 8260B TPH TX1005 (ExA to C35)	Chloride 3000 TDS General Water Chemistry (see attached list)	TPH 8015R Union/Cation Balance							
		YEAR: 2020															
		DATE	TIME														
-01	AH-1E-2 (0-1')	7/23/2020		X	X	1	N	X	X	X							
-02	AH-1E-2 (2-3')	7/23/2020		X	X	1	N	X	X	X							
-03	AH-1S-3 (0-1')	7/24/2020		X	X	1	N	X	X	X							
-04	AH-1S-3 (2-3')	7/24/2020		X	X	1	N	X	X	X							
-05	AH-1S-3 (4-5')	7/24/2020		X	X	1	N	X	X	X							
-06	AH-3W (0-1')	7/24/2020		X	X	1	N	X	X	X							
-07	AH-3W (2-3')	7/24/2020		X	X	1	N	X	X	X							
-08	AH-5W-2 (0-1') - AH-5W (0-1')	7/23/2020		X	X	1	N	X	X	X							
-09	AH-5W-2 (2-3') - AH-5W (2-3')	7/23/2020		X	X	1	N	X	X	X							
-10	AH-9W-3 (0-1')	7/23/2020		X	X	1	N	X	X	X							

Relinquished by: Date: Time: Received by: Date: Time:

7/24 15:00

Received by: Date: 7/24/20 Time: 15:00

Relinquished by: Date: Time: Received by: Date: Time:

7/24/20 17:00

Received by: FedEx Date: 7/24/20 Time: 17:00

Relinquished by: Date: Time: Received by: Date: Time:

Date: 7-25-20 Time: 10:00

Received by: Date: 7-25-20 Time: 10:00

LAB USE
ONLY
Sample Temperature

- 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

3.4-2=3.2 *ACD*

T

Tetra Tech, Inc.

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

61243725

Client Name:	Conoco Phillips	Site Manager:	Christian Llull
Project Name:	MCA 2-C Header	Contact Info:	Email: christian.llull@tetrtech.com Phone: (512) 338-1667
Project Location: (county, state)	Lea County, New Mexico	Project #:	212C-MD-02119
Invoice to:	Accounts Payable 901 West Wall Street, Suite 100 Midland, Texas 79701		
Receiving Laboratory:	Pace Analytical	Sampler Signature:	Devin Dominguez

Comments: COPTETRA Acctnum

Relinquished by:

Date: Time

Received by:

Date: _____ Time: _____

Belinquished by:

Date: _____ Time: _____

Received by

Date: _____ Time: _____

Relinquished by:

Date: _____ Time: _____

Received by:

Date: _____ Time: _____

ANALYSIS REQUEST
(Circle or Specify Method No.)

LAB USE ONLY		REMARKS:
Sample Temperature		<input checked="" type="checkbox"/> Standard
		<input type="checkbox"/> RUSH: Same Day 24 hr. 48 hr. 72 hr.
		<input type="checkbox"/> Rush Charges Authorized
		<input type="checkbox"/> Special Report Limits or TRRP Report
(Circle) HAND DELIVERED FEDEX UPS Tracking #:		HOLD
BTEX	8021B	BTEX 8260B
TPH	TX1005	(Ext to C35)
	X	TPH 8015M (GRO - DRO - ORO - MRO)
	X	Total Metals Ag As Ba Cd Cr Pb Se Hg
	X	TCLP Metals Ag As Ba Cd Cr Pb Se Hg
	X	TCLP Volatiles
	X	TCLP Semi Volatiles
	X	RCL
	X	GC/MS Vol. 8260B / 624
	X	GC/MS Semi. Vol. 8270C/625
	X	PCBs 8082 / 608
	X	NORM
	X	PLM (Asbestos)
	X	Chloride 300.0
	X	Chloride Sulfate TDS
	X	General Water Chemistry (see attached list)
	X	Anion/Cation Balance
	X	TPH 8015R

ORIGINAL COPY

(Circle) HAND DELIVERED FEDEX UPS Tracking #: _____

$$3.4 \div 2 = 3.2$$

APPENDIX D

Soil Boring Logs

212C-MD-02119	TETRA TECH		LOG OF BORING AH-1E						Page 1 of 1				
Project Name: MCA 300 Flowline Release													
Borehole Location: GPS: 32.802329°, -103.769669°						Surface Elevation: 3951 ft							
Borehole Number: AH-1E					Borehole Diameter (in.): 2	Date Started: 3/2/2020			Date Finished: 3/2/2020				
DEPTH (ft)	OPERATION TYPE	SAMPLE	CHLORIDE FIELD SCREENING (ppm)	VOC FIELD SCREENING (ppm)	SAMPLE RECOVERY (%)	MOISTURE CONTENT (%)	DRY DENSITY (pcf)	LIQUID LIMIT	PLASTICITY INDEX	MINUS NO. 200 (%)	WATER LEVEL OBSERVATIONS		
											While Drilling	<input checked="" type="checkbox"/> DRY	ft
Remarks:										MATERIAL DESCRIPTION			
											DEPTH (ft)	REMARKS	
												AH-1E (0'-1')	
												2	
												4 AH-1E (0'-1')	

Bottom of borehole at 4.0 feet.

Sampler Types:	<input checked="" type="checkbox"/> Split Spoon <input checked="" type="checkbox"/> Shelby <input checked="" type="checkbox"/> Bulk Sample <input checked="" type="checkbox"/> Grab Sample	<input type="checkbox"/> Acetate Liner <input type="checkbox"/> Vane Shear <input type="checkbox"/> California <input type="checkbox"/> Test Pit	Operation Types:	<input type="checkbox"/> Mud Rotary <input type="checkbox"/> Continuous Flight Auger <input type="checkbox"/> Wash Rotary	<input type="checkbox"/> Hand Auger <input type="checkbox"/> Air Rotary <input type="checkbox"/> Direct Push <input type="checkbox"/> Core Barrel	Notes: Analytical samples are shown in the "Remarks" column. Surface elevation is an estimated value.
Logger:	Adrian Garcia		Drilling Equipment:	Hand Auger	Driller:	Tetra Tech

212C-MD-02119	 TETRA TECH	LOG OF BORING AH-1S	Page 1 of 1
---------------	---	---------------------	-------------

Project Name: MCA 300 Flowline Release

Borehole Location: GPS: 32.802234°, -103.769734° Surface Elevation: 3950 ft

Borehole Number: AH-1S Borehole Diameter (in.): 2 Date Started: 3/2/2020 Date Finished: 3/2/2020

DEPTH (ft)	OPERATION TYPE	SAMPLE	CHLORIDE FIELD SCREENING (ppm)	VOC FIELD SCREENING (ppm)	SAMPLE RECOVERY (%)	MOISTURE CONTENT (%)	DRY DENSITY (pcf)	LIQUID LIMIT	PLASTICITY INDEX	MINUS NO. 200 (%)	GRAPHIC LOG	WATER LEVEL OBSERVATIONS		
												While Drilling	DRY ft	Upon Completion of Drilling
MATERIAL DESCRIPTION														
												DEPTH (ft)	REMARKS	
		X												
120	ExStik	PID												
95														

Bottom of borehole at 4.0 feet.

Sampler Types:	<input checked="" type="checkbox"/> Split Spoon <input checked="" type="checkbox"/> Shelby <input checked="" type="checkbox"/> Bulk Sample <input checked="" type="checkbox"/> Grab Sample	<input type="checkbox"/> Acetate Liner <input type="checkbox"/> Vane Shear <input type="checkbox"/> California <input type="checkbox"/> Test Pit	Operation Types: <input type="checkbox"/> Mud Rotary <input type="checkbox"/> Continuous Flight Auger <input type="checkbox"/> Wash Rotary	<input type="checkbox"/> Hand Auger <input type="checkbox"/> Air Rotary <input type="checkbox"/> Direct Push <input type="checkbox"/> Core Barrel	Notes: Analytical samples are shown in the "Remarks" column. Surface elevation is an estimated value.
Logger:	Adrian Garcia	Drilling Equipment:	Hand Auger	Driller:	Tetra Tech



- Acetate Liner
- Vane Shear
- California
- Test Pit

	Motor Room
	Control Room
	Water Room



and Auger
air Rotary
Direct Push
core Barrel

Notes

Notes:
Analytical samples are shown in the "Remarks" column.
Surface elevation is an estimated value

Logger: Adrian Garcia

Drilling Equipment: Hand Auger

Driller: Tetra Tech

212C-MD-02119	 TETRA TECH	LOG OF BORING AH-2W			Page 1 of 1
---------------	---	----------------------------	--	--	-------------

Project Name: MCA 300 Flowline Release

Borehole Location: GPS: 32.802470°, -103.769875° Surface Elevation: 3951 ft

Borehole Number: AH-2W Borehole Diameter (in.): 2 Date Started: 3/2/2020 Date Finished: 3/2/2020

DEPTH (ft)	OPERATION TYPE	SAMPLE	CHLORIDE FIELD SCREENING (ppm)	VOC FIELD SCREENING (ppm)	SAMPLE RECOVERY (%)	MOISTURE CONTENT (%)	DRY DENSITY (pcf)	LIQUID LIMIT	PLASTICITY INDEX	MINUS NO. 200 (%)	GRAPHIC LOG	WATER LEVEL OBSERVATIONS		
												While Drilling	DRY ft	Upon Completion of Drilling
												Remarks:		
												MATERIAL DESCRIPTION		
												DEPTH (ft)	REMARKS	
54	ExStik	PID											-SP- SAND: Tan, loose, medium grained to fine grained, with no odor, with no staining.	AH-2W (0'-1')
480													-CL- SANDY CLAY; Reddish brown, medium stiff to stiff, with no odor, with no staining.	AH-2W (0'-1')

Bottom of borehole at 4.0 feet.

Sampler Types:	<input checked="" type="checkbox"/> Split Spoon <input checked="" type="checkbox"/> Shelby <input checked="" type="checkbox"/> Bulk Sample <input checked="" type="checkbox"/> Grab Sample	<input type="checkbox"/> Acetate Liner <input type="checkbox"/> Vane Shear <input type="checkbox"/> California <input type="checkbox"/> Test Pit	Operation Types:	<input type="checkbox"/> Mud Rotary <input type="checkbox"/> Continuous Flight Auger <input type="checkbox"/> Wash Rotary	<input type="checkbox"/> Hand Auger <input type="checkbox"/> Air Rotary <input type="checkbox"/> Direct Push <input type="checkbox"/> Core Barrel	Notes: Analytical samples are shown in the "Remarks" column. Surface elevation is an estimated value.
Logger:	Adrian Garcia	Drilling Equipment:	Hand Auger	Driller:	Tetra Tech	

212C-MD-02119		TETRA TECH		LOG OF BORING AH-3E							Page 1 of 1			
Project Name: MCA 300 Flowline Release														
Borehole Location: GPS: 32.802614°, -103.769760°							Surface Elevation: 3951 ft							
Borehole Number: AH-3E					Borehole Diameter (in.): 2		Date Started: 3/3/2020			Date Finished: 3/3/2020				
DEPTH (ft)	OPERATION TYPE	SAMPLE	CHLORIDE FIELD SCREENING (ppm)	VOC FIELD SCREENING (ppm)	SAMPLE RECOVERY (%)	MOISTURE CONTENT (%)	DRY DENSITY (pcf)	LIQUID LIMIT	PLASTICITY INDEX	MINUS NO. 200 (%)	GRAPHIC LOG	WATER LEVEL OBSERVATIONS		
												While Drilling	<input checked="" type="checkbox"/> DRY	ft
Remarks:														
MATERIAL DESCRIPTION														
												DEPTH (ft)	REMARKS	
												2	AH-3E (0'-1')	
												4	AH-3E (0'-1')	

Bottom of borehole at 4.0 feet.

Sampler Types:	<input checked="" type="checkbox"/> Split Spoon <input checked="" type="checkbox"/> Shelby <input checked="" type="checkbox"/> Bulk Sample <input checked="" type="checkbox"/> Grab Sample	<input type="checkbox"/> Acetate Liner <input type="checkbox"/> Vane Shear <input type="checkbox"/> California <input type="checkbox"/> Test Pit	Operation Types:	<input type="checkbox"/> Mud <input type="checkbox"/> Rotary <input type="checkbox"/> Continuous Flight Auger <input type="checkbox"/> Wash <input type="checkbox"/> Rotary	<input type="checkbox"/> Hand Auger <input type="checkbox"/> Air Rotary <input type="checkbox"/> Direct Push <input type="checkbox"/> Core Barrel	Notes: Analytical samples are shown in the "Remarks" column. Surface elevation is an estimated value.
Logger:	Adrian Garcia		Drilling Equipment:	Hand Auger	Driller:	Tetra Tech

212C-MD-02119	 TETRA TECH	LOG OF BORING AH-3W			Page 1 of 1
---------------	---	----------------------------	--	--	-------------

Project Name: MCA 300 Flowline Release

Borehole Location: GPS: 32.802601°, -103.769890° Surface Elevation: 3951 ft

Borehole Number: AH-3W Borehole Diameter (in.): 2 Date Started: 3/3/2020 Date Finished: 3/3/2020

DEPTH (ft)	OPERATION TYPE	SAMPLE	CHLORIDE FIELD SCREENING (ppm)	VOC FIELD SCREENING (ppm)	SAMPLE RECOVERY (%)	MOISTURE CONTENT (%)	DRY DENSITY (pcf)	LIQUID LIMIT	PLASTICITY INDEX	MINUS NO. 200 (%)	GRAPHIC LOG	WATER LEVEL OBSERVATIONS												
												While Drilling	DRY ft	Upon Completion of Drilling										
MATERIAL DESCRIPTION																								
REMARKS																								
200	ExStik	PID										-SP- SAND: Tan, loose, medium grained to fine grained, with no odor, with no staining.	2	AH-3W (0'-1')										
0												-CL- SANDY CLAY; Reddish tan, medium stiff to stiff, with no odor, with no staining.	4	AH-3W (0'-1')										

Bottom of borehole at 4.0 feet.

Sampler Types:	<input checked="" type="checkbox"/> Split Spoon <input checked="" type="checkbox"/> Shelby <input checked="" type="checkbox"/> Bulk Sample <input checked="" type="checkbox"/> Grab Sample	<input type="checkbox"/> Acetate Liner <input type="checkbox"/> Vane Shear <input type="checkbox"/> California <input type="checkbox"/> Test Pit	Operation Types:	<input type="checkbox"/> Mud Rotary <input type="checkbox"/> Continuous Flight Auger <input type="checkbox"/> Wash Rotary	<input type="checkbox"/> Hand Auger <input type="checkbox"/> Air Rotary <input type="checkbox"/> Direct Push <input type="checkbox"/> Core Barrel	Notes: Analytical samples are shown in the "Remarks" column. Surface elevation is an estimated value.
Logger:	Adrian Garcia	Drilling Equipment:	Hand Auger	Driller:	Tetra Tech	

212C-MD-02119	TETRA TECH		LOG OF BORING AH-4E						Page 1 of 1					
Project Name: MCA 300 Flowline Release														
Borehole Location: GPS: 32.802742°, -103.769778°						Surface Elevation: 3952 ft								
Borehole Number: AH-4E					Borehole Diameter (in.): 2	Date Started: 3/3/2020			Date Finished: 3/3/2020					
DEPTH (ft)	OPERATION TYPE	SAMPLE	CHLORIDE FIELD SCREENING (ppm)	VOC FIELD SCREENING (ppm)	SAMPLE RECOVERY (%)	MOISTURE CONTENT (%)	DRY DENSITY (pcf)	LIQUID LIMIT	PLASTICITY INDEX	MINUS NO. 200 (%)	GRAPHIC LOG	WATER LEVEL OBSERVATIONS		
												While Drilling	<input checked="" type="checkbox"/> DRY	ft
Remarks:										MATERIAL DESCRIPTION				
												DEPTH (ft)	REMARKS	
													AH-4E (0'-1')	
													2	
													4 AH-4E (0'-1')	

Bottom of borehole at 4.0 feet.

Sampler Types:	<input checked="" type="checkbox"/> Split Spoon <input checked="" type="checkbox"/> Shelby <input checked="" type="checkbox"/> Bulk Sample <input checked="" type="checkbox"/> Grab Sample	<input checked="" type="checkbox"/> Acetate Liner <input checked="" type="checkbox"/> Vane Shear <input checked="" type="checkbox"/> California <input checked="" type="checkbox"/> Test Pit	Operation Types:	<input checked="" type="checkbox"/> Mud Rotary <input checked="" type="checkbox"/> Continuous Flight Auger <input checked="" type="checkbox"/> Wash Rotary	<input checked="" type="checkbox"/> Hand Auger <input checked="" type="checkbox"/> Air Rotary <input checked="" type="checkbox"/> Direct Push <input checked="" type="checkbox"/> Core Barrel	Notes: Analytical samples are shown in the "Remarks" column. Surface elevation is an estimated value.
Logger:	Adrian Garcia	Drilling Equipment:	Hand Auger	Driller:	Tetra Tech	

212C-MD-02119	 TETRA TECH	LOG OF BORING AH-4W	Page 1 of 1
---------------	---	---------------------	-------------

Project Name: MCA 300 Flowline Release

Borehole Location: GPS: 32.802723°, -103.769913° Surface Elevation: 3952 ft

Borehole Number: AH-4W Borehole Diameter (in.): 2 Date Started: 3/3/2020 Date Finished: 3/3/2020

DEPTH (ft)	OPERATION TYPE	SAMPLE	CHLORIDE FIELD SCREENING (ppm)	VOC FIELD SCREENING (ppm)	SAMPLE RECOVERY (%)	MOISTURE CONTENT (%)	DRY DENSITY (pcf)	LIQUID LIMIT	PLASTICITY INDEX	MINUS NO. 200 (%)	GRAPHIC LOG	WATER LEVEL OBSERVATIONS		
												While Drilling	DRY ft	Upon Completion of Drilling
	ExStik	PID												
23		0												
695		0												

Bottom of borehole at 4.0 feet.

Sampler Types:	<input checked="" type="checkbox"/> Split Spoon <input checked="" type="checkbox"/> Shelby <input checked="" type="checkbox"/> Bulk Sample <input checked="" type="checkbox"/> Grab Sample	<input checked="" type="checkbox"/> Acetate Liner <input checked="" type="checkbox"/> Vane Shear <input checked="" type="checkbox"/> California <input checked="" type="checkbox"/> Test Pit	Operation Types: <input checked="" type="checkbox"/> Mud Rotary <input checked="" type="checkbox"/> Continuous Flight Auger <input checked="" type="checkbox"/> Wash Rotary	<input checked="" type="checkbox"/> Hand Auger <input checked="" type="checkbox"/> Air Rotary <input checked="" type="checkbox"/> Direct Push <input checked="" type="checkbox"/> Core Barrel	Notes: Analytical samples are shown in the "Remarks" column. Surface elevation is an estimated value.
Logger:	Adrian Garcia	Drilling Equipment:	Hand Auger	Driller:	Tetra Tech

212C-MD-02119	 TETRA TECH	LOG OF BORING AH-11E			Page 1 of 1
---------------	---	-----------------------------	--	--	-------------

Project Name: MCA 300 Flowline Release

Borehole Location: GPS: 32.803034°, -103.769871° Surface Elevation: 3954 ft

Borehole Number: AH-11E Borehole Diameter (in.): 2 Date Started: 3/10/2020 Date Finished: 3/10/2020

DEPTH (ft)	OPERATION TYPE	SAMPLE	CHLORIDE FIELD SCREENING (ppm)	VOC FIELD SCREENING (ppm)	SAMPLE RECOVERY (%)	MOISTURE CONTENT (%)	DRY DENSITY (pcf)	LIQUID LIMIT	PLASTICITY INDEX	MINUS NO. 200 (%)	GRAPHIC LOG	WATER LEVEL OBSERVATIONS		
												While Drilling	DRY ft	Upon Completion of Drilling
	ExStik	PID										Remarks:		
												MATERIAL DESCRIPTION		
54			0									-SM- SILTY SAND; Red, loose, fine grained, with no odor, with no staining.		AH-11E (0'-1')
325			0									-CL- SANDY CLAY; Reddish brown, medium stiff to stiff, with no odor, with no staining.	2	
														4 AH-11E (0'-1')

Bottom of borehole at 4.0 feet.

Sampler Types:	<input checked="" type="checkbox"/> Split Spoon <input checked="" type="checkbox"/> Shelby <input checked="" type="checkbox"/> Bulk Sample <input checked="" type="checkbox"/> Grab Sample	<input type="checkbox"/> Acetate Liner <input type="checkbox"/> Vane Shear <input type="checkbox"/> California <input type="checkbox"/> Test Pit	Operation Types:	<input type="checkbox"/> Mud Rotary <input type="checkbox"/> Continuous Flight Auger <input type="checkbox"/> Wash Rotary	<input type="checkbox"/> Hand Auger <input type="checkbox"/> Air Rotary <input type="checkbox"/> Direct Push <input type="checkbox"/> Core Barrel	Notes: Analytical samples are shown in the "Remarks" column. Surface elevation is an estimated value.
Logger:	Adrian Garcia	Drilling Equipment:	Hand Auger	Driller:	Tetra Tech	

Project Name: MCA 300 Flowline Release		LOG OF TEST PIT T-1										Page 1 of 1			
Test Pit Location: GPS: 32.802324°, -103.769746°		Surface Elevation: 3951 ft													
Test Pit Number: T-1		Hand Auger Diameter (in.): 2			Date Started: 3/2/2020			Date Finished: 3/2/2020							
DEPTH (ft)	OPERATION TYPE SAMPLE	CHLORIDE FIELD SCREENING (ppm) ExStik	VOC FIELD SCREENING (ppm) PID	SAMPLE RECOVERY (%)	MOISTURE CONTENT (%)	DRY DENSITY (pcf)	LIQUID LIMIT FL	PLASTICITY INDEX PI	MINUS NO. 200 (%)	GRAPHIC LOG	WATER LEVEL OBSERVATIONS			DEPTH (ft)	REMARKS
											While Exc.	<u>DRY</u> ft	Upon Completion of Exc. <u>DRY</u> ft		
											MATERIAL DESCRIPTION				
395		0.1									-SP- SANDY CLAY; Reddish brown, medium stiff to stiff, with no odor, with no staining.			4.5	T-1 (1'-2')
390											-ML- SILT; Pink, dense, calicile, with no odor, with no staining.			6	T-1 (3'-4')
5															
190		0													T-1 (5'-6')
Bottom of borehole at 6.0 feet.															
Sampler Types:	<input checked="" type="checkbox"/> Split Spoon <input checked="" type="checkbox"/> Shelby <input checked="" type="checkbox"/> Bulk Sample <input checked="" type="checkbox"/> Grab Sample	<input checked="" type="checkbox"/> Acetate Liner <input checked="" type="checkbox"/> Vane Shear <input checked="" type="checkbox"/> California	Operation Types:	<input checked="" type="checkbox"/> Mud Rotary <input checked="" type="checkbox"/> Continuous Flight Auger <input checked="" type="checkbox"/> Test Pit	<input checked="" type="checkbox"/> Hand Auger <input checked="" type="checkbox"/> Air Rotary <input checked="" type="checkbox"/> Direct Push <input checked="" type="checkbox"/> Core Barrel	Notes: Analytical samples are shown in the "Remarks" column. Surface elevation is an estimated value. Soil samples were collected via hand auger.									
Logger:	Adrian Garcia		Exc. Equipment:	Mini-Excavator		Contractor:	McNabb Services, Inc.								

212C-MD-02119		TETRA TECH		LOG OF TEST PIT T-2								Page 1 of 1					
Project Name: MCA 300 Flowline Release																	
Test Pit Location: GPS: 32.802473°, -103.769800° Surface Elevation: 3951 ft																	
Test Pit Number: T-2						Hand Auger Diameter (in.): 2			Date Started: 3/2/2020			Date Finished: 3/2/2020					
DEPTH (ft)	OPERATION TYPE SAMPLE	CHLORIDE FIELD SCREENING (ppm) ExStik	VOC FIELD SCREENING (ppm) PID	SAMPLE RECOVERY (%)	MOISTURE CONTENT (%)	DRY DENSITY (pcf)	LIQUID LIMIT FL	PLASTICITY INDEX PI	MINUS NO. 200 (%)	GRAPHIC LOG	WATER LEVEL OBSERVATIONS						
											While Exc.	<u>DRY</u> ft	Upon Completion of Exc.	<u>DRY</u> ft			
Remarks:												MATERIAL DESCRIPTION					
												DEPTH (ft)	REMARKS				
													T-2 (1'-2')				
													T-2 (3'-4')				
5													4.5				
													T-2 (5'-6')				
													6				
Bottom of borehole at 6.0 feet.																	
Sampler Types:		<input checked="" type="checkbox"/> Split Spoon	<input type="checkbox"/> Acetate Liner	Operation Types:		<input type="checkbox"/> Hand Auger	Notes: Analytical samples are shown in the "Remarks" column. Surface elevation is an estimated value. Soil samples were collected via hand auger.										
		<input type="checkbox"/> Shelby	<input type="checkbox"/> Vane Shear	<input type="checkbox"/> Mud Rotary	<input type="checkbox"/> Air Rotary	<input type="checkbox"/> Continuous Flight Auger	<input type="checkbox"/> Direct Push	<input type="checkbox"/> Test Pit	<input type="checkbox"/> Core Barrel								
Logger: Adrian Garcia				Exc. Equipment: Mini-Excavator				Contractor: McNabb Services, Inc.									

212C-MD-02119	 TETRA TECH	LOG OF TEST PIT T-3								Page 1 of 1			
Project Name: MCA 300 Flowline Release													
Test Pit Location: GPS: 32.802610°, -103.769826°						Surface Elevation: 3951 ft							
Test Pit Number: T-3				Hand Auger Diameter (in.): 2		Date Started: 3/3/2020			Date Finished: 3/3/2020				
WATER LEVEL OBSERVATIONS While Exc. <u>DRY</u> ft Upon Completion of Exc. <u>DRY</u> ft Remarks: MATERIAL DESCRIPTION													
DEPTH (ft)	OPERATION TYPE	SAMPLE	CHLORIDE FIELD SCREENING (ppm)	VOC FIELD SCREENING (ppm)	SAMPLE RECOVERY (%)	MOISTURE CONTENT (%)	DRY DENSITY (pcf)	LIQUID LIMIT	PLASTICITY INDEX	MINUS NO. 200 (%)	GRAPHIC LOG	DEPTH (ft)	REMARKS
	ExStik	PID						FL	PI				
5				499								-CL- SANDY CLAY; Reddish brown, medium stiff to stiff, with light odor, with no staining.	T-3 (1'-2')
				4.8									T-3 (3'-4')
				2.2									4.5
				3									T-3 (5'-6')
													T-3 (6'-7')
													T-3 (8'-9')
10													
				924									11 T-3 (10'-11')

Bottom of borehole at 11.0 feet.

Sampler Types:	<input checked="" type="checkbox"/> Split Spoon <input checked="" type="checkbox"/> Shelby <input checked="" type="checkbox"/> Bulk Sample <input checked="" type="checkbox"/> Grab Sample	<input type="checkbox"/> Acetate Liner <input type="checkbox"/> Vane Shear <input type="checkbox"/> California	Operation Types:	<input type="checkbox"/> Mud Rotaty <input type="checkbox"/> Continuous Flight Auger <input type="checkbox"/> Test Pit	<input type="checkbox"/> Hand Auger <input type="checkbox"/> Air Rotary <input type="checkbox"/> Direct Push <input type="checkbox"/> Core Barrel	Notes: Analytical samples are shown in the "Remarks" column. Surface elevation is an estimated value. Soil samples were collected via hand auger.
Logger:	Adrian Garcia	Exc. Equipment:	Mini-Excavator	Contractor:	McNabb Services, Inc.	

212C-MD-02119		TETRA TECH		LOG OF TEST PIT T-4								Page 1 of 1		
Project Name: MCA 300 Flowline Release														
Test Pit Location: GPS: 32.802732°, -103.769844° Surface Elevation: 3952 ft														
Test Pit Number: T-4						Hand Auger Diameter (in.): 2			Date Started: 3/3/2020			Date Finished: 3/3/2020		
DEPTH (ft)	OPERATION TYPE SAMPLE	CHLORIDE FIELD SCREENING (ppm) ExStik	VOC FIELD SCREENING (ppm) PID	SAMPLE RECOVERY (%)	MOISTURE CONTENT (%)	DRY DENSITY (pcf)	LIQUID LIMIT	PLASTICITY INDEX	MINUS NO. 200 (%)	GRAPHIC LOG	WATER LEVEL OBSERVATIONS			
											While Exc.	<u>DRY</u> ft	Upon Completion of Exc.	<u>DRY</u> ft
5		2500	547								MATERIAL DESCRIPTION			
											Remarks:			
											DEPTH (ft)	REMARKS		
											4	T-5 (1'-2')		
											4	T-4 (2'-4')		
											5	T-4 (4'-6')		
											9	T-4 (8'-9')		
Bottom of borehole at 9.0 feet.														
Sampler Types:	<input checked="" type="checkbox"/> Split Spoon	<input type="checkbox"/> Acetate Liner	Operation Types:	<input type="checkbox"/> Hand Auger	Notes:									
	<input type="checkbox"/> Shelby	<input type="checkbox"/> Vane Shear	<input type="checkbox"/> Mud Rotary	<input type="checkbox"/> Air Rotary	Analytical samples are shown in the "Remarks" column.									
	<input type="checkbox"/> Bulk Sample	<input type="checkbox"/> California	<input type="checkbox"/> Continuous Flight Auger	<input type="checkbox"/> Direct Push	Surface elevation is an estimated value.									
	<input type="checkbox"/> Grab Sample		<input type="checkbox"/> Test Pit	<input type="checkbox"/> Core Barrel	Soil samples were collected via hand auger.									
Logger:	Adrian Garcia			Exc. Equipment:	Mini-Excavator			Contractor:	McNabb Services, Inc.					

212C-MD-02119		TETRA TECH		LOG OF TEST PIT T-11								Page 1 of 1		
Project Name: MCA 300 Flowline Release														
Test Pit Location: GPS: 32.803023°, -103.769923° Surface Elevation: 3954 ft														
Test Pit Number: T-11						Hand Auger Diameter (in.): 2			Date Started: 3/9/2020			Date Finished: 3/9/2020		
DEPTH (ft)	OPERATION TYPE SAMPLE	CHLORIDE FIELD SCREENING (ppm) ExStik	VOC FIELD SCREENING (ppm) PID	SAMPLE RECOVERY (%)	MOISTURE CONTENT (%)	DRY DENSITY (pcf)	LIQUID LIMIT FL	PLASTICITY INDEX PI	MINUS NO. 200 (%)	GRAPHIC LOG	WATER LEVEL OBSERVATIONS			
											While Exc.	<u>DRY</u> ft	Upon Completion of Exc.	<u>DRY</u> ft
MATERIAL DESCRIPTION												DEPTH (ft)	REMARKS	
5											-SM- SILTY SAND; Red, loose, fine grained, with no odor, with no staining.	T-11 (1'-2')		
											-CL- SANDY CLAY; Reddish brown, medium stiff to stiff, with no odor, with no staining.			
											-ML- SILT; Pink, dense, caliche, with no odor, with no staining.			
											-ML- SILT; Light pink white, loose, caliche, with no odor, with no staining.			
10												T-11 (3'-4')		
15												T-11 (5'-6')		
Bottom of borehole at 15.0 feet.														

Sampler Types:	<input checked="" type="checkbox"/> Split Spoon <input checked="" type="checkbox"/> Shelby <input checked="" type="checkbox"/> Bulk Sample <input checked="" type="checkbox"/> Grab Sample	<input checked="" type="checkbox"/> Acetate Liner <input checked="" type="checkbox"/> Vane Shear <input checked="" type="checkbox"/> California	Operation Types:	<input checked="" type="checkbox"/> Mud Rotaty <input checked="" type="checkbox"/> Continuous Flight Auger <input checked="" type="checkbox"/> Test Pit	<input checked="" type="checkbox"/> Hand Auger <input checked="" type="checkbox"/> Air Rotary <input checked="" type="checkbox"/> Direct Push <input checked="" type="checkbox"/> Core Barrel	Notes: Analytical samples are shown in the "Remarks" column. Surface elevation is an estimated value. Soil samples were collected via hand auger.
Logger:	Adrian Garcia	Exc. Equipment:	Mini-Excavator	Contractor:	McNabb Services, Inc.	

APPENDIX E

Photographic Documentation



TETRA TECH, INC. PROJECT NO. 212C-MD-02119	DESCRIPTION	View of initial response activities inside footprint of the MCA 300 Release Site looking north from south end.	1
	SITE NAME	ConocoPhillips MCA 300 Flowline Release	2/21/2020



TETRA TECH, INC. PROJECT NO. 212C-MD-02119	DESCRIPTION	View of initial response activities inside footprint of the MCA 300 Release Site looking northeast.	2
	SITE NAME	ConocoPhillips MCA 300 Flowline Release	2/21/2020



TETRA TECH, INC. PROJECT NO. 212C-MD-02119	DESCRIPTION	View of initial response activities inside footprint of the MCA 300 Release Site looking northwest.	3
	SITE NAME	ConocoPhillips MCA 300 Flowline Release	2/21/2020

APPENDIX F

NMSLO Seed Mixture Details



United States
Department of
Agriculture



Natural
Resources
Conservation
Service

A product of the National Cooperative Soil Survey, a joint effort of the United States Department of Agriculture and other Federal agencies, State agencies including the Agricultural Experiment Stations, and local participants

Custom Soil Resource Report for Lea County, New Mexico

MCA 300 FL Release



March 22, 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.

The U.S. Department of Agriculture (USDA) prohibits discrimination in all its programs and activities on the basis of race, color, national origin, age, disability, and where applicable, sex, marital status, familial status, parental status, religion, sexual orientation, genetic information, political beliefs, reprisal, or because all or a part of an individual's income is derived from any public assistance program. (Not all prohibited bases apply to all programs.) Persons with disabilities who require

alternative means for communication of program information (Braille, large print, audiotape, etc.) should contact USDA's TARGET Center at (202) 720-2600 (voice and TDD). To file a complaint of discrimination, write to USDA, Director, Office of Civil Rights, 1400 Independence Avenue, S.W., Washington, D.C. 20250-9410 or call (800) 795-3272 (voice) or (202) 720-6382 (TDD). USDA is an equal opportunity provider and employer.

Contents

Preface.....	2
How Soil Surveys Are Made.....	5
Soil Map.....	8
Soil Map.....	9
Legend.....	10
Map Unit Legend.....	11
Map Unit Descriptions.....	11
Lea County, New Mexico.....	13
MF—Maljamar and Palomas fine sands, 0 to 3 percent slopes.....	13
References.....	15

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

Custom Soil Resource Report

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

Custom Soil Resource Report

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



Custom Soil Resource Report

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		Spoil Area
Borrow Pit		Stony Spot
Clay Spot		Very Stony Spot
Closed Depression		Wet Spot
Gravel Pit		Other
Gravelly Spot		Special Line Features
Landfill		
Lava Flow		
Marsh or swamp		Water Features
Mine or Quarry		Streams and Canals
Miscellaneous Water		Transportation
Perennial Water		Rails
Rock Outcrop		Interstate Highways
Saline Spot		US Routes
Sandy Spot		Major Roads
Severely Eroded Spot		Local Roads
Sinkhole		Background
Slide or Slip		Aerial Photography
Sodic Spot		

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 17, Jun 8, 2020

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

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

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

Custom Soil Resource Report

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	0.1	100.0%
Totals for Area of Interest		0.1	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.

Custom Soil Resource Report

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.

Custom Soil Resource Report

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 capacity: 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

Custom Soil Resource Report

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 capacity: 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

References

- American Association of State Highway and Transportation Officials (AASHTO). 2004. Standard specifications for transportation materials and methods of sampling and testing. 24th edition.
- American Society for Testing and Materials (ASTM). 2005. Standard classification of soils for engineering purposes. ASTM Standard D2487-00.
- Cowardin, L.M., V. Carter, F.C. Golet, and E.T. LaRoe. 1979. Classification of wetlands and deep-water habitats of the United States. U.S. Fish and Wildlife Service FWS/OBS-79/31.
- Federal Register. July 13, 1994. Changes in hydric soils of the United States.
- Federal Register. September 18, 2002. Hydric soils of the United States.
- Hurt, G.W., and L.M. Vasilas, editors. Version 6.0, 2006. Field indicators of hydric soils in the United States.
- National Research Council. 1995. Wetlands: Characteristics and boundaries.
- Soil Survey Division Staff. 1993. Soil survey manual. Soil Conservation Service. U.S. Department of Agriculture Handbook 18. http://www.nrcs.usda.gov/wps/portal/nrcs/detail/national/soils/?cid=nrcs142p2_054262
- Soil Survey Staff. 1999. Soil taxonomy: A basic system of soil classification for making and interpreting soil surveys. 2nd edition. Natural Resources Conservation Service, U.S. Department of Agriculture Handbook 436. http://www.nrcs.usda.gov/wps/portal/nrcs/detail/national/soils/?cid=nrcs142p2_053577
- Soil Survey Staff. 2010. Keys to soil taxonomy. 11th edition. U.S. Department of Agriculture, Natural Resources Conservation Service. http://www.nrcs.usda.gov/wps/portal/nrcs/detail/national/soils/?cid=nrcs142p2_053580
- Tiner, R.W., Jr. 1985. Wetlands of Delaware. U.S. Fish and Wildlife Service and Delaware Department of Natural Resources and Environmental Control, Wetlands Section.
- United States Army Corps of Engineers, Environmental Laboratory. 1987. Corps of Engineers wetlands delineation manual. Waterways Experiment Station Technical Report Y-87-1.
- United States Department of Agriculture, Natural Resources Conservation Service. National forestry manual. http://www.nrcs.usda.gov/wps/portal/nrcs/detail/soils/home/?cid=nrcs142p2_053374
- United States Department of Agriculture, Natural Resources Conservation Service. National range and pasture handbook. <http://www.nrcs.usda.gov/wps/portal/nrcs/detail/national/landuse/rangepasture/?cid=stelprdb1043084>

Custom Soil Resource Report

United States Department of Agriculture, Natural Resources Conservation Service. National soil survey handbook, title 430-VI. http://www.nrcs.usda.gov/wps/portal/nrcs/detail/soils/scientists/?cid=nrcs142p2_054242

United States Department of Agriculture, Natural Resources Conservation Service. 2006. Land resource regions and major land resource areas of the United States, the Caribbean, and the Pacific Basin. U.S. Department of Agriculture Handbook 296. http://www.nrcs.usda.gov/wps/portal/nrcs/detail/national/soils/?cid=nrcs142p2_053624

United States Department of Agriculture, Soil Conservation Service. 1961. Land capability classification. U.S. Department of Agriculture Handbook 210. http://www.nrcs.usda.gov/Internet/FSE_DOCUMENTS/nrcs142p2_052290.pdf

NMSLO Seed Mix**Sandy (S)****SANDY (S) SITES SEED MIXTURE:**

COMMON NAME	VARIETY	APPLICATION RATE (PLS/Acre)	DRILL BOX
Grasses:			
Sand bluestem	Elida, VNS, So.	2.0	F
Little bluestem	Cimarron, Pastura	3.0	F
Black grama	VNS, Southern	1.0	D
Sand dropseed	VNS, Southern	4.0	S
Plains bristlegrass	VNS, Southern	2.0	D
Forbs:			
Firewheel (Gaillardia)	VNS, Southern	1.0	D
Annual Sunflower	VNS, Southern	1.0	D
Shrubs:			
Fourwing Saltbush	VNS, Southern	1.0	F
Total PLS/acre		16.0	

S = Small seed drill box, D = Standard seed drill box, F = Fluffy seed drill box

VNS = Variety Not Stated, PLS = Pure Live Seed

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



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 24889

CONDITIONS

Operator: CONOCOPHILLIPS COMPANY 600 W. Illinois Avenue Midland, TX 79701	OGRID: 217817
	Action Number: 24889
	Action Type: [C-141] Release Corrective Action (C-141)

CONDITIONS

Created By	Condition	Condition Date
chensley	None	7/28/2021