SITE INFORMATION

Report Type: Closure Report 1RP-5050

General Site Information:						
Site:	**State F-1 Battery**					
Company:	**ConocoPhillips Co.**					
Section, Township and Range	**Unit M**	**Sec. 1**	**T 21S**	**R 36E**		
Lease Number:	**API No. 30-025-35466**					
County:	**Lea County**					
GPS:	**32.50109**			**-103.2262**		
Surface Owner:	**State**					
Mineral Owner:	**State**					
Directions:	From the intersection of Highway 8 (north of Oil Center) and Curry Road (Highway 36, travel east on Curry Road (Highway 36) for 2.40 miles to entrance of lease road with a cattle guard. Turn left (north) onto lease road. At fork, turn left (northwest) and travel 0.14 miles. At fork, turn left (southwest) and travel 175 feet. Destination is on the right.					

Release Data:	
Date Released:	5/8/2018
Type Release:	Produced Water
Source of Contamination:	Load Line
Fluid Released:	344.9 bbls water
Fluids Recovered:	240 bbls water

Official Communication:			
Name:	Jenni Fortunada		Greg Pope
Company:	ConocoPhillips Co		Tetra Tech
Address:	935 N. Eldridge Pkwy.		901 West Wall Street
			Suite 100
City:	Houston, Texas 77079		Midland, Texas
Phone number:	(281) 293-1000		(432) 687-8134
Fax:			
Email:	Jenni.Fortunada@conocophillps.com		Greg.Pope@tetratech.com

Site Characterization	
Depth to Groundwater:	*Greater than 100 feet*
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

March 15, 2019

Ms. Christina Hernandez
Environmental Engineer Specialist
Oil Conservation Division, District 1
1625 North French Drive
Hobbs, New Mexico 88240

Re: Closure Report for the ConocoPhillips, State F-1, Unit M, Section 1, Township 21 South, Range 36 East, Lea County, New Mexico. 1RP-5050.

Ms. Hernandez:

Tetra Tech, Inc. (Tetra Tech) was contacted by ConocoPhillips to assess a release that occurred at State F-1, Unit M, Section 1, Township 21 South, Range 36 East, Lea County, New Mexico (Site). The spill site coordinates are N 32.50109º, W 103.2262º. The site location is shown on Figures 1 and 2.

Background

According to the State of New Mexico C-141 Initial Report, the release occurred on May 8, 2018, and released approximately 345 barrels of produced water due to a leak found on a load line. Vacuum trucks were used to remove the freestanding fluids, recovering approximately 240 barrels of fluid. Emergency response procedures included excavation of accessible soil.

Groundwater

No wells are listed within Section 01 in the New Mexico Office of the State Engineers database. According to the Chevron Texaco Groundwater Trend map, the average depth to groundwater in the area is between 100 to 125 feet below surface. The groundwater data is shown in Appendix B.

Regulatory

A risk-based evaluation was performed for the Site in accordance with the New Mexico Oil Conservation Division (NMOCD) Title 19, Chapter 15, Part 29; the rule for releases on oil and gas development (effective August 14, 2018). The guidelines require a risk-based evaluation of the site to determine recommended remedial action levels (RRAL)

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

TETRA TECH

for benzene, toluene, ethylbenzene and xylene (collectively referred to as BTEX) and total petroleum hydrocarbons (TPH) in soil. The proposed RRAL for benzene was determined to be 10 parts per million (ppm) or milligrams per kilogram (mg/kg) and 50 ppm for total BTEX (sum of benzene, toluene, ethylbenzene, and xylene). Based upon the depth to groundwater, the proposed RRAL for TPH is 2,500 mg/kg (GRO + DRO + ORO) or 1,000 mg/kg (GRO + DRO). Additionally, based on the reported depth to groundwater in the area, the proposed RRAL for chlorides is 10,000 mg/kg.

Soil Assessment and Analytical Results

From October 2 – 3, 2018, Tetra Tech personnel were onsite to collect soil samples from the spill area by use of a hand auger. Nineteen (19) auger holes (AH-1- AH-19) were collected in and around the spill at a depth of 5 feet below ground surface. Refusal was encountered between 2 to 4 feet below ground surface due to a shallow dense formation at auger holes 15, 16, 17, 18, and 19.

Selected samples were analyzed for TPH analysis by EPA method 8015 modified, BTEX by EPA Method 8260 and chloride by EPA method 300.0. Copies of laboratory analysis and chain-of-custody documentation are included in Appendix C. The results of the soil assessment sampling are summarized in Table 1. The auger hole locations are shown on Figure 3.

Referring to Table 1, no collected samples exceeded their respective RRALs. However, due to an error, no samples were analyzed for TPH or BTEX for AH-19. AH-19 was in close proximity to AH-16 and AH-18. The area of AH-1, located closest to the release area and located on the caliche pad, the shallow subsurface soil intervals had documented chloride concentrations of 2,980 mg/kg (0-1') and 2,870 mg/kg (1-2') but decreased to 681 mg/kg (2-3').

Conclusion

Based on the soil assessment at the site, ConocoPhillips requests closure of the spill due to there not being a significant effect on the site. The final C-141 is enclosed in Appendix A. If you have any questions or comments concerning the assessment or the remediation activities for this site, please call me at (432) 682-4559.

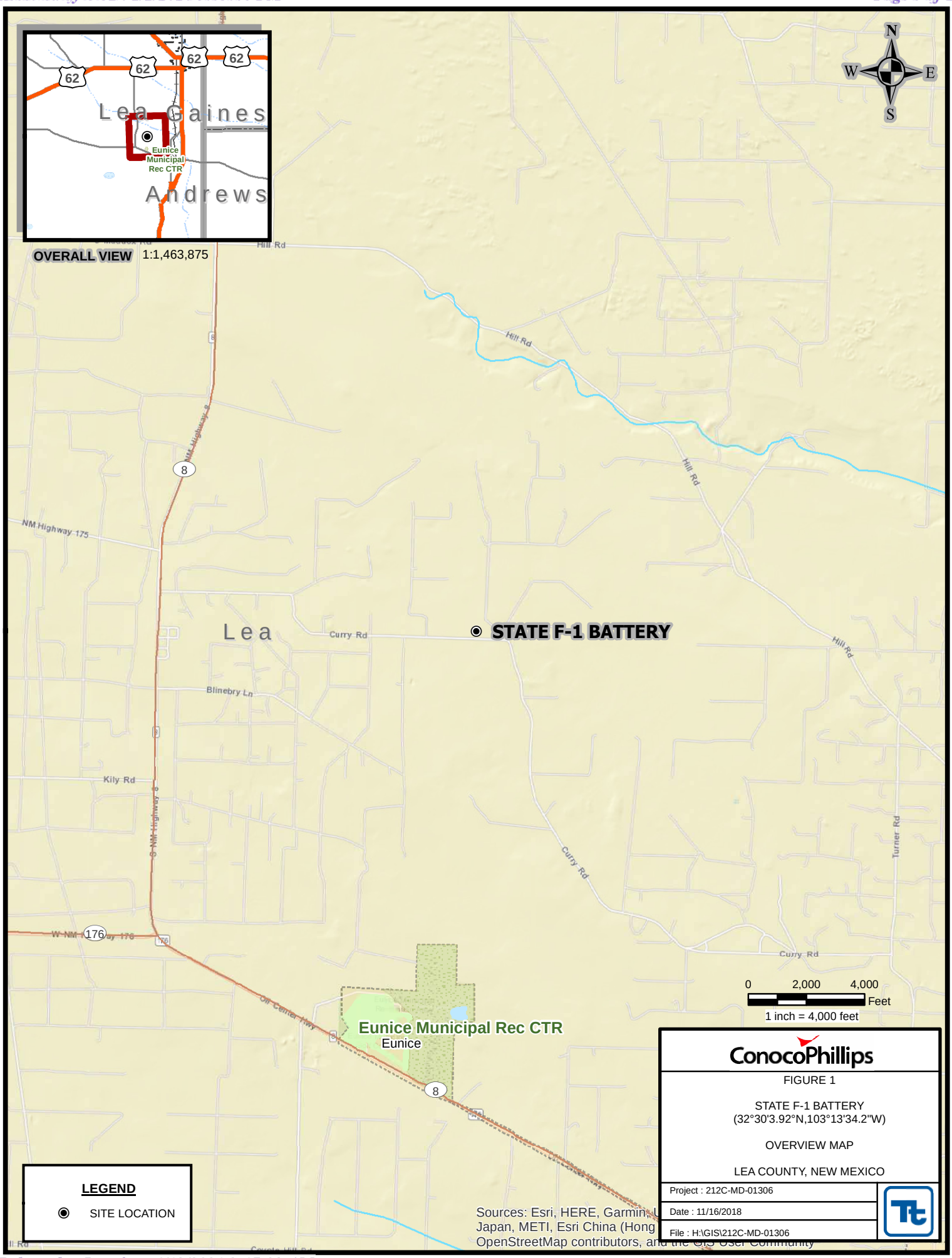
Respectfully submitted,
TETRA TECH

Kayla Taylor, P.G.
Project Manager

Greg Pope, P.G.
Program Manager

cc: Jenni Fortunado - ConocoPhillips

Figures



ConocoPhillips

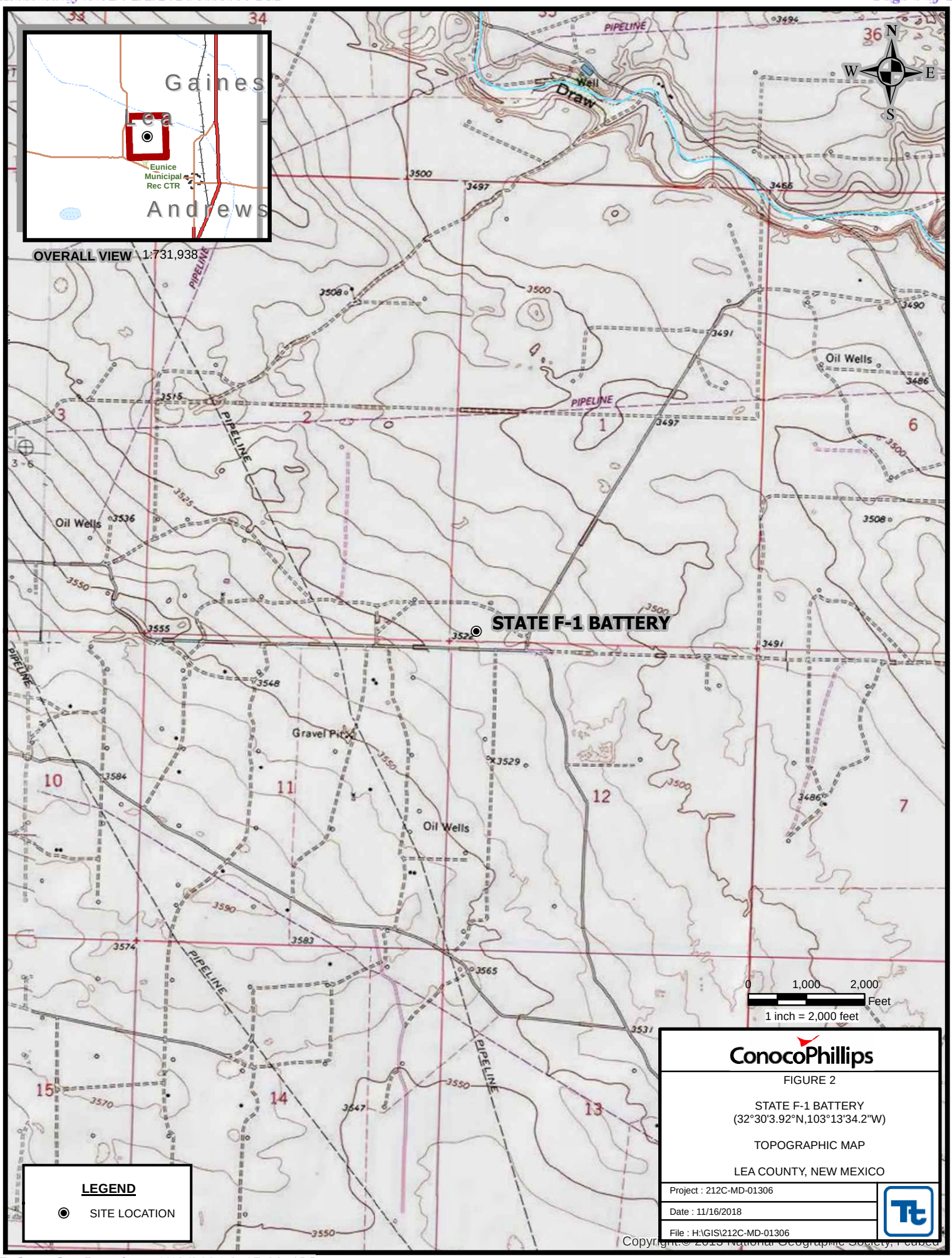
FIGURE 1

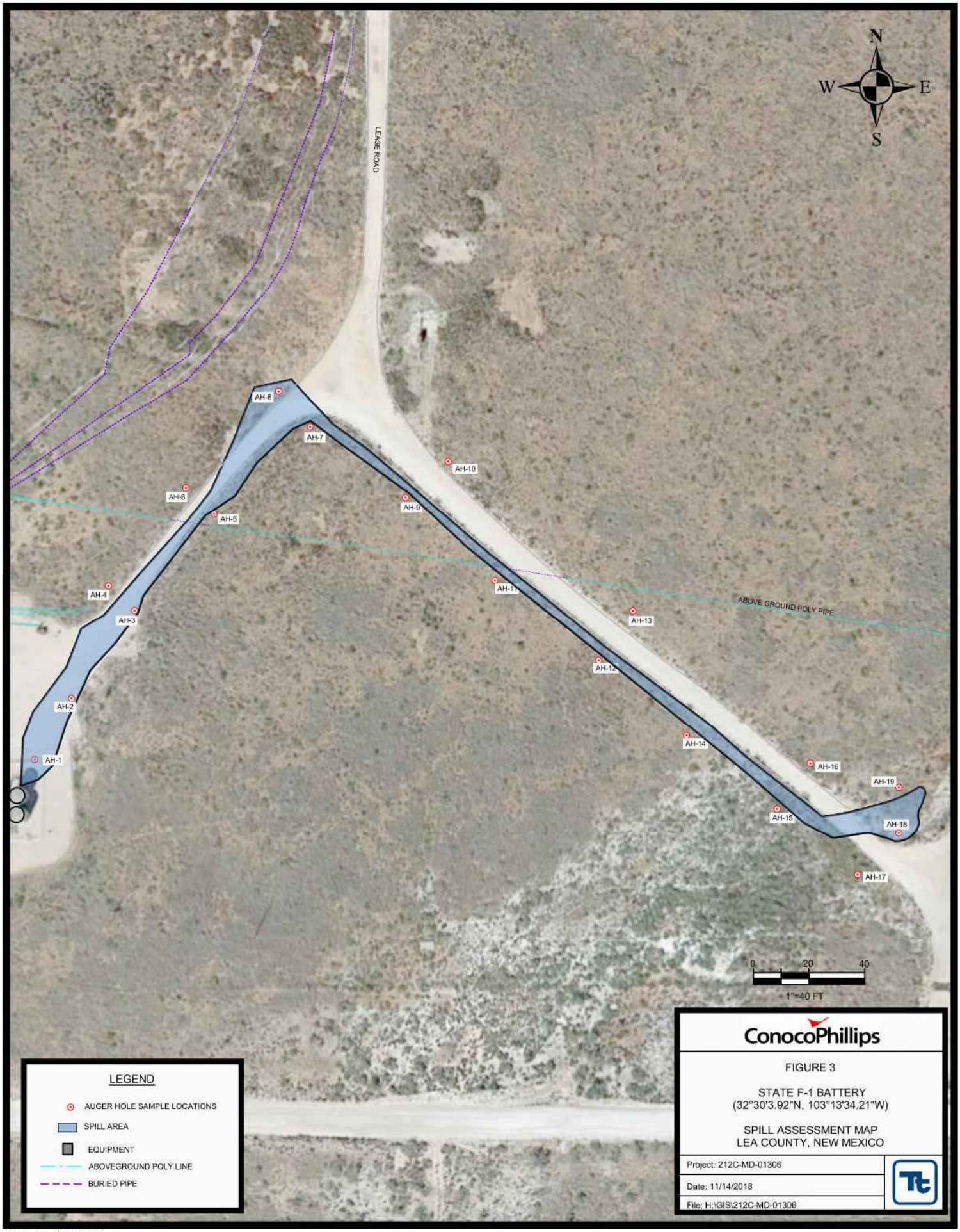
STATE F-1 BATTERY
(32°30'3.92"N,103°13'34.2"W)

OVERVIEW MAP

LEA COUNTY, NEW MEXICO

Project : 212C-MD-01306
Date : 11/16/2018
File : H:\GIS\212C-MD-01306


Gaines
Lea
Eunice Municipal Rec CTR
Andrews
OVERALL VIEW 1:731,938
STATE F-1 BATTERY
PIPELINE
Well
Draw
Oil Wells
Gravel Pit
N
S
E
W
0 1,000 2,000 Feet
1 inch = 2,000 feet
LEGEND
SITE LOCATION
ConocoPhillips
FIGURE 2
STATE F-1 BATTERY
(32°30'3.92"N,103°13'34.2"W)
TOPOGRAPHIC MAP
LEA COUNTY, NEW MEXICO
Project : 212C-MD-01306
Date : 11/16/2018
File : H:\GIS\212C-MD-01306



Drawn By: MISTI MORGAN

Tables

Table 1
ConocoPhillips Co.
Soil Assessment Analytical Data
State F-1 1RP-5050
Lea County, New Mexico

Sample ID	Sample Date	Sample Depth (ft)	Soil Status		PID (PPM)	TPH							BTEX									Chlorides	
			In Situ	Removed		TPH GRO (mg/kg)	Qualifier	TPH DRO (mg/kg)	Qualifier	TPH ORO (mg/kg)	Qualifier	Total TPH (mg/kg)	Benzene (mg/kg)	Qualifier	Toluene (mg/kg)	Qualifier	Ethylbenzene (mg/kg)	Qualifier	Xylenes (mg/kg)	Qualifier	Total BTEX (mg/kg)	Chloride (PPM)	Chloride (mg/kg)
AH-1	10/2/2018	(0-1')	X		-	0.0295	J	< 1.67		0.534	J	0.56	< 0.000414		< 0.00129		< 0.000548		< 0.00494		< 0.00494	5,400	2,980
AH-1	10/2/2018	(1'-2')	X		-	0.0264	J	< 1.77		1.600	J	1.63	< 0.000441		< 0.00138		< 0.000584		< 0.00527		< 0.00527	3,200	2,870
AH-1	10/2/2018	(2'-3')	X		-	-		-		-		-	-		-		-		-		-	2,250	681
AH-1	10/2/2018	(3'-4')	X		-	-		-		-		-	-		-		-		-		-	1,020	611
AH-1	10/2/2018	(4'-5')	X		-	-		-		-		-	-		-		-		-		-	377	468
AH-2	10/2/2018	(0-1')	X		-	0.0428	J	2.19	J	4.37	J	6.60	< 0.000471		< 0.00147		< 0.000625		< 0.00563		< 0.00563	470	463
AH-2	10/2/2018	(1'-2')	X		-	0.0332	J	< 2.03		< 0.345		0.03	< 0.000504		< 0.00158		< 0.000668		< 0.00603		< 0.00603	150	18.5 B
AH-2	10/2/2018	(2'-3')	X		-	-		-		-		-	-		-		-		-		-	187	123
AH-2	10/2/2018	(3'-4')	X		-	-		-		-		-	-		-		-		-		-	168	167
AH-2	10/2/2018	(4'-5')	X		-	-		-		-		-	-		-		-		-		-	292	217
AH-3	10/2/2018	(0-1')	X		-	0.0375	J	24.8		46.7		71.54	< 0.000405		< 0.00127		< 0.000537		< 0.00484		< 0.00484	34.5	2.40 BJ
AH-3	10/2/2018	(1'-2')	X		-	0.0337	J	2.25	J	5.32		7.60	< 0.000511		< 0.00160		< 0.000677		< 0.00611		< 0.00611	53.1	2.81 BJ
AH-3	10/2/2018	(2'-3')	X		-	-		-		-		-	-		-		-		-		-	49.5	43.9
AH-3	10/2/2018	(3'-4')	X		-	-		-		-		-	-		-		-		-		-	57.8	45.4
AH-3	10/2/2018	(4'-5')	X		-	-		-		-		-	-		-		-		-		-	71.1	57.4
AH-4	10/2/2018	(0-1')	X		-	0.0453	J	2.35	J	5.08		7.48	< 0.000465		< 0.00145		< 0.000617		< 0.00556		< 0.00556	56	7.07
AH-4	10/2/2018	(1'-2')	X		-	0.0398	J	< 2.03		3.93	J	3.97	< 0.000505		< 0.00158		< 0.000669		< 0.00604		< 0.00604	89.5	13.4 B
AH-4	10/2/2018	(2'-3')	X		-	-		-		-		-	-		-		-		-		-	76.5	50.8
AH-4	10/2/2018	(3'-4')	X		-	-		-		-		-	-		-		-		-		-	104	53.1
AH-4	10/2/2018	(4'-5')	X		-	-		-		-		-	-		-		-		-		-	72.5	84.4
AH-5	10/2/2018	(0-1')	X		-	0.0374	J	1.72	J	4.57		6.33	< 0.000407		< 0.00127		< 0.000539		< 0.00486		< 0.00486	97.0	27.7
AH-5	10/2/2018	(1'-2')	X		-	0.03	J	2.19	J	6.29		8.51	< 0.000425		< 0.00133		< 0.000563		< 0.00508		< 0.00508	132	13.7 B
AH-5	10/2/2018	(2'-3')	X		-	-		-		-		-	-		-		-		-		-	86.5	46.4
AH-5	10/2/2018	(3'-4')	X		-	-		-		-		-	-		-		-		-		-	78.9	42.6
AH-5	10/2/2018	(4'-5')	X		-	-		-		-		-	-		-		-		-		-	68.2	45.8

Table 1
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Soil Assessment Analytical Data
State F-1 1RP-5050
Lea County, New Mexico

Sample ID	Sample Date	Sample Depth (ft)	Soil Status		PID (PPM)	TPH							BTEX									Chlorides	
			In Situ	Removed		TPH GRO (mg/kg)	Qualifier	TPH DRO (mg/kg)	Qualifier	TPH ORO (mg/kg)	Qualifier	Total TPH (mg/kg)	Benzene (mg/kg)	Qualifier	Toluene (mg/kg)	Qualifier	Ethylbenzene (mg/kg)	Qualifier	Xylenes (mg/kg)	Qualifier	Total BTEX (mg/kg)	Chloride (PPM)	Chloride (mg/kg)
AH-6	10/2/2018	(0-1')	X		-	0.0369	J	1.71	J	3.99	J	5.74	< 0.000408		< 0.00127		< 0.000540		< 0.00487		< 0.00487	76.4	24.8
AH-6	10/2/2018	(1'-2')	X		-	0.0355	J	< 1.71		2.24	J	2.28	< 0.000424		< 0.00133		< 0.000562		< 0.00507		< 0.00507	70.7	9.62 BJ
AH-6	10/2/2018	(2'-3')	X		-	-		-		-		-	-		-		-		-		-	86.7	49.2
AH-6	10/2/2018	(3'-4')	X		-	-		-		-		-	-		-		-		-		-	48.7	59.1
AH-6	10/2/2018	(4'-5')	X		-	-		-		-		-	-		-		-		-		-	59.1	8.01 J
AH-7	10/2/2018	(0-1')	X		-	0.0546	J	3.13	J	7.88		11.06	< 0.000416		< 0.00130		< 0.000551		< 0.00497		< 0.00497	538	270
AH-7	10/2/2018	(1'-2')	X		-	0.0264	J	< 1.72		2	J	2.03	< 0.000428		< 0.00134		< 0.000567		< 0.00512		< 0.00512	208.0	92.1
AH-7	10/2/2018	(2'-3')	X		-	< 0.0238		< 1.77		3.1	J	3.10	< 0.000439		< 0.00137		< 0.000582		< 0.00525		< 0.00525	98.1	446
AH-7	10/2/2018	(3'-4')	X		-	0.0267	J	< 1.78		2.36	J	2.39	< 0.000443		< 0.00138		< 0.000587		< 0.00529		< 0.00529	88.2	97.8
AH-7	10/2/2018	(4'-5')	X		-	< 0.0239		< 1.78		2.03	J	2.03	< 0.000441		< 0.00138		< 0.000585		< 0.00528		< 0.00528	162	43.1
AH-8	10/2/2018	(0-1')	X		-	0.0295	J	3.69	J	14.7		18.42	< 0.000407		< 0.00127		< 0.000539		< 0.00486		< 0.00486	77.7	20.3 B
AH-8	10/2/2018	(1'-2')	X		-	0.0296	J	< 1.68		4.72		4.75	< 0.000418		< 0.00130		< 0.000553		< 0.00499		< 0.00499	56.3	3.58 BJ
AH-8	10/2/2018	(2'-3')	X		-	0.0308	J J3	1.85	J	5.22		7.10	< 0.000426		< 0.00133		< 0.000564		< 0.00509		< 0.00509	99	4.24 BJ
AH-8	10/2/2018	(3'-4')	X		-	< 0.0230		< 1.71		1.53	J	1.53	< 0.000424		< 0.00132		< 0.000561		< 0.00506		< 0.00506	111	50.9
AH-8	10/2/2018	(4'-5')	X		-	< 0.0231		< 1.71		2.48	J	2.48	< 0.000425		< 0.00133		< 0.000564		< 0.00508		< 0.00508	157	44.5
AH-9	10/3/2018	(0-1')	X		-	0.047	J	< 5.41		4.01	J	4.06	< 0.000448	J3	< 0.00140	J3	< 0.000594	J3	< 0.00536	J3	< 0.00536	44.6	52.3
AH-9	10/3/2018	(1'-2')	X		-	0.0434	J	< 1.74		4.65		4.69	< 0.000431		< 0.00135		< 0.000572		< 0.00516		< 0.00516	126	74.5
AH-9	10/3/2018	(2'-3')	X		-	-		-		-		-	-		-		-		-		-	67.7	62.1
AH-9	10/3/2018	(3'-4')	X		-	-		-		-		-	-		-		-		-		-	51.2	70.1
AH-9	10/3/2018	(4'-5')	X		-	-		-		-		-	-		-		-		-		-	42.5	66.9
AH-10	10/3/2018	(0-1')	X		-	0.0552	J	3.17	J	9.47		12.70	< 0.000404		< 0.00126		< 0.000535		< 0.00482		< 0.00482	33.2	46.2
AH-10	10/3/2018	(1'-2')	X		-	0.0551	J	2.25	J	6.71		9.02	< 0.000405		< 0.00127		< 0.000537		< 0.00484		< 0.00484	46.8	42.0
AH-10	10/3/2018	(2'-3')	X		-	-		-		-		-	-		-		-		-		-	66.3	57.7
AH-10	10/3/2018	(3'-4')	X		-	-		-		-		-	-		-		-		-		-	95	58.2
AH-10	10/3/2018	(4'-5')	X		-	-		-		-		-	-		-		-		-		-	45	60.8

Table 1
ConocoPhillips Co.
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State F-1 1RP-5050
Lea County, New Mexico

Sample ID	Sample Date	Sample Depth (ft)	Soil Status		PID (PPM)	TPH							BTEX									Chlorides	
			In Situ	Removed		TPH GRO (mg/kg)	Qualifier	TPH DRO (mg/kg)	Qualifier	TPH ORO (mg/kg)	Qualifier	Total TPH (mg/kg)	Benzene (mg/kg)	Qualifier	Toluene (mg/kg)	Qualifier	Ethylbenzene (mg/kg)	Qualifier	Xylenes (mg/kg)	Qualifier	Total BTEX (mg/kg)	Chloride (PPM)	Chloride (mg/kg)
AH-11	10/3/2018	(0-1')	X		-	0.0657	J	1.69	J	6.19		7.95	< 0.000409		< 0.00128		< 0.000542		< 0.00488		< 0.00488	28.8	47.5
AH-11	10/3/2018	(1'-2')	X		-	0.047	J	1.91	J	6.35		8.31	< 0.000418		< 0.00131		< 0.000554		< 0.00500		< 0.00500	36.8	44.6
AH-11	10/3/2018	(2'-3')	X		-	-		-		-		-	-		-		-		-		-	49.9	62.8
AH-11	10/3/2018	(3'-4')	X		-	-		-		-		-	-		-		-		-		-	34.5	64.4
AH-11	10/3/2018	(4'-5')	X		-	-		-		-		-	-		-		-		-		-	46.7	65.1
AH-12	10/3/2018	(0-1')	X		-	0.0543	J	< 1.68		5.61		5.66	< 0.000417		< 0.00130		< 0.000553		< 0.00498		< 0.00498	57.7	48.7
AH-12	10/3/2018	(1'-2')	X		-	0.0309	J	2	J	7.49		9.52	< 0.000441		< 0.00138		< 0.000585		< 0.00527		< 0.00527	78.4	49.3
AH-12	10/3/2018	(2'-3')	X		-	-		-		-		-	-		-		-		-		-	53	59.0
AH-12	10/3/2018	(3'-4')	X		-	-		-		-		-	-		-		-		-		-	59.6	57.8
AH-12	10/3/2018	(4'-5')	X		-	-		-		-		-	-		-		-		-		-	73.6	55.7
AH-13	10/3/2018	(0-1')	X		-	0.0358	J	1.8	J	7.16		9.00	< 0.000406		< 0.00127		< 0.000538		< 0.00485		< 0.00485	64.8	60.3
AH-13	10/3/2018	(1'-2')	X		-	0.0531	J	< 1.71		7.12		7.17	< 0.000424		< 0.00132		< 0.000561		< 0.00506		< 0.00506	86.5	49.8
AH-13	10/3/2018	(2'-3')	X		-	-		-		-		-	-		-		-		-		-	110	61.7
AH-13	10/3/2018	(3'-4')	X		-	-		-		-		-	-		-		-		-		-	93	64.8
AH-13	10/3/2018	(4'-5')	X		-	-		-		-		-	-		-		-		-		-	104	61.9
AH-14	10/3/2018	(0-1')	X		-	0.0698	J	2.44	J	8.07		10.58	< 0.000408		< 0.00127		< 0.000541		< 0.00488		< 0.00488	46.9	44.0
AH-14	10/3/2018	(1'-2')	X		-	0.051	J	< 1.70		7.25		7.30	< 0.000423		< 0.00132		< 0.000560		< 0.00505		< 0.00505	48	45.1
AH-14	10/3/2018	(2'-3')	X		-	-		-		-		-	-		-		-		-		-	50.5	60.3
AH-14	10/3/2018	(3'-4')	X		-	-		-		-		-	-		-		-		-		-	60	61.8
AH-14	10/3/2018	(4'-5')	X		-	-		-		-		-	-		-		-		-		-	71.1	57.5
AH-15	10/3/2018	(0-1')	X		-	0.0692	J	4.73		14.6		19.40	< 0.000415		< 0.00130		< 0.000549		< 0.00495		< 0.00495	58.8	45.8
AH-15	10/3/2018	(1'-2')	X		-	0.0515	J	2.05	J	10.2		12.30	< 0.000423		< 0.00132		< 0.000561		< 0.00506		< 0.00506	52.8	87.8
AH-15	10/3/2018	(2'-3')	X		-	-		-		-		-	-		-		-		-		-	89.1	54.5
AH-16	10/3/2018	(0-1')	X		-	-		-		-		-	-		-		-		-		-	65.9	56.9
AH-16	10/3/2018	(1'-2')	X		-	-		-		-		-	-		-		-		-		-	50.8	5.1
AH-16	10/3/2018	(2'-3')	X		-	0.0491	J	< 1.72		5.79		5.84	< 0.000427		< 0.00133		< 0.000566		< 0.00510		< 0.00510	92.2	47.8
AH-17	10/3/2018	(0-1')	X		-	0.0791	J	5.11		17.4		22.59	< 0.000419		<0.00131		< 0.000555		< 0.00501		< 0.00501	82.6	45.5
AH-17	10/3/2018	(1'-2')	X		-	-		-		-		-	-		-		-		-		-	63.1	6.44
AH-17	10/3/2018	(2'-3')	X		-	-		-		-		-	-		-		-		-		-	59.8	6.77
AH-17	10/3/2018	(3'-4')	X		-	-		-		-		-	-		-		-		-		-	67.4	6.9

Table 1
ConocoPhillips Co.
Soil Assessment Analytical Data
State F-1 1RP-5050
Lea County, New Mexico

Sample ID	Sample Date	Sample Depth (ft)	Soil Status		PID (PPM)	TPH							BTEX									Chlorides	
			In Situ	Removed		TPH GRO (mg/kg)	Qualifier	TPH DRO (mg/kg)	Qualifier	TPH ORO (mg/kg)	Qualifier	Total TPH (mg/kg)	Benzene (mg/kg)	Qualifier	Toluene (mg/kg)	Qualifier	Ethylbenzene (mg/kg)	Qualifier	Xylenes (mg/kg)	Qualifier	Total BTEX (mg/kg)	Chloride (PPM)	Chloride (mg/kg)
AH-18	10/3/2018	(0-1')	X		-	0.029	J	1.95	J	11.2		13.18	< 0.000418		< 0.00131		< 0.000554		< 0.00500		< 0.00500	396	226
AH-18	10/3/2018	(1'-2')	X		-	0.0303	J	< 1.73		9.08		9.11	< 0.000430		< 0.00134		< 0.000570		< 0.00514		< 0.00514	202	274
AH-19	10/3/2018	(0-1')	X		-	-		-		-		-	-		-		-		-		-	30.8	3.99
AH-19	10/3/2018	(1'-2')	X		-	-		-		-		-	-		-		-		-		-	72.4	4.16
AH-19	10/3/2018	(2'-3')	X		-	-		-		-		-	-		-		-		-		-	33.4	4.41

NOTES:

ft	Feet	DRO	Diesel Range Organics
PPM	Parts per million	ORO	Oil Range Organics
mg/kg	Milligrams per kilogram	J	The identification of the analyte is acceptable; the reported value is an estimate.
TPH	Total Petroleum Hydrocarbons	B	The same analyte is found in the associated blank.
GRO	Gasoline Range Organics	J6	The sample matrix interfered with the ability to make any accurate determination; spike value is low

Photos

ConocoPhillips Co.

State F-1 Site 1RP-5050

Lea County, New Mexico

West – View of release area adjacent to lease road towards release point on pad

Northwest – View of release area adjacent to lease road

ConocoPhillips Co.

State F-1 Site 1RP-5050

Lea County, New Mexico

Southeast – View of release area adjacent to lease road

Northeast – View of release area adjacent to lease road

Appendix A

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

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

Form C-141
Revised August 8, 2011

Submit 1 Copy to appropriate District Office in accordance with 19.15.29 NMAC.

Release Notification and Corrective Action

OPERATOR

☒ Initial Report ☐ Final Report

Name of Company: **ConocoPhillips**	Contact: **Jose A Zepeda**
Address**: 1410 N West County Rd**	Telephone No. **575-391-3165**
Facility Name: **State F-1 Battery**	Facility Type: **Load Line**

Surface Owner: State	Mineral Owner:	API No. 30-025-35466

LOCATION OF RELEASE

Unit Letter	Section	Township	Range	Feet from the	North/South Line	Feet from the	East/West Line	County
5	1	21S	36E					**LEA**

Latitude 32’ 30 4.19___ **Longitude** -103’ 13 34.78___

NATURE OF RELEASE

Type of Release**: PRODUCE WATER & OIL MIX**	Volume of Release: **344.9**	Volume Recovered: **240**
Source of Release: **Load Line**	Date and Hour of Occurrence **05/08/2018 0730**	Date and Hour of Discovery **SAME**
Was Immediate Notice Given? ☒ Yes ☐ No ☐ Not Required	If YES, To Whom? Olivia Yu,	
By Whom? Jose A Zepeda	Date and Hour: **05/08/2018 1415 Via Email**	
Was a Watercourse Reached? ☐ Yes ☒ No	If YES, Volume Impacting the Watercourse.	

If a Watercourse was Impacted, Describe Fully. *

N/A

Describe Cause of Problem and Remedial Action Taken. *
On May 8, 2018 at 0730 hrs. at the State F-1, a leak was found on a load line resulting in a release of 344.9 bbl. of produced water with 240 bbl. recovered. Immediate action was to shut in line to stop spill. Spill site will be remediated per COPC and NMOCD guidelines.

Describe Area Affected and Cleanup Action Taken. *

I hereby certify that the information given above is true and complete to the best of my knowledge and understand that pursuant to NMOCD 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 NMOCD marked as "Final Report" does not relieve the operator of liability should their operations have failed to adequately investigate and remediate contamination that pose a threat to ground water, surface water, human health or the environment. In addition, NMOCD 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.

Signature: *JOSE A ZEPEDA*	OIL CONSERVATION DIVISION	
Printed Name: Jose A Zepeda	Approved by Environmental Specialist:	
Title: LEAD HSE	Approval Date:	Expiration Date:
E-mail Address: ***Jose. A. Zepeda@conocophillips.com***	Conditions of Approval:	Attached ☐
Date: 05/08/2018 Phone:575-391-3165		

* Attach Additional Sheets If Necessary

Form C-141
Page 6

State of New Mexico
Oil Conservation Division

Incident ID	nOY1812933982
District RP	
Facility ID	
Application ID	

Closure

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

Closure Report Attachment Checklist: ***Each of the following items must be included in the closure report.***

☐ A scaled site and sampling diagram as described in 19.15.29.11 NMAC

☐ Photographs of the remediated site prior to backfill or photos of the liner integrity if applicable (Note: appropriate OCD District office must be notified 2 days prior to liner inspection)

☐ Laboratory analyses of final sampling (Note: appropriate ODC District office must be notified 2 days prior to final sampling)

☐ Description of remediation activities

I hereby certify that the information given above is true and complete to the best of my knowledge and understand that pursuant to OCD rules and regulations all operators are required to report and/or file certain release notifications and perform corrective actions for releases which may endanger public health or the environment. The acceptance of a C-141 report by the OCD does not relieve the operator of liability should their operations have failed to adequately investigate and remediate contamination that pose a threat to groundwater, surface water, human health or the environment. In addition, OCD acceptance of a C-141 report does not relieve the operator of responsibility for compliance with any other federal, state, or local laws and/or regulations. The responsible party acknowledges they must substantially restore, reclaim, and re-vegetate the impacted surface area to the conditions that existed prior to the release or their final land use in accordance with 19.15.29.13 NMAC including notification to the OCD when reclamation and re-vegetation are complete.

Printed Name: _____ Title: _____

Signature: _____ Date: _____

email: _____ Telephone: _____

OCD Only

Received by: _____ Date: _____

Closure approval by the OCD does not relieve the responsible party of liability should their operations have failed to adequately investigate and remediate contamination that poses a threat to groundwater, surface water, human health, or the environment nor does not relieve the responsible party of compliance with any other federal, state, or local laws and/or regulations.

Closure Approved by: Bradford Billings Date: 6/18/2021

Printed Name: Bradford Billings Title: Env.Spec.A

Appendix B

Water Well Data
Average Depth to Groundwater (ft)
Conoco Phillips
Lea County, New Mexico

20 South 36 East

6 32	5 28	4	3	2 92	1 40
7 Artesia	8 33	9 38	10	11 32	12 29
18 34	17	16	15	14 45	13
19	20	21	22	23	24
30	29	28	27	26 106 170	25
31	32 170	33	34	35 122	36

20 South 37 East

6 37	5 38	4 22	3	2	1
7 36	8 35	9	10	11	12
18	17	16	15	14	13 78
19 35	20	21	22	23	24
30	29	28 40	27	26	25
31	32	33 198	34	35	36

20 South 38 East

6 63	5 45	4 30	3 36	2 46	1 63
7 69	8 70	9	10 47	11 42	12 53
18 50	17	16	15	14 49	13 42
19	20	21	22	23	24 30
30	29	28	27	26 65	25
31	32	33	34	35	36

21 South 35 East

6	5	4	3	2	1
7	8	9	10	11	12
18	17	16	15	14	13
19	20	21	22	23	24
30	29	28	27	26	25
31	32	33	34	35	36

21 South 36 East

6	5	4	3	2	1 Site
7	8	9	10 200	11	12
18 106	17	16 195	15	14	13 148
19	20	21	22	23 130 150	24
30	29	28	27	26 150	25 148
31	32	33	34 198	35	36

21 South 37 East

6 73	5	4 75	3	2	1
7	8	9	10	11	12
18	17 71	16 70	15	14	13
19	20 98	21	22 53	23	24
30	29 85	28 71	27 76	26	25
31	32	33 100 Eunice	34	35	36

22 South 35 East

6	5	4	3	2	1
7	8	9	10	11	12
18	17	16	15	14	13
19	20	21	22	23	24
30	29	28	27	26	25
31	32	33	34	35	36

22 South 36 East

6 195	5 212	4	3	2	1 137
7	8	9	10	11	12
18	17	16 170	15	14	13
19	20	21	22 22	23	24
30	29	28	27 160	26	25 118
31	32	33	34	35 181 187	36

22 South 37 East

6	5 85	4	3	2	1
7	8	9 90	10	11	12
18 190	17	16	15 125	14 65	13
19	20	21 65	22	23	24 60
30	29	28	27 53	26 65	25
31	32	33	34	35	36

88 New Mexico State Engineers Well Reports

105 USGS Well Reports

90 Geology and Groundwater Conditions in Southern Lea, County, NM (Report 6)

Geology and Groundwater Resources of Eddy County, NM (Report 3)

34 NMOCD - Groundwater Data

123 Tetra Tech installed temporary wells and field water level

143 NMOCD Groundwater map well location

New Mexico Office of the State Engineer

Water Column/Average Depth to Water

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

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

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

POD Number	Code	POD Sub-basin	County	Q 64	Q 16	Q 4	Sec	Twp	Rng	X	Y	Depth Well	Depth Water	Water Column
CP 00279 POD1		CP	LE	3	1	3	14	21S	36E	665053	3594579*	197		
CP 00280 POD1		CP	LE	2	4	2	18	21S	36E	660014	3595098*	300		
CP 00281 POD1		CP	LE	3	1	1	20	21S	36E	660236	3593696*	201		
CP 00446 POD1		CP	LE	1	4	4	13	21S	36E	667871	3594424*	185	148	37
CP 00446 POD2		CP	LE	1	4	4	13	21S	36E	667871	3594424*	200	151	49
CP 00472 POD1		CP	LE	4	4	2	23	21S	36E	666480	3593391*	200	140	60
CP 00472 POD2		CP	LE	4	4	2	23	21S	36E	666480	3593391*	200	140	60
CP 00472 POD3		CP	LE	4	3	2	23	21S	36E	666077	3593385*	200	140	60
CP 00472 POD4		CP	LE	4	3	2	23	21S	36E	666077	3593385*	200	140	60
CP 00472 POD5		CP	LE	2	3	2	23	21S	36E	666077	3593585*	200	143	57
CP 00472 POD6		CP	LE	2	2	3	23	21S	36E	665682	3593177*	200	128	72
CP 00472 POD7		CP	LE	1	4	4	23	21S	36E	666293	3592787*	205	165	40
CP 00481		CP	LE		2	4	25	21S	36E	668021	3591508*	207	148	59
CP 00505		CP	LE			2	16	21S	36E	662933	3595244*	215	195	20
CP 00539		CP	LE	4	3	2	30	21S	36E	659663	3591676*	270	240	30
CP 00664		CP	LE			2	23	21S	36E	666179	3593687*	185	150	35
CP 00670 POD1		CP	LE	1	4	4	05	21S	36E	661383	3597536*	5000	1128	3872
CP 00685 POD1		CP	LE	2	3	4	11	21S	36E	666038	3595997*	220		
CP 00690		CP	LE		4	4	03	21S	36E	664706	3597487*	340		
CP 00692		CP	LE	3	1	1	10	21S	36E	663405	3596961*	215	195	20
CP 00693 POD1		CP	LE	3	2	1	08	21S	36E	660587	3596919*	5000	1000	4000
CP 00694 POD1		CP	LE	1	3	1	04	21S	36E	661771	3598344*	5000	1218	3782
CP 00695 POD1		CP	LE	3	2	4	09	21S	36E	663015	3596153*	5000	1050	3950
CP 00696 POD1		CP	LE	1	1	3	09	21S	36E	661805	3596337*	5000	1200	3800
CP 00697 POD1		CP	LE				04	21S	36E	662488	3598048*	4900	1200	3700
CP 00734		CP	LE			1	10	21S	36E	663713	3596862*	215	200	15
CP 00760 POD1		CP	LE	1	4	4	35	21S	36E	666347	3589567*	5000		
CP 00882		CP	LE			2	23	21S	36E	666179	3593687*	195	142	53
CP 00941 POD1		CP	LE		3	2	22	21S	36E	664254	3593330	257		
CP 01448 POD1		CP	LE	4	4	4	36	21S	36E	668136	3589337	40		
CP 01485 POD1		CP	LE	4	4	3	17	21S	36E	660749	3594154	305	246	59
CP 01696 POD1		CP	LE	4	2	2	16	21S	36E	663284	3595313	210	173	37

Average Depth to Water: 407 feet

Minimum Depth: **128 feet**
Maximum Depth: **1218 feet**

Record Count: 32

PLSS Search:

Township: 21S Range: 36E

***UTM location was derived from PLSS - see Help**

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

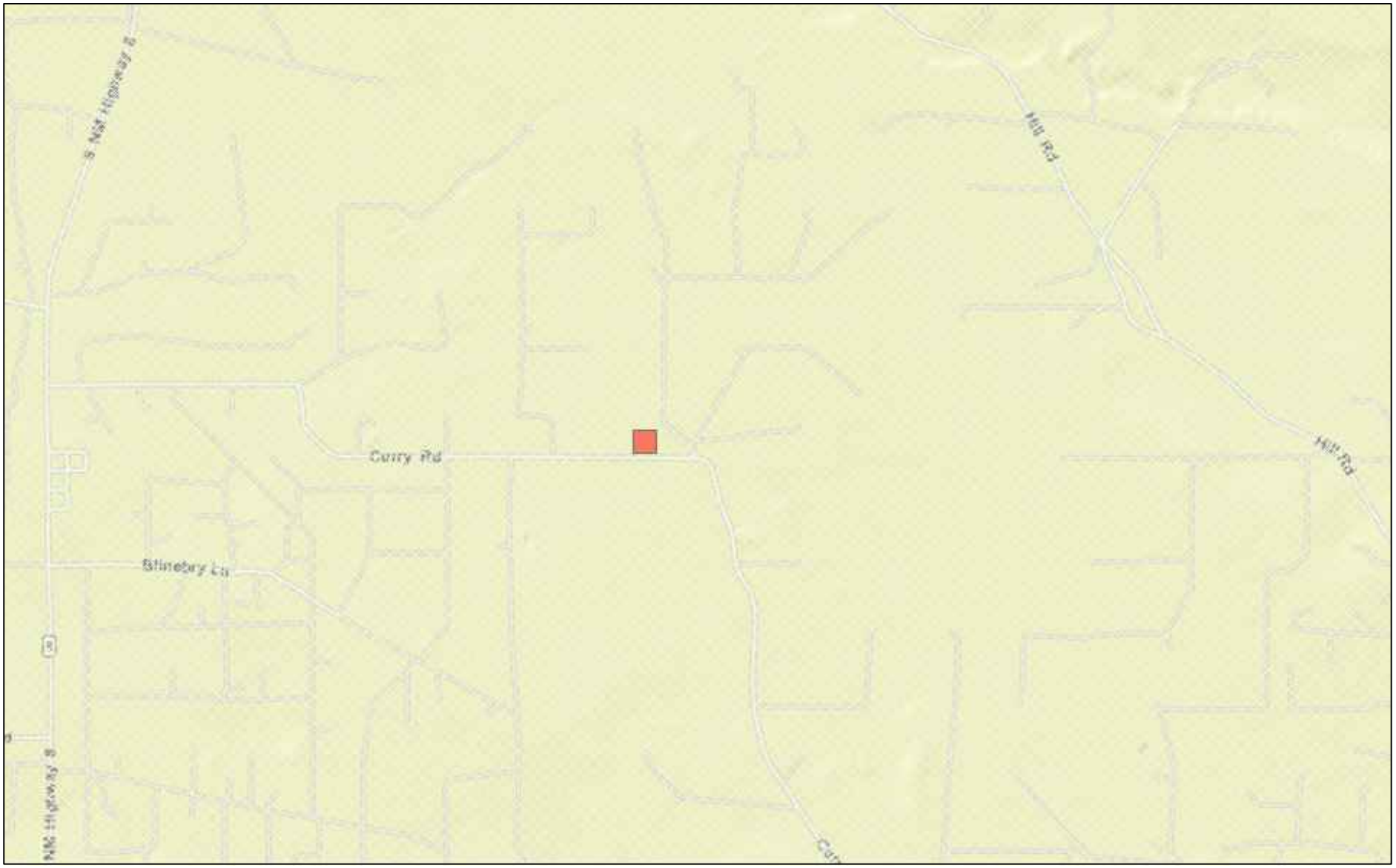
10/25/18 2:59 PM

WATER COLUMN/ AVERAGE DEPTH TO WATER

CoP State F-1 1RP-5050

Karst Potential Map

New Mexico NFHL Data



December 28, 2018

1:36,112

0 0.3 0.6 1.2 mi

0 0.5 1 2 km

FEMA
Sources: Esri, HERE, Garmin, USGS, Intermap, INCREMENT P, NRCan,

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This is a non-regulatory product for informational use only. Please consult your local floodplain administrator for further information.

October 2, 2018 COP State F-1 Hand Auger Sampling 212C-MD-01306

J. Tyler
Day # 1

Tuesday: We began hand augering of spill site at State F-1 northwest of Eunice, NM. Will be sampling 19 holes at and around site for analytical testing to a depth of 5 feet. Field testing will include salinity using the exstik and titrations.

General GPS: 32° 30' 3.92" N, 103° 13' 34.21" W
Weather: Partly cloudy, hot
On-site: Joe Tyler, Devin Dominguez, Matt

Sample ID	Depths	Time	ExStik	Titration	Sample GPS	Soil Descriptions	Notes
~~AH#1 (Bad)~~	~~(0-1')~~	~~1010~~	~~7.73 ppm~~	—	—	—	
~~AH#1~~	~~(1'-2')~~	~~1025~~	~~5.70 ppm~~	—	—	—	
AH-1	(0'-1')	1010	5.40 ppt	1600 ppm	32° 30' 4" N	Red/brown Sandy Silt	none
	(1'-2')	1025	3.20 ppt	1600 ppm	103° 13' 34" W	~~Sandy Silt~~	discoloration or odors present
	(2'-3')	1030	2.25 ppt	480 ppm			
	(3'-4')	1035	1.02 ppt	480 ppm			
	(4'-5')	1040	377 ppm	240 ppm			
AH-2	(0'-1')	1000	470 ppm	520 ppm	32° 30' 5" N,	Red/Brown Sandy Silt	No odors or discoloration present
	(1'-2')	1005	150 ppm	200 ppm	103° 13' 34" W		
	(2'-3')	1010	187 ppm	160 ppm			
	(3'-4')	1018	168 ppm	120 ppm			
	(4'-5')	1025	292 ppm	160 ppm			
AH-3	(0-1')	1140	34.5 ppm	400 ppm	32° 30' 6" N	Red/Brown Sandy Silt	No odor or discoloration
	(1'-2')	1150	53.1 ppm	220 ppm	103° 13' 34" W		
	(2'-3')	1205	49.5 ppm	360 ppm			
	(3'-4')	1215	57.8 ppm	360 ppm			
	(4'-5')	1220	71.1 ppm	240 ppm			
AH-4	(0-1')	1125	56. ppm	160 ppm	32° 30' 7" N	Red/Brown Sandy Silt	No odor or odor
	(1'-2')	1135	89.5 ppm	120 ppm	103° 13' 33" W		
	(2'-3')	1150	76.5 ppm	120 ppm			
	(3'-4')	1200	64 ppm	120 ppm			
	(4'-5')	1210	72.5 ppm	160 ppm			
AH-5	(0-1')	1405	97 ppm	80 ppm	32° 30' 7" N	R/B Sandy Silt	No odor or color
	(1'-2')	1415	132 ppm	120 ppm	103° 13' 33" W		
	(2'-3')	1425	86.5 ppm	120 ppm			
	(3'-4')	1435	78.9 ppm	80 ppm			
	(4'-5')	1445	68.2 ppm	80 ppm			

Rite in the Rain

212C-MD-01506

October 2, 2018 COP State F1 Hand Auger Sampling

Sample ID	Depth:	Time	Exstick	Titration	Sample: GPS	Soil description	Notes
AH-6							
	(0-1)	1415	76.4 ppm	80 ppm	32°30'8" N,	R/B Sandy Silt	No odor
	(1-2)	1422	70.7 ppm	80 ppm	103°13'32" W		or odor
	(2'-3')	1430	86.7 ppm	120 ppm			
	(3'-4')	1440	48.7 ppm	80 ppm			
	(4'-5')	1445	59.1 ppm	80 ppm			
AH-7							
	(0-1)	1540	538 ppm	320 ppm	32° 30' 7" N,	Tan Silty Sand	No odor or
	(1-2)	1545	208 ppm	200 ppm	103° 18' 33" W	R/Brown Sandy Silt	discoloration
	(2-3)	1550	98.1 ppm	480 ppm			
	(3-4)	1605	88.2 ppm	200 ppm			
	(4-5)	1610	162 ppm	240 ppm			
AH-8							
	(0-1)	1540	77.7 ppm	120 ppm	32°30'8" N	Tan Silty Sand	No odor or
	(1-2)	1545	56.3 ppm	120 ppm	103°13'32" W	R/Brown Sandy Silt	discoloration
	(2-3)	1550	99 ppm	120 ppm			
	(3-4)	1553	111 ppm	120 ppm			
	(4-5)	1556	157 ppm	280 ppm			
~~AH-9~~*							
	· The sample (AH-8) was last taken today.						
~~AH-10~~*							
~~AH-11~~*							

October 3, 2018 COP State F-1 Hand Augering 22C-MD-01306

J. Tyler
Day # 2

Wednesday: Resumed hand augering with Devin + Matt.

GPS: 32° 30' 4" N, 103° 13' 24" W
Weather: Clear, hot w/ wind @ 10-15 mph south

Sample ID	Depth	Time	ExStik	Titration	Sample GPS	Soil Descriptions	Notes
AH-9	0'-1'	0851	44.6 ppm	120 ppm	32° 30' 8" N	B/Brown ~~Sand~~/Silty Sand	
	1'-2'	0856	126 ppm	120 ppm	103° 13' 31" W	~~Brown/Red~~	no odor
	2'-3'	0901	67.7 ppm	120 ppm		~~Silty Sand~~	or discolor
	3'-4'	0906	51.2 ppm	160 ppm			
	4'-5'	0909	42.5 ppm	120 ppm			
AH-10	0'-1'	0850	33.2 ppm	80 ppm	32° 30' 3" N,	Red Silty Sand	No odor or
	1'-2'	0900	46.8 ppm	80 ppm	103° 13' 56" W		discoloration
	2'-3'	0905	66.3 ppm	120 ppm		B/Red Sandy Silt	
	3'-4'	0915	95 ppm	160 ppm			
	4'-5'	0925	45 ppm	80 ppm			
AH-11	0'-1'	0945	28.8 ppm	80 ppm	32° 30' 6" N	Brown/Red Silty Sand	No odor
	1'-2'	0950	36.8 ppm	120 ppm	103° 13' 30" W	~~Silty Sand~~	or discolor
	2'-3'	0955	49.9 ppm	120 ppm			
	3'-4'	0958	34.5 ppm	120 ppm			
	4'-5'	1002	45.7 ppm	120 ppm			
AH-12	0'-1'	0945	57.7 ppm	120 ppm	32° 30' 3" N,	Brown Silty Sand	No odor or
	1'-2'	0950	78.4 ppm	160 ppm	103° 13' 56" W	Red Sandy Silt	discoloration
	2'-3'	1000	53 ppm	120 ppm			
	3'-4'	1010	59.6 ppm	160 ppm			
	4'-5'	1015	73.6 ppm	200 ppm			
AH-13	0'-1'	1115	64.8 ppm	160 ppm	32° 30' 6" N,	B/Red Silty Sand	No odor or
	1'-2'	1120	86.5 ppm	200 ppm	103° 13' 28" W		discoloration
	2'-3'	1128	110 ppm	200 ppm			
	3'-4'	1135	95 ppm	120 ppm			
	4'-5'	1142	104 ppm	120 ppm			
AH-14	0'-1'	1117	46.9 ppm	80 ppm	32° 30' 5" N	Brown Silty Sand	no odor
	1'-2'	1123	48 ppm	80 ppm	103° 13' 21" W	Red Sandy Silt	or discolor
	2'-3'	1126	50.5 ppm	80 ppm			
	3'-4'	1129	60 ppm	120 ppm			
	4'-5'	1133	71.1 ppm	120 ppm			

Rite in the Rain

October 3, 2018 COP State F-1 Hand Augering 212C-MD-01306

J. Tyler
Day #2

Wednesday continued: same day.

Sample ID	Depth	Time	ExStik	Titration	Sample GPS	Soil Description	Notes
AH-15	0'-1'	1200	58.8 ppm	80 ppm	32°30'4"N,	Brown/Red Sandy	no odor
	1'-2'	1203	52.8 ppm	80 ppm	103°13'26"W	Silt	or discolor
	2'-3'	1206	89.1 ppm	120 ppm	↓	↓	Refusal
	~~3'-4'~~	REFUSAL: made it 3 ft due to Rock Bedding					
	~~4'-5'~~						
AH-16	0'-1'	1200	65.9 ppm	80 ppm	32°30'5"N,	Brown/Red Sandy Silt	No odor or
	1'-2'	1205	50.8 ppm	80 ppm	103°13'26"W	↓	discoloration
	2'-3'	1209	92.2 ppm	120 ppm	↓	↓	↓
	~~3'-4'~~	Refusal met at the depth of 3 feet due to rock bedding					
	~~4'-5'~~						
AH-17	0'-1'	1307	82.6 ppm	120 ppm	32°30'4"N,	Brown/Red Sandy Silt	No odor or
	1'-2'	1311	63.1 ppm	80 ppm	103°13'25"W	↓	discoloration
	2'-3'	1314	59.8 ppm	80 ppm	↓	↓	↓
	3'-4'	1318	67.4 ppm	80 ppm		Brown Sandy Silt w/rock	
	4'-5'	Refusal met at the depth of 4 feet due to rock bedding					
AH-18	0'-1'	1340	396 ppm	200 ppm	32°30'4"N,	Tan silty Sand w/ gravel	
	1'-2'	1345	202 ppm	160 ppm	103°13'25"W	↓	
	2'-3'	Refusal met at the depth of 2 ft due to rock bedding					
	3'-4'						
	4'-5'						
AH-19	0'-1'	1342	30.8 ppm	40 ppm		Brown/Red Sandy Silt	No odor
	1'-2'	1345	72.4 ppm	80 ppm	32°30'4"N	↓	or discolor
	2'-3'	1348	83.4 ppm	40 ppm	103°13'25"W	↓	
	3'-4'	Refusal met at the depth of 3 ft due to Rock Bedding					
	4'-5'						

Appendix C

Pace Analytical®
National Center for Testing & Innovation

ANALYTICAL REPORT

October 12, 2018

ConocoPhillips - Tetra Tech

Sample Delivery Group:	L1031723
Samples Received:	10/04/2018
Project Number:	212C-MD-01306
Description:	COP State F-1
Site:	LEA COUNTY, NEW MEXICO
Report To:	Kayla Taylor 4001 N. Big Spring St., Ste. 401 Midland, TX 79705

Entire Report Reviewed By:

T. Alan Harvill
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 National is performed per guidance provided in laboratory standard operating procedures: 060302, 060303, and 060304.

TABLE OF CONTENTS

ONE LAB. NATIONWIDE.

SAMPLE SUMMARY

ONE LAB. NATIONWIDE.

AH-1 (0-1') L1031723-01 Solid

Collected by	Collected date/time	Received date/time
	10/02/18 10:10	10/04/18 08:45

Method	Batch	Dilution	Preparation date/time	Analysis date/time	Analyst
Total Solids by Method 2540 G-2011	WG1178063	1	10/09/18 12:26	10/09/18 12:32	KDW
Wet Chemistry by Method 300.0	WG1176311	10	10/05/18 12:48	10/09/18 12:47	ELN
Volatile Organic Compounds (GC) by Method 8015D/GRO	WG1177794	1	10/04/18 23:14	10/09/18 00:15	BMB
Volatile Organic Compounds (GC/MS) by Method 8260B	WG1178428	1	10/04/18 23:14	10/11/18 05:16	DWR
Semi-Volatile Organic Compounds (GC) by Method 8015	WG1179395	1	10/11/18 06:17	10/11/18 13:59	AAT

AH-1 (1-2') L1031723-02 Solid

Collected by	Collected date/time	Received date/time
	10/02/18 10:25	10/04/18 08:45

Method	Batch	Dilution	Preparation date/time	Analysis date/time	Analyst
Total Solids by Method 2540 G-2011	WG1178063	1	10/09/18 12:26	10/09/18 12:32	KDW
Wet Chemistry by Method 300.0	WG1176311	10	10/05/18 12:48	10/09/18 12:55	ELN
Volatile Organic Compounds (GC) by Method 8015D/GRO	WG1177794	1	10/04/18 23:14	10/09/18 00:36	BMB
Volatile Organic Compounds (GC/MS) by Method 8260B	WG1178428	1	10/04/18 23:14	10/11/18 05:34	DWR
Semi-Volatile Organic Compounds (GC) by Method 8015	WG1179395	1	10/11/18 06:17	10/11/18 14:11	AAT

AH-2 (0-1') L1031723-03 Solid

Collected by	Collected date/time	Received date/time
	10/02/18 10:00	10/04/18 08:45

Method	Batch	Dilution	Preparation date/time	Analysis date/time	Analyst
Total Solids by Method 2540 G-2011	WG1178063	1	10/09/18 12:26	10/09/18 12:32	KDW
Wet Chemistry by Method 300.0	WG1176311	1	10/05/18 12:48	10/09/18 13:13	ELN
Volatile Organic Compounds (GC) by Method 8015D/GRO	WG1177794	1	10/04/18 23:14	10/09/18 00:57	BMB
Volatile Organic Compounds (GC/MS) by Method 8260B	WG1178428	1	10/04/18 23:14	10/11/18 05:53	DWR
Semi-Volatile Organic Compounds (GC) by Method 8015	WG1179395	1	10/11/18 06:17	10/11/18 14:36	AAT

AH-2 (1-2') L1031723-04 Solid

Collected by	Collected date/time	Received date/time
	10/02/18 10:05	10/04/18 08:45

Method	Batch	Dilution	Preparation date/time	Analysis date/time	Analyst
Total Solids by Method 2540 G-2011	WG1178063	1	10/09/18 12:26	10/09/18 12:32	KDW
Wet Chemistry by Method 300.0	WG1176311	1	10/05/18 12:48	10/09/18 13:22	ELN
Volatile Organic Compounds (GC) by Method 8015D/GRO	WG1177794	1	10/04/18 23:14	10/09/18 01:18	BMB
Volatile Organic Compounds (GC/MS) by Method 8260B	WG1178428	1	10/04/18 23:14	10/11/18 06:11	DWR
Semi-Volatile Organic Compounds (GC) by Method 8015	WG1179395	1	10/11/18 06:17	10/11/18 14:24	AAT

AH-3 (0-1') L1031723-05 Solid

Collected by	Collected date/time	Received date/time
	10/02/18 11:40	10/04/18 08:45

Method	Batch	Dilution	Preparation date/time	Analysis date/time	Analyst
Total Solids by Method 2540 G-2011	WG1178063	1	10/09/18 12:26	10/09/18 12:32	KDW
Wet Chemistry by Method 300.0	WG1176311	1	10/05/18 12:48	10/09/18 13:30	ELN
Volatile Organic Compounds (GC) by Method 8015D/GRO	WG1177794	1	10/04/18 23:14	10/09/18 01:39	BMB
Volatile Organic Compounds (GC/MS) by Method 8260B	WG1178428	1	10/04/18 23:14	10/11/18 06:30	DWR
Semi-Volatile Organic Compounds (GC) by Method 8015	WG1177743	1	10/10/18 12:01	10/10/18 22:20	MTJ

SAMPLE SUMMARY

ONE LAB. NATIONWIDE.

AH-3 (1-2') L1031723-06 Solid

Collected by	Collected date/time	Received date/time
	10/02/18 11:50	10/04/18 08:45

Method	Batch	Dilution	Preparation date/time	Analysis date/time	Analyst
Total Solids by Method 2540 G-2011	WG1178063	1	10/09/18 12:26	10/09/18 12:32	KDW
Wet Chemistry by Method 300.0	WG1176311	1	10/05/18 12:48	10/09/18 13:39	ELN
Volatile Organic Compounds (GC) by Method 8015D/GRO	WG1177794	1	10/04/18 23:14	10/09/18 01:59	BMB
Volatile Organic Compounds (GC/MS) by Method 8260B	WG1178428	1	10/04/18 23:14	10/11/18 06:48	DWR
Semi-Volatile Organic Compounds (GC) by Method 8015	WG1177743	1	10/10/18 12:01	10/10/18 20:18	MTJ

AH-4 (0-1') L1031723-07 Solid

Collected by	Collected date/time	Received date/time
	10/02/18 11:25	10/04/18 08:45

Method	Batch	Dilution	Preparation date/time	Analysis date/time	Analyst
Total Solids by Method 2540 G-2011	WG1178063	1	10/09/18 12:26	10/09/18 12:32	KDW
Wet Chemistry by Method 300.0	WG1176311	1	10/05/18 12:48	10/09/18 14:05	ELN
Volatile Organic Compounds (GC) by Method 8015D/GRO	WG1177794	1	10/04/18 23:14	10/09/18 02:20	BMB
Volatile Organic Compounds (GC/MS) by Method 8260B	WG1178428	1	10/04/18 23:14	10/11/18 07:07	DWR
Semi-Volatile Organic Compounds (GC) by Method 8015	WG1177743	1	10/10/18 12:01	10/10/18 20:32	MTJ

AH-4 (1-2') L1031723-08 Solid

Collected by	Collected date/time	Received date/time
	10/02/18 11:35	10/04/18 08:45

Method	Batch	Dilution	Preparation date/time	Analysis date/time	Analyst
Total Solids by Method 2540 G-2011	WG1178064	1	10/09/18 13:10	10/09/18 13:17	KDW
Wet Chemistry by Method 300.0	WG1176311	1	10/05/18 12:48	10/09/18 14:14	ELN
Volatile Organic Compounds (GC) by Method 8015D/GRO	WG1177794	1	10/04/18 23:14	10/09/18 02:41	BMB
Volatile Organic Compounds (GC/MS) by Method 8260B	WG1178428	1	10/04/18 23:14	10/11/18 07:25	DWR
Semi-Volatile Organic Compounds (GC) by Method 8015	WG1177743	1	10/10/18 12:01	10/10/18 18:59	MTJ

AH-5 (0-1') L1031723-09 Solid

Collected by	Collected date/time	Received date/time
	10/02/18 14:05	10/04/18 08:45

Method	Batch	Dilution	Preparation date/time	Analysis date/time	Analyst
Total Solids by Method 2540 G-2011	WG1178064	1	10/09/18 13:10	10/09/18 13:17	KDW
Wet Chemistry by Method 300.0	WG1176311	1	10/05/18 12:48	10/09/18 14:23	ELN
Volatile Organic Compounds (GC) by Method 8015D/GRO	WG1177794	1	10/04/18 23:14	10/09/18 03:02	BMB
Volatile Organic Compounds (GC/MS) by Method 8260B	WG1178428	1	10/04/18 23:14	10/11/18 07:43	DWR
Semi-Volatile Organic Compounds (GC) by Method 8015	WG1177743	1	10/10/18 12:01	10/10/18 21:26	MTJ

AH-5 (1-2') L1031723-10 Solid

Collected by	Collected date/time	Received date/time
	10/02/18 14:15	10/04/18 08:45

Method	Batch	Dilution	Preparation date/time	Analysis date/time	Analyst
Total Solids by Method 2540 G-2011	WG1178064	1	10/09/18 13:10	10/09/18 13:17	KDW
Wet Chemistry by Method 300.0	WG1176311	1	10/05/18 12:48	10/09/18 14:49	ELN
Volatile Organic Compounds (GC) by Method 8015D/GRO	WG1177794	1	10/04/18 23:14	10/09/18 03:23	BMB
Volatile Organic Compounds (GC/MS) by Method 8260B	WG1178428	1	10/04/18 23:14	10/11/18 08:02	DWR
Semi-Volatile Organic Compounds (GC) by Method 8015	WG1177743	1	10/10/18 12:01	10/10/18 21:39	MTJ

SAMPLE SUMMARY

ONE LAB. NATIONWIDE.

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

AH-6 (0-1') L1031723-11 Solid

Collected by	Collected date/time	Received date/time
	10/02/18 14:15	10/04/18 08:45

Method	Batch	Dilution	Preparation date/time	Analysis date/time	Analyst
Total Solids by Method 2540 G-2011	WG1178064	1	10/09/18 13:10	10/09/18 13:17	KDW
Wet Chemistry by Method 300.0	WG1176311	1	10/05/18 12:48	10/09/18 14:58	ELN
Volatile Organic Compounds (GC) by Method 8015D/GRO	WG1177794	1	10/05/18 07:49	10/09/18 03:44	BMB
Volatile Organic Compounds (GC/MS) by Method 8260B	WG1178428	1	10/05/18 07:49	10/11/18 08:20	DWR
Semi-Volatile Organic Compounds (GC) by Method 8015	WG1177743	1	10/10/18 12:01	10/10/18 21:53	MTJ

AH-6 (1-2') L1031723-12 Solid

Collected by	Collected date/time	Received date/time
	10/02/18 14:22	10/04/18 08:45

Method	Batch	Dilution	Preparation date/time	Analysis date/time	Analyst
Total Solids by Method 2540 G-2011	WG1178064	1	10/09/18 13:10	10/09/18 13:17	KDW
Wet Chemistry by Method 300.0	WG1176311	1	10/05/18 12:48	10/09/18 15:07	ELN
Volatile Organic Compounds (GC) by Method 8015D/GRO	WG1177794	1	10/05/18 07:49	10/09/18 04:04	BMB
Volatile Organic Compounds (GC/MS) by Method 8260B	WG1178428	1	10/05/18 07:49	10/11/18 08:38	DWR
Semi-Volatile Organic Compounds (GC) by Method 8015	WG1177743	1	10/10/18 12:01	10/10/18 17:37	MTJ

AH-7 (0-1') L1031723-13 Solid

Collected by	Collected date/time	Received date/time
	10/02/18 15:40	10/04/18 08:45

Method	Batch	Dilution	Preparation date/time	Analysis date/time	Analyst
Total Solids by Method 2540 G-2011	WG1178064	1	10/09/18 13:10	10/09/18 13:17	KDW
Wet Chemistry by Method 300.0	WG1176311	1	10/05/18 12:48	10/09/18 15:16	ELN
Volatile Organic Compounds (GC) by Method 8015D/GRO	WG1177794	1	10/05/18 07:49	10/09/18 04:25	BMB
Volatile Organic Compounds (GC/MS) by Method 8260B	WG1178428	1	10/05/18 07:49	10/11/18 08:57	DWR
Semi-Volatile Organic Compounds (GC) by Method 8015	WG1177743	1	10/10/18 12:01	10/10/18 20:45	MTJ

AH-7 (1-2') L1031723-14 Solid

Collected by	Collected date/time	Received date/time
	10/02/18 15:45	10/04/18 08:45

Method	Batch	Dilution	Preparation date/time	Analysis date/time	Analyst
Total Solids by Method 2540 G-2011	WG1178064	1	10/09/18 13:10	10/09/18 13:17	KDW
Wet Chemistry by Method 300.0	WG1176311	1	10/05/18 12:48	10/09/18 15:24	ELN
Volatile Organic Compounds (GC) by Method 8015D/GRO	WG1177794	1	10/05/18 07:49	10/09/18 04:46	BMB
Volatile Organic Compounds (GC/MS) by Method 8260B	WG1178428	1	10/05/18 07:49	10/11/18 09:15	DWR
Semi-Volatile Organic Compounds (GC) by Method 8015	WG1177743	1	10/10/18 12:01	10/10/18 18:18	MTJ

AH-7 (2-3') L1031723-15 Solid

Collected by	Collected date/time	Received date/time
	10/02/18 15:50	10/04/18 08:45

Method	Batch	Dilution	Preparation date/time	Analysis date/time	Analyst
Total Solids by Method 2540 G-2011	WG1178064	1	10/09/18 13:10	10/09/18 13:17	KDW
Wet Chemistry by Method 300.0	WG1176311	1	10/05/18 12:48	10/09/18 15:51	ELN
Volatile Organic Compounds (GC) by Method 8015D/GRO	WG1177794	1	10/05/18 07:49	10/09/18 05:07	BMB
Volatile Organic Compounds (GC/MS) by Method 8260B	WG1178428	1	10/05/18 07:49	10/11/18 09:34	DWR
Semi-Volatile Organic Compounds (GC) by Method 8015	WG1177743	1	10/10/18 12:01	10/10/18 18:32	MTJ

SAMPLE SUMMARY

ONE LAB. NATIONWIDE.

AH-7 (3-4') L1031723-16 Solid

Collected by	Collected date/time	Received date/time
	10/02/18 16:05	10/04/18 08:45

Method	Batch	Dilution	Preparation date/time	Analysis date/time	Analyst
Total Solids by Method 2540 G-2011	WG1178064	1	10/09/18 13:10	10/09/18 13:17	KDW
Wet Chemistry by Method 300.0	WG1176311	1	10/05/18 12:48	10/09/18 15:59	ELN
Volatile Organic Compounds (GC) by Method 8015D/GRO	WG1177794	1	10/05/18 07:49	10/09/18 05:28	BMB
Volatile Organic Compounds (GC/MS) by Method 8260B	WG1178428	1	10/05/18 07:49	10/11/18 09:52	DWR
Semi-Volatile Organic Compounds (GC) by Method 8015	WG1177743	1	10/10/18 12:01	10/10/18 18:45	MTJ

AH-7 (4-5') L1031723-17 Solid

Collected by	Collected date/time	Received date/time
	10/02/18 16:10	10/04/18 08:45

Method	Batch	Dilution	Preparation date/time	Analysis date/time	Analyst
Total Solids by Method 2540 G-2011	WG1178064	1	10/09/18 13:10	10/09/18 13:17	KDW
Wet Chemistry by Method 300.0	WG1176311	1	10/05/18 12:48	10/09/18 16:08	ELN
Volatile Organic Compounds (GC) by Method 8015D/GRO	WG1177794	1	10/05/18 07:49	10/09/18 05:48	BMB
Volatile Organic Compounds (GC/MS) by Method 8260B	WG1178428	1	10/05/18 07:49	10/11/18 10:11	DWR
Semi-Volatile Organic Compounds (GC) by Method 8015	WG1177743	1	10/10/18 12:01	10/10/18 19:12	MTJ

AH-8 (0-1') L1031723-18 Solid

Collected by	Collected date/time	Received date/time
	10/02/18 15:40	10/04/18 08:45

Method	Batch	Dilution	Preparation date/time	Analysis date/time	Analyst
Total Solids by Method 2540 G-2011	WG1178075	1	10/09/18 15:15	10/09/18 15:23	KDW
Wet Chemistry by Method 300.0	WG1176311	1	10/05/18 12:48	10/09/18 16:17	ELN
Volatile Organic Compounds (GC) by Method 8015D/GRO	WG1177794	1	10/05/18 07:49	10/09/18 06:09	BMB
Volatile Organic Compounds (GC/MS) by Method 8260B	WG1178428	1	10/05/18 07:49	10/11/18 10:29	DWR
Semi-Volatile Organic Compounds (GC) by Method 8015	WG1177743	1	10/10/18 12:01	10/10/18 22:06	MTJ

AH-8 (1-2') L1031723-19 Solid

Collected by	Collected date/time	Received date/time
	10/02/18 15:45	10/04/18 08:45

Method	Batch	Dilution	Preparation date/time	Analysis date/time	Analyst
Total Solids by Method 2540 G-2011	WG1178075	1	10/09/18 15:15	10/09/18 15:23	KDW
Wet Chemistry by Method 300.0	WG1176311	1	10/05/18 12:48	10/09/18 16:26	ELN
Volatile Organic Compounds (GC) by Method 8015D/GRO	WG1177794	1	10/05/18 07:49	10/09/18 06:30	BMB
Volatile Organic Compounds (GC/MS) by Method 8260B	WG1178428	1	10/05/18 07:49	10/11/18 10:47	DWR
Semi-Volatile Organic Compounds (GC) by Method 8015	WG1177743	1	10/10/18 12:01	10/10/18 21:12	MTJ

AH-8 (2-3') L1031723-20 Solid

Collected by	Collected date/time	Received date/time
	10/02/18 15:50	10/04/18 08:45

Method	Batch	Dilution	Preparation date/time	Analysis date/time	Analyst
Total Solids by Method 2540 G-2011	WG1178075	1	10/09/18 15:15	10/09/18 15:23	KDW
Wet Chemistry by Method 300.0	WG1176311	1	10/05/18 12:48	10/09/18 16:35	ELN
Volatile Organic Compounds (GC) by Method 8015D/GRO	WG1177794	1	10/05/18 07:49	10/09/18 06:51	BMB
Volatile Organic Compounds (GC/MS) by Method 8260B	WG1178428	1	10/05/18 07:49	10/11/18 11:06	DWR
Semi-Volatile Organic Compounds (GC) by Method 8015	WG1177743	1	10/10/18 12:01	10/10/18 20:59	MTJ

SAMPLE SUMMARY

ONE LAB. NATIONWIDE.

AH-8 (3-4') L1031723-21 Solid

Collected by	Collected date/time	Received date/time
	10/02/18 15:53	10/04/18 08:45

Method	Batch	Dilution	Preparation date/time	Analysis date/time	Analyst
Total Solids by Method 2540 G-2011	WG1178075	1	10/09/18 15:15	10/09/18 15:23	KDW
Wet Chemistry by Method 300.0	WG1177210	1	10/07/18 16:10	10/09/18 00:43	ELN
Volatile Organic Compounds (GC) by Method 8015D/GRO	WG1177209	1	10/05/18 07:49	10/08/18 05:34	DWR
Volatile Organic Compounds (GC/MS) by Method 8260B	WG1178471	1	10/05/18 07:49	10/11/18 00:21	DWR
Semi-Volatile Organic Compounds (GC) by Method 8015	WG1177743	1	10/10/18 12:01	10/10/18 19:26	MTJ

AH-8 (4-5') L1031723-22 Solid

Collected by	Collected date/time	Received date/time
	10/02/18 15:56	10/04/18 08:45

Method	Batch	Dilution	Preparation date/time	Analysis date/time	Analyst
Total Solids by Method 2540 G-2011	WG1178075	1	10/09/18 15:15	10/09/18 15:23	KDW
Wet Chemistry by Method 300.0	WG1177210	1	10/07/18 16:10	10/09/18 00:52	ELN
Volatile Organic Compounds (GC) by Method 8015D/GRO	WG1177209	1	10/05/18 07:49	10/08/18 05:54	DWR
Volatile Organic Compounds (GC/MS) by Method 8260B	WG1178471	1	10/05/18 07:49	10/11/18 00:40	DWR
Semi-Volatile Organic Compounds (GC) by Method 8015	WG1177743	1	10/10/18 12:01	10/10/18 20:05	MTJ

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.

T. Alan Harvill
Project Manager

AH-1 (0-1')
Collected date/time: 10/02/18 10:10

SAMPLE RESULTS - 01

L1031723

ONE LAB. NATIONWIDE.

Total Solids by Method 2540 G-2011

Analyte	Result %	Qualifier	Dilution	Analysis date / time	Batch
Total Solids	96.7		1	10/09/2018 12:32	WG1178063

Wet Chemistry by Method 300.0

Analyte	Result (dry) mg/kg	Qualifier	SDL (dry) mg/kg	Unadj. MQL mg/kg	MQL (dry) mg/kg	Dilution	Analysis date / time	Batch
Chloride	2980		8.22	10.0	103	10	10/09/2018 12:47	WG1176311

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

Analyte	Result (dry) mg/kg	Qualifier	SDL (dry) mg/kg	Unadj. MQL mg/kg	MQL (dry) mg/kg	Dilution	Analysis date / time	Batch
TPH (GC/FID) Low Fraction	0.0295	J	0.0224	0.100	0.103	1	10/09/2018 00:15	WG1177794
(S) a,a,a-Trifluorotoluene(FID)	*103*				*77.0-120*		*10/09/2018 00:15*	WG1177794

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

Analyte	Result (dry) mg/kg	Qualifier	SDL (dry) mg/kg	Unadj. MQL mg/kg	MQL (dry) mg/kg	Dilution	Analysis date / time	Batch
Benzene	U		0.000414	0.00100	0.00103	1	10/11/2018 05:16	WG1178428
Toluene	U		0.00129	0.00500	0.00517	1	10/11/2018 05:16	WG1178428
Ethylbenzene	U		0.000548	0.00250	0.00259	1	10/11/2018 05:16	WG1178428
Total Xylenes	U		0.00494	0.00650	0.00672	1	10/11/2018 05:16	WG1178428
(S) Toluene-d8	*104*				*75.0-131*		*10/11/2018 05:16*	WG1178428
(S) Dibromofluoromethane	*94.0*				*65.0-129*		*10/11/2018 05:16*	WG1178428
(S) a,a,a-Trifluorotoluene	*102*				*80.0-120*		*10/11/2018 05:16*	WG1178428
(S) 4-Bromofluorobenzene	*89.1*				*67.0-138*		*10/11/2018 05:16*	WG1178428

Semi-Volatile Organic Compounds (GC) by Method 8015

Analyte	Result (dry) mg/kg	Qualifier	SDL (dry) mg/kg	Unadj. MQL mg/kg	MQL (dry) mg/kg	Dilution	Analysis date / time	Batch
C10-C28 Diesel Range	U		1.67	4.00	4.14	1	10/11/2018 13:59	WG1179395
C28-C40 Oil Range	0.534	J	0.283	4.00	4.14	1	10/11/2018 13:59	WG1179395
(S) o-Terphenyl	*76.6*				*18.0-148*		*10/11/2018 13:59*	WG1179395

AH-1 (1-2')
Collected date/time: 10/02/18 10:25

SAMPLE RESULTS - 02

L1031723

ONE LAB. NATIONWIDE.

Total Solids by Method 2540 G-2011

Analyte	Result %	Qualifier	Dilution	Analysis date / time	Batch
Total Solids	90.7		1	10/09/2018 12:32	WG1178063

Wet Chemistry by Method 300.0

Analyte	Result (dry) mg/kg	Qualifier	SDL (dry) mg/kg	Unadj. MQL mg/kg	MQL (dry) mg/kg	Dilution	Analysis date / time	Batch
Chloride	2870		8.76	10.0	110	10	10/09/2018 12:55	WG1176311

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

Analyte	Result (dry) mg/kg	Qualifier	SDL (dry) mg/kg	Unadj. MQL mg/kg	MQL (dry) mg/kg	Dilution	Analysis date / time	Batch
TPH (GC/FID) Low Fraction	0.0264	J	0.0239	0.100	0.110	1	10/09/2018 00:36	WG1177794
(S) a,a,a-Trifluorotoluene(FID)	*104*				*77.0-120*		*10/09/2018 00:36*	WG1177794

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

Analyte	Result (dry) mg/kg	Qualifier	SDL (dry) mg/kg	Unadj. MQL mg/kg	MQL (dry) mg/kg	Dilution	Analysis date / time	Batch
Benzene	U		0.000441	0.00100	0.00110	1	10/11/2018 05:34	WG1178428
Toluene	U		0.00138	0.00500	0.00551	1	10/11/2018 05:34	WG1178428
Ethylbenzene	U		0.000584	0.00250	0.00276	1	10/11/2018 05:34	WG1178428
Total Xylenes	U		0.00527	0.00650	0.00716	1	10/11/2018 05:34	WG1178428
(S) Toluene-d8	*101*				*75.0-131*		*10/11/2018 05:34*	WG1178428
(S) Dibromofluoromethane	*92.6*				*65.0-129*		*10/11/2018 05:34*	WG1178428
(S) a,a,a-Trifluorotoluene	*102*				*80.0-120*		*10/11/2018 05:34*	WG1178428
(S) 4-Bromofluorobenzene	*89.0*				*67.0-138*		*10/11/2018 05:34*	WG1178428

Semi-Volatile Organic Compounds (GC) by Method 8015

Analyte	Result (dry) mg/kg	Qualifier	SDL (dry) mg/kg	Unadj. MQL mg/kg	MQL (dry) mg/kg	Dilution	Analysis date / time	Batch
C10-C28 Diesel Range	U		1.77	4.00	4.41	1	10/11/2018 14:11	WG1179395
C28-C40 Oil Range	1.60	J	0.302	4.00	4.41	1	10/11/2018 14:11	WG1179395
(S) o-Terphenyl	*74.2*				*18.0-148*		*10/11/2018 14:11*	WG1179395

AH-2 (0-1')
Collected date/time: 10/02/18 10:00

SAMPLE RESULTS - 03

L1031723

ONE LAB. NATIONWIDE.

Total Solids by Method 2540 G-2011

Analyte	Result %	Qualifier	Dilution	Analysis date / time	Batch
Total Solids	84.9		1	10/09/2018 12:32	WG1178063

Wet Chemistry by Method 300.0

Analyte	Result (dry) mg/kg	Qualifier	SDL (dry) mg/kg	Unadj. MQL mg/kg	MQL (dry) mg/kg	Dilution	Analysis date / time	Batch
Chloride	463		0.937	10.0	11.8	1	10/09/2018 13:13	WG1176311

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

Analyte	Result (dry) mg/kg	Qualifier	SDL (dry) mg/kg	Unadj. MQL mg/kg	MQL (dry) mg/kg	Dilution	Analysis date / time	Batch
TPH (GC/FID) Low Fraction	0.0428	J	0.0256	0.100	0.118	1	10/09/2018 00:57	WG1177794
(S) a,a,a-Trifluorotoluene(FID)	*103*				*77.0-120*		*10/09/2018 00:57*	WG1177794

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

Analyte	Result (dry) mg/kg	Qualifier	SDL (dry) mg/kg	Unadj. MQL mg/kg	MQL (dry) mg/kg	Dilution	Analysis date / time	Batch
Benzene	U		0.000471	0.00100	0.00118	1	10/11/2018 05:53	WG1178428
Toluene	U		0.00147	0.00500	0.00589	1	10/11/2018 05:53	WG1178428
Ethylbenzene	U		0.000625	0.00250	0.00295	1	10/11/2018 05:53	WG1178428
Total Xylenes	U		0.00563	0.00650	0.00766	1	10/11/2018 05:53	WG1178428
(S) Toluene-d8	*101*				*75.0-131*		*10/11/2018 05:53*	WG1178428
(S) Dibromofluoromethane	*95.3*				*65.0-129*		*10/11/2018 05:53*	WG1178428
(S) a,a,a-Trifluorotoluene	*99.5*				*80.0-120*		*10/11/2018 05:53*	WG1178428
(S) 4-Bromofluorobenzene	*90.0*				*67.0-138*		*10/11/2018 05:53*	WG1178428

Semi-Volatile Organic Compounds (GC) by Method 8015

Analyte	Result (dry) mg/kg	Qualifier	SDL (dry) mg/kg	Unadj. MQL mg/kg	MQL (dry) mg/kg	Dilution	Analysis date / time	Batch
C10-C28 Diesel Range	2.19	J	1.90	4.00	4.71	1	10/11/2018 14:36	WG1179395
C28-C40 Oil Range	4.37	J	0.323	4.00	4.71	1	10/11/2018 14:36	WG1179395
(S) o-Terphenyl	*75.8*				*18.0-148*		*10/11/2018 14:36*	WG1179395

AH-2 (1-2')
Collected date/time: 10/02/18 10:05

SAMPLE RESULTS - 04

L1031723

ONE LAB. NATIONWIDE.

Total Solids by Method 2540 G-2011

Analyte	Result %	Qualifier	Dilution	Analysis date / time	Batch
Total Solids	79.3		1	10/09/2018 12:32	WG1178063

Wet Chemistry by Method 300.0

Analyte	Result (dry) mg/kg	Qualifier	SDL (dry) mg/kg	Unadj. MQL mg/kg	MQL (dry) mg/kg	Dilution	Analysis date / time	Batch
Chloride	18.5	B	1.00	10.0	12.6	1	10/09/2018 13:22	WG1176311

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

Analyte	Result (dry) mg/kg	Qualifier	SDL (dry) mg/kg	Unadj. MQL mg/kg	MQL (dry) mg/kg	Dilution	Analysis date / time	Batch
TPH (GC/FID) Low Fraction	0.0332	J	0.0274	0.100	0.126	1	10/09/2018 01:18	WG1177794
(S) a,a,a-Trifluorotoluene(FID)	*103*				*77.0-120*		*10/09/2018 01:18*	WG1177794

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

Analyte	Result (dry) mg/kg	Qualifier	SDL (dry) mg/kg	Unadj. MQL mg/kg	MQL (dry) mg/kg	Dilution	Analysis date / time	Batch
Benzene	U		0.000504	0.00100	0.00126	1	10/11/2018 06:11	WG1178428
Toluene	U		0.00158	0.00500	0.00630	1	10/11/2018 06:11	WG1178428
Ethylbenzene	U		0.000668	0.00250	0.00315	1	10/11/2018 06:11	WG1178428
Total Xylenes	U		0.00603	0.00650	0.00820	1	10/11/2018 06:11	WG1178428
(S) Toluene-d8	*107*				*75.0-131*		*10/11/2018 06:11*	WG1178428
(S) Dibromofluoromethane	*94.5*				*65.0-129*		*10/11/2018 06:11*	WG1178428
(S) a,a,a-Trifluorotoluene	*102*				*80.0-120*		*10/11/2018 06:11*	WG1178428
(S) 4-Bromofluorobenzene	*88.3*				*67.0-138*		*10/11/2018 06:11*	WG1178428

Semi-Volatile Organic Compounds (GC) by Method 8015

Analyte	Result (dry) mg/kg	Qualifier	SDL (dry) mg/kg	Unadj. MQL mg/kg	MQL (dry) mg/kg	Dilution	Analysis date / time	Batch
C10-C28 Diesel Range	U		2.03	4.00	5.04	1	10/11/2018 14:24	WG1179395
C28-C40 Oil Range	U		0.345	4.00	5.04	1	10/11/2018 14:24	WG1179395
(S) o-Terphenyl	*60.9*				*18.0-148*		*10/11/2018 14:24*	WG1179395

AH-3 (0-1')
Collected date/time: 10/02/18 11:40

SAMPLE RESULTS - 05

L1031723

ONE LAB. NATIONWIDE.

Total Solids by Method 2540 G-2011

Analyte	Result %	Qualifier	Dilution	Analysis date / time	Batch
Total Solids	98.8		1	10/09/2018 12:32	WG1178063

Wet Chemistry by Method 300.0

Analyte	Result (dry) mg/kg	Qualifier	SDL (dry) mg/kg	Unadj. MQL mg/kg	MQL (dry) mg/kg	Dilution	Analysis date / time	Batch
Chloride	2.40	B J	0.805	10.0	10.1	1	10/09/2018 13:30	WG1176311

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

Analyte	Result (dry) mg/kg	Qualifier	SDL (dry) mg/kg	Unadj. MQL mg/kg	MQL (dry) mg/kg	Dilution	Analysis date / time	Batch
TPH (GC/FID) Low Fraction	0.0375	J	0.0220	0.100	0.101	1	10/09/2018 01:39	WG1177794
(S) a,a,a-Trifluorotoluene(FID)	*103*				*77.0-120*		*10/09/2018 01:39*	WG1177794

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

Analyte	Result (dry) mg/kg	Qualifier	SDL (dry) mg/kg	Unadj. MQL mg/kg	MQL (dry) mg/kg	Dilution	Analysis date / time	Batch
Benzene	U		0.000405	0.00100	0.00101	1	10/11/2018 06:30	WG1178428
Toluene	U		0.00127	0.00500	0.00506	1	10/11/2018 06:30	WG1178428
Ethylbenzene	U		0.000537	0.00250	0.00253	1	10/11/2018 06:30	WG1178428
Total Xylenes	U		0.00484	0.00650	0.00658	1	10/11/2018 06:30	WG1178428
(S) Toluene-d8	*104*				*75.0-131*		*10/11/2018 06:30*	WG1178428
(S) Dibromofluoromethane	*93.8*				*65.0-129*		*10/11/2018 06:30*	WG1178428
(S) a,a,a-Trifluorotoluene	*99.3*				*80.0-120*		*10/11/2018 06:30*	WG1178428
(S) 4-Bromofluorobenzene	*89.2*				*67.0-138*		*10/11/2018 06:30*	WG1178428

Semi-Volatile Organic Compounds (GC) by Method 8015

Analyte	Result (dry) mg/kg	Qualifier	SDL (dry) mg/kg	Unadj. MQL mg/kg	MQL (dry) mg/kg	Dilution	Analysis date / time	Batch
C10-C28 Diesel Range	24.8		1.63	4.00	4.05	1	10/10/2018 22:20	WG1177743
C28-C40 Oil Range	46.7		0.277	4.00	4.05	1	10/10/2018 22:20	WG1177743
(S) o-Terphenyl	*66.2*				*18.0-148*		*10/10/2018 22:20*	WG1177743

AH-3 (1-2')
Collected date/time: 10/02/18 11:50

SAMPLE RESULTS - 06

L1031723

ONE LAB. NATIONWIDE.

Total Solids by Method 2540 G-2011

Analyte	Result %	Qualifier	Dilution	Analysis date / time	Batch
Total Solids	78.2		1	10/09/2018 12:32	WG1178063

Wet Chemistry by Method 300.0

Analyte	Result (dry) mg/kg	Qualifier	SDL (dry) mg/kg	Unadj. MQL mg/kg	MQL (dry) mg/kg	Dilution	Analysis date / time	Batch
Chloride	2.81	B J	1.02	10.0	12.8	1	10/09/2018 13:39	WG1176311

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

Analyte	Result (dry) mg/kg	Qualifier	SDL (dry) mg/kg	Unadj. MQL mg/kg	MQL (dry) mg/kg	Dilution	Analysis date / time	Batch
TPH (GC/FID) Low Fraction	0.0337	J	0.0277	0.100	0.128	1	10/09/2018 01:59	WG1177794
(S) a,a,a-Trifluorotoluene(FID)	*104*				*77.0-120*		*10/09/2018 01:59*	WG1177794

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

Analyte	Result (dry) mg/kg	Qualifier	SDL (dry) mg/kg	Unadj. MQL mg/kg	MQL (dry) mg/kg	Dilution	Analysis date / time	Batch
Benzene	U		0.000511	0.00100	0.00128	1	10/11/2018 06:48	WG1178428
Toluene	U		0.00160	0.00500	0.00639	1	10/11/2018 06:48	WG1178428
Ethylbenzene	U		0.000677	0.00250	0.00320	1	10/11/2018 06:48	WG1178428
Total Xylenes	U		0.00611	0.00650	0.00831	1	10/11/2018 06:48	WG1178428
(S) Toluene-d8	*102*				*75.0-131*		*10/11/2018 06:48*	WG1178428
(S) Dibromofluoromethane	*93.3*				*65.0-129*		*10/11/2018 06:48*	WG1178428
(S) a,a,a-Trifluorotoluene	*101*				*80.0-120*		*10/11/2018 06:48*	WG1178428
(S) 4-Bromofluorobenzene	*86.6*				*67.0-138*		*10/11/2018 06:48*	WG1178428

Semi-Volatile Organic Compounds (GC) by Method 8015

Analyte	Result (dry) mg/kg	Qualifier	SDL (dry) mg/kg	Unadj. MQL mg/kg	MQL (dry) mg/kg	Dilution	Analysis date / time	Batch
C10-C28 Diesel Range	2.25	J	2.06	4.00	5.11	1	10/10/2018 20:18	WG1177743
C28-C40 Oil Range	5.32		0.350	4.00	5.11	1	10/10/2018 20:18	WG1177743
(S) o-Terphenyl	*66.7*				*18.0-148*		*10/10/2018 20:18*	WG1177743

AH-4 (0-1')
Collected date/time: 10/02/18 11:25

SAMPLE RESULTS - 07

L1031723

ONE LAB. NATIONWIDE.

Total Solids by Method 2540 G-2011

Analyte	Result %	Qualifier	Dilution	Analysis date / time	Batch
Total Solids	86.0		1	10/09/2018 12:32	WG1178063

Wet Chemistry by Method 300.0

Analyte	Result (dry) mg/kg	Qualifier	SDL (dry) mg/kg	Unadj. MQL mg/kg	MQL (dry) mg/kg	Dilution	Analysis date / time	Batch
Chloride	7.07	B J	0.925	10.0	11.6	1	10/09/2018 14:05	WG1176311

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

Analyte	Result (dry) mg/kg	Qualifier	SDL (dry) mg/kg	Unadj. MQL mg/kg	MQL (dry) mg/kg	Dilution	Analysis date / time	Batch
TPH (GC/FID) Low Fraction	0.0453	J	0.0252	0.100	0.116	1	10/09/2018 02:20	WG1177794
(S) a,a,a-Trifluorotoluene(FID)	*103*				*77.0-120*		*10/09/2018 02:20*	WG1177794

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

Analyte	Result (dry) mg/kg	Qualifier	SDL (dry) mg/kg	Unadj. MQL mg/kg	MQL (dry) mg/kg	Dilution	Analysis date / time	Batch
Benzene	U		0.000465	0.00100	0.00116	1	10/11/2018 07:07	WG1178428
Toluene	U		0.00145	0.00500	0.00582	1	10/11/2018 07:07	WG1178428
Ethylbenzene	U		0.000617	0.00250	0.00291	1	10/11/2018 07:07	WG1178428
Total Xylenes	U		0.00556	0.00650	0.00756	1	10/11/2018 07:07	WG1178428
(S) Toluene-d8	*102*				*75.0-131*		*10/11/2018 07:07*	WG1178428
(S) Dibromofluoromethane	*93.5*				*65.0-129*		*10/11/2018 07:07*	WG1178428
(S) a,a,a-Trifluorotoluene	*101*				*80.0-120*		*10/11/2018 07:07*	WG1178428
(S) 4-Bromofluorobenzene	*90.0*				*67.0-138*		*10/11/2018 07:07*	WG1178428

Semi-Volatile Organic Compounds (GC) by Method 8015

Analyte	Result (dry) mg/kg	Qualifier	SDL (dry) mg/kg	Unadj. MQL mg/kg	MQL (dry) mg/kg	Dilution	Analysis date / time	Batch
C10-C28 Diesel Range	2.35	J	1.87	4.00	4.65	1	10/10/2018 20:32	WG1177743
C28-C40 Oil Range	5.08		0.319	4.00	4.65	1	10/10/2018 20:32	WG1177743
(S) o-Terphenyl	*85.0*				*18.0-148*		*10/10/2018 20:32*	WG1177743

AH-4 (1-2')
Collected date/time: 10/02/18 11:35

SAMPLE RESULTS - 08

L1031723

ONE LAB. NATIONWIDE.

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

Total Solids by Method 2540 G-2011

Analyte	Result %	Qualifier	Dilution	Analysis date / time	Batch
Total Solids	79.2		1	10/09/2018 13:17	WG1178064

Wet Chemistry by Method 300.0

Analyte	Result (dry) mg/kg	Qualifier	SDL (dry) mg/kg	Unadj. MQL mg/kg	MQL (dry) mg/kg	Dilution	Analysis date / time	Batch
Chloride	13.4	B	1.00	10.0	12.6	1	10/09/2018 14:14	WG1176311

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

Analyte	Result (dry) mg/kg	Qualifier	SDL (dry) mg/kg	Unadj. MQL mg/kg	MQL (dry) mg/kg	Dilution	Analysis date / time	Batch
TPH (GC/FID) Low Fraction	0.0398	J	0.0274	0.100	0.126	1	10/09/2018 02:41	WG1177794
(S) a,a,a-Trifluorotoluene(FID)	*102*				*77.0-120*		*10/09/2018 02:41*	WG1177794

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

Analyte	Result (dry) mg/kg	Qualifier	SDL (dry) mg/kg	Unadj. MQL mg/kg	MQL (dry) mg/kg	Dilution	Analysis date / time	Batch
Benzene	U		0.000505	0.00100	0.00126	1	10/11/2018 07:25	WG1178428
Toluene	U		0.00158	0.00500	0.00631	1	10/11/2018 07:25	WG1178428
Ethylbenzene	U		0.000669	0.00250	0.00316	1	10/11/2018 07:25	WG1178428
Total Xylenes	U		0.00604	0.00650	0.00821	1	10/11/2018 07:25	WG1178428
(S) Toluene-d8	*103*				*75.0-131*		*10/11/2018 07:25*	WG1178428
(S) Dibromofluoromethane	*94.9*				*65.0-129*		*10/11/2018 07:25*	WG1178428
(S) a,a,a-Trifluorotoluene	*102*				*80.0-120*		*10/11/2018 07:25*	WG1178428
(S) 4-Bromofluorobenzene	*88.8*				*67.0-138*		*10/11/2018 07:25*	WG1178428

Semi-Volatile Organic Compounds (GC) by Method 8015

Analyte	Result (dry) mg/kg	Qualifier	SDL (dry) mg/kg	Unadj. MQL mg/kg	MQL (dry) mg/kg	Dilution	Analysis date / time	Batch
C10-C28 Diesel Range	U		2.03	4.00	5.05	1	10/10/2018 18:59	WG1177743
C28-C40 Oil Range	3.93	J	0.346	4.00	5.05	1	10/10/2018 18:59	WG1177743
(S) o-Terphenyl	*77.3*				*18.0-148*		*10/10/2018 18:59*	WG1177743

AH-5 (0-1')
Collected date/time: 10/02/18 14:05

SAMPLE RESULTS - 09

L1031723

ONE LAB. NATIONWIDE.

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

Total Solids by Method 2540 G-2011

Analyte	Result %	Qualifier	Dilution	Analysis date / time	Batch
Total Solids	98.3		1	10/09/2018 13:17	WG1178064

Wet Chemistry by Method 300.0

Analyte	Result (dry) mg/kg	Qualifier	SDL (dry) mg/kg	Unadj. MQL mg/kg	MQL (dry) mg/kg	Dilution	Analysis date / time	Batch
Chloride	27.7		0.809	10.0	10.2	1	10/09/2018 14:23	WG1176311

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

Analyte	Result (dry) mg/kg	Qualifier	SDL (dry) mg/kg	Unadj. MQL mg/kg	MQL (dry) mg/kg	Dilution	Analysis date / time	Batch
TPH (GC/FID) Low Fraction	0.0374	J	0.0221	0.100	0.102	1	10/09/2018 03:02	WG1177794
(S) a,a,a-Trifluorotoluene(FID)	*103*				*77.0-120*		*10/09/2018 03:02*	WG1177794

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

Analyte	Result (dry) mg/kg	Qualifier	SDL (dry) mg/kg	Unadj. MQL mg/kg	MQL (dry) mg/kg	Dilution	Analysis date / time	Batch
Benzene	U		0.000407	0.00100	0.00102	1	10/11/2018 07:43	WG1178428
Toluene	U		0.00127	0.00500	0.00508	1	10/11/2018 07:43	WG1178428
Ethylbenzene	U		0.000539	0.00250	0.00254	1	10/11/2018 07:43	WG1178428
Total Xylenes	U		0.00486	0.00650	0.00661	1	10/11/2018 07:43	WG1178428
(S) Toluene-d8	*108*				*75.0-131*		*10/11/2018 07:43*	WG1178428
(S) Dibromofluoromethane	*93.5*				*65.0-129*		*10/11/2018 07:43*	WG1178428
(S) a,a,a-Trifluorotoluene	*101*				*80.0-120*		*10/11/2018 07:43*	WG1178428
(S) 4-Bromofluorobenzene	*90.6*				*67.0-138*		*10/11/2018 07:43*	WG1178428

Semi-Volatile Organic Compounds (GC) by Method 8015

Analyte	Result (dry) mg/kg	Qualifier	SDL (dry) mg/kg	Unadj. MQL mg/kg	MQL (dry) mg/kg	Dilution	Analysis date / time	Batch
C10-C28 Diesel Range	1.72	J	1.64	4.00	4.07	1	10/10/2018 21:26	WG1177743
C28-C40 Oil Range	4.57		0.279	4.00	4.07	1	10/10/2018 21:26	WG1177743
(S) o-Terphenyl	*79.9*				*18.0-148*		*10/10/2018 21:26*	WG1177743

AH-5 (1-2')
Collected date/time: 10/02/18 14:15

SAMPLE RESULTS - 10

L1031723

ONE LAB. NATIONWIDE.

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

Total Solids by Method 2540 G-2011

Analyte	Result %	Qualifier	Dilution	Analysis date / time	Batch
Total Solids	94.1		1	10/09/2018 13:17	WG1178064

Wet Chemistry by Method 300.0

Analyte	Result (dry) mg/kg	Qualifier	SDL (dry) mg/kg	Unadj. MQL mg/kg	MQL (dry) mg/kg	Dilution	Analysis date / time	Batch
Chloride	13.7	B	0.845	10.0	10.6	1	10/09/2018 14:49	WG1176311

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

Analyte	Result (dry) mg/kg	Qualifier	SDL (dry) mg/kg	Unadj. MQL mg/kg	MQL (dry) mg/kg	Dilution	Analysis date / time	Batch
TPH (GC/FID) Low Fraction	0.0300	J	0.0231	0.100	0.106	1	10/09/2018 03:23	WG1177794
(S) a,a,a-Trifluorotoluene(FID)	*103*				*77.0-120*		*10/09/2018 03:23*	WG1177794

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

Analyte	Result (dry) mg/kg	Qualifier	SDL (dry) mg/kg	Unadj. MQL mg/kg	MQL (dry) mg/kg	Dilution	Analysis date / time	Batch
Benzene	U		0.000425	0.00100	0.00106	1	10/11/2018 08:02	WG1178428
Toluene	U		0.00133	0.00500	0.00531	1	10/11/2018 08:02	WG1178428
Ethylbenzene	U		0.000563	0.00250	0.00266	1	10/11/2018 08:02	WG1178428
Total Xylenes	U		0.00508	0.00650	0.00691	1	10/11/2018 08:02	WG1178428
(S) Toluene-d8	*104*				*75.0-131*		*10/11/2018 08:02*	WG1178428
(S) Dibromofluoromethane	*93.5*				*65.0-129*		*10/11/2018 08:02*	WG1178428
(S) a,a,a-Trifluorotoluene	*103*				*80.0-120*		*10/11/2018 08:02*	WG1178428
(S) 4-Bromofluorobenzene	*86.7*				*67.0-138*		*10/11/2018 08:02*	WG1178428

Semi-Volatile Organic Compounds (GC) by Method 8015

Analyte	Result (dry) mg/kg	Qualifier	SDL (dry) mg/kg	Unadj. MQL mg/kg	MQL (dry) mg/kg	Dilution	Analysis date / time	Batch
C10-C28 Diesel Range	2.19	J	1.71	4.00	4.25	1	10/10/2018 21:39	WG1177743
C28-C40 Oil Range	6.29		0.291	4.00	4.25	1	10/10/2018 21:39	WG1177743
(S) o-Terphenyl	*80.0*				*18.0-148*		*10/10/2018 21:39*	WG1177743

AH-6 (0-1')
Collected date/time: 10/02/18 14:15

SAMPLE RESULTS - 11

L1031723

ONE LAB. NATIONWIDE.

Total Solids by Method 2540 G-2011

Analyte	Result %	Qualifier	Dilution	Analysis date / time	Batch
Total Solids	98.1		1	10/09/2018 13:17	WG1178064

Wet Chemistry by Method 300.0

Analyte	Result (dry) mg/kg	Qualifier	SDL (dry) mg/kg	Unadj. MQL mg/kg	MQL (dry) mg/kg	Dilution	Analysis date / time	Batch
Chloride	24.8		0.811	10.0	10.2	1	10/09/2018 14:58	WG1176311

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

Analyte	Result (dry) mg/kg	Qualifier	SDL (dry) mg/kg	Unadj. MQL mg/kg	MQL (dry) mg/kg	Dilution	Analysis date / time	Batch
TPH (GC/FID) Low Fraction	0.0369	J	0.0221	0.100	0.102	1	10/09/2018 03:44	WG1177794
(S) a,a,a-Trifluorotoluene(FID)	*104*				*77.0-120*		*10/09/2018 03:44*	WG1177794

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

Analyte	Result (dry) mg/kg	Qualifier	SDL (dry) mg/kg	Unadj. MQL mg/kg	MQL (dry) mg/kg	Dilution	Analysis date / time	Batch
Benzene	U		0.000408	0.00100	0.00102	1	10/11/2018 08:20	WG1178428
Toluene	U		0.00127	0.00500	0.00510	1	10/11/2018 08:20	WG1178428
Ethylbenzene	U		0.000540	0.00250	0.00255	1	10/11/2018 08:20	WG1178428
Total Xylenes	U		0.00487	0.00650	0.00663	1	10/11/2018 08:20	WG1178428
(S) Toluene-d8	*108*				*75.0-131*		*10/11/2018 08:20*	WG1178428
(S) Dibromofluoromethane	*93.0*				*65.0-129*		*10/11/2018 08:20*	WG1178428
(S) a,a,a-Trifluorotoluene	*101*				*80.0-120*		*10/11/2018 08:20*	WG1178428
(S) 4-Bromofluorobenzene	*89.3*				*67.0-138*		*10/11/2018 08:20*	WG1178428

Semi-Volatile Organic Compounds (GC) by Method 8015

Analyte	Result (dry) mg/kg	Qualifier	SDL (dry) mg/kg	Unadj. MQL mg/kg	MQL (dry) mg/kg	Dilution	Analysis date / time	Batch
C10-C28 Diesel Range	1.71	J	1.64	4.00	4.08	1	10/10/2018 21:53	WG1177743
C28-C40 Oil Range	3.99	J	0.279	4.00	4.08	1	10/10/2018 21:53	WG1177743
(S) o-Terphenyl	*83.3*				*18.0-148*		*10/10/2018 21:53*	WG1177743

AH-6 (1-2')
Collected date/time: 10/02/18 14:22

SAMPLE RESULTS - 12

L1031723

ONE LAB. NATIONWIDE.

Total Solids by Method 2540 G-2011

Analyte	Result %	Qualifier	Dilution	Analysis date / time	Batch
Total Solids	94.3		1	10/09/2018 13:17	WG1178064

Wet Chemistry by Method 300.0

Analyte	Result (dry) mg/kg	Qualifier	SDL (dry) mg/kg	Unadj. MQL mg/kg	MQL (dry) mg/kg	Dilution	Analysis date / time	Batch
Chloride	9.62	B J	0.843	10.0	10.6	1	10/09/2018 15:07	WG1176311

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

Analyte	Result (dry) mg/kg	Qualifier	SDL (dry) mg/kg	Unadj. MQL mg/kg	MQL (dry) mg/kg	Dilution	Analysis date / time	Batch
TPH (GC/FID) Low Fraction	0.0355	J	0.0230	0.100	0.106	1	10/09/2018 04:04	WG1177794
(S) a,a,a-Trifluorotoluene(FID)	*104*				*77.0-120*		*10/09/2018 04:04*	WG1177794

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

Analyte	Result (dry) mg/kg	Qualifier	SDL (dry) mg/kg	Unadj. MQL mg/kg	MQL (dry) mg/kg	Dilution	Analysis date / time	Batch
Benzene	U		0.000424	0.00100	0.00106	1	10/11/2018 08:38	WG1178428
Toluene	U		0.00133	0.00500	0.00530	1	10/11/2018 08:38	WG1178428
Ethylbenzene	U		0.000562	0.00250	0.00265	1	10/11/2018 08:38	WG1178428
Total Xylenes	U		0.00507	0.00650	0.00689	1	10/11/2018 08:38	WG1178428
(S) Toluene-d8	*105*				*75.0-131*		*10/11/2018 08:38*	WG1178428
(S) Dibromofluoromethane	*92.0*				*65.0-129*		*10/11/2018 08:38*	WG1178428
(S) a,a,a-Trifluorotoluene	*101*				*80.0-120*		*10/11/2018 08:38*	WG1178428
(S) 4-Bromofluorobenzene	*90.8*				*67.0-138*		*10/11/2018 08:38*	WG1178428

Semi-Volatile Organic Compounds (GC) by Method 8015

Analyte	Result (dry) mg/kg	Qualifier	SDL (dry) mg/kg	Unadj. MQL mg/kg	MQL (dry) mg/kg	Dilution	Analysis date / time	Batch
C10-C28 Diesel Range	U		1.71	4.00	4.24	1	10/10/2018 17:37	WG1177743
C28-C40 Oil Range	2.24	J	0.290	4.00	4.24	1	10/10/2018 17:37	WG1177743
(S) o-Terphenyl	*72.4*				*18.0-148*		*10/10/2018 17:37*	WG1177743

AH-7 (0-1')
Collected date/time: 10/02/18 15:40

SAMPLE RESULTS - 13

L1031723

ONE LAB. NATIONWIDE.

Total Solids by Method 2540 G-2011

Analyte	Result %	Qualifier	Dilution	Analysis date / time	Batch
Total Solids	96.1		1	10/09/2018 13:17	WG1178064

Wet Chemistry by Method 300.0

Analyte	Result (dry) mg/kg	Qualifier	SDL (dry) mg/kg	Unadj. MQL mg/kg	MQL (dry) mg/kg	Dilution	Analysis date / time	Batch
Chloride	270		0.827	10.0	10.4	1	10/09/2018 15:16	WG1176311

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

Analyte	Result (dry) mg/kg	Qualifier	SDL (dry) mg/kg	Unadj. MQL mg/kg	MQL (dry) mg/kg	Dilution	Analysis date / time	Batch
TPH (GC/FID) Low Fraction	0.0546	J	0.0226	0.100	0.104	1	10/09/2018 04:25	WG1177794
(S) a,a,a-Trifluorotoluene(FID)	*102*				*77.0-120*		*10/09/2018 04:25*	WG1177794

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

Analyte	Result (dry) mg/kg	Qualifier	SDL (dry) mg/kg	Unadj. MQL mg/kg	MQL (dry) mg/kg	Dilution	Analysis date / time	Batch
Benzene	U		0.000416	0.00100	0.00104	1	10/11/2018 08:57	WG1178428
Toluene	U		0.00130	0.00500	0.00520	1	10/11/2018 08:57	WG1178428
Ethylbenzene	U		0.000551	0.00250	0.00260	1	10/11/2018 08:57	WG1178428
Total Xylenes	U		0.00497	0.00650	0.00676	1	10/11/2018 08:57	WG1178428
(S) Toluene-d8	*105*				*75.0-131*		*10/11/2018 08:57*	WG1178428
(S) Dibromofluoromethane	*93.7*				*65.0-129*		*10/11/2018 08:57*	WG1178428
(S) a,a,a-Trifluorotoluene	*100*				*80.0-120*		*10/11/2018 08:57*	WG1178428
(S) 4-Bromofluorobenzene	*90.0*				*67.0-138*		*10/11/2018 08:57*	WG1178428

Semi-Volatile Organic Compounds (GC) by Method 8015

Analyte	Result (dry) mg/kg	Qualifier	SDL (dry) mg/kg	Unadj. MQL mg/kg	MQL (dry) mg/kg	Dilution	Analysis date / time	Batch
C10-C28 Diesel Range	3.13	J	1.67	4.00	4.16	1	10/10/2018 20:45	WG1177743
C28-C40 Oil Range	7.88		0.285	4.00	4.16	1	10/10/2018 20:45	WG1177743
(S) o-Terphenyl	*75.2*				*18.0-148*		*10/10/2018 20:45*	WG1177743

AH-7 (1-2')
Collected date/time: 10/02/18 15:45

SAMPLE RESULTS - 14

L1031723

ONE LAB. NATIONWIDE.

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

Total Solids by Method 2540 G-2011

Analyte	Result %	Qualifier	Dilution	Analysis date / time	Batch
Total Solids	93.4		1	10/09/2018 13:17	WG1178064

Wet Chemistry by Method 300.0

Analyte	Result (dry) mg/kg	Qualifier	SDL (dry) mg/kg	Unadj. MQL mg/kg	MQL (dry) mg/kg	Dilution	Analysis date / time	Batch
Chloride	92.1		0.851	10.0	10.7	1	10/09/2018 15:24	WG1176311

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

Analyte	Result (dry) mg/kg	Qualifier	SDL (dry) mg/kg	Unadj. MQL mg/kg	MQL (dry) mg/kg	Dilution	Analysis date / time	Batch
TPH (GC/FID) Low Fraction	0.0264	J	0.0232	0.100	0.107	1	10/09/2018 04:46	WG1177794
(S) a,a,a-Trifluorotoluene(FID)	*103*				*77.0-120*		*10/09/2018 04:46*	WG1177794

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

Analyte	Result (dry) mg/kg	Qualifier	SDL (dry) mg/kg	Unadj. MQL mg/kg	MQL (dry) mg/kg	Dilution	Analysis date / time	Batch
Benzene	U		0.000428	0.00100	0.00107	1	10/11/2018 09:15	WG1178428
Toluene	U		0.00134	0.00500	0.00535	1	10/11/2018 09:15	WG1178428
Ethylbenzene	U		0.000567	0.00250	0.00268	1	10/11/2018 09:15	WG1178428
Total Xylenes	U		0.00512	0.00650	0.00696	1	10/11/2018 09:15	WG1178428
(S) Toluene-d8	*103*				*75.0-131*		*10/11/2018 09:15*	WG1178428
(S) Dibromofluoromethane	*94.3*				*65.0-129*		*10/11/2018 09:15*	WG1178428
(S) a,a,a-Trifluorotoluene	*102*				*80.0-120*		*10/11/2018 09:15*	WG1178428
(S) 4-Bromofluorobenzene	*88.4*				*67.0-138*		*10/11/2018 09:15*	WG1178428

Semi-Volatile Organic Compounds (GC) by Method 8015

Analyte	Result (dry) mg/kg	Qualifier	SDL (dry) mg/kg	Unadj. MQL mg/kg	MQL (dry) mg/kg	Dilution	Analysis date / time	Batch
C10-C28 Diesel Range	U		1.72	4.00	4.28	1	10/10/2018 18:18	WG1177743
C28-C40 Oil Range	2.00	J	0.293	4.00	4.28	1	10/10/2018 18:18	WG1177743
(S) o-Terphenyl	*84.3*				*18.0-148*		*10/10/2018 18:18*	WG1177743

AH-7 (2-3')
Collected date/time: 10/02/18 15:50

SAMPLE RESULTS - 15

L1031723

ONE LAB. NATIONWIDE.

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

Total Solids by Method 2540 G-2011

Analyte	Result %	Qualifier	Dilution	Analysis date / time	Batch
Total Solids	91.0		1	10/09/2018 13:17	WG1178064

Wet Chemistry by Method 300.0

Analyte	Result (dry) mg/kg	Qualifier	SDL (dry) mg/kg	Unadj. MQL mg/kg	MQL (dry) mg/kg	Dilution	Analysis date / time	Batch
Chloride	446		0.873	10.0	11.0	1	10/09/2018 15:51	WG1176311

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

Analyte	Result (dry) mg/kg	Qualifier	SDL (dry) mg/kg	Unadj. MQL mg/kg	MQL (dry) mg/kg	Dilution	Analysis date / time	Batch
TPH (GC/FID) Low Fraction	U		0.0238	0.100	0.110	1	10/09/2018 05:07	WG1177794
(S) a,a,a-Trifluorotoluene(FID)	*103*				*77.0-120*		*10/09/2018 05:07*	WG1177794

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

Analyte	Result (dry) mg/kg	Qualifier	SDL (dry) mg/kg	Unadj. MQL mg/kg	MQL (dry) mg/kg	Dilution	Analysis date / time	Batch
Benzene	U		0.000439	0.00100	0.00110	1	10/11/2018 09:34	WG1178428
Toluene	U		0.00137	0.00500	0.00549	1	10/11/2018 09:34	WG1178428
Ethylbenzene	U		0.000582	0.00250	0.00275	1	10/11/2018 09:34	WG1178428
Total Xylenes	U		0.00525	0.00650	0.00714	1	10/11/2018 09:34	WG1178428
(S) Toluene-d8	*105*				*75.0-131*		*10/11/2018 09:34*	WG1178428
(S) Dibromofluoromethane	*94.4*				*65.0-129*		*10/11/2018 09:34*	WG1178428
(S) a,a,a-Trifluorotoluene	*101*				*80.0-120*		*10/11/2018 09:34*	WG1178428
(S) 4-Bromofluorobenzene	*91.2*				*67.0-138*		*10/11/2018 09:34*	WG1178428

Semi-Volatile Organic Compounds (GC) by Method 8015

Analyte	Result (dry) mg/kg	Qualifier	SDL (dry) mg/kg	Unadj. MQL mg/kg	MQL (dry) mg/kg	Dilution	Analysis date / time	Batch
C10-C28 Diesel Range	U		1.77	4.00	4.39	1	10/10/2018 18:32	WG1177743
C28-C40 Oil Range	3.10	J	0.301	4.00	4.39	1	10/10/2018 18:32	WG1177743
(S) o-Terphenyl	*75.9*				*18.0-148*		*10/10/2018 18:32*	WG1177743

AH-7 (3-4')
Collected date/time: 10/02/18 16:05

SAMPLE RESULTS - 16

L1031723

ONE LAB. NATIONWIDE.

Total Solids by Method 2540 G-2011

Analyte	Result %	Qualifier	Dilution	Analysis date / time	Batch
Total Solids	90.4		1	10/09/2018 13:17	WG1178064

Wet Chemistry by Method 300.0

Analyte	Result (dry) mg/kg	Qualifier	SDL (dry) mg/kg	Unadj. MQL mg/kg	MQL (dry) mg/kg	Dilution	Analysis date / time	Batch
Chloride	97.8		0.880	10.0	11.1	1	10/09/2018 15:59	WG1176311

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

Analyte	Result (dry) mg/kg	Qualifier	SDL (dry) mg/kg	Unadj. MQL mg/kg	MQL (dry) mg/kg	Dilution	Analysis date / time	Batch
TPH (GC/FID) Low Fraction	0.0267	J	0.0240	0.100	0.111	1	10/09/2018 05:28	WG1177794
(S) a,a,a-Trifluorotoluene(FID)	*104*				*77.0-120*		*10/09/2018 05:28*	WG1177794

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

Analyte	Result (dry) mg/kg	Qualifier	SDL (dry) mg/kg	Unadj. MQL mg/kg	MQL (dry) mg/kg	Dilution	Analysis date / time	Batch
Benzene	U		0.000443	0.00100	0.00111	1	10/11/2018 09:52	WG1178428
Toluene	U		0.00138	0.00500	0.00553	1	10/11/2018 09:52	WG1178428
Ethylbenzene	U		0.000587	0.00250	0.00277	1	10/11/2018 09:52	WG1178428
Total Xylenes	U		0.00529	0.00650	0.00719	1	10/11/2018 09:52	WG1178428
(S) Toluene-d8	*102*				*75.0-131*		*10/11/2018 09:52*	WG1178428
(S) Dibromofluoromethane	*92.5*				*65.0-129*		*10/11/2018 09:52*	WG1178428
(S) a,a,a-Trifluorotoluene	*103*				*80.0-120*		*10/11/2018 09:52*	WG1178428
(S) 4-Bromofluorobenzene	*88.7*				*67.0-138*		*10/11/2018 09:52*	WG1178428

Semi-Volatile Organic Compounds (GC) by Method 8015

Analyte	Result (dry) mg/kg	Qualifier	SDL (dry) mg/kg	Unadj. MQL mg/kg	MQL (dry) mg/kg	Dilution	Analysis date / time	Batch
C10-C28 Diesel Range	U		1.78	4.00	4.43	1	10/10/2018 18:45	WG1177743
C28-C40 Oil Range	2.36	J	0.303	4.00	4.43	1	10/10/2018 18:45	WG1177743
(S) o-Terphenyl	*84.0*				*18.0-148*		*10/10/2018 18:45*	WG1177743

AH-7 (4-5')
Collected date/time: 10/02/18 16:10

SAMPLE RESULTS - 17

L1031723

ONE LAB. NATIONWIDE.

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

Total Solids by Method 2540 G-2011

Analyte	Result %	Qualifier	Dilution	Analysis date / time	Batch
Total Solids	90.6		1	10/09/2018 13:17	WG1178064

Wet Chemistry by Method 300.0

Analyte	Result (dry) mg/kg	Qualifier	SDL (dry) mg/kg	Unadj. MQL mg/kg	MQL (dry) mg/kg	Dilution	Analysis date / time	Batch
Chloride	43.1		0.878	10.0	11.0	1	10/09/2018 16:08	WG1176311

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

Analyte	Result (dry) mg/kg	Qualifier	SDL (dry) mg/kg	Unadj. MQL mg/kg	MQL (dry) mg/kg	Dilution	Analysis date / time	Batch
TPH (GC/FID) Low Fraction	U		0.0239	0.100	0.110	1	10/09/2018 05:48	WG1177794
(S) a,a,a-Trifluorotoluene(FID)	*104*				*77.0-120*		*10/09/2018 05:48*	WG1177794

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

Analyte	Result (dry) mg/kg	Qualifier	SDL (dry) mg/kg	Unadj. MQL mg/kg	MQL (dry) mg/kg	Dilution	Analysis date / time	Batch
Benzene	U		0.000441	0.00100	0.00110	1	10/11/2018 10:11	WG1178428
Toluene	U		0.00138	0.00500	0.00552	1	10/11/2018 10:11	WG1178428
Ethylbenzene	U		0.000585	0.00250	0.00276	1	10/11/2018 10:11	WG1178428
Total Xylenes	U		0.00528	0.00650	0.00717	1	10/11/2018 10:11	WG1178428
(S) Toluene-d8	*103*				*75.0-131*		*10/11/2018 10:11*	WG1178428
(S) Dibromofluoromethane	*96.0*				*65.0-129*		*10/11/2018 10:11*	WG1178428
(S) a,a,a-Trifluorotoluene	*103*				*80.0-120*		*10/11/2018 10:11*	WG1178428
(S) 4-Bromofluorobenzene	*89.5*				*67.0-138*		*10/11/2018 10:11*	WG1178428

Semi-Volatile Organic Compounds (GC) by Method 8015

Analyte	Result (dry) mg/kg	Qualifier	SDL (dry) mg/kg	Unadj. MQL mg/kg	MQL (dry) mg/kg	Dilution	Analysis date / time	Batch
C10-C28 Diesel Range	U		1.78	4.00	4.41	1	10/10/2018 19:12	WG1177743
C28-C40 Oil Range	2.03	J	0.302	4.00	4.41	1	10/10/2018 19:12	WG1177743
(S) o-Terphenyl	*84.8*				*18.0-148*		*10/10/2018 19:12*	WG1177743

AH-8 (0-1')
Collected date/time: 10/02/18 15:40

SAMPLE RESULTS - 18

L1031723

ONE LAB. NATIONWIDE.

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

Total Solids by Method 2540 G-2011

Analyte	Result %	Qualifier	Dilution	Analysis date / time	Batch
Total Solids	98.3		1	10/09/2018 15:23	WG1178075

Wet Chemistry by Method 300.0

Analyte	Result (dry) mg/kg	Qualifier	SDL (dry) mg/kg	Unadj. MQL mg/kg	MQL (dry) mg/kg	Dilution	Analysis date / time	Batch
Chloride	20.3	B	0.809	10.0	10.2	1	10/09/2018 16:17	WG1176311

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

Analyte	Result (dry) mg/kg	Qualifier	SDL (dry) mg/kg	Unadj. MQL mg/kg	MQL (dry) mg/kg	Dilution	Analysis date / time	Batch
TPH (GC/FID) Low Fraction	0.0295	J	0.0221	0.100	0.102	1	10/09/2018 06:09	WG1177794
(S) a,a,a-Trifluorotoluene(FID)	*104*				*77.0-120*		*10/09/2018 06:09*	WG1177794

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

Analyte	Result (dry) mg/kg	Qualifier	SDL (dry) mg/kg	Unadj. MQL mg/kg	MQL (dry) mg/kg	Dilution	Analysis date / time	Batch
Benzene	U		0.000407	0.00100	0.00102	1	10/11/2018 10:29	WG1178428
Toluene	U		0.00127	0.00500	0.00509	1	10/11/2018 10:29	WG1178428
Ethylbenzene	U		0.000539	0.00250	0.00254	1	10/11/2018 10:29	WG1178428
Total Xylenes	U		0.00486	0.00650	0.00661	1	10/11/2018 10:29	WG1178428
(S) Toluene-d8	*106*				*75.0-131*		*10/11/2018 10:29*	WG1178428
(S) Dibromofluoromethane	*90.6*				*65.0-129*		*10/11/2018 10:29*	WG1178428
(S) a,a,a-Trifluorotoluene	*99.5*				*80.0-120*		*10/11/2018 10:29*	WG1178428
(S) 4-Bromofluorobenzene	*91.4*				*67.0-138*		*10/11/2018 10:29*	WG1178428

Semi-Volatile Organic Compounds (GC) by Method 8015

Analyte	Result (dry) mg/kg	Qualifier	SDL (dry) mg/kg	Unadj. MQL mg/kg	MQL (dry) mg/kg	Dilution	Analysis date / time	Batch
C10-C28 Diesel Range	3.69	J	1.64	4.00	4.07	1	10/10/2018 22:06	WG1177743
C28-C40 Oil Range	14.7		0.279	4.00	4.07	1	10/10/2018 22:06	WG1177743
(S) o-Terphenyl	*76.7*				*18.0-148*		*10/10/2018 22:06*	WG1177743

AH-8 (1-2')
Collected date/time: 10/02/18 15:45

SAMPLE RESULTS - 19

L1031723

ONE LAB. NATIONWIDE.

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

Total Solids by Method 2540 G-2011

Analyte	Result %	Qualifier	Dilution	Analysis date / time	Batch
Total Solids	95.8		1	10/09/2018 15:23	WG1178075

Wet Chemistry by Method 300.0

Analyte	Result (dry) mg/kg	Qualifier	SDL (dry) mg/kg	Unadj. MQL mg/kg	MQL (dry) mg/kg	Dilution	Analysis date / time	Batch
Chloride	3.58	B J	0.830	10.0	10.4	1	10/09/2018 16:26	WG1176311

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

Analyte	Result (dry) mg/kg	Qualifier	SDL (dry) mg/kg	Unadj. MQL mg/kg	MQL (dry) mg/kg	Dilution	Analysis date / time	Batch
TPH (GC/FID) Low Fraction	0.0296	J	0.0227	0.100	0.104	1	10/09/2018 06:30	WG1177794
(S) a,a,a-Trifluorotoluene(FID)	*104*				*77.0-120*		*10/09/2018 06:30*	WG1177794

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

Analyte	Result (dry) mg/kg	Qualifier	SDL (dry) mg/kg	Unadj. MQL mg/kg	MQL (dry) mg/kg	Dilution	Analysis date / time	Batch
Benzene	U		0.000418	0.00100	0.00104	1	10/11/2018 10:47	WG1178428
Toluene	U		0.00130	0.00500	0.00522	1	10/11/2018 10:47	WG1178428
Ethylbenzene	U		0.000553	0.00250	0.00261	1	10/11/2018 10:47	WG1178428
Total Xylenes	U		0.00499	0.00650	0.00679	1	10/11/2018 10:47	WG1178428
(S) Toluene-d8	*104*				*75.0-131*		*10/11/2018 10:47*	WG1178428
(S) Dibromofluoromethane	*94.8*				*65.0-129*		*10/11/2018 10:47*	WG1178428
(S) a,a,a-Trifluorotoluene	*103*				*80.0-120*		*10/11/2018 10:47*	WG1178428
(S) 4-Bromofluorobenzene	*89.3*				*67.0-138*		*10/11/2018 10:47*	WG1178428

Semi-Volatile Organic Compounds (GC) by Method 8015

Analyte	Result (dry) mg/kg	Qualifier	SDL (dry) mg/kg	Unadj. MQL mg/kg	MQL (dry) mg/kg	Dilution	Analysis date / time	Batch
C10-C28 Diesel Range	U		1.68	4.00	4.18	1	10/10/2018 21:12	WG1177743
C28-C40 Oil Range	4.72		0.286	4.00	4.18	1	10/10/2018 21:12	WG1177743
(S) o-Terphenyl	*81.3*				*18.0-148*		*10/10/2018 21:12*	WG1177743

AH-8 (2-3')
Collected date/time: 10/02/18 15:50

SAMPLE RESULTS - 20

L1031723

ONE LAB. NATIONWIDE.

Total Solids by Method 2540 G-2011

Analyte	Result %	Qualifier	Dilution	Analysis date / time	Batch
Total Solids	94.0		1	10/09/2018 15:23	WG1178075

Wet Chemistry by Method 300.0

Analyte	Result (dry) mg/kg	Qualifier	SDL (dry) mg/kg	Unadj. MQL mg/kg	MQL (dry) mg/kg	Dilution	Analysis date / time	Batch
Chloride	4.24	B J	0.846	10.0	10.6	1	10/09/2018 16:35	WG1176311

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

Analyte	Result (dry) mg/kg	Qualifier	SDL (dry) mg/kg	Unadj. MQL mg/kg	MQL (dry) mg/kg	Dilution	Analysis date / time	Batch
TPH (GC/FID) Low Fraction	0.0308	J J3	0.0231	0.100	0.106	1	10/09/2018 06:51	WG1177794
(S) a,a,a-Trifluorotoluene(FID)	*102*				*77.0-120*		*10/09/2018 06:51*	WG1177794

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

Analyte	Result (dry) mg/kg	Qualifier	SDL (dry) mg/kg	Unadj. MQL mg/kg	MQL (dry) mg/kg	Dilution	Analysis date / time	Batch
Benzene	U		0.000426	0.00100	0.00106	1	10/11/2018 11:06	WG1178428
Toluene	U		0.00133	0.00500	0.00532	1	10/11/2018 11:06	WG1178428
Ethylbenzene	U		0.000564	0.00250	0.00266	1	10/11/2018 11:06	WG1178428
Total Xylenes	U		0.00509	0.00650	0.00692	1	10/11/2018 11:06	WG1178428
(S) Toluene-d8	*103*				*75.0-131*		*10/11/2018 11:06*	WG1178428
(S) Dibromofluoromethane	*94.6*				*65.0-129*		*10/11/2018 11:06*	WG1178428
(S) a,a,a-Trifluorotoluene	*101*				*80.0-120*		*10/11/2018 11:06*	WG1178428
(S) 4-Bromofluorobenzene	*87.7*				*67.0-138*		*10/11/2018 11:06*	WG1178428

Semi-Volatile Organic Compounds (GC) by Method 8015

Analyte	Result (dry) mg/kg	Qualifier	SDL (dry) mg/kg	Unadj. MQL mg/kg	MQL (dry) mg/kg	Dilution	Analysis date / time	Batch
C10-C28 Diesel Range	1.85	J	1.71	4.00	4.26	1	10/10/2018 20:59	WG1177743
C28-C40 Oil Range	5.22		0.292	4.00	4.26	1	10/10/2018 20:59	WG1177743
(S) o-Terphenyl	*82.3*				*18.0-148*		*10/10/2018 20:59*	WG1177743

AH-8 (3-4')
Collected date/time: 10/02/18 15:53

SAMPLE RESULTS - 21

L1031723

ONE LAB. NATIONWIDE.

Total Solids by Method 2540 G-2011

Analyte	Result %	Qualifier	Dilution	Analysis date / time	Batch
Total Solids	94.4		1	10/09/2018 15:23	WG1178075

Wet Chemistry by Method 300.0

Analyte	Result (dry) mg/kg	Qualifier	SDL (dry) mg/kg	Unadj. MQL mg/kg	MQL (dry) mg/kg	Dilution	Analysis date / time	Batch
Chloride	50.9		0.842	10.0	10.6	1	10/09/2018 00:43	WG1177210

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

Analyte	Result (dry) mg/kg	Qualifier	SDL (dry) mg/kg	Unadj. MQL mg/kg	MQL (dry) mg/kg	Dilution	Analysis date / time	Batch
TPH (GC/FID) Low Fraction	U		0.0230	0.100	0.106	1	10/08/2018 05:34	WG1177209
(S) a,a,a-Trifluorotoluene(FID)	*97.8*				*77.0-120*		*10/08/2018 05:34*	WG1177209

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

Analyte	Result (dry) mg/kg	Qualifier	SDL (dry) mg/kg	Unadj. MQL mg/kg	MQL (dry) mg/kg	Dilution	Analysis date / time	Batch
Benzene	U		0.000424	0.00100	0.00106	1	10/11/2018 00:21	WG1178471
Toluene	U		0.00132	0.00500	0.00530	1	10/11/2018 00:21	WG1178471
Ethylbenzene	U		0.000561	0.00250	0.00265	1	10/11/2018 00:21	WG1178471
Total Xylenes	U		0.00506	0.00650	0.00688	1	10/11/2018 00:21	WG1178471
(S) Toluene-d8	*106*				*75.0-131*		*10/11/2018 00:21*	WG1178471
(S) Dibromofluoromethane	*92.3*				*65.0-129*		*10/11/2018 00:21*	WG1178471
(S) a,a,a-Trifluorotoluene	*101*				*80.0-120*		*10/11/2018 00:21*	WG1178471
(S) 4-Bromofluorobenzene	*89.9*				*67.0-138*		*10/11/2018 00:21*	WG1178471

Semi-Volatile Organic Compounds (GC) by Method 8015

Analyte	Result (dry) mg/kg	Qualifier	SDL (dry) mg/kg	Unadj. MQL mg/kg	MQL (dry) mg/kg	Dilution	Analysis date / time	Batch
C10-C28 Diesel Range	U		1.71	4.00	4.24	1	10/10/2018 19:26	WG1177743
C28-C40 Oil Range	1.53	J	0.290	4.00	4.24	1	10/10/2018 19:26	WG1177743
(S) o-Terphenyl	*84.0*				*18.0-148*		*10/10/2018 19:26*	WG1177743

AH-8 (4-5')
Collected date/time: 10/02/18 15:56

SAMPLE RESULTS - 22

L1031723

ONE LAB. NATIONWIDE.

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

Total Solids by Method 2540 G-2011

Analyte	Result %	Qualifier	Dilution	Analysis date / time	Batch
Total Solids	94.1		1	10/09/2018 15:23	WG1178075

Wet Chemistry by Method 300.0

Analyte	Result (dry) mg/kg	Qualifier	SDL (dry) mg/kg	Unadj. MQL mg/kg	MQL (dry) mg/kg	Dilution	Analysis date / time	Batch
Chloride	44.5		0.845	10.0	10.6	1	10/09/2018 00:52	WG1177210

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

Analyte	Result (dry) mg/kg	Qualifier	SDL (dry) mg/kg	Unadj. MQL mg/kg	MQL (dry) mg/kg	Dilution	Analysis date / time	Batch
TPH (GC/FID) Low Fraction	U		0.0231	0.100	0.106	1	10/08/2018 05:54	WG1177209
(S) a,a,a-Trifluorotoluene(FID)	*97.9*				*77.0-120*		*10/08/2018 05:54*	WG1177209

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

Analyte	Result (dry) mg/kg	Qualifier	SDL (dry) mg/kg	Unadj. MQL mg/kg	MQL (dry) mg/kg	Dilution	Analysis date / time	Batch
Benzene	U		0.000425	0.00100	0.00106	1	10/11/2018 00:40	WG1178471
Toluene	U		0.00133	0.00500	0.00532	1	10/11/2018 00:40	WG1178471
Ethylbenzene	U		0.000564	0.00250	0.00266	1	10/11/2018 00:40	WG1178471
Total Xylenes	U		0.00508	0.00650	0.00691	1	10/11/2018 00:40	WG1178471
(S) Toluene-d8	*107*				*75.0-131*		*10/11/2018 00:40*	WG1178471
(S) Dibromofluoromethane	*93.3*				*65.0-129*		*10/11/2018 00:40*	WG1178471
(S) a,a,a-Trifluorotoluene	*101*				*80.0-120*		*10/11/2018 00:40*	WG1178471
(S) 4-Bromofluorobenzene	*89.7*				*67.0-138*		*10/11/2018 00:40*	WG1178471

Semi-Volatile Organic Compounds (GC) by Method 8015

Analyte	Result (dry) mg/kg	Qualifier	SDL (dry) mg/kg	Unadj. MQL mg/kg	MQL (dry) mg/kg	Dilution	Analysis date / time	Batch
C10-C28 Diesel Range	U		1.71	4.00	4.25	1	10/10/2018 20:05	WG1177743
C28-C40 Oil Range	2.48	J	0.291	4.00	4.25	1	10/10/2018 20:05	WG1177743
(S) o-Terphenyl	*85.0*				*18.0-148*		*10/10/2018 20:05*	WG1177743

WG1178063

Total Solids by Method 2540 G-2011

QUALITY CONTROL SUMMARY

L1031723-01,02,03,04,05,06,07

ONE LAB. NATIONWIDE.

Method Blank (MB)

(MB) R3349164-1 10/09/18 12:32

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

L1031723-07 Original Sample (OS) • Duplicate (DUP)

(OS) L1031723-07 10/09/18 12:32 • (DUP) R3349164-3 10/09/18 12:32

Analyte	Original Result %	DUP Result %	Dilution	DUP RPD %	DUP Qualifier	DUP RPD Limits %
Total Solids	86.0	85.6	1	0.378		10

Laboratory Control Sample (LCS)

(LCS) R3349164-2 10/09/18 12:32

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

WG1178064

Total Solids by Method 2540 G-2011

QUALITY CONTROL SUMMARY

L1031723-08,09,10,11,12,13,14,15,16,17

ONE LAB. NATIONWIDE.

Method Blank (MB)

(MB) R3349167-1 10/09/18 13:17

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

L1031723-17 Original Sample (OS) • Duplicate (DUP)

(OS) L1031723-17 10/09/18 13:17 • (DUP) R3349167-3 10/09/18 13:17

Analyte	Original Result %	DUP Result %	Dilution	DUP RPD %	DUP Qualifier	DUP RPD Limits %
Total Solids	90.6	90.7	1	0.131		10

Laboratory Control Sample (LCS)

(LCS) R3349167-2 10/09/18 13:17

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

WG1178075

Total Solids by Method 2540 G-2011

QUALITY CONTROL SUMMARY

L1031723-18,19,20,21,22

ONE LAB. NATIONWIDE.

Method Blank (MB)

(MB) R3349224-1 10/09/18 15:23

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

L1031735-04 Original Sample (OS) • Duplicate (DUP)

(OS) L1031735-04 10/09/18 15:23 • (DUP) R3349224-3 10/09/18 15:23

Analyte	Original Result %	DUP Result %	Dilution	DUP RPD %	DUP Qualifier	DUP RPD Limits %
Total Solids	93.4	93.1	1	0.311		10

Laboratory Control Sample (LCS)

(LCS) R3349224-2 10/09/18 15:23

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

QUALITY CONTROL SUMMARY

L1031723-01,02,03,04,05,06,07,08,09,10,11,12,13,14,15,16,17,18,19,20

Method Blank (MB)

(MB) R3349076-1 10/09/18 12:12

Analyte	MB Result mg/kg	MB Qualifier	MB MDL mg/kg	MB RDL mg/kg
Chloride	2.21	J	0.795	10.0

L1031723-02 Original Sample (OS) • Duplicate (DUP)

(OS) L1031723-02 10/09/18 12:55 • (DUP) R3349076-4 10/09/18 13:04

Analyte	Original Result (dry) mg/kg	DUP Result (dry) mg/kg	Dilution	DUP RPD %	DUP Qualifier	DUP RPD Limits %
Chloride	2870	3290	10	13.7		20

L1031723-20 Original Sample (OS) • Duplicate (DUP)

(OS) L1031723-20 10/09/18 16:35 • (DUP) R3349076-7 10/09/18 16:43

Analyte	Original Result (dry) mg/kg	DUP Result (dry) mg/kg	Dilution	DUP RPD %	DUP Qualifier	DUP RPD Limits %
Chloride	4.24	4.04	1	4.75	J	20

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

(LCS) R3349076-2 10/09/18 12:20 • (LCSD) R3349076-3 10/09/18 12:29

Analyte	Spike Amount mg/kg	LCS Result mg/kg	LCSD Result mg/kg	LCS Rec. %	LCSD Rec. %	Rec. Limits %	LCS Qualifier	LCSD Qualifier	RPD %	RPD Limits %
Chloride	200	200	200	99.8	99.9	90.0-110			0.0932	20

L1031723-09 Original Sample (OS) • Matrix Spike (MS) • Matrix Spike Duplicate (MSD)

(OS) L1031723-09 10/09/18 14:23 • (MS) R3349076-5 10/09/18 14:32 • (MSD) R3349076-6 10/09/18 14:40

Analyte	Spike Amount (dry) mg/kg	Original Result (dry) mg/kg	MS Result (dry) mg/kg	MSD Result (dry) mg/kg	MS Rec. %	MSD Rec. %	Dilution	Rec. Limits %	MS Qualifier	MSD Qualifier	RPD %	RPD Limits %
Chloride	508	27.7	538	527	100	98.2	1	80.0-120			2.11	20

WG1177210

Wet Chemistry by Method 300.0

QUALITY CONTROL SUMMARY

L1031723-21,22

ONE LAB. NATIONWIDE.

Method Blank (MB)

(MB) R3348776-1 10/08/18 20:06

Analyte	MB Result mg/kg	MB Qualifier	MB MDL mg/kg	MB RDL mg/kg
Chloride	U		0.795	10.0

L1031396-01 Original Sample (OS) • Duplicate (DUP)

(OS) L1031396-01 10/08/18 23:25 • (DUP) R3348776-4 10/08/18 23:33

Analyte	Original Result mg/kg	DUP Result mg/kg	Dilution	DUP RPD %	DUP Qualifier	DUP RPD Limits %
Chloride	645	640	1	0.771		20

L1032397-01 Original Sample (OS) • Duplicate (DUP)

(OS) L1032397-01 10/09/18 03:13 • (DUP) R3348776-7 10/09/18 03:21

Analyte	Original Result mg/kg	DUP Result mg/kg	Dilution	DUP RPD %	DUP Qualifier	DUP RPD Limits %
Chloride	32.9	39.5	1	18.3		20

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

(LCS) R3348776-2 10/08/18 20:15 • (LCSD) R3348776-3 10/08/18 20:24

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 %
Chloride	200	201	202	101	101	90.0-110			0.655	20

L1032174-16 Original Sample (OS) • Matrix Spike (MS) • Matrix Spike Duplicate (MSD)

(OS) L1032174-16 10/09/18 01:10 • (MS) R3348776-5 10/09/18 01:19 • (MSD) R3348776-6 10/09/18 01:27

Analyte	Spike Amount mg/kg	Original Result mg/kg	MS Result mg/kg	MSD Result mg/kg	MS Rec. %	MSD Rec. %	Dilution	Rec. Limits %	MS Qualifier	MSD Qualifier	RPD %	RPD Limits %
Chloride	500	61.7	599	586	107	105	1	80.0-120			2.17	20

WG1177209

QUALITY CONTROL SUMMARY

ONE LAB. NATIONWIDE.

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

L1031723-21,22

Method Blank (MB)

(MB) R3348814-3 10/08/18 02:46

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) α,α,α-Trifluorotoluene(FID)	*99.6*			*77.0-120*

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

(LCS) R3348814-1 10/08/18 01:43 • (LCSD) R3348814-2 10/08/18 02:04

Analyte	Spike Amount mg/kg	LCS Result mg/kg	LCSD Result mg/kg	LCS Rec. %	LCSD Rec. %	Rec. Limits %	LCS Qualifier	LCSD Qualifier	RPD %	RPD Limits %
TPH (GC/FID) Low Fraction	5.50	6.49	6.28	118	114	72.0-127			3.39	20
(S) α,α,α-Trifluorotoluene(FID)				*116*	*114*	*77.0-120*				

L1031265-01 Original Sample (OS) • Matrix Spike (MS) • Matrix Spike Duplicate (MSD)

(OS) L1031265-01 10/08/18 10:25 • (MS) R3348814-4 10/08/18 10:46 • (MSD) R3348814-5 10/08/18 11:07

Analyte	Spike Amount (dry) mg/kg	Original Result (dry) mg/kg	MS Result (dry) mg/kg	MSD Result (dry) mg/kg	MS Rec. %	MSD Rec. %	Dilution	Rec. Limits %	MS Qualifier	MSD Qualifier	RPD %	RPD Limits %
TPH (GC/FID) Low Fraction	6.64	0.185	4.89	5.43	70.9	79.0	1	10.0-151			10.4	28
(S) α,α,α-Trifluorotoluene(FID)					*115*	*115*		*77.0-120*				

WG1177794

QUALITY CONTROL SUMMARY

ONE LAB. NATIONWIDE.

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

L1031723-01,02,03,04,05,06,07,08,09,10,11,12,13,14,15,16,17,18,19,20

Method Blank (MB)

(MB) R3349527-3 10/08/18 23:37

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) • Laboratory Control Sample Duplicate (LCSD)

(LCS) R3349527-1 10/08/18 22:35 • (LCSD) R3349527-2 10/08/18 22:55

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	5.95	5.87	108	107	72.0-127			1.34	20
(S) a,a,a-Trifluorotoluene(FID)				*99.9*	*100*	*77.0-120*				

L1031723-20 Original Sample (OS) • Matrix Spike (MS) • Matrix Spike Duplicate (MSD)

(OS) L1031723-20 10/09/18 06:51 • (MS) R3349527-4 10/09/18 07:12 • (MSD) R3349527-5 10/09/18 07:32

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	5.85	0.0308	1.55	4.27	25.9	72.4	1	10.0-151		J3	93.5	28
(S) a,a,a-Trifluorotoluene(FID)					*100*	*97.2*		*77.0-120*				

WG1178428

QUALITY CONTROL SUMMARY

ONE LAB. NATIONWIDE.

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

L1031723-01,02,03,04,05,06,07,08,09,10,11,12,13,14,15,16,17,18,19,20

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

Method Blank (MB)

(MB) R3349765-3 10/11/18 04:58

Analyte	MB Result mg/kg	MB Qualifier	MB MDL mg/kg	MB RDL mg/kg
Benzene	U		0.000400	0.00100
Ethylbenzene	U		0.000530	0.00250
Toluene	U		0.00125	0.00500
Xylenes, Total	U		0.00478	0.00650
(S) Toluene-d8	*103*			*75.0-131*
(S) Dibromofluoromethane	*92.9*			*65.0-129*
(S) a,a,a-Trifluorotoluene	*101*			*80.0-120*
(S) 4-Bromofluorobenzene	*89.2*			*67.0-138*

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

(LCS) R3349765-1 10/11/18 03:44 • (LCSD) R3349765-2 10/11/18 04:02

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	0.131	0.122	105	98.0	70.0-123			6.64	20
Ethylbenzene	0.125	0.101	0.0944	80.8	75.5	74.0-126			6.79	20
Toluene	0.125	0.103	0.0994	82.1	79.5	75.0-121			3.23	20
Xylenes, Total	0.375	0.328	0.309	87.5	82.4	72.0-127			5.97	20
(S) Toluene-d8				*99.9*	*101*	*75.0-131*				
(S) Dibromofluoromethane				*98.4*	*94.2*	*65.0-129*				
(S) a,a,a-Trifluorotoluene				*104*	*101*	*80.0-120*				
(S) 4-Bromofluorobenzene				*88.2*	*88.4*	*67.0-138*				

L1031723-20 Original Sample (OS) • Matrix Spike (MS) • Matrix Spike Duplicate (MSD)

(OS) L1031723-20 10/11/18 11:06 • (MS) R3349765-4 10/11/18 11:24 • (MSD) R3349765-5 10/11/18 11:43

Analyte	Spike Amount (dry) mg/kg	Original Result (dry) mg/kg	MS Result (dry) mg/kg	MSD Result (dry) mg/kg	MS Rec. %	MSD Rec. %	Dilution	Rec. Limits %	MS Qualifier	MSD Qualifier	RPD %	RPD Limits %
Benzene	0.133	U	0.121	0.152	90.7	115	1	10.0-149			23.2	37
Ethylbenzene	0.133	U	0.0941	0.120	70.8	89.9	1	10.0-160			23.8	38
Toluene	0.133	U	0.100	0.126	75.2	94.5	1	10.0-156			22.7	38
Xylenes, Total	0.399	U	0.307	0.385	77.1	96.5	1	10.0-160			22.4	38
(S) Toluene-d8					*103*	*105*		*75.0-131*				
(S) Dibromofluoromethane					*90.2*	*93.7*		*65.0-129*				
(S) a,a,a-Trifluorotoluene					*101*	*102*		*80.0-120*				
(S) 4-Bromofluorobenzene					*89.6*	*88.5*		*67.0-138*				

WG1178471

QUALITY CONTROL SUMMARY

ONE LAB. NATIONWIDE.

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

L1031723-21,22

Method Blank (MB)

(MB) R3349689-2 10/10/18 20:02

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	*106*			*75.0-131*
(S) Dibromofluoromethane	*89.9*			*65.0-129*
(S) a,a,a-Trifluorotoluene	*103*			*80.0-120*
(S) 4-Bromofluorobenzene	*89.9*			*67.0-138*

Laboratory Control Sample (LCS)

(LCS) R3349689-1 10/10/18 18:56

Analyte	Spike Amount mg/kg	LCS Result mg/kg	LCS Rec. %	Rec. Limits %	LCS Qualifier
Benzene	0.125	0.129	103	70.0-123	
Ethylbenzene	0.125	0.102	81.8	74.0-126	
Toluene	0.125	0.105	83.9	75.0-121	
Xylenes, Total	0.375	0.329	87.7	72.0-127	
(S) Toluene-d8			*102*	*75.0-131*	
(S) Dibromofluoromethane			*94.6*	*65.0-129*	
(S) a,a,a-Trifluorotoluene			*101*	*80.0-120*	
(S) 4-Bromofluorobenzene			*90.3*	*67.0-138*	

L1031704-15 Original Sample (OS) • Matrix Spike (MS) • Matrix Spike Duplicate (MSD)

(OS) L1031704-15 10/11/18 02:12 • (MS) R3349689-3 10/11/18 02:30 • (MSD) R3349689-4 10/11/18 02:49

Analyte	Spike Amount mg/kg	Original Result mg/kg	MS Result mg/kg	MSD Result mg/kg	MS Rec. %	MSD Rec. %	Dilution	Rec. Limits %	MS Qualifier	MSD Qualifier	RPD %	RPD Limits %
Benzene	0.125	ND	2.46	2.86	98.2	114	20	10.0-149			15.1	37
Ethylbenzene	0.125	ND	2.11	2.35	83.3	93.1	20	10.0-160			11.0	38
Toluene	0.125	ND	2.16	2.44	86.5	97.4	20	10.0-156			11.9	38
Xylenes, Total	0.375	ND	6.57	7.50	87.6	100	20	10.0-160			13.2	38
(S) Toluene-d8					*107*	*104*		*75.0-131*				
(S) Dibromofluoromethane					*94.1*	*96.4*		*65.0-129*				
(S) a,a,a-Trifluorotoluene					*101*	*102*		*80.0-120*				
(S) 4-Bromofluorobenzene					*92.2*	*92.6*		*67.0-138*				

Sample Narrative:

OS: Non-target compounds too high to run at a lower dilution.

WG1177743

QUALITY CONTROL SUMMARY

Semi-Volatile Organic Compounds (GC) by Method 8015

L1031723-05,06,07,08,09,10,11,12,13,14,15,16,17,18,19,20,21,22

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Method Blank (MB)

(MB) R3349528-1 10/10/18 16:56

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	*84.1*			*18.0-148*

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

(LCS) R3349528-2 10/10/18 17:10 • (LCSD) R3349528-3 10/10/18 17:23

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 %
C10-C28 Diesel Range	50.0	40.2	41.6	80.4	83.2	50.0-150			3.42	20
(S) o-Terphenyl				*88.1*	*99.8*	*18.0-148*				

L1031723-12 Original Sample (OS) • Matrix Spike (MS) • Matrix Spike Duplicate (MSD)

(OS) L1031723-12 10/10/18 17:37 • (MS) R3349528-4 10/10/18 17:51 • (MSD) R3349528-5 10/10/18 18:04

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	53.0	U	37.3	36.4	70.4	68.6	1	50.0-150			2.59	20
(S) o-Terphenyl					*71.8*	*69.1*		*18.0-148*				

WG1179395

QUALITY CONTROL SUMMARY

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Semi-Volatile Organic Compounds (GC) by Method 8015

L1031723-01,02,03,04

Method Blank (MB)

(MB) R3349835-1 10/11/18 12:56

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	*74.8*			*18.0-148*

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

(LCS) R3349835-2 10/11/18 13:09 • (LCSD) R3349835-3 10/11/18 13:21

Analyte	Spike Amount mg/kg	LCS Result mg/kg	LCSD Result mg/kg	LCS Rec. %	LCSD Rec. %	Rec. Limits %	LCS Qualifier	LCSD Qualifier	RPD %	RPD Limits %
C10-C28 Diesel Range	50.0	35.0	30.4	70.0	60.8	50.0-150			14.1	20
(S) o-Terphenyl				*79.0*	*74.0*	*18.0-148*				

GLOSSARY OF TERMS

ONE LAB. NATIONWIDE.

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.

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.
Case Narrative (Cn)	A brief discussion about the included sample results, including a discussion of any non-conformances to protocol observed either at sample receipt by the laboratory from the field or during the analytical process. If present, there will be a section in the Case Narrative to discuss the meaning of any data qualifiers used in the report.
Quality Control Summary (Qc)	This section of the report includes the results of the laboratory quality control analyses required by procedure or analytical methods to assist in evaluating the validity of the results reported for your samples. These analyses are not being performed on your samples typically, but on laboratory generated material.
Sample Chain of Custody (Sc)	This is the document created in the field when your samples were initially collected. This is used to verify the time and date of collection, the person collecting the samples, and the analyses that the laboratory is requested to perform. This chain of custody also documents all persons (excluding commercial shippers) that have had control or possession of the samples from the time of collection until delivery to the laboratory for analysis.
Sample Results (Sr)	This section of your report will provide the results of all testing performed on your samples. These results are provided by sample ID and are separated by the analyses performed on each sample. The header line of each analysis section for each sample will provide the name and method number for the analysis reported.
Sample Summary (Ss)	This section of the Analytical Report defines the specific analyses performed for each sample ID, including the dates and times of preparation and/or analysis.

Qualifier	Description
B	The same analyte is found in the associated blank.
J	The identification of the analyte is acceptable; the reported value is an estimate.
J3	The associated batch QC was outside the established quality control range for precision.

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	T 104704245-17-14
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

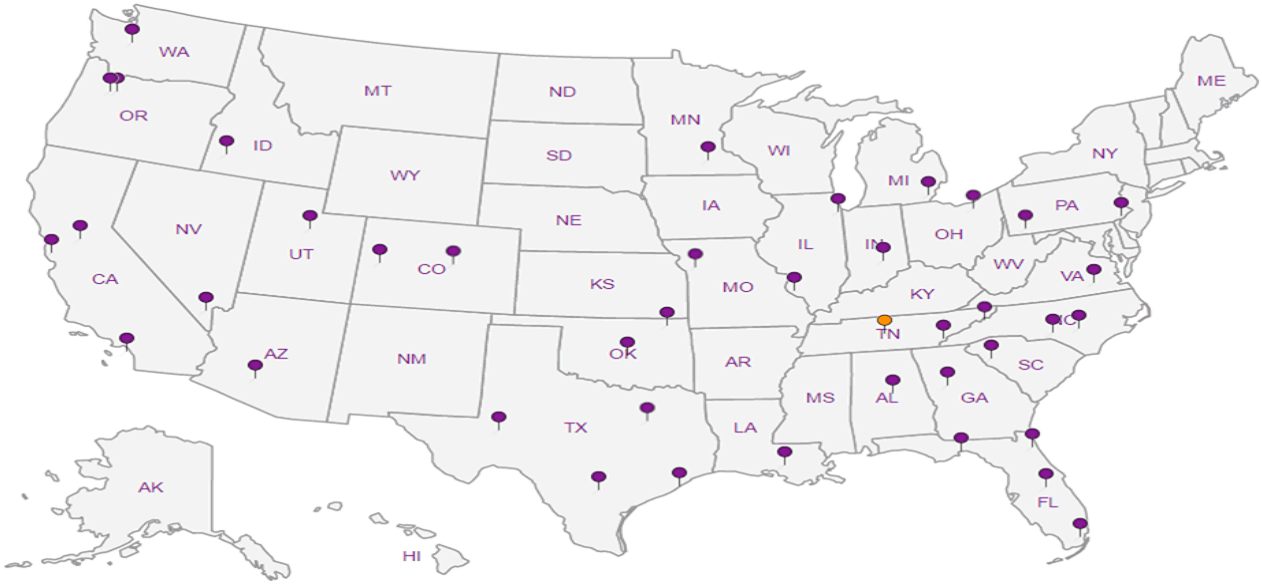
Third Party Federal Accreditations

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.



E058

Analysis Request of Chain of Custody Record

Page 1 of 4

Tetra Tech, Inc.

900 West Wall Street, Ste 100
Midland, Texas 79701
Tel (432) 682 4559
Fax (432) 682 3946

Client Name:	Conoco Phillips	Site Manager:	Kayla Taylor
Project Name	COP State F-1		
Project Location: (county, state)	Lea County, New Mexico	Project #:	212C-MD-01306
Invoice to:	Accounts Payable 900 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 2018)	SAMPLING TIME	MATRIX WATER	MATRIX SOIL	MATRIX	PRESERVATIVE METHOD HCL	HNO3	ICE	None	# CONTAINERS	FILTERED (Y/N)	BTEX 8021B / 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	GCMS Vol. 8260B / 624	GCMS Semi Vol. 8270C/625	PCBs 8082 / 608		PLM (Asbestos)	Chloride 300.0	Chloride Sulfate TDS	General Water Chemistry (see attached list)	Anion/Cation Balance	TPH 8015R			Hold
1031727-01	AH-1 (0'-1')	10/2/2018	1010		X				X		1	N	X		X												X								
02	AH-1 (1'-2')	10/2/2018	1025		X				X		1	N	X		X												X								
	AH-1 (2'-3')	10/2/2018	1030		X				X		1	N	X		X												X								X
	AH-1 (3'-4')	10/2/2018	1035		X				X		1	N	X		X												X								X
	AH-1 (4'-5')	10/2/2018	1040		X				X		1	N	X		X												X								X
03	AH-2 (0'-1')	10/2/2018	1000		X				X		1	N	X		X												X								
04	AH-2 (1'-2')	10/2/2018	1005		X				X		1	N	X		X												X								
	AH-2 (2'-3')	10/2/2018	1010		X				X		1	N	X		X												X								X
	AH-2 (3'-4')	10/2/2018	1018		X				X		1	N	X		X												X								X
	AH-2 (4'-5')	10/2/2018	1025		X				X		1	N	X		X												X								X

Relinquished by:	Date:	Time:	Received by	Date	Time
	10-3-18	0800	Kayla Taylor	10-3-18	0800
Kayla Taylor	10-3-18	11:15		10-3-18	11:15
Relinquished by:	Date	Time:	Received by	Date	Time
			SCL	10/4/18	8:45

LAB USE ONLY

Sample Temperature

REMARKS:

- ☐ STANDARD
- ☐ RUSH Same Day 24 hr 48 hr 72 hr
- ☐ Rush Charges Authorized
- ☐ Special Report Limits or TRRP Report

(Circle) HAND DELIVERED FEDEX UPS Tracking #. 4430 3429 2226

RADIATION: <0.1 mR/hr

ORIGINAL COPY

5.8
-0.3
5.5

10-022

Analysis Request of Chain of Custody Record

Page 4 of 4

Tetra Tech, Inc.

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

Client Name:	Conoco Phillips	Site Manager:	Kayla Taylor
Project Name:	COP State F-1		
Project Location: (county, state)	Lea County, New Mexico	Project #:	212C-MD-01306
Invoice to:	Accounts Payable 900 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 2018)	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	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	GCMS Vol. 8260B / 624	GCMS Semi. Vol. 8270C/625	PCBs 8082 / 608	NORM	PLM (Asbestos)	Chloride 300.0	Chloride	Sulfate	TDS	General Water Chemistry (see attached list)	Anion/Cation Balance	TPH 8015R			Hold
L10 31273	AH-3 (0'-1')	10/2/2018	1140		X				X			1	N	X		X												X									
06	AH-3 (1'-2')	10/2/2018	1150		X				X			1	N	X		X												X									
	AH-3 (2'-3')	10/2/2018	1205		X				X			1	N	X		X												X									X
	AH-3 (3'-4')	10/2/2018	1215		X				X			1	N	X		X												X									X
	AH-3 (4'-5')	10/2/2018	1220		X				X			1	N	X		X												X									X
07	AH-4 (0'-1')	10/2/2018	1125		X				X			1	N	X		X												X									
08	AH-4 (1'-2')	10/2/2018	1135		X				X			1	N	X		X												X									
	AH-4 (2'-3')	10/2/2018	1150		X				X			1	N	X		X												X									X
	AH-4 (3'-4')	10/2/2018	1200		X				X			1	N	X		X												X									X
	AH-4 (4'-5')	10/2/2018	1210		X				X			1	N	X		X												X									X

Relinquished by:	Date: 10-3-18 Time: 0800	Received by: Kayla Taylor	Date: 10-3-18 Time: 0800
Relinquished by: Kayla Taylor	Date: 10-3-18 Time: 11:15	Received by:	Date: 10-3-18 Time: 11:15
Relinquished by:	Date: Time:	Received by: BCI	Date: 10/4/18 Time: 8:45

LAB USE ONLY

Sample Temperature

REMARKS:

- ☐ STANDARD
- ☐ RUSH: Same Day 24 hr 48 hr 72 hr
- ☐ Rush Charges Authorized
- ☐ Special Report Limits or TRRP Report

(Circle) HAND DELIVERED FEDEX UPS Tracking #:

ORIGINAL COPY

RAD SCREEN: <0.5 mR/hr

5.8 0.3 5.5

Analysis Request of Chain of Custody Record

Tetra Tech, Inc.

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

Client Name:	Conoco Phillips	Site Manager:	Kayla Taylor
Project Name:	COP State F-1		
Project Location (county, state):	Lea County, New Mexico	Project #:	212C-MD-01306
Invoice to:	Accounts Payable 900 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 2018)	SAMPLING TIME	MATRIX WATER	MATRIX SOIL	PRESERVATIVE METHOD HCL	HNO3	ICE	None	# CONTAINERS	FILTERED (Y/N)	BTEX 8021B	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	GCMS Vol. 8260B / 624	GCMS 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
L1031723-09	AH-5 (0'-1')	10/2/2018	1405		X			X		1	N	X		X												X								
10	AH-5 (1'-2')	10/2/2018	1415		X			X		1	N	X		X												X								
	AH-5 (2'-3')	10/2/2018	1425		X			X		1	N	X		X												X								X
	AH-5 (3'-4')	10/2/2018	1435		X			X		1	N	X		X												X								X
	AH-5 (4'-5')	10/2/2018	1445		X			X		1	N	X		X												X								X
11	AH-6 (0'-1')	10/2/2018	1415		X			X		1	N	X		X												X								
12	AH-6 (1'-2')	10/2/2018	1422		X			X		1	N	X		X												X								
	AH-6 (2'-3')	10/2/2018	1430		X			X		1	N	X		X												X								X
	AH-6 (3'-4')	10/2/2018	1440		X			X		1	N	X		X												X								X
	AH-6 (4'-5')	10/2/2018	1445		X			X		1	N	X		X												X								X

Relinquished by:	Date:	Time:	Received by:	Date	Time
[signature]	10-3-18	0800	Kayla Taylor	10-3-18	0800
Kayla Taylor	10-3-18	11:15	[signature]	10/3/18	1115
Relinquished by	Date:	Time:	Received by: [signature] PCI	10/4/18	8:45

LAB USE ONLY

Sample Temperature

REMARKS:

- ☐ STANDARD
- ☐ RUSH: Same Day 24 hr 48 hr 72 hr
- ☐ Rush Charges Authorized
- ☐ Special Report Limits or TRRP Report

(Circle) HAND DELIVERED FEDEX UPS Tracking #

RAD SCREEN: <5.0 mR/hr

ORIGINAL COPY

5.8 0.3 5.5

Analysis Request of Chain of Custody Record

Page 4 of 4

Tetra Tech, Inc.

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

Client Name: Conoco Phillips
Site Manager: Kayla Taylor
Project Name: COP State F-1
Project Location: (county, state) Lea County, New Mexico
Project #: 212C-MD-01306
Invoice to: Accounts Payable 900 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: 2018)	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	TPH TX1005 (Ext to C35)	TPH 8015M (GRO - DRO - MRO)	PAH 8270C	Total Metals Ag As Ba Cd Cr Pb Se Hg	TCLP Metals Ag As Ba Cd Cr Pb Se Hg	TCLP Volatiles	TCLP Semi Volatiles	RCI	GCMS Vol. 8260B / 624	GCMS Semi. Vol. 8270C/625	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
L603123-13	AH-7 (0'-1')	10/2/2018	1540		X				X			1	N	X		X												X							
14	AH-7 (1'-2')	10/2/2018	1545		X				X			1	N	X		X												X							
15	AH-7 (2'-3')	10/2/2018	1550		X				X			1	N	X		X												X							
16	AH-7 (3'-4')	10/2/2018	1605		X				X			1	N	X		X												X							
17	AH-7 (4'-5')	10/2/2018	1610		X				X			1	N	X		X												X							
18	AH-8 (0'-1')	10/2/2018	1540		X				X			1	N	X		X												X							
19	AH-8 (1'-2')	10/2/2018	1545		X				X			1	N	X		X												X							
20	AH-8 (2'-3')	10/2/2018	1550		X				X			1	N	X		X												X							
21	AH-8 (3'-4')	10/2/2018	1553		X				X			1	N	X		X												X							
22	AH-8 (4'-5')	10/2/2018	1556		X				X			1	N	X		X												X							

Relinquished by	Date	Time	Received by	Date	Time
[signature]	10-3-18	0800	Kayla Taylor	10-3-18	0800
Kayla Taylor	10-3-18	1:15	[signature]	10-3-18	
Relinquished by	Date:	Time:	Received by [signature] SCL	Date 10/4/18	Time 8:45

LAB USE ONLY
Sample Temperature

REMARKS:
- [ ] STANDARD
- [ ] RUSH: Same Day 24 hr 48 hr 72 hr
- [ ] Rush Charges Authorized
- [ ] Special Report Limits or TRRP Report

(Circle) HAND DELIVERED FEDEX UPS Tracking #

RAD SCREEN: <0.5 mR/h

ORIGINAL COPY

5.8 / 5.5

Pace Analytical National Center for Testing & Innovation
Cooler Receipt Form

Client: TETRAMTX		SDG#	L 1631723
Cooler Received/Opened On: 10/4 /18		Temperature:	5.3
Received By: Kevin Turner			
Signature:			

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

Pace Analytical®
National Center for Testing & Innovation

ANALYTICAL REPORT

October 16, 2018

ConocoPhillips - Tetra Tech

Sample Delivery Group:	L1032149
Samples Received:	10/05/2018
Project Number:	212C-MD-01306
Description:	COP State F-1
Site:	LEA COUNTY, NEW MEXICO
Report To:	Kayla Taylor 4001 N. Big Spring St., Ste. 401 Midland, TX 79705

Entire Report Reviewed By:

Chris McCord
Project Manager

Results relate only to the items tested or calibrated and are reported as rounded values. This test report shall not be reproduced, except in full, without written approval of the laboratory. Where applicable, sampling conducted by Pace National is performed per guidance provided in laboratory standard operating procedures: 060302, 060303, and 060304.

TABLE OF CONTENTS

ONE LAB. NATIONWIDE.

SAMPLE SUMMARY

ONE LAB. NATIONWIDE.

AH-9 (0-1') L1032149-01 Solid

Collected by	Collected date/time	Received date/time
	10/03/18 08:51	10/05/18 08:45

Method	Batch	Dilution	Preparation date/time	Analysis date/time	Analyst
Total Solids by Method 2540 G-2011	WG1178246	1	10/09/18 15:48	10/09/18 15:54	JD
Wet Chemistry by Method 300.0	WG1177213	1	10/07/18 13:32	10/09/18 21:42	ELN
Volatile Organic Compounds (GC) by Method 8015D/GRO	WG1177810	1	10/05/18 20:33	10/11/18 10:40	BMB
Volatile Organic Compounds (GC/MS) by Method 8260B	WG1180054	1	10/05/18 20:33	10/12/18 12:10	LRL
Semi-Volatile Organic Compounds (GC) by Method 8015	WG1178948	3	10/12/18 07:00	10/12/18 22:07	AAT

AH-9 (1-2') L1032149-02 Solid

Collected by	Collected date/time	Received date/time
	10/03/18 08:56	10/05/18 08:45

Method	Batch	Dilution	Preparation date/time	Analysis date/time	Analyst
Total Solids by Method 2540 G-2011	WG1178246	1	10/09/18 15:48	10/09/18 15:54	JD
Wet Chemistry by Method 300.0	WG1177213	1	10/07/18 13:32	10/09/18 21:50	ELN
Volatile Organic Compounds (GC) by Method 8015D/GRO	WG1177810	1	10/05/18 20:33	10/11/18 11:04	BMB
Volatile Organic Compounds (GC/MS) by Method 8260B	WG1180054	1	10/05/18 20:33	10/12/18 12:29	DWR
Semi-Volatile Organic Compounds (GC) by Method 8015	WG1178948	1	10/12/18 07:00	10/12/18 22:47	AAT

AH-10 (0-1') L1032149-03 Solid

Collected by	Collected date/time	Received date/time
	10/03/18 08:50	10/05/18 08:45

Method	Batch	Dilution	Preparation date/time	Analysis date/time	Analyst
Total Solids by Method 2540 G-2011	WG1178246	1	10/09/18 15:48	10/09/18 15:54	JD
Wet Chemistry by Method 300.0	WG1177213	1	10/07/18 13:32	10/09/18 21:59	ELN
Volatile Organic Compounds (GC) by Method 8015D/GRO	WG1177810	1	10/05/18 20:33	10/11/18 11:28	BMB
Volatile Organic Compounds (GC/MS) by Method 8260B	WG1180054	1	10/05/18 20:33	10/12/18 13:43	LRL
Semi-Volatile Organic Compounds (GC) by Method 8015	WG1178948	1	10/12/18 07:00	10/12/18 23:01	AAT

AH-10 (1-2') L1032149-04 Solid

Collected by	Collected date/time	Received date/time
	10/03/18 09:00	10/05/18 08:45

Method	Batch	Dilution	Preparation date/time	Analysis date/time	Analyst
Total Solids by Method 2540 G-2011	WG1178246	1	10/09/18 15:48	10/09/18 15:54	JD
Wet Chemistry by Method 300.0	WG1177213	1	10/07/18 13:32	10/09/18 22:16	ELN
Volatile Organic Compounds (GC) by Method 8015D/GRO	WG1177810	1	10/05/18 20:33	10/11/18 11:52	BMB
Volatile Organic Compounds (GC/MS) by Method 8260B	WG1180054	1	10/05/18 20:33	10/12/18 14:39	ACG
Semi-Volatile Organic Compounds (GC) by Method 8015	WG1178948	1	10/12/18 07:00	10/12/18 23:14	AAT

AH-11 (0-1') L1032149-05 Solid

Collected by	Collected date/time	Received date/time
	10/03/18 09:45	10/05/18 08:45

Method	Batch	Dilution	Preparation date/time	Analysis date/time	Analyst
Total Solids by Method 2540 G-2011	WG1178246	1	10/09/18 15:48	10/09/18 15:54	JD
Wet Chemistry by Method 300.0	WG1177213	1	10/07/18 13:32	10/09/18 22:25	ELN
Volatile Organic Compounds (GC) by Method 8015D/GRO	WG1177810	1	10/05/18 20:33	10/11/18 12:17	BMB
Volatile Organic Compounds (GC/MS) by Method 8260B	WG1180054	1	10/05/18 20:33	10/12/18 14:57	ACG
Semi-Volatile Organic Compounds (GC) by Method 8015	WG1178948	1	10/12/18 07:00	10/12/18 23:28	AAT

SAMPLE SUMMARY

ONE LAB. NATIONWIDE.

AH-11 (1-2') L1032149-06 Solid

Collected by	Collected date/time	Received date/time
	10/03/18 09:50	10/05/18 08:45

Method	Batch	Dilution	Preparation date/time	Analysis date/time	Analyst
Total Solids by Method 2540 G-2011	WG1178246	1	10/09/18 15:48	10/09/18 15:54	JD
Wet Chemistry by Method 300.0	WG1177213	1	10/07/18 13:32	10/09/18 22:51	ELN
Volatile Organic Compounds (GC) by Method 8015D/GRO	WG1177810	1	10/05/18 20:33	10/11/18 12:41	BMB
Volatile Organic Compounds (GC/MS) by Method 8260B	WG1180054	1	10/05/18 20:33	10/12/18 15:16	ACG
Semi-Volatile Organic Compounds (GC) by Method 8015	WG1178948	1	10/12/18 07:00	10/12/18 23:42	AAT

AH-12 (0-1') L1032149-07 Solid

Collected by	Collected date/time	Received date/time
	10/03/18 09:45	10/05/18 08:45

Method	Batch	Dilution	Preparation date/time	Analysis date/time	Analyst
Total Solids by Method 2540 G-2011	WG1178246	1	10/09/18 15:48	10/09/18 15:54	JD
Wet Chemistry by Method 300.0	WG1177213	1	10/07/18 13:32	10/09/18 23:00	ELN
Volatile Organic Compounds (GC) by Method 8015D/GRO	WG1177810	1	10/05/18 20:33	10/11/18 13:05	BMB
Volatile Organic Compounds (GC/MS) by Method 8260B	WG1180054	1	10/05/18 20:33	10/12/18 15:34	ACG
Semi-Volatile Organic Compounds (GC) by Method 8015	WG1178948	1	10/12/18 07:00	10/12/18 23:55	AAT

AH-12 (1-2') L1032149-08 Solid

Collected by	Collected date/time	Received date/time
	10/03/18 09:50	10/05/18 08:45

Method	Batch	Dilution	Preparation date/time	Analysis date/time	Analyst
Total Solids by Method 2540 G-2011	WG1178246	1	10/09/18 15:48	10/09/18 15:54	JD
Wet Chemistry by Method 300.0	WG1177213	1	10/07/18 13:32	10/09/18 23:09	ELN
Volatile Organic Compounds (GC) by Method 8015D/GRO	WG1177810	1	10/05/18 20:33	10/11/18 05:48	BMB
Volatile Organic Compounds (GC/MS) by Method 8260B	WG1180054	1	10/05/18 20:33	10/12/18 15:53	ACG
Semi-Volatile Organic Compounds (GC) by Method 8015	WG1178948	1	10/12/18 07:00	10/13/18 00:08	AAT

AH-13 (0-1') L1032149-09 Solid

Collected by	Collected date/time	Received date/time
	10/03/18 11:15	10/05/18 08:45

Method	Batch	Dilution	Preparation date/time	Analysis date/time	Analyst
Total Solids by Method 2540 G-2011	WG1178246	1	10/09/18 15:48	10/09/18 15:54	JD
Wet Chemistry by Method 300.0	WG1177213	1	10/07/18 13:32	10/09/18 23:35	ELN
Volatile Organic Compounds (GC) by Method 8015D/GRO	WG1177810	1	10/05/18 20:33	10/11/18 06:12	BMB
Volatile Organic Compounds (GC/MS) by Method 8260B	WG1180054	1	10/05/18 20:33	10/12/18 16:11	ACG
Semi-Volatile Organic Compounds (GC) by Method 8015	WG1178948	1	10/12/18 07:00	10/13/18 00:22	AAT

AH-13 (1-2') L1032149-10 Solid

Collected by	Collected date/time	Received date/time
	10/03/18 11:20	10/05/18 08:45

Method	Batch	Dilution	Preparation date/time	Analysis date/time	Analyst
Total Solids by Method 2540 G-2011	WG1178246	1	10/09/18 15:48	10/09/18 15:54	JD
Wet Chemistry by Method 300.0	WG1177213	1	10/07/18 13:32	10/09/18 23:44	ELN
Volatile Organic Compounds (GC) by Method 8015D/GRO	WG1177810	1	10/05/18 20:33	10/11/18 06:37	BMB
Volatile Organic Compounds (GC/MS) by Method 8260B	WG1180054	1	10/05/18 20:33	10/12/18 16:29	ACG
Semi-Volatile Organic Compounds (GC) by Method 8015	WG1178948	1	10/12/18 07:00	10/13/18 00:36	AAT

SAMPLE SUMMARY

ONE LAB. NATIONWIDE.

AH-14 (0-1') L1032149-11 Solid

Collected by	Collected date/time	Received date/time
	10/03/18 11:17	10/05/18 08:45

Method	Batch	Dilution	Preparation date/time	Analysis date/time	Analyst
Total Solids by Method 2540 G-2011	WG1178248	1	10/09/18 15:33	10/09/18 15:47	JD
Wet Chemistry by Method 300.0	WG1177213	1	10/07/18 13:32	10/09/18 23:53	ELN
Volatile Organic Compounds (GC) by Method 8015D/GRO	WG1177810	1	10/05/18 20:33	10/11/18 07:01	BMB
Volatile Organic Compounds (GC/MS) by Method 8260B	WG1180054	1	10/05/18 20:33	10/12/18 17:38	LRL
Semi-Volatile Organic Compounds (GC) by Method 8015	WG1178948	1	10/12/18 07:00	10/13/18 00:49	AAT

AH-14 (1-2') L1032149-12 Solid

Collected by	Collected date/time	Received date/time
	10/03/18 11:23	10/05/18 08:45

Method	Batch	Dilution	Preparation date/time	Analysis date/time	Analyst
Total Solids by Method 2540 G-2011	WG1178248	1	10/09/18 15:33	10/09/18 15:47	JD
Wet Chemistry by Method 300.0	WG1177213	1	10/07/18 13:32	10/10/18 00:02	ELN
Volatile Organic Compounds (GC) by Method 8015D/GRO	WG1177810	1	10/05/18 20:33	10/11/18 07:25	BMB
Volatile Organic Compounds (GC/MS) by Method 8260B	WG1180054	1	10/05/18 20:33	10/12/18 17:57	LRL
Semi-Volatile Organic Compounds (GC) by Method 8015	WG1178948	1	10/12/18 07:00	10/13/18 01:03	AAT

AH-15 (0-1') L1032149-13 Solid

Collected by	Collected date/time	Received date/time
	10/03/18 12:00	10/05/18 08:45

Method	Batch	Dilution	Preparation date/time	Analysis date/time	Analyst
Total Solids by Method 2540 G-2011	WG1178248	1	10/09/18 15:33	10/09/18 15:47	JD
Wet Chemistry by Method 300.0	WG1177213	1	10/07/18 13:32	10/10/18 00:10	ELN
Volatile Organic Compounds (GC) by Method 8015D/GRO	WG1177810	1	10/05/18 20:33	10/11/18 07:50	BMB
Volatile Organic Compounds (GC/MS) by Method 8260B	WG1180054	1	10/05/18 20:33	10/12/18 18:15	LRL
Semi-Volatile Organic Compounds (GC) by Method 8015	WG1178948	1	10/12/18 07:00	10/13/18 01:16	AAT

AH-15 (1-2') L1032149-14 Solid

Collected by	Collected date/time	Received date/time
	10/03/18 12:03	10/05/18 08:45

Method	Batch	Dilution	Preparation date/time	Analysis date/time	Analyst
Total Solids by Method 2540 G-2011	WG1178248	1	10/09/18 15:33	10/09/18 15:47	JD
Wet Chemistry by Method 300.0	WG1177213	1	10/07/18 13:32	10/10/18 00:37	ELN
Volatile Organic Compounds (GC) by Method 8015D/GRO	WG1177810	1	10/05/18 20:33	10/11/18 08:14	BMB
Volatile Organic Compounds (GC/MS) by Method 8260B	WG1180054	1	10/05/18 20:33	10/12/18 18:34	LRL
Semi-Volatile Organic Compounds (GC) by Method 8015	WG1178948	1	10/12/18 07:00	10/13/18 01:30	AAT

AH-16 (2-3') L1032149-15 Solid

Collected by	Collected date/time	Received date/time
	10/03/18 12:09	10/05/18 08:45

Method	Batch	Dilution	Preparation date/time	Analysis date/time	Analyst
Total Solids by Method 2540 G-2011	WG1178248	1	10/09/18 15:33	10/09/18 15:47	JD
Wet Chemistry by Method 300.0	WG1177213	1	10/07/18 13:32	10/10/18 00:46	ELN
Volatile Organic Compounds (GC) by Method 8015D/GRO	WG1177810	1	10/05/18 20:33	10/11/18 08:38	BMB
Volatile Organic Compounds (GC/MS) by Method 8260B	WG1180054	1	10/05/18 20:33	10/12/18 18:52	LRL
Semi-Volatile Organic Compounds (GC) by Method 8015	WG1178948	1	10/12/18 07:00	10/13/18 01:43	AAT

SAMPLE SUMMARY

ONE LAB. NATIONWIDE.

AH-17 (0-1') L1032149-16 Solid

Collected by	Collected date/time	Received date/time
	10/03/18 13:07	10/05/18 08:45

Method	Batch	Dilution	Preparation date/time	Analysis date/time	Analyst
Total Solids by Method 2540 G-2011	WG1178248	1	10/09/18 15:33	10/09/18 15:47	JD
Wet Chemistry by Method 300.0	WG1177213	1	10/07/18 13:32	10/10/18 00:54	ELN
Volatile Organic Compounds (GC) by Method 8015D/GRO	WG1177810	1	10/05/18 20:33	10/11/18 09:02	BMB
Volatile Organic Compounds (GC/MS) by Method 8260B	WG1180054	1	10/05/18 20:33	10/12/18 19:10	LRL
Semi-Volatile Organic Compounds (GC) by Method 8015	WG1178948	1	10/12/18 07:00	10/13/18 01:57	AAT

AH-18 (0-1') L1032149-17 Solid

Collected by	Collected date/time	Received date/time
	10/03/18 13:40	10/05/18 08:45

Method	Batch	Dilution	Preparation date/time	Analysis date/time	Analyst
Total Solids by Method 2540 G-2011	WG1178248	1	10/09/18 15:33	10/09/18 15:47	JD
Wet Chemistry by Method 300.0	WG1177213	1	10/07/18 13:32	10/10/18 01:03	ELN
Volatile Organic Compounds (GC) by Method 8015D/GRO	WG1177810	1	10/05/18 20:33	10/11/18 09:27	BMB
Volatile Organic Compounds (GC/MS) by Method 8260B	WG1180054	1	10/05/18 20:33	10/12/18 19:29	LRL
Semi-Volatile Organic Compounds (GC) by Method 8015	WG1178948	1	10/12/18 07:00	10/13/18 02:10	AAT

AH-18 (1-2') L1032149-18 Solid

Collected by	Collected date/time	Received date/time
	10/03/18 13:45	10/05/18 08:45

Method	Batch	Dilution	Preparation date/time	Analysis date/time	Analyst
Total Solids by Method 2540 G-2011	WG1178248	1	10/09/18 15:33	10/09/18 15:47	JD
Wet Chemistry by Method 300.0	WG1177213	1	10/07/18 13:32	10/10/18 01:12	ELN
Volatile Organic Compounds (GC) by Method 8015D/GRO	WG1177810	1	10/05/18 20:33	10/11/18 09:51	BMB
Volatile Organic Compounds (GC/MS) by Method 8260B	WG1180054	1	10/05/18 20:33	10/12/18 19:47	LRL
Semi-Volatile Organic Compounds (GC) by Method 8015	WG1178948	1	10/12/18 07:00	10/13/18 02:24	AAT

CASE NARRATIVE

ONE LAB. NATIONWIDE.

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

Chris McCord
Project Manager

AH-9 (0-1')
Collected date/time: 10/03/18 08:51

SAMPLE RESULTS - 01

L1032149

ONE LAB. NATIONWIDE.

Total Solids by Method 2540 G-2011

Analyte	Result %	Qualifier	Dilution	Analysis date / time	Batch
Total Solids	89.2		1	10/09/2018 15:54	WG1178246

Wet Chemistry by Method 300.0

Analyte	Result (dry) mg/kg	Qualifier	SDL (dry) mg/kg	Unadj. MQL mg/kg	MQL (dry) mg/kg	Dilution	Analysis date / time	Batch
Chloride	52.3		0.891	10.0	11.2	1	10/09/2018 21:42	WG1177213

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

Analyte	Result (dry) mg/kg	Qualifier	SDL (dry) mg/kg	Unadj. MQL mg/kg	MQL (dry) mg/kg	Dilution	Analysis date / time	Batch
TPH (GC/FID) Low Fraction	0.0470	J	0.0243	0.100	0.112	1	10/11/2018 10:40	WG1177810
(S) a,a,a-Trifluorotoluene(FID)	*98.6*				*77.0-120*		*10/11/2018 10:40*	WG1177810

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

Analyte	Result (dry) mg/kg	Qualifier	SDL (dry) mg/kg	Unadj. MQL mg/kg	MQL (dry) mg/kg	Dilution	Analysis date / time	Batch
Benzene	U	J3	0.000448	0.00100	0.00112	1	10/12/2018 12:10	WG1180054
Toluene	U	J3	0.00140	0.00500	0.00560	1	10/12/2018 12:10	WG1180054
Ethylbenzene	U	J3	0.000594	0.00250	0.00280	1	10/12/2018 12:10	WG1180054
Total Xylenes	U	J3	0.00536	0.00650	0.00728	1	10/12/2018 12:10	WG1180054
(S) Toluene-d8	*106*				*75.0-131*		*10/12/2018 12:10*	WG1180054
(S) Dibromofluoromethane	*92.5*				*65.0-129*		*10/12/2018 12:10*	WG1180054
(S) a,a,a-Trifluorotoluene	*101*				*80.0-120*		*10/12/2018 12:10*	WG1180054
(S) 4-Bromofluorobenzene	*90.6*				*67.0-138*		*10/12/2018 12:10*	WG1180054

Semi-Volatile Organic Compounds (GC) by Method 8015

Analyte	Result (dry) mg/kg	Qualifier	SDL (dry) mg/kg	Unadj. MQL mg/kg	MQL (dry) mg/kg	Dilution	Analysis date / time	Batch
C10-C28 Diesel Range	U		5.41	4.00	13.4	3	10/12/2018 22:07	WG1178948
C28-C40 Oil Range	4.01	J	0.921	4.00	13.4	3	10/12/2018 22:07	WG1178948
(S) o-Terphenyl	*90.5*				*18.0-148*		*10/12/2018 22:07*	WG1178948

AH-9 (1-2')
Collected date/time: 10/03/18 08:56

SAMPLE RESULTS - 02

L1032149

ONE LAB. NATIONWIDE.

Total Solids by Method 2540 G-2011

Analyte	Result %	Qualifier	Dilution	Analysis date / time	Batch
Total Solids	92.7		1	10/09/2018 15:54	WG1178246

Wet Chemistry by Method 300.0

Analyte	Result (dry) mg/kg	Qualifier	SDL (dry) mg/kg	Unadj. MQL mg/kg	MQL (dry) mg/kg	Dilution	Analysis date / time	Batch
Chloride	74.5		0.858	10.0	10.8	1	10/09/2018 21:50	WG1177213

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

Analyte	Result (dry) mg/kg	Qualifier	SDL (dry) mg/kg	Unadj. MQL mg/kg	MQL (dry) mg/kg	Dilution	Analysis date / time	Batch
TPH (GC/FID) Low Fraction	0.0434	J	0.0234	0.100	0.108	1	10/11/2018 11:04	WG1177810
(S) a,a,a-Trifluorotoluene(FID)	*98.6*				*77.0-120*		*10/11/2018 11:04*	WG1177810

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

Analyte	Result (dry) mg/kg	Qualifier	SDL (dry) mg/kg	Unadj. MQL mg/kg	MQL (dry) mg/kg	Dilution	Analysis date / time	Batch
Benzene	U		0.000431	0.00100	0.00108	1	10/12/2018 12:29	WG1180054
Toluene	U		0.00135	0.00500	0.00539	1	10/12/2018 12:29	WG1180054
Ethylbenzene	U		0.000572	0.00250	0.00270	1	10/12/2018 12:29	WG1180054
Total Xylenes	U		0.00516	0.00650	0.00701	1	10/12/2018 12:29	WG1180054
(S) Toluene-d8	*104*				*75.0-131*		*10/12/2018 12:29*	WG1180054
(S) Dibromofluoromethane	*90.8*				*65.0-129*		*10/12/2018 12:29*	WG1180054
(S) a,a,a-Trifluorotoluene	*101*				*80.0-120*		*10/12/2018 12:29*	WG1180054
(S) 4-Bromofluorobenzene	*88.7*				*67.0-138*		*10/12/2018 12:29*	WG1180054

Semi-Volatile Organic Compounds (GC) by Method 8015

Analyte	Result (dry) mg/kg	Qualifier	SDL (dry) mg/kg	Unadj. MQL mg/kg	MQL (dry) mg/kg	Dilution	Analysis date / time	Batch
C10-C28 Diesel Range	U		1.74	4.00	4.31	1	10/12/2018 22:47	WG1178948
C28-C40 Oil Range	4.65		0.296	4.00	4.31	1	10/12/2018 22:47	WG1178948
(S) o-Terphenyl	*80.7*				*18.0-148*		*10/12/2018 22:47*	WG1178948

AH-10 (0-1')
Collected date/time: 10/03/18 08:50

SAMPLE RESULTS - 03

L1032149

ONE LAB. NATIONWIDE.

Total Solids by Method 2540 G-2011

Analyte	Result %	Qualifier	Dilution	Analysis date / time	Batch
Total Solids	99.1		1	10/09/2018 15:54	WG1178246

Wet Chemistry by Method 300.0

Analyte	Result (dry) mg/kg	Qualifier	SDL (dry) mg/kg	Unadj. MQL mg/kg	MQL (dry) mg/kg	Dilution	Analysis date / time	Batch
Chloride	46.2		0.803	10.0	10.1	1	10/09/2018 21:59	WG1177213

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

Analyte	Result (dry) mg/kg	Qualifier	SDL (dry) mg/kg	Unadj. MQL mg/kg	MQL (dry) mg/kg	Dilution	Analysis date / time	Batch
TPH (GC/FID) Low Fraction	0.0552	J	0.0219	0.100	0.101	1	10/11/2018 11:28	WG1177810
(S) a,a,a-Trifluorotoluene(FID)	*98.1*				*77.0-120*		*10/11/2018 11:28*	WG1177810

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

Analyte	Result (dry) mg/kg	Qualifier	SDL (dry) mg/kg	Unadj. MQL mg/kg	MQL (dry) mg/kg	Dilution	Analysis date / time	Batch
Benzene	U		0.000404	0.00100	0.00101	1	10/12/2018 13:43	WG1180054
Toluene	U		0.00126	0.00500	0.00505	1	10/12/2018 13:43	WG1180054
Ethylbenzene	U		0.000535	0.00250	0.00252	1	10/12/2018 13:43	WG1180054
Total Xylenes	U		0.00482	0.00650	0.00656	1	10/12/2018 13:43	WG1180054
(S) Toluene-d8	*107*				*75.0-131*		*10/12/2018 13:43*	WG1180054
(S) Dibromofluoromethane	*92.0*				*65.0-129*		*10/12/2018 13:43*	WG1180054
(S) a,a,a-Trifluorotoluene	*98.8*				*80.0-120*		*10/12/2018 13:43*	WG1180054
(S) 4-Bromofluorobenzene	*90.1*				*67.0-138*		*10/12/2018 13:43*	WG1180054

Semi-Volatile Organic Compounds (GC) by Method 8015

Analyte	Result (dry) mg/kg	Qualifier	SDL (dry) mg/kg	Unadj. MQL mg/kg	MQL (dry) mg/kg	Dilution	Analysis date / time	Batch
C10-C28 Diesel Range	3.17	J	1.63	4.00	4.04	1	10/12/2018 23:01	WG1178948
C28-C40 Oil Range	9.47		0.277	4.00	4.04	1	10/12/2018 23:01	WG1178948
(S) o-Terphenyl	*78.2*				*18.0-148*		*10/12/2018 23:01*	WG1178948

AH-10 (1-2')
Collected date/time: 10/03/18 09:00

SAMPLE RESULTS - 04

L1032149

ONE LAB. NATIONWIDE.

Total Solids by Method 2540 G-2011

Analyte	Result %	Qualifier	Dilution	Analysis date / time	Batch
Total Solids	98.7		1	10/09/2018 15:54	WG1178246

Wet Chemistry by Method 300.0

Analyte	Result (dry) mg/kg	Qualifier	SDL (dry) mg/kg	Unadj. MQL mg/kg	MQL (dry) mg/kg	Dilution	Analysis date / time	Batch
Chloride	42.0		0.805	10.0	10.1	1	10/09/2018 22:16	WG1177213

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

Analyte	Result (dry) mg/kg	Qualifier	SDL (dry) mg/kg	Unadj. MQL mg/kg	MQL (dry) mg/kg	Dilution	Analysis date / time	Batch
TPH (GC/FID) Low Fraction	0.0551	J	0.0220	0.100	0.101	1	10/11/2018 11:52	WG1177810
(S) a,a,a-Trifluorotoluene(FID)	*98.7*				*77.0-120*		*10/11/2018 11:52*	WG1177810

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

Analyte	Result (dry) mg/kg	Qualifier	SDL (dry) mg/kg	Unadj. MQL mg/kg	MQL (dry) mg/kg	Dilution	Analysis date / time	Batch
Benzene	U		0.000405	0.00100	0.00101	1	10/12/2018 14:39	WG1180054
Toluene	U		0.00127	0.00500	0.00506	1	10/12/2018 14:39	WG1180054
Ethylbenzene	U		0.000537	0.00250	0.00253	1	10/12/2018 14:39	WG1180054
Total Xylenes	U		0.00484	0.00650	0.00658	1	10/12/2018 14:39	WG1180054
(S) Toluene-d8	*106*				*75.0-131*		*10/12/2018 14:39*	WG1180054
(S) Dibromofluoromethane	*91.9*				*65.0-129*		*10/12/2018 14:39*	WG1180054
(S) a,a,a-Trifluorotoluene	*98.7*				*80.0-120*		*10/12/2018 14:39*	WG1180054
(S) 4-Bromofluorobenzene	*88.2*				*67.0-138*		*10/12/2018 14:39*	WG1180054

Semi-Volatile Organic Compounds (GC) by Method 8015

Analyte	Result (dry) mg/kg	Qualifier	SDL (dry) mg/kg	Unadj. MQL mg/kg	MQL (dry) mg/kg	Dilution	Analysis date / time	Batch
C10-C28 Diesel Range	2.25	J	1.63	4.00	4.05	1	10/12/2018 23:14	WG1178948
C28-C40 Oil Range	6.71		0.278	4.00	4.05	1	10/12/2018 23:14	WG1178948
(S) o-Terphenyl	*81.0*				*18.0-148*		*10/12/2018 23:14*	WG1178948

AH-11 (0-1')
Collected date/time: 10/03/18 09:45

SAMPLE RESULTS - 05

L1032149

ONE LAB. NATIONWIDE.

Total Solids by Method 2540 G-2011

Analyte	Result %	Qualifier	Dilution	Analysis date / time	Batch
Total Solids	97.9		1	10/09/2018 15:54	WG1178246

Wet Chemistry by Method 300.0

Analyte	Result (dry) mg/kg	Qualifier	SDL (dry) mg/kg	Unadj. MQL mg/kg	MQL (dry) mg/kg	Dilution	Analysis date / time	Batch
Chloride	47.5		0.813	10.0	10.2	1	10/09/2018 22:25	WG1177213

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

Analyte	Result (dry) mg/kg	Qualifier	SDL (dry) mg/kg	Unadj. MQL mg/kg	MQL (dry) mg/kg	Dilution	Analysis date / time	Batch
TPH (GC/FID) Low Fraction	0.0657	J	0.0222	0.100	0.102	1	10/11/2018 12:17	WG1177810
(S) a,a,a-Trifluorotoluene(FID)	*99.0*				*77.0-120*		*10/11/2018 12:17*	WG1177810

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

Analyte	Result (dry) mg/kg	Qualifier	SDL (dry) mg/kg	Unadj. MQL mg/kg	MQL (dry) mg/kg	Dilution	Analysis date / time	Batch
Benzene	U		0.000409	0.00100	0.00102	1	10/12/2018 14:57	WG1180054
Toluene	U		0.00128	0.00500	0.00511	1	10/12/2018 14:57	WG1180054
Ethylbenzene	U		0.000542	0.00250	0.00255	1	10/12/2018 14:57	WG1180054
Total Xylenes	U		0.00488	0.00650	0.00664	1	10/12/2018 14:57	WG1180054
(S) Toluene-d8	*104*				*75.0-131*		*10/12/2018 14:57*	WG1180054
(S) Dibromofluoromethane	*92.3*				*65.0-129*		*10/12/2018 14:57*	WG1180054
(S) a,a,a-Trifluorotoluene	*99.5*				*80.0-120*		*10/12/2018 14:57*	WG1180054
(S) 4-Bromofluorobenzene	*88.1*				*67.0-138*		*10/12/2018 14:57*	WG1180054

Semi-Volatile Organic Compounds (GC) by Method 8015

Analyte	Result (dry) mg/kg	Qualifier	SDL (dry) mg/kg	Unadj. MQL mg/kg	MQL (dry) mg/kg	Dilution	Analysis date / time	Batch
C10-C28 Diesel Range	1.69	J	1.65	4.00	4.09	1	10/12/2018 23:28	WG1178948
C28-C40 Oil Range	6.19		0.280	4.00	4.09	1	10/12/2018 23:28	WG1178948
(S) o-Terphenyl	*88.3*				*18.0-148*		*10/12/2018 23:28*	WG1178948

AH-11 (1-2')
Collected date/time: 10/03/18 09:50

SAMPLE RESULTS - 06

L1032149

ONE LAB. NATIONWIDE.

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

Total Solids by Method 2540 G-2011

Analyte	Result %	Qualifier	Dilution	Analysis date / time	Batch
Total Solids	95.7		1	10/09/2018 15:54	WG1178246

Wet Chemistry by Method 300.0

Analyte	Result (dry) mg/kg	Qualifier	SDL (dry) mg/kg	Unadj. MQL mg/kg	MQL (dry) mg/kg	Dilution	Analysis date / time	Batch
Chloride	44.6		0.831	10.0	10.5	1	10/09/2018 22:51	WG1177213

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

Analyte	Result (dry) mg/kg	Qualifier	SDL (dry) mg/kg	Unadj. MQL mg/kg	MQL (dry) mg/kg	Dilution	Analysis date / time	Batch
TPH (GC/FID) Low Fraction	0.0470	J	0.0227	0.100	0.105	1	10/11/2018 12:41	WG1177810
(S) a,a,a-Trifluorotoluene(FID)	*99.2*				*77.0-120*		*10/11/2018 12:41*	WG1177810

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

Analyte	Result (dry) mg/kg	Qualifier	SDL (dry) mg/kg	Unadj. MQL mg/kg	MQL (dry) mg/kg	Dilution	Analysis date / time	Batch
Benzene	U		0.000418	0.00100	0.00105	1	10/12/2018 15:16	WG1180054
Toluene	U		0.00131	0.00500	0.00523	1	10/12/2018 15:16	WG1180054
Ethylbenzene	U		0.000554	0.00250	0.00261	1	10/12/2018 15:16	WG1180054
Total Xylenes	U		0.00500	0.00650	0.00679	1	10/12/2018 15:16	WG1180054
(S) Toluene-d8	*104*				*75.0-131*		*10/12/2018 15:16*	WG1180054
(S) Dibromofluoromethane	*91.6*				*65.0-129*		*10/12/2018 15:16*	WG1180054
(S) a,a,a-Trifluorotoluene	*97.1*				*80.0-120*		*10/12/2018 15:16*	WG1180054
(S) 4-Bromofluorobenzene	*90.5*				*67.0-138*		*10/12/2018 15:16*	WG1180054

Semi-Volatile Organic Compounds (GC) by Method 8015

Analyte	Result (dry) mg/kg	Qualifier	SDL (dry) mg/kg	Unadj. MQL mg/kg	MQL (dry) mg/kg	Dilution	Analysis date / time	Batch
C10-C28 Diesel Range	1.91	J	1.68	4.00	4.18	1	10/12/2018 23:42	WG1178948
C28-C40 Oil Range	6.35		0.286	4.00	4.18	1	10/12/2018 23:42	WG1178948
(S) o-Terphenyl	*82.7*				*18.0-148*		*10/12/2018 23:42*	WG1178948

AH-12 (0-1')
Collected date/time: 10/03/18 09:45

SAMPLE RESULTS - 07

L1032149

ONE LAB. NATIONWIDE.

Total Solids by Method 2540 G-2011

Analyte	Result %	Qualifier	Dilution	Analysis date / time	Batch
Total Solids	95.9		1	10/09/2018 15:54	WG1178246

Wet Chemistry by Method 300.0

Analyte	Result (dry) mg/kg	Qualifier	SDL (dry) mg/kg	Unadj. MQL mg/kg	MQL (dry) mg/kg	Dilution	Analysis date / time	Batch
Chloride	48.7		0.829	10.0	10.4	1	10/09/2018 23:00	WG1177213

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

Analyte	Result (dry) mg/kg	Qualifier	SDL (dry) mg/kg	Unadj. MQL mg/kg	MQL (dry) mg/kg	Dilution	Analysis date / time	Batch
TPH (GC/FID) Low Fraction	0.0543	J	0.0226	0.100	0.104	1	10/11/2018 13:05	WG1177810
(S) a,a,a-Trifluorotoluene(FID)	*98.3*				*77.0-120*		*10/11/2018 13:05*	WG1177810

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

Analyte	Result (dry) mg/kg	Qualifier	SDL (dry) mg/kg	Unadj. MQL mg/kg	MQL (dry) mg/kg	Dilution	Analysis date / time	Batch
Benzene	U		0.000417	0.00100	0.00104	1	10/12/2018 15:34	WG1180054
Toluene	U		0.00130	0.00500	0.00521	1	10/12/2018 15:34	WG1180054
Ethylbenzene	U		0.000553	0.00250	0.00261	1	10/12/2018 15:34	WG1180054
Total Xylenes	U		0.00498	0.00650	0.00678	1	10/12/2018 15:34	WG1180054
(S) Toluene-d8	*107*				*75.0-131*		*10/12/2018 15:34*	WG1180054
(S) Dibromofluoromethane	*92.0*				*65.0-129*		*10/12/2018 15:34*	WG1180054
(S) a,a,a-Trifluorotoluene	*97.3*				*80.0-120*		*10/12/2018 15:34*	WG1180054
(S) 4-Bromofluorobenzene	*89.5*				*67.0-138*		*10/12/2018 15:34*	WG1180054

Semi-Volatile Organic Compounds (GC) by Method 8015

Analyte	Result (dry) mg/kg	Qualifier	SDL (dry) mg/kg	Unadj. MQL mg/kg	MQL (dry) mg/kg	Dilution	Analysis date / time	Batch
C10-C28 Diesel Range	U		1.68	4.00	4.17	1	10/12/2018 23:55	WG1178948
C28-C40 Oil Range	5.61		0.286	4.00	4.17	1	10/12/2018 23:55	WG1178948
(S) o-Terphenyl	*89.7*				*18.0-148*		*10/12/2018 23:55*	WG1178948

AH-12 (1-2')
Collected date/time: 10/03/18 09:50

SAMPLE RESULTS - 08

L1032149

ONE LAB. NATIONWIDE.

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

Total Solids by Method 2540 G-2011

Analyte	Result %	Qualifier	Dilution	Analysis date / time	Batch
Total Solids	90.7		1	10/09/2018 15:54	WG1178246

Wet Chemistry by Method 300.0

Analyte	Result (dry) mg/kg	Qualifier	SDL (dry) mg/kg	Unadj. MQL mg/kg	MQL (dry) mg/kg	Dilution	Analysis date / time	Batch
Chloride	49.3		0.877	10.0	11.0	1	10/09/2018 23:09	WG1177213

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

Analyte	Result (dry) mg/kg	Qualifier	SDL (dry) mg/kg	Unadj. MQL mg/kg	MQL (dry) mg/kg	Dilution	Analysis date / time	Batch
TPH (GC/FID) Low Fraction	0.0309	J	0.0239	0.100	0.110	1	10/11/2018 05:48	WG1177810
(S) a,a,a-Trifluorotoluene(FID)	*98.6*				*77.0-120*		*10/11/2018 05:48*	WG1177810

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

Analyte	Result (dry) mg/kg	Qualifier	SDL (dry) mg/kg	Unadj. MQL mg/kg	MQL (dry) mg/kg	Dilution	Analysis date / time	Batch
Benzene	U		0.000441	0.00100	0.00110	1	10/12/2018 15:53	WG1180054
Toluene	U		0.00138	0.00500	0.00551	1	10/12/2018 15:53	WG1180054
Ethylbenzene	U		0.000585	0.00250	0.00276	1	10/12/2018 15:53	WG1180054
Total Xylenes	U		0.00527	0.00650	0.00717	1	10/12/2018 15:53	WG1180054
(S) Toluene-d8	*105*				*75.0-131*		*10/12/2018 15:53*	WG1180054
(S) Dibromofluoromethane	*92.0*				*65.0-129*		*10/12/2018 15:53*	WG1180054
(S) a,a,a-Trifluorotoluene	*100*				*80.0-120*		*10/12/2018 15:53*	WG1180054
(S) 4-Bromofluorobenzene	*90.9*				*67.0-138*		*10/12/2018 15:53*	WG1180054

Semi-Volatile Organic Compounds (GC) by Method 8015

Analyte	Result (dry) mg/kg	Qualifier	SDL (dry) mg/kg	Unadj. MQL mg/kg	MQL (dry) mg/kg	Dilution	Analysis date / time	Batch
C10-C28 Diesel Range	2.00	J	1.78	4.00	4.41	1	10/13/2018 00:08	WG1178948
C28-C40 Oil Range	7.49		0.302	4.00	4.41	1	10/13/2018 00:08	WG1178948
(S) o-Terphenyl	*82.9*				*18.0-148*		*10/13/2018 00:08*	WG1178948

AH-13 (0-1')
Collected date/time: 10/03/18 11:15

SAMPLE RESULTS - 09

L1032149

ONE LAB. NATIONWIDE.

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

Total Solids by Method 2540 G-2011

Analyte	Result %	Qualifier	Dilution	Analysis date / time	Batch
Total Solids	98.5		1	10/09/2018 15:54	WG1178246

Wet Chemistry by Method 300.0

Analyte	Result (dry) mg/kg	Qualifier	SDL (dry) mg/kg	Unadj. MQL mg/kg	MQL (dry) mg/kg	Dilution	Analysis date / time	Batch
Chloride	60.3		0.807	10.0	10.1	1	10/09/2018 23:35	WG1177213

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

Analyte	Result (dry) mg/kg	Qualifier	SDL (dry) mg/kg	Unadj. MQL mg/kg	MQL (dry) mg/kg	Dilution	Analysis date / time	Batch
TPH (GC/FID) Low Fraction	0.0358	J	0.0220	0.100	0.101	1	10/11/2018 06:12	WG1177810
(S) a,a,a-Trifluorotoluene(FID)	*98.0*				*77.0-120*		*10/11/2018 06:12*	WG1177810

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

Analyte	Result (dry) mg/kg	Qualifier	SDL (dry) mg/kg	Unadj. MQL mg/kg	MQL (dry) mg/kg	Dilution	Analysis date / time	Batch
Benzene	U		0.000406	0.00100	0.00101	1	10/12/2018 16:11	WG1180054
Toluene	U		0.00127	0.00500	0.00507	1	10/12/2018 16:11	WG1180054
Ethylbenzene	U		0.000538	0.00250	0.00254	1	10/12/2018 16:11	WG1180054
Total Xylenes	U		0.00485	0.00650	0.00660	1	10/12/2018 16:11	WG1180054
(S) Toluene-d8	*106*				*75.0-131*		*10/12/2018 16:11*	WG1180054
(S) Dibromofluoromethane	*90.4*				*65.0-129*		*10/12/2018 16:11*	WG1180054
(S) a,a,a-Trifluorotoluene	*99.5*				*80.0-120*		*10/12/2018 16:11*	WG1180054
(S) 4-Bromofluorobenzene	*91.0*				*67.0-138*		*10/12/2018 16:11*	WG1180054

Semi-Volatile Organic Compounds (GC) by Method 8015

Analyte	Result (dry) mg/kg	Qualifier	SDL (dry) mg/kg	Unadj. MQL mg/kg	MQL (dry) mg/kg	Dilution	Analysis date / time	Batch
C10-C28 Diesel Range	1.80	J	1.63	4.00	4.06	1	10/13/2018 00:22	WG1178948
C28-C40 Oil Range	7.16		0.278	4.00	4.06	1	10/13/2018 00:22	WG1178948
(S) o-Terphenyl	*88.4*				*18.0-148*		*10/13/2018 00:22*	WG1178948

AH-13 (1-2')
Collected date/time: 10/03/18 11:20

SAMPLE RESULTS - 10

L1032149

ONE LAB. NATIONWIDE.

Total Solids by Method 2540 G-2011

Analyte	Result %	Qualifier	Dilution	Analysis date / time	Batch
Total Solids	94.4		1	10/09/2018 15:54	WG1178246

Wet Chemistry by Method 300.0

Analyte	Result (dry) mg/kg	Qualifier	SDL (dry) mg/kg	Unadj. MQL mg/kg	MQL (dry) mg/kg	Dilution	Analysis date / time	Batch
Chloride	49.8		0.842	10.0	10.6	1	10/09/2018 23:44	WG1177213

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

Analyte	Result (dry) mg/kg	Qualifier	SDL (dry) mg/kg	Unadj. MQL mg/kg	MQL (dry) mg/kg	Dilution	Analysis date / time	Batch
TPH (GC/FID) Low Fraction	0.0531	J	0.0230	0.100	0.106	1	10/11/2018 06:37	WG1177810
(S) a,a,a-Trifluorotoluene(FID)	*97.7*				*77.0-120*		*10/11/2018 06:37*	WG1177810

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

Analyte	Result (dry) mg/kg	Qualifier	SDL (dry) mg/kg	Unadj. MQL mg/kg	MQL (dry) mg/kg	Dilution	Analysis date / time	Batch
Benzene	U		0.000424	0.00100	0.00106	1	10/12/2018 16:29	WG1180054
Toluene	U		0.00132	0.00500	0.00530	1	10/12/2018 16:29	WG1180054
Ethylbenzene	U		0.000561	0.00250	0.00265	1	10/12/2018 16:29	WG1180054
Total Xylenes	U		0.00506	0.00650	0.00688	1	10/12/2018 16:29	WG1180054
(S) Toluene-d8	*104*				*75.0-131*		*10/12/2018 16:29*	WG1180054
(S) Dibromofluoromethane	*92.2*				*65.0-129*		*10/12/2018 16:29*	WG1180054
(S) a,a,a-Trifluorotoluene	*103*				*80.0-120*		*10/12/2018 16:29*	WG1180054
(S) 4-Bromofluorobenzene	*89.0*				*67.0-138*		*10/12/2018 16:29*	WG1180054

Semi-Volatile Organic Compounds (GC) by Method 8015

Analyte	Result (dry) mg/kg	Qualifier	SDL (dry) mg/kg	Unadj. MQL mg/kg	MQL (dry) mg/kg	Dilution	Analysis date / time	Batch
C10-C28 Diesel Range	U		1.71	4.00	4.24	1	10/13/2018 00:36	WG1178948
C28-C40 Oil Range	7.12		0.290	4.00	4.24	1	10/13/2018 00:36	WG1178948
(S) o-Terphenyl	*86.2*				*18.0-148*		*10/13/2018 00:36*	WG1178948

AH-14 (0-1')
Collected date/time: 10/03/18 11:17

SAMPLE RESULTS - 11

L1032149

ONE LAB. NATIONWIDE.

Total Solids by Method 2540 G-2011

Analyte	Result %	Qualifier	Dilution	Analysis date / time	Batch
Total Solids	98.0		1	10/09/2018 15:47	WG1178248

Wet Chemistry by Method 300.0

Analyte	Result (dry) mg/kg	Qualifier	SDL (dry) mg/kg	Unadj. MQL mg/kg	MQL (dry) mg/kg	Dilution	Analysis date / time	Batch
Chloride	44.0		0.811	10.0	10.2	1	10/09/2018 23:53	WG1177213

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

Analyte	Result (dry) mg/kg	Qualifier	SDL (dry) mg/kg	Unadj. MQL mg/kg	MQL (dry) mg/kg	Dilution	Analysis date / time	Batch
TPH (GC/FID) Low Fraction	0.0698	J	0.0221	0.100	0.102	1	10/11/2018 07:01	WG1177810
(S) a,a,a-Trifluorotoluene(FID)	*97.8*				*77.0-120*		*10/11/2018 07:01*	WG1177810

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

Analyte	Result (dry) mg/kg	Qualifier	SDL (dry) mg/kg	Unadj. MQL mg/kg	MQL (dry) mg/kg	Dilution	Analysis date / time	Batch
Benzene	U		0.000408	0.00100	0.00102	1	10/12/2018 17:38	WG1180054
Toluene	U		0.00127	0.00500	0.00510	1	10/12/2018 17:38	WG1180054
Ethylbenzene	U		0.000541	0.00250	0.00255	1	10/12/2018 17:38	WG1180054
Total Xylenes	U		0.00488	0.00650	0.00663	1	10/12/2018 17:38	WG1180054
(S) Toluene-d8	*104*				*75.0-131*		*10/12/2018 17:38*	WG1180054
(S) Dibromofluoromethane	*93.3*				*65.0-129*		*10/12/2018 17:38*	WG1180054
(S) a,a,a-Trifluorotoluene	*103*				*80.0-120*		*10/12/2018 17:38*	WG1180054
(S) 4-Bromofluorobenzene	*88.7*				*67.0-138*		*10/12/2018 17:38*	WG1180054

Semi-Volatile Organic Compounds (GC) by Method 8015

Analyte	Result (dry) mg/kg	Qualifier	SDL (dry) mg/kg	Unadj. MQL mg/kg	MQL (dry) mg/kg	Dilution	Analysis date / time	Batch
C10-C28 Diesel Range	2.44	J	1.64	4.00	4.08	1	10/13/2018 00:49	WG1178948
C28-C40 Oil Range	8.07		0.279	4.00	4.08	1	10/13/2018 00:49	WG1178948
(S) o-Terphenyl	*78.7*				*18.0-148*		*10/13/2018 00:49*	WG1178948

AH-14 (1-2')
Collected date/time: 10/03/18 11:23

SAMPLE RESULTS - 12

L1032149

ONE LAB. NATIONWIDE.

Total Solids by Method 2540 G-2011

Analyte	Result %	Qualifier	Dilution	Analysis date / time	Batch
Total Solids	94.7		1	10/09/2018 15:47	WG1178248

Wet Chemistry by Method 300.0

Analyte	Result (dry) mg/kg	Qualifier	SDL (dry) mg/kg	Unadj. MQL mg/kg	MQL (dry) mg/kg	Dilution	Analysis date / time	Batch
Chloride	45.1		0.840	10.0	10.6	1	10/10/2018 00:02	WG1177213

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

Analyte	Result (dry) mg/kg	Qualifier	SDL (dry) mg/kg	Unadj. MQL mg/kg	MQL (dry) mg/kg	Dilution	Analysis date / time	Batch
TPH (GC/FID) Low Fraction	0.0510	J	0.0229	0.100	0.106	1	10/11/2018 07:25	WG1177810
(S) a,a,a-Trifluorotoluene(FID)	*99.2*				*77.0-120*		*10/11/2018 07:25*	WG1177810

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

Analyte	Result (dry) mg/kg	Qualifier	SDL (dry) mg/kg	Unadj. MQL mg/kg	MQL (dry) mg/kg	Dilution	Analysis date / time	Batch
Benzene	U		0.000423	0.00100	0.00106	1	10/12/2018 17:57	WG1180054
Toluene	U		0.00132	0.00500	0.00528	1	10/12/2018 17:57	WG1180054
Ethylbenzene	U		0.000560	0.00250	0.00264	1	10/12/2018 17:57	WG1180054
Total Xylenes	U		0.00505	0.00650	0.00687	1	10/12/2018 17:57	WG1180054
(S) Toluene-d8	*104*				*75.0-131*		*10/12/2018 17:57*	WG1180054
(S) Dibromofluoromethane	*90.7*				*65.0-129*		*10/12/2018 17:57*	WG1180054
(S) a,a,a-Trifluorotoluene	*100*				*80.0-120*		*10/12/2018 17:57*	WG1180054
(S) 4-Bromofluorobenzene	*89.0*				*67.0-138*		*10/12/2018 17:57*	WG1180054

Semi-Volatile Organic Compounds (GC) by Method 8015

Analyte	Result (dry) mg/kg	Qualifier	SDL (dry) mg/kg	Unadj. MQL mg/kg	MQL (dry) mg/kg	Dilution	Analysis date / time	Batch
C10-C28 Diesel Range	U		1.70	4.00	4.23	1	10/13/2018 01:03	WG1178948
C28-C40 Oil Range	7.25		0.289	4.00	4.23	1	10/13/2018 01:03	WG1178948
(S) o-Terphenyl	*80.3*				*18.0-148*		*10/13/2018 01:03*	WG1178948

AH-15 (0-1')
Collected date/time: 10/03/18 12:00

SAMPLE RESULTS - 13

L1032149

ONE LAB. NATIONWIDE.

Total Solids by Method 2540 G-2011

Analyte	Result %	Qualifier	Dilution	Analysis date / time	Batch
Total Solids	96.5		1	10/09/2018 15:47	WG1178248

Wet Chemistry by Method 300.0

Analyte	Result (dry) mg/kg	Qualifier	SDL (dry) mg/kg	Unadj. MQL mg/kg	MQL (dry) mg/kg	Dilution	Analysis date / time	Batch
Chloride	45.8		0.824	10.0	10.4	1	10/10/2018 00:10	WG1177213

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

Analyte	Result (dry) mg/kg	Qualifier	SDL (dry) mg/kg	Unadj. MQL mg/kg	MQL (dry) mg/kg	Dilution	Analysis date / time	Batch
TPH (GC/FID) Low Fraction	0.0692	J	0.0225	0.100	0.104	1	10/11/2018 07:50	WG1177810
(S) a,a,a-Trifluorotoluene(FID)	*97.6*				*77.0-120*		*10/11/2018 07:50*	WG1177810

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

Analyte	Result (dry) mg/kg	Qualifier	SDL (dry) mg/kg	Unadj. MQL mg/kg	MQL (dry) mg/kg	Dilution	Analysis date / time	Batch
Benzene	U		0.000415	0.00100	0.00104	1	10/12/2018 18:15	WG1180054
Toluene	U		0.00130	0.00500	0.00518	1	10/12/2018 18:15	WG1180054
Ethylbenzene	U		0.000549	0.00250	0.00259	1	10/12/2018 18:15	WG1180054
Total Xylenes	U		0.00495	0.00650	0.00674	1	10/12/2018 18:15	WG1180054
(S) Toluene-d8	*105*				*75.0-131*		*10/12/2018 18:15*	WG1180054
(S) Dibromofluoromethane	*90.3*				*65.0-129*		*10/12/2018 18:15*	WG1180054
(S) a,a,a-Trifluorotoluene	*100*				*80.0-120*		*10/12/2018 18:15*	WG1180054
(S) 4-Bromofluorobenzene	*88.0*				*67.0-138*		*10/12/2018 18:15*	WG1180054

Semi-Volatile Organic Compounds (GC) by Method 8015

Analyte	Result (dry) mg/kg	Qualifier	SDL (dry) mg/kg	Unadj. MQL mg/kg	MQL (dry) mg/kg	Dilution	Analysis date / time	Batch
C10-C28 Diesel Range	4.73		1.67	4.00	4.15	1	10/13/2018 01:16	WG1178948
C28-C40 Oil Range	14.6		0.284	4.00	4.15	1	10/13/2018 01:16	WG1178948
(S) o-Terphenyl	*74.2*				*18.0-148*		*10/13/2018 01:16*	WG1178948

AH-15 (1-2')

Collected date/time: 10/03/18 12:03

SAMPLE RESULTS - 14

L1032149

ONE LAB. NATIONWIDE.

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

Total Solids by Method 2540 G-2011

Analyte	Result %	Qualifier	Dilution	Analysis date / time	Batch
Total Solids	94.5		1	10/09/2018 15:47	WG1178248

Wet Chemistry by Method 300.0

Analyte	Result (dry) mg/kg	Qualifier	SDL (dry) mg/kg	Unadj. MQL mg/kg	MQL (dry) mg/kg	Dilution	Analysis date / time	Batch
Chloride	87.8		0.842	10.0	10.6	1	10/10/2018 00:37	WG1177213

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

Analyte	Result (dry) mg/kg	Qualifier	SDL (dry) mg/kg	Unadj. MQL mg/kg	MQL (dry) mg/kg	Dilution	Analysis date / time	Batch
TPH (GC/FID) Low Fraction	0.0515	J	0.0230	0.100	0.106	1	10/11/2018 08:14	WG1177810
(S) a,a,a-Trifluorotoluene(FID)	*98.3*				*77.0-120*		*10/11/2018 08:14*	WG1177810

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

Analyte	Result (dry) mg/kg	Qualifier	SDL (dry) mg/kg	Unadj. MQL mg/kg	MQL (dry) mg/kg	Dilution	Analysis date / time	Batch
Benzene	U		0.000423	0.00100	0.00106	1	10/12/2018 18:34	WG1180054
Toluene	U		0.00132	0.00500	0.00529	1	10/12/2018 18:34	WG1180054
Ethylbenzene	U		0.000561	0.00250	0.00265	1	10/12/2018 18:34	WG1180054
Total Xylenes	U		0.00506	0.00650	0.00688	1	10/12/2018 18:34	WG1180054
(S) Toluene-d8	*107*				*75.0-131*		*10/12/2018 18:34*	WG1180054
(S) Dibromofluoromethane	*91.1*				*65.0-129*		*10/12/2018 18:34*	WG1180054
(S) a,a,a-Trifluorotoluene	*102*				*80.0-120*		*10/12/2018 18:34*	WG1180054
(S) 4-Bromofluorobenzene	*88.6*				*67.0-138*		*10/12/2018 18:34*	WG1180054

Semi-Volatile Organic Compounds (GC) by Method 8015

Analyte	Result (dry) mg/kg	Qualifier	SDL (dry) mg/kg	Unadj. MQL mg/kg	MQL (dry) mg/kg	Dilution	Analysis date / time	Batch
C10-C28 Diesel Range	2.05	J	1.70	4.00	4.23	1	10/13/2018 01:30	WG1178948
C28-C40 Oil Range	10.2		0.290	4.00	4.23	1	10/13/2018 01:30	WG1178948
(S) o-Terphenyl	*79.8*				*18.0-148*		*10/13/2018 01:30*	WG1178948

AH-16 (2-3')
Collected date/time: 10/03/18 12:09

SAMPLE RESULTS - 15

L1032149

ONE LAB. NATIONWIDE.

Total Solids by Method 2540 G-2011

Analyte	Result %	Qualifier	Dilution	Analysis date / time	Batch
Total Solids	93.7		1	10/09/2018 15:47	WG1178248

Wet Chemistry by Method 300.0

Analyte	Result (dry) mg/kg	Qualifier	SDL (dry) mg/kg	Unadj. MQL mg/kg	MQL (dry) mg/kg	Dilution	Analysis date / time	Batch
Chloride	47.8		0.849	10.0	10.7	1	10/10/2018 00:46	WG1177213

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

Analyte	Result (dry) mg/kg	Qualifier	SDL (dry) mg/kg	Unadj. MQL mg/kg	MQL (dry) mg/kg	Dilution	Analysis date / time	Batch
TPH (GC/FID) Low Fraction	0.0491	J	0.0232	0.100	0.107	1	10/11/2018 08:38	WG1177810
(S) a,a,a-Trifluorotoluene(FID)	*99.2*				*77.0-120*		*10/11/2018 08:38*	WG1177810

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

Analyte	Result (dry) mg/kg	Qualifier	SDL (dry) mg/kg	Unadj. MQL mg/kg	MQL (dry) mg/kg	Dilution	Analysis date / time	Batch
Benzene	U		0.000427	0.00100	0.00107	1	10/12/2018 18:52	WG1180054
Toluene	U		0.00133	0.00500	0.00534	1	10/12/2018 18:52	WG1180054
Ethylbenzene	U		0.000566	0.00250	0.00267	1	10/12/2018 18:52	WG1180054
Total Xylenes	U		0.00510	0.00650	0.00694	1	10/12/2018 18:52	WG1180054
(S) Toluene-d8	*105*				*75.0-131*		*10/12/2018 18:52*	WG1180054
(S) Dibromofluoromethane	*90.6*				*65.0-129*		*10/12/2018 18:52*	WG1180054
(S) a,a,a-Trifluorotoluene	*97.7*				*80.0-120*		*10/12/2018 18:52*	WG1180054
(S) 4-Bromofluorobenzene	*89.5*				*67.0-138*		*10/12/2018 18:52*	WG1180054

Semi-Volatile Organic Compounds (GC) by Method 8015

Analyte	Result (dry) mg/kg	Qualifier	SDL (dry) mg/kg	Unadj. MQL mg/kg	MQL (dry) mg/kg	Dilution	Analysis date / time	Batch
C10-C28 Diesel Range	U		1.72	4.00	4.27	1	10/13/2018 01:43	WG1178948
C28-C40 Oil Range	5.79		0.292	4.00	4.27	1	10/13/2018 01:43	WG1178948
(S) o-Terphenyl	*83.1*				*18.0-148*		*10/13/2018 01:43*	WG1178948

AH-17 (0-1')
Collected date/time: 10/03/18 13:07

SAMPLE RESULTS - 16

L1032149

ONE LAB. NATIONWIDE.

Total Solids by Method 2540 G-2011

Analyte	Result %	Qualifier	Dilution	Analysis date / time	Batch
Total Solids	95.5		1	10/09/2018 15:47	WG1178248

Wet Chemistry by Method 300.0

Analyte	Result (dry) mg/kg	Qualifier	SDL (dry) mg/kg	Unadj. MQL mg/kg	MQL (dry) mg/kg	Dilution	Analysis date / time	Batch
Chloride	45.5		0.833	10.0	10.5	1	10/10/2018 00:54	WG1177213

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

Analyte	Result (dry) mg/kg	Qualifier	SDL (dry) mg/kg	Unadj. MQL mg/kg	MQL (dry) mg/kg	Dilution	Analysis date / time	Batch
TPH (GC/FID) Low Fraction	0.0791	J	0.0227	0.100	0.105	1	10/11/2018 09:02	WG1177810
(S) a,a,a-Trifluorotoluene(FID)	*98.8*				*77.0-120*		*10/11/2018 09:02*	WG1177810

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

Analyte	Result (dry) mg/kg	Qualifier	SDL (dry) mg/kg	Unadj. MQL mg/kg	MQL (dry) mg/kg	Dilution	Analysis date / time	Batch
Benzene	U		0.000419	0.00100	0.00105	1	10/12/2018 19:10	WG1180054
Toluene	U		0.00131	0.00500	0.00524	1	10/12/2018 19:10	WG1180054
Ethylbenzene	U		0.000555	0.00250	0.00262	1	10/12/2018 19:10	WG1180054
Total Xylenes	U		0.00501	0.00650	0.00681	1	10/12/2018 19:10	WG1180054
(S) Toluene-d8	*104*				*75.0-131*		*10/12/2018 19:10*	WG1180054
(S) Dibromofluoromethane	*94.3*				*65.0-129*		*10/12/2018 19:10*	WG1180054
(S) a,a,a-Trifluorotoluene	*100*				*80.0-120*		*10/12/2018 19:10*	WG1180054
(S) 4-Bromofluorobenzene	*88.9*				*67.0-138*		*10/12/2018 19:10*	WG1180054

Semi-Volatile Organic Compounds (GC) by Method 8015

Analyte	Result (dry) mg/kg	Qualifier	SDL (dry) mg/kg	Unadj. MQL mg/kg	MQL (dry) mg/kg	Dilution	Analysis date / time	Batch
C10-C28 Diesel Range	5.11		1.69	4.00	4.19	1	10/13/2018 01:57	WG1178948
C28-C40 Oil Range	17.4		0.287	4.00	4.19	1	10/13/2018 01:57	WG1178948
(S) o-Terphenyl	*75.4*				*18.0-148*		*10/13/2018 01:57*	WG1178948

AH-18 (0-1')
Collected date/time: 10/03/18 13:40

SAMPLE RESULTS - 17

L1032149

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Total Solids by Method 2540 G-2011

Analyte	Result %	Qualifier	Dilution	Analysis date / time	Batch
Total Solids	95.7		1	10/09/2018 15:47	WG1178248

Wet Chemistry by Method 300.0

Analyte	Result (dry) mg/kg	Qualifier	SDL (dry) mg/kg	Unadj. MQL mg/kg	MQL (dry) mg/kg	Dilution	Analysis date / time	Batch
Chloride	226		0.831	10.0	10.5	1	10/10/2018 01:03	WG1177213

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

Analyte	Result (dry) mg/kg	Qualifier	SDL (dry) mg/kg	Unadj. MQL mg/kg	MQL (dry) mg/kg	Dilution	Analysis date / time	Batch
TPH (GC/FID) Low Fraction	0.0290	J	0.0227	0.100	0.105	1	10/11/2018 09:27	WG1177810
(S) a,a,a-Trifluorotoluene(FID)	*98.2*				*77.0-120*		*10/11/2018 09:27*	WG1177810

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

Analyte	Result (dry) mg/kg	Qualifier	SDL (dry) mg/kg	Unadj. MQL mg/kg	MQL (dry) mg/kg	Dilution	Analysis date / time	Batch
Benzene	U		0.000418	0.00100	0.00105	1	10/12/2018 19:29	WG1180054
Toluene	U		0.00131	0.00500	0.00523	1	10/12/2018 19:29	WG1180054
Ethylbenzene	U		0.000554	0.00250	0.00261	1	10/12/2018 19:29	WG1180054
Total Xylenes	U		0.00500	0.00650	0.00679	1	10/12/2018 19:29	WG1180054
(S) Toluene-d8	*106*				*75.0-131*		*10/12/2018 19:29*	WG1180054
(S) Dibromofluoromethane	*91.5*				*65.0-129*		*10/12/2018 19:29*	WG1180054
(S) a,a,a-Trifluorotoluene	*100*				*80.0-120*		*10/12/2018 19:29*	WG1180054
(S) 4-Bromofluorobenzene	*89.8*				*67.0-138*		*10/12/2018 19:29*	WG1180054

Semi-Volatile Organic Compounds (GC) by Method 8015

Analyte	Result (dry) mg/kg	Qualifier	SDL (dry) mg/kg	Unadj. MQL mg/kg	MQL (dry) mg/kg	Dilution	Analysis date / time	Batch
C10-C28 Diesel Range	1.95	J	1.68	4.00	4.18	1	10/13/2018 02:10	WG1178948
C28-C40 Oil Range	11.2		0.286	4.00	4.18	1	10/13/2018 02:10	WG1178948
(S) o-Terphenyl	*83.0*				*18.0-148*		*10/13/2018 02:10*	WG1178948

AH-18 (1-2')
Collected date/time: 10/03/18 13:45

SAMPLE RESULTS - 18

L1032149

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

Total Solids by Method 2540 G-2011

Analyte	Result %	Qualifier	Dilution	Analysis date / time	Batch
Total Solids	93.0		1	10/09/2018 15:47	WG1178248

Wet Chemistry by Method 300.0

Analyte	Result (dry) mg/kg	Qualifier	SDL (dry) mg/kg	Unadj. MQL mg/kg	MQL (dry) mg/kg	Dilution	Analysis date / time	Batch
Chloride	274		0.855	10.0	10.8	1	10/10/2018 01:12	WG1177213

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

Analyte	Result (dry) mg/kg	Qualifier	SDL (dry) mg/kg	Unadj. MQL mg/kg	MQL (dry) mg/kg	Dilution	Analysis date / time	Batch
TPH (GC/FID) Low Fraction	0.0303	J	0.0233	0.100	0.108	1	10/11/2018 09:51	WG1177810
(S) a,a,a-Trifluorotoluene(FID)	*98.8*				*77.0-120*		*10/11/2018 09:51*	WG1177810

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

Analyte	Result (dry) mg/kg	Qualifier	SDL (dry) mg/kg	Unadj. MQL mg/kg	MQL (dry) mg/kg	Dilution	Analysis date / time	Batch
Benzene	U		0.000430	0.00100	0.00108	1	10/12/2018 19:47	WG1180054
Toluene	U		0.00134	0.00500	0.00538	1	10/12/2018 19:47	WG1180054
Ethylbenzene	U		0.000570	0.00250	0.00269	1	10/12/2018 19:47	WG1180054
Total Xylenes	U		0.00514	0.00650	0.00699	1	10/12/2018 19:47	WG1180054
(S) Toluene-d8	*105*				*75.0-131*		*10/12/2018 19:47*	WG1180054
(S) Dibromofluoromethane	*93.2*				*65.0-129*		*10/12/2018 19:47*	WG1180054
(S) a,a,a-Trifluorotoluene	*99.6*				*80.0-120*		*10/12/2018 19:47*	WG1180054
(S) 4-Bromofluorobenzene	*87.5*				*67.0-138*		*10/12/2018 19:47*	WG1180054

Semi-Volatile Organic Compounds (GC) by Method 8015

Analyte	Result (dry) mg/kg	Qualifier	SDL (dry) mg/kg	Unadj. MQL mg/kg	MQL (dry) mg/kg	Dilution	Analysis date / time	Batch
C10-C28 Diesel Range	U		1.73	4.00	4.30	1	10/13/2018 02:24	WG1178948
C28-C40 Oil Range	9.08		0.295	4.00	4.30	1	10/13/2018 02:24	WG1178948
(S) o-Terphenyl	*80.6*				*18.0-148*		*10/13/2018 02:24*	WG1178948

WG1178246

Total Solids by Method 2540 G-2011

QUALITY CONTROL SUMMARY

L1032149-01,02,03,04,05,06,07,08,09,10

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Method Blank (MB)

(MB) R3349222-1 10/09/18 15:54

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

L1032149-02 Original Sample (OS) • Duplicate (DUP)

(OS) L1032149-02 10/09/18 15:54 • (DUP) R3349222-3 10/09/18 15:54

Analyte	Original Result %	DUP Result %	Dilution	DUP RPD %	DUP Qualifier	DUP RPD Limits %
Total Solids	92.7	93.4	1	0.696		10

Laboratory Control Sample (LCS)

(LCS) R3349222-2 10/09/18 15:54

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

WG1178248

Total Solids by Method 2540 G-2011

QUALITY CONTROL SUMMARY

L1032149-11,12,13,14,15,16,17,18

ONE LAB. NATIONWIDE.

Method Blank (MB)

(MB) R3349217-1 10/09/18 15:47

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

L1032174-01 Original Sample (OS) • Duplicate (DUP)

(OS) L1032174-01 10/09/18 15:47 • (DUP) R3349217-3 10/09/18 15:47

Analyte	Original Result %	DUP Result %	Dilution	DUP RPD %	DUP Qualifier	DUP RPD Limits %
Total Solids	91.0	90.5	1	0.524		10

Laboratory Control Sample (LCS)

(LCS) R3349217-2 10/09/18 15:47

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) R3349223-1 10/09/18 19:51

Analyte	MB Result mg/kg	MB Qualifier	MB MDL mg/kg	MB RDL mg/kg
Chloride	U		0.795	10.0

L1032149-03 Original Sample (OS) • Duplicate (DUP)

(OS) L1032149-03 10/09/18 21:59 • (DUP) R3349223-4 10/09/18 22:08

Analyte	Original Result (dry) mg/kg	DUP Result (dry) mg/kg	Dilution	DUP RPD %	DUP Qualifier	DUP RPD Limits %
Chloride	46.2	40.3	1	13.7		20

L1032149-18 Original Sample (OS) • Duplicate (DUP)

(OS) L1032149-18 10/10/18 01:12 • (DUP) R3349223-7 10/10/18 01:21

Analyte	Original Result (dry) mg/kg	DUP Result (dry) mg/kg	Dilution	DUP RPD %	DUP Qualifier	DUP RPD Limits %
Chloride	274	327	1	17.9		20

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

(LCS) R3349223-2 10/09/18 20:00 • (LCSD) R3349223-3 10/09/18 20:09

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 %
Chloride	200	205	207	102	103	90.0-110			0.952	20

L1032149-08 Original Sample (OS) • Matrix Spike (MS) • Matrix Spike Duplicate (MSD)

(OS) L1032149-08 10/09/18 23:09 • (MS) R3349223-5 10/09/18 23:18 • (MSD) R3349223-6 10/09/18 23:27

Analyte	Spike Amount (dry) mg/kg	Original Result (dry) mg/kg	MS Result (dry) mg/kg	MSD Result (dry) mg/kg	MS Rec. %	MSD Rec. %	Dilution	Rec. Limits %	MS Qualifier	MSD Qualifier	RPD %	RPD Limits %
Chloride	551	49.3	644	639	108	107	1	80.0-120			0.865	20

WG1177810

QUALITY CONTROL SUMMARY

ONE LAB. NATIONWIDE.

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

L1032149-01,02,03,04,05,06,07,08,09,10,11,12,13,14,15,16,17,18

Method Blank (MB)

(MB) R3349940-3 10/11/18 05:00

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)	*100*			*77.0-120*

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

(LCS) R3349940-1 10/11/18 03:47 • (LCSD) R3349940-2 10/11/18 04:11

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	5.32	5.38	96.8	97.9	72.0-127			1.10	20
(S) a,a,a-Trifluorotoluene(FID)				*105*	*104*	*77.0-120*				

L1032149-07 Original Sample (OS) • Matrix Spike (MS) • Matrix Spike Duplicate (MSD)

(OS) L1032149-07 10/11/18 13:05 • (MS) R3349940-4 10/11/18 13:29 • (MSD) R3349940-5 10/11/18 13:53

Analyte	Spike Amount (dry) mg/kg	Original Result (dry) mg/kg	MS Result (dry) mg/kg	MSD Result (dry) mg/kg	MS Rec. %	MSD Rec. %	Dilution	Rec. Limits %	MS Qualifier	MSD Qualifier	RPD %	RPD Limits %
TPH (GC/FID) Low Fraction	5.74	0.0543	3.43	3.88	58.9	66.7	1	10.0-151			12.1	28
(S) a,a,a-Trifluorotoluene(FID)					*98.0*	*98.3*		*77.0-120*				

Method Blank (MB)

(MB) R3350164-3 10/12/18 11:52

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	*104*			*75.0-131*
(S) Dibromofluoromethane	*91.3*			*65.0-129*
(S) a,a,a-Trifluorotoluene	*101*			*80.0-120*
(S) 4-Bromofluorobenzene	*87.8*			*67.0-138*

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

(LCS) R3350164-1 10/12/18 10:38 • (LCSD) R3350164-2 10/12/18 10:56

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	0.118	0.123	94.7	98.3	70.0-123			3.73	20
Ethylbenzene	0.125	0.102	0.100	82.0	80.3	74.0-126			2.03	20
Toluene	0.125	0.106	0.103	84.7	82.4	75.0-121			2.68	20
Xylenes, Total	0.375	0.330	0.325	88.0	86.7	72.0-127			1.53	20
(S) Toluene-d8				*104*	*102*	*75.0-131*				
(S) Dibromofluoromethane				*95.2*	*94.4*	*65.0-129*				
(S) a,a,a-Trifluorotoluene				*103*	*105*	*80.0-120*				
(S) 4-Bromofluorobenzene				*87.1*	*89.5*	*67.0-138*				

L1032149-01 Original Sample (OS) • Matrix Spike (MS) • Matrix Spike Duplicate (MSD)

(OS) L1032149-01 10/12/18 12:10 • (MS) R3350164-4 10/12/18 20:42 • (MSD) R3350164-5 10/12/18 21:01

Analyte	Spike Amount (dry) mg/kg	Original Result (dry) mg/kg	MS Result (dry) mg/kg	MSD Result (dry) mg/kg	MS Rec. %	MSD Rec. %	Dilution	Rec. Limits %	MS Qualifier	MSD Qualifier	RPD %	RPD Limits %
Benzene	0.140	U	0.133	0.0756	94.7	54.0	1	10.0-149		J3	54.7	37
Ethylbenzene	0.140	U	0.109	0.0614	77.6	43.8	1	10.0-160		J3	55.6	38
Toluene	0.140	U	0.115	0.0673	82.3	48.1	1	10.0-156		J3	52.5	38
Xylenes, Total	0.420	U	0.365	0.213	86.9	50.7	1	10.0-160		J3	52.7	38
(S) Toluene-d8					*106*	*107*		*75.0-131*				
(S) Dibromofluoromethane					*93.4*	*92.6*		*65.0-129*				
(S) a,a,a-Trifluorotoluene					*101*	*101*		*80.0-120*				
(S) 4-Bromofluorobenzene					*86.1*	*86.7*		*67.0-138*				

WG1178948

QUALITY CONTROL SUMMARY

ONE LAB. NATIONWIDE.

Semi-Volatile Organic Compounds (GC) by Method 8015

L1032149-01,02,03,04,05,06,07,08,09,10,11,12,13,14,15,16,17,18

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

Method Blank (MB)

(MB) R3350257-1 10/12/18 21:26

Analyte	MB Result mg/kg	MB Qualifier	MB MDL mg/kg	MB RDL mg/kg
C10-C28 Diesel Range	U		1.61	4.00
C28-C40 Oil Range	U		0.274	4.00
(S) o-Terphenyl	*85.0*			*18.0-148*

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

(LCS) R3350257-2 10/12/18 21:40 • (LCSD) R3350257-3 10/12/18 21:53

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 %
C10-C28 Diesel Range	50.0	41.6	40.0	83.2	80.0	50.0-150			3.92	20
(S) o-Terphenyl				*87.1*	*97.9*	*18.0-148*				

L1032149-01 Original Sample (OS) • Matrix Spike (MS) • Matrix Spike Duplicate (MSD)

(OS) L1032149-01 10/12/18 22:07 • (MS) R3350257-4 10/12/18 22:20 • (MSD) R3350257-5 10/12/18 22:34

Analyte	Spike Amount (dry) mg/kg	Original Result (dry) mg/kg	MS Result (dry) mg/kg	MSD Result (dry) mg/kg	MS Rec. %	MSD Rec. %	Dilution	Rec. Limits %	MS Qualifier	MSD Qualifier	RPD %	RPD Limits %
C10-C28 Diesel Range	168	U	140	143	83.3	85.3	3	50.0-150			2.37	20
(S) o-Terphenyl					*93.0*	*103*		*18.0-148*				

GLOSSARY OF TERMS

ONE LAB. NATIONWIDE.

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.

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.
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.
Case Narrative (Cn)	A brief discussion about the included sample results, including a discussion of any non-conformances to protocol observed either at sample receipt by the laboratory from the field or during the analytical process. If present, there will be a section in the Case Narrative to discuss the meaning of any data qualifiers used in the report.
Quality Control Summary (Qc)	This section of the report includes the results of the laboratory quality control analyses required by procedure or analytical methods to assist in evaluating the validity of the results reported for your samples. These analyses are not being performed on your samples typically, but on laboratory generated material.
Sample Chain of Custody (Sc)	This is the document created in the field when your samples were initially collected. This is used to verify the time and date of collection, the person collecting the samples, and the analyses that the laboratory is requested to perform. This chain of custody also documents all persons (excluding commercial shippers) that have had control or possession of the samples from the time of collection until delivery to the laboratory for analysis.
Sample Results (Sr)	This section of your report will provide the results of all testing performed on your samples. These results are provided by sample ID and are separated by the analyses performed on each sample. The header line of each analysis section for each sample will provide the name and method number for the analysis reported.
Sample Summary (Ss)	This section of the Analytical Report defines the specific analyses performed for each sample ID, including the dates and times of preparation and/or analysis.

Qualifier	Description
J	The identification of the analyte is acceptable; the reported value is an estimate.
J3	The associated batch QC was outside the established quality control range for precision.

ACCREDITATIONS & LOCATIONS

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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	T 104704245-17-14
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

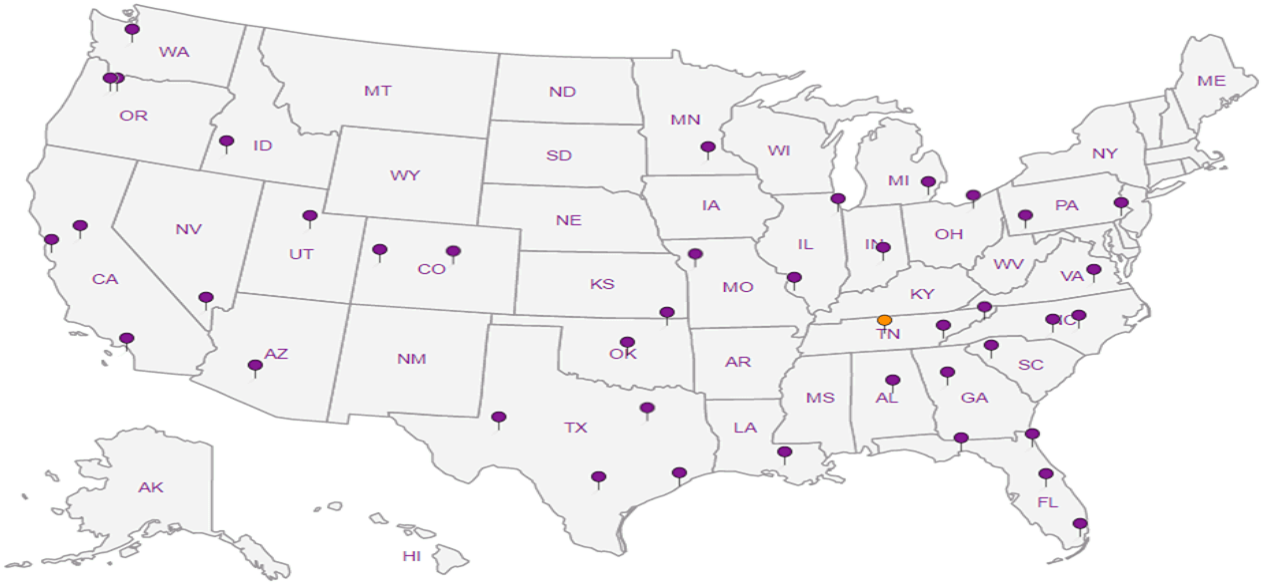
Third Party Federal Accreditations

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.



F231

Analysis Request of Chain of Custody Record

Page 1 of 5

Tetra Tech. Inc.

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

L1032149

Client Name:	Conoco Phillips
Site Manager:	Kayla Taylor
Project Name:	COP State F-1
Project Location: (county, state)	Lea County, New Mexico
Project #:	212C-MD-01306
Invoice to:	Accounts Payable 900 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: 2018)	SAMPLING TIME	MATRIX WATER	MATRIX SOIL	MATRIX	PRESERVATIVE METHOD HCL	HNO3	ICE	None		# CONTAINERS	FILTERED (Y/N)	BTEX 8021B / BTEX 8260	TPH TX1005 (Ext to C35)	TPH 8015 GRO - DRO - ORO - MRO	PAH 8270C	Total Metals Ag As Ba Cd Cr Pb Se Hg	TCLP Metals Ag As Ba Cd Cr Pb Se Hg	TCLP Volatiles	TCLP Semi Volatiles	RCI	GC/MS Vol. 8260B / 624	GC/MS Semi. Vol. 8270C/625	PCB's 8082 / 608	NORM	PLM (Asbestos)	Chloride 300.0	Chloride Sulfate TDS	General Water Chemistry (see attached list)	Anion/Cation Balance	TPH 8015R			Hold
	AH-9 (0'-1')	10/3/2018	0851		X				X			1	N	X		X												X							01
	AH-9 (1'-2')	10/3/2018	0856		X				X			1	N																						02
	AH-9 (2'-3')	10/3/2018	0901		X				X			1	N																						X
	AH-9 (3'-4')	10/3/2018	0906		X				X			1	N																						X
	AH-9 (4'-5')	10/3/2018	0909		X				X			1	N																						X
	AH-10 (0'-1')	10/3/2018	0850		X				X			1	N																						03
	AH-10 (1'-2')	10/3/2018	0900		X				X			1	N																						04
	AH-10 (2'-3')	10/3/2018	0905		X				X			1	N																						X
	AH-10 (3'-4')	10/3/2018	0915		X				X			1	N																						X
	AH-10 (4'-5')	10/3/2018	0925		X				X			1	N																						X

Relinquished by	Date	Time	Received by	Date	Time
	10-4-18	0900		10/4/18	9:00
	10/4/18	17:45		10/5/18	0845

LAB USE ONLY

Sample Temperature

REMARKS:

☒ STANDARD

☐ RUSH: Same Day 24 hr 48 hr 72 hr

☐ Rush Charges Authorized

☐ Special Report Limits or TRRP Report

(Circle) HAND DELIVERED FEDEX UPS Tracking #: _____

FedEx# 4430 2424 3575

ORIGINAL COPY

BACKGROUND: <0.5 mR/hr

10-035

rec 45 cont

L1 -0.4 0.7

Analysis Request of Chain of Custody Record

Tetra Tech, Inc.

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

L1032149

Client Name:	Conoco Phillips	Site Manager:	Kayla Taylor
Project Name:	COP State F-1		
Project Location: (county, state)	Lea County, New Mexico	Project #:	212C-MD-01306
Invoice to:	Accounts Payable 900 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: 2018)	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	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		GC/MS Vol. 8260B / 624	GC/MS Semi. Vol. 8270C/625	PCB's 8082 / 608		PLM (Asbestos)		Chloride Sulfate TDS	General Water Chemistry (see attached list)	Anion/Cation Balance	TPH 8015R			Hold
	AH-11 (0'-1')	10/3/2018	0945		X				X			1	N	X		X																				05
	AH-11 (1'-2')	10/3/2018	0950		X				X			1	N																							06
	AH-11 (2'-3')	10/3/2018	0955		X				X			1	N																							X
	AH-11 (3'-4')	10/3/2018	0958		X				X			1	N																							X
	AH-11 (4'-5')	10/3/2018	1002		X				X			1	N																							X
	AH-12 (0'-1')	10/3/2018	0945		X				X			1	N																							07
	AH-12 (1'-2')	10/3/2018	0950		X				X			1	N																							08
	AH-12 (2'-3')	10/3/2018	1000		X				X			1	N																							X
	AH-12 (3'-4')	10/3/2018	1010		X				X			1	N																							X
	AH-12 (4'-5')	10/3/2018	1015		X				X			1	N																							X

Relinquished by:	Date: 10.4.18	Time: 0900	Received by:	Date: 10/4/18	Time: 9:00
Relinquished by:	Date: 10/4/18	Time: 13:45	Received by:	Date: 10/5/18	Time: 0845
Relinquished by:	Date:	Time:	Received by:	Date:	Time:

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

1.1 - 0.7
0.7

rec. 45 cont

Analysis Request of Chain of Custody Record

Tetra Tech, Inc.

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

L1632149

Client Name:	Conoco Phillips
Site Manager:	Kayla Taylor
Project Name:	COP State F-1
Project Location (county, state):	Lea County, New Mexico
Project #:	212C-MD-01306
Invoice to:	Accounts Payable 900 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: 2018)	SAMPLING TIME	MATRIX: WATER	MATRIX: SOIL	MATRIX:	PRESERVATIVE METHOD: HCL	HNO3	ICE	None		# CONTAINERS	FILTERED (Y/N)	BTEX 8021B / 8260	TPH TX1005 (Ext to C35)	TPH 8015M (GRO - DRO - ORO - MRO)	PAH 8270C	Total Metals Ag As Ba Cd Cr Pb Se Hg	TCLP Metals Ag As Ba Cd Cr Pb Se Hg	TCLP Volatiles	TCLP Semi Volatiles	RCI	GC/MS Vol. 8260B / 624	GC/MS Semi. Vol. 8270C/625	PCB's 8082 / 608	NORM	PLM (Asbestos)	Chloride (Chloride 300.0)	Sulfate	TDS	General Water Chemistry (see attached list)	Anion/Cation Balance	TPH 8015R			Hold
	AH-13 (0'-1')	10/3/2018	1115		X				X			1	N	X		X												X								09
	AH-13 (1'-2')	10/3/2018	1120		X				X			1	N																							10
	AH-13 (2'-3')	10/3/2018	1128		X				X			1	N																							X
	AH-13 (3'-4')	10/3/2018	1135		X				X			1	N																							X
	AH-13 (4'-5')	10/3/2018	1142		X				X			1	N																							X
	AH-14 (0'-1')	10/3/2018	1117		X				X			1	N																							11
	AH-14 (1'-2')	10/3/2018	1123		X				X			1	N																							12
	AH-14 (2'-3')	10/3/2018	1126		X				X			1	N																							X
	AH-14 (3'-4')	10/3/2018	1129		X				X			1	N																							X
	AH-14 (4'-5')	10/3/2018	1133		X				X			1	N																							X

Relinquished by:	Date	Time	Received by:	Date	Time
	10.4.18	0900		10/4/18	9:00
	10/4/18	13:45		10/5/18	0845

LAB USE ONLY
Sample Temperature

REMARKS:
☒ STANDARD
☐ RUSH: Same Day 24 hr 48 hr 72 hr
☐ Rush Charges Authorized
☐ Special Report Limits or TRRP Report

(Circle) HAND DELIVERED FEDEX UPS Tracking #:

ORIGINAL COPY

RAD SCREEN: <0.5 mR/hr

1.1 -0.4 0.7

rec. 45 cont

Analysis Request of Chain of Custody Record

Tetra Tech, Inc.

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

L1032149

Client Name:	Conoco Phillips	Site Manager:	Kayla Taylor
Project Name:	COP State F-1		
Project Location (county, state):	Lea County, New Mexico	Project #:	212C-MD-01306
Invoice to:	Accounts Payable 900 West Wall Street Suite 100 Midland, Texas 79701		
Receiving Laboratory:	Pace Analytical	Sampler Signature:	
Comments:	COPTETRA Acclnum		

ANALYSIS REQUEST
(Circle or Specify Method No.)

LAB # (LAB USE ONLY)	SAMPLE IDENTIFICATION	SAMPLING DATE (YEAR: 2018)	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	TPH TX1005 (Ext to C35)	TPH 8015M GRO - DRO - ORO - MRO	PAH 8270C	Total Metals Ag As Ba Cd Cr Pb Se Hg	TCLP Metals Ag As Ba Cd Cr Pb Se Hg	TCLP Volatiles	TCLP Semi Volatiles	RCI	GC/MS Vol. 8260B / 624	GC/MS Semi. Vol. 8270C/625	PCBs 8082 / 608	NORM	PLM (Asbestos)	Chloride 300.0	Chloride Sulfate TDS	General Water Chemistry (see attached list)	Anion/Cation Balance	TPH 8015R			Hold
	AH-15 (0'-1')	10/3/2018	1200		X				X			1	N	X		X												X							13
	AH-15 (1'-2')	10/3/2018	1203		X				X			1	N																						14
	AH-15 (2'-3')	10/3/2018	1206		X				X			1	N																						X
	AH-16 (0'-1')	10/3/2018	1200		X				X			1	N																						X
	AH-16 (1'-2')	10/3/2018	1205		X				X			1	N																						X
	AH-16 (2'-3')	10/3/2018	1209		X				X			1	N																						15
	AH-17 (0'-1')	10/3/2018	1307		X				X			1	N																						16
	AH-17 (1'-2')	10/3/2018	1311		X				X			1	N																						X
	AH-17 (2'-3')	10/3/2018	1314		X				X			1	N																						X
	AH-17 (3'-4')	10/3/2018	1318		X				X			1	N																						X

Relinquished by: J. Tyler	Date: 10-4-18 Time: 0900	Received by: Todd Wells	Date: 10/4/18 Time: 9:00
Relinquished by: Todd Wells	Date: 10/4/18 Time: 13:45	Received by: K Lerner	Date: 10/5/18 Time: 0845
Relinquished by:	Date: Time:	Received by:	Date: Time:

LAB USE ONLY
Sample Temperature

REMARKS:
☒ STANDARD
☐ RUSH: Same Day 24 hr 48 hr 72 hr
☐ Rush Charges Authorized
☐ Special Report Limits or TRRP Report

(Circle) HAND DELIVERED FEDEX UPS Tracking # _____

ORIGINAL COPY

RAD SCREEN: <0.5 mR/hr

1.1 - 0.4
0.7

rec 45 ont

Analysis Request of Chain of Custody Record

Tetra Tech, Inc.

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

L1032149

Client Name	Conoco Phillips
Site Manager:	Kayla Taylor
Project Name	COP State F-1
Project Location: (county state)	Lea County, New Mexico
Project #:	212C-MD-01306
Invoice to	Accounts Payable 900 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: 2018)	SAMPLING TIME	MATRIX: WATER	MATRIX: SOIL	MATRIX:	PRESERVATIVE METHOD: HCL	HNO3	ICE	None	# CONTAINERS	FILTERED (Y/N)	BTEX 8021B (8TEX ONLY)	TPH TX1005 (Ext to C35)	TPH 8015M GRO - DRO - MRO	PAH 8270C	Total Metals Ag As Ba Cd Cr Pb Se Hg	TCLP Metals Ag As Ba Cd Cr Pb Se Hg	TCLP Volatiles	TCLP Semi Volatiles	RCI	GCMS Vol. 8260B / 624	GCMS Semi Vol. 8270C/625	PCB's 8082 / 608		PLM (Asbestos)	Chloride 300.0	Chloride Sulfate TDS	General Water Chemistry (see attached list)	Anion/Cation Balance	TPH 8015R			Hold
	AH-18 (0'-1')	10/3/2018	1340		X				X		1	N	X		X												X							17
	AH-18 (1'-2')	10/3/2018	1345		X				X		1	N																						18
	AH-19 (0'-1')	10/3/2018	1342		X				X		1	N																						X
	AH-19 (1'-2')	10/3/2018	1345		X				X		1	N																						X
	AH-19 (2'-3')	10/3/2018	1348		X				X		1	N																						X

Relinquished by:	Date 10.4.18	Time 0900	Received by: Date: 10/4/18 Time: 9:00
Relinquished by:	Date: 10/4/18	Time 13:45	Received by: Date: 10/5/18 Time 0845
Relinquished by:	Date:	Time:	Received by: Date: Time:

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

Raw SCREEN: <0.5 mR/hr

1.1 -0.4 0.79

rec. 45 cont

Pace Analytical National Center for Testing & Innovation
Cooler Receipt Form

Client:	COPTETRA	SDG#	L1032149
Cooler Received/Opened On: 10/5 /18	Temperature:	0.7	
Received By: Keteishia Cameron			
Signature: Kcameron			

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

Pace Analytical®
National Center for Testing & Innovation

ANALYTICAL REPORT

October 22, 2018

ConocoPhillips - Tetra Tech

Sample Delivery Group:	L1034371
Samples Received:	10/04/2018
Project Number:	212C-MD-01306
Description:	COP State F-1
Report To:	Kayla Taylor 4001 N. Big Spring St., Ste. 401 Midland, TX 79705

Entire Report Reviewed By:

Chris McCord
Project Manager

Results relate only to the items tested or calibrated and are reported as rounded values. This test report shall not be reproduced, except in full, without written approval of the laboratory. Where applicable, sampling conducted by Pace National is performed per guidance provided in laboratory standard operating procedures: 060302, 060303, and 060304.

TABLE OF CONTENTS

ONE LAB. NATIONWIDE.

SAMPLE SUMMARY

ONE LAB. NATIONWIDE.

AH-1 (2-3) L1034371-01 Solid

Collected by	Collected date/time	Received date/time
	10/02/18 10:30	10/04/18 08:45

Method	Batch	Dilution	Preparation date/time	Analysis date/time	Analyst
Total Solids by Method 2540 G-2011	WG1182618	1	10/18/18 10:53	10/18/18 10:59	KDW
Wet Chemistry by Method 300.0	WG1180578	1	10/13/18 15:27	10/16/18 19:46	ELN

AH-1 (3-4) L1034371-02 Solid

Collected by	Collected date/time	Received date/time
	10/02/18 10:35	10/04/18 08:45

Method	Batch	Dilution	Preparation date/time	Analysis date/time	Analyst
Total Solids by Method 2540 G-2011	WG1182618	1	10/18/18 10:53	10/18/18 10:59	KDW
Wet Chemistry by Method 300.0	WG1180578	1	10/13/18 15:27	10/16/18 19:55	ELN

AH-1 (4-5) L1034371-03 Solid

Collected by	Collected date/time	Received date/time
	10/02/18 10:40	10/04/18 08:45

Method	Batch	Dilution	Preparation date/time	Analysis date/time	Analyst
Total Solids by Method 2540 G-2011	WG1182618	1	10/18/18 10:53	10/18/18 10:59	KDW
Wet Chemistry by Method 300.0	WG1180578	1	10/13/18 15:27	10/16/18 20:03	ELN

AH-2 (2-3) L1034371-04 Solid

Collected by	Collected date/time	Received date/time
	10/02/18 10:10	10/04/18 08:45

Method	Batch	Dilution	Preparation date/time	Analysis date/time	Analyst
Total Solids by Method 2540 G-2011	WG1182619	1	10/18/18 10:45	10/18/18 10:51	KDW
Wet Chemistry by Method 300.0	WG1180578	1	10/13/18 15:27	10/16/18 20:21	ELN

AH-2 (3-4) L1034371-05 Solid

Collected by	Collected date/time	Received date/time
	10/02/18 10:18	10/04/18 08:45

Method	Batch	Dilution	Preparation date/time	Analysis date/time	Analyst
Total Solids by Method 2540 G-2011	WG1182619	1	10/18/18 10:45	10/18/18 10:51	KDW
Wet Chemistry by Method 300.0	WG1180578	1	10/13/18 15:27	10/16/18 20:30	ELN

AH-2 (4-5) L1034371-06 Solid

Collected by	Collected date/time	Received date/time
	10/02/18 10:25	10/04/18 08:45

Method	Batch	Dilution	Preparation date/time	Analysis date/time	Analyst
Total Solids by Method 2540 G-2011	WG1182619	1	10/18/18 10:45	10/18/18 10:51	KDW
Wet Chemistry by Method 300.0	WG1180578	1	10/13/18 15:27	10/16/18 20:56	ELN

AH-3 (2-3) L1034371-07 Solid

Collected by	Collected date/time	Received date/time
	10/02/18 12:05	10/04/18 08:45

Method	Batch	Dilution	Preparation date/time	Analysis date/time	Analyst
Total Solids by Method 2540 G-2011	WG1182619	1	10/18/18 10:45	10/18/18 10:51	KDW
Wet Chemistry by Method 300.0	WG1180578	1	10/13/18 15:27	10/16/18 21:05	ELN

SAMPLE SUMMARY

ONE LAB. NATIONWIDE.

AH-3 (3-4) L1034371-08 Solid

Collected by	Collected date/time	Received date/time
	10/02/18 12:15	10/04/18 08:45

Method	Batch	Dilution	Preparation date/time	Analysis date/time	Analyst
Total Solids by Method 2540 G-2011	WG1182619	1	10/18/18 10:45	10/18/18 10:51	KDW
Wet Chemistry by Method 300.0	WG1180578	1	10/13/18 15:27	10/16/18 21:14	ELN

AH-3 (4-5) L1034371-09 Solid

Collected by	Collected date/time	Received date/time
	10/02/18 12:20	10/04/18 08:45

Method	Batch	Dilution	Preparation date/time	Analysis date/time	Analyst
Total Solids by Method 2540 G-2011	WG1182619	1	10/18/18 10:45	10/18/18 10:51	KDW
Wet Chemistry by Method 300.0	WG1180578	1	10/13/18 15:27	10/16/18 21:22	ELN

AH-4 (2-3) L1034371-10 Solid

Collected by	Collected date/time	Received date/time
	10/02/18 11:50	10/04/18 08:45

Method	Batch	Dilution	Preparation date/time	Analysis date/time	Analyst
Total Solids by Method 2540 G-2011	WG1182619	1	10/18/18 10:45	10/18/18 10:51	KDW
Wet Chemistry by Method 300.0	WG1180578	1	10/13/18 15:27	10/16/18 21:31	ELN

AH-4 (3-4) L1034371-11 Solid

Collected by	Collected date/time	Received date/time
	10/02/18 12:00	10/04/18 08:45

Method	Batch	Dilution	Preparation date/time	Analysis date/time	Analyst
Total Solids by Method 2540 G-2011	WG1182619	1	10/18/18 10:45	10/18/18 10:51	KDW
Wet Chemistry by Method 300.0	WG1180578	1	10/13/18 15:27	10/16/18 21:40	ELN

AH-4 (4-5) L1034371-12 Solid

Collected by	Collected date/time	Received date/time
	10/02/18 12:10	10/04/18 08:45

Method	Batch	Dilution	Preparation date/time	Analysis date/time	Analyst
Total Solids by Method 2540 G-2011	WG1182619	1	10/18/18 10:45	10/18/18 10:51	KDW
Wet Chemistry by Method 300.0	WG1180578	1	10/13/18 15:27	10/16/18 22:06	ELN

AH-5 (2-3) L1034371-13 Solid

Collected by	Collected date/time	Received date/time
	10/02/18 14:25	10/04/18 08:45

Method	Batch	Dilution	Preparation date/time	Analysis date/time	Analyst
Total Solids by Method 2540 G-2011	WG1182619	1	10/18/18 10:45	10/18/18 10:51	KDW
Wet Chemistry by Method 300.0	WG1180578	1	10/13/18 15:27	10/16/18 22:15	ELN

AH-5 (3-4) L1034371-14 Solid

Collected by	Collected date/time	Received date/time
	10/02/18 14:35	10/04/18 08:45

Method	Batch	Dilution	Preparation date/time	Analysis date/time	Analyst
Total Solids by Method 2540 G-2011	WG1182620	1	10/18/18 10:38	10/18/18 10:43	KDW
Wet Chemistry by Method 300.0	WG1180578	1	10/13/18 15:27	10/16/18 22:41	ELN

SAMPLE SUMMARY

ONE LAB. NATIONWIDE.

AH-5 (4-5) L1034371-15 Solid

Collected by	Collected date/time	Received date/time
	10/02/18 14:45	10/04/18 08:45

Method	Batch	Dilution	Preparation date/time	Analysis date/time	Analyst
Total Solids by Method 2540 G-2011	WG1182620	1	10/18/18 10:38	10/18/18 10:43	KDW
Wet Chemistry by Method 300.0	WG1180578	1	10/13/18 15:27	10/16/18 22:59	ELN

AH-6 (2-3) L1034371-16 Solid

Collected by	Collected date/time	Received date/time
	10/02/18 14:30	10/04/18 08:45

Method	Batch	Dilution	Preparation date/time	Analysis date/time	Analyst
Total Solids by Method 2540 G-2011	WG1182620	1	10/18/18 10:38	10/18/18 10:43	KDW
Wet Chemistry by Method 300.0	WG1180578	1	10/13/18 15:27	10/16/18 23:08	ELN

AH-6 (3-4) L1034371-17 Solid

Collected by	Collected date/time	Received date/time
	10/02/18 14:40	10/04/18 08:45

Method	Batch	Dilution	Preparation date/time	Analysis date/time	Analyst
Total Solids by Method 2540 G-2011	WG1182620	1	10/18/18 10:38	10/18/18 10:43	KDW
Wet Chemistry by Method 300.0	WG1180578	1	10/13/18 15:27	10/16/18 23:16	ELN

AH-6 (4-5) L1034371-18 Solid

Collected by	Collected date/time	Received date/time
	10/02/18 14:45	10/04/18 08:45

Method	Batch	Dilution	Preparation date/time	Analysis date/time	Analyst
Total Solids by Method 2540 G-2011	WG1182620	1	10/18/18 10:38	10/18/18 10:43	KDW
Wet Chemistry by Method 300.0	WG1181984	1	10/17/18 09:56	10/17/18 11:00	ELN

CASE NARRATIVE

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

Chris McCord
Project Manager

AH-1 (2-3)
Collected date/time: 10/02/18 10:30

SAMPLE RESULTS - 01

L1034371

ONE LAB. NATIONWIDE.

Total Solids by Method 2540 G-2011

Analyte	Result %	Qualifier	Dilution	Analysis date / time	Batch
Total Solids	91.6	T8	1	10/18/2018 10:59	WG1182618

Wet Chemistry by Method 300.0

Analyte	Result (dry) mg/kg	Qualifier	SDL (dry) mg/kg	Unadj. MQL mg/kg	MQL (dry) mg/kg	Dilution	Analysis date / time	Batch
Chloride	681		0.868	10.0	10.9	1	10/16/2018 19:46	WG1180578

AH-1 (3-4)
Collected date/time: 10/02/18 10:35

SAMPLE RESULTS - 02

L1034371

ONE LAB. NATIONWIDE.

Total Solids by Method 2540 G-2011

Analyte	Result %	Qualifier	Dilution	Analysis date / time	Batch
Total Solids	92.6	T8	1	10/18/2018 10:59	WG1182618

Wet Chemistry by Method 300.0

Analyte	Result (dry) mg/kg	Qualifier	SDL (dry) mg/kg	Unadj. MQL mg/kg	MQL (dry) mg/kg	Dilution	Analysis date / time	Batch
Chloride	611		0.858	10.0	10.8	1	10/16/2018 19:55	WG1180578

AH-1 (4-5)
Collected date/time: 10/02/18 10:40

SAMPLE RESULTS - 03

L1034371

ONE LAB. NATIONWIDE.

Total Solids by Method 2540 G-2011

Analyte	Result %	Qualifier	Dilution	Analysis date / time	Batch
Total Solids	92.7	T8	1	10/18/2018 10:59	WG1182618

Wet Chemistry by Method 300.0

Analyte	Result (dry) mg/kg	Qualifier	SDL (dry) mg/kg	Unadj. MQL mg/kg	MQL (dry) mg/kg	Dilution	Analysis date / time	Batch
Chloride	468		0.858	10.0	10.8	1	10/16/2018 20:03	WG1180578

AH-2 (2-3)
Collected date/time: 10/02/18 10:10

SAMPLE RESULTS - 04

L1034371

ONE LAB. NATIONWIDE.

Total Solids by Method 2540 G-2011

Analyte	Result %	Qualifier	Dilution	Analysis date / time	Batch
Total Solids	92.9	T8	1	10/18/2018 10:51	WG1182619

Wet Chemistry by Method 300.0

Analyte	Result (dry) mg/kg	Qualifier	SDL (dry) mg/kg	Unadj. MQL mg/kg	MQL (dry) mg/kg	Dilution	Analysis date / time	Batch
Chloride	123		0.856	10.0	10.8	1	10/16/2018 20:21	WG1180578

AH-2 (3-4)
Collected date/time: 10/02/18 10:18

SAMPLE RESULTS - 05

L1034371

ONE LAB. NATIONWIDE.

Total Solids by Method 2540 G-2011

Analyte	Result %	Qualifier	Dilution	Analysis date / time	Batch
Total Solids	93.2	T8	1	10/18/2018 10:51	WG1182619

Wet Chemistry by Method 300.0

Analyte	Result (dry) mg/kg	Qualifier	SDL (dry) mg/kg	Unadj. MQL mg/kg	MQL (dry) mg/kg	Dilution	Analysis date / time	Batch
Chloride	167		0.853	10.0	10.7	1	10/16/2018 20:30	WG1180578

AH-2 (4-5)
Collected date/time: 10/02/18 10:25

SAMPLE RESULTS - 06

L1034371

ONE LAB. NATIONWIDE.

Total Solids by Method 2540 G-2011

Analyte	Result %	Qualifier	Dilution	Analysis date / time	Batch
Total Solids	89.2	T8	1	10/18/2018 10:51	WG1182619

Wet Chemistry by Method 300.0

Analyte	Result (dry) mg/kg	Qualifier	SDL (dry) mg/kg	Unadj. MQL mg/kg	MQL (dry) mg/kg	Dilution	Analysis date / time	Batch
Chloride	217		0.891	10.0	11.2	1	10/16/2018 20:56	WG1180578

AH-3 (2-3)
Collected date/time: 10/02/18 12:05

SAMPLE RESULTS - 07

L1034371

ONE LAB. NATIONWIDE.

Total Solids by Method 2540 G-2011

Analyte	Result %	Qualifier	Dilution	Analysis date / time	Batch
Total Solids	92.7	T8	1	10/18/2018 10:51	WG1182619

Wet Chemistry by Method 300.0

Analyte	Result (dry) mg/kg	Qualifier	SDL (dry) mg/kg	Unadj. MQL mg/kg	MQL (dry) mg/kg	Dilution	Analysis date / time	Batch
Chloride	43.9		0.858	10.0	10.8	1	10/16/2018 21:05	WG1180578

AH-3 (3-4)
Collected date/time: 10/02/18 12:15

SAMPLE RESULTS - 08

L1034371

ONE LAB. NATIONWIDE.

Total Solids by Method 2540 G-2011

Analyte	Result %	Qualifier	Dilution	Analysis date / time	Batch
Total Solids	92.2	T8	1	10/18/2018 10:51	WG1182619

Wet Chemistry by Method 300.0

Analyte	Result (dry) mg/kg	Qualifier	SDL (dry) mg/kg	Unadj. MQL mg/kg	MQL (dry) mg/kg	Dilution	Analysis date / time	Batch
Chloride	45.4		0.863	10.0	10.8	1	10/16/2018 21:14	WG1180578

AH-3 (4-5)
Collected date/time: 10/02/18 12:20

SAMPLE RESULTS - 09

L1034371

ONE LAB. NATIONWIDE.

Total Solids by Method 2540 G-2011

Analyte	Result %	Qualifier	Dilution	Analysis date / time	Batch
Total Solids	73.3	T8	1	10/18/2018 10:51	WG1182619

Wet Chemistry by Method 300.0

Analyte	Result (dry) mg/kg	Qualifier	SDL (dry) mg/kg	Unadj. MQL mg/kg	MQL (dry) mg/kg	Dilution	Analysis date / time	Batch
Chloride	57.4		1.08	10.0	13.6	1	10/16/2018 21:22	WG1180578

AH-4 (2-3)
Collected date/time: 10/02/18 11:50

SAMPLE RESULTS - 10

L1034371

ONE LAB. NATIONWIDE.

Total Solids by Method 2540 G-2011

Analyte	Result %	Qualifier	Dilution	Analysis date / time	Batch
Total Solids	93.5	T8	1	10/18/2018 10:51	WG1182619

Wet Chemistry by Method 300.0

Analyte	Result (dry) mg/kg	Qualifier	SDL (dry) mg/kg	Unadj. MQL mg/kg	MQL (dry) mg/kg	Dilution	Analysis date / time	Batch
Chloride	50.8		0.851	10.0	10.7	1	10/16/2018 21:31	WG1180578

AH-4 (3-4)
Collected date/time: 10/02/18 12:00

SAMPLE RESULTS - 11

L1034371

ONE LAB. NATIONWIDE.

Total Solids by Method 2540 G-2011

Analyte	Result %	Qualifier	Dilution	Analysis date / time	Batch
Total Solids	93.2	T8	1	10/18/2018 10:51	WG1182619

Wet Chemistry by Method 300.0

Analyte	Result (dry) mg/kg	Qualifier	SDL (dry) mg/kg	Unadj. MQL mg/kg	MQL (dry) mg/kg	Dilution	Analysis date / time	Batch
Chloride	53.1		0.853	10.0	10.7	1	10/16/2018 21:40	WG1180578

AH-4 (4-5)
Collected date/time: 10/02/18 12:10

SAMPLE RESULTS - 12
L1034371

ONE LAB. NATIONWIDE.

Total Solids by Method 2540 G-2011

Analyte	Result %	Qualifier	Dilution	Analysis date / time	Batch
Total Solids	89.8	T8	1	10/18/2018 10:51	WG1182619

Wet Chemistry by Method 300.0

Analyte	Result (dry) mg/kg	Qualifier	SDL (dry) mg/kg	Unadj. MQL mg/kg	MQL (dry) mg/kg	Dilution	Analysis date / time	Batch
Chloride	84.4		0.886	10.0	11.1	1	10/16/2018 22:06	WG1180578

AH-5 (2-3)
Collected date/time: 10/02/18 14:25

SAMPLE RESULTS - 13

L1034371

ONE LAB. NATIONWIDE.

Total Solids by Method 2540 G-2011

Analyte	Result %	Qualifier	Dilution	Analysis date / time	Batch
Total Solids	92.7	T8	1	10/18/2018 10:51	WG1182619

Wet Chemistry by Method 300.0

Analyte	Result (dry) mg/kg	Qualifier	SDL (dry) mg/kg	Unadj. MQL mg/kg	MQL (dry) mg/kg	Dilution	Analysis date / time	Batch
Chloride	46.4		0.858	10.0	10.8	1	10/16/2018 22:15	WG1180578

AH-5 (3-4)
Collected date/time: 10/02/18 14:35

SAMPLE RESULTS - 14

L1034371

ONE LAB. NATIONWIDE.

Total Solids by Method 2540 G-2011

Analyte	Result %	Qualifier	Dilution	Analysis date / time	Batch
Total Solids	93.5	T8	1	10/18/2018 10:43	WG1182620

Wet Chemistry by Method 300.0

Analyte	Result (dry) mg/kg	Qualifier	SDL (dry) mg/kg	Unadj. MQL mg/kg	MQL (dry) mg/kg	Dilution	Analysis date / time	Batch
Chloride	42.6		0.851	10.0	10.7	1	10/16/2018 22:41	WG1180578

AH-5 (4-5)
Collected date/time: 10/02/18 14:45

SAMPLE RESULTS - 15

L1034371

ONE LAB. NATIONWIDE.

Total Solids by Method 2540 G-2011

Analyte	Result %	Qualifier	Dilution	Analysis date / time	Batch
Total Solids	93.3	T8	1	10/18/2018 10:43	WG1182620

Wet Chemistry by Method 300.0

Analyte	Result (dry) mg/kg	Qualifier	SDL (dry) mg/kg	Unadj. MQL mg/kg	MQL (dry) mg/kg	Dilution	Analysis date / time	Batch
Chloride	45.8		0.852	10.0	10.7	1	10/16/2018 22:59	WG1180578

AH-6 (2-3)
Collected date/time: 10/02/18 14:30

SAMPLE RESULTS - 16
L1034371

ONE LAB. NATIONWIDE.

Total Solids by Method 2540 G-2011

Analyte	Result %	Qualifier	Dilution	Analysis date / time	Batch
Total Solids	93.3	T8	1	10/18/2018 10:43	WG1182620

Wet Chemistry by Method 300.0

Analyte	Result (dry) mg/kg	Qualifier	SDL (dry) mg/kg	Unadj. MQL mg/kg	MQL (dry) mg/kg	Dilution	Analysis date / time	Batch
Chloride	49.2		0.852	10.0	10.7	1	10/16/2018 23:08	WG1180578

AH-6 (3-4)
Collected date/time: 10/02/18 14:40

SAMPLE RESULTS - 17

L1034371

ONE LAB. NATIONWIDE.

Total Solids by Method 2540 G-2011

Analyte	Result %	Qualifier	Dilution	Analysis date / time	Batch
Total Solids	74.3	T8	1	10/18/2018 10:43	WG1182620

Wet Chemistry by Method 300.0

Analyte	Result (dry) mg/kg	Qualifier	SDL (dry) mg/kg	Unadj. MQL mg/kg	MQL (dry) mg/kg	Dilution	Analysis date / time	Batch
Chloride	59.1		1.07	10.0	13.5	1	10/16/2018 23:16	WG1180578

AH-6 (4-5)
Collected date/time: 10/02/18 14:45

SAMPLE RESULTS - 18

L1034371

ONE LAB. NATIONWIDE.

Total Solids by Method 2540 G-2011

Analyte	Result %	Qualifier	Dilution	Analysis date / time	Batch
Total Solids	76.4	T8	1	10/18/2018 10:43	WG1182620

Wet Chemistry by Method 300.0

Analyte	Result (dry) mg/kg	Qualifier	SDL (dry) mg/kg	Unadj. MQL mg/kg	MQL (dry) mg/kg	Dilution	Analysis date / time	Batch
Chloride	8.01	J	1.04	10.0	13.1	1	10/17/2018 11:00	WG1181984

WG1182618

Total Solids by Method 2540 G-2011

QUALITY CONTROL SUMMARY

L1034371-01,02,03

ONE LAB. NATIONWIDE.

Method Blank (MB)

(MB) R3352030-1 10/18/18 10:59

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

L1034369-01 Original Sample (OS) • Duplicate (DUP)

(OS) L1034369-01 10/18/18 10:59 • (DUP) R3352030-3 10/18/18 10:59

Analyte	Original Result %	DUP Result %	Dilution	DUP RPD %	DUP Qualifier	DUP RPD Limits %
Total Solids	83.2	84.8	1	1.92		10

Laboratory Control Sample (LCS)

(LCS) R3352030-2 10/18/18 10:59

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

Method Blank (MB)

(MB) R3352029-1 10/18/18 10:51

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

L1034371-04 Original Sample (OS) • Duplicate (DUP)

(OS) L1034371-04 10/18/18 10:51 • (DUP) R3352029-3 10/18/18 10:51

Analyte	Original Result %	DUP Result %	Dilution	DUP RPD %	DUP Qualifier	DUP RPD Limits %
Total Solids	92.9	93.0	1	0.0326		10

Laboratory Control Sample (LCS)

(LCS) R3352029-2 10/18/18 10:51

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

WG1182620

Total Solids by Method 2540 G-2011

QUALITY CONTROL SUMMARY

L1034371-14,15,16,17,18

ONE LAB. NATIONWIDE.

Method Blank (MB)

(MB) R3352028-1 10/18/18 10:43

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

L1034381-03 Original Sample (OS) • Duplicate (DUP)

(OS) L1034381-03 10/18/18 10:43 • (DUP) R3352028-3 10/18/18 10:43

Analyte	Original Result %	DUP Result %	Dilution	DUP RPD %	DUP Qualifier	DUP RPD Limits %
Total Solids	76.8	78.3	1	1.86		10

Laboratory Control Sample (LCS)

(LCS) R3352028-2 10/18/18 10:43

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

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

Method Blank (MB)

(MB) R3351299-1 10/16/18 19:11

Analyte	MB Result mg/kg	MB Qualifier	MB MDL mg/kg	MB RDL mg/kg
Chloride	U		0.795	10.0

L1034371-03 Original Sample (OS) • Duplicate (DUP)

(OS) L1034371-03 10/16/18 20:03 • (DUP) R3351299-4 10/16/18 20:12

Analyte	Original Result (dry) mg/kg	DUP Result (dry) mg/kg	Dilution	DUP RPD %	DUP Qualifier	DUP RPD Limits %
Chloride	468	466	1	0.532		20

L1034371-14 Original Sample (OS) • Duplicate (DUP)

(OS) L1034371-14 10/16/18 22:41 • (DUP) R3351299-7 10/16/18 22:50

Analyte	Original Result (dry) mg/kg	DUP Result (dry) mg/kg	Dilution	DUP RPD %	DUP Qualifier	DUP RPD Limits %
Chloride	42.6	47.4	1	10.7		20

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

(LCS) R3351299-2 10/16/18 19:20 • (LCSD) R3351299-3 10/16/18 19:28

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 %
Chloride	200	202	207	101	104	90.0-110			2.65	20

L1034371-11 Original Sample (OS) • Matrix Spike (MS) • Matrix Spike Duplicate (MSD)

(OS) L1034371-11 10/16/18 21:40 • (MS) R3351299-5 10/16/18 21:49 • (MSD) R3351299-6 10/16/18 21:58

Analyte	Spike Amount (dry) mg/kg	Original Result (dry) mg/kg	MS Result (dry) mg/kg	MSD Result (dry) mg/kg	MS Rec. %	MSD Rec. %	Dilution	Rec. Limits %	MS Qualifier	MSD Qualifier	RPD %	RPD Limits %
Chloride	536	53.1	642	632	110	108	1	80.0-120			1.61	20

Method Blank (MB)

(MB) R3351459-1 10/17/18 10:18

Analyte	MB Result mg/kg	MB Qualifier	MB MDL mg/kg	MB RDL mg/kg
Chloride	U		0.795	10.0

L1034371-18 Original Sample (OS) • Duplicate (DUP)

(OS) L1034371-18 10/17/18 11:00 • (DUP) R3351459-4 10/17/18 11:08

Analyte	Original Result (dry) mg/kg	DUP Result (dry) mg/kg	Dilution	DUP RPD %	DUP Qualifier	DUP RPD Limits %
Chloride	8.01	7.85	1	2.00	J	20

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

(LCS) R3351459-2 10/17/18 10:26 • (LCSD) R3351459-3 10/17/18 10:35

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 %
Chloride	200	184	197	92.0	98.4	90.0-110			6.70	20

L1034971-01 Original Sample (OS) • Matrix Spike (MS) • Matrix Spike Duplicate (MSD)

(OS) L1034971-01 10/17/18 11:26 • (MS) R3351459-5 10/17/18 11:35 • (MSD) R3351459-6 10/17/18 11:44

Analyte	Spike Amount mg/kg	Original Result mg/kg	MS Result mg/kg	MSD Result mg/kg	MS Rec. %	MSD Rec. %	Dilution	Rec. Limits %	MS Qualifier	MSD Qualifier	RPD %	RPD Limits %
Chloride	500	73.8	536	528	92.4	90.8	1	80.0-120			1.46	20

GLOSSARY OF TERMS

ONE LAB. NATIONWIDE.

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.

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.
RDL	Reported Detection Limit.
Rec.	Recovery.
RPD	Relative Percent Difference.
SDG	Sample Delivery Group.
SDL	Sample Detection Limit.
SDL (dry)	Sample Detection Limit.
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.
Case Narrative (Cn)	A brief discussion about the included sample results, including a discussion of any non-conformances to protocol observed either at sample receipt by the laboratory from the field or during the analytical process. If present, there will be a section in the Case Narrative to discuss the meaning of any data qualifiers used in the report.
Quality Control Summary (Qc)	This section of the report includes the results of the laboratory quality control analyses required by procedure or analytical methods to assist in evaluating the validity of the results reported for your samples. These analyses are not being performed on your samples typically, but on laboratory generated material.
Sample Chain of Custody (Sc)	This is the document created in the field when your samples were initially collected. This is used to verify the time and date of collection, the person collecting the samples, and the analyses that the laboratory is requested to perform. This chain of custody also documents all persons (excluding commercial shippers) that have had control or possession of the samples from the time of collection until delivery to the laboratory for analysis.
Sample Results (Sr)	This section of your report will provide the results of all testing performed on your samples. These results are provided by sample ID and are separated by the analyses performed on each sample. The header line of each analysis section for each sample will provide the name and method number for the analysis reported.
Sample Summary (Ss)	This section of the Analytical Report defines the specific analyses performed for each sample ID, including the dates and times of preparation and/or analysis.

Qualifier	Description
J	The identification of the analyte is acceptable; the reported value is an estimate.
T8	Sample(s) received past/too close to holding time expiration.

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	T 104704245-17-14
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

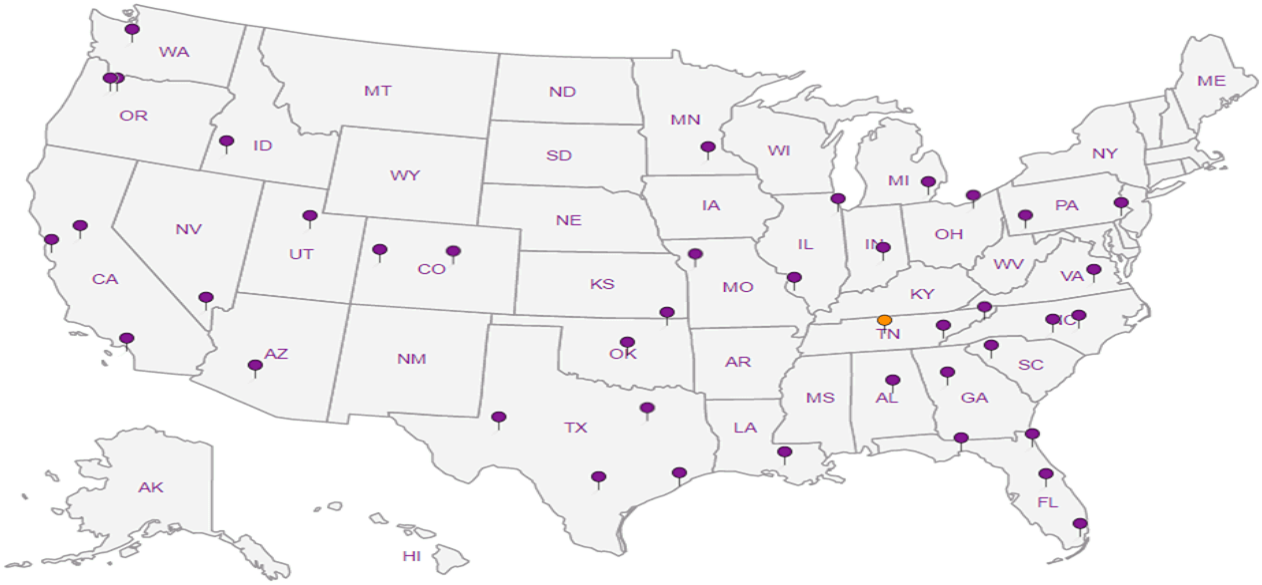
Third Party Federal Accreditations

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.



E058

Analysis Request of Chain of Custody Record

Page 1 of 4

Tetra Tech, Inc.

1034571

Client Name	Conoco Phillips
Site Manager	Kayla Taylor
Project Name	COP State F-1
Project Location (County, State)	Lea County, New Mexico
Project #	212C-MD-01306
Invoice to	Accounts Payable 900 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	SAMPLING TIME	MATRIX WATER	MATRIX SOIL	HCL	HNO_3	ICE	None	# CONTAINERS	FILTERED (Y/N)	BTEX 8021B (1 X 1L)	TPH TX1005 (Ext to C35)	TPH 8015M/GRO - DRO - MRO	PAH 8270C	Total Metals Ag As Ba Cd Cr Pb Se Hg	TCLP Metals Ag As Ba Cd Cr Pb Se Hg	TCLP Volatiles	TCLP Semi Volatiles	RCI	GC/MS Vol. 8260B / 624	GC/MS Semi Vol. 8270C/625	PCBs 8082 / 608	NORM	PLM (Asbestos)	Chloride 300.0	Chloride Sulfate TDS	General Water Chemistry (see attached list)	Anion/Cation Balance	TPH 8015R				
1053273-01	AH-1 (0'-1')	10/2/2018	1010		X			X		1	N	X														X								
02	AH-1 (1'-2')	10/2/2018	1025		X			X		1	N	X		X												X								
	AH-1 (2'-3')	10/2/2018	1030		X			X		1	N	X		X												X							X	01
	AH-1 (3'-4')	10/2/2018	1035		X			X		1	N	X		X												X							X	02
	AH-1 (4'-5')	10/2/2018	1040		X			X		1	N	X		X												X							X	03
03	AH-2 (0'-1')	10/2/2018	1000		X			X		1	N	X		X												X								
04	AH-2 (1'-2')	10/2/2018	1005		X			X		1	N	X		X												X								
	AH-2 (2'-3')	10/2/2018	1010		X			X		1	N	X		X												X							X	04
	AH-2 (3'-4')	10/2/2018	1018		X			X		1	N	X		X												X							X	05
	AH-2 (4'-5')	10/2/2018	1025		X			X		1	N	X		X												X							X	06

Relinquished by	Date	Time	Received by	Date	Time
[signature]	10-3-18	0800	Kayla Taylor	10-3-18	0800
Kayla Taylor	10-3-18	11:15	[signature]	10/3/18	11:15
Relinquished by	Date	Time	Received by	Date	Time
			[signature]	8/1	8:45

LAB USE ONLY

Sample Temperature

REMARKS:

☐ STANDARD

☐ RUSH Same Day 24 hr 48 hr 72 hr

☐ Rush Charges Authorized

☐ Special Report Limits or TRRP Report

Carrier: HAND DELIVERED FEDEX UPS Tracking # 4430 3429 2226

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-0.3
5.5

10-022

Analysis Request of Chain of Custody Record

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Tetra Tech, Inc.

1034371

Client Name	Conoco Phillips
Site Manager	Kayla Taylor
Project Name	COP State F-1
Project Location (county, state)	Lea County, New Mexico
Project #	212C-MD-01306
Invoice to	Accounts Payable 900 West Wall Street Suite 100 Midland Texas 79701
Receiving Laboratory	Paco Analytical
Sampler Signature	
Comments	COPTE TRA Accounts

ANALYSIS REQUEST (Circle or Specify Method No.)

LAB #	SAMPLE IDENTIFICATION	SAMPLING Date	SAMPLING Time	MATRIX WATER	MATRIX SOIL	PRESERVATIVE METHOD HCL	HNO3	Ice	None	# CONTAINERS	FILTERED (Y/N)	BTEX 8021B	TPH TX1005 (Ext to C35)	GRO DRO ORO MRO	PAH 8270C	Total Metals Ag As Ba Cd Cr Pb Se Hg	TCLP Metals Ag As Ba Cd Cr Pb Se Hg	TCLP volatiles	TCLP Semi Volatiles	RCI	GC/MS Vol. 8260B / 624	GC/MS Semi Vol. 8270C/625	PCBs 8082 / 608	Pesticides	Herbicides	Chloride 300.0	Sulfate	TDS	General Water Chemistry (see attached list)	Anions/Cation Balance	TPH 8015M			Hold	
L10 3127	AH-3 (0-1)	10/2/2018	1140		X				X		1	N	X		X												X								
04	AH-3 (1-2)	10/2/2018	1150		X				X		1	N	X		X												X								
	AH-3 (2-3)	10/2/2018	1205		X				X		1	N	X		X												X							X	07
	AH-3 (3-4)	10/2/2018	1215		X				X		1	N	X		X												X							X	08
	AH-3 (4-5)	10/2/2018	1220		X				X		1	N	X		X												X							X	09
07	AH-4 (0-1)	10/2/2018	1125		X				X		1	N	X		X												X								
08	AH-4 (1-2)	10/2/2018	1135		X				X		1	N	X		X												X								
	AH-4 (2-3)	10/2/2018	1150		X				X		1	N	X		X												X							X	10
	AH-4 (3-4)	10/2/2018	1200		X				X		1	N	X		X												X							X	11
	AH-4 (4-5)	10/2/2018	1210		X				X		1	N	X		X												X							X	12

Relinquished by	Date	Time	Received by	Date	Time
	10-3-18	0800	Kayla Taylor	10-3-18	0800
Kayla Taylor	10-3-18	11:05			
			FCI	10/4/18	8:45

LAB USE ONLY

Sample Temperature

REMARKS

☐ STANDARD

☐ RUSH: Same Day 24 hr 48 hr 72 hr

☐ Rush Charges Authorized

☐ Special Report Limits or TRRP Report

Sent: HAND DELIVERED FEDEX UPS Tracking #

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RAD SCREEN: <0.5 mR/hr

5.8 0.3 5.5

Analysis Request of Chain of Custody Record

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Tetra Tech, Inc.

1034371

Client Name	Conoco Phillips
Site Manager	Kayla Taylor
Project Name	COP State F-1
Project Location (County, State)	Lea County, New Mexico
Project #	212C-MD-01308
Invoice to	Accounts Payable 900 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 # (For Lab Use Only)	SAMPLE IDENTIFICATION	SAMPLING Date	SAMPLING Time	MATRIX WATER	MATRIX SOIL	PRESERVATIVE METHOD HCL	PRESERVATIVE METHOD ICE	PRESERVATIVE METHOD None	# CONTAINERS	FILTERED (Y/N)	418.1	8015 GRO/DRO	8015 GRO/DRO/MRO	6010 Metals Ag As Ba Cd Cr Pb Se Hg	6020 Metals Ag As Ba Cd Cr Pb Se Hg	8260B Full Suite	8260B Sam Vol	8270C/625	8082 PCB	8021B	300.0 Anions	Chloride	Sulfate	TDS	Gamma Water Chemistry (see attached list)	Alpha/Radium Balance	TPH 8015M		
1034371-09	AH-5 (0-1')		1405		X		X		1	N	X		X									X							
10	AH-5 (1-2')		1415		X		X		1	N			X									X							
	AH-5 (2-3')		1425		X				1	N	X		X									X							X
	AH-5 (3-4')		1435		X		X		1	N	X		X									X						X	X
	AH-5 (4-5')		1445		X		X		1	N	X		X									X							
11	AH-6 (0-1')		1415		X				1	N	X		X									X							
12	AH-6 (1-2')		142		X		X		1	N	X		X									X							X
	AH-6 (2-3')	10/2/2018	1430		X		X		1	N	X		X									X							X
	AH-6 (3-4')	10/2/2018	1440		X		X		1	N	X		X									X							X
	AH-6 (4-5')	10/2/2018	1445		X		X		1	N	X		X									X							

Relinquished by	Date	Time	Received by	Date	Time
[signature]	10-3-18	0800	Kayla Taylor	10-3-18	0800
Kayla Taylor	10-3-18	11:15	[signature]	10/3/18	1[illegible]
Relinquished by	Date	Time	Received by	Date	Time
			[signature]	10/4/18	8:45

LAB USE ONLY

Sample Temperature

REMARKS

☐ STANDARD

☐ RUSH Same Day 24 hr 48 hr 72 hr

☐ Rush Charges Authorized

☐ Special Report Limits or TRRP Report

Samples Hand Delivered FedEx UPS Tracking #

RAD SCREEN [illegible]

ORIGINAL COPY

5.8 0.3 55

Matt Shacklock

From: Mark Beasley
Sent: Friday, October 12, 2018 2:59 PM
To: Login
Subject: L1031723 *COPTETRA* hold samples

Log all remaining samples on hold for CHLORIDE-300 & TS. Log as RS due 10/19

Thanks
Mark

From: LovelyTaylor, Kayla [mailto:Kayla.LovelyTaylor@tetratech.com]
Sent: Friday, October 12, 2018 2:19 PM
To: Mark Beasley
Subject: FW: Pace National Report for 212C-MD-01306 COP State F-1 L1031723
Importance: High

Hey Mark,

Since Chris is still on vacation I was wondering if we could run the rest of these samples for chlorides that are associated with this group. It is mostly sand out there and traveled down faster than anticipated. I'm not worried about running the TPH or BTEX.

Let me know if you have any questions.

Thanks!
Kayla

Pace Analytical®
National Center for Testing & Innovation

ANALYTICAL REPORT

November 06, 2018

ConocoPhillips - Tetra Tech

Sample Delivery Group:	L1039602
Samples Received:	10/05/2018
Project Number:	212C-MD-01306
Description:	COP State F-1
Site:	LEA COUNTY, NEW MEXICO
Report To:	Kayla Taylor 4001 N. Big Spring St., Ste. 401 Midland, TX 79705

Entire Report Reviewed By:

Chris McCord
Project Manager

Results relate only to the items tested or calibrated and are reported as rounded values. This test report shall not be reproduced, except in full, without written approval of the laboratory. Where applicable, sampling conducted by Pace National is performed per guidance provided in laboratory standard operating procedures: 060302, 060303, and 060304.

TABLE OF CONTENTS

ONE LAB. NATIONWIDE.

SAMPLE SUMMARY

ONE LAB. NATIONWIDE.

AH-9 (2-3') L1039602-01 Solid

Collected by	Collected date/time	Received date/time
	10/03/18 09:01	10/05/18 08:45

Method	Batch	Dilution	Preparation date/time	Analysis date/time	Analyst
Total Solids by Method 2540 G-2011	WG1189485	1	11/01/18 08:16	11/01/18 08:23	JD
Wet Chemistry by Method 300.0	WG1189242	1	10/31/18 20:04	11/01/18 00:49	ELN

AH-9 (3-4') L1039602-02 Solid

Collected by	Collected date/time	Received date/time
	10/03/18 09:06	10/05/18 08:45

Method	Batch	Dilution	Preparation date/time	Analysis date/time	Analyst
Total Solids by Method 2540 G-2011	WG1189485	1	11/01/18 08:16	11/01/18 08:23	JD
Wet Chemistry by Method 300.0	WG1189242	1	10/31/18 20:04	11/01/18 01:06	ELN

AH-9 (4-5') L1039602-03 Solid

Collected by	Collected date/time	Received date/time
	10/03/18 09:09	10/05/18 08:45

Method	Batch	Dilution	Preparation date/time	Analysis date/time	Analyst
Total Solids by Method 2540 G-2011	WG1189485	1	11/01/18 08:16	11/01/18 08:23	JD
Wet Chemistry by Method 300.0	WG1189242	1	10/31/18 20:04	11/01/18 01:15	ELN

AH-10 (2-3') L1039602-04 Solid

Collected by	Collected date/time	Received date/time
	10/03/18 09:05	10/05/18 08:45

Method	Batch	Dilution	Preparation date/time	Analysis date/time	Analyst
Total Solids by Method 2540 G-2011	WG1189485	1	11/01/18 08:16	11/01/18 08:23	JD
Wet Chemistry by Method 300.0	WG1189242	1	10/31/18 20:04	11/01/18 01:24	ELN

AH-10 (3-4') L1039602-05 Solid

Collected by	Collected date/time	Received date/time
	10/03/18 09:15	10/05/18 08:45

Method	Batch	Dilution	Preparation date/time	Analysis date/time	Analyst
Total Solids by Method 2540 G-2011	WG1189485	1	11/01/18 08:16	11/01/18 08:23	JD
Wet Chemistry by Method 300.0	WG1189242	1	10/31/18 20:04	11/01/18 01:32	ELN

AH-10 (4-5') L1039602-06 Solid

Collected by	Collected date/time	Received date/time
	10/03/18 09:25	10/05/18 08:45

Method	Batch	Dilution	Preparation date/time	Analysis date/time	Analyst
Total Solids by Method 2540 G-2011	WG1189485	1	11/01/18 08:16	11/01/18 08:23	JD
Wet Chemistry by Method 300.0	WG1189242	1	10/31/18 20:04	11/01/18 01:59	ELN

AH-11 (2-3') L1039602-07 Solid

Collected by	Collected date/time	Received date/time
	10/03/18 09:55	10/05/18 08:45

Method	Batch	Dilution	Preparation date/time	Analysis date/time	Analyst
Total Solids by Method 2540 G-2011	WG1189485	1	11/01/18 08:16	11/01/18 08:23	JD
Wet Chemistry by Method 300.0	WG1189242	1	10/31/18 20:04	11/01/18 02:07	ELN

SAMPLE SUMMARY

ONE LAB. NATIONWIDE.

AH-11 (3-4') L1039602-08 Solid

Collected by	Collected date/time	Received date/time
	10/03/18 09:58	10/05/18 08:45

Method	Batch	Dilution	Preparation date/time	Analysis date/time	Analyst
Total Solids by Method 2540 G-2011	WG1189485	1	11/01/18 08:16	11/01/18 08:23	JD
Wet Chemistry by Method 300.0	WG1189242	1	10/31/18 20:04	11/01/18 02:34	ELN

AH-11 (4-5') L1039602-09 Solid

Collected by	Collected date/time	Received date/time
	10/03/18 10:02	10/05/18 08:45

Method	Batch	Dilution	Preparation date/time	Analysis date/time	Analyst
Total Solids by Method 2540 G-2011	WG1189485	1	11/01/18 08:16	11/01/18 08:23	JD
Wet Chemistry by Method 300.0	WG1189242	1	10/31/18 20:04	11/01/18 02:43	ELN

AH-12 (2-3') L1039602-10 Solid

Collected by	Collected date/time	Received date/time
	10/03/18 10:00	10/05/18 08:45

Method	Batch	Dilution	Preparation date/time	Analysis date/time	Analyst
Total Solids by Method 2540 G-2011	WG1189485	1	11/01/18 08:16	11/01/18 08:23	JD
Wet Chemistry by Method 300.0	WG1189242	1	10/31/18 20:04	11/01/18 02:51	ELN

AH-12 (3-4') L1039602-11 Solid

Collected by	Collected date/time	Received date/time
	10/03/18 10:10	10/05/18 08:45

Method	Batch	Dilution	Preparation date/time	Analysis date/time	Analyst
Total Solids by Method 2540 G-2011	WG1189486	1	11/01/18 08:07	11/01/18 08:15	JD
Wet Chemistry by Method 300.0	WG1189242	1	10/31/18 20:04	11/01/18 03:00	ELN

AH-12 (4-5') L1039602-12 Solid

Collected by	Collected date/time	Received date/time
	10/03/18 10:15	10/05/18 08:45

Method	Batch	Dilution	Preparation date/time	Analysis date/time	Analyst
Total Solids by Method 2540 G-2011	WG1189486	1	11/01/18 08:07	11/01/18 08:15	JD
Wet Chemistry by Method 300.0	WG1189242	1	10/31/18 20:04	11/01/18 03:09	ELN

AH-13 (2-3') L1039602-13 Solid

Collected by	Collected date/time	Received date/time
	10/03/18 11:28	10/05/18 08:45

Method	Batch	Dilution	Preparation date/time	Analysis date/time	Analyst
Total Solids by Method 2540 G-2011	WG1189486	1	11/01/18 08:07	11/01/18 08:15	JD
Wet Chemistry by Method 300.0	WG1189242	1	10/31/18 20:04	11/01/18 03:18	ELN

AH-13 (3-4') L1039602-14 Solid

Collected by	Collected date/time	Received date/time
	10/03/18 11:35	10/05/18 08:45

Method	Batch	Dilution	Preparation date/time	Analysis date/time	Analyst
Total Solids by Method 2540 G-2011	WG1189486	1	11/01/18 08:07	11/01/18 08:15	JD
Wet Chemistry by Method 300.0	WG1189242	1	10/31/18 20:04	11/01/18 03:44	ELN

SAMPLE SUMMARY

ONE LAB. NATIONWIDE.

AH-13 (4-5') L1039602-15 Solid

Collected by	Collected date/time	Received date/time
	10/03/18 11:42	10/05/18 08:45

Method	Batch	Dilution	Preparation date/time	Analysis date/time	Analyst
Total Solids by Method 2540 G-2011	WG1189486	1	11/01/18 08:07	11/01/18 08:15	JD
Wet Chemistry by Method 300.0	WG1189242	1	10/31/18 20:04	11/01/18 03:53	ELN

AH-14 (2-3') L1039602-16 Solid

Collected by	Collected date/time	Received date/time
	10/03/18 11:26	10/05/18 08:45

Method	Batch	Dilution	Preparation date/time	Analysis date/time	Analyst
Total Solids by Method 2540 G-2011	WG1189486	1	11/01/18 08:07	11/01/18 08:15	JD
Wet Chemistry by Method 300.0	WG1189242	1	10/31/18 20:04	11/01/18 04:02	ELN

AH-14 (3-4') L1039602-17 Solid

Collected by	Collected date/time	Received date/time
	10/03/18 11:29	10/05/18 08:45

Method	Batch	Dilution	Preparation date/time	Analysis date/time	Analyst
Total Solids by Method 2540 G-2011	WG1189486	1	11/01/18 08:07	11/01/18 08:15	JD
Wet Chemistry by Method 300.0	WG1189242	1	10/31/18 20:04	11/01/18 04:10	ELN

AH-14 (4-5') L1039602-18 Solid

Collected by	Collected date/time	Received date/time
	10/03/18 11:33	10/05/18 08:45

Method	Batch	Dilution	Preparation date/time	Analysis date/time	Analyst
Total Solids by Method 2540 G-2011	WG1189486	1	11/01/18 08:07	11/01/18 08:15	JD
Wet Chemistry by Method 300.0	WG1189242	1	10/31/18 20:04	11/01/18 04:19	ELN

AH-15 (2-3') L1039602-19 Solid

Collected by	Collected date/time	Received date/time
	10/03/18 12:06	10/05/18 08:45

Method	Batch	Dilution	Preparation date/time	Analysis date/time	Analyst
Total Solids by Method 2540 G-2011	WG1189486	1	11/01/18 08:07	11/01/18 08:15	JD
Wet Chemistry by Method 300.0	WG1189242	1	10/31/18 20:04	11/01/18 04:28	ELN

AH-16 (0-1') L1039602-20 Solid

Collected by	Collected date/time	Received date/time
	10/03/18 12:00	10/05/18 08:45

Method	Batch	Dilution	Preparation date/time	Analysis date/time	Analyst
Total Solids by Method 2540 G-2011	WG1189486	1	11/01/18 08:07	11/01/18 08:15	JD
Wet Chemistry by Method 300.0	WG1189242	1	10/31/18 20:04	11/01/18 04:37	ELN

AH-16 (1-2') L1039602-21 Solid

Collected by	Collected date/time	Received date/time
	10/03/18 12:05	10/05/18 08:45

Method	Batch	Dilution	Preparation date/time	Analysis date/time	Analyst
Total Solids by Method 2540 G-2011	WG1189487	1	11/01/18 07:56	11/01/18 08:05	JD
Wet Chemistry by Method 300.0	WG1189253	1	11/01/18 09:56	11/01/18 13:18	ELN

SAMPLE SUMMARY

ONE LAB. NATIONWIDE.

AH-17 (1-2') L1039602-22 Solid

Collected by	Collected date/time	Received date/time
	10/03/18 13:11	10/05/18 08:45

Method	Batch	Dilution	Preparation date/time	Analysis date/time	Analyst
Total Solids by Method 2540 G-2011	WG1189487	1	11/01/18 07:56	11/01/18 08:05	JD
Wet Chemistry by Method 300.0	WG1189253	1	11/01/18 09:56	11/01/18 13:27	ELN

AH-17 (2-3') L1039602-23 Solid

Collected by	Collected date/time	Received date/time
	10/03/18 13:14	10/05/18 08:45

Method	Batch	Dilution	Preparation date/time	Analysis date/time	Analyst
Total Solids by Method 2540 G-2011	WG1189487	1	11/01/18 07:56	11/01/18 08:05	JD
Wet Chemistry by Method 300.0	WG1189253	1	11/01/18 09:56	11/01/18 13:36	ELN

AH-17 (3-4') L1039602-24 Solid

Collected by	Collected date/time	Received date/time
	10/03/18 13:18	10/05/18 08:45

Method	Batch	Dilution	Preparation date/time	Analysis date/time	Analyst
Total Solids by Method 2540 G-2011	WG1189487	1	11/01/18 07:56	11/01/18 08:05	JD
Wet Chemistry by Method 300.0	WG1189253	1	11/01/18 09:56	11/01/18 13:45	ELN

AH-19 (0-1') L1039602-25 Solid

Collected by	Collected date/time	Received date/time
	10/03/18 13:42	10/05/18 08:45

Method	Batch	Dilution	Preparation date/time	Analysis date/time	Analyst
Total Solids by Method 2540 G-2011	WG1189487	1	11/01/18 07:56	11/01/18 08:05	JD
Wet Chemistry by Method 300.0	WG1189253	1	11/01/18 09:56	11/01/18 13:01	ELN

AH-19 (1-2') L1039602-26 Solid

Collected by	Collected date/time	Received date/time
	10/03/18 13:45	10/05/18 08:45

Method	Batch	Dilution	Preparation date/time	Analysis date/time	Analyst
Total Solids by Method 2540 G-2011	WG1189487	1	11/01/18 07:56	11/01/18 08:05	JD
Wet Chemistry by Method 300.0	WG1189253	1	11/01/18 09:56	11/01/18 13:53	ELN

AH-19 (2-3') L1039602-27 Solid

Collected by	Collected date/time	Received date/time
	10/03/18 13:48	10/05/18 08:45

Method	Batch	Dilution	Preparation date/time	Analysis date/time	Analyst
Total Solids by Method 2540 G-2011	WG1189487	1	11/01/18 07:56	11/01/18 08:05	JD
Wet Chemistry by Method 300.0	WG1189253	1	11/01/18 09:56	11/01/18 14:20	ELN

CASE NARRATIVE

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

Chris McCord
Project Manager

AH-9 (2-3')
Collected date/time: 10/03/18 09:01

SAMPLE RESULTS - 01

L1039602

ONE LAB. NATIONWIDE.

Total Solids by Method 2540 G-2011

Analyte	Result %	Qualifier	Dilution	Analysis date / time	Batch
Total Solids	92.0	T8	1	11/01/2018 08:23	WG1189485

Wet Chemistry by Method 300.0

Analyte	Result (dry) mg/kg	Qualifier	SDL (dry) mg/kg	Unadj. MQL mg/kg	MQL (dry) mg/kg	Dilution	Analysis date / time	Batch
Chloride	62.1		0.864	10.0	10.9	1	11/01/2018 00:49	WG1189242

AH-9 (3-4')
Collected date/time: 10/03/18 09:06

SAMPLE RESULTS - 02

L1039602

ONE LAB. NATIONWIDE.

Total Solids by Method 2540 G-2011

Analyte	Result %	Qualifier	Dilution	Analysis date / time	Batch
Total Solids	91.0	T8	1	11/01/2018 08:23	WG1189485

Wet Chemistry by Method 300.0

Analyte	Result (dry) mg/kg	Qualifier	SDL (dry) mg/kg	Unadj. MQL mg/kg	MQL (dry) mg/kg	Dilution	Analysis date / time	Batch
Chloride	70.1		0.874	10.0	11.0	1	11/01/2018 01:06	WG1189242

AH-9 (4-5')
Collected date/time: 10/03/18 09:09

SAMPLE RESULTS - 03

L1039602

ONE LAB. NATIONWIDE.

Total Solids by Method 2540 G-2011

Analyte	Result %	Qualifier	Dilution	Analysis date / time	Batch
Total Solids	85.6	T8	1	11/01/2018 08:23	WG1189485

Wet Chemistry by Method 300.0

Analyte	Result (dry) mg/kg	Qualifier	SDL (dry) mg/kg	Unadj. MQL mg/kg	MQL (dry) mg/kg	Dilution	Analysis date / time	Batch
Chloride	66.9		0.929	10.0	11.7	1	11/01/2018 01:15	WG1189242

AH-10 (2-3')
Collected date/time: 10/03/18 09:05

SAMPLE RESULTS - 04

L1039602

ONE LAB. NATIONWIDE.

Total Solids by Method 2540 G-2011

Analyte	Result %	Qualifier	Dilution	Analysis date / time	Batch
Total Solids	95.7	T8	1	11/01/2018 08:23	WG1189485

Wet Chemistry by Method 300.0

Analyte	Result (dry) mg/kg	Qualifier	SDL (dry) mg/kg	Unadj. MQL mg/kg	MQL (dry) mg/kg	Dilution	Analysis date / time	Batch
Chloride	57.7		0.831	10.0	10.4	1	11/01/2018 01:24	WG1189242

AH-10 (3-4')
Collected date/time: 10/03/18 09:15

SAMPLE RESULTS - 05
L1039602

ONE LAB. NATIONWIDE.

Total Solids by Method 2540 G-2011

Analyte	Result %	Qualifier	Dilution	Analysis date / time	Batch
Total Solids	93.0	T8	1	11/01/2018 08:23	WG1189485

Wet Chemistry by Method 300.0

Analyte	Result (dry) mg/kg	Qualifier	SDL (dry) mg/kg	Unadj. MQL mg/kg	MQL (dry) mg/kg	Dilution	Analysis date / time	Batch
Chloride	58.2		0.855	10.0	10.8	1	11/01/2018 01:32	WG1189242

AH-10 (4-5')
Collected date/time: 10/03/18 09:25

SAMPLE RESULTS - 06

L1039602

ONE LAB. NATIONWIDE.

Total Solids by Method 2540 G-2011

Analyte	Result %	Qualifier	Dilution	Analysis date / time	Batch
Total Solids	95.1	T8	1	11/01/2018 08:23	WG1189485

Wet Chemistry by Method 300.0

Analyte	Result (dry) mg/kg	Qualifier	SDL (dry) mg/kg	Unadj. MQL mg/kg	MQL (dry) mg/kg	Dilution	Analysis date / time	Batch
Chloride	60.8		0.836	10.0	10.5	1	11/01/2018 01:59	WG1189242

AH-11 (2-3')
Collected date/time: 10/03/18 09:55

SAMPLE RESULTS - 07

L1039602

ONE LAB. NATIONWIDE.

Total Solids by Method 2540 G-2011

Analyte	Result %	Qualifier	Dilution	Analysis date / time	Batch
Total Solids	93.7	T8	1	11/01/2018 08:23	WG1189485

Wet Chemistry by Method 300.0

Analyte	Result (dry) mg/kg	Qualifier	SDL (dry) mg/kg	Unadj. MQL mg/kg	MQL (dry) mg/kg	Dilution	Analysis date / time	Batch
Chloride	62.8		0.849	10.0	10.7	1	11/01/2018 02:07	WG1189242

AH-11 (3-4')
Collected date/time: 10/03/18 09:58

SAMPLE RESULTS - 08
L1039602

ONE LAB. NATIONWIDE.

Total Solids by Method 2540 G-2011

Analyte	Result %	Qualifier	Dilution	Analysis date / time	Batch
Total Solids	95.3	T8	1	11/01/2018 08:23	WG1189485

Wet Chemistry by Method 300.0

Analyte	Result (dry) mg/kg	Qualifier	SDL (dry) mg/kg	Unadj. MQL mg/kg	MQL (dry) mg/kg	Dilution	Analysis date / time	Batch
Chloride	64.4		0.835	10.0	10.5	1	11/01/2018 02:34	WG1189242

AH-11 (4-5')
Collected date/time: 10/03/18 10:02

SAMPLE RESULTS - 09

L1039602

ONE LAB. NATIONWIDE.

Total Solids by Method 2540 G-2011

Analyte	Result %	Qualifier	Dilution	Analysis date / time	Batch
Total Solids	89.9	T8	1	11/01/2018 08:23	WG1189485

Wet Chemistry by Method 300.0

Analyte	Result (dry) mg/kg	Qualifier	SDL (dry) mg/kg	Unadj. MQL mg/kg	MQL (dry) mg/kg	Dilution	Analysis date / time	Batch
Chloride	65.1		0.884	10.0	11.1	1	11/01/2018 02:43	WG1189242

AH-12 (2-3')
Collected date/time: 10/03/18 10:00

SAMPLE RESULTS - 10

L1039602

ONE LAB. NATIONWIDE.

Total Solids by Method 2540 G-2011

Analyte	Result %	Qualifier	Dilution	Analysis date / time	Batch
Total Solids	92.4	T8	1	11/01/2018 08:23	WG1189485

Wet Chemistry by Method 300.0

Analyte	Result (dry) mg/kg	Qualifier	SDL (dry) mg/kg	Unadj. MQL mg/kg	MQL (dry) mg/kg	Dilution	Analysis date / time	Batch
Chloride	59.0		0.860	10.0	10.8	1	11/01/2018 02:51	WG1189242

AH-12 (3-4')
Collected date/time: 10/03/18 10:10

SAMPLE RESULTS - 11

L1039602

ONE LAB. NATIONWIDE.

Total Solids by Method 2540 G-2011

Analyte	Result %	Qualifier	Dilution	Analysis date / time	Batch
Total Solids	94.1	T8	1	11/01/2018 08:15	WG1189486

Wet Chemistry by Method 300.0

Analyte	Result (dry) mg/kg	Qualifier	SDL (dry) mg/kg	Unadj. MQL mg/kg	MQL (dry) mg/kg	Dilution	Analysis date / time	Batch
Chloride	57.8		0.845	10.0	10.6	1	11/01/2018 03:00	WG1189242

AH-12 (4-5')
Collected date/time: 10/03/18 10:15

SAMPLE RESULTS - 12

L1039602

ONE LAB. NATIONWIDE.

Total Solids by Method 2540 G-2011

Analyte	Result %	Qualifier	Dilution	Analysis date / time	Batch
Total Solids	93.0	T8	1	11/01/2018 08:15	WG1189486

Wet Chemistry by Method 300.0

Analyte	Result (dry) mg/kg	Qualifier	SDL (dry) mg/kg	Unadj. MQL mg/kg	MQL (dry) mg/kg	Dilution	Analysis date / time	Batch
Chloride	55.7		0.855	10.0	10.8	1	11/01/2018 03:09	WG1189242

AH-13 (2-3')
Collected date/time: 10/03/18 11:28

SAMPLE RESULTS - 13

L1039602

ONE LAB. NATIONWIDE.

Total Solids by Method 2540 G-2011

Analyte	Result %	Qualifier	Dilution	Analysis date / time	Batch
Total Solids	93.2	T8	1	11/01/2018 08:15	WG1189486

Wet Chemistry by Method 300.0

Analyte	Result (dry) mg/kg	Qualifier	SDL (dry) mg/kg	Unadj. MQL mg/kg	MQL (dry) mg/kg	Dilution	Analysis date / time	Batch
Chloride	61.7		0.854	10.0	10.7	1	11/01/2018 03:18	WG1189242

AH-13 (3-4')
Collected date/time: 10/03/18 11:35

SAMPLE RESULTS - 14

L1039602

ONE LAB. NATIONWIDE.

Total Solids by Method 2540 G-2011

Analyte	Result %	Qualifier	Dilution	Analysis date / time	Batch
Total Solids	95.2	T8	1	11/01/2018 08:15	WG1189486

Wet Chemistry by Method 300.0

Analyte	Result (dry) mg/kg	Qualifier	SDL (dry) mg/kg	Unadj. MQL mg/kg	MQL (dry) mg/kg	Dilution	Analysis date / time	Batch
Chloride	64.8		0.835	10.0	10.5	1	11/01/2018 03:44	WG1189242

AH-13 (4-5')
Collected date/time: 10/03/18 11:42

SAMPLE RESULTS - 15

L1039602

ONE LAB. NATIONWIDE.

Total Solids by Method 2540 G-2011

Analyte	Result %	Qualifier	Dilution	Analysis date / time	Batch
Total Solids	95.1	T8	1	11/01/2018 08:15	WG1189486

Wet Chemistry by Method 300.0

Analyte	Result (dry) mg/kg	Qualifier	SDL (dry) mg/kg	Unadj. MQL mg/kg	MQL (dry) mg/kg	Dilution	Analysis date / time	Batch
Chloride	61.9		0.836	10.0	10.5	1	11/01/2018 03:53	WG1189242

AH-14 (2-3')
Collected date/time: 10/03/18 11:26

SAMPLE RESULTS - 16
L1039602

ONE LAB. NATIONWIDE.

Total Solids by Method 2540 G-2011

Analyte	Result %	Qualifier	Dilution	Analysis date / time	Batch
Total Solids	86.6	T8	1	11/01/2018 08:15	WG1189486

Wet Chemistry by Method 300.0

Analyte	Result (dry) mg/kg	Qualifier	SDL (dry) mg/kg	Unadj. MQL mg/kg	MQL (dry) mg/kg	Dilution	Analysis date / time	Batch
Chloride	60.3		0.919	10.0	11.6	1	11/01/2018 04:02	WG1189242

AH-14 (3-4')
Collected date/time: 10/03/18 11:29

SAMPLE RESULTS - 17

L1039602

ONE LAB. NATIONWIDE.

Total Solids by Method 2540 G-2011

Analyte	Result %	Qualifier	Dilution	Analysis date / time	Batch
Total Solids	91.2	T8	1	11/01/2018 08:15	WG1189486

Wet Chemistry by Method 300.0

Analyte	Result (dry) mg/kg	Qualifier	SDL (dry) mg/kg	Unadj. MQL mg/kg	MQL (dry) mg/kg	Dilution	Analysis date / time	Batch
Chloride	61.8		0.872	10.0	11.0	1	11/01/2018 04:10	WG1189242

AH-14 (4-5')
Collected date/time: 10/03/18 11:33

SAMPLE RESULTS - 18

L1039602

ONE LAB. NATIONWIDE.

Total Solids by Method 2540 G-2011

Analyte	Result %	Qualifier	Dilution	Analysis date / time	Batch
Total Solids	88.6	T8	1	11/01/2018 08:15	WG1189486

Wet Chemistry by Method 300.0

Analyte	Result (dry) mg/kg	Qualifier	SDL (dry) mg/kg	Unadj. MQL mg/kg	MQL (dry) mg/kg	Dilution	Analysis date / time	Batch
Chloride	57.5		0.897	10.0	11.3	1	11/01/2018 04:19	WG1189242

AH-15 (2-3')
Collected date/time: 10/03/18 12:06

SAMPLE RESULTS - 19

L1039602

ONE LAB. NATIONWIDE.

Total Solids by Method 2540 G-2011

Analyte	Result %	Qualifier	Dilution	Analysis date / time	Batch
Total Solids	94.3	T8	1	11/01/2018 08:15	WG1189486

Wet Chemistry by Method 300.0

Analyte	Result (dry) mg/kg	Qualifier	SDL (dry) mg/kg	Unadj. MQL mg/kg	MQL (dry) mg/kg	Dilution	Analysis date / time	Batch
Chloride	54.5		0.843	10.0	10.6	1	11/01/2018 04:28	WG1189242

AH-16 (0-1')
Collected date/time: 10/03/18 12:00

SAMPLE RESULTS - 20

L1039602

ONE LAB. NATIONWIDE.

Total Solids by Method 2540 G-2011

Analyte	Result %	Qualifier	Dilution	Analysis date / time	Batch
Total Solids	98.7	T8	1	11/01/2018 08:15	WG1189486

Wet Chemistry by Method 300.0

Analyte	Result (dry) mg/kg	Qualifier	SDL (dry) mg/kg	Unadj. MQL mg/kg	MQL (dry) mg/kg	Dilution	Analysis date / time	Batch
Chloride	56.9		0.806	10.0	10.1	1	11/01/2018 04:37	WG1189242

AH-16 (1-2')
Collected date/time: 10/03/18 12:05

SAMPLE RESULTS - 21

L1039602

ONE LAB. NATIONWIDE.

Total Solids by Method 2540 G-2011

Analyte	Result %	Qualifier	Dilution	Analysis date / time	Batch
Total Solids	96.9	T8	1	11/01/2018 08:05	WG1189487

Wet Chemistry by Method 300.0

Analyte	Result (dry) mg/kg	Qualifier	SDL (dry) mg/kg	Unadj. MQL mg/kg	MQL (dry) mg/kg	Dilution	Analysis date / time	Batch
Chloride	5.10	J	0.820	10.0	10.3	1	11/01/2018 13:18	WG1189253

AH-17 (1-2')
Collected date/time: 10/03/18 13:11

SAMPLE RESULTS - 22
L1039602

ONE LAB. NATIONWIDE.

Total Solids by Method 2540 G-2011

Analyte	Result %	Qualifier	Dilution	Analysis date / time	Batch
Total Solids	94.7	T8	1	11/01/2018 08:05	WG1189487

Wet Chemistry by Method 300.0

Analyte	Result (dry) mg/kg	Qualifier	SDL (dry) mg/kg	Unadj. MQL mg/kg	MQL (dry) mg/kg	Dilution	Analysis date / time	Batch
Chloride	6.44	J	0.839	10.0	10.6	1	11/01/2018 13:27	WG1189253

AH-17 (2-3')
Collected date/time: 10/03/18 13:14

SAMPLE RESULTS - 23
L1039602

ONE LAB. NATIONWIDE.

Total Solids by Method 2540 G-2011

Analyte	Result %	Qualifier	Dilution	Analysis date / time	Batch
Total Solids	91.3	T8	1	11/01/2018 08:05	WG1189487

Wet Chemistry by Method 300.0

Analyte	Result (dry) mg/kg	Qualifier	SDL (dry) mg/kg	Unadj. MQL mg/kg	MQL (dry) mg/kg	Dilution	Analysis date / time	Batch
Chloride	6.77	J	0.871	10.0	11.0	1	11/01/2018 13:36	WG1189253

AH-17 (3-4')
Collected date/time: 10/03/18 13:18

SAMPLE RESULTS - 24
L1039602

ONE LAB. NATIONWIDE.

Total Solids by Method 2540 G-2011

Analyte	Result %	Qualifier	Dilution	Analysis date / time	Batch
Total Solids	92.1	T8	1	11/01/2018 08:05	WG1189487

Wet Chemistry by Method 300.0

Analyte	Result (dry) mg/kg	Qualifier	SDL (dry) mg/kg	Unadj. MQL mg/kg	MQL (dry) mg/kg	Dilution	Analysis date / time	Batch
Chloride	6.90	J	0.864	10.0	10.9	1	11/01/2018 13:45	WG1189253

AH-19 (0-1')
Collected date/time: 10/03/18 13:42

SAMPLE RESULTS - 25
L1039602

ONE LAB. NATIONWIDE.

Total Solids by Method 2540 G-2011

Analyte	Result %	Qualifier	Dilution	Analysis date / time	Batch
Total Solids	98.8	T8	1	11/01/2018 08:05	WG1189487

Wet Chemistry by Method 300.0

Analyte	Result (dry) mg/kg	Qualifier	SDL (dry) mg/kg	Unadj. MQL mg/kg	MQL (dry) mg/kg	Dilution	Analysis date / time	Batch
Chloride	3.99	J	0.805	10.0	10.1	1	11/01/2018 13:01	WG1189253

AH-19 (1-2')
Collected date/time: 10/03/18 13:45

SAMPLE RESULTS - 26
L1039602

ONE LAB. NATIONWIDE.

Total Solids by Method 2540 G-2011

Analyte	Result %	Qualifier	Dilution	Analysis date / time	Batch
Total Solids	96.2	T8	1	11/01/2018 08:05	WG1189487

Wet Chemistry by Method 300.0

Analyte	Result (dry) mg/kg	Qualifier	SDL (dry) mg/kg	Unadj. MQL mg/kg	MQL (dry) mg/kg	Dilution	Analysis date / time	Batch
Chloride	4.16	J	0.827	10.0	10.4	1	11/01/2018 13:53	WG1189253

AH-19 (2-3')
Collected date/time: 10/03/18 13:48

SAMPLE RESULTS - 27
L1039602

ONE LAB. NATIONWIDE.

Total Solids by Method 2540 G-2011

Analyte	Result %	Qualifier	Dilution	Analysis date / time	Batch
Total Solids	93.5	T8	1	11/01/2018 08:05	WG1189487

Wet Chemistry by Method 300.0

Analyte	Result (dry) mg/kg	Qualifier	SDL (dry) mg/kg	Unadj. MQL mg/kg	MQL (dry) mg/kg	Dilution	Analysis date / time	Batch
Chloride	4.41	J	0.850	10.0	10.7	1	11/01/2018 14:20	WG1189253

WG1189485

Total Solids by Method 2540 G-2011

QUALITY CONTROL SUMMARY

L1039602-01,02,03,04,05,06,07,08,09,10

ONE LAB. NATIONWIDE.

Method Blank (MB)

(MB) R3356025-1 11/01/18 08:23

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

L1039602-01 Original Sample (OS) • Duplicate (DUP)

(OS) L1039602-01 11/01/18 08:23 • (DUP) R3356025-3 11/01/18 08:23

Analyte	Original Result %	DUP Result %	Dilution	DUP RPD %	DUP Qualifier	DUP RPD Limits %
Total Solids	92.0	91.1	1	0.942		10

Laboratory Control Sample (LCS)

(LCS) R3356025-2 11/01/18 08:23

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

WG1189486

Total Solids by Method 2540 G-2011

QUALITY CONTROL SUMMARY

L1039602-11,12,13,14,15,16,17,18,19,20

ONE LAB. NATIONWIDE.

Method Blank (MB)

(MB) R3356019-1 11/01/18 08:15

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

L1039602-13 Original Sample (OS) • Duplicate (DUP)

(OS) L1039602-13 11/01/18 08:15 • (DUP) R3356019-3 11/01/18 08:15

Analyte	Original Result %	DUP Result %	Dilution	DUP RPD %	DUP Qualifier	DUP RPD Limits %
Total Solids	93.2	93.9	1	0.832		10

Laboratory Control Sample (LCS)

(LCS) R3356019-2 11/01/18 08:15

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

WG1189487

Total Solids by Method 2540 G-2011

QUALITY CONTROL SUMMARY

L1039602-21,22,23,24,25,26,27

ONE LAB. NATIONWIDE.

Method Blank (MB)

(MB) R3356016-1 11/01/18 08:05

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

L1039728-01 Original Sample (OS) • Duplicate (DUP)

(OS) L1039728-01 11/01/18 08:05 • (DUP) R3356016-3 11/01/18 08:05

Analyte	Original Result %	DUP Result %	Dilution	DUP RPD %	DUP Qualifier	DUP RPD Limits %
Total Solids	97.9	91.3	1	6.99		10

Laboratory Control Sample (LCS)

(LCS) R3356016-2 11/01/18 08:05

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

QUALITY CONTROL SUMMARY

L1039602-01,02,03,04,05,06,07,08,09,10,11,12,13,14,15,16,17,18,19,20

Method Blank (MB)

(MB) R3355837-1 11/01/18 00:22

Analyte	MB Result mg/kg	MB Qualifier	MB MDL mg/kg	MB RDL mg/kg
Chloride	U		0.795	10.0

L1039602-01 Original Sample (OS) • Duplicate (DUP)

(OS) L1039602-01 11/01/18 00:49 • (DUP) R3355837-3 11/01/18 00:57

Analyte	Original Result (dry) mg/kg	DUP Result (dry) mg/kg	Dilution	DUP RPD %	DUP Qualifier	DUP RPD Limits %
Chloride	62.1	64.5	1	3.84		20

L1039602-20 Original Sample (OS) • Duplicate (DUP)

(OS) L1039602-20 11/01/18 04:37 • (DUP) R3355837-6 11/01/18 04:45

Analyte	Original Result (dry) mg/kg	DUP Result (dry) mg/kg	Dilution	DUP RPD %	DUP Qualifier	DUP RPD Limits %
Chloride	56.9	59.8	1	5.00		20

Laboratory Control Sample (LCS)

(LCS) R3355837-2 11/01/18 00:31

Analyte	Spike Amount mg/kg	LCS Result mg/kg	LCS Rec. %	Rec. Limits %	LCS Qualifier
Chloride	200	203	101	90.0-110	

L1039602-07 Original Sample (OS) • Matrix Spike (MS) • Matrix Spike Duplicate (MSD)

(OS) L1039602-07 11/01/18 02:07 • (MS) R3355837-4 11/01/18 02:16 • (MSD) R3355837-5 11/01/18 02:25

Analyte	Spike Amount (dry) mg/kg	Original Result (dry) mg/kg	MS Result (dry) mg/kg	MSD Result (dry) mg/kg	MS Rec. %	MSD Rec. %	Dilution	Rec. Limits %	MS Qualifier	MSD Qualifier	RPD %	RPD Limits %
Chloride	534	62.8	626	601	105	101	1	80.0-120			4.06	20

QUALITY CONTROL SUMMARY

L1039602-21,22,23,24,25,26,27

Method Blank (MB)

(MB) R3356036-1 11/01/18 12:33

Analyte	MB Result mg/kg	MB Qualifier	MB MDL mg/kg	MB RDL mg/kg
Chloride	U		0.795	10.0

L1039602-25 Original Sample (OS) • Duplicate (DUP)

(OS) L1039602-25 11/01/18 13:01 • (DUP) R3356036-3 11/01/18 13:10

Analyte	Original Result (dry) mg/kg	DUP Result (dry) mg/kg	Dilution	DUP RPD %	DUP Qualifier	DUP RPD Limits %
Chloride	3.99	3.30	1	19.1	J	20

Laboratory Control Sample (LCS)

(LCS) R3356036-2 11/01/18 12:42

Analyte	Spike Amount mg/kg	LCS Result mg/kg	LCS Rec. %	Rec. Limits %	LCS Qualifier
Chloride	200	186	93.2	90.0-110	

GLOSSARY OF TERMS

ONE LAB. NATIONWIDE.

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.

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.
RDL	Reported Detection Limit.
Rec.	Recovery.
RPD	Relative Percent Difference.
SDG	Sample Delivery Group.
SDL	Sample Detection Limit.
SDL (dry)	Sample Detection Limit.
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.
Case Narrative (Cn)	A brief discussion about the included sample results, including a discussion of any non-conformances to protocol observed either at sample receipt by the laboratory from the field or during the analytical process. If present, there will be a section in the Case Narrative to discuss the meaning of any data qualifiers used in the report.
Quality Control Summary (Qc)	This section of the report includes the results of the laboratory quality control analyses required by procedure or analytical methods to assist in evaluating the validity of the results reported for your samples. These analyses are not being performed on your samples typically, but on laboratory generated material.
Sample Chain of Custody (Sc)	This is the document created in the field when your samples were initially collected. This is used to verify the time and date of collection, the person collecting the samples, and the analyses that the laboratory is requested to perform. This chain of custody also documents all persons (excluding commercial shippers) that have had control or possession of the samples from the time of collection until delivery to the laboratory for analysis.
Sample Results (Sr)	This section of your report will provide the results of all testing performed on your samples. These results are provided by sample ID and are separated by the analyses performed on each sample. The header line of each analysis section for each sample will provide the name and method number for the analysis reported.
Sample Summary (Ss)	This section of the Analytical Report defines the specific analyses performed for each sample ID, including the dates and times of preparation and/or analysis.

Qualifier	Description
J	The identification of the analyte is acceptable; the reported value is an estimate.
T8	Sample(s) received past/too close to holding time expiration.

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	T 104704245-17-14
Maine	TN0002	Texas [5]	LAB0152
Maryland	324	Utah	TN00003
Massachusetts	M-TN003	Vermont	VT2006
Michigan	9958	Virginia	460132
Minnesota	047-999-395	Washington	C847
Mississippi	TN00003	West Virginia	233
Missouri	340	Wisconsin	9980939910
Montana	CERT0086	Wyoming	A2LA

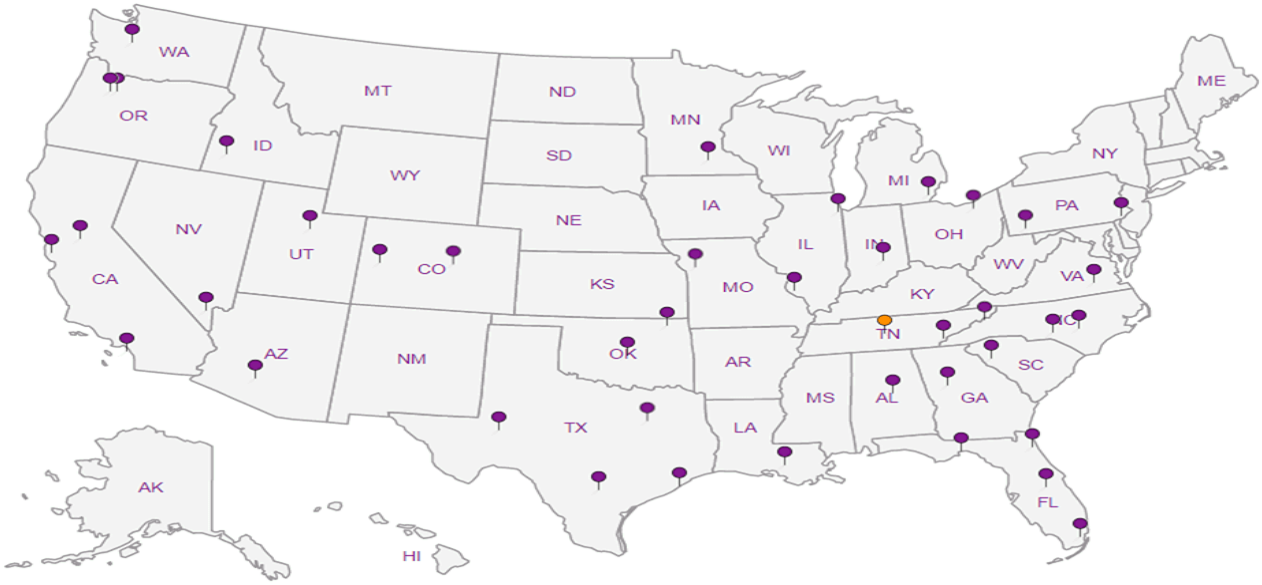
Third Party Federal Accreditations

A2LA – ISO 17025	1461.01	AIHA-LAP,LLC EMLAP	100789
A2LA – ISO 17025 [5]	1461.02	DOD	1461.01
Canada	1461.01	USDA	P330-15-00234
EPA–Crypto	TN00003		

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

Our Locations

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



Analysis Request of Chain of Custody Record

Page 1 of 5

Tetra Tech, Inc.

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

AV 10/31/18

L1039602 L16 32449

Client Name:	Conoco Phillips	Site Manager:	Kayla Taylor
Project Name:	COP State F-1		
Project Location (county, state):	Lea County, New Mexico	Project #:	212C-MD-01306
Invoice to:	Accounts Payable 900 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: 2018)	SAMPLING TIME	MATRIX WATER	MATRIX SOIL	PRESERVATIVE METHOD HCL	HNO3	ICE	None	# CONTAINERS	FILTERED (Y/N)	BTEX 8021B / 8260B	TPH TX1005 (Ext to C35)	TPH 8015M GRO / DRO / MRO	PAH 8270C	Total Metals Ag As Ba Cd Cr Pb Se Hg	TCLP Metals Ag As Ba Cd Cr Pb Se Hg	TCLP Volatiles	TCLP Semi Volatiles	RCI	GCMS Vol 8260B / 624	GCMS Semi Vol 8270C / 625	PCBs 8082 / 608	RORM	PLM (Asbestos)	Chloride 300.0	Chloride SM4500	General Water Chemistry (see attached list)	Anions/Cation Balance	TPH 8015M		Hold
	AH-9 (0'-1')	10/3/2018	0851		X			X		11	N	X		X												X						
	AH-9 (1'-2')	10/3/2018	0856		X			X		11	N																					
	AH-9 (2'-3')	10/3/2018	0901		X			X		1	N																				-01	X
	AH-9 (3'-4')	10/3/2018	0906		X			X		11	N																				-02	X
	AH-9 (4'-5')	10/3/2018	0909		X			X		11	N																				-03	X
	AH-10 (0'-1')	10/3/2018	0850		X			X		1	N																					
	AH-10 (1'-2')	10/3/2018	0900		X			X		11	N																					
	AH-10 (2'-3')	10/3/2018	0905		X			X		11	N																				-04	X
	AH-10 (3'-4')	10/3/2018	0915		X			X		11	N																				-05	X
	AH-10 (4'-5')	10/3/2018	0925		X			X		1	N																				-06	X

Relinquished by:	Date	Time	Received by	Date	Time
	10-4-18	0900		10/4/18	9:00
	10/4/18	13:45		10/5/18	0845

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

Chain: HAND DELIVERED FEDEX UPS Tracking #:

FedEx # 4430 2429 3575

ORIGINAL COPY

BACKGROUND SCREEN: <0.5 mR/hr

10-035

1.1 -0.4 0.7

rec. 45 cont

Analysis Request of Chain of Custody Record

Page 22 of 55

Tetra Tech, Inc.

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

L1039602 L1032199

Client Name:	Conoco Phillips
Site Manager:	Kayla Taylor
Project Name:	COP State F-1
Project Location (county, state):	Lea County, New Mexico
Project #:	212C-MD-01306
Invoice to:	Accounts Payable 900 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 (EAR 2018)	SAMPLING TIME	MATRIX WATER	MATRIX SOIL	PRESERVATIVE METHOD HCL	HNO3	ICE	None	# CONTAINERS	FILTERED (Y/N)	BTEX 8021B / BTEX 8260B	TPH TX1005 (Ext to C35)	TPH 8015M GRO - DRO - ORO - MRO	PAH 8270C	Total Metals Ag As Ba Cd Cr Pb Se Hg	TCLP Metals Ag As Ba Cd Cr Pb Se Hg	TCLP Volatiles	TCLP Semi Volatiles	RCI	GCMS Vol. 8260B / 624	GCMS Semi Vol. 8270C/625	PCB's 8082 / 608	NORM	PLM (Asbestos)	Chloride 300.0	Chloride Sulfate TDS	General Water Chemistry (see attached list)	Anion/Cation Balance	TPH 8015R			Hold
	AH-11 (0'-1')	10/3/2018	0945		X			X		1	N																							~~-05~~
	AH-11 (1'-2')	10/3/2018	0950		X			X		1	N																							~~-06~~
	AH-11 (2'-3')	10/3/2018	0955		X			X		1	N																						-07	X
	AH-11 (3'-4')	10/3/2018	0958		X			X		1	N																						-08	X
	AH-11 (4'-5')	10/3/2018	1002		X			X		1	N																						-09	X
	AH-12 (0'-1')	10/3/2018	0945		X			X		1	N																							~~-09~~
	AH-12 (1'-2')	10/3/2018	0950		X			X		1	N																							~~-10~~
	AH-12 (2'-3')	10/3/2018	1000		X			X		1	N																						-10	X
	AH-12 (3'-4')	10/3/2018	1010		X			X		1	N																						-11	X
	AH-12 (4'-5')	10/3/2018	1015		X			X		1	N																						-12	X

Relinquished by:	Date:	Time:	Received by:	Date:	Time:
	10.4.18	0900		10/4/18	9:00
	10/4/18	13:45		10/5/18	0845

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

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0.7R

r 22.45 (rmt

Analysis Request of Chain of Custody Record

Page 3 of 5

Tetra Tech, Inc.

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

AV 10/31/18

L1039602 ~~L1022199~~

Client Name:	Conoco Phillips
Site Manager:	Kayla Taylor
Project Name:	COP State F-1
Project Location: (county, state)	Lea County, New Mexico
Project #	212C-MD-01306
Invoice to:	Accounts Payable 900 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: 2018)	SAMPLING TIME	MATRIX WATER	MATRIX SOIL	PRESERVATIVE METHOD HCL	HNO3	ICE	None	# CONTAINERS	FILTERED (Y/N)	BTEX 8021B/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	GCMS Vol 8260B / 624	GCMS Semi Vol 8270C/625	PCB's 8082 / 608	NORM	PLM (Asbestos)	Chloride 300.0	Chloride Sulfate TDS	General Water Chemistry (see attached list)	Anion/Cation Balance	TPH 8015R			Hold
	AH-13 (0'-1')	10/3/2018	1115		X			X		1	N	X		X												X								~~09~~
	AH-13 (1'-2')	10/3/2018	1120		X			X		1	N																							~~10~~
	AH-13 (2'-3')	10/3/2018	1128		X			X		1	N																							~~11~~
	AH-13 (3'-4')	10/3/2018	1135		X			X		1	N																							~~12~~
	AH-13 (4'-5')	10/3/2018	1142		X			X		1	N																							~~13~~
	AH-14 (0'-1')	10/3/2018	1117		X			X		1	N																							~~14~~
	AH-14 (1'-2')	10/3/2018	1123		X			X		1	N																							~~15~~
	AH-14 (2'-3')	10/3/2018	1126		X			X		1	N																							~~16~~
	AH-14 (3'-4')	10/3/2018	1129		X			X		1	N																							~~17~~
	AH-14 (4'-5')	10/3/2018	1133		X			X		1	N																							~~18~~

	Date	Time		Date	Time
Relinquished by:	10-4-18	0900	Received by:	10/4/18	9:00
Relinquished by:	10/4/18	13:45	Received by:	10/5/18	0845
Relinquished by:			Received by:		

LAB USE ONLY

Remote 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

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Analysis Request of Chain of Custody Record

Page 4 of 5

Tetra Tech, Inc.

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

AV 10/3/18

L1039602 ~~L1032111~~

Client Name:	Conoco Phillips
Site Manager:	Kayla Taylor
Project Name:	COP State F-1
Project Location (county, state):	Lea County, New Mexico
Project #:	212C-MD-01306
Invoice to:	Accounts Payable 900 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 (EAST 2018)	SAMPLING TIME	MATRIX: WATER	MATRIX: SOIL	MATRIX:	PRESERVATIVE METHOD: HCL	HNO3	ICE	None	# CONTAINERS	FILTERED (Y/N)	BTEX 8021B	TPH TX1005 (Ext. to C35)	TPH 8015M GRO - DRO - ORO - MRO	PAH 8270C	Total Metals Ag As Ba Cd Cr Pb Se Hg	TCLP Metals Ag As Ba Cd Cr Pb Se Hg	TCLP Volatiles	TCLP Semi Volatiles	RCI	GC/MS Vol. 8260B / 624	GC/MS Semi. Vol. 8270C/625	PCBs 8082 / 608	NORM	PLM (Asbestos)	Chloride 300.0	Chloride	Sulfate	TDS	General Water Chemistry (see attached list)	Anion/Cation Balance	TPH 8015R			Hold
	AH-15 (0'-1')	10/3/2018	1200		X				X		1	N	X		X												X									
	AH-15 (1'-2')	10/3/2018	1203		X				X		1	N																								
	AH-15 (2'-3')	10/3/2018	1206		X				X		1	N																							19	X
	AH-16 (0'-1')	10/3/2018	1200		X				X		1	N																							20	X
	AH-16 (1'-2')	10/3/2018	1205		X				X		1	N																							21	X
	AH-16 (2'-3')	10/3/2018	1209		X				X		1	N																								X
	AH-17 (0'-1')	10/3/2018	1307		X				X		1	N																								
	AH-17 (1'-2')	10/3/2018	1311		X				X		1	N																							22	X
	AH-17 (2'-3')	10/3/2018	1314		X				X		1	N																							23	X
	AH-17 (3'-4')	10/3/2018	1318		X				X		1	N																							24	X

Relinquished by:	Date:	Time:	Received by:	Date:	Time:
[signature]	10-4-18	0900	[signature]	10/4/18	9:00
[signature]	10/4/18	13:45	[signature]	10/5/18	0845

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

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0.7 3

rec 45 ont

Analysis Request of Chain of Custody Record

Tetra Tech, Inc.

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

L1039602

NJ 10/31/18 L1037149

Client Name:	Conoco Phillips
Site Manager:	Kayla Taylor
Project Name:	COP State F-1
Project Location: (county, state)	Lea County, New Mexico
Project #:	212C-MD-01306
Invoice to:	Accounts Payable 900 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: 2018)	SAMPLING TIME	MATRIX: WATER	MATRIX: SOIL	MATRIX:	PRESERVATIVE METHOD: HCL	HNO3	ICE	None		# CONTAINERS	FILTERED (Y/N)	BTEX 8021B (BTEX 8260B)	TPH TX1005 (Ext to C35)	TPH 8015M GRO - DRO - ORO - MRO	PAH 8270C	Total Metals Ag As Ba Cd Cr Pb Se Hg	TCLP Metals Ag As Ba Cd Cr Pb Se Hg	TCLP Volatiles	TCLP Semi Volatiles	RCI	GCMS Vol. 8260B / 624	GCMS Semi. Vol. 8270C / 625	PCB's 8082 / 608	NORM	PLM (Asbestos)	Chloride 300.0	Chloride Sulfate TDS	General Water Chemistry (see attached list)	Anion/Cation Balance	TPH 8015R			Hold
	AH-18 (0'-1')	10/3/2018	1340		X				X			1	N	X		X												X							17
	AH-18 (1'-2')	10/3/2018	1345		X				X			1	N																						18
	AH-19 (0'-1')	10/3/2018	1342		X				X			1	N																					25	X
	AH-19 (1'-2')	10/3/2018	1345		X				X			1	N																					26	X
	AH-19 (2'-3')	10/3/2018	1348		X				X			1	N																					27	X

Relinquished by:	Date: 10.4.18	Time: 0900	Received by: Date: 10/4/18 Time: 9:00
Relinquished by:	Date: 10/4/18	Time: 13:45	Received by: Date: 10/5/18 Time: 0845
Relinquished by:	Date:	Time:	Received by: Date: Time:

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

RADIO SCREEN: <0.5 mR/hr

1.1 -0.4 0.7

Andy Vann

From: Chris McCord
Sent: Wednesday, October 31, 2018 11:54 AM
To: Login; Sample Storage; Due WetLab
Subject: L1032149 *COPTETRA* RUSH relog
Attachments: COCL1032149.pdf

Importance: High

Please relog all hold samples for CHLORIDE-300 and TS. Log as R2 due 11/1. Refer to 10-035 for hold samples.

Thanks,

Christopher McCord
Project Manager
Pace Analytical National Center for Testing & Innovation
12065 Lebanon Road | Mt. Juliet, TN 37122
615.773.3281 | Cell 615.504.3183
cmccord@pacenational.com | pacenational.com

ESC Lab Sciences is now Pace Analytical National Center for Testing & Innovation! Please make note of my new email address and website.

District I
1625 N. French Dr., Hobbs, NM 88240
Phone:(575) 393-6161 Fax:(575) 393-0720
District II
811 S. First St., Artesia, NM 88210
Phone:(575) 748-1283 Fax:(575) 748-9720
District III
1000 Rio Brazos Rd., Aztec, NM 87410
Phone:(505) 334-6178 Fax:(505) 334-6170
District IV
1220 S. St Francis Dr., Santa Fe, NM 87505
Phone:(505) 476-3470 Fax:(505) 476-3462

State of New Mexico
Energy, Minerals and Natural Resources
Oil Conservation Division
1220 S. St Francis Dr.
Santa Fe, NM 87505

CONDITIONS

Operator: CONOCOPHILLIPS COMPANY 600 W. Illinois Avenue Midland, TX 79701	OGRID: 217817
	Action Number: 3160
	Action Type: [C-141] Release Corrective Action (C-141)

CONDITIONS

Created By	Condition	Condition Date
bbillings	Soils in the area of AH-1 will need remediation at pad P&A,	6/18/2021