SITE INFORMATION

Report Type: Work Plan 1RP-5641

General Site Information:						
Site:	**Baish "A" Battery**					
Company:	**ConocoPhillips**					
Section, Township and Range	**Unit H**	**Sec. 21**	**T 17S**	**R 32E**		
Lease Number:	**Associated API No. N/A**					
County:	**Lea**					
GPS:	**32.822975**			**-103.764358**		
Surface Owner:	**Federal**					
Mineral Owner:	**N/A**					
Directions:	Depart from Maljamar (Hwy. 82/Maljamar Rd.). Head south on Maljamar Rd. for 2.29 miles. Turn right onto dirt road. Head west for 450 feet. Arrive at location.					

Release Data:		
Date Released:	6/19/2019	
Type Release:	Produced Water/Oil	
Source of Contamination:	Heater Treater	
Fluid Released:	6.62 bbl	
Fluids Recovered:	0 bbl	

Official Communication:			
Name:	Jenni Fortunato		Greg W. Pope
Company:	Conoco Phillips - RMR		Tetra Tech
Address:	935 N. Eldridge Pkwy.		901 West Wall Street
	SP2-12-W084		Suite 100
City:	Houston, Texas 77079		Midland, Texas
Phone number:	(832) 486-2477		(432) 687-8134
Fax:			
Email:	jenni.fortunato@conocophillips.com		Greg.Pope@tetratech.com

Ranking Criteria		
Depth to Groundwater:	***Ranking Score***	***Site Data***
<50 ft	*20*	
50-99 ft	***10***	
>100 ft.	*0*	
WellHead Protection:	***Ranking Score***	***Site Data***
Water Source <1,000 ft., Private <200 ft.	*20*	
Water Source >1,000 ft., Private >200 ft.	***0***	
Surface Body of Water:	***Ranking Score***	***Site Data***
<200 ft.	*20*	
200 ft - 1,000 ft.	*10*	
>1,000 ft.	***0***	
Total Ranking Score:	***10***	

Site Characterization	
Depth to Groundwater:	*92' below surface*
Karst Potential:	*Low*

Recommended Remedial Action Levels (RRALs)				
Benzene	***Total BTEX***	***TPH (GRO+DRO)***	***TPH (GRO+DRO+MRO)***	***Chlorides***
10 mg/kg	*50 mg/kg*	*1,000 mg/kg*	*2,500 mg/kg*	*10,000 mg/kg*

TETRA TECH

November 15, 2019

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

Re: Release Characterization and Remediation Work Plan
ConocoPhillips
Baish "A" Battery Release
Unit Letter H, Section 21, Township 17 South, Range 32 East
Lea County, New Mexico
1RP-5641

Dear Mr. Rickman:

Tetra Tech, Inc. (Tetra Tech) was contacted by ConocoPhillips to assess a release that occurred at the Baish "A" Battery, Unit H, Section 21, Township 17 South, Range 32 East, Lea County, New Mexico (Site). The release site coordinates are 32.822983, -103.764178. The Site location is shown on Figures 1 and 2.

BACKGROUND

According to the State of New Mexico Oil Conservation Division (NMOCD) Initial Site Assessment/Characterization Report (Form C-141), the release occurred on June 6, 2019. The release occurred due to a malfunctioning dump valve on the heater treater and resulted in the discharge of 3 barrels (bbls) of crude oil and 3.62 bbls of produced water to the ground surface. Due to the small volume released, no fluids were recovered. The C-141 Form is shown in Appendix A.

SITE CHARACTERIZATION

A site characterization was performed and per 19.15.29.12 NMAC, no watercourses, lakebeds, sinkholes, playa lakes, residences, schools, hospitals, institutions, churches, springs, private domestic water wells, springs, wetlands, incorporated municipal boundaries, subsurface mines, or floodplains are located within the specified distances and the Site is in a low karst potential area. The Site is within a New Mexico oil and gas production area. The New Mexico Office of the State Engineer (NMOSE) well database indicates that two water wells are located in Section 21, Township 17 South, Range 32 East in with average groundwater depths documented at 92 feet below ground surface. The groundwater database report for these two wells is included in Appendix B.

REGULATORY FRAMEWORK

A risk-based evaluation was performed for the Site in accordance with the NMOCD Guidelines for Remediation of Leaks, Spills, and Releases, updated August 14, 2018. The guidelines require a risk-based evaluation of the site to determine recommended remedial action levels (RRAL) for benzene, toluene, ethylbenzene, and xylene (collectively referred to as BTEX) and total petroleum hydrocarbons (TPH) in soil.

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

Based upon the Site characterization, the proposed RRALs for soil are:

- Benzene: 10 milligrams per kilogram (mg/kg);
- Total BTEX (sum of benzene, toluene, ethylbenzene, and xylene): 50 mg/kg;
- TPH (GRO + DRO + ORO): 2,500 mg/kg;
- TPH (GRO + DRO): 1,000 mg/kg;
- Chloride: 10,000 mg/kg (600 mg/kg in the top four feet)

INITIAL SITE ASSESSMENT

ConocoPhillips personnel were initially onsite to delineate and sample the release area in July 2019. Seven (7) borings (SP-1 through SP-7) were installed using a hand auger to depths ranging from 4 to 8 feet below ground surface to evaluate the vertical extents of the release. A total of 25 soil samples were collected from these 7 boring locations on July 1, 2019 (Figure 3). Selected samples were submitted to an analytical laboratory for total petroleum hydrocarbons (TPH), benzene, toluene, ethylbenzene and xylenes (BTEX) and chloride (SM4500Cl-B) analyses. Copies of the analytical laboratory reports and chain-of-custody documentation are included in Appendix C.

ADDITIONAL SITE ASSESSMENT

To completely assess the release area, Tetra Tech personnel were onsite to further delineate and sample the release area in September 2019. Ten (10) borings (BH-1 – BH-10) were installed using an air rotary drilling rig to various depths to evaluate the vertical and horizontal extents of the release. A total of two (2) additional borings were completed to a depth of 6 inches (BH-11 and BH-12) within the lined area of the tank battery using a hand auger. Selected samples were submitted to an analytical laboratory for TPH, BTEX, and chloride (Method 300.0) analyses. Copies of the analytical laboratory reports and chain-of-custody documentation are included in Appendix C. The boring logs are shown in Appendix D.

SUMMARY OF SAMPLING RESULTS

The results of the initial sampling event in July 2019 are summarized in Table 1. The boring locations are shown on Figure 3. The analytical results associated with the samples within the release area were predominantly above the RRALs for BTEX and TPH at the surface. Five of the boring locations (SP-1, SP-2, SP-4, SP-6, and SP-7) had surface samples that exceeded the RRAL for BTEX. In addition, the sample from the 2-foot interval at boring location SP-1 exceeded the RRAL for BTEX. At boring location SP-5, the surface sample results exceed the RRAL for TPH. At boring locations SP-1, SP-2, and SP-7, there were exceedances of the RRAL for TPH from the surface down to the 3-foot interval. At boring locations SP-3, SP-4, and SP-6, there were exceedances of the RRAL for TPH from the surface down to the 4-foot interval. There was one RRAL exceedance for chloride at boring location SP-3 (SURFACE).

The results of the additional sampling event in September 2019 are summarized in Table 2. The sample locations are shown in Figure 3. The analytical results associated with boring locations BH-1, BH-2, BH-4, BH-5 and BH-8 had exceedances of the RRAL for TPH from the surface to the 3-foot depth interval. There were no exceedances of chloride or BTEX during the September 2019 sampling event.

REMEDIATION WORK PLAN

Based on the soil sample results, ConocoPhillips proposes to remove the impacted material exceeding RRALs shown in Tables 1 and 2 and as depicted in Figure 4. Excavation in the area will be performed using heavy equipment (backhoes and track hoes) to a maximum depth of 5 feet below ground surface within the release area. A 6-inch scrape will be conducted within the secondary containment area in the vicinity of BH-11 and BH-12. Impacted soils within the area containing boring location SP-5 are proposed to be excavated to a depth of 2 feet. The impacted soil areas containing boring locations BH-1, BH-2, BH-4, BH-5, BH-8, SP-1, SP-2 and SP-7 are proposed to be excavated to a depth of 4 feet. The area containing

boring locations SP-3, SP-4 and SP-6 are proposed to be excavated to depth of 5 feet. The estimated volume of material to be remediated is 2,300 cubic yards.

Horizontal delineation of the northern extent of the release was not obtained during the site assessment due to subsurface utilities. However, during the remediation activities, the excavation extent north of BH-1 and BH-5 will be expanded to the north until a discrete sidewall sample can be collected that is below the proposed RRALs.

Excavated soils will be transported offsite and disposed of at an NMOCD-approved or permitted facility. Confirmation bottom and sidewall samples will be collected for verification of remedial activities, and analyzed for TPH, BTEX and chloride. Once the sample results are received, NMOCD will be notified and the excavation will then be backfilled with clean material to surface grade.

REVEGETATION PLAN

The backfilled areas south and east of the pad location will be seeded in Spring 2020 (first favorable growing season) to aid in revegetation. Based on the soil types present at the site, the New Mexico State Land Office (NMSLO) Shallow (SH) 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 E.

CONCLUSION

Upon completion of the remedial actions described above, a final report detailing the remediation activities will be submitted to the NMOCD. If you have any questions or comments concerning the assessment or the proposed remediation activities for this site, please call me at (512) 338-2861 or (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. Gustavo Fejervary-Morena, GPBU - ConocoPhillips
Mr. Jim Amos, BLM

List of Attachments

Figures:

- Figure 1 – Site Location/Overview Map
- Figure 2 – Site Location/Topographic Map
- Figure 3 – Site Assessment and Release Extents
- Figure 4 – Proposed Remediation Areas

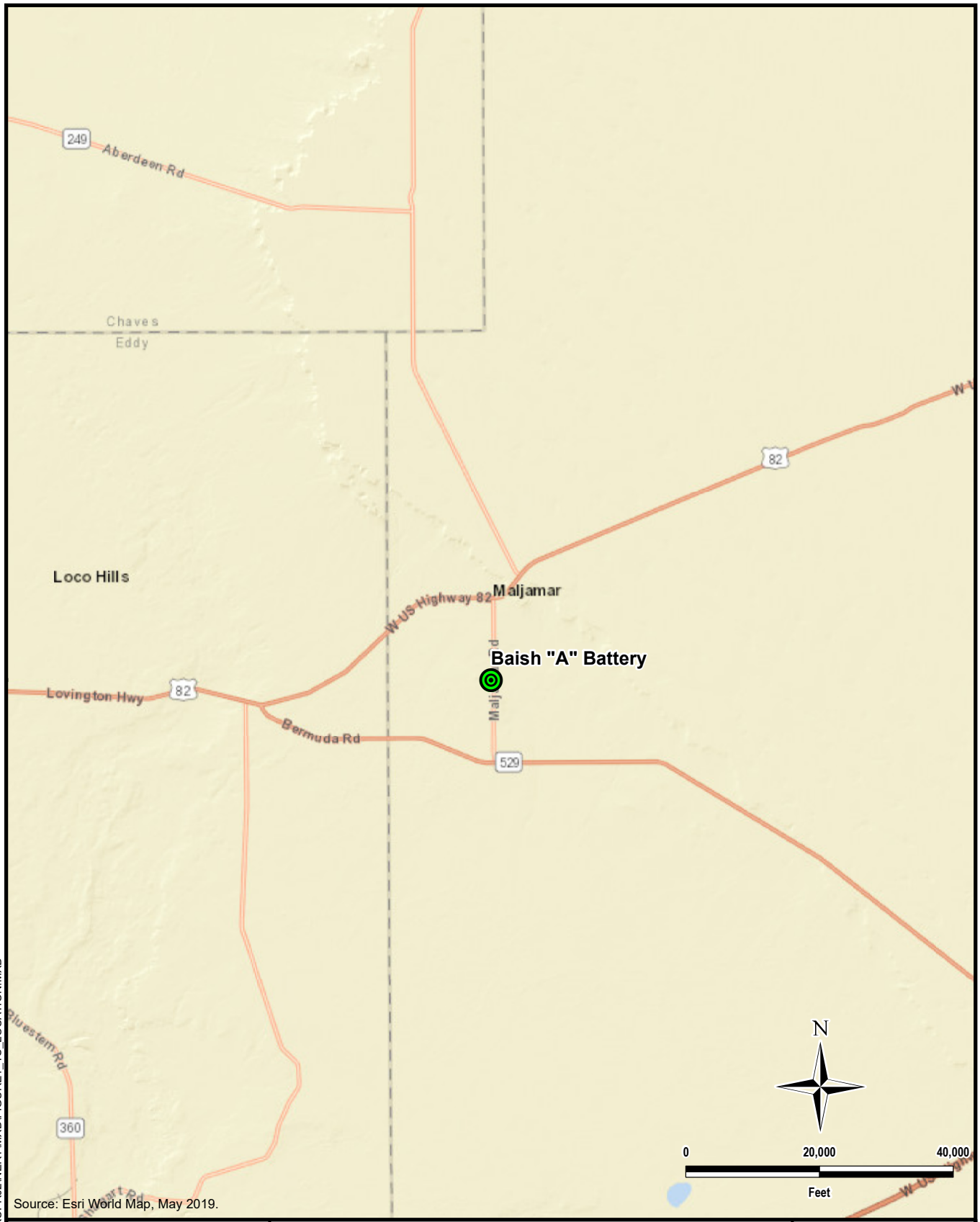
Tables:

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

Appendices:

- Appendix A – C-141 Form
- Appendix B – NMOSE Groundwater Data/Karst Potential Map
- Appendix C – Laboratory Analytical Data
- Appendix D – Soil Boring Logs
- Appendix E – NMSLO Seed Mixture Details

FIGURES



Source: Esri World Map, May 2019.

\\TTS134FS1\SUP-GIS\ARCPRJ2\NERT\MXD\FIGURE1_TS_LOCATION.MXD

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

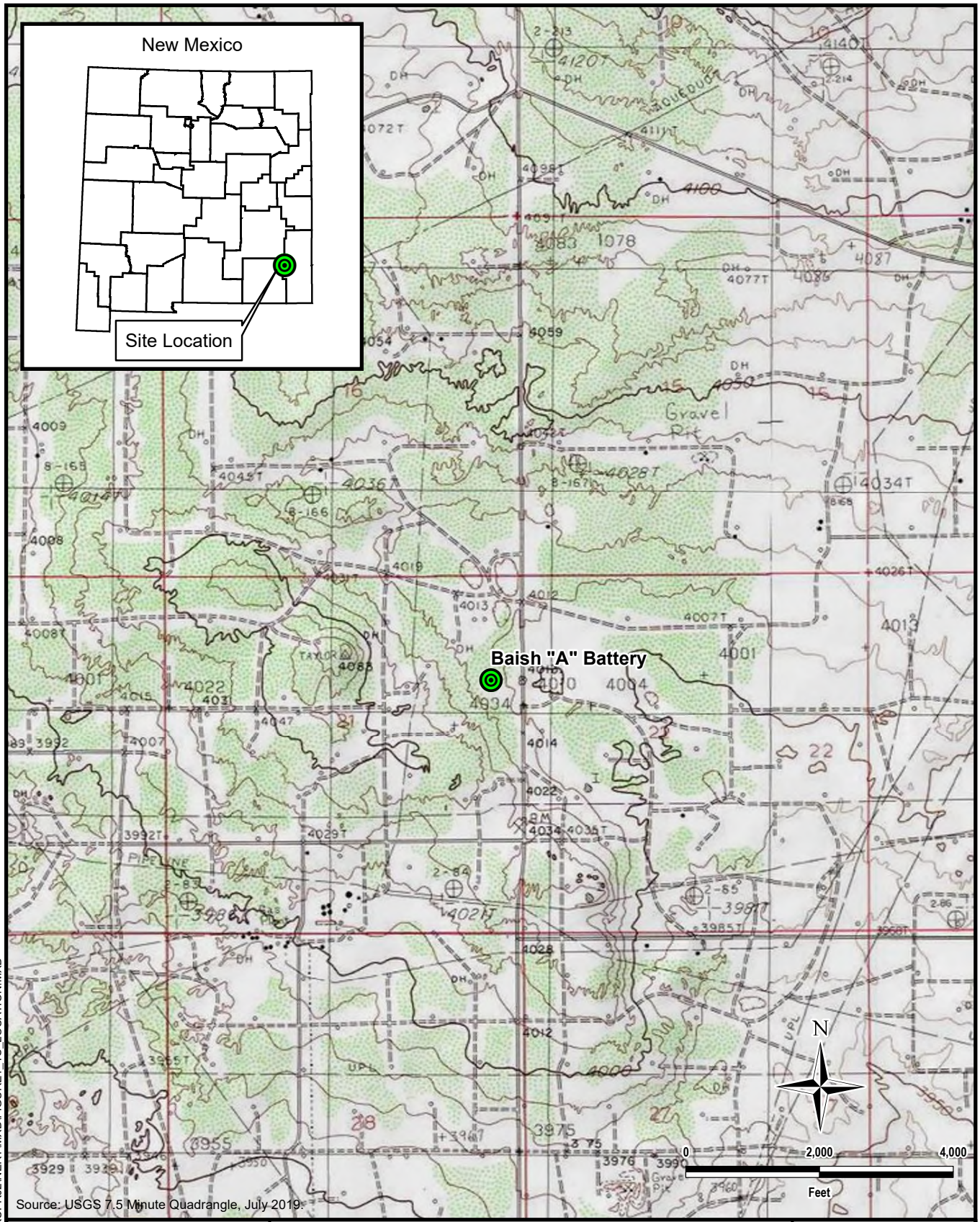
CONOCOPHILLIPS

(32.822982° , -103.764177°)
LEA COUNTY, NEW MEXICO

BAISH "A" BATTERY
OVERVIEW MAP

PROJECT NO.:	212C-MD-01878
DATE:	AUGUST 13, 2019
DESIGNED BY:	AAM

Figure No.
1



\\TTS134FS1\SUP-GIS\ARCPRJ2\NERT\MXD\FIGURE1_TS_LOCATION.MXD

TETRA TECH

www.tetratech.com

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

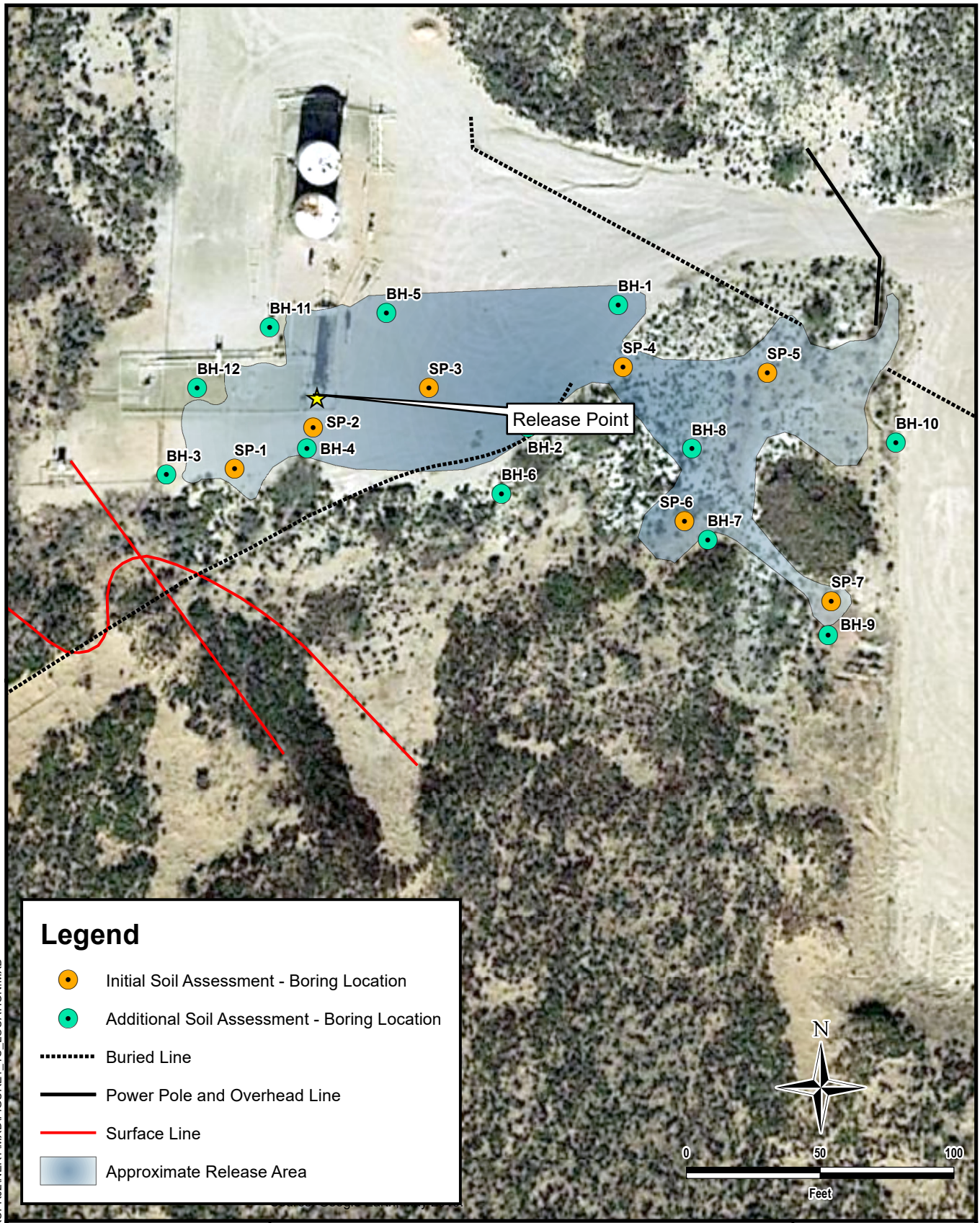
CONOCOPHILLIPS

(32.822982° , -103.764177°)
LEA COUNTY, NEW MEXICO

BAISH "A" BATTERY
TOPOGRAPHIC MAP

PROJECT NO.:	212C-MD-01878
DATE:	AUGUST 13, 2019
DESIGNED BY:	AAM

Figure No.
2



Legend

- Initial Soil Assessment - Boring Location
- Additional Soil Assessment - Boring Location
- Buried Line
- Power Pole and Overhead Line
- Surface Line
- Approximate Release Area

\\TTS134FS1\SUP-GIS\ARCPRJ2\NERT\MXD\FIGURE1_TS_LOCATION.MXD

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

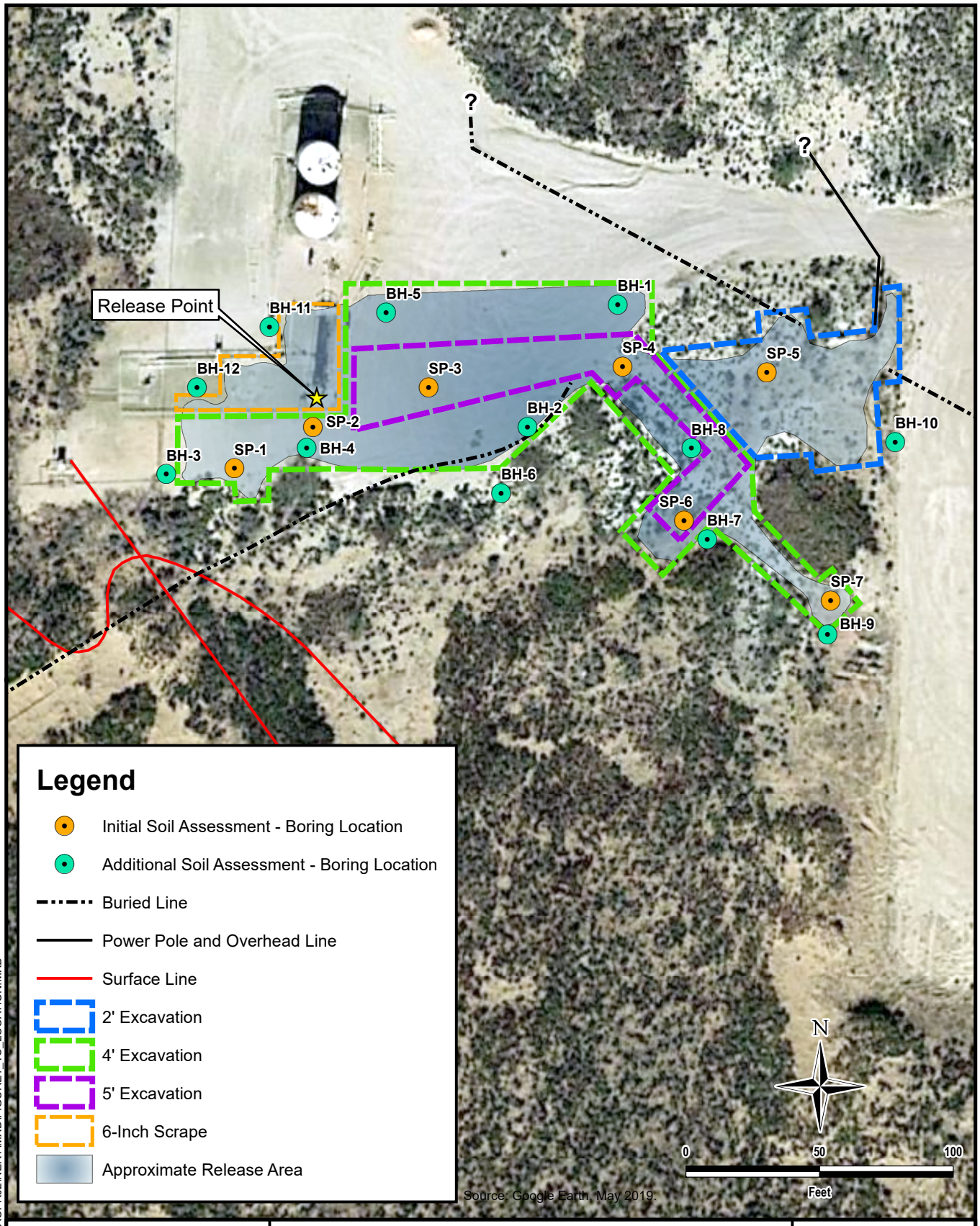
CONOCOPHILLIPS

(32.822982° , -103.764177°)
LEA COUNTY, NEW MEXICO

BAISH "A" BATTERY
SITE ASSESSMENT AND RELEASE EXTENTS

PROJECT NO.:	212C-MD-01878
DATE:	NOVEMBER 11, 2019
DESIGNED BY:	AAM

Figure No.
3



\\TTS134FS1\SUP-GIS\ARCPRJ2\NERT\MXD\FIGURE1_TS_LOCATION.MXD

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

CONOCOPHILLIPS

(32.822982° , -103.764177°)
LEA COUNTY, NEW MEXICO

BAISH "A" BATTERY
PROPOSED REMEDIATION AREAS

PROJECT NO.:	212C-MD-01878
DATE:	NOVEMBER 11, 2019
DESIGNED BY:	AAM

Figure No.
4

TABLES

TABLE 1
SUMMARY OF ANALYTICAL RESULTS
INITIAL SOIL ASSESSMENT
BAISH "A" BATTERY RELEASE
LEA COUNTY, NM

Sample ID	Sample Date	Sample Interval	Chloride[1]	BTEX[2]										TPH[3]							
				Benzene		Toluene		Ethylbenzene		Xylene		Total BTEX	GRO		DRO		ORO		GRO + DRO	TPH (C_6 - C_{36})
													C_6 - C_{10}		>C_{10} - C_{28}		>C_{28} - C_{36}		C6 - C28	
		ft. bgs	mg/kg	mg/kg	Q	mg/kg	Q	mg/kg	Q	mg/kg	Q	mg/kg	mg/kg	Q	mg/kg	Q	mg/kg	Q	mg/kg	mg/kg
SP-1	07/01/19	0	<16.0	<2.00		6.2		15.2		77.1		***98.4***	2230		10400		1570		***12630***	***14200***
		2	<16.0	<2.00		3.71		11.3		46.7		***61.7***	1220		7050		1540		***8270***	***9810***
		4	<16.0	<0.050		<0.050		<0.050		0.209		<0.300	<50.0		376		270		376	646
SP-2	07/01/19	0	80	<1.00	QR-03	9.35		16.8	QM-07	60.9	QM-07	***87.1***	1480	QM-07	17300	QM-07	3200		***18780***	***21980***
		2	32	<0.050		<0.050		<0.050		<0.150		<0.300	<10.0		20.3		21.5		20.3	41.8
		4	32	<0.050		<0.050		<0.050		<0.150		<0.300	<10.0		<10.0		<10.0		--	--
SP-3	07/01/19	0	***1660***	<0.050		1.8		3.06		11.6		16.5	281		15600		4190		***15881***	***20071***
		2	336	<0.050		<0.050		<0.050		<0.150		<0.300	<10.0		1430		978		***1430***	2408
		4	96	<0.050		<0.050		<0.050		<0.150		<0.300	<10.0		1810		1000		***1810***	***2810***
		6	192	<0.050		<0.050		<0.050		<0.150		<0.300	<10.0		192		109		192	301
		8	144	<0.050		<0.050		<0.050		<0.150		<0.300	<10.0		95.7		51		95.7	146.7
SP-4	07/01/19	0	32	2.44		25.4		18		63.1		***109***	1690		17700		2900		***19390***	***22290***
		2	32	<0.050		0.064		0.166		0.634		0.864	20.7		142		51.6		162.7	214.3
		4	32	<0.200		4.53		4.39		14.3		23.3	373		2230		393		***2603***	***2996***
SP-5	07/01/19	0	32	0.3		4.61		3.5		12.1		20.5	682		32500		7580		***33182***	***40762***
		2	128	0.055		0.292		0.372		1.26		1.97	22.3		819		572		841.3	1413
		4	288	<0.050		0.104		0.138		0.461		0.703	<10.0		412		315		412	727
SP-6	07/01/19	0	<16.0	<0.500		9.45		11.5		43.9		***64.9***	1490		22000		4380		***23490***	***27870***
		2	16	<0.050		0.497		0.092		<0.150		0.726	11		416		309		427	736
		4	32	<0.050		<0.050		<0.050		<0.150		<0.300	<10.0		1430		1120		***1430***	***2550***
		6	16	<0.050		<0.050		<0.050		<0.150		<0.300	<10.0		12.1		14.4		12.1	26.5
SP-7	07/01/19	0	<16.0	0.515		11		14.4		48.6		***74.5***	1580		18600		3700		***20180***	***23880***
		2	16	<0.050		<0.050		0.059		0.225		<0.300	12.8		442		122		454.8	576.8
		4	64	<0.050		0.198		0.139		0.401		0.737	24.1		912		193		936.1	1129
		6	16	<0.050		<0.050		<0.050		<0.150		<0.300	<10.0		107		87.1		107	194.1

NOTES:

ft. Feet
bgs Below ground surface
mg/kg Milligrams per kilogram
TPH Total Petroleum Hydrocarbons
DRO Diesel Range Organics
GRO Gasoline Range Organics
ORO Oil Range Organics

Bold and italicized values exceed the proposed RRAL for the Site.

Shaded rows indicate depth intervals proposed for excavation and remediation.

1 Method SM4500Cl-B
2 Method 8260B
3 Method 8015M
QR-03 The RPD value for the sample duplicate or MS/MSD was outside of QC acceptance limits due to matrix interference. QC batch accepted based on LCS and/or LCSD recovery and/or RPD values.
QM-07 The spilke recovery was outside acceptance limits for the MS and/or MSD. The batch was accepted based on acceptable LCS recovery.

TABLE 2
SUMMARY OF ANALYTICAL RESULTS
ADDITIONAL SOIL ASSESSMENT
BAISH "A" BATTERY RELEASE
LEA COUNTY, NM

Sample ID	Sample Date	Sample Interval	Field Screening Results		Chloride[1]	BTEX[2]									TPH[3]							
						Benzene		Toluene		Ethylbenzene		Xylene		Total BTEX	GRO		DRO		ORO		GRO + DRO	TPH (C_6 - C_{36})
			Chloride	PID											C_6 - C_{10}		>C_{10} - C_{28}		>C_{28} - C_{36}		C6 - C28	
		ft. bgs	ppm		mg/kg	mg/kg	Q	mg/kg	Q	mg/kg	Q	mg/kg	Q	mg/kg	mg/kg	Q	mg/kg	Q	mg/kg	Q	mg/kg	mg/kg
BH-1	09/10/19	0-1	NM	18.1	458	<0.00106		<0.00531		<0.00266		<0.00690	J4	--	<0.106		1420		1760		***1420***	***3180***
		2-3	***694***	13.4	148	<0.00103		<0.00517		<0.00259		<0.00673	J4	--	<0.103		1080		1400		***1080***	2480
		4-5	307	10.3	408	<0.00103		<0.00513		<0.00257		<0.00667	J4	--	<0.103		317		663		317	980
		6-7	538	10.3	377	<0.00108		<0.00542		<0.00271		<0.00705	J4	--	<0.108		28		59.8		28	87.8
		9-10	423	6.6	935	<0.00114		<0.00568		<0.00284		<0.00738	J4	--	<0.114		25.4		44.4		25.4	69.8
BH-2	09/10/19	0-1	NM	112.6	281	<0.00103		<0.00517		<0.00258		<0.00672	J4	--	0.14	B	2880		1680		***2880***	***4560***
		2-3	NM	87.4	157	<0.00102		<0.00512		<0.00256		<0.00666	J4	--	0.0655	B J	1020		1180		***1020***	2200
		4-5	113	36.9	70.7	<0.00101		<0.00506		<0.00253		<0.00657	J4	--	<0.101		152		232		152	384
		6-7	116	17.4	108	<0.00103		<0.00513		<0.00256		<0.00667	J4	--	0.023	B J	43.2		60.8		43.22	104.02
		9-10	114	9.4	190	<0.00107		<0.00533		<0.00267		<0.00693	J4	--	<0.107		4.63		15.9		4.63	20.53
BH-3	09/10/19	0-1	NM	8.1	23.5	<0.00103		<0.00514		<0.00257		<0.00668	J4	--	0.0236	B J	251		455		251.02	706.02
		2-3	36.2	7.2	23.5	<0.00102		<0.00509		<0.00255		<0.00662	J4	--	<0.102		418		953		418	1371
		4-5	NM	7.0	23.9	<0.00103		<0.00517		<0.00259		<0.00672		--	<0.103		189		524		189	713
		6-7	NM	7.8	71.6	0.000532	J	<0.00524		<0.00262		<0.00681		0.000532	<0.105		36.1	J	103		36.1	139.1
		9-10	NM	7.0	260	0.000558	J	<0.00559		<0.00280		<0.00727		0.000558	<0.112	J3	42.5		104		42.5	146.5
BH-4	09/10/19	0-1	152	36.1	124	0.0012		<0.00536		<0.00268		<0.00696		0.0012	<0.107		1600		1370		***1600***	***2970***
		2-3	NM	39.4	208	0.00152		<0.00508		<0.00254		<0.00660		0.00152	<0.102		3380		2680		***3380***	***6060***
		4-5	NM	39.1	57.9	0.00139		<0.00512		<0.00256		<0.00666		0.00139	<0.102		200		161		200	361
		6-7	112	16.0	145	0.000795	J	<0.00532		<0.00266		<0.00692		0.000795	<0.106		8.7		10.4		8.7	19.1
		9-10	NM	10.0	201	0.000765	J	<0.00551		<0.00276		<0.00716		0.000765	<0.110		7.95		10.8		7.95	18.75
BH-5	09/11/19	0-1	NM	2.8	172	<0.00102		<0.00508		<0.00254		<0.00660		--	<0.103		27		77.3		27	104.3
		2-3	258	2.5	133	0.00115		<0.00508		<0.00254		<0.00660		0.00115	<0.102		1650		4890		***1650***	***6540***
		4-5	184	4.4	70.1	0.00066	J	<0.00508		<0.00254		<0.00660		0.00066	<0.102		246		748		246	994
		6-7	NM	4.2	86.9	0.00111	J	<0.00562		<0.00281		<0.00730		0.00111	<0.112		50.8		143		50.8	193.8
		9-10	98	>1100	57.7	0.00163		0.00351	J	0.486		0.21		0.70114	170		747		561		917	1478
		12-13	NM	100.8	72	<0.00114		<0.00569		0.00826		<0.00740		0.00826	0.598		39.6		51.7		40.20	91.90
		14-15	NM	54.5	95	<0.00114		<0.00569		0.00186	J	<0.00740		0.00186	0.34		33.8		40.5		34.14	74.64
		19-20	NM	6.2	160	<0.00112		<0.00560		<0.00280		<0.00729		--	<0.112		<4.48		1.55	J	--	1.55

TABLE 2
SUMMARY OF ANALYTICAL RESULTS
ADDITIONAL SOIL ASSESSMENT
BAISH "A" BATTERY RELEASE
LEA COUNTY, NM

Sample ID	Sample Date	Sample Interval	Field Screening Results		Chloride[1]	BTEX[2]									TPH[3]							
			Chloride	PID		Benzene		Toluene		Ethylbenzene		Xylene		Total BTEX	GRO		DRO		ORO		GRO + DRO	TPH (C_6 - C_{36})
															C_6 - C_{10}		>C_{10} - C_{28}		>C_{28} - C_{36}		C6 - C28	
		ft. bgs	ppm		mg/kg	mg/kg	Q	mg/kg	Q	mg/kg	Q	mg/kg	Q	mg/kg	mg/kg	Q	mg/kg	Q	mg/kg	Q	mg/kg	mg/kg
BH-6	09/11/19	0-1	91.3	17.2	40.9	0.000499	J	<0.00570		<0.00285		<0.00740		0.000499	0.0405	B J	30.4		81.3		30.44	111.74
		2-3	87.1	16.6	42.3	0.000518	J	<0.00533		<0.00266		<0.00692		0.000518	0.0452	B J	63.1		148		63.15	211.15
		4-5	NM	6.6	20.4	<0.00101		<0.00506		<0.00253		<0.00658		--	<0.101		1.87	B J J3	2.44	J	1.87	4.31
		6-7	82.2	4.6	94.9	0.000435	J	<0.00517		<0.00258		<0.00672		0.000435	<0.103		1.78	B J	3.04	J	1.78	4.82
BH-7	09/11/19	0-1	41.8	6.8	3.75	<0.00104		<0.00521		<0.00261		<0.00678		--	<0.104		7.55	B	46.3		7.55	53.85
		2-3	36.4	4.7	15.4	<0.00101		<0.00505		<0.00253		<0.00657		--	<0.101		5.75	B	30.5		5.75	36.25
		4-5	NM	6.3	3.1	<0.00101		<0.00504		<0.00252		<0.00655		--	0.0463	B J	16.3	B J	95.5		16.35	111.85
BH-8	09/11/19	0-1	NM	252.8	51.4	<0.00103		<0.00514		0.0138		0.155		0.1688	1.3		3830		2350		***3831***	***6181***
		2-3	NM	237.5	63.7	<0.00106		<0.00529		0.0106		0.121		0.1316	1.51		5520		3670		***5522***	***9192***
		4-5	671	36.8	57.6	<0.00103		<0.00515		0.00093	J	0.0217		0.02263	0.142	B	336		1010		336.14	1346
		6-7	180	4.1	74.9	<0.00105		<0.00523		<0.00261		<0.00680		--	0.0564	B J	408		1030		408.06	1438
		9-10	128	3.4	214	<0.00105		<0.00526		<0.00263		<0.00684		--	0.0498	B J	10.6		9.11		10.65	19.76
BH-9	09/11/19	0-1	NM	5.4	22.4	<0.00100		<0.00502		<0.00251		<0.00653		--	0.0507	B J	155		452		155.05	607.05
		2-3	NM	4.9	4.32	<0.00102		<0.00510		<0.00255		<0.00662		--	0.0508	B J	326		795		326.05	1121
BH-10	09/11/19	0-1	134	8.6	4	<0.00114		<0.00569		<0.00284		<0.00739		--	<0.114		24.7		32		24.7	56.7
		2-3	112	9.8	3.97	<0.00123		<0.00615		<0.00307		<0.00799		--	<0.123		<4.92		3.36	J	--	3.36
		4-5	NM	3.4	2.76	<0.00104		<0.00518		<0.00259		<0.00673		--	<0.105		115		194		115	309
BH-11	09/11/19	0-0.5	NM	0.1	30.7	<0.00101		<0.00506		<0.00253		<0.00658		--	<0.102		29.8		72.4		29.8	102.2
BH-12	09/11/19	0-0.5	NM	3.2	2.64	<0.00101		<0.00504		<0.00252		<0.00655		--	<0.102		21.1		69.9		21.1	91

NOTES:

ft.	Feet
bgs	Below ground surface
mg/kg	Milligrams per kilogram
ppm	Parts per million
NM	Not measured
TPH	Total Petroleum Hydrocarbons
DRO	Diesel Range Organics
GRO	Gasoline Range Organics
ORO	Oil Range Organics

Bold and italicized values exceed the proposed RRAL for the Site.

Shaded rows indicate depth intervals proposed for excavation and remediation.

1	Method 300.0
2	Method 8260B
3	Method 8015M
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.
J4	The associated batch QC was outside the established quality control range for accuracy.

APPENDIX A
C-141 Form

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	NJEG1922759656
District RP	1RP-5641
Facility ID	fJEG1922759200
Application ID	pJEG1922758212

Release Notification

Responsible Party

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

Location of Release Source

Latitude 32.822975 Longitude -103.764358
(NAD 83 in decimal degrees to 5 decimal places)

Site Name BAISH A	Site Type TANK BATTERY
Date Release Discovered 6/19/19	API# *(if applicable)*

Unit Letter	Section	Township	Range	County
H	21	17S	32E	Lea

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

Nature and Volume of Release

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

☑ Crude Oil	Volume Released (bbls) 3	Volume Recovered (bbls) 0
☐ Produced Water	Volume Released (bbls) 3.62	Volume Recovered (bbls) 0
	Is the concentration of total dissolved solids (TDS) in the produced water >10,000 mg/l?	☒ Yes ☐ No
☐ Condensate	Volume Released (bbls)	Volume Recovered (bbls)
☐ Natural Gas	Volume Released (Mcf)	Volume Recovered (Mcf)
☐ Other (describe)	Volume/Weight Released (provide units)	Volume/Weight Recovered (provide units)

Cause of Release Dump valve had malfunctioned on the heater treater.

Form C-141
Page 2

State of New Mexico
Oil Conservation Division

Incident ID	nJEG1922759656
District RP	1RP-5641
Facility ID	fJEG1922759200
Application ID	pJEG1922758212

Was this a major release as defined by 19.15.29.7(A) NMAC? ☐ Yes ☑ No	If YES, for what reason(s) does the responsible party consider this a major release?
If YES, was immediate notice given to the OCD? By whom? To whom? When and by what means (phone, email, etc)?	

Initial Response

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

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

If all the actions described above have not been undertaken, explain why: Due to the small volume we were not able to recover any fluid. However, the site will be remediated according to the NMOCD Requirements.

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 Fejevary Title: Environmental Coordinator

Signature: Date: 7/3/19

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

OCD Only

Received by: Jim Griswold Date: 7/22/19

Form C-141
Page 3

State of New Mexico
Oil Conservation Division

Incident ID	
District RP	
Facility ID	
Application ID	

Site Assessment/Characterization

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

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

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

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

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

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

Form C-141
Page 4

State of New Mexico
Oil Conservation Division

Incident ID	
District RP	
Facility ID	
Application ID	

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

Printed Name: _____ Title: _____

Signature: _____ Date: _____

email: _____ Telephone: _____

OCD Only

Received by: _____ Date: _____

Form C-141
Page 5

State of New Mexico
Oil Conservation Division

Incident ID	
District RP	
Facility ID	
Application ID	

Remediation Plan

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

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

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

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

☐ Extents of contamination must be fully delineated.

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

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

Printed Name: _____ Title: _____

Signature: _____ Date: _____

email: _____ Telephone: _____

OCD Only

Received by: _____ Date: _____

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

Signature: _____ Date: _____

APPENDIX B
NMOSE Groundwater Data

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

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

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

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

POD Number	POD Sub-basin	County	Q 64	Q 16	Q 4	Sec	Tws	Rng	X	Y	Depth Well	Depth Water	Water Column
RA 12521 POD1	RA	LE	3	3	4	21	17S	32E	615127	3631271	105	92	13
RA 12522 POD1	RA	LE	3	3	4	21	17S	32E	614941	3631122	100		

Average Depth to Water: **92 feet**

Minimum Depth: **92 feet**

Maximum Depth: **92 feet**

Record Count: 2

Basin/County Search:

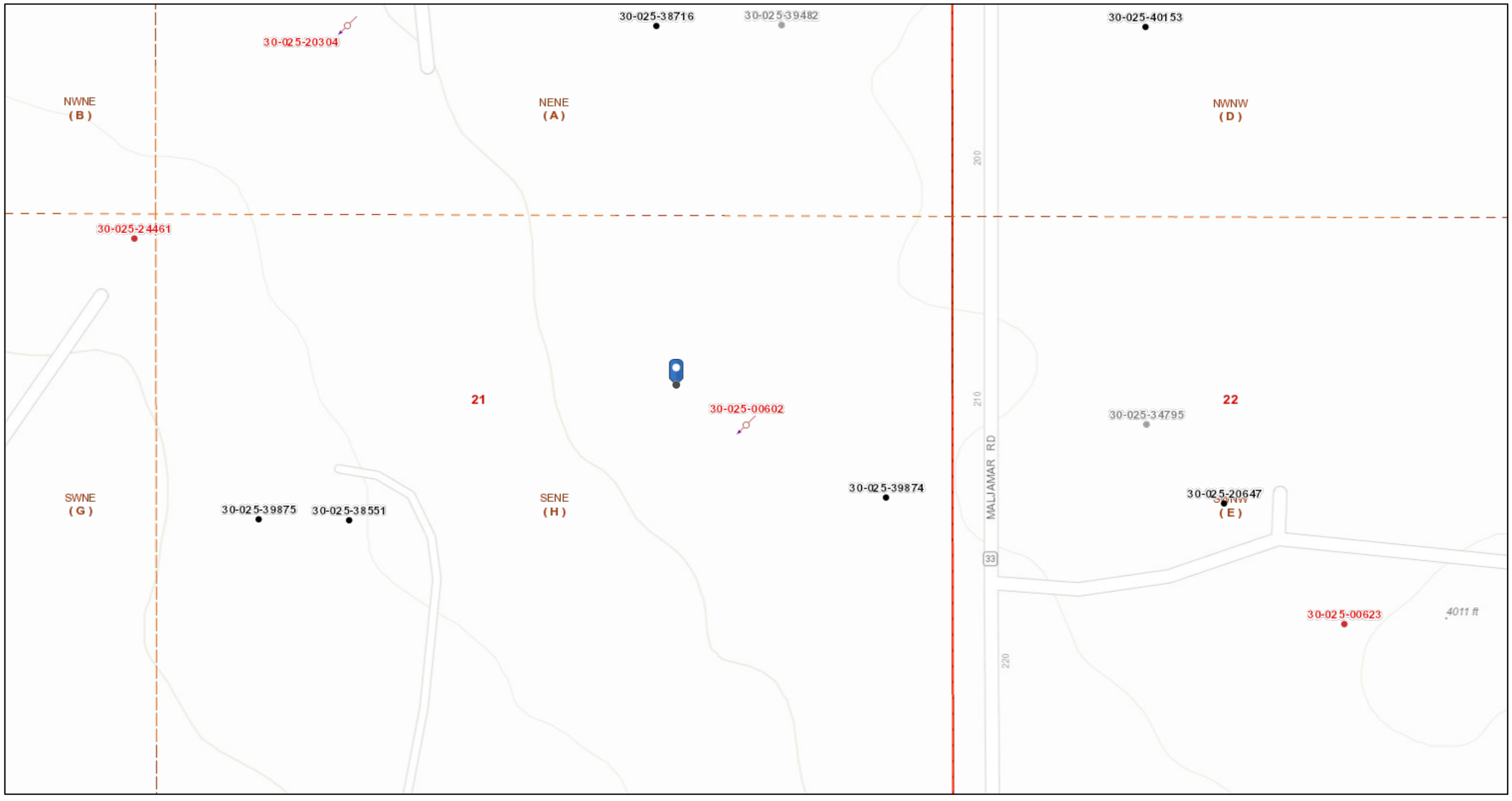
County: Lea

PLSS Search:

Section(s): 21 **Township:** 17S **Range:** 32E


1RP-5641
ConocoPhillips
Baish "A" Battery
Cave Karst Potential Map
Legend
Baish "A" Battery 32.822975, -103.764358
High
Low
Medium
Hwy 82
Maljamar
31
Baish "A" Battery 32.822975, -103.764358
muda Rd
529
Google Earth
N
2 mi

Baish "A" Battery



10/31/2019, 2:41:33 PM

1:2,257

0 0.02 0.04 0.09 mi

0 0.04 0.07 0.15 km

Well Locations - Small Scale
- Active
- New
- Plugged
- Cancelled
- Temporarily Abandoned

Well Locations - Large Scale
- Miscellaneous
- CO2 Active
- CO2 Cancelled
- CO2 New
- CO2, Plugged
- CO2, Temporarily Abandoned

- Gas Active
- Gas, Cancelled, Never Drilled
- Gas, New
- Gas, Plugged
- Gas, Temporarily Abandoned
- Injection, Active
- Injection, Cancelled
- Injection, New
- Injection, Plugged
- Injection, Temporarily Abandoned
- Oil, Active
- Oil, Cancelled
- Oil, New
- Oil, Plugged
- Oil, Temporarily Abondoned
- Salt Water Injection, Active
- Salt Water Injection, Cancelled
- Salt Water Injection, New
- Salt Water Injection, Plugged
- Salt Water InjectionTemporarily Abandoned
- Water, Active
- Water, Cancelled
- Water, New
- Water, Plugged

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

New Mexico Oil Conservation Division

NM OCD Oil and Gas Map. http://nm-emnrd.maps.arcgis.com/apps/webappviewer/: New Mexico Oil Conservation Division

APPENDIX C
Laboratory Analytical Data

CARDINAL Laboratories

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

July 09, 2019

JUSTIN WRIGHT

Conoco Phillips - Hobbs

P. O. BOX 325

Hobbs, NM 88240

RE: BAISH A BATTERY

Enclosed are the results of analyses for samples received by the laboratory on 07/02/19 11:00.

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

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

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

Accreditation applies to public drinking water matrices.

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

Sincerely,

Celey D. Keene

Lab Director/Quality Manager

CARDINAL Laboratories

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

Analytical Results For:

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

Received:	07/02/2019	Sampling Date:	07/01/2019
Reported:	07/09/2019	Sampling Type:	Soil
Project Name:	BAISH A BATTERY	Sampling Condition:	Cool & Intact
Project Number:	NONE GIVEN	Sample Received By:	Tamara Oldaker
Project Location:	COPC - LEA CO NM		

Sample ID: SP # 1 - SURFACE (H902258-01)

BTEX 8021B mg/kg Analyzed By: ms

Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
Benzene*	<2.00	2.00	07/03/2019	ND	1.91	95.7	2.00	0.375	
Toluene*	**6.20**	2.00	07/03/2019	ND	2.03	101	2.00	3.41	
Ethylbenzene*	**15.2**	2.00	07/03/2019	ND	1.94	96.9	2.00	2.42	
Total Xylenes*	**77.1**	6.00	07/03/2019	ND	5.82	97.0	6.00	1.52	
Total BTEX	**98.4**	12.0	07/03/2019	ND					

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

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

Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
Chloride	<16.0	16.0	07/03/2019	ND	416	104	400	0.00	

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

Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
GRO C6-C10*	**2230**	50.0	07/03/2019	ND	193	96.5	200	1.97	
DRO >C10-C28*	**10400**	50.0	07/03/2019	ND	190	95.2	200	5.09	
EXT DRO >C28-C36	**1570**	50.0	07/03/2019	ND					

Surrogate: 1-Chlorooctane *256 %* *41-142*

Surrogate: 1-Chlorooctadecane *394 %* *37.6-147*

Cardinal Laboratories *=Accredited Analyte

Celey D. Keene, Lab Director/Quality Manager

CARDINAL Laboratories

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

Analytical Results For:

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

Received:	07/02/2019	Sampling Date:	07/01/2019
Reported:	07/09/2019	Sampling Type:	Soil
Project Name:	BAISH A BATTERY	Sampling Condition:	Cool & Intact
Project Number:	NONE GIVEN	Sample Received By:	Tamara Oldaker
Project Location:	COPC - LEA CO NM		

Sample ID: SP # 1 - 2' (H902258-02)

BTEX 8021B mg/kg Analyzed By: ms

Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
Benzene*	<2.00	2.00	07/03/2019	ND	1.91	95.7	2.00	0.375	
Toluene*	**3.71**	2.00	07/03/2019	ND	2.03	101	2.00	3.41	
Ethylbenzene*	**11.3**	2.00	07/03/2019	ND	1.94	96.9	2.00	2.42	
Total Xylenes*	**46.7**	6.00	07/03/2019	ND	5.82	97.0	6.00	1.52	
Total BTEX	**61.7**	12.0	07/03/2019	ND					

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

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

Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
Chloride	<16.0	16.0	07/03/2019	ND	416	104	400	0.00	

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

Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
GRO C6-C10*	**1220**	50.0	07/03/2019	ND	193	96.5	200	1.97	
DRO >C10-C28*	**7050**	50.0	07/03/2019	ND	190	95.2	200	5.09	
EXT DRO >C28-C36	**1540**	50.0	07/03/2019	ND					

Surrogate: 1-Chlorooctane *199 %* *41-142*

Surrogate: 1-Chlorooctadecane *306 %* *37.6-147*

Cardinal Laboratories *=Accredited Analyte

Celey D. Keene, Lab Director/Quality Manager

CARDINAL Laboratories

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

Analytical Results For:

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

Received:	07/02/2019	Sampling Date:	07/01/2019
Reported:	07/09/2019	Sampling Type:	Soil
Project Name:	BAISH A BATTERY	Sampling Condition:	Cool & Intact
Project Number:	NONE GIVEN	Sample Received By:	Tamara Oldaker
Project Location:	COPC - LEA CO NM		

Sample ID: SP # 1 - 4' (H902258-03)

BTEX 8021B mg/kg Analyzed By: ms

Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
Benzene*	<0.050	0.050	07/03/2019	ND	1.91	95.7	2.00	0.375	
Toluene*	<0.050	0.050	07/03/2019	ND	2.03	101	2.00	3.41	
Ethylbenzene*	<0.050	0.050	07/03/2019	ND	1.94	96.9	2.00	2.42	
Total Xylenes*	**0.209**	0.150	07/03/2019	ND	5.82	97.0	6.00	1.52	
Total BTEX	<0.300	0.300	07/03/2019	ND					

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

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

Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
Chloride	<16.0	16.0	07/03/2019	ND	416	104	400	0.00	

TPH 8015M mg/kg Analyzed By: MS

Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
GRO C6-C10*	<50.0	50.0	07/03/2019	ND	193	96.5	200	1.97	
DRO >C10-C28*	**376**	50.0	07/03/2019	ND	190	95.2	200	5.09	
EXT DRO >C28-C36	**270**	50.0	07/03/2019	ND					

Surrogate: 1-Chlorooctane *104 %* *41-142*

Surrogate: 1-Chlorooctadecane *118 %* *37.6-147*

Cardinal Laboratories *=Accredited Analyte

Celey D. Keene, Lab Director/Quality Manager

CARDINAL Laboratories

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

Analytical Results For:

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

Received:	07/02/2019	Sampling Date:	07/01/2019
Reported:	07/09/2019	Sampling Type:	Soil
Project Name:	BAISH A BATTERY	Sampling Condition:	Cool & Intact
Project Number:	NONE GIVEN	Sample Received By:	Tamara Oldaker
Project Location:	COPC - LEA CO NM		

Sample ID: SP # 2 - SURFACE (H902258-04)

BTEX 8021B mg/kg Analyzed By: ms

Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
Benzene*	<1.00	1.00	07/04/2019	ND	1.63	81.6	2.00	2.28	QR-03
Toluene*	**9.35**	1.00	07/04/2019	ND	1.75	87.3	2.00	0.398	
Ethylbenzene*	**16.8**	1.00	07/04/2019	ND	1.68	84.2	2.00	3.08	QM-07
Total Xylenes*	**60.9**	3.00	07/04/2019	ND	5.11	85.1	6.00	2.75	QM-07
Total BTEX	**87.1**	6.00	07/04/2019	ND					

Surrogate: 4-Bromofluorobenzene (PID *110 %* *73.3-129*

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

Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
Chloride	**80.0**	16.0	07/03/2019	ND	416	104	400	0.00	

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

Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
GRO C6-C10*	**1480**	50.0	07/03/2019	ND	190	94.8	200	0.817	QM-07
DRO >C10-C28*	**17300**	50.0	07/03/2019	ND	183	91.6	200	0.350	QM-07
EXT DRO >C28-C36	**3200**	50.0	07/03/2019	ND					

Surrogate: 1-Chlorooctane *396 %* *41-142*

Surrogate: 1-Chlorooctadecane *543 %* *37.6-147*

Cardinal Laboratories *=Accredited Analyte

Celey D. Keene, Lab Director/Quality Manager

CARDINAL Laboratories

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

Analytical Results For:

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

Received:	07/02/2019	Sampling Date:	07/01/2019
Reported:	07/09/2019	Sampling Type:	Soil
Project Name:	BAISH A BATTERY	Sampling Condition:	Cool & Intact
Project Number:	NONE GIVEN	Sample Received By:	Tamara Oldaker
Project Location:	COPC - LEA CO NM		

Sample ID: SP # 2 - 2' (H902258-05)

BTEX 8021B mg/kg Analyzed By: ms

Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
Benzene*	<0.050	0.050	07/04/2019	ND	1.63	81.6	2.00	2.28	
Toluene*	<0.050	0.050	07/04/2019	ND	1.75	87.3	2.00	0.398	
Ethylbenzene*	<0.050	0.050	07/04/2019	ND	1.68	84.2	2.00	3.08	
Total Xylenes*	<0.150	0.150	07/04/2019	ND	5.11	85.1	6.00	2.75	
Total BTEX	<0.300	0.300	07/04/2019	ND					

Surrogate: 4-Bromofluorobenzene (PID *98.1 %* *73.3-129*

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

Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
Chloride	**32.0**	16.0	07/03/2019	ND	416	104	400	0.00	

TPH 8015M mg/kg Analyzed By: MS

Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
GRO C6-C10*	<10.0	10.0	07/03/2019	ND	190	94.8	200	0.817	
DRO >C10-C28*	**20.3**	10.0	07/03/2019	ND	183	91.6	200	0.350	
EXT DRO >C28-C36	**21.5**	10.0	07/03/2019	ND					

Surrogate: 1-Chlorooctane *68.3 %* *41-142*

Surrogate: 1-Chlorooctadecane *70.8 %* *37.6-147*

Cardinal Laboratories *=Accredited Analyte

Celey D. Keene, Lab Director/Quality Manager

CARDINAL Laboratories

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

Analytical Results For:

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

Received:	07/02/2019	Sampling Date:	07/01/2019
Reported:	07/09/2019	Sampling Type:	Soil
Project Name:	BAISH A BATTERY	Sampling Condition:	Cool & Intact
Project Number:	NONE GIVEN	Sample Received By:	Tamara Oldaker
Project Location:	COPC - LEA CO NM		

Sample ID: SP # 2 - 4' (H902258-06)

BTEX 8021B mg/kg Analyzed By: ms

Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
Benzene*	<0.050	0.050	07/04/2019	ND	1.63	81.6	2.00	2.28	
Toluene*	<0.050	0.050	07/04/2019	ND	1.75	87.3	2.00	0.398	
Ethylbenzene*	<0.050	0.050	07/04/2019	ND	1.68	84.2	2.00	3.08	
Total Xylenes*	<0.150	0.150	07/04/2019	ND	5.11	85.1	6.00	2.75	
Total BTEX	<0.300	0.300	07/04/2019	ND					

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

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

Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
Chloride	**32.0**	16.0	07/03/2019	ND	416	104	400	0.00	

TPH 8015M mg/kg Analyzed By: MS

Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
GRO C6-C10*	<10.0	10.0	07/03/2019	ND	190	94.8	200	0.817	
DRO >C10-C28*	<10.0	10.0	07/03/2019	ND	183	91.6	200	0.350	
EXT DRO >C28-C36	<10.0	10.0	07/03/2019	ND					

Surrogate: 1-Chlorooctane *67.3 %* *41-142*

Surrogate: 1-Chlorooctadecane *70.1 %* *37.6-147*

Cardinal Laboratories *=Accredited Analyte

Celey D. Keene, Lab Director/Quality Manager

CARDINAL Laboratories

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

Analytical Results For:

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

Received:	07/02/2019	Sampling Date:	07/01/2019
Reported:	07/09/2019	Sampling Type:	Soil
Project Name:	BAISH A BATTERY	Sampling Condition:	Cool & Intact
Project Number:	NONE GIVEN	Sample Received By:	Tamara Oldaker
Project Location:	COPC - LEA CO NM		

Sample ID: SP # 3 - SURFACE (H902258-07)

BTEX 8021B mg/kg Analyzed By: ms S-04

Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
Benzene*	<0.050	0.050	07/04/2019	ND	1.63	81.6	2.00	2.28	
Toluene*	**1.80**	0.050	07/04/2019	ND	1.75	87.3	2.00	0.398	
Ethylbenzene*	**3.06**	0.050	07/04/2019	ND	1.68	84.2	2.00	3.08	
Total Xylenes*	**11.6**	0.150	07/04/2019	ND	5.11	85.1	6.00	2.75	
Total BTEX	**16.5**	0.300	07/04/2019	ND					

Surrogate: 4-Bromofluorobenzene (PID *131 %* *73.3-129*

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

Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
Chloride	**1660**	16.0	07/03/2019	ND	416	104	400	0.00	

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

Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
GRO C6-C10*	**281**	50.0	07/03/2019	ND	190	94.8	200	0.817	
DRO >C10-C28*	**15600**	50.0	07/03/2019	ND	183	91.6	200	0.350	
EXT DRO >C28-C36	**4190**	50.0	07/03/2019	ND					

Surrogate: 1-Chlorooctane *145 %* *41-142*

Surrogate: 1-Chlorooctadecane *577 %* *37.6-147*

Cardinal Laboratories *=Accredited Analyte

Celey D. Keene, Lab Director/Quality Manager

CARDINAL Laboratories

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

Analytical Results For:

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

Received:	07/02/2019	Sampling Date:	07/01/2019
Reported:	07/09/2019	Sampling Type:	Soil
Project Name:	BAISH A BATTERY	Sampling Condition:	Cool & Intact
Project Number:	NONE GIVEN	Sample Received By:	Tamara Oldaker
Project Location:	COPC - LEA CO NM		

Sample ID: SP # 3 - 2' (H902258-08)

BTEX 8021B mg/kg Analyzed By: ms

Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
Benzene*	<0.050	0.050	07/04/2019	ND	1.63	81.6	2.00	2.28	
Toluene*	<0.050	0.050	07/04/2019	ND	1.75	87.3	2.00	0.398	
Ethylbenzene*	<0.050	0.050	07/04/2019	ND	1.68	84.2	2.00	3.08	
Total Xylenes*	<0.150	0.150	07/04/2019	ND	5.11	85.1	6.00	2.75	
Total BTEX	<0.300	0.300	07/04/2019	ND					

Surrogate: 4-Bromofluorobenzene (PID *98.8 %* *73.3-129*

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

Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
Chloride	**336**	16.0	07/03/2019	ND	416	104	400	0.00	

TPH 8015M mg/kg Analyzed By: MS

Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
GRO C6-C10*	<10.0	10.0	07/05/2019	ND	190	94.8	200	0.817	
DRO >C10-C28*	**1430**	10.0	07/05/2019	ND	183	91.6	200	0.350	
EXT DRO >C28-C36	**978**	10.0	07/05/2019	ND					

Surrogate: 1-Chlorooctane *65.3 %* *41-142*

Surrogate: 1-Chlorooctadecane *106 %* *37.6-147*

Cardinal Laboratories *=Accredited Analyte

Celey D. Keene, Lab Director/Quality Manager

CARDINAL Laboratories

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

Analytical Results For:

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

Received:	07/02/2019	Sampling Date:	07/01/2019
Reported:	07/09/2019	Sampling Type:	Soil
Project Name:	BAISH A BATTERY	Sampling Condition:	Cool & Intact
Project Number:	NONE GIVEN	Sample Received By:	Tamara Oldaker
Project Location:	COPC - LEA CO NM		

Sample ID: SP # 3 - 4' (H902258-09)

BTEX 8021B mg/kg Analyzed By: ms

Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
Benzene*	<0.050	0.050	07/04/2019	ND	1.63	81.6	2.00	2.28	
Toluene*	<0.050	0.050	07/04/2019	ND	1.75	87.3	2.00	0.398	
Ethylbenzene*	<0.050	0.050	07/04/2019	ND	1.68	84.2	2.00	3.08	
Total Xylenes*	<0.150	0.150	07/04/2019	ND	5.11	85.1	6.00	2.75	
Total BTEX	<0.300	0.300	07/04/2019	ND					

Surrogate: 4-Bromofluorobenzene (PID *98.1 %* *73.3-129*

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

Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
Chloride	**96.0**	16.0	07/03/2019	ND	416	104	400	0.00	

TPH 8015M mg/kg Analyzed By: MS

Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
GRO C6-C10*	<10.0	10.0	07/05/2019	ND	190	94.8	200	0.817	
DRO >C10-C28*	**1810**	10.0	07/05/2019	ND	183	91.6	200	0.350	
EXT DRO >C28-C36	**1000**	10.0	07/05/2019	ND					

Surrogate: 1-Chlorooctane *72.2 %* *41-142*

Surrogate: 1-Chlorooctadecane *108 %* *37.6-147*

Cardinal Laboratories *=Accredited Analyte

Celey D. Keene, Lab Director/Quality Manager

CARDINAL Laboratories

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

Analytical Results For:

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

Received:	07/02/2019	Sampling Date:	07/01/2019
Reported:	07/09/2019	Sampling Type:	Soil
Project Name:	BAISH A BATTERY	Sampling Condition:	Cool & Intact
Project Number:	NONE GIVEN	Sample Received By:	Tamara Oldaker
Project Location:	COPC - LEA CO NM		

Sample ID: SP # 3 - 6' (H902258-10)

BTEX 8021B mg/kg Analyzed By: ms

Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
Benzene*	<0.050	0.050	07/04/2019	ND	1.63	81.6	2.00	2.28	
Toluene*	<0.050	0.050	07/04/2019	ND	1.75	87.3	2.00	0.398	
Ethylbenzene*	<0.050	0.050	07/04/2019	ND	1.68	84.2	2.00	3.08	
Total Xylenes*	<0.150	0.150	07/04/2019	ND	5.11	85.1	6.00	2.75	
Total BTEX	<0.300	0.300	07/04/2019	ND					

Surrogate: 4-Bromofluorobenzene (PID *99.5 %* *73.3-129*

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

Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
Chloride	**192**	16.0	07/03/2019	ND	416	104	400	0.00	

TPH 8015M mg/kg Analyzed By: MS

Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
GRO C6-C10*	<10.0	10.0	07/03/2019	ND	190	94.8	200	0.817	
DRO >C10-C28*	**192**	10.0	07/03/2019	ND	183	91.6	200	0.350	
EXT DRO >C28-C36	**109**	10.0	07/03/2019	ND					

Surrogate: 1-Chlorooctane *67.1 %* *41-142*

Surrogate: 1-Chlorooctadecane *83.7 %* *37.6-147*

Cardinal Laboratories *=Accredited Analyte

Celey D. Keene, Lab Director/Quality Manager

CARDINAL Laboratories

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

Analytical Results For:

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

Received:	07/02/2019	Sampling Date:	07/01/2019
Reported:	07/09/2019	Sampling Type:	Soil
Project Name:	BAISH A BATTERY	Sampling Condition:	Cool & Intact
Project Number:	NONE GIVEN	Sample Received By:	Tamara Oldaker
Project Location:	COPC - LEA CO NM		

Sample ID: SP # 3 - 8' (H902258-11)

BTEX 8021B mg/kg Analyzed By: ms

Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
Benzene*	<0.050	0.050	07/04/2019	ND	1.63	81.6	2.00	2.28	
Toluene*	<0.050	0.050	07/04/2019	ND	1.75	87.3	2.00	0.398	
Ethylbenzene*	<0.050	0.050	07/04/2019	ND	1.68	84.2	2.00	3.08	
Total Xylenes*	<0.150	0.150	07/04/2019	ND	5.11	85.1	6.00	2.75	
Total BTEX	<0.300	0.300	07/04/2019	ND					

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

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

Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
Chloride	**144**	16.0	07/03/2019	ND	416	104	400	0.00	

TPH 8015M mg/kg Analyzed By: MS

Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
GRO C6-C10*	<10.0	10.0	07/03/2019	ND	190	94.8	200	0.817	
DRO >C10-C28*	**95.7**	10.0	07/03/2019	ND	183	91.6	200	0.350	
EXT DRO >C28-C36	**51.0**	10.0	07/03/2019	ND					

Surrogate: 1-Chlorooctane *72.3 %* *41-142*

Surrogate: 1-Chlorooctadecane *77.0 %* *37.6-147*

Cardinal Laboratories *=Accredited Analyte

Celey D. Keene, Lab Director/Quality Manager

CARDINAL Laboratories

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

Analytical Results For:

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

Received:	07/02/2019	Sampling Date:	07/01/2019
Reported:	07/09/2019	Sampling Type:	Soil
Project Name:	BAISH A BATTERY	Sampling Condition:	Cool & Intact
Project Number:	NONE GIVEN	Sample Received By:	Tamara Oldaker
Project Location:	COPC - LEA CO NM		

Sample ID: SP # 4 - SURFACE (H902258-12)

BTEX 8021B mg/kg Analyzed By: ms

Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
Benzene*	**2.44**	1.00	07/04/2019	ND	1.63	81.6	2.00	2.28	
Toluene*	**25.4**	1.00	07/04/2019	ND	1.75	87.3	2.00	0.398	
Ethylbenzene*	**18.0**	1.00	07/04/2019	ND	1.68	84.2	2.00	3.08	
Total Xylenes*	**63.1**	3.00	07/04/2019	ND	5.11	85.1	6.00	2.75	
Total BTEX	**109**	6.00	07/04/2019	ND					

Surrogate: 4-Bromofluorobenzene (PID *112 %* *73.3-129*

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

Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
Chloride	**32.0**	16.0	07/03/2019	ND	416	104	400	0.00	

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

Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
GRO C6-C10*	**1690**	50.0	07/03/2019	ND	190	94.8	200	0.817	
DRO >C10-C28*	**17700**	50.0	07/03/2019	ND	183	91.6	200	0.350	
EXT DRO >C28-C36	**2900**	50.0	07/03/2019	ND					

Surrogate: 1-Chlorooctane *392 %* *41-142*

Surrogate: 1-Chlorooctadecane *562 %* *37.6-147*

Cardinal Laboratories *=Accredited Analyte

Celey D. Keene, Lab Director/Quality Manager

CARDINAL Laboratories

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

Analytical Results For:

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

Received:	07/02/2019	Sampling Date:	07/01/2019
Reported:	07/09/2019	Sampling Type:	Soil
Project Name:	BAISH A BATTERY	Sampling Condition:	Cool & Intact
Project Number:	NONE GIVEN	Sample Received By:	Tamara Oldaker
Project Location:	COPC - LEA CO NM		

Sample ID: SP # 4 - 2' (H902258-13)

BTEX 8021B mg/kg Analyzed By: ms

Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
Benzene*	<0.050	0.050	07/04/2019	ND	1.63	81.6	2.00	2.28	
Toluene*	**0.064**	0.050	07/04/2019	ND	1.75	87.3	2.00	0.398	
Ethylbenzene*	**0.166**	0.050	07/04/2019	ND	1.68	84.2	2.00	3.08	
Total Xylenes*	**0.634**	0.150	07/04/2019	ND	5.11	85.1	6.00	2.75	
Total BTEX	**0.864**	0.300	07/04/2019	ND					

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

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

Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
Chloride	**32.0**	16.0	07/03/2019	ND	416	104	400	3.92	

TPH 8015M mg/kg Analyzed By: MS

Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
GRO C6-C10*	**20.7**	10.0	07/03/2019	ND	190	94.8	200	0.817	
DRO >C10-C28*	**142**	10.0	07/03/2019	ND	183	91.6	200	0.350	
EXT DRO >C28-C36	**51.6**	10.0	07/03/2019	ND					

Surrogate: 1-Chlorooctane *77.0 %* *41-142*

Surrogate: 1-Chlorooctadecane *81.7 %* *37.6-147*

Cardinal Laboratories *=Accredited Analyte

Celey D. Keene, Lab Director/Quality Manager

CARDINAL Laboratories

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

Analytical Results For:

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

Received:	07/02/2019	Sampling Date:	07/01/2019
Reported:	07/09/2019	Sampling Type:	Soil
Project Name:	BAISH A BATTERY	Sampling Condition:	Cool & Intact
Project Number:	NONE GIVEN	Sample Received By:	Tamara Oldaker
Project Location:	COPC - LEA CO NM		

Sample ID: SP # 4 - 4' (H902258-14)

BTEX 8021B mg/kg Analyzed By: ms

Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
Benzene*	<0.200	0.200	07/04/2019	ND	1.63	81.6	2.00	2.28	
Toluene*	**4.53**	0.200	07/04/2019	ND	1.75	87.3	2.00	0.398	
Ethylbenzene*	**4.39**	0.200	07/04/2019	ND	1.68	84.2	2.00	3.08	
Total Xylenes*	**14.3**	0.600	07/04/2019	ND	5.11	85.1	6.00	2.75	
Total BTEX	**23.3**	1.20	07/04/2019	ND					

Surrogate: 4-Bromofluorobenzene (PID *112 %* *73.3-129*

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

Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
Chloride	**32.0**	16.0	07/03/2019	ND	416	104	400	3.92	

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

Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
GRO C6-C10*	**373**	10.0	07/09/2019	ND	190	94.8	200	0.817	
DRO >C10-C28*	**2230**	10.0	07/09/2019	ND	183	91.6	200	0.350	
EXT DRO >C28-C36	**393**	10.0	07/09/2019	ND					

Surrogate: 1-Chlorooctane *156 %* *41-142*

Surrogate: 1-Chlorooctadecane *169 %* *37.6-147*

Cardinal Laboratories *=Accredited Analyte

Celey D. Keene, Lab Director/Quality Manager

CARDINAL Laboratories

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

Analytical Results For:

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

Received:	07/02/2019	Sampling Date:	07/01/2019
Reported:	07/09/2019	Sampling Type:	Soil
Project Name:	BAISH A BATTERY	Sampling Condition:	Cool & Intact
Project Number:	NONE GIVEN	Sample Received By:	Tamara Oldaker
Project Location:	COPC - LEA CO NM		

Sample ID: SP # 5 - SURFACE (H902258-15)

BTEX 8021B mg/kg Analyzed By: ms

Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
Benzene*	**0.300**	0.050	07/04/2019	ND	1.63	81.6	2.00	2.28	
Toluene*	**4.61**	0.050	07/04/2019	ND	1.75	87.3	2.00	0.398	
Ethylbenzene*	**3.50**	0.050	07/04/2019	ND	1.68	84.2	2.00	3.08	
Total Xylenes*	**12.1**	0.150	07/04/2019	ND	5.11	85.1	6.00	2.75	
Total BTEX	**20.5**	0.300	07/04/2019	ND					

Surrogate: 4-Bromofluorobenzene (PID *128 %* *73.3-129*

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

Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
Chloride	**32.0**	16.0	07/03/2019	ND	416	104	400	3.92	

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

Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
GRO C6-C10*	**682**	50.0	07/03/2019	ND	190	94.8	200	0.817	
DRO >C10-C28*	**32500**	50.0	07/03/2019	ND	183	91.6	200	0.350	
EXT DRO >C28-C36	**7580**	50.0	07/03/2019	ND					

Surrogate: 1-Chlorooctane *205 %* *41-142*

Surrogate: 1-Chlorooctadecane *1300 %* *37.6-147*

Cardinal Laboratories *=Accredited Analyte

Celey D. Keene, Lab Director/Quality Manager

CARDINAL Laboratories

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

Analytical Results For:

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

Received:	07/02/2019	Sampling Date:	07/01/2019
Reported:	07/09/2019	Sampling Type:	Soil
Project Name:	BAISH A BATTERY	Sampling Condition:	Cool & Intact
Project Number:	NONE GIVEN	Sample Received By:	Tamara Oldaker
Project Location:	COPC - LEA CO NM		

Sample ID: SP # 5 - 2' (H902258-16)

BTEX 8021B mg/kg Analyzed By: ms

Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
Benzene*	**0.055**	0.050	07/04/2019	ND	1.63	81.6	2.00	2.28	
Toluene*	**0.292**	0.050	07/04/2019	ND	1.75	87.3	2.00	0.398	
Ethylbenzene*	**0.372**	0.050	07/04/2019	ND	1.68	84.2	2.00	3.08	
Total Xylenes*	**1.26**	0.150	07/04/2019	ND	5.11	85.1	6.00	2.75	
Total BTEX	**1.97**	0.300	07/04/2019	ND					

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

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

Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
Chloride	**128**	16.0	07/03/2019	ND	416	104	400	3.92	

TPH 8015M mg/kg Analyzed By: MS

Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
GRO C6-C10*	**22.3**	10.0	07/05/2019	ND	190	94.8	200	0.817	
DRO >C10-C28*	**819**	10.0	07/05/2019	ND	183	91.6	200	0.350	
EXT DRO >C28-C36	**572**	10.0	07/05/2019	ND					

Surrogate: 1-Chlorooctane *55.4 %* *41-142*

Surrogate: 1-Chlorooctadecane *75.5 %* *37.6-147*

Cardinal Laboratories *=Accredited Analyte

Celey D. Keene, Lab Director/Quality Manager

CARDINAL Laboratories

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

Analytical Results For:

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

Received:	07/02/2019	Sampling Date:	07/01/2019
Reported:	07/09/2019	Sampling Type:	Soil
Project Name:	BAISH A BATTERY	Sampling Condition:	Cool & Intact
Project Number:	NONE GIVEN	Sample Received By:	Tamara Oldaker
Project Location:	COPC - LEA CO NM		

Sample ID: SP # 5 - 4' (H902258-17)

BTEX 8021B mg/kg Analyzed By: ms

Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
Benzene*	<0.050	0.050	07/04/2019	ND	1.63	81.6	2.00	2.28	
Toluene*	**0.104**	0.050	07/04/2019	ND	1.75	87.3	2.00	0.398	
Ethylbenzene*	**0.138**	0.050	07/04/2019	ND	1.68	84.2	2.00	3.08	
Total Xylenes*	**0.461**	0.150	07/04/2019	ND	5.11	85.1	6.00	2.75	
Total BTEX	**0.703**	0.300	07/04/2019	ND					

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

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

Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
Chloride	**288**	16.0	07/03/2019	ND	416	104	400	3.92	

TPH 8015M mg/kg Analyzed By: MS

Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
GRO C6-C10*	<10.0	10.0	07/05/2019	ND	190	94.8	200	0.817	
DRO >C10-C28*	**412**	10.0	07/05/2019	ND	183	91.6	200	0.350	
EXT DRO >C28-C36	**315**	10.0	07/05/2019	ND					

Surrogate: 1-Chlorooctane *71.7 %* *41-142*

Surrogate: 1-Chlorooctadecane *108 %* *37.6-147*

Cardinal Laboratories *=Accredited Analyte

Celey D. Keene, Lab Director/Quality Manager

CARDINAL Laboratories

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

Analytical Results For:

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

Received:	07/02/2019	Sampling Date:	07/01/2019
Reported:	07/09/2019	Sampling Type:	Soil
Project Name:	BAISH A BATTERY	Sampling Condition:	Cool & Intact
Project Number:	NONE GIVEN	Sample Received By:	Tamara Oldaker
Project Location:	COPC - LEA CO NM		

Sample ID: SP # 6 - SURFACE (H902258-18)

BTEX 8021B mg/kg Analyzed By: ms

Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
Benzene*	<0.500	0.500	07/04/2019	ND	1.63	81.6	2.00	2.28	
Toluene*	**9.45**	0.500	07/04/2019	ND	1.75	87.3	2.00	0.398	
Ethylbenzene*	**11.5**	0.500	07/04/2019	ND	1.68	84.2	2.00	3.08	
Total Xylenes*	**43.9**	1.50	07/04/2019	ND	5.11	85.1	6.00	2.75	
Total BTEX	**64.9**	3.00	07/04/2019	ND					

Surrogate: 4-Bromofluorobenzene (PID *123 %* *73.3-129*

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

Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
Chloride	<16.0	16.0	07/03/2019	ND	416	104	400	3.92	

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

Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
GRO C6-C10*	**1490**	50.0	07/03/2019	ND	190	94.8	200	0.817	
DRO >C10-C28*	**22000**	50.0	07/03/2019	ND	183	91.6	200	0.350	
EXT DRO >C28-C36	**4380**	50.0	07/03/2019	ND					

Surrogate: 1-Chlorooctane *443 %* *41-142*

Surrogate: 1-Chlorooctadecane *683 %* *37.6-147*

Cardinal Laboratories *=Accredited Analyte

Celey D. Keene, Lab Director/Quality Manager

CARDINAL Laboratories

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

Analytical Results For:

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

Received:	07/02/2019	Sampling Date:	07/01/2019
Reported:	07/09/2019	Sampling Type:	Soil
Project Name:	BAISH A BATTERY	Sampling Condition:	Cool & Intact
Project Number:	NONE GIVEN	Sample Received By:	Tamara Oldaker
Project Location:	COPC - LEA CO NM		

Sample ID: SP # 6 - 2' (H902258-19)

BTEX 8021B mg/kg Analyzed By: ms

Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
Benzene*	<0.050	0.050	07/04/2019	ND	1.63	81.6	2.00	2.28	
Toluene*	**0.497**	0.050	07/04/2019	ND	1.75	87.3	2.00	0.398	
Ethylbenzene*	**0.092**	0.050	07/04/2019	ND	1.68	84.2	2.00	3.08	
Total Xylenes*	<0.150	0.150	07/04/2019	ND	5.11	85.1	6.00	2.75	
Total BTEX	**0.726**	0.300	07/04/2019	ND					

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

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

Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
Chloride	**16.0**	16.0	07/03/2019	ND	416	104	400	3.92	

TPH 8015M mg/kg Analyzed By: MS

Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
GRO C6-C10*	**11.0**	10.0	07/05/2019	ND	190	94.8	200	0.817	
DRO >C10-C28*	**416**	10.0	07/05/2019	ND	183	91.6	200	0.350	
EXT DRO >C28-C36	**309**	10.0	07/05/2019	ND					

Surrogate: 1-Chlorooctane *68.2 %* *41-142*

Surrogate: 1-Chlorooctadecane *108 %* *37.6-147*

Cardinal Laboratories *=Accredited Analyte

Celey D. Keene, Lab Director/Quality Manager

CARDINAL Laboratories

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

Analytical Results For:

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

Received:	07/02/2019	Sampling Date:	07/01/2019
Reported:	07/09/2019	Sampling Type:	Soil
Project Name:	BAISH A BATTERY	Sampling Condition:	Cool & Intact
Project Number:	NONE GIVEN	Sample Received By:	Tamara Oldaker
Project Location:	COPC - LEA CO NM		

Sample ID: SP # 6 - 4' (H902258-20)

BTEX 8021B mg/kg Analyzed By: ms

Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
Benzene*	<0.050	0.050	07/04/2019	ND	1.63	81.6	2.00	2.28	
Toluene*	<0.050	0.050	07/04/2019	ND	1.75	87.3	2.00	0.398	
Ethylbenzene*	<0.050	0.050	07/04/2019	ND	1.68	84.2	2.00	3.08	
Total Xylenes*	<0.150	0.150	07/04/2019	ND	5.11	85.1	6.00	2.75	
Total BTEX	<0.300	0.300	07/04/2019	ND					

Surrogate: 4-Bromofluorobenzene (PID *99.9 %* *73.3-129*

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

Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
Chloride	**32.0**	16.0	07/03/2019	ND	416	104	400	3.92	

TPH 8015M mg/kg Analyzed By: MS

Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
GRO C6-C10*	<10.0	10.0	07/05/2019	ND	190	94.8	200	0.817	
DRO >C10-C28*	**1430**	10.0	07/05/2019	ND	183	91.6	200	0.350	
EXT DRO >C28-C36	**1120**	10.0	07/05/2019	ND					

Surrogate: 1-Chlorooctane *69.5 %* *41-142*

Surrogate: 1-Chlorooctadecane *141 %* *37.6-147*

Cardinal Laboratories *=Accredited Analyte

Celey D. Keene, Lab Director/Quality Manager

CARDINAL Laboratories

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

Analytical Results For:

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

Received:	07/02/2019	Sampling Date:	07/01/2019
Reported:	07/09/2019	Sampling Type:	Soil
Project Name:	BAISH A BATTERY	Sampling Condition:	Cool & Intact
Project Number:	NONE GIVEN	Sample Received By:	Tamara Oldaker
Project Location:	COPC - LEA CO NM		

Sample ID: SP # 6 - 6' (H902258-21)

BTEX 8021B mg/kg Analyzed By: ms

Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
Benzene*	<0.050	0.050	07/04/2019	ND	1.63	81.6	2.00	2.28	
Toluene*	<0.050	0.050	07/04/2019	ND	1.75	87.3	2.00	0.398	
Ethylbenzene*	<0.050	0.050	07/04/2019	ND	1.68	84.2	2.00	3.08	
Total Xylenes*	<0.150	0.150	07/04/2019	ND	5.11	85.1	6.00	2.75	
Total BTEX	<0.300	0.300	07/04/2019	ND					

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

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

Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
Chloride	**16.0**	16.0	07/03/2019	ND	416	104	400	3.92	

TPH 8015M mg/kg Analyzed By: MS

Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
GRO C6-C10*	<10.0	10.0	07/03/2019	ND	190	94.8	200	0.817	
DRO >C10-C28*	**12.1**	10.0	07/03/2019	ND	183	91.6	200	0.350	
EXT DRO >C28-C36	**14.4**	10.0	07/03/2019	ND					

Surrogate: 1-Chlorooctane *75.4 %* *41-142*

Surrogate: 1-Chlorooctadecane *74.3 %* *37.6-147*

Cardinal Laboratories

*=Accredited Analyte

Celey D. Keene, Lab Director/Quality Manager

CARDINAL Laboratories

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

Analytical Results For:

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

Received:	07/02/2019	Sampling Date:	07/01/2019
Reported:	07/09/2019	Sampling Type:	Soil
Project Name:	BAISH A BATTERY	Sampling Condition:	Cool & Intact
Project Number:	NONE GIVEN	Sample Received By:	Tamara Oldaker
Project Location:	COPC - LEA CO NM		

Sample ID: SP # 7 - SURFACE (H902258-22)

BTEX 8021B mg/kg Analyzed By: ms

Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
Benzene*	**0.515**	0.500	07/04/2019	ND	1.63	81.6	2.00	2.28	
Toluene*	**11.0**	0.500	07/04/2019	ND	1.75	87.3	2.00	0.398	
Ethylbenzene*	**14.4**	0.500	07/04/2019	ND	1.68	84.2	2.00	3.08	
Total Xylenes*	**48.6**	1.50	07/04/2019	ND	5.11	85.1	6.00	2.75	
Total BTEX	**74.5**	3.00	07/04/2019	ND					

Surrogate: 4-Bromofluorobenzene (PID *123 %* *73.3-129*

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

Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
Chloride	<16.0	16.0	07/03/2019	ND	416	104	400	3.92	

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

Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
GRO C6-C10*	**1580**	50.0	07/03/2019	ND	190	94.8	200	0.817	
DRO >C10-C28*	**18600**	50.0	07/03/2019	ND	183	91.6	200	0.350	
EXT DRO >C28-C36	**3700**	50.0	07/03/2019	ND					

Surrogate: 1-Chlorooctane *457 %* *41-142*

Surrogate: 1-Chlorooctadecane *538 %* *37.6-147*

Cardinal Laboratories *=Accredited Analyte

Celey D. Keene, Lab Director/Quality Manager

CARDINAL Laboratories

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

Analytical Results For:

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

Received:	07/02/2019	Sampling Date:	07/01/2019
Reported:	07/09/2019	Sampling Type:	Soil
Project Name:	BAISH A BATTERY	Sampling Condition:	Cool & Intact
Project Number:	NONE GIVEN	Sample Received By:	Tamara Oldaker
Project Location:	COPC - LEA CO NM		

Sample ID: SP # 7 - 2' (H902258-23)

BTEX 8021B mg/kg Analyzed By: ms

Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
Benzene*	<0.050	0.050	07/04/2019	ND	1.63	81.6	2.00	2.28	
Toluene*	<0.050	0.050	07/04/2019	ND	1.75	87.3	2.00	0.398	
Ethylbenzene*	**0.059**	0.050	07/04/2019	ND	1.68	84.2	2.00	3.08	
Total Xylenes*	**0.225**	0.150	07/04/2019	ND	5.11	85.1	6.00	2.75	
Total BTEX	<0.300	0.300	07/04/2019	ND					

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

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

Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
Chloride	**16.0**	16.0	07/03/2019	ND	416	104	400	3.92	

TPH 8015M mg/kg Analyzed By: MS

Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
GRO C6-C10*	**12.8**	10.0	07/03/2019	ND	190	94.8	200	0.817	
DRO >C10-C28*	**442**	10.0	07/03/2019	ND	183	91.6	200	0.350	
EXT DRO >C28-C36	**122**	10.0	07/03/2019	ND					

Surrogate: 1-Chlorooctane *76.6 %* *41-142*

Surrogate: 1-Chlorooctadecane *85.7 %* *37.6-147*

Cardinal Laboratories *=Accredited Analyte

Celey D. Keene, Lab Director/Quality Manager

CARDINAL Laboratories

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

Analytical Results For:

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

Received:	07/02/2019	Sampling Date:	07/01/2019
Reported:	07/09/2019	Sampling Type:	Soil
Project Name:	BAISH A BATTERY	Sampling Condition:	Cool & Intact
Project Number:	NONE GIVEN	Sample Received By:	Tamara Oldaker
Project Location:	COPC - LEA CO NM		

Sample ID: SP # 7 - 4' (H902258-24)

BTEX 8021B mg/kg Analyzed By: ms

Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
Benzene*	<0.050	0.050	07/03/2019	ND	1.61	80.7	2.00	0.0650	
Toluene*	**0.198**	0.050	07/03/2019	ND	1.71	85.6	2.00	0.670	
Ethylbenzene*	**0.139**	0.050	07/03/2019	ND	1.64	81.9	2.00	0.327	
Total Xylenes*	**0.401**	0.150	07/03/2019	ND	4.97	82.9	6.00	0.539	
Total BTEX	**0.737**	0.300	07/03/2019	ND					

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

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

Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
Chloride	**64.0**	16.0	07/03/2019	ND	416	104	400	3.92	

TPH 8015M mg/kg Analyzed By: MS

Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
GRO C6-C10*	**24.1**	10.0	07/04/2019	ND	206	103	200	2.41	
DRO >C10-C28*	**912**	10.0	07/04/2019	ND	208	104	200	3.99	
EXT DRO >C28-C36	**193**	10.0	07/04/2019	ND					

Surrogate: 1-Chlorooctane *84.1 %* *41-142*

Surrogate: 1-Chlorooctadecane *108 %* *37.6-147*

Cardinal Laboratories *=Accredited Analyte

Celey D. Keene, Lab Director/Quality Manager

CARDINAL Laboratories

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

Analytical Results For:

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

Received:	07/02/2019	Sampling Date:	07/01/2019
Reported:	07/09/2019	Sampling Type:	Soil
Project Name:	BAISH A BATTERY	Sampling Condition:	Cool & Intact
Project Number:	NONE GIVEN	Sample Received By:	Tamara Oldaker
Project Location:	COPC - LEA CO NM		

Sample ID: SP # 7 - 6' (H902258-25)

BTEX 8021B mg/kg Analyzed By: ms

Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
Benzene*	<0.050	0.050	07/03/2019	ND	1.61	80.7	2.00	0.0650	
Toluene*	<0.050	0.050	07/03/2019	ND	1.71	85.6	2.00	0.670	
Ethylbenzene*	<0.050	0.050	07/03/2019	ND	1.64	81.9	2.00	0.327	
Total Xylenes*	<0.150	0.150	07/03/2019	ND	4.97	82.9	6.00	0.539	
Total BTEX	<0.300	0.300	07/03/2019	ND					

Surrogate: 4-Bromofluorobenzene (PID *99.2 %* *73.3-129*

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

Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
Chloride	**16.0**	16.0	07/03/2019	ND	416	104	400	3.92	

TPH 8015M mg/kg Analyzed By: MS

Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
GRO C6-C10*	<10.0	10.0	07/05/2019	ND	206	103	200	2.41	
DRO >C10-C28*	**107**	10.0	07/05/2019	ND	208	104	200	3.99	
EXT DRO >C28-C36	**87.1**	10.0	07/05/2019	ND					

Surrogate: 1-Chlorooctane *68.7 %* *41-142*

Surrogate: 1-Chlorooctadecane *82.6 %* *37.6-147*

Cardinal Laboratories *=Accredited Analyte

Celey D. Keene, Lab Director/Quality Manager

CARDINAL Laboratories

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

Notes and Definitions

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

Cardinal Laboratories *=Accredited Analyte

Celey D. Keene, Lab Director/Quality Manager

CARDINAL LABORATORIES

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

Page_____ of _____

Company Name: Baish A Battery
Project Manager: Justin Wright
Address:
City: Hobbs State: NM Zip: 88240
Phone #: 575-631-9052 Fax #:
Project #: Project Owner: COPC
Project Name: Baish A Battery
Project Location: Lea County, NM
Sampler Name: Justin Wright

BILL TO

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

ANALYSIS REQUEST

FOR LAB USE ONLY Lab I.D.	Sample I.D.	(G)RAB OR (C)OMP.	# CONTAINERS	MATRIX: GROUNDWATER	WASTEWATER	SOIL	OIL	SLUDGE	OTHER:	PRESERV.: ACID/BASE:	ICE / COOL	OTHER:	SAMPLING: DATE	TIME	Chlorides -	TPH -	BTEX
H902258																	
1	SP#1-Surface	G				✓					✓		7-1	7:14	✓	✓	✓
2	SP#1-2'	G				✓					✓		7-1	7:18	✓	✓	✓
3	SP#1-4'	G				✓					✓		7-1	7:23	✓	✓	✓
4	SP#2-Surface	G				✓					✓		7-1	7:28	✓	✓	✓
5	SP#2-2'	G				✓					✓		7-1	7:34	✓	✓	✓
6	SP#2-4'	G				✓					✓		7-1	7:39	✓	✓	✓
7	SP#3-Surface	G				✓					✓		7-1	7:45	✓	✓	✓
8	SP#3-2'	G				✓					✓		7-1	7:49	✓	✓	✓
9	SP#3-4'	G				✓					✓		7-1	7:54	✓	✓	✓
10	SP#3-6'	G				✓					✓		7-1	8:00	✓	✓	✓

Sampler Relinquished: Date: 7-2-19 Time: 11:00 AM
Relinquished By: Received By: Tamara Oldaker
Date: Received By:
Time:

Delivered By: (Circle One) Temp.
Sampler - UPS - Bus - Other: 3.3° #97

Sample Condition: Cool: Yes / No; Intact: Yes / No
CHECKED BY: (Initials) TO

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

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

CARDINAL LABORATORIES

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

Page_____ of _____

Company Name:	ConocoPhillips
Project Manager:	Justin Wright
Address:	
City:	Hobbs
State:	NM
Zip:	88240
Phone #:	575-631-6982
Fax #:	
Project Owner:	COPC
Project #:	
Project Name:	Baish A Battery
Project Location:	Lea County, NM
Sampler Name:	Justin Wright

BILL TO

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

ANALYSIS REQUEST

FOR LAB USE ONLY Lab I.D.	Sample I.D.	(G)RAB OR (C)OMP.	# CONTAINERS	MATRIX: GROUNDWATER	WASTEWATER	SOIL	OIL	SLUDGE	OTHER:	PRESERV.: ACID/BASE:	ICE / COOL	OTHER:	SAMPLING: DATE	TIME	Chlorides	TPH	BTEX
H902258 11	SP#3-8'	G				✓					✓		7-1	8:00	✓	✓	✓
12	SP#4-Surface	G				✓					✓		7-1	8:17	✓	✓	✓
13	SP#4-2'	G				✓					✓		7-1	8:24	✓	✓	✓
14	SP#4-4'	G				✓					✓		7-1	8:30	✓	✓	✓
15	SP#5-surface	G				✓					✓		7-1	8:34	✓	✓	✓
16	SP#5-2'	G				✓					✓		7-1	8:39	✓	✓	✓
17	SP#5-4'	G				✓					✓		7-1	8:50	✓	✓	✓
18	SP#6-Surface	G				✓					✓		7-1	8:56	✓	✓	✓
19	SP#6-2'	G				✓					✓		7-1	9:01	✓	✓	✓
20	SP#6-4'	G				✓					✓		7-1	9:07	✓	✓	✓

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

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

Relinquished By:	Date: 7-2-19	Received By:	Tamara Oldaker
	Time: 11:00 AM		
Relinquished By:	Date:	Received By:	
	Time:		

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

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

Temp. 3.3°C #97

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

CHECKED BY: (Initials) T.O.

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

CARDINAL LABORATORIES

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

Page_____ of _____

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

BILL TO

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

ANALYSIS REQUEST

FOR LAB USE ONLY Lab I.D.	Sample I.D.	(G)RAB OR (C)OMP.	# CONTAINERS	MATRIX: GROUNDWATER	WASTEWATER	SOIL	OIL	SLUDGE	OTHER:	PRESERV.: ACID/BASE:	ICE / COOL	OTHER:	SAMPLING: DATE	TIME	Chlorides	TPH	BTEX
H902258-21	SP#6-6'	G				✓					✓		7-1	9:14	✓	✓	✓
22	SP#7-Surface	G				✓					✓		7-1	9:21	✓	✓	✓
23	SP#7-2'	G				✓					✓		7-1	9:24	✓	✓	✓
24	SP#7-4'	G				✓					✓		7-1	9:30	✓	✓	✓
25	SP#7-6'	G				✓					✓		7-1	9:41	✓	✓	✓

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

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

Sampler Relinquished:	Date: 7-2-19	Received By: Tamara Oldaker	
Relinquished By:	Time: 11:00 AM	Received By:	
	Date:		
	Time:		

Delivered By: (Circle One)	Temp.	Sample Condition: Cool	Intact	CHECKED BY: (Initials)
Sampler - UPS - Bus - Other:	3.3° #97	☐ Yes ☐ No	☐ Yes ☐ No	T.O.

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

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

Pace Analytical®
National Center for Testing & Innovation

ANALYTICAL REPORT

September 23, 2019

ConocoPhillips - Tetra Tech

Sample Delivery Group:	L1139267
Samples Received:	09/13/2019
Project Number:	212C-MD-01878
Description:	COP Baish A Battery

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

Entire Report Reviewed By:

Jason Romer
Project Manager

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

TABLE OF CONTENTS

SAMPLE SUMMARY

BH-1 (0'-1') L1139267-01 Solid

			Collected by	Collected date/time	Received date/time
				09/10/19 12:00	09/13/19 08:45

Method	Batch	Dilution	Preparation date/time	Analysis date/time	Analyst	Location
Total Solids by Method 2540 G-2011	WG1348336	1	09/19/19 18:59	09/19/19 19:08	KDW	Mt. Juliet, TN
Wet Chemistry by Method 300.0	WG1346408	1	09/16/19 23:40	09/17/19 05:38	ELN	Mt. Juliet, TN
Volatile Organic Compounds (GC) by Method 8015D/GRO	WG1347755	1	09/15/19 01:29	09/18/19 18:18	DWR	Mt. Juliet, TN
Volatile Organic Compounds (GC/MS) by Method 8260B	WG1347343	1	09/15/19 01:29	09/18/19 00:40	ADM	Mt. Juliet, TN
Semi-Volatile Organic Compounds (GC) by Method 8015	WG1345951	20	09/14/19 19:39	09/16/19 15:56	TJD	Mt. Juliet, TN

BH-1 (2'-3') L1139267-02 Solid

			Collected by	Collected date/time	Received date/time
				09/10/19 12:05	09/13/19 08:45

Method	Batch	Dilution	Preparation date/time	Analysis date/time	Analyst	Location
Total Solids by Method 2540 G-2011	WG1348337	1	09/19/19 18:49	09/19/19 18:57	KDW	Mt. Juliet, TN
Wet Chemistry by Method 300.0	WG1346408	1	09/16/19 23:40	09/17/19 05:53	ELN	Mt. Juliet, TN
Volatile Organic Compounds (GC) by Method 8015D/GRO	WG1347755	1	09/15/19 01:29	09/18/19 18:38	DWR	Mt. Juliet, TN
Volatile Organic Compounds (GC/MS) by Method 8260B	WG1347343	1	09/15/19 01:29	09/18/19 01:01	ADM	Mt. Juliet, TN
Semi-Volatile Organic Compounds (GC) by Method 8015	WG1345951	20	09/14/19 19:39	09/16/19 15:15	TJD	Mt. Juliet, TN

BH-1 (4'-5') L1139267-03 Solid

			Collected by	Collected date/time	Received date/time
				09/10/19 12:10	09/13/19 08:45

Method	Batch	Dilution	Preparation date/time	Analysis date/time	Analyst	Location
Total Solids by Method 2540 G-2011	WG1348337	1	09/19/19 18:49	09/19/19 18:57	KDW	Mt. Juliet, TN
Wet Chemistry by Method 300.0	WG1346408	1	09/16/19 23:40	09/17/19 07:05	ELN	Mt. Juliet, TN
Volatile Organic Compounds (GC) by Method 8015D/GRO	WG1347755	1	09/15/19 01:29	09/18/19 19:25	DWR	Mt. Juliet, TN
Volatile Organic Compounds (GC/MS) by Method 8260B	WG1347343	1	09/15/19 01:29	09/18/19 01:22	ADM	Mt. Juliet, TN
Semi-Volatile Organic Compounds (GC) by Method 8015	WG1345951	40	09/14/19 19:39	09/16/19 16:09	TJD	Mt. Juliet, TN

BH-1 (6'-7') L1139267-04 Solid

			Collected by	Collected date/time	Received date/time
				09/10/19 12:20	09/13/19 08:45

Method	Batch	Dilution	Preparation date/time	Analysis date/time	Analyst	Location
Total Solids by Method 2540 G-2011	WG1348337	1	09/19/19 18:49	09/19/19 18:57	KDW	Mt. Juliet, TN
Wet Chemistry by Method 300.0	WG1346408	1	09/16/19 23:40	09/17/19 07:19	ELN	Mt. Juliet, TN
Volatile Organic Compounds (GC) by Method 8015D/GRO	WG1347755	1	09/15/19 01:29	09/18/19 19:45	DWR	Mt. Juliet, TN
Volatile Organic Compounds (GC/MS) by Method 8260B	WG1347343	1	09/15/19 01:29	09/18/19 01:42	ADM	Mt. Juliet, TN
Semi-Volatile Organic Compounds (GC) by Method 8015	WG1345951	5	09/14/19 19:39	09/16/19 14:49	TJD	Mt. Juliet, TN

BH-1 (9'-10') L1139267-05 Solid

			Collected by	Collected date/time	Received date/time
				09/10/19 12:30	09/13/19 08:45

Method	Batch	Dilution	Preparation date/time	Analysis date/time	Analyst	Location
Total Solids by Method 2540 G-2011	WG1348337	1	09/19/19 18:49	09/19/19 18:57	KDW	Mt. Juliet, TN
Wet Chemistry by Method 300.0	WG1346408	5	09/16/19 23:40	09/17/19 07:34	ELN	Mt. Juliet, TN
Volatile Organic Compounds (GC) by Method 8015D/GRO	WG1347755	1	09/15/19 01:29	09/18/19 20:05	DWR	Mt. Juliet, TN
Volatile Organic Compounds (GC/MS) by Method 8260B	WG1347343	1	09/15/19 01:29	09/18/19 02:02	ADM	Mt. Juliet, TN
Semi-Volatile Organic Compounds (GC) by Method 8015	WG1345951	1	09/14/19 19:39	09/16/19 14:22	TJD	Mt. Juliet, TN

SAMPLE SUMMARY

BH-2 (0'-1') L1139267-06 Solid

Collected by | Collected date/time 09/10/19 13:00 | Received date/time 09/13/19 08:45

Method	Batch	Dilution	Preparation date/time	Analysis date/time	Analyst	Location
Total Solids by Method 2540 G-2011	WG1348337	1	09/19/19 18:49	09/19/19 18:57	KDW	Mt. Juliet, TN
Wet Chemistry by Method 300.0	WG1346408	1	09/16/19 23:40	09/17/19 07:48	ELN	Mt. Juliet, TN
Volatile Organic Compounds (GC) by Method 8015D/GRO	WG1347755	1	09/15/19 01:29	09/18/19 20:26	DWR	Mt. Juliet, TN
Volatile Organic Compounds (GC/MS) by Method 8260B	WG1347343	1	09/15/19 01:29	09/18/19 02:23	ADM	Mt. Juliet, TN
Semi-Volatile Organic Compounds (GC) by Method 8015	WG1345951	20	09/14/19 19:39	09/16/19 15:42	TJD	Mt. Juliet, TN

BH-2 (2'-3') L1139267-07 Solid

Collected by | Collected date/time 09/10/19 13:05 | Received date/time 09/13/19 08:45

Method	Batch	Dilution	Preparation date/time	Analysis date/time	Analyst	Location
Total Solids by Method 2540 G-2011	WG1348337	1	09/19/19 18:49	09/19/19 18:57	KDW	Mt. Juliet, TN
Wet Chemistry by Method 300.0	WG1346408	1	09/16/19 23:40	09/17/19 08:17	ELN	Mt. Juliet, TN
Volatile Organic Compounds (GC) by Method 8015D/GRO	WG1347755	1	09/15/19 01:29	09/18/19 20:46	DWR	Mt. Juliet, TN
Volatile Organic Compounds (GC/MS) by Method 8260B	WG1347343	1	09/15/19 01:29	09/18/19 02:44	ADM	Mt. Juliet, TN
Semi-Volatile Organic Compounds (GC) by Method 8015	WG1345951	40	09/14/19 19:39	09/16/19 15:29	TJD	Mt. Juliet, TN

BH-2 (4'-5') L1139267-08 Solid

Collected by | Collected date/time 09/10/19 13:10 | Received date/time 09/13/19 08:45

Method	Batch	Dilution	Preparation date/time	Analysis date/time	Analyst	Location
Total Solids by Method 2540 G-2011	WG1348337	1	09/19/19 18:49	09/19/19 18:57	KDW	Mt. Juliet, TN
Wet Chemistry by Method 300.0	WG1346419	1	09/16/19 18:10	09/16/19 23:05	LDC	Mt. Juliet, TN
Volatile Organic Compounds (GC) by Method 8015D/GRO	WG1348549	1	09/15/19 01:29	09/19/19 13:10	JHH	Mt. Juliet, TN
Volatile Organic Compounds (GC/MS) by Method 8260B	WG1347343	1	09/15/19 01:29	09/18/19 03:04	ADM	Mt. Juliet, TN
Semi-Volatile Organic Compounds (GC) by Method 8015	WG1345951	5	09/14/19 19:39	09/16/19 15:02	TJD	Mt. Juliet, TN

BH-2 (6'-7') L1139267-09 Solid

Collected by | Collected date/time 09/10/19 13:20 | Received date/time 09/13/19 08:45

Method	Batch	Dilution	Preparation date/time	Analysis date/time	Analyst	Location
Total Solids by Method 2540 G-2011	WG1348337	1	09/19/19 18:49	09/19/19 18:57	KDW	Mt. Juliet, TN
Wet Chemistry by Method 300.0	WG1346419	1	09/16/19 18:10	09/16/19 23:34	LDC	Mt. Juliet, TN
Volatile Organic Compounds (GC) by Method 8015D/GRO	WG1347755	1	09/15/19 01:29	09/18/19 22:01	DWR	Mt. Juliet, TN
Volatile Organic Compounds (GC/MS) by Method 8260B	WG1347343	1	09/15/19 01:29	09/18/19 03:25	ADM	Mt. Juliet, TN
Semi-Volatile Organic Compounds (GC) by Method 8015	WG1345951	1	09/14/19 19:39	09/16/19 14:35	TJD	Mt. Juliet, TN

BH-2 (9'-10') L1139267-10 Solid

Collected by | Collected date/time 09/10/19 13:30 | Received date/time 09/13/19 08:45

Method	Batch	Dilution	Preparation date/time	Analysis date/time	Analyst	Location
Total Solids by Method 2540 G-2011	WG1348337	1	09/19/19 18:49	09/19/19 18:57	KDW	Mt. Juliet, TN
Wet Chemistry by Method 300.0	WG1346419	1	09/16/19 18:10	09/16/19 23:43	LDC	Mt. Juliet, TN
Volatile Organic Compounds (GC) by Method 8015D/GRO	WG1347755	1	09/15/19 01:29	09/18/19 22:21	DWR	Mt. Juliet, TN
Volatile Organic Compounds (GC/MS) by Method 8260B	WG1347343	1	09/15/19 01:29	09/18/19 03:46	ADM	Mt. Juliet, TN
Semi-Volatile Organic Compounds (GC) by Method 8015	WG1345980	1	09/14/19 16:48	09/15/19 22:32	CLG	Mt. Juliet, TN

SAMPLE SUMMARY

BH-3 (0'-1') L1139267-11 Solid

Collected by | Collected date/time 09/10/19 14:00 | Received date/time 09/13/19 08:45

Method	Batch	Dilution	Preparation date/time	Analysis date/time	Analyst	Location
Total Solids by Method 2540 G-2011	WG1348337	1	09/19/19 18:49	09/19/19 18:57	KDW	Mt. Juliet, TN
Wet Chemistry by Method 300.0	WG1346419	1	09/16/19 18:10	09/16/19 23:53	LDC	Mt. Juliet, TN
Volatile Organic Compounds (GC) by Method 8015D/GRO	WG1347755	1	09/15/19 01:29	09/18/19 22:42	DWR	Mt. Juliet, TN
Volatile Organic Compounds (GC/MS) by Method 8260B	WG1347343	1	09/15/19 01:29	09/18/19 04:06	ADM	Mt. Juliet, TN
Semi-Volatile Organic Compounds (GC) by Method 8015	WG1345980	10	09/14/19 16:48	09/16/19 01:48	CLG	Mt. Juliet, TN

BH-3 (2'-3') L1139267-12 Solid

Collected by | Collected date/time 09/10/19 14:10 | Received date/time 09/13/19 08:45

Method	Batch	Dilution	Preparation date/time	Analysis date/time	Analyst	Location
Total Solids by Method 2540 G-2011	WG1348339	1	09/19/19 18:37	09/19/19 18:47	KDW	Mt. Juliet, TN
Wet Chemistry by Method 300.0	WG1346419	1	09/16/19 18:10	09/17/19 00:03	LDC	Mt. Juliet, TN
Volatile Organic Compounds (GC) by Method 8015D/GRO	WG1347755	1	09/15/19 01:29	09/18/19 23:03	DWR	Mt. Juliet, TN
Volatile Organic Compounds (GC/MS) by Method 8260B	WG1347343	1	09/15/19 01:29	09/18/19 04:27	ADM	Mt. Juliet, TN
Semi-Volatile Organic Compounds (GC) by Method 8015	WG1345980	40	09/14/19 16:48	09/16/19 02:01	CLG	Mt. Juliet, TN

BH-3 (4'-5') L1139267-13 Solid

Collected by | Collected date/time 09/10/19 14:20 | Received date/time 09/13/19 08:45

Method	Batch	Dilution	Preparation date/time	Analysis date/time	Analyst	Location
Total Solids by Method 2540 G-2011	WG1348339	1	09/19/19 18:37	09/19/19 18:47	KDW	Mt. Juliet, TN
Wet Chemistry by Method 300.0	WG1346419	1	09/16/19 18:10	09/17/19 00:22	LDC	Mt. Juliet, TN
Volatile Organic Compounds (GC) by Method 8015D/GRO	WG1347802	1	09/15/19 01:29	09/18/19 15:05	DWR	Mt. Juliet, TN
Volatile Organic Compounds (GC/MS) by Method 8260B	WG1347349	1	09/15/19 01:29	09/18/19 06:30	BMB	Mt. Juliet, TN
Semi-Volatile Organic Compounds (GC) by Method 8015	WG1345980	20	09/14/19 16:48	09/16/19 02:15	CLG	Mt. Juliet, TN

BH-3 (6'-7') L1139267-14 Solid

Collected by | Collected date/time 09/10/19 14:30 | Received date/time 09/13/19 08:45

Method	Batch	Dilution	Preparation date/time	Analysis date/time	Analyst	Location
Total Solids by Method 2540 G-2011	WG1348339	1	09/19/19 18:37	09/19/19 18:47	KDW	Mt. Juliet, TN
Wet Chemistry by Method 300.0	WG1346419	1	09/16/19 18:10	09/17/19 00:31	LDC	Mt. Juliet, TN
Volatile Organic Compounds (GC) by Method 8015D/GRO	WG1347802	1	09/15/19 01:29	09/18/19 15:25	DWR	Mt. Juliet, TN
Volatile Organic Compounds (GC/MS) by Method 8260B	WG1347349	1	09/15/19 01:29	09/18/19 06:48	BMB	Mt. Juliet, TN
Semi-Volatile Organic Compounds (GC) by Method 8015	WG1345980	10	09/14/19 16:48	09/16/19 13:42	TJD	Mt. Juliet, TN

BH-3 (9'-10') L1139267-15 Solid

Collected by | Collected date/time 09/10/19 14:40 | Received date/time 09/13/19 08:45

Method	Batch	Dilution	Preparation date/time	Analysis date/time	Analyst	Location
Total Solids by Method 2540 G-2011	WG1348339	1	09/19/19 18:37	09/19/19 18:47	KDW	Mt. Juliet, TN
Wet Chemistry by Method 300.0	WG1346419	1	09/16/19 18:10	09/17/19 01:00	LDC	Mt. Juliet, TN
Volatile Organic Compounds (GC) by Method 8015D/GRO	WG1347802	1	09/15/19 01:29	09/18/19 15:45	DWR	Mt. Juliet, TN
Volatile Organic Compounds (GC/MS) by Method 8260B	WG1347349	1	09/15/19 01:29	09/18/19 07:07	BMB	Mt. Juliet, TN
Semi-Volatile Organic Compounds (GC) by Method 8015	WG1345980	1	09/14/19 16:48	09/16/19 00:04	CLG	Mt. Juliet, TN

SAMPLE SUMMARY

BH-4 (0'-1') L1139267-16 Solid

Collected by | Collected date/time 09/10/19 15:10 | Received date/time 09/13/19 08:45

Method	Batch	Dilution	Preparation date/time	Analysis date/time	Analyst	Location
Total Solids by Method 2540 G-2011	WG1348339	1	09/19/19 18:37	09/19/19 18:47	KDW	Mt. Juliet, TN
Wet Chemistry by Method 300.0	WG1346419	1	09/16/19 18:10	09/17/19 01:09	LDC	Mt. Juliet, TN
Volatile Organic Compounds (GC) by Method 8015D/GRO	WG1347802	1	09/15/19 01:29	09/18/19 16:06	DWR	Mt. Juliet, TN
Volatile Organic Compounds (GC/MS) by Method 8260B	WG1347349	1	09/15/19 01:29	09/18/19 07:25	BMB	Mt. Juliet, TN
Semi-Volatile Organic Compounds (GC) by Method 8015	WG1345980	10	09/14/19 16:48	09/16/19 00:30	CLG	Mt. Juliet, TN

BH-4 (2'-3') L1139267-17 Solid

Collected by | Collected date/time 09/10/19 15:20 | Received date/time 09/13/19 08:45

Method	Batch	Dilution	Preparation date/time	Analysis date/time	Analyst	Location
Total Solids by Method 2540 G-2011	WG1348339	1	09/19/19 18:37	09/19/19 18:47	KDW	Mt. Juliet, TN
Wet Chemistry by Method 300.0	WG1346419	1	09/16/19 18:10	09/17/19 01:19	LDC	Mt. Juliet, TN
Volatile Organic Compounds (GC) by Method 8015D/GRO	WG1347802	1	09/15/19 01:29	09/18/19 16:27	DWR	Mt. Juliet, TN
Volatile Organic Compounds (GC/MS) by Method 8260B	WG1347349	1	09/15/19 01:29	09/18/19 07:44	BMB	Mt. Juliet, TN
Semi-Volatile Organic Compounds (GC) by Method 8015	WG1345980	50	09/14/19 16:48	09/21/19 13:22	JDG	Mt. Juliet, TN

BH-4 (4'-5') L1139267-18 Solid

Collected by | Collected date/time 09/10/19 15:30 | Received date/time 09/13/19 08:45

Method	Batch	Dilution	Preparation date/time	Analysis date/time	Analyst	Location
Total Solids by Method 2540 G-2011	WG1348339	1	09/19/19 18:37	09/19/19 18:47	KDW	Mt. Juliet, TN
Wet Chemistry by Method 300.0	WG1346419	1	09/16/19 18:10	09/17/19 01:28	LDC	Mt. Juliet, TN
Volatile Organic Compounds (GC) by Method 8015D/GRO	WG1347802	1	09/15/19 01:29	09/18/19 16:47	DWR	Mt. Juliet, TN
Volatile Organic Compounds (GC/MS) by Method 8260B	WG1347349	1	09/15/19 01:29	09/18/19 08:02	BMB	Mt. Juliet, TN
Semi-Volatile Organic Compounds (GC) by Method 8015	WG1345980	1	09/14/19 16:48	09/15/19 23:38	CLG	Mt. Juliet, TN
Semi-Volatile Organic Compounds (GC) by Method 8015	WG1345980	5	09/14/19 16:48	09/16/19 16:49	TJD	Mt. Juliet, TN

BH-4 (6'-7') L1139267-19 Solid

Collected by | Collected date/time 09/10/19 15:40 | Received date/time 09/13/19 08:45

Method	Batch	Dilution	Preparation date/time	Analysis date/time	Analyst	Location
Total Solids by Method 2540 G-2011	WG1348339	1	09/19/19 18:37	09/19/19 18:47	KDW	Mt. Juliet, TN
Wet Chemistry by Method 300.0	WG1346419	1	09/16/19 18:10	09/17/19 01:38	LDC	Mt. Juliet, TN
Volatile Organic Compounds (GC) by Method 8015D/GRO	WG1347802	1	09/15/19 01:29	09/18/19 17:08	DWR	Mt. Juliet, TN
Volatile Organic Compounds (GC/MS) by Method 8260B	WG1347349	1	09/15/19 01:29	09/18/19 08:21	BMB	Mt. Juliet, TN
Semi-Volatile Organic Compounds (GC) by Method 8015	WG1345980	1	09/14/19 16:48	09/15/19 22:58	CLG	Mt. Juliet, TN

BH-4 (9'-10') L1139267-20 Solid

Collected by | Collected date/time 09/10/19 16:00 | Received date/time 09/13/19 08:45

Method	Batch	Dilution	Preparation date/time	Analysis date/time	Analyst	Location
Total Solids by Method 2540 G-2011	WG1348339	1	09/19/19 18:37	09/19/19 18:47	KDW	Mt. Juliet, TN
Wet Chemistry by Method 300.0	WG1346419	1	09/16/19 18:10	09/17/19 01:47	LDC	Mt. Juliet, TN
Volatile Organic Compounds (GC) by Method 8015D/GRO	WG1347802	1	09/15/19 01:29	09/18/19 17:28	DWR	Mt. Juliet, TN
Volatile Organic Compounds (GC/MS) by Method 8260B	WG1347349	1	09/15/19 01:29	09/18/19 08:40	BMB	Mt. Juliet, TN
Semi-Volatile Organic Compounds (GC) by Method 8015	WG1345980	1	09/14/19 16:48	09/15/19 22:45	CLG	Mt. Juliet, TN

SAMPLE SUMMARY

BH-5 (0'-1') L1139267-21 Solid

Collected by | Collected date/time 09/11/19 10:30 | Received date/time 09/13/19 08:45

Method	Batch	Dilution	Preparation date/time	Analysis date/time	Analyst	Location
Total Solids by Method 2540 G-2011	WG1348339	1	09/19/19 18:37	09/19/19 18:47	KDW	Mt. Juliet, TN
Wet Chemistry by Method 300.0	WG1346738	1	09/17/19 18:10	09/17/19 21:20	LDC	Mt. Juliet, TN
Volatile Organic Compounds (GC) by Method 8015D/GRO	WG1347802	1.01	09/15/19 01:35	09/18/19 17:49	DWR	Mt. Juliet, TN
Volatile Organic Compounds (GC/MS) by Method 8260B	WG1347349	1	09/15/19 01:35	09/18/19 08:58	BMB	Mt. Juliet, TN
Semi-Volatile Organic Compounds (GC) by Method 8015	WG1345980	1	09/14/19 16:48	09/15/19 23:51	CLG	Mt. Juliet, TN

BH-5 (2'-3') L1139267-22 Solid

Collected by | Collected date/time 09/11/19 10:40 | Received date/time 09/13/19 08:45

Method	Batch	Dilution	Preparation date/time	Analysis date/time	Analyst	Location
Total Solids by Method 2540 G-2011	WG1348340	1	09/19/19 18:12	09/19/19 18:23	KDW	Mt. Juliet, TN
Wet Chemistry by Method 300.0	WG1346738	1	09/17/19 18:10	09/17/19 21:38	LDC	Mt. Juliet, TN
Volatile Organic Compounds (GC) by Method 8015D/GRO	WG1347802	1	09/15/19 01:35	09/18/19 18:09	DWR	Mt. Juliet, TN
Volatile Organic Compounds (GC/MS) by Method 8260B	WG1347349	1	09/15/19 01:35	09/18/19 09:17	BMB	Mt. Juliet, TN
Semi-Volatile Organic Compounds (GC) by Method 8015	WG1345980	50	09/14/19 16:48	09/16/19 02:28	CLG	Mt. Juliet, TN

BH-5 (4'-5') L1139267-23 Solid

Collected by | Collected date/time 09/11/19 10:50 | Received date/time 09/13/19 08:45

Method	Batch	Dilution	Preparation date/time	Analysis date/time	Analyst	Location
Total Solids by Method 2540 G-2011	WG1348340	1	09/19/19 18:12	09/19/19 18:23	KDW	Mt. Juliet, TN
Wet Chemistry by Method 300.0	WG1346738	1	09/17/19 18:10	09/17/19 21:48	LDC	Mt. Juliet, TN
Volatile Organic Compounds (GC) by Method 8015D/GRO	WG1347802	1	09/15/19 01:35	09/18/19 18:29	DWR	Mt. Juliet, TN
Volatile Organic Compounds (GC/MS) by Method 8260B	WG1347349	1	09/15/19 01:35	09/18/19 09:36	BMB	Mt. Juliet, TN
Semi-Volatile Organic Compounds (GC) by Method 8015	WG1345980	50	09/14/19 16:48	09/16/19 02:41	CLG	Mt. Juliet, TN

BH-5 (6'-7') L1139267-24 Solid

Collected by | Collected date/time 09/11/19 11:00 | Received date/time 09/13/19 08:45

Method	Batch	Dilution	Preparation date/time	Analysis date/time	Analyst	Location
Total Solids by Method 2540 G-2011	WG1348340	1	09/19/19 18:12	09/19/19 18:23	KDW	Mt. Juliet, TN
Wet Chemistry by Method 300.0	WG1346738	1	09/17/19 18:10	09/17/19 21:57	LDC	Mt. Juliet, TN
Volatile Organic Compounds (GC) by Method 8015D/GRO	WG1347802	1	09/15/19 01:35	09/18/19 18:50	DWR	Mt. Juliet, TN
Volatile Organic Compounds (GC/MS) by Method 8260B	WG1347349	1	09/15/19 01:35	09/18/19 09:55	BMB	Mt. Juliet, TN
Semi-Volatile Organic Compounds (GC) by Method 8015	WG1345980	5	09/14/19 16:48	09/16/19 00:17	CLG	Mt. Juliet, TN

BH-5 (9'-10') L1139267-25 Solid

Collected by | Collected date/time 09/11/19 11:10 | Received date/time 09/13/19 08:45

Method	Batch	Dilution	Preparation date/time	Analysis date/time	Analyst	Location
Total Solids by Method 2540 G-2011	WG1348340	1	09/19/19 18:12	09/19/19 18:23	KDW	Mt. Juliet, TN
Wet Chemistry by Method 300.0	WG1346738	1	09/17/19 18:10	09/17/19 22:07	LDC	Mt. Juliet, TN
Volatile Organic Compounds (GC) by Method 8015D/GRO	WG1348959	25	09/15/19 01:35	09/20/19 14:56	JAH	Mt. Juliet, TN
Volatile Organic Compounds (GC/MS) by Method 8260B	WG1347349	1	09/15/19 01:35	09/18/19 10:13	BMB	Mt. Juliet, TN
Semi-Volatile Organic Compounds (GC) by Method 8015	WG1345980	10	09/14/19 16:48	09/16/19 00:56	CLG	Mt. Juliet, TN

SAMPLE SUMMARY

BH-5 (12'-13') L1139267-26 Solid

Collected by | Collected date/time 09/11/19 11:20 | Received date/time 09/13/19 08:45

Method	Batch	Dilution	Preparation date/time	Analysis date/time	Analyst	Location
Total Solids by Method 2540 G-2011	WG1348340	1	09/19/19 18:12	09/19/19 18:23	KDW	Mt. Juliet, TN
Wet Chemistry by Method 300.0	WG1346738	1	09/17/19 18:10	09/17/19 22:16	LDC	Mt. Juliet, TN
Volatile Organic Compounds (GC) by Method 8015D/GRO	WG1348959	1	09/15/19 01:35	09/20/19 14:08	JAH	Mt. Juliet, TN
Volatile Organic Compounds (GC/MS) by Method 8260B	WG1347349	1	09/15/19 01:35	09/18/19 10:32	BMB	Mt. Juliet, TN
Semi-Volatile Organic Compounds (GC) by Method 8015	WG1345980	1	09/14/19 16:48	09/15/19 23:12	CLG	Mt. Juliet, TN

BH-5 (14'-15') L1139267-27 Solid

Collected by | Collected date/time 09/11/19 11:30 | Received date/time 09/13/19 08:45

Method	Batch	Dilution	Preparation date/time	Analysis date/time	Analyst	Location
Total Solids by Method 2540 G-2011	WG1348340	1	09/19/19 18:12	09/19/19 18:23	KDW	Mt. Juliet, TN
Wet Chemistry by Method 300.0	WG1346738	1	09/17/19 18:10	09/17/19 22:26	LDC	Mt. Juliet, TN
Volatile Organic Compounds (GC) by Method 8015D/GRO	WG1348959	1	09/15/19 01:35	09/20/19 14:32	JAH	Mt. Juliet, TN
Volatile Organic Compounds (GC/MS) by Method 8260B	WG1347349	1	09/15/19 01:35	09/18/19 10:50	BMB	Mt. Juliet, TN
Semi-Volatile Organic Compounds (GC) by Method 8015	WG1345980	1	09/14/19 16:48	09/15/19 23:25	CLG	Mt. Juliet, TN

BH-5 (19'-20') L1139267-28 Solid

Collected by | Collected date/time 09/11/19 11:50 | Received date/time 09/13/19 08:45

Method	Batch	Dilution	Preparation date/time	Analysis date/time	Analyst	Location
Total Solids by Method 2540 G-2011	WG1348340	1	09/19/19 18:12	09/19/19 18:23	KDW	Mt. Juliet, TN
Wet Chemistry by Method 300.0	WG1346738	1	09/17/19 18:10	09/17/19 22:54	LDC	Mt. Juliet, TN
Volatile Organic Compounds (GC) by Method 8015D/GRO	WG1348619	1	09/15/19 01:35	09/19/19 19:45	BMB	Mt. Juliet, TN
Volatile Organic Compounds (GC/MS) by Method 8260B	WG1347349	1	09/15/19 01:35	09/18/19 11:08	BMB	Mt. Juliet, TN
Semi-Volatile Organic Compounds (GC) by Method 8015	WG1346816	1	09/17/19 13:35	09/17/19 19:11	JDG	Mt. Juliet, TN

BH-6 (0'-1') L1139267-29 Solid

Collected by | Collected date/time 09/11/19 12:00 | Received date/time 09/13/19 08:45

Method	Batch	Dilution	Preparation date/time	Analysis date/time	Analyst	Location
Total Solids by Method 2540 G-2011	WG1348340	1	09/19/19 18:12	09/19/19 18:23	KDW	Mt. Juliet, TN
Wet Chemistry by Method 300.0	WG1346738	1	09/17/19 18:10	09/17/19 23:04	LDC	Mt. Juliet, TN
Volatile Organic Compounds (GC) by Method 8015D/GRO	WG1348619	1	09/15/19 01:35	09/19/19 20:05	BMB	Mt. Juliet, TN
Volatile Organic Compounds (GC/MS) by Method 8260B	WG1347349	1	09/15/19 01:35	09/18/19 11:27	BMB	Mt. Juliet, TN
Semi-Volatile Organic Compounds (GC) by Method 8015	WG1346816	1	09/17/19 13:35	09/17/19 20:29	JDG	Mt. Juliet, TN

BH-6 (2'-3') L1139267-30 Solid

Collected by | Collected date/time 09/11/19 12:10 | Received date/time 09/13/19 08:45

Method	Batch	Dilution	Preparation date/time	Analysis date/time	Analyst	Location
Total Solids by Method 2540 G-2011	WG1348340	1	09/19/19 18:12	09/19/19 18:23	KDW	Mt. Juliet, TN
Wet Chemistry by Method 300.0	WG1346738	1	09/17/19 18:10	09/17/19 23:33	LDC	Mt. Juliet, TN
Volatile Organic Compounds (GC) by Method 8015D/GRO	WG1348619	1	09/15/19 01:35	09/19/19 20:26	BMB	Mt. Juliet, TN
Volatile Organic Compounds (GC/MS) by Method 8260B	WG1347349	1	09/15/19 01:35	09/18/19 11:46	BMB	Mt. Juliet, TN
Semi-Volatile Organic Compounds (GC) by Method 8015	WG1346816	1	09/17/19 13:35	09/17/19 20:55	JDG	Mt. Juliet, TN

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

SAMPLE SUMMARY

BH-6 (4'-5') L1139267-31 Solid

Collected by | Collected date/time 09/11/19 12:20 | Received date/time 09/13/19 08:45

Method	Batch	Dilution	Preparation date/time	Analysis date/time	Analyst	Location
Total Solids by Method 2540 G-2011	WG1348340	1	09/19/19 18:12	09/19/19 18:23	KDW	Mt. Juliet, TN
Wet Chemistry by Method 300.0	WG1346738	1	09/17/19 18:10	09/17/19 23:42	LDC	Mt. Juliet, TN
Volatile Organic Compounds (GC) by Method 8015D/GRO	WG1348619	1	09/15/19 22:18	09/19/19 20:46	BMB	Mt. Juliet, TN
Volatile Organic Compounds (GC/MS) by Method 8260B	WG1347349	1	09/15/19 22:18	09/18/19 12:04	BMB	Mt. Juliet, TN
Semi-Volatile Organic Compounds (GC) by Method 8015	WG1346816	1	09/17/19 13:35	09/17/19 19:37	JDG	Mt. Juliet, TN

BH-6 (6'-7') L1139267-32 Solid

Collected by | Collected date/time 09/11/19 12:30 | Received date/time 09/13/19 08:45

Method	Batch	Dilution	Preparation date/time	Analysis date/time	Analyst	Location
Total Solids by Method 2540 G-2011	WG1348341	1	09/19/19 17:46	09/19/19 18:09	KDW	Mt. Juliet, TN
Wet Chemistry by Method 300.0	WG1346738	1	09/17/19 18:10	09/17/19 23:52	LDC	Mt. Juliet, TN
Volatile Organic Compounds (GC) by Method 8015D/GRO	WG1348619	1	09/15/19 22:18	09/19/19 21:07	BMB	Mt. Juliet, TN
Volatile Organic Compounds (GC/MS) by Method 8260B	WG1347349	1	09/15/19 22:18	09/18/19 12:23	BMB	Mt. Juliet, TN
Semi-Volatile Organic Compounds (GC) by Method 8015	WG1346816	1	09/17/19 13:35	09/17/19 19:24	JDG	Mt. Juliet, TN

BH-7 (0'-1') L1139267-33 Solid

Collected by | Collected date/time 09/11/19 12:50 | Received date/time 09/13/19 08:45

Method	Batch	Dilution	Preparation date/time	Analysis date/time	Analyst	Location
Total Solids by Method 2540 G-2011	WG1348341	1	09/19/19 17:46	09/19/19 18:09	KDW	Mt. Juliet, TN
Wet Chemistry by Method 300.0	WG1346738	1	09/17/19 18:10	09/18/19 00:01	LDC	Mt. Juliet, TN
Volatile Organic Compounds (GC) by Method 8015D/GRO	WG1348619	1	09/15/19 22:18	09/19/19 21:27	BMB	Mt. Juliet, TN
Volatile Organic Compounds (GC/MS) by Method 8260B	WG1347795	1	09/15/19 22:18	09/18/19 11:04	JHH	Mt. Juliet, TN
Semi-Volatile Organic Compounds (GC) by Method 8015	WG1346816	1	09/17/19 13:35	09/17/19 21:08	JDG	Mt. Juliet, TN

BH-7 (2'-3') L1139267-34 Solid

Collected by | Collected date/time 09/11/19 13:00 | Received date/time 09/13/19 08:45

Method	Batch	Dilution	Preparation date/time	Analysis date/time	Analyst	Location
Total Solids by Method 2540 G-2011	WG1348341	1	09/19/19 17:46	09/19/19 18:09	KDW	Mt. Juliet, TN
Wet Chemistry by Method 300.0	WG1346738	1	09/17/19 18:10	09/18/19 00:11	LDC	Mt. Juliet, TN
Volatile Organic Compounds (GC) by Method 8015D/GRO	WG1348619	1	09/15/19 22:18	09/19/19 21:47	BMB	Mt. Juliet, TN
Volatile Organic Compounds (GC/MS) by Method 8260B	WG1347795	1	09/15/19 22:18	09/18/19 11:25	JHH	Mt. Juliet, TN
Semi-Volatile Organic Compounds (GC) by Method 8015	WG1346816	1	09/17/19 13:35	09/17/19 20:42	JDG	Mt. Juliet, TN

BH-7 (4'-5') L1139267-35 Solid

Collected by | Collected date/time 09/11/19 13:10 | Received date/time 09/13/19 08:45

Method	Batch	Dilution	Preparation date/time	Analysis date/time	Analyst	Location
Total Solids by Method 2540 G-2011	WG1348341	1	09/19/19 17:46	09/19/19 18:09	KDW	Mt. Juliet, TN
Wet Chemistry by Method 300.0	WG1346738	1	09/17/19 18:10	09/18/19 00:20	LDC	Mt. Juliet, TN
Volatile Organic Compounds (GC) by Method 8015D/GRO	WG1348624	1	09/15/19 22:18	09/20/19 05:55	BMB	Mt. Juliet, TN
Volatile Organic Compounds (GC/MS) by Method 8260B	WG1347795	1	09/15/19 22:18	09/18/19 11:45	JHH	Mt. Juliet, TN
Semi-Volatile Organic Compounds (GC) by Method 8015	WG1346816	5	09/17/19 13:35	09/17/19 21:21	JDG	Mt. Juliet, TN

SAMPLE SUMMARY

BH-8 (0'-1') L1139267-36 Solid

Collected by | Collected date/time 09/11/19 13:30 | Received date/time 09/13/19 08:45

Method	Batch	Dilution	Preparation date/time	Analysis date/time	Analyst	Location
Total Solids by Method 2540 G-2011	WG1348341	1	09/19/19 17:46	09/19/19 18:09	KDW	Mt. Juliet, TN
Wet Chemistry by Method 300.0	WG1346738	1	09/17/19 18:10	09/18/19 00:49	LDC	Mt. Juliet, TN
Volatile Organic Compounds (GC) by Method 8015D/GRO	WG1348624	1	09/15/19 22:18	09/20/19 06:17	BMB	Mt. Juliet, TN
Volatile Organic Compounds (GC/MS) by Method 8260B	WG1347795	1	09/15/19 22:18	09/18/19 12:05	JHH	Mt. Juliet, TN
Semi-Volatile Organic Compounds (GC) by Method 8015	WG1346816	20	09/17/19 13:35	09/21/19 12:56	JDG	Mt. Juliet, TN

BH-8 (2'-3') L1139267-37 Solid

Collected by | Collected date/time 09/11/19 13:40 | Received date/time 09/13/19 08:45

Method	Batch	Dilution	Preparation date/time	Analysis date/time	Analyst	Location
Total Solids by Method 2540 G-2011	WG1348341	1	09/19/19 17:46	09/19/19 18:09	KDW	Mt. Juliet, TN
Wet Chemistry by Method 300.0	WG1346738	1	09/17/19 18:10	09/18/19 00:58	LDC	Mt. Juliet, TN
Volatile Organic Compounds (GC) by Method 8015D/GRO	WG1348624	1	09/15/19 22:18	09/20/19 06:40	BMB	Mt. Juliet, TN
Volatile Organic Compounds (GC/MS) by Method 8260B	WG1347795	1	09/15/19 22:18	09/18/19 12:26	JHH	Mt. Juliet, TN
Semi-Volatile Organic Compounds (GC) by Method 8015	WG1346816	50	09/17/19 13:35	09/21/19 13:09	JDG	Mt. Juliet, TN

BH-8 (4'-5') L1139267-38 Solid

Collected by | Collected date/time 09/11/19 13:50 | Received date/time 09/13/19 08:45

Method	Batch	Dilution	Preparation date/time	Analysis date/time	Analyst	Location
Total Solids by Method 2540 G-2011	WG1348341	1	09/19/19 17:46	09/19/19 18:09	KDW	Mt. Juliet, TN
Wet Chemistry by Method 300.0	WG1346738	1	09/17/19 18:10	09/18/19 01:08	LDC	Mt. Juliet, TN
Volatile Organic Compounds (GC) by Method 8015D/GRO	WG1348624	1	09/15/19 22:18	09/20/19 07:59	BMB	Mt. Juliet, TN
Volatile Organic Compounds (GC/MS) by Method 8260B	WG1347795	1	09/15/19 22:18	09/18/19 12:46	JHH	Mt. Juliet, TN
Semi-Volatile Organic Compounds (GC) by Method 8015	WG1346816	50	09/17/19 13:35	09/17/19 21:34	JDG	Mt. Juliet, TN

BH-8 (6'-7') L1139267-39 Solid

Collected by | Collected date/time 09/11/19 14:00 | Received date/time 09/13/19 08:45

Method	Batch	Dilution	Preparation date/time	Analysis date/time	Analyst	Location
Total Solids by Method 2540 G-2011	WG1348341	1	09/19/19 17:46	09/19/19 18:09	KDW	Mt. Juliet, TN
Wet Chemistry by Method 300.0	WG1346738	1	09/17/19 18:10	09/18/19 01:17	LDC	Mt. Juliet, TN
Volatile Organic Compounds (GC) by Method 8015D/GRO	WG1348624	1	09/15/19 22:18	09/20/19 08:22	BMB	Mt. Juliet, TN
Volatile Organic Compounds (GC/MS) by Method 8260B	WG1347795	1	09/15/19 22:18	09/18/19 13:07	JHH	Mt. Juliet, TN
Semi-Volatile Organic Compounds (GC) by Method 8015	WG1346816	50	09/17/19 13:35	09/17/19 21:47	JDG	Mt. Juliet, TN

BH-8 (9'-10') L1139267-40 Solid

Collected by | Collected date/time 09/11/19 14:10 | Received date/time 09/13/19 08:45

Method	Batch	Dilution	Preparation date/time	Analysis date/time	Analyst	Location
Total Solids by Method 2540 G-2011	WG1348341	1	09/19/19 17:46	09/19/19 18:09	KDW	Mt. Juliet, TN
Wet Chemistry by Method 300.0	WG1346738	1	09/17/19 18:10	09/18/19 01:27	LDC	Mt. Juliet, TN
Volatile Organic Compounds (GC) by Method 8015D/GRO	WG1348624	1	09/15/19 22:18	09/20/19 08:44	BMB	Mt. Juliet, TN
Volatile Organic Compounds (GC/MS) by Method 8260B	WG1347795	1	09/15/19 22:18	09/18/19 13:28	JHH	Mt. Juliet, TN
Semi-Volatile Organic Compounds (GC) by Method 8015	WG1347218	1	09/17/19 16:59	09/18/19 22:06	CLG	Mt. Juliet, TN

SAMPLE SUMMARY

BH-9 (0'-1') L1139267-41 Solid

Collected by | Collected date/time 09/11/19 14:40 | Received date/time 09/13/19 08:45

Method	Batch	Dilution	Preparation date/time	Analysis date/time	Analyst	Location
Total Solids by Method 2540 G-2011	WG1348341	1	09/19/19 17:46	09/19/19 18:09	KDW	Mt. Juliet, TN
Wet Chemistry by Method 300.0	WG1347692	1	09/18/19 18:40	09/18/19 21:17	ST	Mt. Juliet, TN
Volatile Organic Compounds (GC) by Method 8015D/GRO	WG1348624	1	09/15/19 23:40	09/20/19 09:48	BMB	Mt. Juliet, TN
Volatile Organic Compounds (GC/MS) by Method 8260B	WG1347795	1	09/15/19 23:40	09/18/19 13:49	JHH	Mt. Juliet, TN
Semi-Volatile Organic Compounds (GC) by Method 8015	WG1347218	20	09/17/19 16:59	09/18/19 23:52	CLG	Mt. Juliet, TN

BH-9 (2'-3') L1139267-42 Solid

Collected by | Collected date/time 09/11/19 14:50 | Received date/time 09/13/19 08:45

Method	Batch	Dilution	Preparation date/time	Analysis date/time	Analyst	Location
Total Solids by Method 2540 G-2011	WG1348343	1	09/19/19 13:37	09/19/19 13:54	KDW	Mt. Juliet, TN
Wet Chemistry by Method 300.0	WG1347474	1	09/18/19 08:10	09/18/19 10:42	LDC	Mt. Juliet, TN
Volatile Organic Compounds (GC) by Method 8015D/GRO	WG1348624	1	09/15/19 23:40	09/20/19 10:11	BMB	Mt. Juliet, TN
Volatile Organic Compounds (GC/MS) by Method 8260B	WG1347795	1	09/15/19 23:40	09/18/19 14:10	JHH	Mt. Juliet, TN
Semi-Volatile Organic Compounds (GC) by Method 8015	WG1347218	20	09/17/19 16:59	09/19/19 00:06	CLG	Mt. Juliet, TN

BH-10 (0'-1') L1139267-43 Solid

Collected by | Collected date/time 09/11/19 15:00 | Received date/time 09/13/19 08:45

Method	Batch	Dilution	Preparation date/time	Analysis date/time	Analyst	Location
Total Solids by Method 2540 G-2011	WG1348343	1	09/19/19 13:37	09/19/19 13:54	KDW	Mt. Juliet, TN
Wet Chemistry by Method 300.0	WG1347474	1	09/18/19 08:10	09/18/19 11:10	LDC	Mt. Juliet, TN
Volatile Organic Compounds (GC) by Method 8015D/GRO	WG1348819	1	09/15/19 23:40	09/20/19 01:02	JHH	Mt. Juliet, TN
Volatile Organic Compounds (GC/MS) by Method 8260B	WG1347795	1	09/15/19 23:40	09/18/19 14:31	JHH	Mt. Juliet, TN
Semi-Volatile Organic Compounds (GC) by Method 8015	WG1347218	1	09/17/19 16:59	09/18/19 22:59	CLG	Mt. Juliet, TN

BH-10 (2'-3') L1139267-44 Solid

Collected by | Collected date/time 09/11/19 15:10 | Received date/time 09/13/19 08:45

Method	Batch	Dilution	Preparation date/time	Analysis date/time	Analyst	Location
Total Solids by Method 2540 G-2011	WG1348343	1	09/19/19 13:37	09/19/19 13:54	KDW	Mt. Juliet, TN
Wet Chemistry by Method 300.0	WG1347474	1	09/18/19 08:10	09/18/19 11:29	LDC	Mt. Juliet, TN
Volatile Organic Compounds (GC) by Method 8015D/GRO	WG1348819	1	09/15/19 23:40	09/20/19 01:22	JHH	Mt. Juliet, TN
Volatile Organic Compounds (GC/MS) by Method 8260B	WG1347795	1	09/15/19 23:40	09/18/19 14:51	JHH	Mt. Juliet, TN
Semi-Volatile Organic Compounds (GC) by Method 8015	WG1347218	1	09/17/19 16:59	09/18/19 22:46	CLG	Mt. Juliet, TN

BH-10 (4'-5') L1139267-45 Solid

Collected by | Collected date/time 09/11/19 15:20 | Received date/time 09/13/19 08:45

Method	Batch	Dilution	Preparation date/time	Analysis date/time	Analyst	Location
Total Solids by Method 2540 G-2011	WG1348343	1	09/19/19 13:37	09/19/19 13:54	KDW	Mt. Juliet, TN
Wet Chemistry by Method 300.0	WG1347474	1	09/18/19 08:10	09/18/19 11:39	LDC	Mt. Juliet, TN
Volatile Organic Compounds (GC) by Method 8015D/GRO	WG1348819	1.01	09/15/19 23:40	09/20/19 01:43	JHH	Mt. Juliet, TN
Volatile Organic Compounds (GC/MS) by Method 8260B	WG1347795	1	09/15/19 23:40	09/18/19 15:12	JHH	Mt. Juliet, TN
Semi-Volatile Organic Compounds (GC) by Method 8015	WG1347221	2	09/17/19 16:20	09/18/19 16:21	TJD	Mt. Juliet, TN

SAMPLE SUMMARY

BH-11 (0'-0.5') L1139267-46 Solid

			Collected by	Collected date/time	Received date/time
				09/11/19 16:00	09/13/19 08:45

Method	Batch	Dilution	Preparation date/time	Analysis date/time	Analyst	Location
Total Solids by Method 2540 G-2011	WG1348343	1	09/19/19 13:37	09/19/19 13:54	KDW	Mt. Juliet, TN
Wet Chemistry by Method 300.0	WG1347474	1	09/18/19 08:10	09/18/19 11:48	LDC	Mt. Juliet, TN
Volatile Organic Compounds (GC) by Method 8015D/GRO	WG1348819	1.01	09/15/19 23:40	09/20/19 02:03	JHH	Mt. Juliet, TN
Volatile Organic Compounds (GC/MS) by Method 8260B	WG1347795	1	09/15/19 23:40	09/18/19 15:32	JHH	Mt. Juliet, TN
Semi-Volatile Organic Compounds (GC) by Method 8015	WG1347221	5	09/17/19 16:20	09/18/19 06:04	JDG	Mt. Juliet, TN
Semi-Volatile Organic Compounds (GC) by Method 8015	WG1347221	5	09/17/19 16:20	09/18/19 16:34	TJD	Mt. Juliet, TN

BH-12 (0'-0.5') L1139267-47 Solid

			Collected by	Collected date/time	Received date/time
				09/11/19 16:30	09/13/19 08:45

Method	Batch	Dilution	Preparation date/time	Analysis date/time	Analyst	Location
Total Solids by Method 2540 G-2011	WG1348343	1	09/19/19 13:37	09/19/19 13:54	KDW	Mt. Juliet, TN
Wet Chemistry by Method 300.0	WG1347474	1	09/18/19 08:10	09/18/19 11:58	LDC	Mt. Juliet, TN
Volatile Organic Compounds (GC) by Method 8015D/GRO	WG1348819	1.01	09/15/19 23:40	09/20/19 02:24	JHH	Mt. Juliet, TN
Volatile Organic Compounds (GC/MS) by Method 8260B	WG1347795	1	09/15/19 23:40	09/18/19 15:59	JHH	Mt. Juliet, TN
Semi-Volatile Organic Compounds (GC) by Method 8015	WG1347221	5	09/17/19 16:20	09/18/19 06:19	JDG	Mt. Juliet, TN
Semi-Volatile Organic Compounds (GC) by Method 8015	WG1347221	5	09/17/19 16:20	09/18/19 16:47	TJD	Mt. Juliet, TN

CASE NARRATIVE

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

Jason Romer
Project Manager

BH-1 (0'-1')
Collected date/time: 09/10/19 12:00

SAMPLE RESULTS - 01

L1139267

ONE LAB. NATIONWIDE.

Total Solids by Method 2540 G-2011

Analyte	Result	Qualifier	Dilution	Analysis	Batch
	%			date / time	
Total Solids	94.2		1	09/19/2019 19:08	WG1348336

Wet Chemistry by Method 300.0

Analyte	Result (dry)	Qualifier	SDL (dry)	Unadj. MQL	MQL (dry)	Dilution	Analysis	Batch
	mg/kg		mg/kg	mg/kg	mg/kg		date / time	
Chloride	458		0.845	10.0	10.6	1	09/17/2019 05:38	WG1346408

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

Analyte	Result (dry)	Qualifier	SDL (dry)	Unadj. MQL	MQL (dry)	Dilution	Analysis	Batch
	mg/kg		mg/kg	mg/kg	mg/kg		date / time	
TPH (GC/FID) Low Fraction	U		0.0230	0.100	0.106	1	09/18/2019 18:18	WG1347755
(S) a,a,a-Trifluorotoluene(FID)	*94.0*				*77.0-120*		*09/18/2019 18:18*	WG1347755

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

Analyte	Result (dry)	Qualifier	SDL (dry)	Unadj. MQL	MQL (dry)	Dilution	Analysis	Batch
	mg/kg		mg/kg	mg/kg	mg/kg		date / time	
Benzene	U		0.000425	0.00100	0.00106	1	09/18/2019 00:40	WG1347343
Toluene	U		0.00133	0.00500	0.00531	1	09/18/2019 00:40	WG1347343
Ethylbenzene	U		0.000563	0.00250	0.00266	1	09/18/2019 00:40	WG1347343
Total Xylenes	U	J4	0.00508	0.00650	0.00690	1	09/18/2019 00:40	WG1347343
(S) Toluene-d8	*115*				*75.0-131*		*09/18/2019 00:40*	WG1347343
(S) 4-Bromofluorobenzene	*103*				*67.0-138*		*09/18/2019 00:40*	WG1347343
(S) 1,2-Dichloroethane-d4	*113*				*70.0-130*		*09/18/2019 00:40*	WG1347343

Semi-Volatile Organic Compounds (GC) by Method 8015

Analyte	Result (dry)	Qualifier	SDL (dry)	Unadj. MQL	MQL (dry)	Dilution	Analysis	Batch
	mg/kg		mg/kg	mg/kg	mg/kg		date / time	
C10-C28 Diesel Range	1420		34.2	4.00	85.0	20	09/16/2019 15:56	WG1345951
C28-C40 Oil Range	1760		5.82	4.00	85.0	20	09/16/2019 15:56	WG1345951
(S) o-Terphenyl	*0.000*	J7			*18.0-148*		*09/16/2019 15:56*	WG1345951

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

BH-1 (2'-3')
Collected date/time: 09/10/19 12:05

SAMPLE RESULTS - 02
L1139267

ONE LAB. NATIONWIDE.

Total Solids by Method 2540 G-2011

Analyte	Result	Qualifier	Dilution	Analysis	Batch
	%			date / time	
Total Solids	96.6		1	09/19/2019 18:57	WG1348337

Wet Chemistry by Method 300.0

Analyte	Result (dry)	Qualifier	SDL (dry)	Unadj. MQL	MQL (dry)	Dilution	Analysis	Batch
	mg/kg		mg/kg	mg/kg	mg/kg		date / time	
Chloride	148	J5	0.823	10.0	10.3	1	09/17/2019 05:53	WG1346408

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

Analyte	Result (dry)	Qualifier	SDL (dry)	Unadj. MQL	MQL (dry)	Dilution	Analysis	Batch
	mg/kg		mg/kg	mg/kg	mg/kg		date / time	
TPH (GC/FID) Low Fraction	U		0.0225	0.100	0.103	1	09/18/2019 18:38	WG1347755
(S) a,a,a-Trifluorotoluene(FID)	*93.6*				*77.0-120*		*09/18/2019 18:38*	WG1347755

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

Analyte	Result (dry)	Qualifier	SDL (dry)	Unadj. MQL	MQL (dry)	Dilution	Analysis	Batch
	mg/kg		mg/kg	mg/kg	mg/kg		date / time	
Benzene	U		0.000414	0.00100	0.00103	1	09/18/2019 01:01	WG1347343
Toluene	U		0.00129	0.00500	0.00517	1	09/18/2019 01:01	WG1347343
Ethylbenzene	U		0.000548	0.00250	0.00259	1	09/18/2019 01:01	WG1347343
Total Xylenes	U	J4	0.00495	0.00650	0.00673	1	09/18/2019 01:01	WG1347343
(S) Toluene-d8	*112*				*75.0-131*		*09/18/2019 01:01*	WG1347343
(S) 4-Bromofluorobenzene	*103*				*67.0-138*		*09/18/2019 01:01*	WG1347343
(S) 1,2-Dichloroethane-d4	*112*				*70.0-130*		*09/18/2019 01:01*	WG1347343

Semi-Volatile Organic Compounds (GC) by Method 8015

Analyte	Result (dry)	Qualifier	SDL (dry)	Unadj. MQL	MQL (dry)	Dilution	Analysis	Batch
	mg/kg		mg/kg	mg/kg	mg/kg		date / time	
C10-C28 Diesel Range	1080		33.3	4.00	82.8	20	09/16/2019 15:15	WG1345951
C28-C40 Oil Range	1400		5.67	4.00	82.8	20	09/16/2019 15:15	WG1345951
(S) o-Terphenyl	*0.000*	J7			*18.0-148*		*09/16/2019 15:15*	WG1345951

BH-1 (4'-5')
Collected date/time: 09/10/19 12:10

SAMPLE RESULTS - 03
L1139267

ONE LAB. NATIONWIDE.

Total Solids by Method 2540 G-2011

Analyte	Result	Qualifier	Dilution	Analysis	Batch
	%			date / time	
Total Solids	97.4		1	09/19/2019 18:57	WG1348337

Wet Chemistry by Method 300.0

Analyte	Result (dry)	Qualifier	SDL (dry)	Unadj. MQL	MQL (dry)	Dilution	Analysis	Batch
	mg/kg		mg/kg	mg/kg	mg/kg		date / time	
Chloride	408		0.816	10.0	10.3	1	09/17/2019 07:05	WG1346408

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

Analyte	Result (dry)	Qualifier	SDL (dry)	Unadj. MQL	MQL (dry)	Dilution	Analysis	Batch
	mg/kg		mg/kg	mg/kg	mg/kg		date / time	
TPH (GC/FID) Low Fraction	U		0.0223	0.100	0.103	1	09/18/2019 19:25	WG1347755
(S) a,a,a-Trifluorotoluene(FID)	*93.8*				*77.0-120*		*09/18/2019 19:25*	WG1347755

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

Analyte	Result (dry)	Qualifier	SDL (dry)	Unadj. MQL	MQL (dry)	Dilution	Analysis	Batch
	mg/kg		mg/kg	mg/kg	mg/kg		date / time	
Benzene	U		0.000411	0.00100	0.00103	1	09/18/2019 01:22	WG1347343
Toluene	U		0.00128	0.00500	0.00513	1	09/18/2019 01:22	WG1347343
Ethylbenzene	U		0.000544	0.00250	0.00257	1	09/18/2019 01:22	WG1347343
Total Xylenes	U	J4	0.00491	0.00650	0.00667	1	09/18/2019 01:22	WG1347343
(S) Toluene-d8	*111*				*75.0-131*		*09/18/2019 01:22*	WG1347343
(S) 4-Bromofluorobenzene	*98.3*				*67.0-138*		*09/18/2019 01:22*	WG1347343
(S) 1,2-Dichloroethane-d4	*112*				*70.0-130*		*09/18/2019 01:22*	WG1347343

Semi-Volatile Organic Compounds (GC) by Method 8015

Analyte	Result (dry)	Qualifier	SDL (dry)	Unadj. MQL	MQL (dry)	Dilution	Analysis	Batch
	mg/kg		mg/kg	mg/kg	mg/kg		date / time	
C10-C28 Diesel Range	317		66.1	4.00	164	40	09/16/2019 16:09	WG1345951
C28-C40 Oil Range	663		11.3	4.00	164	40	09/16/2019 16:09	WG1345951
(S) o-Terphenyl	*0.000*	J7			*18.0-148*		*09/16/2019 16:09*	WG1345951

BH-1 (6'-7')
Collected date/time: 09/10/19 12:20

SAMPLE RESULTS - 04
L1139267

ONE LAB. NATIONWIDE.

Total Solids by Method 2540 G-2011

Analyte	Result	Qualifier	Dilution	Analysis	Batch
	%			date / time	
Total Solids	92.2		1	09/19/2019 18:57	WG1348337

Wet Chemistry by Method 300.0

Analyte	Result (dry)	Qualifier	SDL (dry)	Unadj. MQL	MQL (dry)	Dilution	Analysis	Batch
	mg/kg		mg/kg	mg/kg	mg/kg		date / time	
Chloride	377		0.863	10.0	10.8	1	09/17/2019 07:19	WG1346408

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

Analyte	Result (dry)	Qualifier	SDL (dry)	Unadj. MQL	MQL (dry)	Dilution	Analysis	Batch
	mg/kg		mg/kg	mg/kg	mg/kg		date / time	
TPH (GC/FID) Low Fraction	U		0.0235	0.100	0.108	1	09/18/2019 19:45	WG1347755
(S) a,a,a-Trifluorotoluene(FID)	*93.2*				*77.0-120*		*09/18/2019 19:45*	WG1347755

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

Analyte	Result (dry)	Qualifier	SDL (dry)	Unadj. MQL	MQL (dry)	Dilution	Analysis	Batch
	mg/kg		mg/kg	mg/kg	mg/kg		date / time	
Benzene	U		0.000434	0.00100	0.00108	1	09/18/2019 01:42	WG1347343
Toluene	U		0.00136	0.00500	0.00542	1	09/18/2019 01:42	WG1347343
Ethylbenzene	U		0.000575	0.00250	0.00271	1	09/18/2019 01:42	WG1347343
Total Xylenes	U	J4	0.00519	0.00650	0.00705	1	09/18/2019 01:42	WG1347343
(S) Toluene-d8	*113*				*75.0-131*		*09/18/2019 01:42*	WG1347343
(S) 4-Bromofluorobenzene	*97.7*				*67.0-138*		*09/18/2019 01:42*	WG1347343
(S) 1,2-Dichloroethane-d4	*110*				*70.0-130*		*09/18/2019 01:42*	WG1347343

Semi-Volatile Organic Compounds (GC) by Method 8015

Analyte	Result (dry)	Qualifier	SDL (dry)	Unadj. MQL	MQL (dry)	Dilution	Analysis	Batch
	mg/kg		mg/kg	mg/kg	mg/kg		date / time	
C10-C28 Diesel Range	28.0		8.73	4.00	21.7	5	09/16/2019 14:49	WG1345951
C28-C40 Oil Range	59.8		1.49	4.00	21.7	5	09/16/2019 14:49	WG1345951
(S) o-Terphenyl	*75.7*				*18.0-148*		*09/16/2019 14:49*	WG1345951

BH-1 (9'-10')
Collected date/time: 09/10/19 12:30

SAMPLE RESULTS - 05

L1139267

Total Solids by Method 2540 G-2011

Analyte	Result	Qualifier	Dilution	Analysis	Batch
	%			date / time	
Total Solids	88.1		1	09/19/2019 18:57	WG1348337

Wet Chemistry by Method 300.0

Analyte	Result (dry)	Qualifier	SDL (dry)	Unadj. MQL	MQL (dry)	Dilution	Analysis	Batch
	mg/kg		mg/kg	mg/kg	mg/kg		date / time	
Chloride	935		4.52	10.0	56.8	5	09/17/2019 07:34	WG1346408

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

Analyte	Result (dry)	Qualifier	SDL (dry)	Unadj. MQL	MQL (dry)	Dilution	Analysis	Batch
	mg/kg		mg/kg	mg/kg	mg/kg		date / time	
TPH (GC/FID) Low Fraction	U		0.0246	0.100	0.114	1	09/18/2019 20:05	WG1347755
(S) a,a,a-Trifluorotoluene(FID)	*92.2*				*77.0-120*		*09/18/2019 20:05*	WG1347755

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

Analyte	Result (dry)	Qualifier	SDL (dry)	Unadj. MQL	MQL (dry)	Dilution	Analysis	Batch
	mg/kg		mg/kg	mg/kg	mg/kg		date / time	
Benzene	U		0.000454	0.00100	0.00114	1	09/18/2019 02:02	WG1347343
Toluene	U		0.00142	0.00500	0.00568	1	09/18/2019 02:02	WG1347343
Ethylbenzene	U		0.000602	0.00250	0.00284	1	09/18/2019 02:02	WG1347343
Total Xylenes	U	J4	0.00543	0.00650	0.00738	1	09/18/2019 02:02	WG1347343
(S) Toluene-d8	*114*				*75.0-131*		*09/18/2019 02:02*	WG1347343
(S) 4-Bromofluorobenzene	*100*				*67.0-138*		*09/18/2019 02:02*	WG1347343
(S) 1,2-Dichloroethane-d4	*111*				*70.0-130*		*09/18/2019 02:02*	WG1347343

Semi-Volatile Organic Compounds (GC) by Method 8015

Analyte	Result (dry)	Qualifier	SDL (dry)	Unadj. MQL	MQL (dry)	Dilution	Analysis	Batch
	mg/kg		mg/kg	mg/kg	mg/kg		date / time	
C10-C28 Diesel Range	25.4		1.83	4.00	4.54	1	09/16/2019 14:22	WG1345951
C28-C40 Oil Range	44.4		0.311	4.00	4.54	1	09/16/2019 14:22	WG1345951
(S) o-Terphenyl	*68.3*				*18.0-148*		*09/16/2019 14:22*	WG1345951

BH-2 (0'-1')
Collected date/time: 09/10/19 13:00

SAMPLE RESULTS - 06
L1139267

ONE LAB. NATIONWIDE.

Total Solids by Method 2540 G-2011

Analyte	Result	Qualifier	Dilution	Analysis	Batch
	%			date / time	
Total Solids	96.8		1	09/19/2019 18:57	WG1348337

Wet Chemistry by Method 300.0

Analyte	Result (dry)	Qualifier	SDL (dry)	Unadj. MQL	MQL (dry)	Dilution	Analysis	Batch
	mg/kg		mg/kg	mg/kg	mg/kg		date / time	
Chloride	281		0.822	10.0	10.3	1	09/17/2019 07:48	WG1346408

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

Analyte	Result (dry)	Qualifier	SDL (dry)	Unadj. MQL	MQL (dry)	Dilution	Analysis	Batch
	mg/kg		mg/kg	mg/kg	mg/kg		date / time	
TPH (GC/FID) Low Fraction	0.140	B	0.0224	0.100	0.103	1	09/18/2019 20:26	WG1347755
(S) a,a,a-Trifluorotoluene(FID)	*93.5*				*77.0-120*		*09/18/2019 20:26*	WG1347755

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

Analyte	Result (dry)	Qualifier	SDL (dry)	Unadj. MQL	MQL (dry)	Dilution	Analysis	Batch
	mg/kg		mg/kg	mg/kg	mg/kg		date / time	
Benzene	U		0.000413	0.00100	0.00103	1	09/18/2019 02:23	WG1347343
Toluene	U		0.00129	0.00500	0.00517	1	09/18/2019 02:23	WG1347343
Ethylbenzene	U		0.000548	0.00250	0.00258	1	09/18/2019 02:23	WG1347343
Total Xylenes	U	J4	0.00494	0.00650	0.00672	1	09/18/2019 02:23	WG1347343
(S) Toluene-d8	*109*				*75.0-131*		*09/18/2019 02:23*	WG1347343
(S) 4-Bromofluorobenzene	*114*				*67.0-138*		*09/18/2019 02:23*	WG1347343
(S) 1,2-Dichloroethane-d4	*114*				*70.0-130*		*09/18/2019 02:23*	WG1347343

Semi-Volatile Organic Compounds (GC) by Method 8015

Analyte	Result (dry)	Qualifier	SDL (dry)	Unadj. MQL	MQL (dry)	Dilution	Analysis	Batch
	mg/kg		mg/kg	mg/kg	mg/kg		date / time	
C10-C28 Diesel Range	2880		33.3	4.00	82.7	20	09/16/2019 15:42	WG1345951
C28-C40 Oil Range	1680		5.66	4.00	82.7	20	09/16/2019 15:42	WG1345951
(S) o-Terphenyl	*0.000*	J7			*18.0-148*		*09/16/2019 15:42*	WG1345951

BH-2 (2'-3')
Collected date/time: 09/10/19 13:05

SAMPLE RESULTS - 07

L1139267

ONE LAB. NATIONWIDE.

Total Solids by Method 2540 G-2011

Analyte	Result	Qualifier	Dilution	Analysis	Batch
	%			date / time	
Total Solids	97.6		1	09/19/2019 18:57	WG1348337

Wet Chemistry by Method 300.0

Analyte	Result (dry)	Qualifier	SDL (dry)	Unadj. MQL	MQL (dry)	Dilution	Analysis	Batch
	mg/kg		mg/kg	mg/kg	mg/kg		date / time	
Chloride	157		0.815	10.0	10.2	1	09/17/2019 08:17	WG1346408

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

Analyte	Result (dry)	Qualifier	SDL (dry)	Unadj. MQL	MQL (dry)	Dilution	Analysis	Batch
	mg/kg		mg/kg	mg/kg	mg/kg		date / time	
TPH (GC/FID) Low Fraction	0.0655	B J	0.0222	0.100	0.102	1	09/18/2019 20:46	WG1347755
(S) a,a,a-Trifluorotoluene(FID)	*93.5*				*77.0-120*		*09/18/2019 20:46*	WG1347755

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

Analyte	Result (dry)	Qualifier	SDL (dry)	Unadj. MQL	MQL (dry)	Dilution	Analysis	Batch
	mg/kg		mg/kg	mg/kg	mg/kg		date / time	
Benzene	U		0.000410	0.00100	0.00102	1	09/18/2019 02:44	WG1347343
Toluene	U		0.00128	0.00500	0.00512	1	09/18/2019 02:44	WG1347343
Ethylbenzene	U		0.000543	0.00250	0.00256	1	09/18/2019 02:44	WG1347343
Total Xylenes	U	J4	0.00490	0.00650	0.00666	1	09/18/2019 02:44	WG1347343
(S) Toluene-d8	*109*				*75.0-131*		*09/18/2019 02:44*	WG1347343
(S) 4-Bromofluorobenzene	*107*				*67.0-138*		*09/18/2019 02:44*	WG1347343
(S) 1,2-Dichloroethane-d4	*111*				*70.0-130*		*09/18/2019 02:44*	WG1347343

Semi-Volatile Organic Compounds (GC) by Method 8015

Analyte	Result (dry)	Qualifier	SDL (dry)	Unadj. MQL	MQL (dry)	Dilution	Analysis	Batch
	mg/kg		mg/kg	mg/kg	mg/kg		date / time	
C10-C28 Diesel Range	1020		66.0	4.00	164	40	09/16/2019 15:29	WG1345951
C28-C40 Oil Range	1180		11.2	4.00	164	40	09/16/2019 15:29	WG1345951
(S) o-Terphenyl	*0.000*	J7			*18.0-148*		*09/16/2019 15:29*	WG1345951

BH-2 (4'-5')
Collected date/time: 09/10/19 13:10

SAMPLE RESULTS - 08
L1139267

ONE LAB. NATIONWIDE.

Total Solids by Method 2540 G-2011

Analyte	Result	Qualifier	Dilution	Analysis	Batch
	%			date / time	
Total Solids	98.9		1	09/19/2019 18:57	WG1348337

Wet Chemistry by Method 300.0

Analyte	Result (dry)	Qualifier	SDL (dry)	Unadj. MQL	MQL (dry)	Dilution	Analysis	Batch
	mg/kg		mg/kg	mg/kg	mg/kg		date / time	
Chloride	70.7		0.804	10.0	10.1	1	09/16/2019 23:05	WG1346419

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

Analyte	Result (dry)	Qualifier	SDL (dry)	Unadj. MQL	MQL (dry)	Dilution	Analysis	Batch
	mg/kg		mg/kg	mg/kg	mg/kg		date / time	
TPH (GC/FID) Low Fraction	U		0.0219	0.100	0.101	1	09/19/2019 13:10	WG1348549
(S) a,a,a-Trifluorotoluene(FID)	*101*				*77.0-120*		*09/19/2019 13:10*	WG1348549

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

Analyte	Result (dry)	Qualifier	SDL (dry)	Unadj. MQL	MQL (dry)	Dilution	Analysis	Batch
	mg/kg		mg/kg	mg/kg	mg/kg		date / time	
Benzene	U		0.000404	0.00100	0.00101	1	09/18/2019 03:04	WG1347343
Toluene	U		0.00126	0.00500	0.00506	1	09/18/2019 03:04	WG1347343
Ethylbenzene	U		0.000536	0.00250	0.00253	1	09/18/2019 03:04	WG1347343
Total Xylenes	U	J4	0.00483	0.00650	0.00657	1	09/18/2019 03:04	WG1347343
(S) Toluene-d8	*108*				*75.0-131*		*09/18/2019 03:04*	WG1347343
(S) 4-Bromofluorobenzene	*103*				*67.0-138*		*09/18/2019 03:04*	WG1347343
(S) 1,2-Dichloroethane-d4	*110*				*70.0-130*		*09/18/2019 03:04*	WG1347343

Semi-Volatile Organic Compounds (GC) by Method 8015

Analyte	Result (dry)	Qualifier	SDL (dry)	Unadj. MQL	MQL (dry)	Dilution	Analysis	Batch
	mg/kg		mg/kg	mg/kg	mg/kg		date / time	
C10-C28 Diesel Range	152		8.14	4.00	20.2	5	09/16/2019 15:02	WG1345951
C28-C40 Oil Range	232		1.39	4.00	20.2	5	09/16/2019 15:02	WG1345951
(S) o-Terphenyl	*118*				*18.0-148*		*09/16/2019 15:02*	WG1345951

BH-2 (6'-7')
Collected date/time: 09/10/19 13:20

SAMPLE RESULTS - 09
L1139267

ONE LAB. NATIONWIDE.

Total Solids by Method 2540 G-2011

Analyte	Result	Qualifier	Dilution	Analysis	Batch
	%			date / time	
Total Solids	97.5		1	09/19/2019 18:57	WG1348337

Wet Chemistry by Method 300.0

Analyte	Result (dry)	Qualifier	SDL (dry)	Unadj. MQL	MQL (dry)	Dilution	Analysis	Batch
	mg/kg		mg/kg	mg/kg	mg/kg		date / time	
Chloride	108		0.816	10.0	10.3	1	09/16/2019 23:34	WG1346419

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

Analyte	Result (dry)	Qualifier	SDL (dry)	Unadj. MQL	MQL (dry)	Dilution	Analysis	Batch
	mg/kg		mg/kg	mg/kg	mg/kg		date / time	
TPH (GC/FID) Low Fraction	0.0230	B J	0.0223	0.100	0.103	1	09/18/2019 22:01	WG1347755
(S) a,a,a-Trifluorotoluene(FID)	*93.5*				*77.0-120*		*09/18/2019 22:01*	WG1347755

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

Analyte	Result (dry)	Qualifier	SDL (dry)	Unadj. MQL	MQL (dry)	Dilution	Analysis	Batch
	mg/kg		mg/kg	mg/kg	mg/kg		date / time	
Benzene	U		0.000410	0.00100	0.00103	1	09/18/2019 03:25	WG1347343
Toluene	U		0.00128	0.00500	0.00513	1	09/18/2019 03:25	WG1347343
Ethylbenzene	U		0.000544	0.00250	0.00256	1	09/18/2019 03:25	WG1347343
Total Xylenes	U	J4	0.00490	0.00650	0.00667	1	09/18/2019 03:25	WG1347343
(S) Toluene-d8	*110*				*75.0-131*		*09/18/2019 03:25*	WG1347343
(S) 4-Bromofluorobenzene	*104*				*67.0-138*		*09/18/2019 03:25*	WG1347343
(S) 1,2-Dichloroethane-d4	*110*				*70.0-130*		*09/18/2019 03:25*	WG1347343

Semi-Volatile Organic Compounds (GC) by Method 8015

Analyte	Result (dry)	Qualifier	SDL (dry)	Unadj. MQL	MQL (dry)	Dilution	Analysis	Batch
	mg/kg		mg/kg	mg/kg	mg/kg		date / time	
C10-C28 Diesel Range	43.2		1.65	4.00	4.10	1	09/16/2019 14:35	WG1345951
C28-C40 Oil Range	60.8		0.281	4.00	4.10	1	09/16/2019 14:35	WG1345951
(S) o-Terphenyl	*76.8*				*18.0-148*		*09/16/2019 14:35*	WG1345951

BH-2 (9'-10')
Collected date/time: 09/10/19 13:30

SAMPLE RESULTS - 10
L1139267

ONE LAB. NATIONWIDE.

Total Solids by Method 2540 G-2011

Analyte	Result	Qualifier	Dilution	Analysis	Batch
	%			date / time	
Total Solids	93.8		1	09/19/2019 18:57	WG1348337

Wet Chemistry by Method 300.0

Analyte	Result (dry)	Qualifier	SDL (dry)	Unadj. MQL	MQL (dry)	Dilution	Analysis	Batch
	mg/kg		mg/kg	mg/kg	mg/kg		date / time	
Chloride	190		0.848	10.0	10.7	1	09/16/2019 23:43	WG1346419

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

Analyte	Result (dry)	Qualifier	SDL (dry)	Unadj. MQL	MQL (dry)	Dilution	Analysis	Batch
	mg/kg		mg/kg	mg/kg	mg/kg		date / time	
TPH (GC/FID) Low Fraction	U		0.0231	0.100	0.107	1	09/18/2019 22:21	WG1347755
(S) a,a,a-Trifluorotoluene(FID)	*93.6*				*77.0-120*		*09/18/2019 22:21*	WG1347755

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

Analyte	Result (dry)	Qualifier	SDL (dry)	Unadj. MQL	MQL (dry)	Dilution	Analysis	Batch
	mg/kg		mg/kg	mg/kg	mg/kg		date / time	
Benzene	U		0.000426	0.00100	0.00107	1	09/18/2019 03:46	WG1347343
Toluene	U		0.00133	0.00500	0.00533	1	09/18/2019 03:46	WG1347343
Ethylbenzene	U		0.000565	0.00250	0.00267	1	09/18/2019 03:46	WG1347343
Total Xylenes	U	J4	0.00510	0.00650	0.00693	1	09/18/2019 03:46	WG1347343
(S) Toluene-d8	*110*				*75.0-131*		*09/18/2019 03:46*	WG1347343
(S) 4-Bromofluorobenzene	*100*				*67.0-138*		*09/18/2019 03:46*	WG1347343
(S) 1,2-Dichloroethane-d4	*110*				*70.0-130*		*09/18/2019 03:46*	WG1347343

Semi-Volatile Organic Compounds (GC) by Method 8015

Analyte	Result (dry)	Qualifier	SDL (dry)	Unadj. MQL	MQL (dry)	Dilution	Analysis	Batch
	mg/kg		mg/kg	mg/kg	mg/kg		date / time	
C10-C28 Diesel Range	4.63		1.72	4.00	4.26	1	09/15/2019 22:32	WG1345980
C28-C40 Oil Range	15.9		0.292	4.00	4.26	1	09/15/2019 22:32	WG1345980
(S) o-Terphenyl	*62.8*				*18.0-148*		*09/15/2019 22:32*	WG1345980

BH-3 (0'-1')
Collected date/time: 09/10/19 14:00

SAMPLE RESULTS - 11

L1139267

ONE LAB. NATIONWIDE.

Total Solids by Method 2540 G-2011

Analyte	Result	Qualifier	Dilution	Analysis	Batch
	%			date / time	
Total Solids	97.4		1	09/19/2019 18:57	WG1348337

Wet Chemistry by Method 300.0

Analyte	Result (dry)	Qualifier	SDL (dry)	Unadj. MQL	MQL (dry)	Dilution	Analysis	Batch
	mg/kg		mg/kg	mg/kg	mg/kg		date / time	
Chloride	23.5	B	0.817	10.0	10.3	1	09/16/2019 23:53	WG1346419

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

Analyte	Result (dry)	Qualifier	SDL (dry)	Unadj. MQL	MQL (dry)	Dilution	Analysis	Batch
	mg/kg		mg/kg	mg/kg	mg/kg		date / time	
TPH (GC/FID) Low Fraction	0.0236	B J	0.0223	0.100	0.103	1	09/18/2019 22:42	WG1347755
(S) a,a,a-Trifluorotoluene(FID)	*91.7*				*77.0-120*		*09/18/2019 22:42*	WG1347755

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

Analyte	Result (dry)	Qualifier	SDL (dry)	Unadj. MQL	MQL (dry)	Dilution	Analysis	Batch
	mg/kg		mg/kg	mg/kg	mg/kg		date / time	
Benzene	U		0.000411	0.00100	0.00103	1	09/18/2019 04:06	WG1347343
Toluene	U		0.00128	0.00500	0.00514	1	09/18/2019 04:06	WG1347343
Ethylbenzene	U		0.000544	0.00250	0.00257	1	09/18/2019 04:06	WG1347343
Total Xylenes	U	J4	0.00491	0.00650	0.00668	1	09/18/2019 04:06	WG1347343
(S) Toluene-d8	*116*				*75.0-131*		*09/18/2019 04:06*	WG1347343
(S) 4-Bromofluorobenzene	*96.3*				*67.0-138*		*09/18/2019 04:06*	WG1347343
(S) 1,2-Dichloroethane-d4	*109*				*70.0-130*		*09/18/2019 04:06*	WG1347343

Semi-Volatile Organic Compounds (GC) by Method 8015

Analyte	Result (dry)	Qualifier	SDL (dry)	Unadj. MQL	MQL (dry)	Dilution	Analysis	Batch
	mg/kg		mg/kg	mg/kg	mg/kg		date / time	
C10-C28 Diesel Range	251		16.5	4.00	41.1	10	09/16/2019 01:48	WG1345980
C28-C40 Oil Range	455		2.81	4.00	41.1	10	09/16/2019 01:48	WG1345980
(S) o-Terphenyl	*49.5*				*18.0-148*		*09/16/2019 01:48*	WG1345980

BH-3 (2'-3')
Collected date/time: 09/10/19 14:10

SAMPLE RESULTS - 12
L1139267

ONE LAB. NATIONWIDE.

Total Solids by Method 2540 G-2011

Analyte	Result	Qualifier	Dilution	Analysis	Batch
	%			date / time	
Total Solids	98.2		1	09/19/2019 18:47	WG1348339

Wet Chemistry by Method 300.0

Analyte	Result (dry)	Qualifier	SDL (dry)	Unadj. MQL	MQL (dry)	Dilution	Analysis	Batch
	mg/kg		mg/kg	mg/kg	mg/kg		date / time	
Chloride	23.5	B P1	0.810	10.0	10.2	1	09/17/2019 00:03	WG1346419

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

Analyte	Result (dry)	Qualifier	SDL (dry)	Unadj. MQL	MQL (dry)	Dilution	Analysis	Batch
	mg/kg		mg/kg	mg/kg	mg/kg		date / time	
TPH (GC/FID) Low Fraction	U		0.0221	0.100	0.102	1	09/18/2019 23:03	WG1347755
(S) a,a,a-Trifluorotoluene(FID)	*93.3*				*77.0-120*		*09/18/2019 23:03*	WG1347755

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

Analyte	Result (dry)	Qualifier	SDL (dry)	Unadj. MQL	MQL (dry)	Dilution	Analysis	Batch
	mg/kg		mg/kg	mg/kg	mg/kg		date / time	
Benzene	U		0.000407	0.00100	0.00102	1	09/18/2019 04:27	WG1347343
Toluene	U		0.00127	0.00500	0.00509	1	09/18/2019 04:27	WG1347343
Ethylbenzene	U		0.000540	0.00250	0.00255	1	09/18/2019 04:27	WG1347343
Total Xylenes	U	J4	0.00487	0.00650	0.00662	1	09/18/2019 04:27	WG1347343
(S) Toluene-d8	*116*				*75.0-131*		*09/18/2019 04:27*	WG1347343
(S) 4-Bromofluorobenzene	*101*				*67.0-138*		*09/18/2019 04:27*	WG1347343
(S) 1,2-Dichloroethane-d4	*109*				*70.0-130*		*09/18/2019 04:27*	WG1347343

Semi-Volatile Organic Compounds (GC) by Method 8015

Analyte	Result (dry)	Qualifier	SDL (dry)	Unadj. MQL	MQL (dry)	Dilution	Analysis	Batch
	mg/kg		mg/kg	mg/kg	mg/kg		date / time	
C10-C28 Diesel Range	418		65.6	4.00	163	40	09/16/2019 02:01	WG1345980
C28-C40 Oil Range	953		11.2	4.00	163	40	09/16/2019 02:01	WG1345980
(S) o-Terphenyl	*109*	J7			*18.0-148*		*09/16/2019 02:01*	WG1345980

BH-3 (4'-5')
Collected date/time: 09/10/19 14:20

SAMPLE RESULTS - 13
L1139267

ONE LAB. NATIONWIDE.

Total Solids by Method 2540 G-2011

Analyte	Result	Qualifier	Dilution	Analysis	Batch
	%			date / time	
Total Solids	96.7		1	09/19/2019 18:47	WG1348339

Wet Chemistry by Method 300.0

Analyte	Result (dry)	Qualifier	SDL (dry)	Unadj. MQL	MQL (dry)	Dilution	Analysis	Batch
	mg/kg		mg/kg	mg/kg	mg/kg		date / time	
Chloride	23.9	B	0.823	10.0	10.3	1	09/17/2019 00:22	WG1346419

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

Analyte	Result (dry)	Qualifier	SDL (dry)	Unadj. MQL	MQL (dry)	Dilution	Analysis	Batch
	mg/kg		mg/kg	mg/kg	mg/kg		date / time	
TPH (GC/FID) Low Fraction	U		0.0224	0.100	0.103	1	09/18/2019 15:05	WG1347802
(S) a,a,a-Trifluorotoluene(FID)	*101*				*77.0-120*		*09/18/2019 15:05*	WG1347802

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

Analyte	Result (dry)	Qualifier	SDL (dry)	Unadj. MQL	MQL (dry)	Dilution	Analysis	Batch
	mg/kg		mg/kg	mg/kg	mg/kg		date / time	
Benzene	U		0.000414	0.00100	0.00103	1	09/18/2019 06:30	WG1347349
Toluene	U		0.00129	0.00500	0.00517	1	09/18/2019 06:30	WG1347349
Ethylbenzene	U		0.000548	0.00250	0.00259	1	09/18/2019 06:30	WG1347349
Total Xylenes	U		0.00494	0.00650	0.00672	1	09/18/2019 06:30	WG1347349
(S) Toluene-d8	*112*				*75.0-131*		*09/18/2019 06:30*	WG1347349
(S) 4-Bromofluorobenzene	*84.5*				*67.0-138*		*09/18/2019 06:30*	WG1347349
(S) 1,2-Dichloroethane-d4	*101*				*70.0-130*		*09/18/2019 06:30*	WG1347349

Semi-Volatile Organic Compounds (GC) by Method 8015

Analyte	Result (dry)	Qualifier	SDL (dry)	Unadj. MQL	MQL (dry)	Dilution	Analysis	Batch
	mg/kg		mg/kg	mg/kg	mg/kg		date / time	
C10-C28 Diesel Range	189		33.3	4.00	82.8	20	09/16/2019 02:15	WG1345980
C28-C40 Oil Range	524		5.67	4.00	82.8	20	09/16/2019 02:15	WG1345980
(S) o-Terphenyl	*79.5*	J7			*18.0-148*		*09/16/2019 02:15*	WG1345980

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

BH-3 (6'-7')
Collected date/time: 09/10/19 14:30

SAMPLE RESULTS - 14
L1139267

ONE LAB. NATIONWIDE.

Total Solids by Method 2540 G-2011

Analyte	Result	Qualifier	Dilution	Analysis	Batch
	%			date / time	
Total Solids	95.4		1	09/19/2019 18:47	WG1348339

Wet Chemistry by Method 300.0

Analyte	Result (dry)	Qualifier	SDL (dry)	Unadj. MQL	MQL (dry)	Dilution	Analysis	Batch
	mg/kg		mg/kg	mg/kg	mg/kg		date / time	
Chloride	71.6		0.833	10.0	10.5	1	09/17/2019 00:31	WG1346419

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

Analyte	Result (dry)	Qualifier	SDL (dry)	Unadj. MQL	MQL (dry)	Dilution	Analysis	Batch
	mg/kg		mg/kg	mg/kg	mg/kg		date / time	
TPH (GC/FID) Low Fraction	U		0.0227	0.100	0.105	1	09/18/2019 15:25	WG1347802
(S) a,a,a-Trifluorotoluene(FID)	*99.3*				*77.0-120*		*09/18/2019 15:25*	WG1347802

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

Analyte	Result (dry)	Qualifier	SDL (dry)	Unadj. MQL	MQL (dry)	Dilution	Analysis	Batch
	mg/kg		mg/kg	mg/kg	mg/kg		date / time	
Benzene	0.000532	J	0.000419	0.00100	0.00105	1	09/18/2019 06:48	WG1347349
Toluene	U		0.00131	0.00500	0.00524	1	09/18/2019 06:48	WG1347349
Ethylbenzene	U		0.000555	0.00250	0.00262	1	09/18/2019 06:48	WG1347349
Total Xylenes	U		0.00501	0.00650	0.00681	1	09/18/2019 06:48	WG1347349
(S) Toluene-d8	*109*				*75.0-131*		*09/18/2019 06:48*	WG1347349
(S) 4-Bromofluorobenzene	*85.7*				*67.0-138*		*09/18/2019 06:48*	WG1347349
(S) 1,2-Dichloroethane-d4	*98.9*				*70.0-130*		*09/18/2019 06:48*	WG1347349

Semi-Volatile Organic Compounds (GC) by Method 8015

Analyte	Result (dry)	Qualifier	SDL (dry)	Unadj. MQL	MQL (dry)	Dilution	Analysis	Batch
	mg/kg		mg/kg	mg/kg	mg/kg		date / time	
C10-C28 Diesel Range	36.1	J	16.9	4.00	41.9	10	09/16/2019 13:42	WG1345980
C28-C40 Oil Range	103		2.87	4.00	41.9	10	09/16/2019 13:42	WG1345980
(S) o-Terphenyl	*71.4*				*18.0-148*		*09/16/2019 13:42*	WG1345980

Sample Narrative:

L1139267-14 WG1345980: Cannot run at lower dilution due to viscosity of extract

BH-3 (9'-10')
Collected date/time: 09/10/19 14:40

SAMPLE RESULTS - 15

L1139267

ONE LAB. NATIONWIDE.

Total Solids by Method 2540 G-2011

Analyte	Result	Qualifier	Dilution	Analysis	Batch
	%			date / time	
Total Solids	89.4		1	09/19/2019 18:47	WG1348339

Wet Chemistry by Method 300.0

Analyte	Result (dry)	Qualifier	SDL (dry)	Unadj. MQL	MQL (dry)	Dilution	Analysis	Batch
	mg/kg		mg/kg	mg/kg	mg/kg		date / time	
Chloride	260		0.890	10.0	11.2	1	09/17/2019 01:00	WG1346419

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

Analyte	Result (dry)	Qualifier	SDL (dry)	Unadj. MQL	MQL (dry)	Dilution	Analysis	Batch
	mg/kg		mg/kg	mg/kg	mg/kg		date / time	
TPH (GC/FID) Low Fraction	U	J3	0.0243	0.100	0.112	1	09/18/2019 15:45	WG1347802
(S) a,a,a-Trifluorotoluene(FID)	*102*				*77.0-120*		*09/18/2019 15:45*	WG1347802

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

Analyte	Result (dry)	Qualifier	SDL (dry)	Unadj. MQL	MQL (dry)	Dilution	Analysis	Batch
	mg/kg		mg/kg	mg/kg	mg/kg		date / time	
Benzene	0.000558	J	0.000448	0.00100	0.00112	1	09/18/2019 07:07	WG1347349
Toluene	U		0.00140	0.00500	0.00559	1	09/18/2019 07:07	WG1347349
Ethylbenzene	U		0.000593	0.00250	0.00280	1	09/18/2019 07:07	WG1347349
Total Xylenes	U		0.00535	0.00650	0.00727	1	09/18/2019 07:07	WG1347349
(S) Toluene-d8	*107*				*75.0-131*		*09/18/2019 07:07*	WG1347349
(S) 4-Bromofluorobenzene	*82.7*				*67.0-138*		*09/18/2019 07:07*	WG1347349
(S) 1,2-Dichloroethane-d4	*96.8*				*70.0-130*		*09/18/2019 07:07*	WG1347349

Semi-Volatile Organic Compounds (GC) by Method 8015

Analyte	Result (dry)	Qualifier	SDL (dry)	Unadj. MQL	MQL (dry)	Dilution	Analysis	Batch
	mg/kg		mg/kg	mg/kg	mg/kg		date / time	
C10-C28 Diesel Range	42.5		1.80	4.00	4.48	1	09/16/2019 00:04	WG1345980
C28-C40 Oil Range	104		0.307	4.00	4.48	1	09/16/2019 00:04	WG1345980
(S) o-Terphenyl	*67.4*				*18.0-148*		*09/16/2019 00:04*	WG1345980

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

BH-4 (0'-1')
Collected date/time: 09/10/19 15:10

SAMPLE RESULTS - 16
L1139267

ONE LAB. NATIONWIDE.

Total Solids by Method 2540 G-2011

Analyte	Result	Qualifier	Dilution	Analysis	Batch
	%			date / time	
Total Solids	93.4		1	09/19/2019 18:47	WG1348339

Wet Chemistry by Method 300.0

Analyte	Result (dry)	Qualifier	SDL (dry)	Unadj. MQL	MQL (dry)	Dilution	Analysis	Batch
	mg/kg		mg/kg	mg/kg	mg/kg		date / time	
Chloride	124		0.852	10.0	10.7	1	09/17/2019 01:09	WG1346419

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

Analyte	Result (dry)	Qualifier	SDL (dry)	Unadj. MQL	MQL (dry)	Dilution	Analysis	Batch
	mg/kg		mg/kg	mg/kg	mg/kg		date / time	
TPH (GC/FID) Low Fraction	U		0.0232	0.100	0.107	1	09/18/2019 16:06	WG1347802
(S) a,a,a-Trifluorotoluene(FID)	*97.9*				*77.0-120*		*09/18/2019 16:06*	WG1347802

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

Analyte	Result (dry)	Qualifier	SDL (dry)	Unadj. MQL	MQL (dry)	Dilution	Analysis	Batch
	mg/kg		mg/kg	mg/kg	mg/kg		date / time	
Benzene	0.00120		0.000428	0.00100	0.00107	1	09/18/2019 07:25	WG1347349
Toluene	U		0.00134	0.00500	0.00536	1	09/18/2019 07:25	WG1347349
Ethylbenzene	U		0.000568	0.00250	0.00268	1	09/18/2019 07:25	WG1347349
Total Xylenes	U		0.00512	0.00650	0.00696	1	09/18/2019 07:25	WG1347349
(S) Toluene-d8	*106*				*75.0-131*		*09/18/2019 07:25*	WG1347349
(S) 4-Bromofluorobenzene	*83.8*				*67.0-138*		*09/18/2019 07:25*	WG1347349
(S) 1,2-Dichloroethane-d4	*95.8*				*70.0-130*		*09/18/2019 07:25*	WG1347349

Semi-Volatile Organic Compounds (GC) by Method 8015

Analyte	Result (dry)	Qualifier	SDL (dry)	Unadj. MQL	MQL (dry)	Dilution	Analysis	Batch
	mg/kg		mg/kg	mg/kg	mg/kg		date / time	
C10-C28 Diesel Range	1600		17.2	4.00	42.8	10	09/16/2019 00:30	WG1345980
C28-C40 Oil Range	1370		2.93	4.00	42.8	10	09/16/2019 00:30	WG1345980
(S) o-Terphenyl	*187*	J1			*18.0-148*		*09/16/2019 00:30*	WG1345980

Sample Narrative:

L1139267-16 WG1345980: Surrogate failure due to matrix interference

BH-4 (2'-3')
Collected date/time: 09/10/19 15:20

SAMPLE RESULTS - 17
L1139267

ONE LAB. NATIONWIDE.

Total Solids by Method 2540 G-2011

Analyte	Result	Qualifier	Dilution	Analysis	Batch
	%			date / time	
Total Solids	98.5		1	09/19/2019 18:47	WG1348339

Wet Chemistry by Method 300.0

Analyte	Result (dry)	Qualifier	SDL (dry)	Unadj. MQL	MQL (dry)	Dilution	Analysis	Batch
	mg/kg		mg/kg	mg/kg	mg/kg		date / time	
Chloride	208		0.807	10.0	10.2	1	09/17/2019 01:19	WG1346419

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

Analyte	Result (dry)	Qualifier	SDL (dry)	Unadj. MQL	MQL (dry)	Dilution	Analysis	Batch
	mg/kg		mg/kg	mg/kg	mg/kg		date / time	
TPH (GC/FID) Low Fraction	U		0.0220	0.100	0.102	1	09/18/2019 16:27	WG1347802
(S) a,a,a-Trifluorotoluene(FID)	*95.3*				*77.0-120*		*09/18/2019 16:27*	WG1347802

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

Analyte	Result (dry)	Qualifier	SDL (dry)	Unadj. MQL	MQL (dry)	Dilution	Analysis	Batch
	mg/kg		mg/kg	mg/kg	mg/kg		date / time	
Benzene	0.00152		0.000406	0.00100	0.00102	1	09/18/2019 07:44	WG1347349
Toluene	U		0.00127	0.00500	0.00508	1	09/18/2019 07:44	WG1347349
Ethylbenzene	U		0.000538	0.00250	0.00254	1	09/18/2019 07:44	WG1347349
Total Xylenes	U		0.00485	0.00650	0.00660	1	09/18/2019 07:44	WG1347349
(S) Toluene-d8	*107*				*75.0-131*		*09/18/2019 07:44*	WG1347349
(S) 4-Bromofluorobenzene	*83.8*				*67.0-138*		*09/18/2019 07:44*	WG1347349
(S) 1,2-Dichloroethane-d4	*97.2*				*70.0-130*		*09/18/2019 07:44*	WG1347349

Semi-Volatile Organic Compounds (GC) by Method 8015

Analyte	Result (dry)	Qualifier	SDL (dry)	Unadj. MQL	MQL (dry)	Dilution	Analysis	Batch
	mg/kg		mg/kg	mg/kg	mg/kg		date / time	
C10-C28 Diesel Range	3380		81.7	4.00	203	50	09/21/2019 13:22	WG1345980
C28-C40 Oil Range	2680		13.9	4.00	203	50	09/21/2019 13:22	WG1345980
(S) o-Terphenyl	*0.000*	J7			*18.0-148*		*09/21/2019 13:22*	WG1345980

BH-4 (4'-5')
Collected date/time: 09/10/19 15:30

SAMPLE RESULTS - 18

L1139267

ONE LAB. NATIONWIDE.

Total Solids by Method 2540 G-2011

Analyte	Result	Qualifier	Dilution	Analysis	Batch
	%			date / time	
Total Solids	97.6		1	09/19/2019 18:47	WG1348339

Wet Chemistry by Method 300.0

Analyte	Result (dry)	Qualifier	SDL (dry)	Unadj. MQL	MQL (dry)	Dilution	Analysis	Batch
	mg/kg		mg/kg	mg/kg	mg/kg		date / time	
Chloride	57.9		0.815	10.0	10.2	1	09/17/2019 01:28	WG1346419

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

Analyte	Result (dry)	Qualifier	SDL (dry)	Unadj. MQL	MQL (dry)	Dilution	Analysis	Batch
	mg/kg		mg/kg	mg/kg	mg/kg		date / time	
TPH (GC/FID) Low Fraction	U		0.0222	0.100	0.102	1	09/18/2019 16:47	WG1347802
(S) a,a,a-Trifluorotoluene(FID)	*100*				*77.0-120*		*09/18/2019 16:47*	WG1347802

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

Analyte	Result (dry)	Qualifier	SDL (dry)	Unadj. MQL	MQL (dry)	Dilution	Analysis	Batch
	mg/kg		mg/kg	mg/kg	mg/kg		date / time	
Benzene	0.00139		0.000410	0.00100	0.00102	1	09/18/2019 08:02	WG1347349
Toluene	U		0.00128	0.00500	0.00512	1	09/18/2019 08:02	WG1347349
Ethylbenzene	U		0.000543	0.00250	0.00256	1	09/18/2019 08:02	WG1347349
Total Xylenes	U		0.00490	0.00650	0.00666	1	09/18/2019 08:02	WG1347349
(S) Toluene-d8	*102*				*75.0-131*		*09/18/2019 08:02*	WG1347349
(S) 4-Bromofluorobenzene	*89.7*				*67.0-138*		*09/18/2019 08:02*	WG1347349
(S) 1,2-Dichloroethane-d4	*105*				*70.0-130*		*09/18/2019 08:02*	WG1347349

Semi-Volatile Organic Compounds (GC) by Method 8015

Analyte	Result (dry)	Qualifier	SDL (dry)	Unadj. MQL	MQL (dry)	Dilution	Analysis	Batch
	mg/kg		mg/kg	mg/kg	mg/kg		date / time	
C10-C28 Diesel Range	200		1.65	4.00	4.10	1	09/15/2019 23:38	WG1345980
C28-C40 Oil Range	161		1.40	4.00	20.5	5	09/16/2019 16:49	WG1345980
(S) o-Terphenyl	*75.6*				*18.0-148*		*09/15/2019 23:38*	WG1345980
(S) o-Terphenyl	*0.000*	J2			*18.0-148*		*09/16/2019 16:49*	WG1345980

Sample Narrative:

L1139267-18 WG1345980: Surrogate failure due to matrix interference

BH-4 (6'-7')
Collected date/time: 09/10/19 15:40

SAMPLE RESULTS - 19
L1139267

ONE LAB. NATIONWIDE.

Total Solids by Method 2540 G-2011

Analyte	Result	Qualifier	Dilution	Analysis	Batch
	%			date / time	
Total Solids	94.0		1	09/19/2019 18:47	WG1348339

Wet Chemistry by Method 300.0

Analyte	Result (dry)	Qualifier	SDL (dry)	Unadj. MQL	MQL (dry)	Dilution	Analysis	Batch
	mg/kg		mg/kg	mg/kg	mg/kg		date / time	
Chloride	145		0.846	10.0	10.6	1	09/17/2019 01:38	WG1346419

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

Analyte	Result (dry)	Qualifier	SDL (dry)	Unadj. MQL	MQL (dry)	Dilution	Analysis	Batch
	mg/kg		mg/kg	mg/kg	mg/kg		date / time	
TPH (GC/FID) Low Fraction	U		0.0231	0.100	0.106	1	09/18/2019 17:08	WG1347802
(S) a,a,a-Trifluorotoluene(FID)	*104*				*77.0-120*		*09/18/2019 17:08*	WG1347802

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

Analyte	Result (dry)	Qualifier	SDL (dry)	Unadj. MQL	MQL (dry)	Dilution	Analysis	Batch
	mg/kg		mg/kg	mg/kg	mg/kg		date / time	
Benzene	0.000795	J	0.000426	0.00100	0.00106	1	09/18/2019 08:21	WG1347349
Toluene	U		0.00133	0.00500	0.00532	1	09/18/2019 08:21	WG1347349
Ethylbenzene	U		0.000564	0.00250	0.00266	1	09/18/2019 08:21	WG1347349
Total Xylenes	U		0.00509	0.00650	0.00692	1	09/18/2019 08:21	WG1347349
(S) Toluene-d8	*105*				*75.0-131*		*09/18/2019 08:21*	WG1347349
(S) 4-Bromofluorobenzene	*85.9*				*67.0-138*		*09/18/2019 08:21*	WG1347349
(S) 1,2-Dichloroethane-d4	*101*				*70.0-130*		*09/18/2019 08:21*	WG1347349

Semi-Volatile Organic Compounds (GC) by Method 8015

Analyte	Result (dry)	Qualifier	SDL (dry)	Unadj. MQL	MQL (dry)	Dilution	Analysis	Batch
	mg/kg		mg/kg	mg/kg	mg/kg		date / time	
C10-C28 Diesel Range	8.70		1.71	4.00	4.26	1	09/15/2019 22:58	WG1345980
C28-C40 Oil Range	10.4		0.292	4.00	4.26	1	09/15/2019 22:58	WG1345980
(S) o-Terphenyl	*58.2*				*18.0-148*		*09/15/2019 22:58*	WG1345980

BH-4 (9'-10')
Collected date/time: 09/10/19 16:00

SAMPLE RESULTS - 20
L1139267

ONE LAB. NATIONWIDE.

Total Solids by Method 2540 G-2011

Analyte	Result	Qualifier	Dilution	Analysis	Batch
	%			date / time	
Total Solids	90.7		1	09/19/2019 18:47	WG1348339

Wet Chemistry by Method 300.0

Analyte	Result (dry)	Qualifier	SDL (dry)	Unadj. MQL	MQL (dry)	Dilution	Analysis	Batch
	mg/kg		mg/kg	mg/kg	mg/kg		date / time	
Chloride	201		0.876	10.0	11.0	1	09/17/2019 01:47	WG1346419

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

Analyte	Result (dry)	Qualifier	SDL (dry)	Unadj. MQL	MQL (dry)	Dilution	Analysis	Batch
	mg/kg		mg/kg	mg/kg	mg/kg		date / time	
TPH (GC/FID) Low Fraction	U		0.0239	0.100	0.110	1	09/18/2019 17:28	WG1347802
(S) a,a,a-Trifluorotoluene(FID)	*103*				*77.0-120*		*09/18/2019 17:28*	WG1347802

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

Analyte	Result (dry)	Qualifier	SDL (dry)	Unadj. MQL	MQL (dry)	Dilution	Analysis	Batch
	mg/kg		mg/kg	mg/kg	mg/kg		date / time	
Benzene	0.000765	J	0.000441	0.00100	0.00110	1	09/18/2019 08:40	WG1347349
Toluene	U		0.00138	0.00500	0.00551	1	09/18/2019 08:40	WG1347349
Ethylbenzene	U		0.000584	0.00250	0.00276	1	09/18/2019 08:40	WG1347349
Total Xylenes	U		0.00527	0.00650	0.00716	1	09/18/2019 08:40	WG1347349
(S) Toluene-d8	*103*				*75.0-131*		*09/18/2019 08:40*	WG1347349
(S) 4-Bromofluorobenzene	*87.5*				*67.0-138*		*09/18/2019 08:40*	WG1347349
(S) 1,2-Dichloroethane-d4	*98.4*				*70.0-130*		*09/18/2019 08:40*	WG1347349

Semi-Volatile Organic Compounds (GC) by Method 8015

Analyte	Result (dry)	Qualifier	SDL (dry)	Unadj. MQL	MQL (dry)	Dilution	Analysis	Batch
	mg/kg		mg/kg	mg/kg	mg/kg		date / time	
C10-C28 Diesel Range	7.95		1.77	4.00	4.41	1	09/15/2019 22:45	WG1345980
C28-C40 Oil Range	10.8		0.302	4.00	4.41	1	09/15/2019 22:45	WG1345980
(S) o-Terphenyl	*65.9*				*18.0-148*		*09/15/2019 22:45*	WG1345980

BH-5 (0'-1')
Collected date/time: 09/11/19 10:30

SAMPLE RESULTS - 21
L1139267

ONE LAB. NATIONWIDE.

Total Solids by Method 2540 G-2011

Analyte	Result	Qualifier	Dilution	Analysis	Batch
	%			date / time	
Total Solids	98.5		1	09/19/2019 18:47	WG1348339

Wet Chemistry by Method 300.0

Analyte	Result (dry)	Qualifier	SDL (dry)	Unadj. MQL	MQL (dry)	Dilution	Analysis	Batch
	mg/kg		mg/kg	mg/kg	mg/kg		date / time	
Chloride	172		0.807	10.0	10.2	1	09/17/2019 21:20	WG1346738

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

Analyte	Result (dry)	Qualifier	SDL (dry)	Unadj. MQL	MQL (dry)	Dilution	Analysis	Batch
	mg/kg		mg/kg	mg/kg	mg/kg		date / time	
TPH (GC/FID) Low Fraction	U		0.0222	0.100	0.103	1.01	09/18/2019 17:49	WG1347802
(S) a,a,a-Trifluorotoluene(FID)	*102*				*77.0-120*		*09/18/2019 17:49*	WG1347802

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

Analyte	Result (dry)	Qualifier	SDL (dry)	Unadj. MQL	MQL (dry)	Dilution	Analysis	Batch
	mg/kg		mg/kg	mg/kg	mg/kg		date / time	
Benzene	U		0.000406	0.00100	0.00102	1	09/18/2019 08:58	WG1347349
Toluene	U		0.00127	0.00500	0.00508	1	09/18/2019 08:58	WG1347349
Ethylbenzene	U		0.000538	0.00250	0.00254	1	09/18/2019 08:58	WG1347349
Total Xylenes	U		0.00485	0.00650	0.00660	1	09/18/2019 08:58	WG1347349
(S) Toluene-d8	*105*				*75.0-131*		*09/18/2019 08:58*	WG1347349
(S) 4-Bromofluorobenzene	*86.9*				*67.0-138*		*09/18/2019 08:58*	WG1347349
(S) 1,2-Dichloroethane-d4	*97.0*				*70.0-130*		*09/18/2019 08:58*	WG1347349

Semi-Volatile Organic Compounds (GC) by Method 8015

Analyte	Result (dry)	Qualifier	SDL (dry)	Unadj. MQL	MQL (dry)	Dilution	Analysis	Batch
	mg/kg		mg/kg	mg/kg	mg/kg		date / time	
C10-C28 Diesel Range	27.0		1.63	4.00	4.06	1	09/15/2019 23:51	WG1345980
C28-C40 Oil Range	77.3		0.278	4.00	4.06	1	09/15/2019 23:51	WG1345980
(S) o-Terphenyl	*69.3*				*18.0-148*		*09/15/2019 23:51*	WG1345980

BH-5 (2'-3')
Collected date/time: 09/11/19 10:40

SAMPLE RESULTS - 22
L1139267

ONE LAB. NATIONWIDE.

Total Solids by Method 2540 G-2011

Analyte	Result	Qualifier	Dilution	Analysis	Batch
	%			date / time	
Total Solids	98.4		1	09/19/2019 18:23	WG1348340

Wet Chemistry by Method 300.0

Analyte	Result (dry)	Qualifier	SDL (dry)	Unadj. MQL	MQL (dry)	Dilution	Analysis	Batch
	mg/kg		mg/kg	mg/kg	mg/kg		date / time	
Chloride	133		0.808	10.0	10.2	1	09/17/2019 21:38	WG1346738

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

Analyte	Result (dry)	Qualifier	SDL (dry)	Unadj. MQL	MQL (dry)	Dilution	Analysis	Batch
	mg/kg		mg/kg	mg/kg	mg/kg		date / time	
TPH (GC/FID) Low Fraction	U		0.0220	0.100	0.102	1	09/18/2019 18:09	WG1347802
(S) a,a,a-Trifluorotoluene(FID)	*101*				*77.0-120*		*09/18/2019 18:09*	WG1347802

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

Analyte	Result (dry)	Qualifier	SDL (dry)	Unadj. MQL	MQL (dry)	Dilution	Analysis	Batch
	mg/kg		mg/kg	mg/kg	mg/kg		date / time	
Benzene	0.00115		0.000406	0.00100	0.00102	1	09/18/2019 09:17	WG1347349
Toluene	U		0.00127	0.00500	0.00508	1	09/18/2019 09:17	WG1347349
Ethylbenzene	U		0.000538	0.00250	0.00254	1	09/18/2019 09:17	WG1347349
Total Xylenes	U		0.00486	0.00650	0.00660	1	09/18/2019 09:17	WG1347349
(S) Toluene-d8	*105*				*75.0-131*		*09/18/2019 09:17*	WG1347349
(S) 4-Bromofluorobenzene	*82.5*				*67.0-138*		*09/18/2019 09:17*	WG1347349
(S) 1,2-Dichloroethane-d4	*101*				*70.0-130*		*09/18/2019 09:17*	WG1347349

Semi-Volatile Organic Compounds (GC) by Method 8015

Analyte	Result (dry)	Qualifier	SDL (dry)	Unadj. MQL	MQL (dry)	Dilution	Analysis	Batch
	mg/kg		mg/kg	mg/kg	mg/kg		date / time	
C10-C28 Diesel Range	1650		81.8	4.00	203	50	09/16/2019 02:28	WG1345980
C28-C40 Oil Range	4890		13.9	4.00	203	50	09/16/2019 02:28	WG1345980
(S) o-Terphenyl	*0.000*	J7			*18.0-148*		*09/16/2019 02:28*	WG1345980

BH-5 (4'-5')
Collected date/time: 09/11/19 10:50

SAMPLE RESULTS - 23
L1139267

ONE LAB. NATIONWIDE.

Total Solids by Method 2540 G-2011

Analyte	Result	Qualifier	Dilution	Analysis	Batch
	%			date / time	
Total Solids	98.5		1	09/19/2019 18:23	WG1348340

Wet Chemistry by Method 300.0

Analyte	Result (dry)	Qualifier	SDL (dry)	Unadj. MQL	MQL (dry)	Dilution	Analysis	Batch
	mg/kg		mg/kg	mg/kg	mg/kg		date / time	
Chloride	70.1		0.807	10.0	10.2	1	09/17/2019 21:48	WG1346738

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

Analyte	Result (dry)	Qualifier	SDL (dry)	Unadj. MQL	MQL (dry)	Dilution	Analysis	Batch
	mg/kg		mg/kg	mg/kg	mg/kg		date / time	
TPH (GC/FID) Low Fraction	U		0.0220	0.100	0.102	1	09/18/2019 18:29	WG1347802
(S) a,a,a-Trifluorotoluene(FID)	*101*				*77.0-120*		*09/18/2019 18:29*	WG1347802

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

Analyte	Result (dry)	Qualifier	SDL (dry)	Unadj. MQL	MQL (dry)	Dilution	Analysis	Batch
	mg/kg		mg/kg	mg/kg	mg/kg		date / time	
Benzene	0.000660	J	0.000406	0.00100	0.00102	1	09/18/2019 09:36	WG1347349
Toluene	U		0.00127	0.00500	0.00508	1	09/18/2019 09:36	WG1347349
Ethylbenzene	U		0.000538	0.00250	0.00254	1	09/18/2019 09:36	WG1347349
Total Xylenes	U		0.00485	0.00650	0.00660	1	09/18/2019 09:36	WG1347349
(S) Toluene-d8	*106*				*75.0-131*		*09/18/2019 09:36*	WG1347349
(S) 4-Bromofluorobenzene	*84.4*				*67.0-138*		*09/18/2019 09:36*	WG1347349
(S) 1,2-Dichloroethane-d4	*96.2*				*70.0-130*		*09/18/2019 09:36*	WG1347349

Semi-Volatile Organic Compounds (GC) by Method 8015

Analyte	Result (dry)	Qualifier	SDL (dry)	Unadj. MQL	MQL (dry)	Dilution	Analysis	Batch
	mg/kg		mg/kg	mg/kg	mg/kg		date / time	
C10-C28 Diesel Range	246		81.7	4.00	203	50	09/16/2019 02:41	WG1345980
C28-C40 Oil Range	748		13.9	4.00	203	50	09/16/2019 02:41	WG1345980
(S) o-Terphenyl	*0.000*	J7			*18.0-148*		*09/16/2019 02:41*	WG1345980

BH-5 (6'-7')
Collected date/time: 09/11/19 11:00

SAMPLE RESULTS - 24

L1139267

ONE LAB. NATIONWIDE.

Total Solids by Method 2540 G-2011

Analyte	Result	Qualifier	Dilution	Analysis	Batch
	%			date / time	
Total Solids	89.0		1	09/19/2019 18:23	WG1348340

Wet Chemistry by Method 300.0

Analyte	Result (dry)	Qualifier	SDL (dry)	Unadj. MQL	MQL (dry)	Dilution	Analysis	Batch
	mg/kg		mg/kg	mg/kg	mg/kg		date / time	
Chloride	86.9		0.893	10.0	11.2	1	09/17/2019 21:57	WG1346738

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

Analyte	Result (dry)	Qualifier	SDL (dry)	Unadj. MQL	MQL (dry)	Dilution	Analysis	Batch
	mg/kg		mg/kg	mg/kg	mg/kg		date / time	
TPH (GC/FID) Low Fraction	U		0.0244	0.100	0.112	1	09/18/2019 18:50	WG1347802
(S) a,a,a-Trifluorotoluene(FID)	*102*				*77.0-120*		*09/18/2019 18:50*	WG1347802

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

Analyte	Result (dry)	Qualifier	SDL (dry)	Unadj. MQL	MQL (dry)	Dilution	Analysis	Batch
	mg/kg		mg/kg	mg/kg	mg/kg		date / time	
Benzene	0.00111	J	0.000449	0.00100	0.00112	1	09/18/2019 09:55	WG1347349
Toluene	U		0.00140	0.00500	0.00562	1	09/18/2019 09:55	WG1347349
Ethylbenzene	U		0.000595	0.00250	0.00281	1	09/18/2019 09:55	WG1347349
Total Xylenes	U		0.00537	0.00650	0.00730	1	09/18/2019 09:55	WG1347349
(S) Toluene-d8	*105*				*75.0-131*		*09/18/2019 09:55*	WG1347349
(S) 4-Bromofluorobenzene	*85.2*				*67.0-138*		*09/18/2019 09:55*	WG1347349
(S) 1,2-Dichloroethane-d4	*98.6*				*70.0-130*		*09/18/2019 09:55*	WG1347349

Semi-Volatile Organic Compounds (GC) by Method 8015

Analyte	Result (dry)	Qualifier	SDL (dry)	Unadj. MQL	MQL (dry)	Dilution	Analysis	Batch
	mg/kg		mg/kg	mg/kg	mg/kg		date / time	
C10-C28 Diesel Range	50.8		9.04	4.00	22.5	5	09/16/2019 00:17	WG1345980
C28-C40 Oil Range	143		1.54	4.00	22.5	5	09/16/2019 00:17	WG1345980
(S) o-Terphenyl	*81.6*				*18.0-148*		*09/16/2019 00:17*	WG1345980

BH-5 (9'-10')
Collected date/time: 09/11/19 11:10

SAMPLE RESULTS - 25
L1139267

ONE LAB. NATIONWIDE.

Total Solids by Method 2540 G-2011

Analyte	Result	Qualifier	Dilution	Analysis	Batch
	%			date / time	
Total Solids	87.1		1	09/19/2019 18:23	WG1348340

Wet Chemistry by Method 300.0

Analyte	Result (dry)	Qualifier	SDL (dry)	Unadj. MQL	MQL (dry)	Dilution	Analysis	Batch
	mg/kg		mg/kg	mg/kg	mg/kg		date / time	
Chloride	57.7		0.913	10.0	11.5	1	09/17/2019 22:07	WG1346738

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

Analyte	Result (dry)	Qualifier	SDL (dry)	Unadj. MQL	MQL (dry)	Dilution	Analysis	Batch
	mg/kg		mg/kg	mg/kg	mg/kg		date / time	
TPH (GC/FID) Low Fraction	170		0.623	0.100	2.87	25	09/20/2019 14:56	WG1348959
(S) a,a,a-Trifluorotoluene(FID)	*94.4*				*77.0-120*		*09/20/2019 14:56*	WG1348959

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

Analyte	Result (dry)	Qualifier	SDL (dry)	Unadj. MQL	MQL (dry)	Dilution	Analysis	Batch
	mg/kg		mg/kg	mg/kg	mg/kg		date / time	
Benzene	0.00163		0.000459	0.00100	0.00115	1	09/18/2019 10:13	WG1347349
Toluene	0.00351	J	0.00144	0.00500	0.00574	1	09/18/2019 10:13	WG1347349
Ethylbenzene	0.486		0.000609	0.00250	0.00287	1	09/18/2019 10:13	WG1347349
Total Xylenes	0.210		0.00549	0.00650	0.00747	1	09/18/2019 10:13	WG1347349
(S) Toluene-d8	*107*				*75.0-131*		*09/18/2019 10:13*	WG1347349
(S) 4-Bromofluorobenzene	*100*				*67.0-138*		*09/18/2019 10:13*	WG1347349
(S) 1,2-Dichloroethane-d4	*99.3*				*70.0-130*		*09/18/2019 10:13*	WG1347349

Semi-Volatile Organic Compounds (GC) by Method 8015

Analyte	Result (dry)	Qualifier	SDL (dry)	Unadj. MQL	MQL (dry)	Dilution	Analysis	Batch
	mg/kg		mg/kg	mg/kg	mg/kg		date / time	
C10-C28 Diesel Range	747		18.5	4.00	45.9	10	09/16/2019 00:56	WG1345980
C28-C40 Oil Range	561		3.15	4.00	45.9	10	09/16/2019 00:56	WG1345980
(S) o-Terphenyl	*93.8*				*18.0-148*		*09/16/2019 00:56*	WG1345980

BH-5 (12'-13')
Collected date/time: 09/11/19 11:20

SAMPLE RESULTS - 26
L1139267

ONE LAB. NATIONWIDE.

Total Solids by Method 2540 G-2011

Analyte	Result	Qualifier	Dilution	Analysis	Batch
	%			date / time	
Total Solids	87.9		1	09/19/2019 18:23	WG1348340

Wet Chemistry by Method 300.0

Analyte	Result (dry)	Qualifier	SDL (dry)	Unadj. MQL	MQL (dry)	Dilution	Analysis	Batch
	mg/kg		mg/kg	mg/kg	mg/kg		date / time	
Chloride	72.0		0.905	10.0	11.4	1	09/17/2019 22:16	WG1346738

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

Analyte	Result (dry)	Qualifier	SDL (dry)	Unadj. MQL	MQL (dry)	Dilution	Analysis	Batch
	mg/kg		mg/kg	mg/kg	mg/kg		date / time	
TPH (GC/FID) Low Fraction	0.598		0.0247	0.100	0.114	1	09/20/2019 14:08	WG1348959
(S) a,a,a-Trifluorotoluene(FID)	*95.4*				*77.0-120*		*09/20/2019 14:08*	WG1348959

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

Analyte	Result (dry)	Qualifier	SDL (dry)	Unadj. MQL	MQL (dry)	Dilution	Analysis	Batch
	mg/kg		mg/kg	mg/kg	mg/kg		date / time	
Benzene	U		0.000455	0.00100	0.00114	1	09/18/2019 10:32	WG1347349
Toluene	U		0.00142	0.00500	0.00569	1	09/18/2019 10:32	WG1347349
Ethylbenzene	0.00826		0.000603	0.00250	0.00285	1	09/18/2019 10:32	WG1347349
Total Xylenes	U		0.00544	0.00650	0.00740	1	09/18/2019 10:32	WG1347349
(S) Toluene-d8	*105*				*75.0-131*		*09/18/2019 10:32*	WG1347349
(S) 4-Bromofluorobenzene	*95.6*				*67.0-138*		*09/18/2019 10:32*	WG1347349
(S) 1,2-Dichloroethane-d4	*104*				*70.0-130*		*09/18/2019 10:32*	WG1347349

Semi-Volatile Organic Compounds (GC) by Method 8015

Analyte	Result (dry)	Qualifier	SDL (dry)	Unadj. MQL	MQL (dry)	Dilution	Analysis	Batch
	mg/kg		mg/kg	mg/kg	mg/kg		date / time	
C10-C28 Diesel Range	39.6		1.83	4.00	4.55	1	09/15/2019 23:12	WG1345980
C28-C40 Oil Range	51.7		0.312	4.00	4.55	1	09/15/2019 23:12	WG1345980
(S) o-Terphenyl	*65.0*				*18.0-148*		*09/15/2019 23:12*	WG1345980

BH-5 (14'-15')
Collected date/time: 09/11/19 11:30

SAMPLE RESULTS - 27

L1139267

ONE LAB. NATIONWIDE.

Total Solids by Method 2540 G-2011

Analyte	Result	Qualifier	Dilution	Analysis	Batch
	%			date / time	
Total Solids	87.8		1	09/19/2019 18:23	WG1348340

Wet Chemistry by Method 300.0

Analyte	Result (dry)	Qualifier	SDL (dry)	Unadj. MQL	MQL (dry)	Dilution	Analysis	Batch
	mg/kg		mg/kg	mg/kg	mg/kg		date / time	
Chloride	95.0		0.905	10.0	11.4	1	09/17/2019 22:26	WG1346738

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

Analyte	Result (dry)	Qualifier	SDL (dry)	Unadj. MQL	MQL (dry)	Dilution	Analysis	Batch
	mg/kg		mg/kg	mg/kg	mg/kg		date / time	
TPH (GC/FID) Low Fraction	0.340		0.0247	0.100	0.114	1	09/20/2019 14:32	WG1348959
(S) a,a,a-Trifluorotoluene(FID)	*96.5*				*77.0-120*		*09/20/2019 14:32*	WG1348959

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

Analyte	Result (dry)	Qualifier	SDL (dry)	Unadj. MQL	MQL (dry)	Dilution	Analysis	Batch
	mg/kg		mg/kg	mg/kg	mg/kg		date / time	
Benzene	U		0.000455	0.00100	0.00114	1	09/18/2019 10:50	WG1347349
Toluene	U		0.00142	0.00500	0.00569	1	09/18/2019 10:50	WG1347349
Ethylbenzene	0.00186	J	0.000603	0.00250	0.00285	1	09/18/2019 10:50	WG1347349
Total Xylenes	U		0.00544	0.00650	0.00740	1	09/18/2019 10:50	WG1347349
(S) Toluene-d8	*102*				*75.0-131*		*09/18/2019 10:50*	WG1347349
(S) 4-Bromofluorobenzene	*91.6*				*67.0-138*		*09/18/2019 10:50*	WG1347349
(S) 1,2-Dichloroethane-d4	*103*				*70.0-130*		*09/18/2019 10:50*	WG1347349

Semi-Volatile Organic Compounds (GC) by Method 8015

Analyte	Result (dry)	Qualifier	SDL (dry)	Unadj. MQL	MQL (dry)	Dilution	Analysis	Batch
	mg/kg		mg/kg	mg/kg	mg/kg		date / time	
C10-C28 Diesel Range	33.8		1.83	4.00	4.55	1	09/15/2019 23:25	WG1345980
C28-C40 Oil Range	40.5		0.312	4.00	4.55	1	09/15/2019 23:25	WG1345980
(S) o-Terphenyl	*49.2*				*18.0-148*		*09/15/2019 23:25*	WG1345980

BH-5 (19'-20')
Collected date/time: 09/11/19 11:50

SAMPLE RESULTS - 28
L1139267

ONE LAB. NATIONWIDE.

Total Solids by Method 2540 G-2011

Analyte	Result	Qualifier	Dilution	Analysis	Batch
	%			date / time	
Total Solids	89.2		1	09/19/2019 18:23	WG1348340

Wet Chemistry by Method 300.0

Analyte	Result (dry)	Qualifier	SDL (dry)	Unadj. MQL	MQL (dry)	Dilution	Analysis	Batch
	mg/kg		mg/kg	mg/kg	mg/kg		date / time	
Chloride	160		0.891	10.0	11.2	1	09/17/2019 22:54	WG1346738

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

Analyte	Result (dry)	Qualifier	SDL (dry)	Unadj. MQL	MQL (dry)	Dilution	Analysis	Batch
	mg/kg		mg/kg	mg/kg	mg/kg		date / time	
TPH (GC/FID) Low Fraction	U		0.0243	0.100	0.112	1	09/19/2019 19:45	WG1348619
(S) a,a,a-Trifluorotoluene(FID)	*94.7*				*77.0-120*		*09/19/2019 19:45*	WG1348619

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

Analyte	Result (dry)	Qualifier	SDL (dry)	Unadj. MQL	MQL (dry)	Dilution	Analysis	Batch
	mg/kg		mg/kg	mg/kg	mg/kg		date / time	
Benzene	U		0.000448	0.00100	0.00112	1	09/18/2019 11:08	WG1347349
Toluene	U		0.00140	0.00500	0.00560	1	09/18/2019 11:08	WG1347349
Ethylbenzene	U		0.000594	0.00250	0.00280	1	09/18/2019 11:08	WG1347349
Total Xylenes	U		0.00536	0.00650	0.00729	1	09/18/2019 11:08	WG1347349
(S) Toluene-d8	*103*				*75.0-131*		*09/18/2019 11:08*	WG1347349
(S) 4-Bromofluorobenzene	*85.9*				*67.0-138*		*09/18/2019 11:08*	WG1347349
(S) 1,2-Dichloroethane-d4	*103*				*70.0-130*		*09/18/2019 11:08*	WG1347349

Semi-Volatile Organic Compounds (GC) by Method 8015

Analyte	Result (dry)	Qualifier	SDL (dry)	Unadj. MQL	MQL (dry)	Dilution	Analysis	Batch
	mg/kg		mg/kg	mg/kg	mg/kg		date / time	
C10-C28 Diesel Range	U		1.80	4.00	4.48	1	09/17/2019 19:11	WG1346816
C28-C40 Oil Range	1.55	J	0.307	4.00	4.48	1	09/17/2019 19:11	WG1346816
(S) o-Terphenyl	*52.1*				*18.0-148*		*09/17/2019 19:11*	WG1346816

BH-6 (0'-1')
Collected date/time: 09/11/19 12:00

SAMPLE RESULTS - 29
L1139267

ONE LAB. NATIONWIDE.

Total Solids by Method 2540 G-2011

Analyte	Result	Qualifier	Dilution	Analysis	Batch
	%			date / time	
Total Solids	87.8		1	09/19/2019 18:23	WG1348340

Wet Chemistry by Method 300.0

Analyte	Result (dry)	Qualifier	SDL (dry)	Unadj. MQL	MQL (dry)	Dilution	Analysis	Batch
	mg/kg		mg/kg	mg/kg	mg/kg		date / time	
Chloride	40.9		0.906	10.0	11.4	1	09/17/2019 23:04	WG1346738

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

Analyte	Result (dry)	Qualifier	SDL (dry)	Unadj. MQL	MQL (dry)	Dilution	Analysis	Batch
	mg/kg		mg/kg	mg/kg	mg/kg		date / time	
TPH (GC/FID) Low Fraction	0.0405	B J	0.0247	0.100	0.114	1	09/19/2019 20:05	WG1348619
(S) a,a,a-Trifluorotoluene(FID)	*94.9*				*77.0-120*		*09/19/2019 20:05*	WG1348619

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

Analyte	Result (dry)	Qualifier	SDL (dry)	Unadj. MQL	MQL (dry)	Dilution	Analysis	Batch
	mg/kg		mg/kg	mg/kg	mg/kg		date / time	
Benzene	0.000499	J	0.000456	0.00100	0.00114	1	09/18/2019 11:27	WG1347349
Toluene	U		0.00142	0.00500	0.00570	1	09/18/2019 11:27	WG1347349
Ethylbenzene	U		0.000604	0.00250	0.00285	1	09/18/2019 11:27	WG1347349
Total Xylenes	U		0.00544	0.00650	0.00740	1	09/18/2019 11:27	WG1347349
(S) Toluene-d8	*108*				*75.0-131*		*09/18/2019 11:27*	WG1347349
(S) 4-Bromofluorobenzene	*88.9*				*67.0-138*		*09/18/2019 11:27*	WG1347349
(S) 1,2-Dichloroethane-d4	*101*				*70.0-130*		*09/18/2019 11:27*	WG1347349

Semi-Volatile Organic Compounds (GC) by Method 8015

Analyte	Result (dry)	Qualifier	SDL (dry)	Unadj. MQL	MQL (dry)	Dilution	Analysis	Batch
	mg/kg		mg/kg	mg/kg	mg/kg		date / time	
C10-C28 Diesel Range	30.4		1.83	4.00	4.56	1	09/17/2019 20:29	WG1346816
C28-C40 Oil Range	81.3		0.312	4.00	4.56	1	09/17/2019 20:29	WG1346816
(S) o-Terphenyl	*90.1*				*18.0-148*		*09/17/2019 20:29*	WG1346816

BH-6 (2'-3')
Collected date/time: 09/11/19 12:10

SAMPLE RESULTS - 30
L1139267

ONE LAB. NATIONWIDE.

Total Solids by Method 2540 G-2011

Analyte	Result	Qualifier	Dilution	Analysis	Batch
	%			date / time	
Total Solids	93.9		1	09/19/2019 18:23	WG1348340

Wet Chemistry by Method 300.0

Analyte	Result (dry)	Qualifier	SDL (dry)	Unadj. MQL	MQL (dry)	Dilution	Analysis	Batch
	mg/kg		mg/kg	mg/kg	mg/kg		date / time	
Chloride	42.3		0.847	10.0	10.7	1	09/17/2019 23:33	WG1346738

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

Analyte	Result (dry)	Qualifier	SDL (dry)	Unadj. MQL	MQL (dry)	Dilution	Analysis	Batch
	mg/kg		mg/kg	mg/kg	mg/kg		date / time	
TPH (GC/FID) Low Fraction	0.0452	B J	0.0231	0.100	0.107	1	09/19/2019 20:26	WG1348619
(S) a,a,a-Trifluorotoluene(FID)	*94.5*				*77.0-120*		*09/19/2019 20:26*	WG1348619

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

Analyte	Result (dry)	Qualifier	SDL (dry)	Unadj. MQL	MQL (dry)	Dilution	Analysis	Batch
	mg/kg		mg/kg	mg/kg	mg/kg		date / time	
Benzene	0.000518	J	0.000426	0.00100	0.00107	1	09/18/2019 11:46	WG1347349
Toluene	U		0.00133	0.00500	0.00533	1	09/18/2019 11:46	WG1347349
Ethylbenzene	U		0.000564	0.00250	0.00266	1	09/18/2019 11:46	WG1347349
Total Xylenes	U		0.00509	0.00650	0.00692	1	09/18/2019 11:46	WG1347349
(S) Toluene-d8	*104*				*75.0-131*		*09/18/2019 11:46*	WG1347349
(S) 4-Bromofluorobenzene	*87.9*				*67.0-138*		*09/18/2019 11:46*	WG1347349
(S) 1,2-Dichloroethane-d4	*102*				*70.0-130*		*09/18/2019 11:46*	WG1347349

Semi-Volatile Organic Compounds (GC) by Method 8015

Analyte	Result (dry)	Qualifier	SDL (dry)	Unadj. MQL	MQL (dry)	Dilution	Analysis	Batch
	mg/kg		mg/kg	mg/kg	mg/kg		date / time	
C10-C28 Diesel Range	63.1		1.71	4.00	4.26	1	09/17/2019 20:55	WG1346816
C28-C40 Oil Range	148		0.292	4.00	4.26	1	09/17/2019 20:55	WG1346816
(S) o-Terphenyl	*66.7*				*18.0-148*		*09/17/2019 20:55*	WG1346816

BH-6 (4'-5')
Collected date/time: 09/11/19 12:20

SAMPLE RESULTS - 31

L1139267

ONE LAB. NATIONWIDE.

Total Solids by Method 2540 G-2011

Analyte	Result	Qualifier	Dilution	Analysis	Batch
	%			date / time	
Total Solids	98.7		1	09/19/2019 18:23	WG1348340

Wet Chemistry by Method 300.0

Analyte	Result (dry)	Qualifier	SDL (dry)	Unadj. MQL	MQL (dry)	Dilution	Analysis	Batch
	mg/kg		mg/kg	mg/kg	mg/kg		date / time	
Chloride	20.4	B	0.805	10.0	10.1	1	09/17/2019 23:42	WG1346738

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

Analyte	Result (dry)	Qualifier	SDL (dry)	Unadj. MQL	MQL (dry)	Dilution	Analysis	Batch
	mg/kg		mg/kg	mg/kg	mg/kg		date / time	
TPH (GC/FID) Low Fraction	U		0.0220	0.100	0.101	1	09/19/2019 20:46	WG1348619
(S) a,a,a-Trifluorotoluene(FID)	*94.5*				*77.0-120*		*09/19/2019 20:46*	WG1348619

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

Analyte	Result (dry)	Qualifier	SDL (dry)	Unadj. MQL	MQL (dry)	Dilution	Analysis	Batch
	mg/kg		mg/kg	mg/kg	mg/kg		date / time	
Benzene	U		0.000405	0.00100	0.00101	1	09/18/2019 12:04	WG1347349
Toluene	U		0.00127	0.00500	0.00506	1	09/18/2019 12:04	WG1347349
Ethylbenzene	U		0.000537	0.00250	0.00253	1	09/18/2019 12:04	WG1347349
Total Xylenes	U		0.00484	0.00650	0.00658	1	09/18/2019 12:04	WG1347349
(S) Toluene-d8	*107*				*75.0-131*		*09/18/2019 12:04*	WG1347349
(S) 4-Bromofluorobenzene	*85.6*				*67.0-138*		*09/18/2019 12:04*	WG1347349
(S) 1,2-Dichloroethane-d4	*101*				*70.0-130*		*09/18/2019 12:04*	WG1347349

Semi-Volatile Organic Compounds (GC) by Method 8015

Analyte	Result (dry)	Qualifier	SDL (dry)	Unadj. MQL	MQL (dry)	Dilution	Analysis	Batch
	mg/kg		mg/kg	mg/kg	mg/kg		date / time	
C10-C28 Diesel Range	1.87	B J J3	1.63	4.00	4.05	1	09/17/2019 19:37	WG1346816
C28-C40 Oil Range	2.44	J	0.277	4.00	4.05	1	09/17/2019 19:37	WG1346816
(S) o-Terphenyl	*65.3*				*18.0-148*		*09/17/2019 19:37*	WG1346816

BH-6 (6'-7')
Collected date/time: 09/11/19 12:30

SAMPLE RESULTS - 32
L1139267

ONE LAB. NATIONWIDE.

Total Solids by Method 2540 G-2011

Analyte	Result	Qualifier	Dilution	Analysis	Batch
	%			date / time	
Total Solids	96.8		1	09/19/2019 18:09	WG1348341

Wet Chemistry by Method 300.0

Analyte	Result (dry)	Qualifier	SDL (dry)	Unadj. MQL	MQL (dry)	Dilution	Analysis	Batch
	mg/kg		mg/kg	mg/kg	mg/kg		date / time	
Chloride	94.9		0.822	10.0	10.3	1	09/17/2019 23:52	WG1346738

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

Analyte	Result (dry)	Qualifier	SDL (dry)	Unadj. MQL	MQL (dry)	Dilution	Analysis	Batch
	mg/kg		mg/kg	mg/kg	mg/kg		date / time	
TPH (GC/FID) Low Fraction	U		0.0224	0.100	0.103	1	09/19/2019 21:07	WG1348619
(S) a,a,a-Trifluorotoluene(FID)	*94.9*				*77.0-120*		*09/19/2019 21:07*	WG1348619

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

Analyte	Result (dry)	Qualifier	SDL (dry)	Unadj. MQL	MQL (dry)	Dilution	Analysis	Batch
	mg/kg		mg/kg	mg/kg	mg/kg		date / time	
Benzene	0.000435	J	0.000413	0.00100	0.00103	1	09/18/2019 12:23	WG1347349
Toluene	U		0.00129	0.00500	0.00517	1	09/18/2019 12:23	WG1347349
Ethylbenzene	U		0.000548	0.00250	0.00258	1	09/18/2019 12:23	WG1347349
Total Xylenes	U		0.00494	0.00650	0.00672	1	09/18/2019 12:23	WG1347349
(S) Toluene-d8	*108*				*75.0-131*		*09/18/2019 12:23*	WG1347349
(S) 4-Bromofluorobenzene	*84.5*				*67.0-138*		*09/18/2019 12:23*	WG1347349
(S) 1,2-Dichloroethane-d4	*102*				*70.0-130*		*09/18/2019 12:23*	WG1347349

Semi-Volatile Organic Compounds (GC) by Method 8015

Analyte	Result (dry)	Qualifier	SDL (dry)	Unadj. MQL	MQL (dry)	Dilution	Analysis	Batch
	mg/kg		mg/kg	mg/kg	mg/kg		date / time	
C10-C28 Diesel Range	1.78	B J	1.66	4.00	4.13	1	09/17/2019 19:24	WG1346816
C28-C40 Oil Range	3.04	J	0.283	4.00	4.13	1	09/17/2019 19:24	WG1346816
(S) o-Terphenyl	*87.5*				*18.0-148*		*09/17/2019 19:24*	WG1346816

BH-7 (0'-1')
Collected date/time: 09/11/19 12:50

SAMPLE RESULTS - 33
L1139267

ONE LAB. NATIONWIDE.

Total Solids by Method 2540 G-2011

Analyte	Result	Qualifier	Dilution	Analysis	Batch
	%			date / time	
Total Solids	95.9		1	09/19/2019 18:09	WG1348341

Wet Chemistry by Method 300.0

Analyte	Result (dry)	Qualifier	SDL (dry)	Unadj. MQL	MQL (dry)	Dilution	Analysis	Batch
	mg/kg		mg/kg	mg/kg	mg/kg		date / time	
Chloride	3.75	B J	0.829	10.0	10.4	1	09/18/2019 00:01	WG1346738

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

Analyte	Result (dry)	Qualifier	SDL (dry)	Unadj. MQL	MQL (dry)	Dilution	Analysis	Batch
	mg/kg		mg/kg	mg/kg	mg/kg		date / time	
TPH (GC/FID) Low Fraction	U		0.0226	0.100	0.104	1	09/19/2019 21:27	WG1348619
(S) a,a,a-Trifluorotoluene(FID)	*94.5*				*77.0-120*		*09/19/2019 21:27*	WG1348619

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

Analyte	Result (dry)	Qualifier	SDL (dry)	Unadj. MQL	MQL (dry)	Dilution	Analysis	Batch
	mg/kg		mg/kg	mg/kg	mg/kg		date / time	
Benzene	U		0.000417	0.00100	0.00104	1	09/18/2019 11:04	WG1347795
Toluene	U		0.00130	0.00500	0.00521	1	09/18/2019 11:04	WG1347795
Ethylbenzene	U		0.000553	0.00250	0.00261	1	09/18/2019 11:04	WG1347795
Total Xylenes	U		0.00498	0.00650	0.00678	1	09/18/2019 11:04	WG1347795
(S) Toluene-d8	*116*				*75.0-131*		*09/18/2019 11:04*	WG1347795
(S) 4-Bromofluorobenzene	*105*				*67.0-138*		*09/18/2019 11:04*	WG1347795
(S) 1,2-Dichloroethane-d4	*106*				*70.0-130*		*09/18/2019 11:04*	WG1347795

Semi-Volatile Organic Compounds (GC) by Method 8015

Analyte	Result (dry)	Qualifier	SDL (dry)	Unadj. MQL	MQL (dry)	Dilution	Analysis	Batch
	mg/kg		mg/kg	mg/kg	mg/kg		date / time	
C10-C28 Diesel Range	7.55	B	1.68	4.00	4.17	1	09/17/2019 21:08	WG1346816
C28-C40 Oil Range	46.3		0.286	4.00	4.17	1	09/17/2019 21:08	WG1346816
(S) o-Terphenyl	*80.9*				*18.0-148*		*09/17/2019 21:08*	WG1346816

BH-7 (2'-3')
Collected date/time: 09/11/19 13:00

SAMPLE RESULTS - 34
L1139267

ONE LAB. NATIONWIDE.

Total Solids by Method 2540 G-2011

Analyte	Result	Qualifier	Dilution	Analysis	Batch
	%			date / time	
Total Solids	98.9		1	09/19/2019 18:09	WG1348341

Wet Chemistry by Method 300.0

Analyte	Result (dry)	Qualifier	SDL (dry)	Unadj. MQL	MQL (dry)	Dilution	Analysis	Batch
	mg/kg		mg/kg	mg/kg	mg/kg		date / time	
Chloride	15.4	B	0.804	10.0	10.1	1	09/18/2019 00:11	WG1346738

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

Analyte	Result (dry)	Qualifier	SDL (dry)	Unadj. MQL	MQL (dry)	Dilution	Analysis	Batch
	mg/kg		mg/kg	mg/kg	mg/kg		date / time	
TPH (GC/FID) Low Fraction	U		0.0219	0.100	0.101	1	09/19/2019 21:47	WG1348619
(S) a,a,a-Trifluorotoluene(FID)	*95.0*				*77.0-120*		*09/19/2019 21:47*	WG1348619

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

Analyte	Result (dry)	Qualifier	SDL (dry)	Unadj. MQL	MQL (dry)	Dilution	Analysis	Batch
	mg/kg		mg/kg	mg/kg	mg/kg		date / time	
Benzene	U		0.000404	0.00100	0.00101	1	09/18/2019 11:25	WG1347795
Toluene	U		0.00126	0.00500	0.00505	1	09/18/2019 11:25	WG1347795
Ethylbenzene	U		0.000536	0.00250	0.00253	1	09/18/2019 11:25	WG1347795
Total Xylenes	U		0.00483	0.00650	0.00657	1	09/18/2019 11:25	WG1347795
(S) Toluene-d8	*118*				*75.0-131*		*09/18/2019 11:25*	WG1347795
(S) 4-Bromofluorobenzene	*98.4*				*67.0-138*		*09/18/2019 11:25*	WG1347795
(S) 1,2-Dichloroethane-d4	*103*				*70.0-130*		*09/18/2019 11:25*	WG1347795

Semi-Volatile Organic Compounds (GC) by Method 8015

Analyte	Result (dry)	Qualifier	SDL (dry)	Unadj. MQL	MQL (dry)	Dilution	Analysis	Batch
	mg/kg		mg/kg	mg/kg	mg/kg		date / time	
C10-C28 Diesel Range	5.75	B	1.63	4.00	4.04	1	09/17/2019 20:42	WG1346816
C28-C40 Oil Range	30.5		0.277	4.00	4.04	1	09/17/2019 20:42	WG1346816
(S) o-Terphenyl	*67.0*				*18.0-148*		*09/17/2019 20:42*	WG1346816

BH-7 (4'-5')
Collected date/time: 09/11/19 13:10

SAMPLE RESULTS - 35
L1139267

ONE LAB. NATIONWIDE.

Total Solids by Method 2540 G-2011

Analyte	Result	Qualifier	Dilution	Analysis	Batch
	%			date / time	
Total Solids	99.2		1	09/19/2019 18:09	WG1348341

Wet Chemistry by Method 300.0

Analyte	Result (dry)	Qualifier	SDL (dry)	Unadj. MQL	MQL (dry)	Dilution	Analysis	Batch
	mg/kg		mg/kg	mg/kg	mg/kg		date / time	
Chloride	3.10	B J	0.801	10.0	10.1	1	09/18/2019 00:20	WG1346738

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

Analyte	Result (dry)	Qualifier	SDL (dry)	Unadj. MQL	MQL (dry)	Dilution	Analysis	Batch
	mg/kg		mg/kg	mg/kg	mg/kg		date / time	
TPH (GC/FID) Low Fraction	0.0463	B J	0.0219	0.100	0.101	1	09/20/2019 05:55	WG1348624
(S) a,a,a-Trifluorotoluene(FID)	*103*				*77.0-120*		*09/20/2019 05:55*	WG1348624

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

Analyte	Result (dry)	Qualifier	SDL (dry)	Unadj. MQL	MQL (dry)	Dilution	Analysis	Batch
	mg/kg		mg/kg	mg/kg	mg/kg		date / time	
Benzene	U		0.000403	0.00100	0.00101	1	09/18/2019 11:45	WG1347795
Toluene	U		0.00126	0.00500	0.00504	1	09/18/2019 11:45	WG1347795
Ethylbenzene	U		0.000534	0.00250	0.00252	1	09/18/2019 11:45	WG1347795
Total Xylenes	U		0.00482	0.00650	0.00655	1	09/18/2019 11:45	WG1347795
(S) Toluene-d8	*113*				*75.0-131*		*09/18/2019 11:45*	WG1347795
(S) 4-Bromofluorobenzene	*95.6*				*67.0-138*		*09/18/2019 11:45*	WG1347795
(S) 1,2-Dichloroethane-d4	*105*				*70.0-130*		*09/18/2019 11:45*	WG1347795

Semi-Volatile Organic Compounds (GC) by Method 8015

Analyte	Result (dry)	Qualifier	SDL (dry)	Unadj. MQL	MQL (dry)	Dilution	Analysis	Batch
	mg/kg		mg/kg	mg/kg	mg/kg		date / time	
C10-C28 Diesel Range	16.3	B J	8.11	4.00	20.2	5	09/17/2019 21:21	WG1346816
C28-C40 Oil Range	95.5		1.38	4.00	20.2	5	09/17/2019 21:21	WG1346816
(S) o-Terphenyl	*72.6*				*18.0-148*		*09/17/2019 21:21*	WG1346816

BH-8 (0'-1')
Collected date/time: 09/11/19 13:30

SAMPLE RESULTS - 36
L1139267

ONE LAB. NATIONWIDE.

Total Solids by Method 2540 G-2011

Analyte	Result	Qualifier	Dilution	Analysis	Batch
	%			date / time	
Total Solids	97.4		1	09/19/2019 18:09	WG1348341

Wet Chemistry by Method 300.0

Analyte	Result (dry)	Qualifier	SDL (dry)	Unadj. MQL	MQL (dry)	Dilution	Analysis	Batch
	mg/kg		mg/kg	mg/kg	mg/kg		date / time	
Chloride	51.4		0.817	10.0	10.3	1	09/18/2019 00:49	WG1346738

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

Analyte	Result (dry)	Qualifier	SDL (dry)	Unadj. MQL	MQL (dry)	Dilution	Analysis	Batch
	mg/kg		mg/kg	mg/kg	mg/kg		date / time	
TPH (GC/FID) Low Fraction	1.30		0.0223	0.100	0.103	1	09/20/2019 06:17	WG1348624
(S) a,a,a-Trifluorotoluene(FID)	*102*				*77.0-120*		*09/20/2019 06:17*	WG1348624

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

Analyte	Result (dry)	Qualifier	SDL (dry)	Unadj. MQL	MQL (dry)	Dilution	Analysis	Batch
	mg/kg		mg/kg	mg/kg	mg/kg		date / time	
Benzene	U		0.000411	0.00100	0.00103	1	09/18/2019 12:05	WG1347795
Toluene	U		0.00128	0.00500	0.00514	1	09/18/2019 12:05	WG1347795
Ethylbenzene	0.0138		0.000544	0.00250	0.00257	1	09/18/2019 12:05	WG1347795
Total Xylenes	0.155		0.00491	0.00650	0.00668	1	09/18/2019 12:05	WG1347795
(S) Toluene-d8	*109*				*75.0-131*		*09/18/2019 12:05*	WG1347795
(S) 4-Bromofluorobenzene	*133*				*67.0-138*		*09/18/2019 12:05*	WG1347795
(S) 1,2-Dichloroethane-d4	*106*				*70.0-130*		*09/18/2019 12:05*	WG1347795

Semi-Volatile Organic Compounds (GC) by Method 8015

Analyte	Result (dry)	Qualifier	SDL (dry)	Unadj. MQL	MQL (dry)	Dilution	Analysis	Batch
	mg/kg		mg/kg	mg/kg	mg/kg		date / time	
C10-C28 Diesel Range	3830		33.1	4.00	82.2	20	09/21/2019 12:56	WG1346816
C28-C40 Oil Range	2350		5.63	4.00	82.2	20	09/21/2019 12:56	WG1346816
(S) o-Terphenyl	*0.000*	J7			*18.0-148*		*09/21/2019 12:56*	WG1346816

BH-8 (2'-3')
Collected date/time: 09/11/19 13:40

SAMPLE RESULTS - 37
L1139267

ONE LAB. NATIONWIDE.

Total Solids by Method 2540 G-2011

Analyte	Result	Qualifier	Dilution	Analysis	Batch
	%			date / time	
Total Solids	94.6		1	09/19/2019 18:09	WG1348341

Wet Chemistry by Method 300.0

Analyte	Result (dry)	Qualifier	SDL (dry)	Unadj. MQL	MQL (dry)	Dilution	Analysis	Batch
	mg/kg		mg/kg	mg/kg	mg/kg		date / time	
Chloride	63.7		0.841	10.0	10.6	1	09/18/2019 00:58	WG1346738

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

Analyte	Result (dry)	Qualifier	SDL (dry)	Unadj. MQL	MQL (dry)	Dilution	Analysis	Batch
	mg/kg		mg/kg	mg/kg	mg/kg		date / time	
TPH (GC/FID) Low Fraction	1.51		0.0229	0.100	0.106	1	09/20/2019 06:40	WG1348624
(S) a,a,a-Trifluorotoluene(FID)	*102*				*77.0-120*		*09/20/2019 06:40*	WG1348624

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

Analyte	Result (dry)	Qualifier	SDL (dry)	Unadj. MQL	MQL (dry)	Dilution	Analysis	Batch
	mg/kg		mg/kg	mg/kg	mg/kg		date / time	
Benzene	U		0.000423	0.00100	0.00106	1	09/18/2019 12:26	WG1347795
Toluene	U		0.00132	0.00500	0.00529	1	09/18/2019 12:26	WG1347795
Ethylbenzene	0.0106		0.000560	0.00250	0.00264	1	09/18/2019 12:26	WG1347795
Total Xylenes	0.121		0.00505	0.00650	0.00687	1	09/18/2019 12:26	WG1347795
(S) Toluene-d8	*112*				*75.0-131*		*09/18/2019 12:26*	WG1347795
(S) 4-Bromofluorobenzene	*124*				*67.0-138*		*09/18/2019 12:26*	WG1347795
(S) 1,2-Dichloroethane-d4	*108*				*70.0-130*		*09/18/2019 12:26*	WG1347795

Semi-Volatile Organic Compounds (GC) by Method 8015

Analyte	Result (dry)	Qualifier	SDL (dry)	Unadj. MQL	MQL (dry)	Dilution	Analysis	Batch
	mg/kg		mg/kg	mg/kg	mg/kg		date / time	
C10-C28 Diesel Range	5520		85.1	4.00	211	50	09/21/2019 13:09	WG1346816
C28-C40 Oil Range	3670		14.5	4.00	211	50	09/21/2019 13:09	WG1346816
(S) o-Terphenyl	*0.000*	J7			*18.0-148*		*09/21/2019 13:09*	WG1346816

BH-8 (4'-5')
Collected date/time: 09/11/19 13:50

SAMPLE RESULTS - 38
L1139267

ONE LAB. NATIONWIDE.

Total Solids by Method 2540 G-2011

Analyte	Result	Qualifier	Dilution	Analysis	Batch
	%			date / time	
Total Solids	97.0		1	09/19/2019 18:09	WG1348341

Wet Chemistry by Method 300.0

Analyte	Result (dry)	Qualifier	SDL (dry)	Unadj. MQL	MQL (dry)	Dilution	Analysis	Batch
	mg/kg		mg/kg	mg/kg	mg/kg		date / time	
Chloride	57.6		0.820	10.0	10.3	1	09/18/2019 01:08	WG1346738

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

Analyte	Result (dry)	Qualifier	SDL (dry)	Unadj. MQL	MQL (dry)	Dilution	Analysis	Batch
	mg/kg		mg/kg	mg/kg	mg/kg		date / time	
TPH (GC/FID) Low Fraction	0.142	B	0.0224	0.100	0.103	1	09/20/2019 07:59	WG1348624
(S) a,a,a-Trifluorotoluene(FID)	*101*				*77.0-120*		*09/20/2019 07:59*	WG1348624

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

Analyte	Result (dry)	Qualifier	SDL (dry)	Unadj. MQL	MQL (dry)	Dilution	Analysis	Batch
	mg/kg		mg/kg	mg/kg	mg/kg		date / time	
Benzene	U		0.000412	0.00100	0.00103	1	09/18/2019 12:46	WG1347795
Toluene	U		0.00129	0.00500	0.00515	1	09/18/2019 12:46	WG1347795
Ethylbenzene	0.000930	J	0.000546	0.00250	0.00258	1	09/18/2019 12:46	WG1347795
Total Xylenes	0.0217		0.00493	0.00650	0.00670	1	09/18/2019 12:46	WG1347795
(S) Toluene-d8	*109*				*75.0-131*		*09/18/2019 12:46*	WG1347795
(S) 4-Bromofluorobenzene	*106*				*67.0-138*		*09/18/2019 12:46*	WG1347795
(S) 1,2-Dichloroethane-d4	*106*				*70.0-130*		*09/18/2019 12:46*	WG1347795

Semi-Volatile Organic Compounds (GC) by Method 8015

Analyte	Result (dry)	Qualifier	SDL (dry)	Unadj. MQL	MQL (dry)	Dilution	Analysis	Batch
	mg/kg		mg/kg	mg/kg	mg/kg		date / time	
C10-C28 Diesel Range	336		83.0	4.00	206	50	09/17/2019 21:34	WG1346816
C28-C40 Oil Range	1010		14.1	4.00	206	50	09/17/2019 21:34	WG1346816
(S) o-Terphenyl	*0.000*	J7			*18.0-148*		*09/17/2019 21:34*	WG1346816

BH-8 (6'-7')
Collected date/time: 09/11/19 14:00

SAMPLE RESULTS - 39
L1139267

ONE LAB. NATIONWIDE.

Total Solids by Method 2540 G-2011

Analyte	Result	Qualifier	Dilution	Analysis	Batch
	%			date / time	
Total Solids	95.6		1	09/19/2019 18:09	WG1348341

Wet Chemistry by Method 300.0

Analyte	Result (dry)	Qualifier	SDL (dry)	Unadj. MQL	MQL (dry)	Dilution	Analysis	Batch
	mg/kg		mg/kg	mg/kg	mg/kg		date / time	
Chloride	74.9		0.831	10.0	10.5	1	09/18/2019 01:17	WG1346738

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

Analyte	Result (dry)	Qualifier	SDL (dry)	Unadj. MQL	MQL (dry)	Dilution	Analysis	Batch
	mg/kg		mg/kg	mg/kg	mg/kg		date / time	
TPH (GC/FID) Low Fraction	0.0564	B J	0.0227	0.100	0.105	1	09/20/2019 08:22	WG1348624
(S) a,a,a-Trifluorotoluene(FID)	*103*				*77.0-120*		*09/20/2019 08:22*	WG1348624

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

Analyte	Result (dry)	Qualifier	SDL (dry)	Unadj. MQL	MQL (dry)	Dilution	Analysis	Batch
	mg/kg		mg/kg	mg/kg	mg/kg		date / time	
Benzene	U		0.000418	0.00100	0.00105	1	09/18/2019 13:07	WG1347795
Toluene	U		0.00131	0.00500	0.00523	1	09/18/2019 13:07	WG1347795
Ethylbenzene	U		0.000554	0.00250	0.00261	1	09/18/2019 13:07	WG1347795
Total Xylenes	U		0.00500	0.00650	0.00680	1	09/18/2019 13:07	WG1347795
(S) Toluene-d8	*109*				*75.0-131*		*09/18/2019 13:07*	WG1347795
(S) 4-Bromofluorobenzene	*106*				*67.0-138*		*09/18/2019 13:07*	WG1347795
(S) 1,2-Dichloroethane-d4	*106*				*70.0-130*		*09/18/2019 13:07*	WG1347795

Semi-Volatile Organic Compounds (GC) by Method 8015

Analyte	Result (dry)	Qualifier	SDL (dry)	Unadj. MQL	MQL (dry)	Dilution	Analysis	Batch
	mg/kg		mg/kg	mg/kg	mg/kg		date / time	
C10-C28 Diesel Range	408		84.2	4.00	209	50	09/17/2019 21:47	WG1346816
C28-C40 Oil Range	1030		14.3	4.00	209	50	09/17/2019 21:47	WG1346816
(S) o-Terphenyl	*0.000*	J7			*18.0-148*		*09/17/2019 21:47*	WG1346816

BH-8 (9'-10')
Collected date/time: 09/11/19 14:10

SAMPLE RESULTS - 40

L1139267

ONE LAB. NATIONWIDE.

Total Solids by Method 2540 G-2011

Analyte	Result	Qualifier	Dilution	Analysis	Batch
	%			date / time	
Total Solids	95.0		1	09/19/2019 18:09	WG1348341

Wet Chemistry by Method 300.0

Analyte	Result (dry)	Qualifier	SDL (dry)	Unadj. MQL	MQL (dry)	Dilution	Analysis	Batch
	mg/kg		mg/kg	mg/kg	mg/kg		date / time	
Chloride	214		0.837	10.0	10.5	1	09/18/2019 01:27	WG1346738

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

Analyte	Result (dry)	Qualifier	SDL (dry)	Unadj. MQL	MQL (dry)	Dilution	Analysis	Batch
	mg/kg		mg/kg	mg/kg	mg/kg		date / time	
TPH (GC/FID) Low Fraction	0.0498	B J	0.0228	0.100	0.105	1	09/20/2019 08:44	WG1348624
(S) a,a,a-Trifluorotoluene(FID)	*104*				*77.0-120*		*09/20/2019 08:44*	WG1348624

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

Analyte	Result (dry)	Qualifier	SDL (dry)	Unadj. MQL	MQL (dry)	Dilution	Analysis	Batch
	mg/kg		mg/kg	mg/kg	mg/kg		date / time	
Benzene	U		0.000421	0.00100	0.00105	1	09/18/2019 13:28	WG1347795
Toluene	U		0.00132	0.00500	0.00526	1	09/18/2019 13:28	WG1347795
Ethylbenzene	U		0.000558	0.00250	0.00263	1	09/18/2019 13:28	WG1347795
Total Xylenes	U		0.00503	0.00650	0.00684	1	09/18/2019 13:28	WG1347795
(S) Toluene-d8	*115*				*75.0-131*		*09/18/2019 13:28*	WG1347795
(S) 4-Bromofluorobenzene	*105*				*67.0-138*		*09/18/2019 13:28*	WG1347795
(S) 1,2-Dichloroethane-d4	*105*				*70.0-130*		*09/18/2019 13:28*	WG1347795

Semi-Volatile Organic Compounds (GC) by Method 8015

Analyte	Result (dry)	Qualifier	SDL (dry)	Unadj. MQL	MQL (dry)	Dilution	Analysis	Batch
	mg/kg		mg/kg	mg/kg	mg/kg		date / time	
C10-C28 Diesel Range	10.6		1.70	4.00	4.21	1	09/18/2019 22:06	WG1347218
C28-C40 Oil Range	9.11		0.288	4.00	4.21	1	09/18/2019 22:06	WG1347218
(S) o-Terphenyl	*112*				*18.0-148*		*09/18/2019 22:06*	WG1347218

BH-9 (0'-1')
Collected date/time: 09/11/19 14:40

SAMPLE RESULTS - 41
L1139267

ONE LAB. NATIONWIDE.

Total Solids by Method 2540 G-2011

Analyte	Result	Qualifier	Dilution	Analysis	Batch
	%			date / time	
Total Solids	99.6		1	09/19/2019 18:09	WG1348341

Wet Chemistry by Method 300.0

Analyte	Result (dry)	Qualifier	SDL (dry)	Unadj. MQL	MQL (dry)	Dilution	Analysis	Batch
	mg/kg		mg/kg	mg/kg	mg/kg		date / time	
Chloride	22.4	B	0.798	10.0	10.0	1	09/18/2019 21:17	WG1347692

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

Analyte	Result (dry)	Qualifier	SDL (dry)	Unadj. MQL	MQL (dry)	Dilution	Analysis	Batch
	mg/kg		mg/kg	mg/kg	mg/kg		date / time	
TPH (GC/FID) Low Fraction	0.0507	B J	0.0218	0.100	0.100	1	09/20/2019 09:48	WG1348624
(S) a,a,a-Trifluorotoluene(FID)	*101*				*77.0-120*		*09/20/2019 09:48*	WG1348624

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

Analyte	Result (dry)	Qualifier	SDL (dry)	Unadj. MQL	MQL (dry)	Dilution	Analysis	Batch
	mg/kg		mg/kg	mg/kg	mg/kg		date / time	
Benzene	U		0.000402	0.00100	0.00100	1	09/18/2019 13:49	WG1347795
Toluene	U		0.00125	0.00500	0.00502	1	09/18/2019 13:49	WG1347795
Ethylbenzene	U		0.000532	0.00250	0.00251	1	09/18/2019 13:49	WG1347795
Total Xylenes	U		0.00480	0.00650	0.00653	1	09/18/2019 13:49	WG1347795
(S) Toluene-d8	*119*				*75.0-131*		*09/18/2019 13:49*	WG1347795
(S) 4-Bromofluorobenzene	*97.6*				*67.0-138*		*09/18/2019 13:49*	WG1347795
(S) 1,2-Dichloroethane-d4	*98.6*				*70.0-130*		*09/18/2019 13:49*	WG1347795

Semi-Volatile Organic Compounds (GC) by Method 8015

Analyte	Result (dry)	Qualifier	SDL (dry)	Unadj. MQL	MQL (dry)	Dilution	Analysis	Batch
	mg/kg		mg/kg	mg/kg	mg/kg		date / time	
C10-C28 Diesel Range	155		32.3	4.00	80.3	20	09/18/2019 23:52	WG1347218
C28-C40 Oil Range	452		5.50	4.00	80.3	20	09/18/2019 23:52	WG1347218
(S) o-Terphenyl	*121*	J7			*18.0-148*		*09/18/2019 23:52*	WG1347218

BH-9 (2'-3')
Collected date/time: 09/11/19 14:50

SAMPLE RESULTS - 42

L1139267

ONE LAB. NATIONWIDE.

Total Solids by Method 2540 G-2011

Analyte	Result	Qualifier	Dilution	Analysis	Batch
	%			date / time	
Total Solids	98.1		1	09/19/2019 13:54	WG1348343

Wet Chemistry by Method 300.0

Analyte	Result (dry)	Qualifier	SDL (dry)	Unadj. MQL	MQL (dry)	Dilution	Analysis	Batch
	mg/kg		mg/kg	mg/kg	mg/kg		date / time	
Chloride	4.32	B J	0.810	10.0	10.2	1	09/18/2019 10:42	WG1347474

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

Analyte	Result (dry)	Qualifier	SDL (dry)	Unadj. MQL	MQL (dry)	Dilution	Analysis	Batch
	mg/kg		mg/kg	mg/kg	mg/kg		date / time	
TPH (GC/FID) Low Fraction	0.0508	B J	0.0221	0.100	0.102	1	09/20/2019 10:11	WG1348624
(S) a,a,a-Trifluorotoluene(FID)	*103*				*77.0-120*		*09/20/2019 10:11*	WG1348624

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

Analyte	Result (dry)	Qualifier	SDL (dry)	Unadj. MQL	MQL (dry)	Dilution	Analysis	Batch
	mg/kg		mg/kg	mg/kg	mg/kg		date / time	
Benzene	U		0.000408	0.00100	0.00102	1	09/18/2019 14:10	WG1347795
Toluene	U		0.00127	0.00500	0.00510	1	09/18/2019 14:10	WG1347795
Ethylbenzene	U		0.000540	0.00250	0.00255	1	09/18/2019 14:10	WG1347795
Total Xylenes	U		0.00487	0.00650	0.00662	1	09/18/2019 14:10	WG1347795
(S) Toluene-d8	*113*				*75.0-131*		*09/18/2019 14:10*	WG1347795
(S) 4-Bromofluorobenzene	*99.6*				*67.0-138*		*09/18/2019 14:10*	WG1347795
(S) 1,2-Dichloroethane-d4	*105*				*70.0-130*		*09/18/2019 14:10*	WG1347795

Semi-Volatile Organic Compounds (GC) by Method 8015

Analyte	Result (dry)	Qualifier	SDL (dry)	Unadj. MQL	MQL (dry)	Dilution	Analysis	Batch
	mg/kg		mg/kg	mg/kg	mg/kg		date / time	
C10-C28 Diesel Range	326		32.8	4.00	81.5	20	09/19/2019 00:06	WG1347218
C28-C40 Oil Range	795		5.58	4.00	81.5	20	09/19/2019 00:06	WG1347218
(S) o-Terphenyl	*133*	J7			*18.0-148*		*09/19/2019 00:06*	WG1347218

BH-10 (0'-1')
Collected date/time: 09/11/19 15:00

SAMPLE RESULTS - 43
L1139267

ONE LAB. NATIONWIDE.

Total Solids by Method 2540 G-2011

Analyte	Result	Qualifier	Dilution	Analysis	Batch
	%			date / time	
Total Solids	87.9		1	09/19/2019 13:54	WG1348343

Wet Chemistry by Method 300.0

Analyte	Result (dry)	Qualifier	SDL (dry)	Unadj. MQL	MQL (dry)	Dilution	Analysis	Batch
	mg/kg		mg/kg	mg/kg	mg/kg		date / time	
Chloride	4.00	B J P1	0.904	10.0	11.4	1	09/18/2019 11:10	WG1347474

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

Analyte	Result (dry)	Qualifier	SDL (dry)	Unadj. MQL	MQL (dry)	Dilution	Analysis	Batch
	mg/kg		mg/kg	mg/kg	mg/kg		date / time	
TPH (GC/FID) Low Fraction	U		0.0247	0.100	0.114	1	09/20/2019 01:02	WG1348819
(S) a,a,a-Trifluorotoluene(FID)	*106*				*77.0-120*		*09/20/2019 01:02*	WG1348819

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

Analyte	Result (dry)	Qualifier	SDL (dry)	Unadj. MQL	MQL (dry)	Dilution	Analysis	Batch
	mg/kg		mg/kg	mg/kg	mg/kg		date / time	
Benzene	U		0.000455	0.00100	0.00114	1	09/18/2019 14:31	WG1347795
Toluene	U		0.00142	0.00500	0.00569	1	09/18/2019 14:31	WG1347795
Ethylbenzene	U		0.000603	0.00250	0.00284	1	09/18/2019 14:31	WG1347795
Total Xylenes	U		0.00544	0.00650	0.00739	1	09/18/2019 14:31	WG1347795
(S) Toluene-d8	*114*				*75.0-131*		*09/18/2019 14:31*	WG1347795
(S) 4-Bromofluorobenzene	*103*				*67.0-138*		*09/18/2019 14:31*	WG1347795
(S) 1,2-Dichloroethane-d4	*103*				*70.0-130*		*09/18/2019 14:31*	WG1347795

Semi-Volatile Organic Compounds (GC) by Method 8015

Analyte	Result (dry)	Qualifier	SDL (dry)	Unadj. MQL	MQL (dry)	Dilution	Analysis	Batch
	mg/kg		mg/kg	mg/kg	mg/kg		date / time	
C10-C28 Diesel Range	24.7		1.83	4.00	4.55	1	09/18/2019 22:59	WG1347218
C28-C40 Oil Range	32.0		0.312	4.00	4.55	1	09/18/2019 22:59	WG1347218
(S) o-Terphenyl	*91.4*				*18.0-148*		*09/18/2019 22:59*	WG1347218

BH-10 (2'-3')
Collected date/time: 09/11/19 15:10

SAMPLE RESULTS - 44
L1139267

ONE LAB. NATIONWIDE.

Total Solids by Method 2540 G-2011

Analyte	Result	Qualifier	Dilution	Analysis	Batch
	%			date / time	
Total Solids	81.3		1	09/19/2019 13:54	WG1348343

Wet Chemistry by Method 300.0

Analyte	Result (dry)	Qualifier	SDL (dry)	Unadj. MQL	MQL (dry)	Dilution	Analysis	Batch
	mg/kg		mg/kg	mg/kg	mg/kg		date / time	
Chloride	3.97	B J	0.978	10.0	12.3	1	09/18/2019 11:29	WG1347474

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

Analyte	Result (dry)	Qualifier	SDL (dry)	Unadj. MQL	MQL (dry)	Dilution	Analysis	Batch
	mg/kg		mg/kg	mg/kg	mg/kg		date / time	
TPH (GC/FID) Low Fraction	U		0.0267	0.100	0.123	1	09/20/2019 01:22	WG1348819
(S) a,a,a-Trifluorotoluene(FID)	*106*				*77.0-120*		*09/20/2019 01:22*	WG1348819

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

Analyte	Result (dry)	Qualifier	SDL (dry)	Unadj. MQL	MQL (dry)	Dilution	Analysis	Batch
	mg/kg		mg/kg	mg/kg	mg/kg		date / time	
Benzene	U		0.000492	0.00100	0.00123	1	09/18/2019 14:51	WG1347795
Toluene	U		0.00154	0.00500	0.00615	1	09/18/2019 14:51	WG1347795
Ethylbenzene	U		0.000652	0.00250	0.00307	1	09/18/2019 14:51	WG1347795
Total Xylenes	U		0.00588	0.00650	0.00799	1	09/18/2019 14:51	WG1347795
(S) Toluene-d8	*113*				*75.0-131*		*09/18/2019 14:51*	WG1347795
(S) 4-Bromofluorobenzene	*106*				*67.0-138*		*09/18/2019 14:51*	WG1347795
(S) 1,2-Dichloroethane-d4	*106*				*70.0-130*		*09/18/2019 14:51*	WG1347795

Semi-Volatile Organic Compounds (GC) by Method 8015

Analyte	Result (dry)	Qualifier	SDL (dry)	Unadj. MQL	MQL (dry)	Dilution	Analysis	Batch
	mg/kg		mg/kg	mg/kg	mg/kg		date / time	
C10-C28 Diesel Range	U		1.98	4.00	4.92	1	09/18/2019 22:46	WG1347218
C28-C40 Oil Range	3.36	J	0.337	4.00	4.92	1	09/18/2019 22:46	WG1347218
(S) o-Terphenyl	*91.7*				*18.0-148*		*09/18/2019 22:46*	WG1347218

BH-10 (4'-5')
Collected date/time: 09/11/19 15:20

SAMPLE RESULTS - 45
L1139267

ONE LAB. NATIONWIDE.

Total Solids by Method 2540 G-2011

Analyte	Result	Qualifier	Dilution	Analysis	Batch
	%			date / time	
Total Solids	96.5		1	09/19/2019 13:54	WG1348343

Wet Chemistry by Method 300.0

Analyte	Result (dry)	Qualifier	SDL (dry)	Unadj. MQL	MQL (dry)	Dilution	Analysis	Batch
	mg/kg		mg/kg	mg/kg	mg/kg		date / time	
Chloride	2.76	B J	0.824	10.0	10.4	1	09/18/2019 11:39	WG1347474

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

Analyte	Result (dry)	Qualifier	SDL (dry)	Unadj. MQL	MQL (dry)	Dilution	Analysis	Batch
	mg/kg		mg/kg	mg/kg	mg/kg		date / time	
TPH (GC/FID) Low Fraction	U		0.0227	0.100	0.105	1.01	09/20/2019 01:43	WG1348819
(S) a,a,a-Trifluorotoluene(FID)	*106*				*77.0-120*		*09/20/2019 01:43*	WG1348819

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

Analyte	Result (dry)	Qualifier	SDL (dry)	Unadj. MQL	MQL (dry)	Dilution	Analysis	Batch
	mg/kg		mg/kg	mg/kg	mg/kg		date / time	
Benzene	U		0.000414	0.00100	0.00104	1	09/18/2019 15:12	WG1347795
Toluene	U		0.00129	0.00500	0.00518	1	09/18/2019 15:12	WG1347795
Ethylbenzene	U		0.000549	0.00250	0.00259	1	09/18/2019 15:12	WG1347795
Total Xylenes	U		0.00495	0.00650	0.00673	1	09/18/2019 15:12	WG1347795
(S) Toluene-d8	*114*				*75.0-131*		*09/18/2019 15:12*	WG1347795
(S) 4-Bromofluorobenzene	*96.4*				*67.0-138*		*09/18/2019 15:12*	WG1347795
(S) 1,2-Dichloroethane-d4	*102*				*70.0-130*		*09/18/2019 15:12*	WG1347795

Semi-Volatile Organic Compounds (GC) by Method 8015

Analyte	Result (dry)	Qualifier	SDL (dry)	Unadj. MQL	MQL (dry)	Dilution	Analysis	Batch
	mg/kg		mg/kg	mg/kg	mg/kg		date / time	
C10-C28 Diesel Range	115		3.34	4.00	8.29	2	09/18/2019 16:21	WG1347221
C28-C40 Oil Range	194		0.568	4.00	8.29	2	09/18/2019 16:21	WG1347221
(S) o-Terphenyl	*102*				*18.0-148*		*09/18/2019 16:21*	WG1347221

BH-11 (0'-0.5')
Collected date/time: 09/11/19 16:00

SAMPLE RESULTS - 46
L1139267

ONE LAB. NATIONWIDE.

Total Solids by Method 2540 G-2011

Analyte	Result	Qualifier	Dilution	Analysis	Batch
	%			date / time	
Total Solids	98.8		1	09/19/2019 13:54	WG1348343

Wet Chemistry by Method 300.0

Analyte	Result (dry)	Qualifier	SDL (dry)	Unadj. MQL	MQL (dry)	Dilution	Analysis	Batch
	mg/kg		mg/kg	mg/kg	mg/kg		date / time	
Chloride	30.7		0.805	10.0	10.1	1	09/18/2019 11:48	WG1347474

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

Analyte	Result (dry)	Qualifier	SDL (dry)	Unadj. MQL	MQL (dry)	Dilution	Analysis	Batch
	mg/kg		mg/kg	mg/kg	mg/kg		date / time	
TPH (GC/FID) Low Fraction	U		0.0222	0.100	0.102	1.01	09/20/2019 02:03	WG1348819
(S) a,a,a-Trifluorotoluene(FID)	*107*				*77.0-120*		*09/20/2019 02:03*	WG1348819

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

Analyte	Result (dry)	Qualifier	SDL (dry)	Unadj. MQL	MQL (dry)	Dilution	Analysis	Batch
	mg/kg		mg/kg	mg/kg	mg/kg		date / time	
Benzene	U		0.000405	0.00100	0.00101	1	09/18/2019 15:32	WG1347795
Toluene	U		0.00127	0.00500	0.00506	1	09/18/2019 15:32	WG1347795
Ethylbenzene	U		0.000536	0.00250	0.00253	1	09/18/2019 15:32	WG1347795
Total Xylenes	U		0.00484	0.00650	0.00658	1	09/18/2019 15:32	WG1347795
(S) Toluene-d8	*113*				*75.0-131*		*09/18/2019 15:32*	WG1347795
(S) 4-Bromofluorobenzene	*99.1*				*67.0-138*		*09/18/2019 15:32*	WG1347795
(S) 1,2-Dichloroethane-d4	*106*				*70.0-130*		*09/18/2019 15:32*	WG1347795

Semi-Volatile Organic Compounds (GC) by Method 8015

Analyte	Result (dry)	Qualifier	SDL (dry)	Unadj. MQL	MQL (dry)	Dilution	Analysis	Batch
	mg/kg		mg/kg	mg/kg	mg/kg		date / time	
C10-C28 Diesel Range	29.8		8.15	4.00	20.2	5	09/18/2019 16:34	WG1347221
C28-C40 Oil Range	72.4		1.39	4.00	20.2	5	09/18/2019 06:04	WG1347221
(S) o-Terphenyl	*131*				*18.0-148*		*09/18/2019 06:04*	WG1347221
(S) o-Terphenyl	*129*				*18.0-148*		*09/18/2019 16:34*	WG1347221

BH-12 (0'-0.5')
Collected date/time: 09/11/19 16:30

SAMPLE RESULTS - 47
L1139267

ONE LAB. NATIONWIDE.

Total Solids by Method 2540 G-2011

Analyte	Result	Qualifier	Dilution	Analysis	Batch
	%			date / time	
Total Solids	99.2		1	09/19/2019 13:54	WG1348343

Wet Chemistry by Method 300.0

Analyte	Result (dry)	Qualifier	SDL (dry)	Unadj. MQL	MQL (dry)	Dilution	Analysis	Batch
	mg/kg		mg/kg	mg/kg	mg/kg		date / time	
Chloride	2.64	B J	0.801	10.0	10.1	1	09/18/2019 11:58	WG1347474

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

Analyte	Result (dry)	Qualifier	SDL (dry)	Unadj. MQL	MQL (dry)	Dilution	Analysis	Batch
	mg/kg		mg/kg	mg/kg	mg/kg		date / time	
TPH (GC/FID) Low Fraction	U		0.0221	0.100	0.102	1.01	09/20/2019 02:24	WG1348819
(S) a,a,a-Trifluorotoluene(FID)	*106*				*77.0-120*		*09/20/2019 02:24*	WG1348819

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

Analyte	Result (dry)	Qualifier	SDL (dry)	Unadj. MQL	MQL (dry)	Dilution	Analysis	Batch
	mg/kg		mg/kg	mg/kg	mg/kg		date / time	
Benzene	U		0.000403	0.00100	0.00101	1	09/18/2019 15:59	WG1347795
Toluene	U		0.00126	0.00500	0.00504	1	09/18/2019 15:59	WG1347795
Ethylbenzene	U		0.000534	0.00250	0.00252	1	09/18/2019 15:59	WG1347795
Total Xylenes	U		0.00482	0.00650	0.00655	1	09/18/2019 15:59	WG1347795
(S) Toluene-d8	*113*				*75.0-131*		*09/18/2019 15:59*	WG1347795
(S) 4-Bromofluorobenzene	*101*				*67.0-138*		*09/18/2019 15:59*	WG1347795
(S) 1,2-Dichloroethane-d4	*106*				*70.0-130*		*09/18/2019 15:59*	WG1347795

Semi-Volatile Organic Compounds (GC) by Method 8015

Analyte	Result (dry)	Qualifier	SDL (dry)	Unadj. MQL	MQL (dry)	Dilution	Analysis	Batch
	mg/kg		mg/kg	mg/kg	mg/kg		date / time	
C10-C28 Diesel Range	21.1		8.11	4.00	20.2	5	09/18/2019 16:47	WG1347221
C28-C40 Oil Range	69.9		1.38	4.00	20.2	5	09/18/2019 06:19	WG1347221
(S) o-Terphenyl	*107*				*18.0-148*		*09/18/2019 06:19*	WG1347221
(S) o-Terphenyl	*118*				*18.0-148*		*09/18/2019 16:47*	WG1347221

WG1348336

Total Solids by Method 2540 G-2011

QUALITY CONTROL SUMMARY

L1139267-01

Method Blank (MB)

(MB) R3452742-1 09/19/19 19:08

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

L1139257-06 Original Sample (OS) • Duplicate (DUP)

(OS) L1139257-06 09/19/19 19:08 • (DUP) R3452742-3 09/19/19 19:08

Analyte	Original Result	DUP Result	Dilution	DUP RPD	DUP Qualifier	DUP RPD Limits
	%	%		%		%
Total Solids	89.9	90.0	1	0.104		10

Laboratory Control Sample (LCS)

(LCS) R3452742-2 09/19/19 19:08

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

WG1348337
Total Solids by Method 2540 G-2011

QUALITY CONTROL SUMMARY

L1139267-02,03,04,05,06,07,08,09,10,11

Method Blank (MB)

(MB) R3452740-1 09/19/19 18:57

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

L1139267-02 Original Sample (OS) • Duplicate (DUP)

(OS) L1139267-02 09/19/19 18:57 • (DUP) R3452740-3 09/19/19 18:57

Analyte	Original Result	DUP Result	Dilution	DUP RPD	DUP Qualifier	DUP RPD Limits
	%	%		%		%
Total Solids	96.6	96.3	1	0.398		10

Laboratory Control Sample (LCS)

(LCS) R3452740-2 09/19/19 18:57

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

WG1348339
Total Solids by Method 2540 G-2011

QUALITY CONTROL SUMMARY

L1139267-12,13,14,15,16,17,18,19,20,21

Method Blank (MB)

(MB) R3452737-1 09/19/19 18:47

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

L1139267-12 Original Sample (OS) • Duplicate (DUP)

(OS) L1139267-12 09/19/19 18:47 • (DUP) R3452737-3 09/19/19 18:47

Analyte	Original Result	DUP Result	Dilution	DUP RPD	DUP Qualifier	DUP RPD Limits
	%	%		%		%
Total Solids	98.2	96.1	1	2.15		10

Laboratory Control Sample (LCS)

(LCS) R3452737-2 09/19/19 18:47

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

WG1348340
Total Solids by Method 2540 G-2011

QUALITY CONTROL SUMMARY

L1139267-22,23,24,25,26,27,28,29,30,31

Method Blank (MB)

(MB) R3452736-1 09/19/19 18:23

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

L1139267-23 Original Sample (OS) • Duplicate (DUP)

(OS) L1139267-23 09/19/19 18:23 • (DUP) R3452736-3 09/19/19 18:23

Analyte	Original Result	DUP Result	Dilution	DUP RPD	DUP Qualifier	DUP RPD Limits
	%	%		%		%
Total Solids	98.5	98.4	1	0.0544		10

Laboratory Control Sample (LCS)

(LCS) R3452736-2 09/19/19 18:23

Analyte	Spike Amount	LCS Result	LCS Rec.	Rec. Limits	LCS Qualifier
	%	%	%	%	
Total Solids	50.0	50.0	99.9	85.0-115	

WG1348341
Total Solids by Method 2540 G-2011

QUALITY CONTROL SUMMARY

L1139267-32,33,34,35,36,37,38,39,40,41

ONE LAB. NATIONWIDE.

Method Blank (MB)

(MB) R3452735-1 09/19/19 18:09

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

L1139267-34 Original Sample (OS) • Duplicate (DUP)

(OS) L1139267-34 09/19/19 18:09 • (DUP) R3452735-3 09/19/19 18:09

Analyte	Original Result	DUP Result	Dilution	DUP RPD	DUP Qualifier	DUP RPD Limits
	%	%		%		%
Total Solids	98.9	98.9	1	0.0197		10

Laboratory Control Sample (LCS)

(LCS) R3452735-2 09/19/19 18:09

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

WG1348343

Total Solids by Method 2540 G-2011

QUALITY CONTROL SUMMARY

L1139267-42,43,44,45,46,47

ONE LAB. NATIONWIDE.

Method Blank (MB)

(MB) R3452923-1 09/19/19 13:54

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

L1139267-45 Original Sample (OS) • Duplicate (DUP)

(OS) L1139267-45 09/19/19 13:54 • (DUP) R3452923-3 09/19/19 13:54

Analyte	Original Result	DUP Result	Dilution	DUP RPD	DUP Qualifier	DUP RPD Limits
	%	%		%		%
Total Solids	96.5	97.4	1	0.900		10

Laboratory Control Sample (LCS)

(LCS) R3452923-2 09/19/19 13:54

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

Method Blank (MB)

(MB) R3451379-1 09/17/19 01:04

Analyte	MB Result mg/kg	MB Qualifier	MB MDL mg/kg	MB RDL mg/kg
Chloride	2.12	J	0.795	10.0

L1139207-39 Original Sample (OS) • Duplicate (DUP)

(OS) L1139207-39 09/17/19 03:00 • (DUP) R3451379-3 09/17/19 03:14

Analyte	Original Result mg/kg	DUP Result mg/kg	Dilution	DUP RPD %	DUP Qualifier	DUP RPD Limits %
Chloride	315	309	1	2.11		20

L1139267-06 Original Sample (OS) • Duplicate (DUP)

(OS) L1139267-06 09/17/19 07:48 • (DUP) R3451379-6 09/17/19 08:02

Analyte	Original Result (dry) mg/kg	DUP Result (dry) mg/kg	Dilution	DUP RPD %	DUP Qualifier	DUP RPD Limits %
Chloride	281	260	1	7.81		20

Laboratory Control Sample (LCS)

(LCS) R3451379-2 09/17/19 01:19

Analyte	Spike Amount mg/kg	LCS Result mg/kg	LCS Rec. %	Rec. Limits %	LCS Qualifier
Chloride	200	215	108	90.0-110	

L1139267-02 Original Sample (OS) • Matrix Spike (MS) • Matrix Spike Duplicate (MSD)

(OS) L1139267-02 09/17/19 05:53 • (MS) R3451379-4 09/17/19 06:07 • (MSD) R3451379-5 09/17/19 06:22

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 %	MS Qualifier	MSD Qualifier	RPD %	RPD Limits %
Chloride	517	148	920	904	149	146	1	80.0-120	J5	J5	1.71	20

Method Blank (MB)

(MB) R3451345-1 09/16/19 20:05

Analyte	MB Result mg/kg	MB Qualifier	MB MDL mg/kg	MB RDL mg/kg
Chloride	3.28	J	0.795	10.0

L1135822-15 Original Sample (OS) • Duplicate (DUP)

(OS) L1135822-15 09/16/19 21:59 • (DUP) R3451345-3 09/16/19 22:08

Analyte	Original Result (dry) mg/kg	DUP Result (dry) mg/kg	Dilution	DUP RPD %	DUP Qualifier	DUP RPD Limits %
Chloride	3700	3540	10	4.45		20

L1139267-12 Original Sample (OS) • Duplicate (DUP)

(OS) L1139267-12 09/17/19 00:03 • (DUP) R3451345-6 09/17/19 00:12

Analyte	Original Result (dry) mg/kg	DUP Result (dry) mg/kg	Dilution	DUP RPD %	DUP Qualifier	DUP RPD Limits %
Chloride	23.5	6.37	1	115	J P1	20

Laboratory Control Sample (LCS)

(LCS) R3451345-2 09/16/19 20:14

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

L1139267-08 Original Sample (OS) • Matrix Spike (MS) • Matrix Spike Duplicate (MSD)

(OS) L1139267-08 09/16/19 23:05 • (MS) R3451345-4 09/16/19 23:15 • (MSD) R3451345-5 09/16/19 23:24

Analyte	Spike Amount (dry) mg/kg	Original Result (dry) mg/kg	MS Result (dry) mg/kg	MSD Result (dry) mg/kg	MS Rec. %	MSD Rec. %	Dilution	Rec. Limits %	MS Qualifier	MSD Qualifier	RPD %	RPD Limits %
Chloride	506	70.7	586	578	102	100	1	80.0-120			1.24	20

Method Blank (MB)

(MB) R3451729-1 09/17/19 20:18

Analyte	MB Result mg/kg	MB Qualifier	MB MDL mg/kg	MB RDL mg/kg
Chloride	3.18	J	0.795	10.0

L1139267-21 Original Sample (OS) • Duplicate (DUP)

(OS) L1139267-21 09/17/19 21:20 • (DUP) R3451729-3 09/17/19 21:29

Analyte	Original Result (dry) mg/kg	DUP Result (dry) mg/kg	Dilution	DUP RPD %	DUP Qualifier	DUP RPD Limits %
Chloride	172	166	1	3.81		20

L1139267-40 Original Sample (OS) • Duplicate (DUP)

(OS) L1139267-40 09/18/19 01:27 • (DUP) R3451729-6 09/18/19 01:36

Analyte	Original Result (dry) mg/kg	DUP Result (dry) mg/kg	Dilution	DUP RPD %	DUP Qualifier	DUP RPD Limits %
Chloride	214	226	1	5.47		20

Laboratory Control Sample (LCS)

(LCS) R3451729-2 09/17/19 20:28

Analyte	Spike Amount mg/kg	LCS Result mg/kg	LCS Rec. %	Rec. Limits %	LCS Qualifier
Chloride	200	210	105	90.0-110	

L1139267-29 Original Sample (OS) • Matrix Spike (MS) • Matrix Spike Duplicate (MSD)

(OS) L1139267-29 09/17/19 23:04 • (MS) R3451729-4 09/17/19 23:14 • (MSD) R3451729-5 09/17/19 23:23

Analyte	Spike Amount (dry) mg/kg	Original Result (dry) mg/kg	MS Result (dry) mg/kg	MSD Result (dry) mg/kg	MS Rec. %	MSD Rec. %	Dilution	Rec. Limits %	MS Qualifier	MSD Qualifier	RPD %	RPD Limits %
Chloride	570	40.9	631	610	104	99.9	1	80.0-120			3.40	20

WG1347474
Wet Chemistry by Method 300.0

QUALITY CONTROL SUMMARY

L1139267-42,43,44,45,46,47

ONE LAB. NATIONWIDE.

Method Blank (MB)

(MB) R3451957-1 09/18/19 09:17

Analyte	MB Result mg/kg	MB Qualifier	MB MDL mg/kg	MB RDL mg/kg
Chloride	2.33	J	0.795	10.0

L1139267-43 Original Sample (OS) • Duplicate (DUP)

(OS) L1139267-43 09/18/19 11:10 • (DUP) R3451957-5 09/18/19 11:20

Analyte	Original Result (dry) mg/kg	DUP Result (dry) mg/kg	Dilution	DUP RPD %	DUP Qualifier	DUP RPD Limits %
Chloride	4.00	2.98	1	29.2	J P1	20

L1139565-01 Original Sample (OS) • Duplicate (DUP)

(OS) L1139565-01 09/18/19 12:07 • (DUP) R3451957-6 09/18/19 12:36

Analyte	Original Result mg/kg	DUP Result mg/kg	Dilution	DUP RPD %	DUP Qualifier	DUP RPD Limits %
Chloride	165	176	1	6.14		20

Laboratory Control Sample (LCS)

(LCS) R3451957-2 09/18/19 09:27

Analyte	Spike Amount mg/kg	LCS Result mg/kg	LCS Rec. %	Rec. Limits %	LCS Qualifier
Chloride	200	203	101	90.0-110	

L1139267-42 Original Sample (OS) • Matrix Spike (MS) • Matrix Spike Duplicate (MSD)

(OS) L1139267-42 09/18/19 10:42 • (MS) R3451957-3 09/18/19 10:51 • (MSD) R3451957-4 09/18/19 11:01

Analyte	Spike Amount (dry) mg/kg	Original Result (dry) mg/kg	MS Result (dry) mg/kg	MSD Result (dry) mg/kg	MS Rec. %	MSD Rec. %	Dilution	Rec. Limits %	MS Qualifier	MSD Qualifier	RPD %	RPD Limits %
Chloride	510	4.32	557	552	108	107	1	80.0-120			0.872	20

WG1347692
Wet Chemistry by Method 300.0

QUALITY CONTROL SUMMARY

L1139267-41

ONE LAB. NATIONWIDE.

Method Blank (MB)

(MB) R3452210-1 09/18/19 20:18

Analyte	MB Result mg/kg	MB Qualifier	MB MDL mg/kg	MB RDL mg/kg
Chloride	3.00	J	0.795	10.0

L1135822-25 Original Sample (OS) • Duplicate (DUP)

(OS) L1135822-25 09/18/19 20:49 • (DUP) R3452210-3 09/18/19 20:58

Analyte	Original Result mg/kg	DUP Result mg/kg	Dilution	DUP RPD %	DUP Qualifier	DUP RPD Limits %
Chloride	6900	7290	20	5.39		20

L1140590-01 Original Sample (OS) • Duplicate (DUP)

(OS) L1140590-01 09/18/19 23:31 • (DUP) R3452210-6 09/18/19 23:40

Analyte	Original Result mg/kg	DUP Result mg/kg	Dilution	DUP RPD %	DUP Qualifier	DUP RPD Limits %
Chloride	127	155	10	20.0		20

Laboratory Control Sample (LCS)

(LCS) R3452210-2 09/18/19 20:27

Analyte	Spike Amount mg/kg	LCS Result mg/kg	LCS Rec. %	Rec. Limits %	LCS Qualifier
Chloride	200	212	106	90.0-110	

L1139267-41 Original Sample (OS) • Matrix Spike (MS) • Matrix Spike Duplicate (MSD)

(OS) L1139267-41 09/18/19 21:17 • (MS) R3452210-4 09/18/19 21:27 • (MSD) R3452210-5 09/18/19 21:36

Analyte	Spike Amount (dry) mg/kg	Original Result (dry) mg/kg	MS Result (dry) mg/kg	MSD Result (dry) mg/kg	MS Rec. %	MSD Rec. %	Dilution	Rec. Limits %	MS Qualifier	MSD Qualifier	RPD %	RPD Limits %
Chloride	502	22.4	521	526	99.3	100	1	80.0-120			0.980	20

Method Blank (MB)

(MB) R3452039-3 09/18/19 13:37

Analyte	MB Result mg/kg	MB Qualifier	MB MDL mg/kg	MB RDL mg/kg
TPH (GC/FID) Low Fraction	0.0289	J	0.0217	0.100
(S) a,a,a-Trifluorotoluene(FID)	*95.0*			*77.0-120*

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

(LCS) R3452039-1 09/18/19 12:26 • (LCSD) R3452039-2 09/18/19 12:47

Analyte	Spike Amount mg/kg	LCS Result mg/kg	LCSD Result mg/kg	LCS Rec. %	LCSD Rec. %	Rec. Limits %	LCS Qualifier	LCSD Qualifier	RPD %	RPD Limits %
TPH (GC/FID) Low Fraction	5.50	5.93	6.91	108	126	72.0-127			15.3	20
(S) a,a,a-Trifluorotoluene(FID)				*110*	*112*	*77.0-120*				

L1138214-01 Original Sample (OS) • Matrix Spike (MS) • Matrix Spike Duplicate (MSD)

(OS) L1138214-01 09/18/19 14:43 • (MS) R3452039-6 09/19/19 00:25 • (MSD) R3452039-7 09/19/19 00:45

Analyte	Spike Amount (dry) mg/kg	Original Result (dry) mg/kg	MS Result (dry) mg/kg	MSD Result (dry) mg/kg	MS Rec. %	MSD Rec. %	Dilution	Rec. Limits %	MS Qualifier	MSD Qualifier	RPD %	RPD Limits %
TPH (GC/FID) Low Fraction	6.50	U	1.89	2.50	29.1	38.5	1	10.0-151			27.9	28
(S) a,a,a-Trifluorotoluene(FID)					*90.2*	*93.5*		*77.0-120*				

WG1347802

QUALITY CONTROL SUMMARY

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

L1139267-13,14,15,16,17,18,19,20,21,22,23,24

Method Blank (MB)

(MB) R3452509-1 09/18/19 11:12

Analyte	MB Result mg/kg	MB Qualifier	MB MDL mg/kg	MB RDL mg/kg
TPH (GC/FID) Low Fraction	U		0.0217	0.100
(S) a,a,a-Trifluorotoluene(FID)	*103*			*77.0-120*

Laboratory Control Sample (LCS)

(LCS) R3452509-2 09/18/19 12:29

Analyte	Spike Amount mg/kg	LCS Result mg/kg	LCS Rec. %	Rec. Limits %	LCS Qualifier
TPH (GC/FID) Low Fraction	5.50	5.68	103	72.0-127	
(S) a,a,a-Trifluorotoluene(FID)			*107*	*77.0-120*	

L1139267-15 Original Sample (OS) • Matrix Spike (MS) • Matrix Spike Duplicate (MSD)

(OS) L1139267-15 09/18/19 15:45 • (MS) R3452509-3 09/18/19 20:12 • (MSD) R3452509-4 09/18/19 20:32

Analyte	Spike Amount (dry) mg/kg	Original Result (dry) mg/kg	MS Result (dry) mg/kg	MSD Result (dry) mg/kg	MS Rec. %	MSD Rec. %	Dilution	Rec. Limits %	MS Qualifier	MSD Qualifier	RPD %	RPD Limits %
TPH (GC/FID) Low Fraction	6.15	U	2.12	4.80	34.5	77.9	1	10.0-151		J3	77.2	28
(S) a,a,a-Trifluorotoluene(FID)					*98.0*	*105*		*77.0-120*				

WG1348549

QUALITY CONTROL SUMMARY

ONE LAB. NATIONWIDE.

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

L1139267-08

Method Blank (MB)

(MB) R3452747-3 09/19/19 11:57

Analyte	MB Result mg/kg	MB Qualifier	MB MDL mg/kg	MB RDL mg/kg
TPH (GC/FID) Low Fraction	U		0.0217	0.100
(S) a,a,a-Trifluorotoluene(FID)	*107*			*77.0-120*

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

(LCS) R3452747-1 09/19/19 10:55 • (LCSD) R3452747-2 09/19/19 11:15

Analyte	Spike Amount mg/kg	LCS Result mg/kg	LCSD Result mg/kg	LCS Rec. %	LCSD Rec. %	Rec. Limits %	LCS Qualifier	LCSD Qualifier	RPD %	RPD Limits %
TPH (GC/FID) Low Fraction	5.50	6.13	5.96	112	108	72.0-127			2.89	20
(S) a,a,a-Trifluorotoluene(FID)				*109*	*112*	*77.0-120*				

WG1348619

QUALITY CONTROL SUMMARY

ONE LAB. NATIONWIDE.

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

L1139267-28,29,30,31,32,33,34

Method Blank (MB)

(MB) R3452760-2 09/19/19 12:55

Analyte	MB Result mg/kg	MB Qualifier	MB MDL mg/kg	MB RDL mg/kg
TPH (GC/FID) Low Fraction	0.0247	J	0.0217	0.100
(S) a,a,a-Trifluorotoluene(FID)	*95.7*			*77.0-120*

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

(LCS) R3452760-1 09/19/19 11:49 • (LCSD) R3452760-3 09/19/19 22:28

Analyte	Spike Amount mg/kg	LCS Result mg/kg	LCSD Result mg/kg	LCS Rec. %	LCSD Rec. %	Rec. Limits %	LCS Qualifier	LCSD Qualifier	RPD %	RPD Limits %
TPH (GC/FID) Low Fraction	5.50	5.83	5.46	106	99.4	72.0-127			6.39	20
(S) a,a,a-Trifluorotoluene(FID)				*110*	*106*	*77.0-120*				

WG1348624

QUALITY CONTROL SUMMARY

ONE LAB. NATIONWIDE.

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

L1139267-35,36,37,38,39,40,41,42

Method Blank (MB)

(MB) R3452843-4 09/19/19 23:50

Analyte	MB Result mg/kg	MB Qualifier	MB MDL mg/kg	MB RDL mg/kg
TPH (GC/FID) Low Fraction	0.0508	J	0.0217	0.100
(S) a,a,a-Trifluorotoluene(FID)	*105*			*77.0-120*

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

(LCS) R3452843-1 09/19/19 12:44 • (LCSD) R3452843-3 09/19/19 18:30

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 %
TPH (GC/FID) Low Fraction	5.50	5.48	6.46	99.6	117	72.0-127			16.4	20
(S) a,a,a-Trifluorotoluene(FID)				*106*	*109*	*77.0-120*				

WG1348819

QUALITY CONTROL SUMMARY

ONE LAB. NATIONWIDE.

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

L1139267-43,44,45,46,47

Method Blank (MB)

(MB) R3452748-2 09/19/19 23:20

Analyte	MB Result mg/kg	MB Qualifier	MB MDL mg/kg	MB RDL mg/kg
TPH (GC/FID) Low Fraction	U		0.0217	0.100
(S) a,a,a-Trifluorotoluene(FID)	*104*			*77.0-120*

Laboratory Control Sample (LCS)

(LCS) R3452748-1 09/19/19 22:39

Analyte	Spike Amount mg/kg	LCS Result mg/kg	LCS Rec. %	Rec. Limits %	LCS Qualifier
TPH (GC/FID) Low Fraction	5.50	5.55	101	72.0-127	
(S) a,a,a-Trifluorotoluene(FID)			*110*	*77.0-120*	

L1139451-04 Original Sample (OS) • Matrix Spike (MS) • Matrix Spike Duplicate (MSD)

(OS) L1139451-04 09/20/19 06:09 • (MS) R3452748-3 09/20/19 06:29 • (MSD) R3452748-4 09/20/19 06:50

Analyte	Spike Amount mg/kg	Original Result mg/kg	MS Result mg/kg	MSD Result mg/kg	MS Rec. %	MSD Rec. %	Dilution	Rec. Limits %	MS Qualifier	MSD Qualifier	RPD %	RPD Limits %
TPH (GC/FID) Low Fraction	5.50	ND	100	117	72.3	84.2	25	10.0-151			15.1	28
(S) a,a,a-Trifluorotoluene(FID)					*110*	*112*		*77.0-120*				

WG1348959

QUALITY CONTROL SUMMARY

ONE LAB. NATIONWIDE.

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

L1139267-25,26,27

Method Blank (MB)

(MB) R3452960-2 09/20/19 11:56

Analyte	MB Result mg/kg	MB Qualifier	MB MDL mg/kg	MB RDL mg/kg
TPH (GC/FID) Low Fraction	U		0.0217	0.100
(S) a,a,a-Trifluorotoluene(FID)	*96.6*			*77.0-120*

Laboratory Control Sample (LCS)

(LCS) R3452960-1 09/20/19 11:09

Analyte	Spike Amount mg/kg	LCS Result mg/kg	LCS Rec. %	Rec. Limits %	LCS Qualifier
TPH (GC/FID) Low Fraction	5.50	4.96	90.3	72.0-127	
(S) a,a,a-Trifluorotoluene(FID)			*101*	*77.0-120*	

WG1347343

QUALITY CONTROL SUMMARY

ONE LAB. NATIONWIDE.

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

L1139267-01,02,03,04,05,06,07,08,09,10,11,12

Method Blank (MB)

(MB) R3452593-3 09/17/19 21:57

Analyte	MB Result	MB Qualifier	MB MDL	MB RDL
	mg/kg		mg/kg	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	*111*			*75.0-131*
(S) 4-Bromofluorobenzene	*99.0*			*67.0-138*
(S) 1,2-Dichloroethane-d4	*117*			*70.0-130*

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

(LCS) R3452593-1 09/17/19 20:35 • (LCSD) R3452593-2 09/17/19 20:56

Analyte	Spike Amount	LCS Result	LCSD Result	LCS Rec.	LCSD Rec.	Rec. Limits	LCS Qualifier	LCSD Qualifier	RPD	RPD Limits
	mg/kg	mg/kg	mg/kg	%	%	%			%	%
Benzene	0.125	0.100	0.0935	80.4	74.8	70.0-123			7.12	20
Ethylbenzene	0.125	0.119	0.113	95.0	90.8	74.0-126			4.51	20
Toluene	0.125	0.119	0.110	95.2	87.8	75.0-121			8.06	20
Xylenes, Total	0.375	0.346	0.299	92.3	79.7	72.0-127		J4	14.6	20
(S) Toluene-d8				*107*	*107*	*75.0-131*				
(S) 4-Bromofluorobenzene				*102*	*103*	*67.0-138*				
(S) 1,2-Dichloroethane-d4				*116*	*118*	*70.0-130*				

L1139233-01 Original Sample (OS) • Matrix Spike (MS) • Matrix Spike Duplicate (MSD)

(OS) L1139233-01 09/18/19 04:48 • (MS) R3452593-4 09/18/19 05:09 • (MSD) R3452593-5 09/18/19 05:29

Analyte	Spike Amount	Original Result	MS Result	MSD Result	MS Rec.	MSD Rec.	Dilution	Rec. Limits	MS Qualifier	MSD Qualifier	RPD	RPD Limits
	mg/kg	mg/kg	mg/kg	mg/kg	%	%		%			%	%
Benzene	0.125	0.0921	1.09	0.885	100	79.2	8	10.0-149			21.0	37
Ethylbenzene	0.125	0.439	2.39	2.09	195	165	8	10.0-160	J5	J5	13.2	38
Toluene	0.125	1.01	4.61	4.48	360	347	8	10.0-156	J5	J5	2.90	38
Xylenes, Total	0.375	1.94	9.65	8.92	257	233	8	10.0-160	J5	J5	7.86	38
(S) Toluene-d8					*110*	*113*		*75.0-131*				
(S) 4-Bromofluorobenzene					*114*	*115*		*67.0-138*				
(S) 1,2-Dichloroethane-d4					*112*	*110*		*70.0-130*				

Method Blank (MB)

(MB) R3452584-3 09/18/19 06:11

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	*105*			*75.0-131*
(S) 4-Bromofluorobenzene	*81.2*			*67.0-138*
(S) 1,2-Dichloroethane-d4	*101*			*70.0-130*

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

(LCS) R3452584-1 09/18/19 04:57 • (LCSD) R3452584-2 09/18/19 05:15

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	0.110	0.111	88.1	88.5	70.0-123			0.508	20
Ethylbenzene	0.125	0.115	0.112	92.2	89.4	74.0-126			3.13	20
Toluene	0.125	0.121	0.122	97.0	97.5	75.0-121			0.429	20
Xylenes, Total	0.375	0.322	0.307	85.9	81.9	72.0-127			4.77	20
(S) Toluene-d8				*100*	*102*	*75.0-131*				
(S) 4-Bromofluorobenzene				*92.6*	*91.1*	*67.0-138*				
(S) 1,2-Dichloroethane-d4				*108*	*105*	*70.0-130*				

L1139267-32 Original Sample (OS) • Matrix Spike (MS) • Matrix Spike Duplicate (MSD)

(OS) L1139267-32 09/18/19 12:23 • (MS) R3452584-4 09/18/19 12:41 • (MSD) R3452584-5 09/18/19 13:00

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 %	MS Qualifier	MSD Qualifier	RPD %	RPD Limits %
Benzene	0.129	0.000435	0.0805	0.0981	62.0	75.6	1	10.0-149			19.6	37
Ethylbenzene	0.129	U	0.0817	0.100	63.3	77.7	1	10.0-160			20.5	38
Toluene	0.129	U	0.0939	0.117	72.7	90.4	1	10.0-156			21.7	38
Xylenes, Total	0.387	U	0.232	0.288	59.9	74.3	1	10.0-160			21.5	38
(S) Toluene-d8					*108*	*107*		*75.0-131*				
(S) 4-Bromofluorobenzene					*86.7*	*88.1*		*67.0-138*				
(S) 1,2-Dichloroethane-d4					*101*	*101*		*70.0-130*				

WG1347795

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

QUALITY CONTROL SUMMARY

L1139267-33,34,35,36,37,38,39,40,41,42,43,44,45,46,47

Method Blank (MB)

(MB) R3452485-2 09/18/19 07:52

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	*114*			*75.0-131*
(S) 4-Bromofluorobenzene	*99.7*			*67.0-138*
(S) 1,2-Dichloroethane-d4	*103*			*70.0-130*

Laboratory Control Sample (LCS)

(LCS) R3452485-1 09/18/19 06:51

Analyte	Spike Amount mg/kg	LCS Result mg/kg	LCS Rec. %	Rec. Limits %	LCS Qualifier
Benzene	0.125	0.0960	76.8	70.0-123	
Ethylbenzene	0.125	0.114	90.9	74.0-126	
Toluene	0.125	0.122	97.7	75.0-121	
Xylenes, Total	0.375	0.314	83.7	72.0-127	
(S) Toluene-d8			*111*	*75.0-131*	
(S) 4-Bromofluorobenzene			*101*	*67.0-138*	
(S) 1,2-Dichloroethane-d4			*108*	*70.0-130*	

L1139267-33 Original Sample (OS) • Matrix Spike (MS) • Matrix Spike Duplicate (MSD)

(OS) L1139267-33 09/18/19 11:04 • (MS) R3452485-3 09/18/19 18:02 • (MSD) R3452485-4 09/18/19 18:23

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	0.130	U	0.0938	0.0801	72.0	61.5	1	10.0-149			15.7	37
Ethylbenzene	0.130	U	0.109	0.103	83.6	79.4	1	10.0-160			5.21	38
Toluene	0.130	U	0.115	0.105	88.0	80.4	1	10.0-156			8.94	38
Xylenes, Total	0.391	U	0.296	0.290	75.7	74.2	1	10.0-160			2.03	38
(S) Toluene-d8					*114*	*118*		*75.0-131*				
(S) 4-Bromofluorobenzene					*96.9*	*100*		*67.0-138*				
(S) 1,2-Dichloroethane-d4					*108*	*102*		*70.0-130*				

WG1345951

QUALITY CONTROL SUMMARY

ONE LAB. NATIONWIDE.

Semi-Volatile Organic Compounds (GC) by Method 8015

L1139267-01,02,03,04,05,06,07,08,09

Method Blank (MB)

(MB) R3450998-1 09/15/19 22:06

Analyte	MB Result mg/kg	MB Qualifier	MB MDL mg/kg	MB RDL mg/kg
C10-C28 Diesel Range	U		1.61	4.00
C28-C40 Oil Range	U		0.274	4.00
(S) o-Terphenyl	*67.1*			*18.0-148*

Laboratory Control Sample (LCS)

(LCS) R3450998-2 09/15/19 22:19

Analyte	Spike Amount mg/kg	LCS Result mg/kg	LCS Rec. %	Rec. Limits %	LCS Qualifier
C10-C28 Diesel Range	50.0	33.1	66.2	50.0-150	
(S) o-Terphenyl			*84.8*	*18.0-148*	

L1138633-06 Original Sample (OS) • Matrix Spike (MS) • Matrix Spike Duplicate (MSD)

(OS) L1138633-06 09/16/19 05:05 • (MS) R3450998-3 09/16/19 05:18 • (MSD) R3450998-4 09/16/19 05:31

Analyte	Spike Amount (dry) mg/kg	Original Result (dry) mg/kg	MS Result (dry) mg/kg	MSD Result (dry) mg/kg	MS Rec. %	MSD Rec. %	Dilution	Rec. Limits %	MS Qualifier	MSD Qualifier	RPD %	RPD Limits %
C10-C28 Diesel Range	62.2	ND	45.9	41.1	73.7	66.1	1	50.0-150			11.0	20
(S) o-Terphenyl					*89.7*	*82.0*		*18.0-148*				

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

WG1345980

Semi-Volatile Organic Compounds (GC) by Method 8015

QUALITY CONTROL SUMMARY

L1139267-10,11,12,13,14,15,16,17,18,19,20,21,22,23,24,25,26,27

Method Blank (MB)

(MB) R3450999-1 09/15/19 21:40

Analyte	MB Result mg/kg	MB Qualifier	MB MDL mg/kg	MB RDL mg/kg
C10-C28 Diesel Range	U		1.61	4.00
C28-C40 Oil Range	U		0.274	4.00
(S) o-Terphenyl	*26.6*			*18.0-148*

Laboratory Control Sample (LCS)

(LCS) R3450999-2 09/15/19 21:53

Analyte	Spike Amount mg/kg	LCS Result mg/kg	LCS Rec. %	Rec. Limits %	LCS Qualifier
C10-C28 Diesel Range	50.0	36.0	72.0	50.0-150	
(S) o-Terphenyl			*89.6*	*18.0-148*	

L1139267-14 Original Sample (OS) • Matrix Spike (MS) • Matrix Spike Duplicate (MSD)

(OS) L1139267-14 09/16/19 13:42 • (MS) R3450999-3 09/16/19 13:55 • (MSD) R3450999-4 09/16/19 14:09

Analyte	Spike Amount (dry) mg/kg	Original Result (dry) mg/kg	MS Result (dry) mg/kg	MSD Result (dry) mg/kg	MS Rec. %	MSD Rec. %	Dilution	Rec. Limits %	MS Qualifier	MSD Qualifier	RPD %	RPD Limits %
C10-C28 Diesel Range	52.4	36.1	83.0	82.9	89.6	89.4	10	50.0-150			0.126	20
(S) o-Terphenyl					*92.8*	*91.1*		*18.0-148*				

Sample Narrative:

OS: Cannot run at lower dilution due to viscosity of extract

WG1346816

QUALITY CONTROL SUMMARY

Semi-Volatile Organic Compounds (GC) by Method 8015

L1139267-28,29,30,31,32,33,34,35,36,37,38,39

Method Blank (MB)

(MB) R3452048-1 09/17/19 17:13

Analyte	MB Result mg/kg	MB Qualifier	MB MDL mg/kg	MB RDL mg/kg
C10-C28 Diesel Range	2.01	J	1.61	4.00
C28-C40 Oil Range	U		0.274	4.00
(S) o-Terphenyl	*76.7*			*18.0-148*

Laboratory Control Sample (LCS)

(LCS) R3452048-2 09/17/19 17:26

Analyte	Spike Amount mg/kg	LCS Result mg/kg	LCS Rec. %	Rec. Limits %	LCS Qualifier
C10-C28 Diesel Range	50.0	35.8	71.6	50.0-150	
(S) o-Terphenyl			*90.7*	*18.0-148*	

L1139267-31 Original Sample (OS) • Matrix Spike (MS) • Matrix Spike Duplicate (MSD)

(OS) L1139267-31 09/17/19 19:37 • (MS) R3452048-3 09/17/19 19:50 • (MSD) R3452048-4 09/17/19 20:03

Analyte	Spike Amount (dry) mg/kg	Original Result (dry) mg/kg	MS Result (dry) mg/kg	MSD Result (dry) mg/kg	MS Rec. %	MSD Rec. %	Dilution	Rec. Limits %	MS Qualifier	MSD Qualifier	RPD %	RPD Limits %
C10-C28 Diesel Range	49.2	1.87	44.9	36.4	87.3	69.8	1	50.0-150		J3	20.9	20
(S) o-Terphenyl					*88.7*	*90.3*		*18.0-148*				

WG1347218

QUALITY CONTROL SUMMARY

ONE LAB. NATIONWIDE.

Semi-Volatile Organic Compounds (GC) by Method 8015

L1139267-40,41,42,43,44

Method Blank (MB)

(MB) R3451752-1 09/18/19 01:42

Analyte	MB Result mg/kg	MB Qualifier	MB MDL mg/kg	MB RDL mg/kg
C10-C28 Diesel Range	U		1.61	4.00
C28-C40 Oil Range	U		0.274	4.00
(S) o-Terphenyl	*92.6*			*18.0-148*

Laboratory Control Sample (LCS)

(LCS) R3451752-2 09/18/19 01:57

Analyte	Spike Amount mg/kg	LCS Result mg/kg	LCS Rec. %	Rec. Limits %	LCS Qualifier
C10-C28 Diesel Range	50.0	46.9	93.8	50.0-150	
(S) o-Terphenyl			*89.8*	*18.0-148*	

L1139287-01 Original Sample (OS) • Matrix Spike (MS) • Matrix Spike Duplicate (MSD)

(OS) L1139287-01 09/18/19 19:54 • (MS) R3451752-3 09/18/19 20:07 • (MSD) R3451752-4 09/18/19 20:20

Analyte	Spike Amount (dry) mg/kg	Original Result (dry) mg/kg	MS Result (dry) mg/kg	MSD Result (dry) mg/kg	MS Rec. %	MSD Rec. %	Dilution	Rec. Limits %	MS Qualifier	MSD Qualifier	RPD %	RPD Limits %
C10-C28 Diesel Range	63.0	ND	59.6	53.9	94.6	85.6	1	50.0-150			9.99	20
(S) o-Terphenyl					*87.4*	*86.2*		*18.0-148*				

WG1347221

QUALITY CONTROL SUMMARY

ONE LAB. NATIONWIDE.

Semi-Volatile Organic Compounds (GC) by Method 8015

L1139267-45,46,47

Method Blank (MB)

(MB) R3451753-1 09/18/19 01:12

Analyte	MB Result mg/kg	MB Qualifier	MB MDL mg/kg	MB RDL mg/kg
C10-C28 Diesel Range	U		1.61	4.00
C28-C40 Oil Range	0.480	J	0.274	4.00
(S) o-Terphenyl	*96.7*			*18.0-148*

Laboratory Control Sample (LCS)

(LCS) R3451753-2 09/18/19 01:26

Analyte	Spike Amount mg/kg	LCS Result mg/kg	LCS Rec. %	Rec. Limits %	LCS Qualifier
C10-C28 Diesel Range	50.0	50.7	101	50.0-150	
(S) o-Terphenyl			*104*	*18.0-148*	

L1139294-07 Original Sample (OS) • Matrix Spike (MS) • Matrix Spike Duplicate (MSD)

(OS) L1139294-07 09/18/19 03:32 • (MS) R3451753-3 09/18/19 03:47 • (MSD) R3451753-4 09/18/19 04:02

Analyte	Spike Amount (dry) mg/kg	Original Result (dry) mg/kg	MS Result (dry) mg/kg	MSD Result (dry) mg/kg	MS Rec. %	MSD Rec. %	Dilution	Rec. Limits %	MS Qualifier	MSD Qualifier	RPD %	RPD Limits %
C10-C28 Diesel Range	83.2	U	ND	ND	0.000	0.000	1	50.0-150	J6	J6	0.000	20
(S) o-Terphenyl					*93.8*	*97.6*		*18.0-148*				

GLOSSARY OF TERMS

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.
MQL (dry)	Method Quantitation Limit.
MQL	Method Quantitation Limit.
ND	Not detected at the Method Quantitation Limit.
RDL	Reported Detection Limit.
Rec.	Recovery.
RPD	Relative Percent Difference.
SDG	Sample Delivery Group.
SDL	Sample Detection Limit.
SDL (dry)	Sample Detection Limit.
(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 Sample Detection Limit.
Unadj. MQL	Unadjusted Method Quantitation Limit.
Analyte	The name of the particular compound or analysis performed. Some Analyses and Methods will have multiple analytes reported.
Dilution	If the sample matrix contains an interfering material, the sample preparation volume or weight values differ from the standard, or if concentrations of analytes in the sample are higher than the highest limit of concentration that the laboratory can accurately report, the sample may be diluted for analysis. If a value different than 1 is used in this field, the result reported has already been corrected for this factor.
Limits	These are the target % recovery ranges or % difference value that the laboratory has historically determined as normal for the method and analyte being reported. Successful QC Sample analysis will target all analytes recovered or duplicated within these ranges.
Original Sample	The non-spiked sample in the prep batch used to determine the Relative Percent Difference (RPD) from a quality control sample. The Original Sample may not be included within the reported SDG.
Qualifier	This column provides a letter and/or number designation that corresponds to additional information concerning the result reported. If a Qualifier is present, a definition per Qualifier is provided within the Glossary and Definitions page and potentially a discussion of possible implications of the Qualifier in the Case Narrative if applicable.
Result	The actual analytical final result (corrected for any sample specific characteristics) reported for your sample. If there was no measurable result returned for a specific analyte, the result in this column may state “ND” (Not Detected) or “BDL” (Below Detectable Levels). The information in the results column should always be accompanied by either an MDL (Method Detection Limit) or RDL (Reporting Detection Limit) that defines the lowest value that the laboratory could detect or report for this analyte.
Uncertainty (Radiochemistry)	Confidence level of 2 sigma.
Case Narrative (Cn)	A brief discussion about the included sample results, including a discussion of any non-conformances to protocol observed either at sample receipt by the laboratory from the field or during the analytical process. If present, there will be a section in the Case Narrative to discuss the meaning of any data qualifiers used in the report.
Quality Control Summary (Qc)	This section of the report includes the results of the laboratory quality control analyses required by procedure or analytical methods to assist in evaluating the validity of the results reported for your samples. These analyses are not being performed on your samples typically, but on laboratory generated material.
Sample Chain of Custody (Sc)	This is the document created in the field when your samples were initially collected. This is used to verify the time and date of collection, the person collecting the samples, and the analyses that the laboratory is requested to perform. This chain of custody also documents all persons (excluding commercial shippers) that have had control or possession of the samples from the time of collection until delivery to the laboratory for analysis.
Sample Results (Sr)	This section of your report will provide the results of all testing performed on your samples. These results are provided by sample ID and are separated by the analyses performed on each sample. The header line of each analysis section for each sample will provide the name and method number for the analysis reported.
Sample Summary (Ss)	This section of the Analytical Report defines the specific analyses performed for each sample ID, including the dates and times of preparation and/or analysis.

Qualifier	Description
B	The same analyte is found in the associated blank.
J	The identification of the analyte is acceptable; the reported value is an estimate.
J1	Surrogate recovery limits have been exceeded; values are outside upper control limits.
J2	Surrogate recovery limits have been exceeded; values are outside lower control limits.
J3	The associated batch QC was outside the established quality control range for precision.

GLOSSARY OF TERMS

Qualifier	Description
J4	The associated batch QC was outside the established quality control range for accuracy.
J5	The sample matrix interfered with the ability to make any accurate determination; spike value is high.
J6	The sample matrix interfered with the ability to make any accurate determination; spike value is low.
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.

ACCREDITATIONS & LOCATIONS

ONE LAB. NATIONWIDE.

Pace National is the only environmental laboratory accredited/certified to support your work nationwide from one location. One phone call, one point of contact, one laboratory. No other lab is as accessible or prepared to handle your needs throughout the country. Our capacity and capability from our single location laboratory is comparable to the collective totals of the network laboratories in our industry. The most significant benefit to our one location design is the design of our laboratory campus. The model is conducive to accelerated productivity, decreasing turn-around time, and preventing cross contamination, thus protecting sample integrity. Our focus on premium quality and prompt service allows us to be YOUR LAB OF CHOICE.
* Not all certifications held by the laboratory are applicable to the results reported in the attached report.
* Accreditation is only applicable to the test methods specified on each scope of accreditation held by Pace National.

State Accreditations

Alabama	40660	Nebraska	NE-OS-15-05
Alaska	17-026	Nevada	TN-03-2002-34
Arizona	AZ0612	New Hampshire	2975
Arkansas	88-0469	New Jersey–NELAP	TN002
California	2932	New Mexico [1]	n/a
Colorado	TN00003	New York	11742
Connecticut	PH-0197	North Carolina	Env375
Florida	E87487	North Carolina [1]	DW21704
Georgia	NELAP	North Carolina [3]	41
Georgia [1]	923	North Dakota	R-140
Idaho	TN00003	Ohio–VAP	CL0069
Illinois	200008	Oklahoma	9915
Indiana	C-TN-01	Oregon	TN200002
Iowa	364	Pennsylvania	68-02979
Kansas	E-10277	Rhode Island	LA000356
Kentucky [1 6]	90010	South Carolina	84004
Kentucky [2]	16	South Dakota	n/a
Louisiana	AI30792	Tennessee [1 4]	2006
Louisiana [1]	LA180010	Texas	T104704245-18-15
Maine	TN0002	Texas [5]	LAB0152
Maryland	324	Utah	TN00003
Massachusetts	M-TN003	Vermont	VT2006
Michigan	9958	Virginia	460132
Minnesota	047-999-395	Washington	C847
Mississippi	TN00003	West Virginia	233
Missouri	340	Wisconsin	9980939910
Montana	CERT0086	Wyoming	A2LA

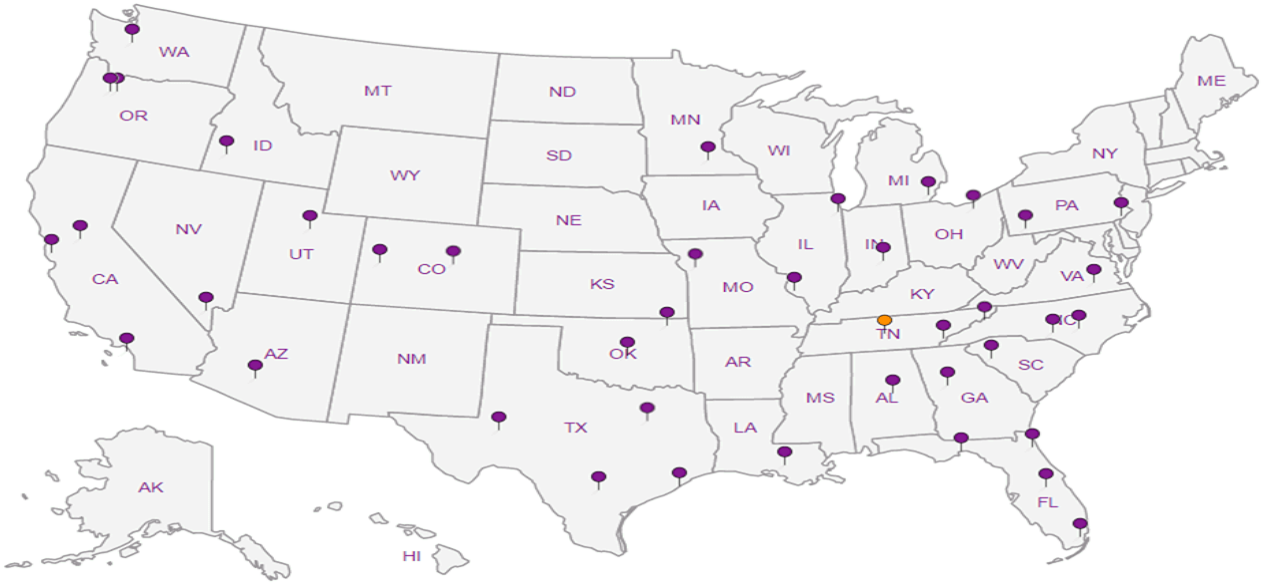
Third Party Federal Accreditations

A2LA – ISO 17025	1461.01	AIHA-LAP,LLC EMLAP	100789
A2LA – ISO 17025 [5]	1461.02	DOD	1461.01
Canada	1461.01	USDA	P330-15-00234
EPA–Crypto	TN00003		

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

Our Locations

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



C147

Analysis Request of Chain of Custody Record

Page : 1 of 5

Tetra Tech, Inc.

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

L1139267

Client Name: ConocoPhillips

Site Manager: Christian Llull

Project Name: COP Baish A Battery

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

Project #: 212C-MD-01878

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

Receiving Laboratory: Pace Analytical

Sampler Signature:

Comments: COPTETRA Acctnum

LAB # (LAB USE ONLY)	SAMPLE IDENTIFICATION	SAMPLING YEAR: 2019 DATE	SAMPLING TIME	MATRIX WATER	MATRIX SOIL	MATRIX	PRESERVATIVE METHOD HCL	PRESERVATIVE METHOD HNO_3	PRESERVATIVE METHOD ICE	PRESERVATIVE METHOD NONE	PRESERVATIVE METHOD	# CONTAINERS	FILTERED (Y/N)	BTEX 8021B BTEX 8260B	TPH TX1005 (Ext to C35)	TPH 8015M (GRO - DRO - ORO - MRO)	PAH 8270C	Total Metals Ag As Ba Cd Cr Pb Se Hg	TCLP Metals Ag As Ba Cd Cr Pb Se Hg	TCLP Volatiles	TCLP Semi Volatiles	RCI	GC/MS Vol. 8260B / 624	GC/MS Semi. Vol. 8270C/625	PCB's 8082 / 608	NORM	PLM (Asbestos)	Chloride 300.0	Chloride Sulfate TDS	General Water Chemistry (see attached list)	Anion/Cation Balance	TPH 8015R		HOLD
	BH-1 (0'- 1')	9/10/2019	1200		X				X			1	N	X		X												X						-01
	BH-1 (2'- 3')	9/10/2019	1205		X				X			1	N	X		X												X						-02
	BH-1 (4'- 5')	9/10/2019	1210		X				X			1	N	X		X												X						-03
	BH-1 (6'- 7')	9/10/2019	1220		X				X			1	N	X		X												X						-04
	BH-1 (9'- 10')	9/10/2019	1230		X				X			1	N	X		X												X						-05
	BH-2 (0'- 1')	9/10/2019	1300		X				X			1	N	X		X												X						-06
	BH-2 (2'- 3')	9/10/2019	1305		X				X			1	N	X		X												X						-07
	BH-2 (4'- 5')	9/10/2019	1310		X				X			1	N	X		X												X						-08
	BH-2 (6'- 7')	9/10/2019	1320		X				X			1	N	X		X												X						-09
	BH-2 (9'- 10')	9/10/2019	1330		X				X			1	N	X		X												X						-10

ANALYSIS REQUEST (Circle or Specify Method No.)

Relinquished by:	Date:	Time:	Received by:	Date:	Time:
	9-12-19	14:45		9.12.19	14:45
	9.12.19	17:00	Fedex	9.12.19	17:00
				9/13/19	8:45

LAB USE ONLY

Sample Temperature

REMARKS:

- [X] STANDARD
- [ ] RUSH: Same Day 24 hr 48 hr 72 hr
- [ ] Rush Charges Authorized
- [ ] Special Report Limits or TRRP Report

(Circle) HAND DELIVERED FEDEX UPS Tracking #:

ORIGINAL COPY

Fedex 4510 1659 5704

RAD SCREEN: <0.5 mR/hr

0,3-,2=0,1 tzp

47 containers

Analysis Request of Chain of Custody Record

Page : 2 of 5

Tetra Tech. Inc.

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

L1139267

Client Name:	ConocoPhillips	Site Manager:	Christian Llull
Project Name:	COP Baish A Battery		
Project Location: (county, state)	Lea County, New Mexico	Project #:	212C-MD-01878
Invoice to:	Accounts Payable 901 West Wall Street, Suite 100 Midland, Texas 79701		
Receiving Laboratory:	Pace Analytical	Sampler Signature:	

Comments: COPTETRA Acctnum

ANALYSIS REQUEST (Circle or Specify Method No.)

LAB # (LAB USE ONLY)	SAMPLE IDENTIFICATION	SAMPLING DATE (YEAR: 2019)	SAMPLING TIME	MATRIX: WATER	MATRIX: SOIL	MATRIX:	PRESERVATIVE METHOD: HCL	PRESERVATIVE METHOD: HNO_3	PRESERVATIVE METHOD: ICE	PRESERVATIVE METHOD: NONE	PRESERVATIVE METHOD:	# CONTAINERS	FILTERED (Y/N)	BTEX 8021B BTEX 8260B	TPH TX1005 (Ext to C35)	TPH 8015M (GRO - DRO - ORO - MRO)	PAH 8270C	Total Metals Ag As Ba Cd Cr Pb Se Hg	TCLP Metals Ag As Ba Cd Cr Pb Se Hg	TCLP Volatiles	TCLP Semi Volatiles	RCI	GC/MS Vol. 8260B / 624	GC/MS Semi. Vol. 8270C/625	PCB's 8082 / 608	NORM	PLM (Asbestos)	Chloride 300.0	Chloride	Sulfate	TDS	General Water Chemistry (see attached list)	Anion/Cation Balance	TPH 8015R		HOLD
	BH-3 (0'- 1')	9/10/2019	1400		X				X			1	N	X		X												X								-11
	BH-3 (2'- 3')	9/10/2019	1410		X				X			1	N	X		X												X								-12
	BH-3 (4'- 5')	9/10/2019	1420		X				X			1	N	X		X												X								-13
	BH-3 (6'- 7')	9/10/2019	1430		X				X			1	N	X		X												X								-14
	BH-3 (9'- 10')	9/10/2019	1440		X				X			1	N	X		X												X								-15
	BH-4 (0'- 1')	9/10/2019	1510		X				X			1	N	X		X												X								-16
	BH-4 (2'- 3')	9/10/2019	1520		X				X			1	N	X		X												X								-17
	BH-4 (4'- 5')	9/10/2019	1530		X				X			1	N	X		X												X								-18
	BH-4 (6'- 7')	9/10/2019	1540		X				X			1	N	X		X												X								-19
	BH-4 (9'- 10')	9/10/2019	1600		X				X			1	N	X		X												X								-20

Relinquished by:	Date: 9-12-19	Time: 14:45	Received by:
Relinquished by:	Date: 9.12.19	Time: 17:00	Received by: FedEx
Relinquished by:	Date:	Time:	Received by:
	Date: 9/13/19	Time: 8:45	

LAB USE ONLY

Sample Temperature

REMARKS:

- [X] STANDARD
- [ ] RUSH: Same Day 24 hr 48 hr 72 hr
- [ ] Rush Charges Authorized
- [ ] Special Report Limits or TRRP Report

OK

(Circle) HAND DELIVERED FEDEX UPS Tracking #: _____

ORIGINAL COPY

RAD SCREEN: <0.5 mR/hr

0.3 - 2 = 0.1

AzP

Analysis Request of Chain of Custody Record

Page : 3 of 5

Tetra Tech. Inc.

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

L1139267

Client Name:	ConocoPhillips	Site Manager:	Christian Llull
Project Name:	COP Baish A Battery		
Project Location: (county, state)	Lea County, New Mexico	Project #:	212C-MD-01878
Invoice to:	Accounts Payable 901 West Wall Street, Suite 100 Midland, Texas 79701		
Receiving Laboratory:	Pace Analytical	Sampler Signature:	

Comments: COPTETRA Acctnum

ANALYSIS REQUEST (Circle or Specify Method No.)

LAB # (LAB USE ONLY)	SAMPLE IDENTIFICATION	SAMPLING YEAR: 2019 DATE	SAMPLING TIME	MATRIX WATER	MATRIX SOIL	MATRIX	PRESERVATIVE METHOD HCL	PRESERVATIVE METHOD HNO_3	PRESERVATIVE METHOD ICE	PRESERVATIVE METHOD NONE	# CONTAINERS	FILTERED (Y/N)	BTEX 8021B BTEX 8260B	TPH TX1005 (Ext to C35)	TPH 8015M (GRO - DRO - ORO - MRO)	PAH 8270C	Total Metals Ag As Ba Cd Cr Pb Se Hg	TCLP Metals Ag As Ba Cd Cr Pb Se Hg	TCLP Volatiles	TCLP Semi Volatiles	RCI	GC/MS Vol. 8260B / 624	GC/MS Semi. Vol. 8270C/625	PCB's 8082 / 608	NORM	PLM (Asbestos)	Chloride 300.0	Chloride Sulfate TDS	General Water Chemistry (see attached list)	Anion/Cation Balance	TPH 8015R		HOLD	
	BH-5 (0'- 1')	9/11/2019	1030		X				X		1	N	X		X												X							21
	BH-5 (2'- 3')	9/11/2019	1040		X				X		1	N	X		X												X							22
	BH-5 (4'- 5')	9/11/2019	1050		X				X		1	N	X		X												X							23
	BH-5 (6'- 7')	9/11/2019	1100		X				X		1	N	X		X												X							24
	BH-5 (9'- 10')	9/11/2019	1110		X				X		1	N	X		X												X							25
	BH-5 (12'- 13')	9/11/2019	1120		X				X		1	N	X		X												X							26
	BH-5 (14'- 15')	9/11/2019	1130		X				X		1	N	X		X												X							27
	BH-5 (19'- 20')	9/11/2019	1150		X				X		1	N	X		X												X							28
	BH-6 (0'- 1')	9/11/2019	1200		X				X		1	N	X		X												X							29
	BH-6 (2'- 3')	9/11/2019	1210		X				X		1	N	X		X												X							30

Relinquished by:	Date: 9-12-19	Time: 14:45	Received by:
Relinquished by:	Date: 9.12.19	Time: 17:20	Received by: FedEx
Relinquished by:	Date:	Time:	Received by: Date: 9/13/19 Time: 8:45

Date: 9.12.19 Time: 14:45

Date: 9.12.19 Time: 17:20

LAB USE ONLY

Sample Temperature

REMARKS:

- [X] STANDARD
- [ ] RUSH: Same Day 24 hr 48 hr 72 hr
- [ ] Rush Charges Authorized
- [ ] Special Report Limits or TRRP Report

AK

(Circle) HAND DELIVERED FEDEX UPS Tracking #: _____

ORIGINAL COPY

RAD SCREEN: <0.5 mR/hr

0.3-2=0.1
RRA

Page : 4 of 5

Analysis Request of Chain of Custody Record

Tetra Tech. Inc.

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

L1139267

Client Name:	ConocoPhillips	Site Manager:	Christian Llull
Project Name:	COP Baish A Battery		
Project Location: (county, state)	Lea County, New Mexico	Project #:	212C-MD-01878
Invoice to:	Accounts Payable 901 West Wall Street, Suite 100 Midland, Texas 79701		
Receiving Laboratory:	Pace Analytical	Sampler Signature:	
Comments:	COPTETRA Acctnum		

ANALYSIS REQUEST
(Circle or Specify Method No.)

LAB # (LAB USE ONLY)	SAMPLE IDENTIFICATION	SAMPLING DATE (YEAR: 2019)	SAMPLING TIME	MATRIX: WATER	MATRIX: SOIL	MATRIX:	PRESERVATIVE METHOD: HCL	PRESERVATIVE METHOD: HNO_3	PRESERVATIVE METHOD: ICE	PRESERVATIVE METHOD: NONE	PRESERVATIVE METHOD:	# CONTAINERS	FILTERED (Y/N)	BTEX 8021B BTEX 8260B	TPH TX1005 (Ext to C35)	TPH 8015M (GRO - DRO - ORO - MRO)	PAH 8270C	Total Metals Ag As Ba Cd Cr Pb Se Hg	TCLP Metals Ag As Ba Cd Cr Pb Se Hg	TCLP Volatiles	TCLP Semi Volatiles	RCI	GC/MS Vol. 8260B / 624	GC/MS Semi. Vol. 8270C/625	PCB's 8082 / 608	NORM	PLM (Asbestos)	Chloride 300.0	Chloride Sulfate TDS	General Water Chemistry (see attached list)	Anion/Cation Balance	TPH 8015R	HOLD	
	BH-6 (4'- 5')	9/11/2019	1220		X				X			1	N	X		X												X						31
	BH-6 (6'- 7')	9/11/2019	1230		X				X			1	N	X		X												X						32
	BH-7 (0'- 1')	9/11/2019	1250		X				X			1	N	X		X												X						33
	BH-7 (2'- 3')	9/11/2019	1300		X				X			1	N	X		X												X						34
	BH-7 (4'- 5')	9/11/2019	1310		X				X			1	N	X		X												X						35
	BH-8 (0'- 1')	9/11/2019	1330		X				X			1	N	X		X												X						36
	BH-8 (2'- 3')	9/11/2019	1340		X				X			1	N	X		X												X						37
	BH-8 (4'- 5')	9/11/2019	1350		X				X			1	N	X		X												X						38
	BH-8 (6'- 7')	9/11/2019	1400		X				X			1	N	X		X												X						39
	BH-8 (9'- 10')	9/11/2019	1410		X				X			1	N	X		X												X						41

	Date:	Time:		Date:	Time:
Relinquished by: J. Llull	9-12-19	14:45	Received by:	9.12.19	14:45
Relinquished by:	9/12/19	17:00	Received by: FEDEX	9.12.19	17:00
Relinquished by:			Received by:	9/13/19	8:45

LAB USE ONLY

Sample Temperature

REMARKS:

- [X] STANDARD
- [ ] RUSH: Same Day 24 hr 48 hr 72 hr
- [ ] Rush Charges Authorized
- [ ] Special Report Limits or TRRP Report

OK

(Circle) HAND DELIVERED FEDEX UPS Tracking #: _____

ORIGINAL COPY

RAD SCREEN: <0.5 mR/h 0.3 − .2 = 0.1

Analysis Request of Chain of Custody Record

Tetra Tech. Inc.

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

L1179267

Client Name: ConocoPhillips
Site Manager: Christian Llull
Project Name: COP Baish A Battery
Project Location: (county, state) Lea County, New Mexico
Project #: 212C-MD-01878
Invoice to: Accounts Payable 901 West Wall Street, Suite 100 Midland, Texas 79701
Receiving Laboratory: Pace Analytical
Sampler Signature:
Comments: COPTETRA Acctnum

LAB # (LAB USE ONLY)	SAMPLE IDENTIFICATION	SAMPLING DATE	SAMPLING TIME	MATRIX WATER	MATRIX SOIL	PRESERVATIVE METHOD HCL	PRESERVATIVE METHOD HNO_3	PRESERVATIVE METHOD ICE	PRESERVATIVE METHOD NONE	# CONTAINERS	FILTERED (Y/N)	BTEX 8021B BTEX 8260B	TPH TX1005 (Ext to C35)	TPH 8015M (GRO - DRO - ORO - MRO)	PAH 8270C	Total Metals Ag As Ba Cd Cr Pb Se Hg	TCLP Metals Ag As Ba Cd Cr Pb Se Hg	TCLP Volatiles	TCLP Semi Volatiles	RCI	GC/MS Vol. 8260B / 624	GC/MS Semi. Vol. 8270C/625	PCB's 8082 / 608	NORM	PLM (Asbestos)	Chloride 300.0	Chloride Sulfate TDS	General Water Chemistry (see attached list)	Anion/Cation Balance	TPH 8015R	HOLD
	BH-9 (0'- 1')	9/11/2019	1440		X			X		1	N	X		X												X					-41
	BH-9 (2'- 3')	9/11/2019	1450		X			X		1	N	X		X												X					-42
	BH-10 (0'- 1')	9/11/2019	1500		X			X		1	N	X		X												X					-43
	BH-10 (2'- 3')	9/11/2019	1510		X			X		1	N	X		X												X					-44
	BH-10 (4'- 5')	9/11/2019	1520		X			X		1	N	X		X												X					-45
	BH-11 (0'- 0.5')	9/11/2019	1600		X			X		1	N	X		X												X					-46
	BH-12 (0'- 0.5')	9/11/2019	1630		X			X		1	N	X		X												X					-47

ANALYSIS REQUEST
(Circle or Specify Method No.)

Relinquished by: Date: 9-12-19 Time: 14:45
Received by: Date: 9.12.19 Time: 14:45
Relinquished by: Date: 9.12.19 Time: 17:00
Received by: FedEX Date: 9.12.19 Time: 17:00
Relinquished by: Date: Time:
Received by: Date: 9/13/19 Time: 8:25

LAB USE ONLY
Sample Temperature

REMARKS:
- [X] STANDARD
- [ ] RUSH: Same Day 24 hr 48 hr 72 hr
- [ ] Rush Charges Authorized
- [ ] Special Report Limits or TRRP Report

(Circle) HAND DELIVERED FEDEX UPS Tracking #:

ORIGINAL COPY

RAD SCREEN: <0.5 mR/hr

0.3 - .2 = 0.1

AR

Pace Analytical National Center for Testing & Innovation
Cooler Receipt Form

Client: COPTETRA	L1139267	
Cooler Received/Opened On: 9/13/19 Temperature:	0.1	
Received By: Adam Burns		
Signature:		

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

APPENDIX D
Soil Boring Logs

212C-MD-01878	TETRA TECH	**LOG OF BORING BH-1**	Page 1 of 1

Project Name: Baish "A" Battery Release

Borehole Location: GPS: N 32.822855° E -103.763964° | Surface Elevation: 4015 ft

Borehole Number: BH-1 | Borehole Diameter (in.): 8 | Date Started: 9/10/2019 | Date Finished: 9/10/2019

WATER LEVEL OBSERVATIONS

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

Remarks:

DEPTH (ft)	OPERATION TYPE	SAMPLE	CHLORIDE FIELD SCREENING (ppm) ExStik	TPH FIELD SCREENING (ppm) PID	SAMPLE RECOVERY (%)	MOISTURE CONTENT (%)	DRY DENSITY (pcf)	LIQUID LIMIT LL	PLASTICITY INDEX PI	MINUS NO. 200 (%)	GRAPHIC LOG	MATERIAL DESCRIPTION	DEPTH (ft)	REMARKS
				18.1								**-FILL-** FILL MATERIAL; Base material, tan, very dense, with occasional small gravel, dry.	0.5	BH-1 (0'-1')
			694	13.4								**-SM-** SILTY SAND; Tan, loose to medium dense, with gravel, medium hydrocarbon odor, with no staining.		BH-1 (2'-3')
													3.5	
5			307	10.8								**-SM-** SILTY SAND; Brown, medium dense, moderately cemented, with no hydrocarbon odor, with no staining.		BH-1 (4'-5')
			538	10.3										BH-1 (6'-7')
													8	
10			423	6.6								**-CL-** SANDY CLAY; Brown, medium stiff to stiff, with no hydrocarbon odor, with no staining.	10	BH-1 (9'-10')

Bottom of borehole at 10.0 feet.

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

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

Notes:

Analytical samples are shown in the "Remarks" column.
Surface elevation is an estimated value.

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

212C-MD-01878	TETRA TECH	LOG OF BORING BH-2	Page 1 of 1

Project Name: Baish "A" Battery Release

Borehole Location: GPS: N 32.822731° E -103.764074° | Surface Elevation: 4015 ft

Borehole Number: BH-2 | Borehole Diameter (in.): 8 | Date Started: 9/10/2019 | Date Finished: 9/10/2019

WATER LEVEL OBSERVATIONS

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

Remarks:

DEPTH (ft)	OPERATION TYPE	SAMPLE	CHLORIDE FIELD SCREENING (ppm) ExStik	TPH FIELD SCREENING (ppm) PID	SAMPLE RECOVERY (%)	MOISTURE CONTENT (%)	DRY DENSITY (pcf)	LIQUID LIMIT LL	PLASTICITY INDEX PI	MINUS NO. 200 (%)	GRAPHIC LOG	MATERIAL DESCRIPTION	DEPTH (ft)	REMARKS
				112.6								**-FILL-** FILL MATERIAL; Base material, tan, very dense, with occasional small gravel, dry.	0.5	BH-2 (0'-1')
												-SM- SILTY SAND; Tan, loose to medium dense, with gravel, with high hydrocarbon odor, with no staining.	1.5	
				87.4										BH-2 (2'-3')
												-SM- SILTY SAND; Tan, medium dense, uniform, with medium hydrocarbon odor, with no staining.	3.5	
5			113	36.9								**-SM-** SILTY SAND; Brown, medium dense to dense, moderately cemented, with no hydrocarbon odor, with no staining.		BH-2 (4'-5')
			116	17.4										BH-2 (6'-7')
													8	
												-CL- SANDY CLAY; Brown, medium stiff to stiff, with few gravel, with no hydrocarbon odor, with no staining.		
10			114	9.4									10	BH-2 (9'-10')

Bottom of borehole at 10.0 feet.

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

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

Notes:

Analytical samples are shown in the "Remarks" column.
Surface elevation is an estimated value.

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

212C-MD-01878	TETRA TECH	**LOG OF BORING BH-3**	Page 1 of 1

Project Name: Baish "A" Battery Release

Borehole Location: GPS: N 32.822685° E -103.764515° | Surface Elevation: 4015 ft

Borehole Number: BH-3 | Borehole Diameter (in.): 8 | Date Started: 9/10/2019 | Date Finished: 9/10/2019

WATER LEVEL OBSERVATIONS

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

Remarks:

DEPTH (ft)	OPERATION TYPE	SAMPLE	CHLORIDE FIELD SCREENING (ppm) ExStik	TPH FIELD SCREENING (ppm) PID	SAMPLE RECOVERY (%)	MOISTURE CONTENT (%)	DRY DENSITY (pcf)	LIQUID LIMIT LL	PLASTICITY INDEX PI	MINUS NO. 200 (%)	GRAPHIC LOG	MATERIAL DESCRIPTION	DEPTH (ft)	REMARKS
				8.1								**-FILL-** FILL MATERIAL; Base material, tan, very dense, with occasional small gravel, dry.	0.5	BH-3 (0'-1')
												-SM- SILTY SAND; Brown, loose to medium dense, with few gravel, with medium hydrocarbon odor, with no staining.	1.5	
			36.2	7.2										BH-3 (2'-3')
5				7								**-SM-** SILTY SAND; Brown, medium dense, moderately cemented, with no hydrocarbon odor, with no staining.		BH-3 (4'-5')
				7.8										BH-3 (6'-7')
													8	
												-SM- SILTY SAND; Brown, medium dense, with gravel, with no hydrocarbon odor, with no staining.		
10				7									10	BH-3 (9'-10')

Bottom of borehole at 10.0 feet.

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

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

Notes:

Analytical samples are shown in the "Remarks" column.
Surface elevation is an estimated value.

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

212C-MD-01878	TETRA TECH	LOG OF BORING BH-4	Page 1 of 1

Project Name: Baish "A" Battery Release

Borehole Location: GPS: N 32.822711° E -103.764344° | Surface Elevation: 4015 ft

Borehole Number: BH-4 | Borehole Diameter (in.): 8 | Date Started: 9/10/2019 | Date Finished: 9/10/2019

WATER LEVEL OBSERVATIONS

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

Remarks:

DEPTH (ft)	OPERATION TYPE	SAMPLE	CHLORIDE FIELD SCREENING (ppm) ExStik	TPH FIELD SCREENING (ppm) PID	SAMPLE RECOVERY (%)	MOISTURE CONTENT (%)	DRY DENSITY (pcf)	LIQUID LIMIT LL	PLASTICITY INDEX PI	MINUS NO. 200 (%)	GRAPHIC LOG	MATERIAL DESCRIPTION	DEPTH (ft)	REMARKS
			152	36.1								**-FILL-** FILL MATERIAL; Base material, tan, very dense, with occasional small gravel, dry.	0.5	BH-4 (0'-1')
												-SM- SILTY SAND; Tan, loose to medium dense, with gravel, with high hydrocarbon odor, with no staining.	1.5	
				39.4								**-SM-** SILTY SAND; Brown, medium dense, moderately cemented, with medium hydrocarbon odor, with no staining.		BH-4 (2'-3')
5				39.1										BH-4 (4'-5')
													5.5	
			112	16								**-SM-** SILTY SAND; Brown, medium dense, cemented, with no hydrocarbon odor, with no staining.		BH-4 (6'-7')
													8	
												-SM- SILTY SAND; Brown, medium dense to dense, with few gravel, with no hydrocarbon odor, with no staining.		
10				10									10	BH-4 (9'-10')

Bottom of borehole at 10.0 feet.

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

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

Notes:

Analytical samples are shown in the "Remarks" column.
Surface elevation is an estimated value.

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

212C-MD-01878	TETRA TECH	**LOG OF BORING BH-5**	Page 1 of 1

Project Name: Baish "A" Battery Release

Borehole Location: GPS: N 32.822849° E -103.764246° | Surface Elevation: 4015 ft

Borehole Number: BH-5 | Borehole Diameter (in.): 8 | Date Started: 9/11/2019 | Date Finished: 9/11/2019

WATER LEVEL OBSERVATIONS

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

Remarks:

DEPTH (ft)	OPERATION TYPE	SAMPLE	CHLORIDE FIELD SCREENING (ppm) ExStik	TPH FIELD SCREENING (ppm) PID	SAMPLE RECOVERY (%)	MOISTURE CONTENT (%)	DRY DENSITY (pcf)	LIQUID LIMIT LL	PLASTICITY INDEX PI	MINUS NO. 200 (%)	GRAPHIC LOG	MATERIAL DESCRIPTION	DEPTH (ft)	REMARKS
				2.8								**-FILL-** FILL MATERIAL; Base material, tan, very dense, with occasional small gravel, dry.	0.5	BH-5 (0'-1')
												-SM- SILTY SAND; Tan, loose to medium dense, with gravel, with low hydrocarbon odor, with no staining.	1.5	
			258	2.5										BH-5 (2'-3')
												-SM- SILTY SAND; Brown, medium dense, moderately cemented, with no hydrocarbon odor, with no staining.		
5			184	4.4										BH-5 (4'-5')
				4.2										BH-5 (6'-7')
10			98	>1100									10	BH-5 (9'-10')
												-CL- SANDY CLAY; Brown, stiff, with no hydrocarbon odor, with no staining.		
				100.8										BH-5 (12'-13')
15				54.5										BH-5 (14'-15')
													17	
												-CL- SILTY CLAY; Brown, stiff to very stiff, with no hydrocarbon odor, with no staining.		
20				6.2									20	BH-5 (19'-20')

Bottom of borehole at 20.0 feet.

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

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

Notes:

Analytical samples are shown in the "Remarks" column.
Surface elevation is an estimated value.

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

212C-MD-01878	TETRA TECH	**LOG OF BORING BH-6**	Page 1 of 1

Project Name: Baish "A" Battery Release

Borehole Location: GPS: N 32.822664° E -103.764107° | Surface Elevation: 4012 ft

Borehole Number: BH-6 | Borehole Diameter (in.): 8 | Date Started: 9/11/2019 | Date Finished: 9/11/2019

WATER LEVEL OBSERVATIONS

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

Remarks:

DEPTH (ft)	OPERATION TYPE	SAMPLE	CHLORIDE FIELD SCREENING (ppm) ExStik	TPH FIELD SCREENING (ppm) PID	SAMPLE RECOVERY (%)	MOISTURE CONTENT (%)	DRY DENSITY (pcf)	LIQUID LIMIT LL	PLASTICITY INDEX PI	MINUS NO. 200 (%)	GRAPHIC LOG	MATERIAL DESCRIPTION	DEPTH (ft)	REMARKS
			91.3	17.2								**-SM-** SILTY SAND; Brown, loose to medium dense, moderately cemented, with no hydrocarbon odor, with no staining.		BH-6 (0'-1')
			87.1	16.6										BH-6 (2'-3')
5				6.6										BH-6 (4'-5')
			82.2	4.6									7	BH-6 (6'-7')

Bottom of borehole at 7.0 feet.

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

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

Notes:

Analytical samples are shown in the "Remarks" column.
Surface elevation is an estimated value.

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

212C-MD-01878	TETRA TECH	**LOG OF BORING BH-7**	Page 1 of 1

Project Name: Baish "A" Battery Release

Borehole Location: GPS: N 32.822616°, E -103.763856° | Surface Elevation: 4010 ft

Borehole Number: BH-7 | Borehole Diameter (in.): 8 | Date Started: 9/11/2019 | Date Finished: 9/11/2019

WATER LEVEL OBSERVATIONS

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

Remarks:

DEPTH (ft)	OPERATION TYPE	SAMPLE	CHLORIDE FIELD SCREENING (ppm) ExStik	TPH FIELD SCREENING (ppm) PID	SAMPLE RECOVERY (%)	MOISTURE CONTENT (%)	DRY DENSITY (pcf)	LIQUID LIMIT LL	PLASTICITY INDEX PI	MINUS NO. 200 (%)	GRAPHIC LOG	MATERIAL DESCRIPTION	DEPTH (ft)	REMARKS
			41.8	6.8								**-SM-** SILTY SAND; Brown, loose to medium dense, moderately cemented, with no hydrocarbon odor, with no staining.		BH-7 (0'-1')
			36.4	4.7										BH-7 (2'-3')
5				6.3									5	BH-7 (4'-5')

Bottom of borehole at 5.0 feet.

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

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

Notes:

Analytical samples are shown in the "Remarks" column.
Surface elevation is an estimated value.

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

212C-MD-01878	TETRA TECH	**LOG OF BORING BH-8**	Page 1 of 1

Project Name: Baish "A" Battery Release

Borehole Location: GPS: N 32.822709°, E -103.763875° | Surface Elevation: 4010 ft

Borehole Number: BH-8 | Borehole Diameter (in.): 8 | Date Started: 9/11/2019 | Date Finished: 9/11/2019

WATER LEVEL OBSERVATIONS

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

Remarks:

DEPTH (ft)	OPERATION TYPE	SAMPLE	CHLORIDE FIELD SCREENING (ppm) ExStik	TPH FIELD SCREENING (ppm) PID	SAMPLE RECOVERY (%)	MOISTURE CONTENT (%)	DRY DENSITY (pcf)	LIQUID LIMIT LL	PLASTICITY INDEX PI	MINUS NO. 200 (%)	GRAPHIC LOG	MATERIAL DESCRIPTION	DEPTH (ft)	REMARKS
				252.8								**-SM-** SILTY SAND; Brown, loose to medium dense, with organic material, with high hydrocarbon odor, with no staining.		BH-8 (0'-1')
				237.5										BH-8 (2'-3')
													3.5	
5			671	36.8								**-SM-** SILTY SAND; Brown, medium dense, moderately cemented, with no hydrocarbon odor, with no staining.		BH-8 (4'-5')
			180	4.1										BH-8 (6'-7')
													7.5	
												-SM- SILTY SAND: Tan, medium dense, with no hydrocarbon odor, with no staining.		
10			128	3.4									10	BH-8 (9'-10')

Bottom of borehole at 10.0 feet.

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

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

Notes:

Analytical samples are shown in the "Remarks" column.
Surface elevation is an estimated value.

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

212C-MD-01878	TETRA TECH	**LOG OF BORING BH-9**	Page 1 of 1

Project Name: Baish "A" Battery Release

Borehole Location: GPS: N 32.822518°, E -103.763711° | Surface Elevation: 4010 ft

Borehole Number: BH-9 | Borehole Diameter (in.): 8 | Date Started: 9/11/2019 | Date Finished: 9/11/2019

WATER LEVEL OBSERVATIONS

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

Remarks:

DEPTH (ft)	OPERATION TYPE	SAMPLE	CHLORIDE FIELD SCREENING (ppm) ExStik	TPH FIELD SCREENING (ppm) PID	SAMPLE RECOVERY (%)	MOISTURE CONTENT (%)	DRY DENSITY (pcf)	LIQUID LIMIT LL	PLASTICITY INDEX PI	MINUS NO. 200 (%)	GRAPHIC LOG	MATERIAL DESCRIPTION	DEPTH (ft)	REMARKS
				5.4								**-SM-** SILTY SAND; Brown, loose to medium dense, with medium hydrocarbon odor, with no staining.	1.5	BH-9 (0'-1')
				4.9								**-SM-** SILTY SAND; Brown, medium dense, moderately cemented, with no hydrocarbon odor, with no staining.	3	BH-9 (2'-3')
												Bottom of borehole at 3.0 feet.		

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

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

Notes:

Analytical samples are shown in the "Remarks" column.
Surface elevation is an estimated value.

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

212C-MD-01878	TETRA TECH	**LOG OF BORING BH-10**	Page 1 of 1

Project Name: Baish "A" Battery Release

Borehole Location: GPS: N 32.822714°, E -103.763627° | Surface Elevation: 4010 ft

Borehole Number: BH-10 | Borehole Diameter (in.): 8 | Date Started: 9/11/2019 | Date Finished: 9/11/2019

WATER LEVEL OBSERVATIONS

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

Remarks:

DEPTH (ft)	OPERATION TYPE	SAMPLE	CHLORIDE FIELD SCREENING (ppm) ExStik	TPH FIELD SCREENING (ppm) PID	SAMPLE RECOVERY (%)	MOISTURE CONTENT (%)	DRY DENSITY (pcf)	LIQUID LIMIT LL	PLASTICITY INDEX PI	MINUS NO. 200 (%)	GRAPHIC LOG	MATERIAL DESCRIPTION	DEPTH (ft)	REMARKS
			134	8.6								**-SM-** SILTY SAND; Brown, loose to medium dense, with low hydrocarbon odor, with no staining.	1.5	BH-10 (0'-1')
			112	9.8								**-SM-** SILTY SAND; Brown, medium dense, moderately cemented, with no hydrocarbon odor, with no staining.		BH-10 (2'-3')
5				3.4									5	BH-10 (4'-5')

Bottom of borehole at 5.0 feet.

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

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

Notes:

Analytical samples are shown in the "Remarks" column.
Surface elevation is an estimated value.

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

APPENDIX E
NMSLO Seed Mixture Details

United States Department of Agriculture

NRCS

Natural Resources Conservation Service

A product of the National Cooperative Soil Survey, a joint effort of the United States Department of Agriculture and other Federal agencies, State agencies including the Agricultural Experiment Stations, and local participants

Custom Soil Resource Report for Lea County, New Mexico

Baish "A" Battery

October 15, 2019

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

How Soil Surveys Are Made

Soil surveys are made to provide information about the soils and miscellaneous areas in a specific area. They include a description of the soils and miscellaneous areas and their location on the landscape and tables that show soil properties and limitations affecting various uses. Soil scientists observed the steepness, length, and shape of the slopes; the general pattern of drainage; the kinds of crops and native plants; and the kinds of bedrock. They observed and described many soil profiles. A soil profile is the sequence of natural layers, or horizons, in a soil. The profile extends from the surface down into the unconsolidated material in which the soil formed or from the surface down to bedrock. The unconsolidated material is devoid of roots and other living organisms and has not been changed by other biological activity.

Currently, soils are mapped according to the boundaries of major land resource areas (MLRAs). MLRAs are geographically associated land resource units that share common characteristics related to physiography, geology, climate, water resources, soils, biological resources, and land uses (USDA, 2006). Soil survey areas typically consist of parts of one or more MLRA.

The soils and miscellaneous areas in a survey area occur in an orderly pattern that is related to the geology, landforms, relief, climate, and natural vegetation of the area. Each kind of soil and miscellaneous area is associated with a particular kind of landform or with a segment of the landform. By observing the soils and miscellaneous areas in the survey area and relating their position to specific segments of the landform, a soil scientist develops a concept, or model, of how they were formed. Thus, during mapping, this model enables the soil scientist to predict with a considerable degree of accuracy the kind of soil or miscellaneous area at a specific location on the landscape.

Commonly, individual soils on the landscape merge into one another as their characteristics gradually change. To construct an accurate soil map, however, soil scientists must determine the boundaries between the soils. They can observe only a limited number of soil profiles. Nevertheless, these observations, supplemented by an understanding of the soil-vegetation-landscape relationship, are sufficient to verify predictions of the kinds of soil in an area and to determine the boundaries.

Soil scientists recorded the characteristics of the soil profiles that they studied. They noted soil color, texture, size and shape of soil aggregates, kind and amount of rock fragments, distribution of plant roots, reaction, and other features that enable them to identify soils. After describing the soils in the survey area and determining their properties, the soil scientists assigned the soils to taxonomic classes (units). Taxonomic classes are concepts. Each taxonomic class has a set of soil characteristics with precisely defined limits. The classes are used as a basis for comparison to classify soils systematically. Soil taxonomy, the system of taxonomic classification used in the United States, is based mainly on the kind and character of soil properties and the arrangement of horizons within the profile. After the soil

scientists classified and named the soils in the survey area, they compared the individual soils with similar soils in the same taxonomic class in other areas so that they could confirm data and assemble additional data based on experience and research.

The objective of soil mapping is not to delineate pure map unit components; the objective is to separate the landscape into landforms or landform segments that have similar use and management requirements. Each map unit is defined by a unique combination of soil components and/or miscellaneous areas in predictable proportions. Some components may be highly contrasting to the other components of the map unit. The presence of minor components in a map unit in no way diminishes the usefulness or accuracy of the data. The delineation of such landforms and landform segments on the map provides sufficient information for the development of resource plans. If intensive use of small areas is planned, onsite investigation is needed to define and locate the soils and miscellaneous areas.

Soil scientists make many field observations in the process of producing a soil map. The frequency of observation is dependent upon several factors, including scale of mapping, intensity of mapping, design of map units, complexity of the landscape, and experience of the soil scientist. Observations are made to test and refine the soil-landscape model and predictions and to verify the classification of the soils at specific locations. Once the soil-landscape model is refined, a significantly smaller number of measurements of individual soil properties are made and recorded. These measurements may include field measurements, such as those for color, depth to bedrock, and texture, and laboratory measurements, such as those for content of sand, silt, clay, salt, and other components. Properties of each soil typically vary from one point to another across the landscape.

Observations for map unit components are aggregated to develop ranges of characteristics for the components. The aggregated values are presented. Direct measurements do not exist for every property presented for every map unit component. Values for some properties are estimated from combinations of other properties.

While a soil survey is in progress, samples of some of the soils in the area generally are collected for laboratory analyses and for engineering tests. Soil scientists interpret the data from these analyses and tests as well as the field-observed characteristics and the soil properties to determine the expected behavior of the soils under different uses. Interpretations for all of the soils are field tested through observation of the soils in different uses and under different levels of management. Some interpretations are modified to fit local conditions, and some new interpretations are developed to meet local needs. Data are assembled from other sources, such as research information, production records, and field experience of specialists. For example, data on crop yields under defined levels of management are assembled from farm records and from field or plot experiments on the same kinds of soil.

Predictions about soil behavior are based not only on soil properties but also on such variables as climate and biological activity. Soil conditions are predictable over long periods of time, but they are not predictable from year to year. For example, soil scientists can predict with a fairly high degree of accuracy that a given soil will have a high water table within certain depths in most years, but they cannot predict that a high water table will always be at a specific level in the soil on a specific date.

After soil scientists located and identified the significant natural bodies of soil in the survey area, they drew the boundaries of these bodies on aerial photographs and

identified each as a specific map unit. Aerial photographs show trees, buildings, fields, roads, and rivers, all of which help in locating boundaries accurately.

Soil Map

The soil map section includes the soil map for the defined area of interest, a list of soil map units on the map and extent of each map unit, and cartographic symbols displayed on the map. Also presented are various metadata about data used to produce the map, and a description of each soil map unit.

Custom Soil Resource Report
Soil Map

Map Scale: 1:541 if printed on A landscape (11" x 8.5") sheet.

N

Meters
0 5 10 20 30

Feet
0 25 50 100 150

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

MAP LEGEND

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

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

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

Water Features
- Streams and Canals

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

Background
- Aerial Photography

MAP INFORMATION

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

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

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

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

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

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

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

Soil Survey Area: Lea County, New Mexico
Survey Area Data: Version 16, Sep 15, 2019

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

Date(s) aerial images were photographed: Sep 18, 2016—Nov 20, 2017

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

Map Unit Legend

Map Unit Symbol	Map Unit Name	Acres in AOI	Percent of AOI
KM	Kermit soils and dune land, 0 to 12 percent slopes	1.5	100.0%
Totals for Area of Interest		**1.5**	**100.0%**

Map Unit Descriptions

The map units delineated on the detailed soil maps in a soil survey represent the soils or miscellaneous areas in the survey area. The map unit descriptions, along with the maps, can be used to determine the composition and properties of a unit.

A map unit delineation on a soil map represents an area dominated by one or more major kinds of soil or miscellaneous areas. A map unit is identified and named according to the taxonomic classification of the dominant soils. Within a taxonomic class there are precisely defined limits for the properties of the soils. On the landscape, however, the soils are natural phenomena, and they have the characteristic variability of all natural phenomena. Thus, the range of some observed properties may extend beyond the limits defined for a taxonomic class. Areas of soils of a single taxonomic class rarely, if ever, can be mapped without including areas of other taxonomic classes. Consequently, every map unit is made up of the soils or miscellaneous areas for which it is named and some minor components that belong to taxonomic classes other than those of the major soils.

Most minor soils have properties similar to those of the dominant soil or soils in the map unit, and thus they do not affect use and management. These are called noncontrasting, or similar, components. They may or may not be mentioned in a particular map unit description. Other minor components, however, have properties and behavioral characteristics divergent enough to affect use or to require different management. These are called contrasting, or dissimilar, components. They generally are in small areas and could not be mapped separately because of the scale used. Some small areas of strongly contrasting soils or miscellaneous areas are identified by a special symbol on the maps. If included in the database for a given area, the contrasting minor components are identified in the map unit descriptions along with some characteristics of each. A few areas of minor components may not have been observed, and consequently they are not mentioned in the descriptions, especially where the pattern was so complex that it was impractical to make enough observations to identify all the soils and miscellaneous areas on the landscape.

The presence of minor components in a map unit in no way diminishes the usefulness or accuracy of the data. The objective of mapping is not to delineate pure taxonomic classes but rather to separate the landscape into landforms or landform segments that have similar use and management requirements. The delineation of such segments on the map provides sufficient information for the development of resource plans. If intensive use of small areas is planned, however, onsite investigation is needed to define and locate the soils and miscellaneous areas.

An identifying symbol precedes the map unit name in the map unit descriptions. Each description includes general facts about the unit and gives important soil properties and qualities.

Soils that have profiles that are almost alike make up a *soil series*. Except for differences in texture of the surface layer, all the soils of a series have major horizons that are similar in composition, thickness, and arrangement.

Soils of one series can differ in texture of the surface layer, slope, stoniness, salinity, degree of erosion, and other characteristics that affect their use. On the basis of such differences, a soil series is divided into *soil phases*. Most of the areas shown on the detailed soil maps are phases of soil series. The name of a soil phase commonly indicates a feature that affects use or management. For example, Alpha silt loam, 0 to 2 percent slopes, is a phase of the Alpha series.

Some map units are made up of two or more major soils or miscellaneous areas. These map units are complexes, associations, or undifferentiated groups.

A *complex* consists of two or more soils or miscellaneous areas in such an intricate pattern or in such small areas that they cannot be shown separately on the maps. The pattern and proportion of the soils or miscellaneous areas are somewhat similar in all areas. Alpha-Beta complex, 0 to 6 percent slopes, is an example.

An *association* is made up of two or more geographically associated soils or miscellaneous areas that are shown as one unit on the maps. Because of present or anticipated uses of the map units in the survey area, it was not considered practical or necessary to map the soils or miscellaneous areas separately. The pattern and relative proportion of the soils or miscellaneous areas are somewhat similar. Alpha-Beta association, 0 to 2 percent slopes, is an example.

An *undifferentiated group* is made up of two or more soils or miscellaneous areas that could be mapped individually but are mapped as one unit because similar interpretations can be made for use and management. The pattern and proportion of the soils or miscellaneous areas in a mapped area are not uniform. An area can be made up of only one of the major soils or miscellaneous areas, or it can be made up of all of them. Alpha and Beta soils, 0 to 2 percent slopes, is an example.

Some surveys include *miscellaneous areas*. Such areas have little or no soil material and support little or no vegetation. Rock outcrop is an example.

Lea County, New Mexico

KM—Kermit soils and dune land, 0 to 12 percent slopes

Map Unit Setting

National map unit symbol: dmpx
Elevation: 3,000 to 4,400 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: Not prime farmland

Map Unit Composition

Dune land: 45 percent
Kermit and similar soils: 45 percent
Minor components: 10 percent
Estimates are based on observations, descriptions, and transects of the mapunit.

Description of Dune Land

Setting

Landform: Dunes
Landform position (two-dimensional): Shoulder, backslope, footslope
Landform position (three-dimensional): Side slope
Down-slope shape: Convex, linear, concave
Across-slope shape: Convex

Typical profile

A - 0 to 6 inches: fine sand
C - 6 to 60 inches: fine sand

Interpretive groups

Land capability classification (irrigated): None specified
Land capability classification (nonirrigated): 8e
Hydrologic Soil Group: A
Hydric soil rating: No

Description of Kermit

Setting

Landform: Dunes
Landform position (two-dimensional): Shoulder, backslope, footslope
Landform position (three-dimensional): Side slope
Down-slope shape: Convex, linear, concave
Across-slope shape: Convex
Parent material: Calcareous sandy eolian deposits derived from sedimentary rock

Typical profile

A - 0 to 8 inches: fine sand
C - 8 to 60 inches: fine sand

Properties and qualities

Slope: 5 to 12 percent
Depth to restrictive feature: More than 80 inches
Natural drainage class: Excessively drained
Runoff class: Very low

Capacity of the most limiting layer to transmit water (Ksat): Very high (20.00 in/hr)
Depth to water table: More than 80 inches
Frequency of flooding: None
Frequency of ponding: None
Calcium carbonate, maximum in profile: 3 percent
Gypsum, maximum in profile: 1 percent
Salinity, maximum in profile: Nonsaline to very slightly saline (0.0 to 2.0 mmhos/cm)
Sodium adsorption ratio, maximum in profile: 2.0
Available water storage in profile: Low (about 3.1 inches)

Interpretive groups

Land capability classification (irrigated): None specified
Land capability classification (nonirrigated): 7e
Hydrologic Soil Group: A
Ecological site: Sandhills (R042XC022NM)
Hydric soil rating: No

Minor Components

Palomas

Percent of map unit: 3 percent
Ecological site: Loamy Sand (R042XC003NM)
Hydric soil rating: No

Pyote

Percent of map unit: 3 percent
Ecological site: Loamy Sand (R042XC003NM)
Hydric soil rating: No

Maljamar

Percent of map unit: 2 percent
Ecological site: Loamy Sand (R042XC003NM)
Hydric soil rating: No

Wink

Percent of map unit: 2 percent
Ecological site: Loamy Sand (R042XC003NM)
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

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 Shallow (SH)

SHALLOW (SH) SITES SEED MIXTURE:

COMMON NAME	VARIETY	APPLICATION RATE (PLS/Acre)	DRILL BOX
Grasses:			
Sideoats grama	**Vaughn, El Reno**	**4.0**	**F**
Blue grama	**Lovington, Hachita**	**3.0**	**D**
Little bluestem	**Pastura, Cimmaron**	**1.5**	**F**
Green sprangletop	**VNS, Southern**	**1.0**	**D**
Plains bristlegrass	**VNS, Southern**	**1.0**	**D**
Forbs:			
Firewheel (*Gaillardia*)	**VNS, Southern**	**1.0**	**D**
Shrubs:			
Fourwing saltbush	**Marana, Santa Rita**	**1.0**	**D**
Common winterfat	**VNS, Southern**	**0.5**	**F**
	Total PLS/acre	**13.0**	

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.