

## SITE INFORMATION

**Report Type: Closure Report      1RP No. 4533**

### General Site Information:

<b>Site:</b>	Vacuum Abo Unit 14-02						
<b>Company:</b>	ConocoPhillips						
<b>Section, Township and Range</b>		Sec. 5	T 18S	R 35E			
<b>Lease Number:</b>	API No. 30-025-03064						
<b>County:</b>	Lea						
<b>Release GPS:</b>	32.7714844			-103.4862823			
<b>Surface Owner:</b>	State						
<b>Mineral Owner:</b>							
<b>Directions:</b>	From the intersection of HWY 238 and Buckeye Road travel south on HWY-238 for 2.4 miles. Turn left (east) and travel approximately 0.4 miles until the intersection. Take the road to the right (south) and follow 0.1 miles to site.						

### Release Data:

<b>Date Released:</b>	12/16/2016
<b>Type Release:</b>	Oil
<b>Source of Contamination:</b>	Flow line
<b>Fluid Released:</b>	16 bbls
<b>Fluids Recovered:</b>	5 bbls

### Official Communication:

<b>Name:</b>	Neal Goates		Greg Pope
<b>Company:</b>	ConocoPhillips		Tetra Tech
<b>Address:</b>	600 N Dairy Ashford Road		4000 N. Big Spring
			Ste 401
<b>City:</b>	Houston, TX 77079		Midland, Texas
<b>Phone number:</b>	(281) 293-1000		(432) 687-8134
<b>Fax:</b>			
<b>Email:</b>	<a href="mailto:N.Goates@conocophillips.com">N.Goates@conocophillips.com</a>		<a href="mailto:Greg.Pope@tetrach.com">Greg.Pope@tetrach.com</a>

### Ranking Criteria

<b>Depth to Groundwater:</b>	<b>Ranking Score</b>	<b>Site Data</b>
<50 ft	20	
50-99 ft	10	Approximately 65 feet
>100 ft.	0	
<b>WellHead Protection:</b>	<b>Ranking Score</b>	<b>Site Data</b>
Water Source <1,000 ft., Private <200 ft.	20	
Water Source >1,000 ft., Private >200 ft.	0	0
<b>Surface Body of Water:</b>	<b>Ranking Score</b>	<b>Site Data</b>
<200 ft.	20	
200 ft - 1,000 ft.	10	
>1,000 ft.	0	0
<b>Total Ranking Score:</b>	<b>10</b>	

#### Acceptable Soil RRAL (mg/kg)

Benzene	Total BTEX	TPH
10	50	1,000



**TETRA TECH**

February 20, 2018

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

**Re: Request for Closure for the ConocoPhillips Company, Vacuum Abo Unit 14-02, Section 5, Township 18 South, Range 35 East, Lea County, New Mexico. RP Number 4533**

Ms. Yu:

Tetra Tech, Inc. (Tetra Tech) was contacted by ConocoPhillips Company (Conoco) to assess a release that occurred at the Vacuum Abo Unit 14-02, Section 5, Township 18 South, Range 35 East, Lea County, New Mexico (site). The spill site coordinates are N 32.7714844°, W 103.4862823°. The site location is shown on Figures 1 and 2.

### **Background**

According to the State of New Mexico C-141 Initial Report, the leak was discovered on December 19, 2016, and released approximately sixteen (16) barrels of crude oil due to a flow line leak. As a part of the emergency response action, Conoco isolated the well and recovered approximately five (5) barrels of fluid by a vacuum truck. In addition, Conoco immediately excavated the soils to a depth of approximately 6" to 1.0' below surface to the top of a dense rock formation. The release occurred in the pasture and impacted an area measuring approximately 50'x 150'. The initial C-141 Form is included in Appendix A.

### **Groundwater**

Four (4) water wells were reported within Section 5 on the New Mexico Office of the State Engineer's (NMOSE) database with an average depth to groundwater of 68 feet below surface. According to the Chevron Texaco Groundwater Trend map, the average depth to groundwater in the area is less than 100 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) Guidelines for Remediation of Leaks, Spills and Releases, dated August 13, 1993. The guidelines require a risk-based evaluation of the site to determine recommended remedial action levels (RRAL) for benzene, toluene, ethylbenzene and xylene (collectively referred to as BTEX) and total petroleum hydrocarbons (TPH) in soil. 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 1,000 mg/kg.

## Soil Assessment and Analytical Results

On August 7, 2017, Tetra Tech personnel were onsite to supervise the installation of soil borings in order to further evaluate and sample the release area. A total of three (3) soil borings (SB-1, SB-2, and SB-3) were installed in the spill area to assess and define the extents of the impacted soils. Soil samples were collected and field screened with a PID and for chlorides. Three (3) soil samples from each soil boring were collected for analysis of TPH by method 8015B modified and BTEX by Method 8260. All of the samples collected were analyzed for chloride by EPA method 300.0. The laboratory results are summarized in Table 1. A copy of the laboratory analytical report and chain-of-custody document is included in Appendix C.

Referring to Table 1, the samples selected for BTEX and TPH analysis did not show concentrations above the laboratory reporting limits or above the RRAL's. Additionally, the area of soil boring (SB-3) did not show any chloride concentrations above the 600 mg/kg threshold, with a chloride concentration of 150 mg/kg at 0.5'-1.0' below surface. However, some of the chloride concentrations exceeded the recommended limit of 600 mg/kg in the areas of soil borings (SB-1 and SB-2). The area of soil boring (SB-1) showed a chloride high of 1,140 mg/kg at 0.5'-1.0' below surface, which declined with depth. The area of soil boring (SB-2) showed chloride concentrations of 951 mg/kg (0.5'-1.0') and 1,060 mg/kg (2'-3'), which then declined with depth to below the laboratory reporting limits.

## Conclusions and Recommendations

The site location poses significant remediation challenges based on the surface conditions at the site. The soil lithology logged during the soil boring investigation showed a dense and compacted limestone formation in the subsurface soils. After the release, Conoco immediately removed the impacted soil to the top of the limestone formation and transported the material for proper disposal.

Based on the assessment results, the areas of soil borings (SB-1 and SB-2) showed a shallow chloride impact that does not appear to be significant, with concentrations ranging from 951 mg/kg to 1,140 mg/kg. Based on the laboratory results, the chloride concentrations do not appear to be an environmental concern. Due to the shallow dense formation, any material that cannot be feasibly removed using excavation equipment will remain in place. The site will be returned to surface grade with clean



**TETRA TECH**

backfill material.

Based on the results and the site lithology, Conoco request closure of the site. The Final C-141 is enclosed in Appendix A. If you have any questions or comments concerning the assessment activities for this site, please call at (432) 682-4559.

Respectfully submitted,

A handwritten signature in black ink that reads "Todd Wells".

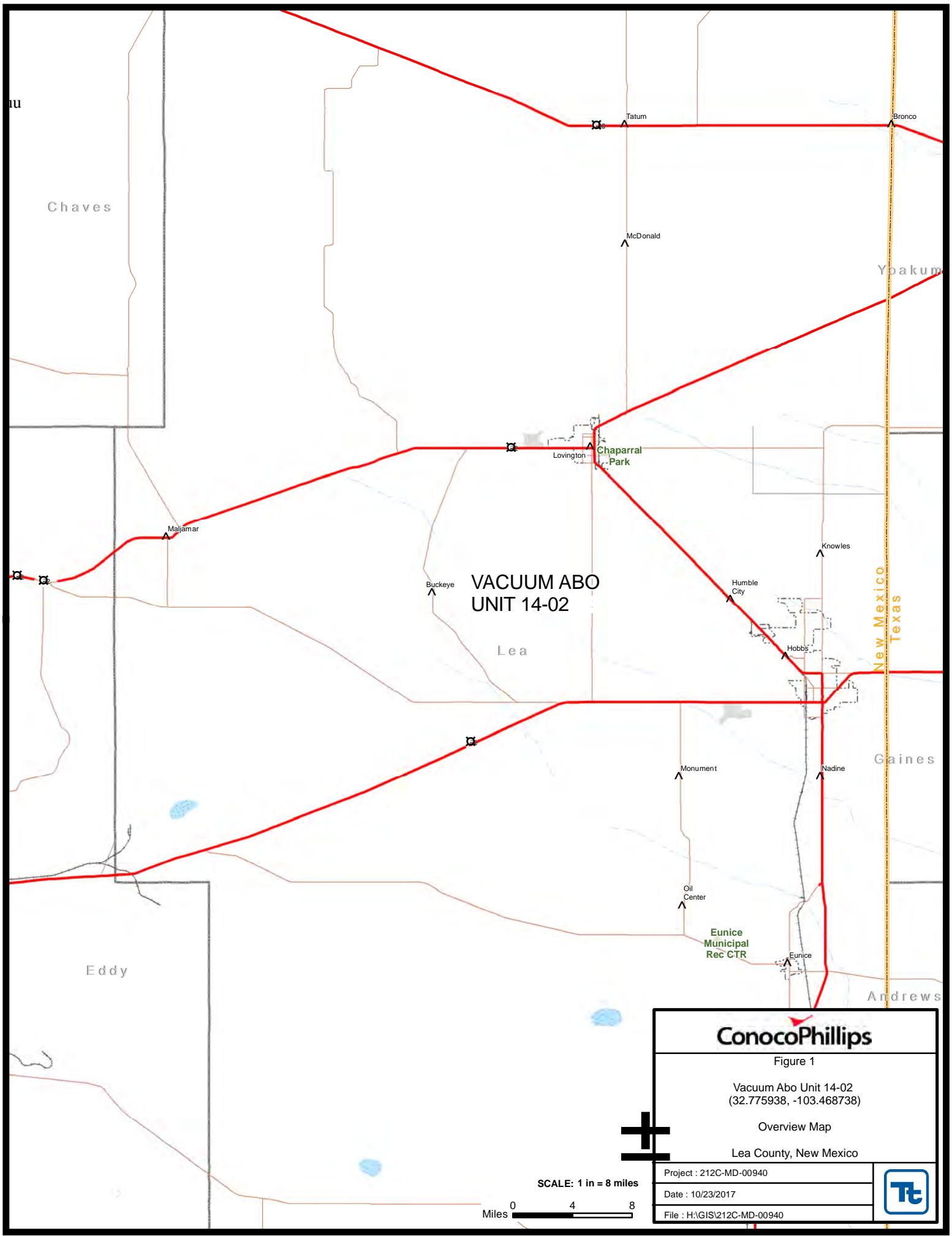
Todd Wells,  
Project Manager

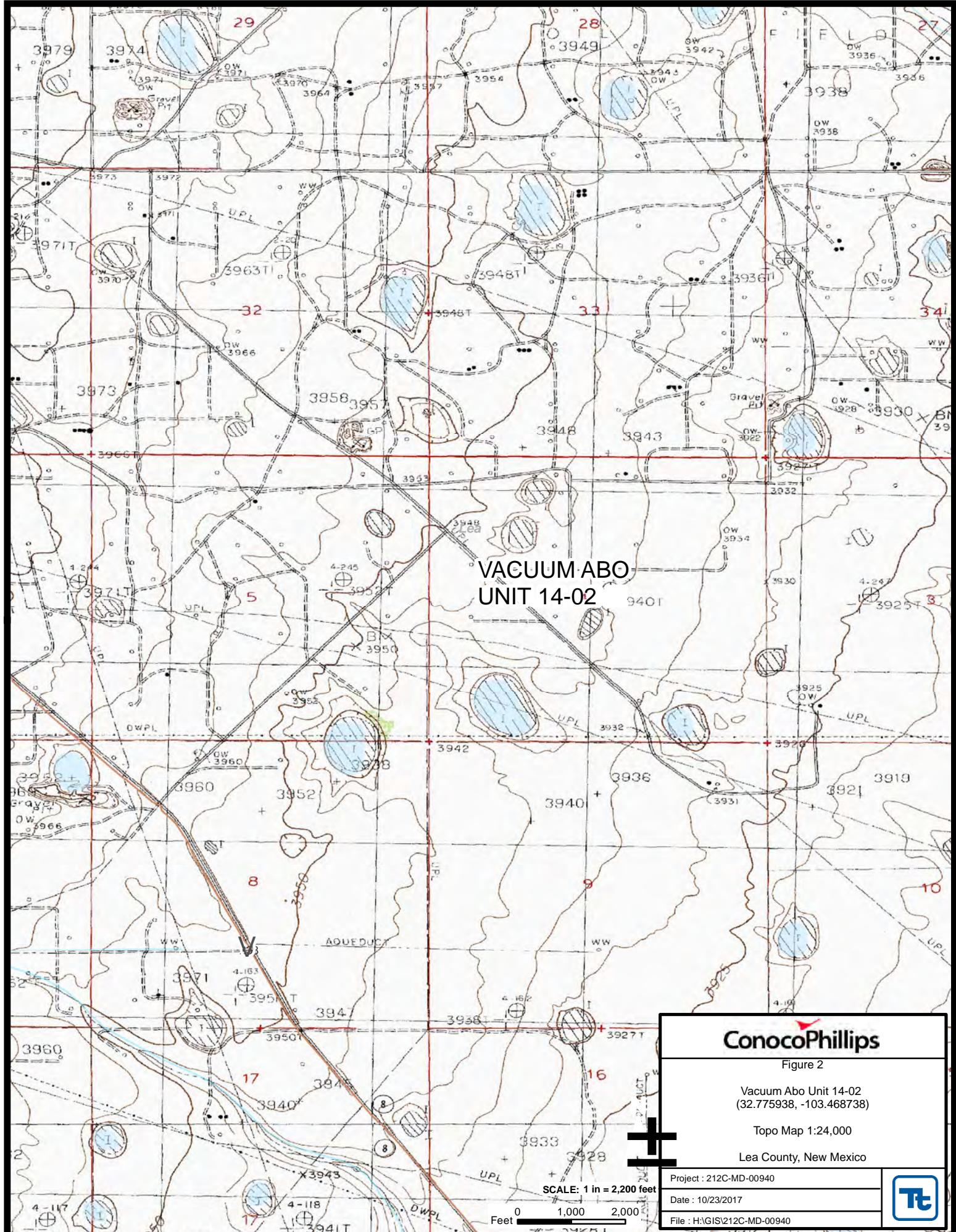
A handwritten signature in blue ink that reads "Greg Pope".

Greg Pope,  
Senior Project Manager, P.G.

cc: Neal Goates – ConocoPhillips

# Figures





**ConocoPhillips**

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Figure 2

Vacuum Abo Unit 14-02  
(32.775938, -103.468738)

Topo Map 1:24,000

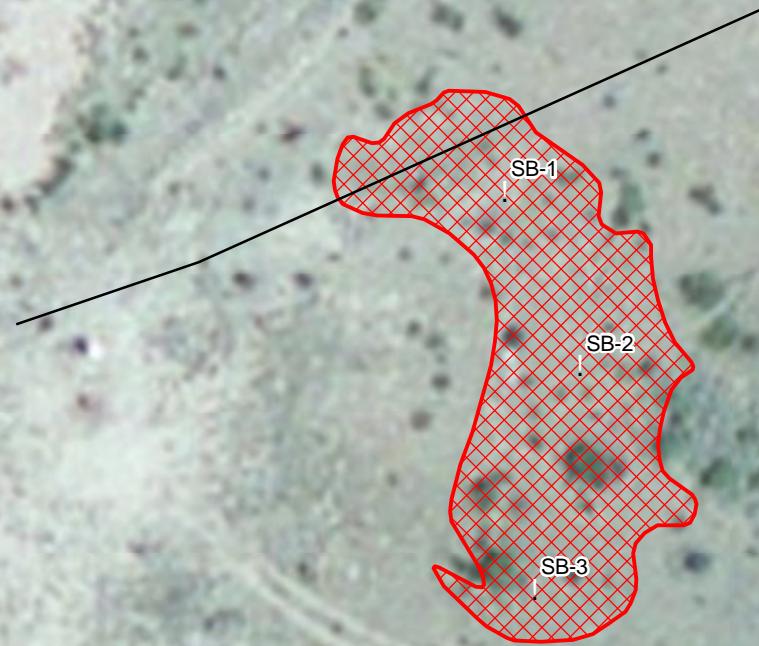
## Lea County, New Mexico

Project : 212C-MD-00940

Date : 10/23/2017

File : H:\GIS\212C-MD-00940





#### EXPLANATION

- PRIOR SAMPLE LOCATIONS
- SOIL BORING SAMPLE LOCATIONS
- SURFACE PIPELINE
- SPILL AREA - 9,639 SQ FT

SCALE: 1 IN = 50 FEET  
Feet 0 25 50



**ConocoPhillips**

Figure 3

Vacuum Abo Unit 14-02  
(32.775938, -103.468738)

Spill Assessment Map

Lea County, New Mexico

Project : 212C-MD-00940

Date : 10/23/2017

File : H:\GIS\212C-MD-00940



## Tables

**Table 1**  
**ConocoPhillips**  
**Vacuum ABO Unit 14-02**  
**Lea County, New Mexico**

Sample ID	Sample Date	Sample Depth (ft)	Soil Status		TPH				BTEX					Chlorides	
			In-Situ	Removed	Field PID (PPM)	TPH GRO mg/kg	TPH DRO mg/kg	TPH ORO mg/kg	Total TPH mg/kg	Benzene (ug/kg)	Toluene (ug/kg)	Ethylbenzene (ug/kg)	Xylenes (ug/kg)	Total BTEX (ug/kg)	mg/kg
SB-1 - Cuttings	08/07/17	0-0.5		X	-	-	-	-	-	-	-	-	-	-	-
Cuttings	"	0.5-1	X		1.0	<12.4	<23.4	<23.4	<23.4	<6.3	<6.3	<6.3	<6.3	<6.3	1,140
Cuttings	"	2-3	X		0.6	<11.4	<10.8	<10.8	<11.4	<5.8	<5.8	<5.8	<5.8	<5.8	<113
Cuttings	"	4-5	X		0.6	-	-	-	-	-	-	-	-	-	<100
Cuttings	"	6-7	X		0.6	-	-	-	-	-	-	-	-	-	<99.6
Cuttings	"	9-10	X		0.6	<10.3	14.0	14.4	28.4	<5.2	<5.2	<5.2	<5.2	<5.2	<102
SB-2 - Cuttings	08/07/17	0-0.5		X	-	-	-	-	-	-	-	-	-	-	-
Cuttings	"	0.5-1	X		209.8	<10.6	380.0	93.0	473.0	<5.4	<5.4	<5.4	<5.4	<5.4	951
Cuttings	"	2-3	X		7.1	-	-	-	-	-	-	-	-	-	1,060
Cuttings	"	4-5	X		3.6	<12.4	<12.6	<12.6	<12.6	<6.4	<6.4	<6.4	<6.4	<6.4	<125
Cuttings	"	6-7	X		3.2	-	-	-	-	-	-	-	-	-	<99.2
Cuttings	"	9-10	X		1.0	-	-	-	-	-	-	-	-	-	<98.0
Cuttings	"	14-15	X		1.0	<12.1	<12.1	<12.1	<12.1	<6.2	<6.2	<6.2	<6.2	<6.2	<122
SB-3 - Cuttings	08/07/17	0-0.5		X	-	-	-	-	-	-	-	-	-	-	-
Cuttings	"	0.5-1	X		42.9	<10.2	84.5	25.9	110.4	<5.1	<5.1	<5.1	<5.1	<5.1	150
Cuttings	"	2-3	X		4.7	<12.0	<11.8	<11.8	<12.0	<6.0	<6.0	<6.0	<6.0	<6.0	<117
Cuttings	"	4-5	X		2.4	-	-	-	-	-	-	-	-	-	<99.2
Cuttings	"	6-7	X		2.4	-	-	-	-	-	-	-	-	-	<96.7
Cuttings	"	9-10	X		1.7	<12.7	<12.5	<12.5	<12.7	<6.4	<6.4	<6.4	<6.4	<6.4	127

(-) Not Analyzed

# Photos

ConocoPhillips  
Vacuum Abo Unit 14-02  
Lea County, New Mexico



TETRA TECH



View Northeast- Spill Area



View Northeast– Area of SB-1

ConocoPhillips  
Vacuum Abo Unit 14-02  
Lea County, New Mexico



TETRA TECH



View Southeast– Area of SB-2



View Southeast– Area of SB-3

## 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

## NM OIL CONSERVATION

ARTESIA DISTRICT

Form C-141  
Revised August 8, 2011

DEC 22 2016

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

RECEIVED

### Release Notification and Corrective Action

*NAB 1030439118*

*217817*

#### OPERATOR

Initial Report

Final Report

Name of Company: ConocoPhillips	Contact: Cullen
Address: 29 Vacuum Complex Lane	Telephone No. 575-391-3133
Facility Name: Vacuum Abo Unit 14-02	Facility Type: Flow line

Surface Owner: State	Mineral Owner: N/A	API No.30-025-03064
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### LOCATION OF RELEASE

Unit Letter	Section 5	Township 18S	Range 35E	Feet from the	North/South Line	Feet from the	East/West Line	County Lea
M								

Latitude 32.7714844 Longitude -103.4862823

### NATURE OF RELEASE

Type of Release: 16 BBL Oil	Volume of Release: 16 BBL	Volume Recovered: 5 BBL
Source of Release: Flow line	Date and Hour of Occurrence <b>12-19-2016 11:15 AM</b>	Date and Hour of Discovery <b>SAME</b>
Was Immediate Notice Given? <input checked="" type="checkbox"/> Yes <input type="checkbox"/> No <input type="checkbox"/> Not Required	If YES, To Whom? Kristen Lynch	
By Whom? Cullen Rosine	Date and Hour: 12-20-2016 via phone/email	
Was a Watercourse Reached? <input type="checkbox"/> Yes <input checked="" type="checkbox"/> No	If YES, Volume Impacting the Watercourse.	

If a Watercourse was Impacted, Describe Fully.\*

N/A

Descr On December 19, 2016 at 1115, MSO discovered a flow line leak that resulted in 16 BBL oil spilled. 5 BBLs were recovered by vacuum truck. Spill site will be remediated per NMOCD and COPC guidelines. be Cause of Problem and Remedial Action Taken. \*

Describe Area Affected and Cleanup Action Taken. \*

Area 1 – 21' X 60' X 2" deep.  
Area 2 – 30' X 36' X 2" dep.  
Area 3 – 48' X 75' X 2" deep.

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.

### OIL CONSERVATION DIVISION

Signature: <i>Cullen Rosine</i>	Approved by Environmental Specialist <i>Cullen Rosine</i>
Printed Name: Cullen Rosine	
Title: HSE Specialist	Approval Date: <i>12/20/16</i> Expiration Date: <i>N/A</i>
E-mail Address: <b>Cullen.J.Rosine@conocophillips.com</b>	Conditions of Approval: <i>See attached</i>
Date: 12/20/2016	Attached <input checked="" type="checkbox"/>

\* Attach Additional Sheets If Necessary

1RP-4533

District I  
 1625 N. French Dr., Hobbs, NM 88240  
 District II  
 1301 W. Grand Avenue, 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 October 10, 2003

Submit 2 Copies to appropriate  
 District Office in accordance  
 with Rule 116 on back  
 side of form

## Release Notification and Corrective Action

### OPERATOR

Initial Report  Final Report

Name of Company <b>ConocoPhillips</b>	Contact <b>Cullen</b>
Address <b>29 Vacuum Complex Lane</b>	Telephone No. <b>(575) 391-3133</b>
Facility Name <b>Vacuum Abo Unit 14-02</b>	Facility Type <b>Flow Line</b>

Surface Owner: State	Mineral Owner: N/A	API No. 30-025-03064
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### LOCATION OF RELEASE

Unit Letter M	Section 5	Township 18S	Range 35E	Feet from the	North/South Line	Feet from the	East/West Line	County Lea

**Latitude N 32.7714844° Longitude W 103.4862823°**

### NATURE OF RELEASE

Type of Release: <b>Oil</b>	Volume of Release <b>16 bbls</b>	Volume Recovered <b>5 bbls</b>
Source of Release: <b>Flow Line</b>	Date and Hour of Occurrence <b>12/19/2016 11:15 am</b>	Date and Hour of Discovery <b>Same</b>
Was Immediate Notice Given? <input checked="" type="checkbox"/> Yes <input type="checkbox"/> No <input type="checkbox"/> Not Required	If YES, To Whom? <b>Kristen Lynch</b>	
By Whom? <b>Cullen Rosine</b>	Date and Hour: <b>12/20/2016 via phone/email</b>	
Was a Watercourse Reached? <input type="checkbox"/> Yes <input checked="" type="checkbox"/> No	If YES, Volume Impacting the Watercourse. N/A	

If a Watercourse was Impacted, Describe Fully.\*

N/A

Describe Cause of Problem and Remedial Action Taken.\*

On December 19, 2016 at 1115, MSO discovered a flow line leak that resulted in 16 bbls of oil spilled. 5 bbls were recovered by vacuum truck. The impacted soil was excavated to the top of the limestone formation and transported to a proper disposal facility.

Describe Area Affected and Cleanup Action Taken.\*

Tetra Tech inspected site and collected samples to define spills extent. None of the samples exceeded the RRALs for BTEX and TPH. The chloride concentrations were not significant and do not appear to be an environmental concern. Site will be brought up to surface grade with clean backfill material. Tetra Tech prepared closure report and submitted to NMOCD for review.

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.

### OIL CONSERVATION DIVISION

Signature:	Approved by District Supervisor:	
Printed Name: Greg Pope (Agent for Conoco)		
Title: Project Manager	Approval Date:	Expiration Date:
E-mail Address: Greg.Pope@TetraTech.com	Conditions of Approval:	
Date: 12/05/2017	Attached <input type="checkbox"/>	

\* Attach Additional Sheets If Necessary

## Appendix B

**Water Well Data**  
**Average Depth to Groundwater (ft)**  
**Conoco Phillips - Vacuum Abo Unit 14-02**  
**Lea County, New Mexico**

**17 South      34 East**

6	120	5	4	3	2	80	1
157		65	95			77	
7	8	9	10	11	12		
140	140		95	92	115		
18	17	16	15	114	14	13	
160	113	60	60	79	84		
19	20	21	22	23	24		
78	140	153	109				
30	29	28	27	26	25		
						82	
31	32	33	34	35	36		

**17 South      35 East**

6	5	4	3	2	1	
50					50	
7	8	9	10	11	12	
40		55				
18	17	16	15	14	13	
85	60					
19	20	21	22	23	24	
83		70				
30	29	28	27	26	25	
106		63	56	40	50	
31	32	33	34	35	36	

**17 South      36 East**

6	5	4	3	2	60	1	83
50		65	60	69	74		
7	8	9	10	11	12	44	
18	17	16	15	14	13	48	
19	20	21	22	23	24		
30	29	28	27	26	25		
31	32	33	34	35	36		

**18 South      34 East**

6	5	4	3	2	1
130	105		87	102	107
7	8	9	10	11	12
83	148		148	110	92
18	17	16	15	114	14
125		108	110	103	96
19	20	21	22	23	24
105	125				
30	29	28	27	26	25
		112			117
31	32	33	34	35	36
			118		

**18 South      35 East**

Buc	6	89	5	68	4	58	3	62	2	55	1
	7	8	9	72	10	11	59	12			
	85				49	48					
	18	17	90	16	15	14	13				
	90	124	75			90	135				
	19	74	20	85	21	22	23	24			
	70	50			70						
	30	29	28	27	26	25					
		95			68	60					
	31	32	33	34	35	36					
		58	80			58					

**18 South      36 East**

6	5	35	4	65	3	2	60	1	50
45									
7	65	8	9	85	10	11	12		
					38	40			
	18	17	16	15	14	13			
	25			53	55				
	19	20	21	22	23	24			
	59		58	60	39	28			
	30	29	28	27	26	25			
	55	45		55	55	62			
	31	32	33	34	35	36			
		70							

**19 South      34 East**

6	5	4	3	2	100	1	
244							
7	8	9	29	10	11	12	60
			28.6		123		
18	17	16	15	14	13		
19	20	21	22	23	24		
30	29	28	27	26	25		
			28				
31	32	33	34	35	36		
65							

6	61	5	4	3	2	1
58	63	70			63	
7	8	9	20	10	11	12
51	18		53			
18	17	26	16	15	14	13
30			26	27	27	
19	20	21	22	23	24	
30	29	28	27	26	25	
31	32	33	34	35	36	

**19 South      36 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

**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	POD Sub-Code	basin	County	Q Q Q				X	Y	Depth Well	Depth Water	Water Column		
				64	16	4	Sec							
L 04250	L	LE		05	18S	35E		642378	3627565*		112	60	52	
L 04591	L	LE		4	2	05	18S	35E	642970	3627785*		130	75	55
L 04664	L	LE		2	3	05	18S	35E	642171	3627371*		140	70	70
L 04931	L	LE		1	2	05	18S	35E	642561	3628183*		237	70	167

Average Depth to Water: **68 feet**

Minimum Depth: **60 feet**

Maximum Depth: **75 feet**

Record Count: 4

PLSS Search:

**Section(s):** 5

**Township:** 18S      **Range:** 35E

\*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.



# New Mexico Office of the State Engineer

## Water Column/Average Depth to Water

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

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

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

(quarters are smallest to largest)

)

(NAD83 UTM in meters)

(In feet)

POD Number	POD Sub-Code	basin	County	Q Q Q			Tws	Rng	X	Y	Depth Well	Depth Water	Water Column		
				64	16	4									
L 00335		L	LE	4	1	3	35	18S	35E	646843	3619253*		124	45	79
L 01225 POD1		L	LE	1	2	3	35	18S	35E	647047	3619458*		97	50	47
L 02052		L	LE			17	18S	35E		642438	3624337*		190	72	118
L 02053		L	LE			20	18S	35E		642464	3622723*		175	78	97
L 02348		L	LE	3	1	4	09	18S	35E	644116	3625679*		215	105	110
L 02349	R	L	LE	3	1	4	07	18S	35E	640891	3625641*		207	85	122
L 02349 POD2		L	LE	4	1	4	07	18S	35E	641091	3625641*		214	85	129
L 02349 POD3		L	LE	4	1	4	07	18S	35E	641091	3625641		220	142	78
L 02350		L	LE	4	1	3	08	18S	35E	641897	3625650*		216	105	111
L 02357		L	LE		2	20	18S	35E		642855	3623137*		170	77	93
L 02503	R	L	LE	2	4	1	02	18S	35E	647106	3627930*		100		
L 02520		L	LE	4	1	23	18S	35E		647088	3622989*		134	78	56
L 02628		L	LE	2	2	3	11	18S	35E	647141	3625912*		112	40	72
L 02675		L	LE	3	2	15	18S	35E		645850	3624587*		197	47	150
L 02676		L	LE	1	2	16	18S	35E		644231	3624972*		175	60	115
L 02677		L	LE	3	4	15	18S	35E		645863	3623780*		194	54	140
L 02678		L	LE	3	4	22	18S	35E		645890	3622166*		200	58	142
L 02678 POD2	R	L	LE	3	4	22	18S	35E		645890	3622166*		200	58	142
L 02678 POD3	R	L	LE	3	4	22	18S	35E		645890	3622166*		185	58	127
L 02679		L	LE	3	4	22	18S	35E		645890	3622166*		190	154	36
L 02679		L	LE	4	4	21	18S	35E		644680	3622151*		200	68	132
L 02679 POD2	R	L	LE	4	4	21	18S	35E		644680	3622151*		200	68	132
L 02680		L	LE	3	2	22	18S	35E		645876	3622973*		187	65	122
L 03171		L	LE	1	2	21	18S	35E		644257	3623357*		190	59	131
L 03221		L	LE	3	3	17	18S	35E		641835	3623734*		170	150	20
		L	LE	4	2	14	18S	35E		647868	3624613*		100	90	10

\*UTM location was derived from PLSS - see Help

(A CLW##### in the  
POD suffix indicates the  
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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	Sub-basin	POD							X	Y	Depth Well	Depth Water	Water Column	
			Q	Q	Q	64	16	4	Sec						
<a href="#">L_03678</a>		L	LE			35	18S	35E		647354	3619554*		115	60	55
<a href="#">L_03721</a>		L	LE	3	3	18	18S	35E		640241	3623717*		161	90	71
<a href="#">L_03772</a>		L	LE	2	2	21	18S	35E		644659	3623361*		130	60	70
<a href="#">L_03783</a>		L	LE			27	18S	35E		645710	3621138*		115	65	50
<a href="#">L_03866</a>		L	LE	3	3	22	18S	35E		645082	3622155*		127	65	62
<a href="#">L_03888</a>		L	LE	3	1	19	18S	35E		640253	3622912*		107	70	37
<a href="#">L_03963</a>		L	LE	1	2	27	18S	35E		645896	3621762*		127	70	57
<a href="#">L_04206</a>		L	LE	3	4	04	18S	35E		644194	3626992*		125	50	75
<a href="#">L_04250</a>		L	LE			05	18S	35E		642378	3627565*		112	60	52
<a href="#">L_04399</a>		L	LE	3	3	22	18S	35E		645082	3622155*		90	75	15
<a href="#">L_04498</a>		L	LE	3	1	04	18S	35E		643373	3627790*		128	70	58
<a href="#">L_04562</a>		L	LE	3	1	29	18S	35E		641874	3621315*		156	95	61
<a href="#">L_04591</a>		L	LE	4	2	05	18S	35E		642970	3627785*		130	75	55
<a href="#">L_04631</a>		L	LE	2	1	1	04	18S	35E	643465	3628292*		140	60	80
<a href="#">L_04664</a>		L	LE	2	3	05	18S	35E		642171	3627371*		140	70	70
<a href="#">L_04744</a>		L	LE	1	2	2	02	18S	35E	647704	3628341*		122	51	71
<a href="#">L_04777</a>		L	LE	1	2	2	07	18S	35E	641279	3626653*		145	85	60
<a href="#">L_04778</a>		L	LE	2	1	07	18S	35E		640575	3626545*		150	75	75
<a href="#">L_04794</a>		L	LE		4	07	18S	35E		641200	3625540*		150	95	55
<a href="#">L_04796</a>		L	LE	4	4	06	18S	35E		640667	3626847*		150	95	55
<a href="#">L_04906</a>		L	LE		3	07	18S	35E		640415	3625532*		155	87	68
<a href="#">L_04931</a>		L	LE	1	2	05	18S	35E		642561	3628183*		237	70	167
<a href="#">L_04931 X</a>		L	LE	1	3	07	18S	35E		640208	3625735*		212	105	107
<a href="#">L_04975</a>		L	LE	2	2	07	18S	35E		640688	3625837*		152	105	47
<a href="#">L_05156</a>		L	LE	4	1	17	18S	35E		642224	3624545*		150	90	60
<a href="#">L_05172</a>		L	LE	3	3	07	18S	35E		640214	3625331*		161	85	76
<a href="#">L_05235</a>		L	LE	1	2	02	18S	35E		647402	3628238*		114	54	60
<a href="#">L_05385</a>		L	LE			01	18S	35E		648832	3627639*		100		
<a href="#">L_05411</a>		L	LE	3	4	06	18S	35E		640970	3626952*		120	60	60

\*UTM location was derived from PLSS - see Help

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(quarters are smallest to largest) (NAD83 UTM in meters)

(In feet)

POD Number	Code	Sub-basin	POD							X	Y	Depth Well	Depth Water	Water Column	
			Q	Q	Q	64	16	4	Sec						
<u>L_05444</u>		L	LE	4	3	32	18S	35E		642319	3618899*		80	58	22
<u>L_05523</u>		L	LE	3	3	2	06	18S	35E	640855	3627660*		147	85	62
<u>L_05810</u>		L	LE	2	3	22	18S	35E		645479	3622564*		145	95	50
<u>L_06047</u>		L	LE	2	2	1	16	18S	35E	643927	3625066*		122	65	57
<u>L_06868</u>		L	LE	1	4	3	26	18S	35E	647026	3620666*		110	57	53
<u>L_06869</u>		L	LE	1	3	26	18S	35E		646717	3620966*		125	60	65
<u>L_07119</u>		L	LE	1	1	1	06	18S	35E	640068	3628255*		233	95	138
<u>L_07119 S</u>		L	LE	1	2	1	06	18S	35E	640445	3628259*		233	95	138
<u>L_07129</u>		L	LE	4	3	3	34	18S	35E	645237	3618830*		60	40	20
<u>L_07872</u>		L	LE	1	3	3	03	18S	35E	644900	3627101*		162	62	100
<u>L_07928</u>		L	LE	4	4	1	19	18S	35E	640639	3622915		175		
<u>L_08309</u>		L	LE	1	2	2	10	18S	35E	646122	3626711*		112	49	63
<u>L_09373</u>		L	LE	1	1	26	18S	35E		646704	3621773*		120	60	60
<u>L_09524</u>		L	LE	1	4	35	18S	35E		647552	3619364*		140	57	83
<u>L_09574</u>		L	LE	4	2	14	18S	35E		647868	3624613*		90		
<u>L_09588</u>		L	LE	4	3	4	16	18S	35E	644349	3623659*		155	84	71
<u>L_09726</u>		L	LE	4	4	4	11	18S	35E	647953	3625318*		135	48	87
<u>L_09742</u>		L	LE	1	4	17	18S	35E		642474	3624312		200		
<u>L_09745</u>		L	LE	2	4	3	35	18S	35E	647254	3619055*		106	65	41
<u>L_09762</u>		L	LE	3	3	33	18S	35E		643526	3618913*		160	80	80
<u>L_09766</u>		L	LE	1	1	13	18S	35E		648106	3624799		135	135	0
<u>L_09958</u>		L	LE	4	2	2	35	18S	35E	648040	3620074*		150	55	95
<u>L_10294</u>		L	LE	2	4	03	18S	35E		646209	3627419*		90	61	29
<u>L_10304</u>		L	LE	1	4	4	09	18S	35E	644526	3625479*		170	72	98
<u>L_10337</u>		L	LE	4	1	1	06	18S	35E	640268	3628055*		190	100	90
<u>L_11511</u>		L	LE	2	4	4	25	18S	35E	649646	3620696*		102	62	40
<u>L_12932 POD1</u>		L	LE	2	2	1	02	18S	35E	676000	3628886		175	95	80
<u>L_13041 POD1</u>		L	LE	2	2	06	18S	35E		641152	3628026		130		
<u>L_13041 POD2</u>		L	LE	2	2	06	18S	35E		641152	3628026		140		

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(quarters are smallest to largest) (NAD83 UTM in meters)

(In feet)

POD Number	Code	Sub-basin	POD			X	Y	Depth Well	Depth Water	Water Column	
			Q	Q	Q						
L_13041 POD3		L	LE	2	2	06	18S	35E	641152	3628026	
L_13041 POD4		L	LE	2	2	06	18S	35E	641152	3628026	
L_13988 POD1		L	LE	1	3	4	34	18S	35E	645839	3618945

Average Depth to Water: **74 feet**

Minimum Depth: **38 feet**

Maximum Depth: **154 feet**

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**Record Count:** 87

**PLSS Search:**

**Township:** 18S      **Range:** 35E

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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.

## Appendix C

August 24, 2017

Greg Pope  
TetraTech  
4000 N. Big Spring St.  
Ste 401  
Midland, TX 79705

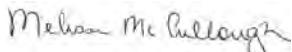
RE: Project: 212C-MD-00940/EVGSU Vac Abo  
Pace Project No.: 7572003

Dear Greg Pope:

Enclosed are the analytical results for sample(s) received by the laboratory on August 15, 2017. The results relate only to the samples included in this report. Results reported herein conform to the most current, applicable TNI/NELAC standards and the laboratory's Quality Assurance Manual, where applicable, unless otherwise noted in the body of the report.

If you have any questions concerning this report, please feel free to contact me.

Sincerely,



Melissa McCullough  
melissa.mccullough@pacelabs.com  
(972)727-1123  
Project Manager

Enclosures

cc: Jeanne Fitch, Tetra Tech  
Todd Wells, TetraTech



## REPORT OF LABORATORY ANALYSIS

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## CERTIFICATIONS

Project: 212C-MD-00940/EVGSAU Vac Abo  
Pace Project No.: 7572003

---

### Kansas Certification IDs

9608 Loiret Boulevard, Lenexa, KS 66219	Nevada Certification #: KS000212008A
WY STR Certification #: 2456.01	Oklahoma Certification #: 9205/9935
Arkansas Certification #: 15-016-0	Texas Certification #: T104704407
Illinois Certification #: 003097	Utah Certification #: KS00021
Iowa Certification #: 118	Kansas Field Laboratory Accreditation: # E-92587
Kansas/NELAP Certification #: E-10116	Missouri Certification: 10070
Louisiana Certification #: 03055	

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## REPORT OF LABORATORY ANALYSIS

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## SAMPLE SUMMARY

Project: 212C-MD-00940/EVGSU Vac Abo  
Pace Project No.: 7572003

Lab ID	Sample ID	Matrix	Date Collected	Date Received
7572003001	COP Vac Abo Unit SB-1 (0-1')	Solid	08/07/17 00:01	08/15/17 08:50
7572003002	COP Vac Abo Unit SB-1 (2-3')	Solid	08/07/17 00:01	08/15/17 08:50
7572003003	COP Vac Abo Unit SB-1 (4-5')	Solid	08/07/17 00:01	08/15/17 08:50
7572003004	COP Vac Abo Unit SB-1 (6-7')	Solid	08/07/17 00:01	08/15/17 08:50
7572003005	COP Vac Abo Unit SB-1 (9-10')	Solid	08/07/17 00:01	08/15/17 08:50
7572003006	COP Vac Abo Unit SB-2 (0-1')	Solid	08/07/17 00:01	08/15/17 08:50
7572003007	COP Vac Abo Unit SB-2 (2-3')	Solid	08/07/17 00:01	08/15/17 08:50
7572003008	COP Vac Abo Unit SB-2 (4-5')	Solid	08/07/17 00:01	08/15/17 08:50
7572003009	COP Vac Abo Unit SB-2 (6-7')	Solid	08/07/17 00:01	08/15/17 08:50
7572003010	COP Vac Abo Unit SB-2 (9-10')	Solid	08/07/17 00:01	08/15/17 08:50
7572003011	COP Vac Abo Unit SB-2 (14-15')	Solid	08/07/17 00:01	08/15/17 08:50
7572003012	COP Vac Abo Unit SB-3 (0-1')	Solid	08/07/17 00:01	08/15/17 08:50
7572003013	COP Vac Abo Unit SB-3 (2-3')	Solid	08/07/17 00:01	08/15/17 08:50
7572003014	COP Vac Abo Unit SB-3 (4-5')	Solid	08/07/17 00:01	08/15/17 08:50
7572003015	COP Vac Abo Unit SB-3 (6-7')	Solid	08/07/17 00:01	08/15/17 08:50
7572003016	COP Vac Abo Unit SB-3 (9-10')	Solid	08/07/17 00:01	08/15/17 08:50

## REPORT OF LABORATORY ANALYSIS

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## SAMPLE ANALYTE COUNT

Project: 212C-MD-00940/EVGSU Vac Abo  
Pace Project No.: 7572003

Lab ID	Sample ID	Method	Analysts	Analytes Reported	Laboratory
7572003001	<b>COP Vac Abo Unit SB-1 (0-1')</b>	EPA 8015B	AJM	4	PASI-K
		EPA 8015B	JTK	2	PASI-K
		EPA 8260	CJW	7	PASI-K
		EPA 300.0	OL	1	PASI-K
7572003002	<b>COP Vac Abo Unit SB-1 (2-3')</b>	EPA 8015B	AJM	4	PASI-K
		EPA 8015B	JTK	2	PASI-K
		EPA 8260	CJW	7	PASI-K
		EPA 300.0	OL	1	PASI-K
7572003003	<b>COP Vac Abo Unit SB-1 (4-5')</b>	EPA 300.0	OL	1	PASI-K
7572003004	<b>COP Vac Abo Unit SB-1 (6-7')</b>	EPA 300.0	OL	1	PASI-K
7572003005	<b>COP Vac Abo Unit SB-1 (9-10')</b>	EPA 8015B	AJM	4	PASI-K
		EPA 8015B	JTK	2	PASI-K
		EPA 8260	CJW	7	PASI-K
		EPA 300.0	OL	1	PASI-K
7572003006	<b>COP Vac Abo Unit SB-2 (0-1')</b>	EPA 8015B	AJM	4	PASI-K
		EPA 8015B	JTK	2	PASI-K
		EPA 8260	CJW	7	PASI-K
		EPA 300.0	OL	1	PASI-K
7572003007	<b>COP Vac Abo Unit SB-2 (2-3')</b>	EPA 300.0	OL	1	PASI-K
7572003008	<b>COP Vac Abo Unit SB-2 (4-5')</b>	EPA 8015B	AJM	4	PASI-K
		EPA 8015B	JTK	2	PASI-K
		EPA 8260	CJW	7	PASI-K
		EPA 300.0	OL	1	PASI-K
7572003009	<b>COP Vac Abo Unit SB-2 (6-7')</b>	EPA 300.0	OL	1	PASI-K
7572003010	<b>COP Vac Abo Unit SB-2 (9-10')</b>	EPA 300.0	OL	1	PASI-K
7572003011	<b>COP Vac Abo Unit SB-2 (14-15')</b>	EPA 8015B	AJM	4	PASI-K
		EPA 8015B	JTK	2	PASI-K
		EPA 8260	CJW	7	PASI-K
		EPA 300.0	OL	1	PASI-K
7572003012	<b>COP Vac Abo Unit SB-3 (0-1')</b>	EPA 8015B	AJM	4	PASI-K
		EPA 8015B	JTK	2	PASI-K
		EPA 8260	CJW	7	PASI-K
		EPA 300.0	OL	1	PASI-K
7572003013	<b>COP Vac Abo Unit SB-3 (2-3')</b>	EPA 8015B	AJM	4	PASI-K
		EPA 8015B	JTK	2	PASI-K
		EPA 8260	CJW	7	PASI-K
		EPA 300.0	OL	1	PASI-K

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## SAMPLE ANALYTE COUNT

Project: 212C-MD-00940/EVGSAU Vac Abo

Pace Project No.: 7572003

Lab ID	Sample ID	Method	Analysts	Analytes Reported	Laboratory
7572003014	COP Vac Abo Unit SB-3 (4-5')	EPA 300.0	OL	1	PASI-K
7572003015	COP Vac Abo Unit SB-3 (6-7')	EPA 300.0	OL	1	PASI-K
7572003016	COP Vac Abo Unit SB-3 (9-10')	EPA 8015B	AJM	4	PASI-K
		EPA 8015B	JTK	2	PASI-K
		EPA 8260	CJW	7	PASI-K
		EPA 300.0	OL	1	PASI-K

## REPORT OF LABORATORY ANALYSIS

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## ANALYTICAL RESULTS

Project: 212C-MD-00940/EVGSU Vac Abo

Pace Project No.: 7572003

Sample: COP Vac Abo Unit SB-1 (0-1') Lab ID: 7572003001 Collected: 08/07/17 00:01 Received: 08/15/17 08:50 Matrix: Solid

**Results reported on a "dry weight" basis and are adjusted for percent moisture, sample size and any dilutions.**

Parameters	Results	Units	Report Limit	DF	Prepared	Analyzed	CAS No.	Qual
<b>8015B Diesel Range Organics</b>	Analytical Method: EPA 8015B Preparation Method: EPA 3546							
TPH-DRO (C10-C28)	ND	mg/kg	23.4	1	08/21/17 07:51	08/23/17 01:37		
TPH-ORO (C28-C35)	ND	mg/kg	23.4	1	08/21/17 07:51	08/23/17 01:37		
<b>Surrogates</b>								
n-Tetracosane (S)	95	%	65-119	1	08/21/17 07:51	08/23/17 01:37	646-31-1	
p-Terphenyl (S)	93	%	41-131	1	08/21/17 07:51	08/23/17 01:37	92-94-4	
<b>Gasoline Range Organics</b>	Analytical Method: EPA 8015B Preparation Method: EPA 5035A/5030B							
TPH-GRO	ND	mg/kg	12.4	1	08/17/17 00:00	08/18/17 16:42		
<b>Surrogates</b>								
4-Bromofluorobenzene (S)	95	%	64-122	1	08/17/17 00:00	08/18/17 16:42	460-00-4	
<b>8260/5035A Volatile Organics</b>	Analytical Method: EPA 8260							
Benzene	ND	ug/kg	6.3	1		08/19/17 02:09	71-43-2	
Ethylbenzene	ND	ug/kg	6.3	1		08/19/17 02:09	100-41-4	
Toluene	ND	ug/kg	6.3	1		08/19/17 02:09	108-88-3	
Xylene (Total)	ND	ug/kg	6.3	1		08/19/17 02:09	1330-20-7	
<b>Surrogates</b>								
Toluene-d8 (S)	99	%	87-112	1		08/19/17 02:09	2037-26-5	
4-Bromofluorobenzene (S)	107	%	87-115	1		08/19/17 02:09	460-00-4	
1,2-Dichloroethane-d4 (S)	101	%	85-115	1		08/19/17 02:09	17060-07-0	
<b>300.0 IC Anions 28 Days</b>	Analytical Method: EPA 300.0 Preparation Method: EPA 300.0							
Chloride	1140	mg/kg	124	10	08/22/17 20:03	08/22/17 20:03	16887-00-6	

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## ANALYTICAL RESULTS

Project: 212C-MD-00940/EVGSU Vac Abo  
Pace Project No.: 7572003

Sample: COP Vac Abo Unit SB-1 (2-3') Lab ID: 7572003002 Collected: 08/07/17 00:01 Received: 08/15/17 08:50 Matrix: Solid

**Results reported on a "dry weight" basis and are adjusted for percent moisture, sample size and any dilutions.**

Parameters	Results	Units	Report Limit	DF	Prepared	Analyzed	CAS No.	Qual
<b>8015B Diesel Range Organics</b>	Analytical Method: EPA 8015B Preparation Method: EPA 3546							
TPH-DRO (C10-C28)	ND	mg/kg	10.8	1	08/21/17 07:51	08/23/17 01:47		
TPH-ORO (C28-C35)	ND	mg/kg	10.8	1	08/21/17 07:51	08/23/17 01:47		
<b>Surrogates</b>								
n-Tetracosane (S)	82	%	65-119	1	08/21/17 07:51	08/23/17 01:47	646-31-1	
p-Terphenyl (S)	85	%	41-131	1	08/21/17 07:51	08/23/17 01:47	92-94-4	
<b>Gasoline Range Organics</b>	Analytical Method: EPA 8015B Preparation Method: EPA 5035A/5030B							
TPH-GRO	ND	mg/kg	11.4	1	08/17/17 00:00	08/18/17 16:58		
<b>Surrogates</b>								
4-Bromofluorobenzene (S)	98	%	64-122	1	08/17/17 00:00	08/18/17 16:58	460-00-4	
<b>8260/5035A Volatile Organics</b>	Analytical Method: EPA 8260							
Benzene	ND	ug/kg	5.8	1		08/19/17 02:24	71-43-2	
Ethylbenzene	ND	ug/kg	5.8	1		08/19/17 02:24	100-41-4	
Toluene	ND	ug/kg	5.8	1		08/19/17 02:24	108-88-3	
Xylene (Total)	ND	ug/kg	5.8	1		08/19/17 02:24	1330-20-7	
<b>Surrogates</b>								
Toluene-d8 (S)	100	%	87-112	1		08/19/17 02:24	2037-26-5	
4-Bromofluorobenzene (S)	105	%	87-115	1		08/19/17 02:24	460-00-4	
1,2-Dichloroethane-d4 (S)	105	%	85-115	1		08/19/17 02:24	17060-07-0	
<b>300.0 IC Anions 28 Days</b>	Analytical Method: EPA 300.0 Preparation Method: EPA 300.0							
Chloride	ND	mg/kg	113	10	08/23/17 10:45	08/23/17 16:01	16887-00-6	

## REPORT OF LABORATORY ANALYSIS

## ANALYTICAL RESULTS

Project: 212C-MD-00940/EVGSU Vac Abo

Pace Project No.: 7572003

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Sample: COP Vac Abo Unit SB-1 (4-5') Lab ID: 7572003003 Collected: 08/07/17 00:01 Received: 08/15/17 08:50 Matrix: Solid

**Results reported on a "wet-weight" basis**

Parameters	Results	Units	Report Limit	DF	Prepared	Analyzed	CAS No.	Qual
<b>300.0 IC Anions 28 Days</b>		Analytical Method: EPA 300.0 Preparation Method: EPA 300.0						
Chloride	ND	mg/kg		100	10	08/23/17 10:45	08/23/17 16:27	16887-00-6

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## ANALYTICAL RESULTS

Project: 212C-MD-00940/EVGSU Vac Abo

Pace Project No.: 7572003

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Sample: COP Vac Abo Unit SB-1 (6-7') Lab ID: 7572003004 Collected: 08/07/17 00:01 Received: 08/15/17 08:50 Matrix: Solid

**Results reported on a "wet-weight" basis**

Parameters	Results	Units	Report Limit	DF	Prepared	Analyzed	CAS No.	Qual
<b>300.0 IC Anions 28 Days</b>	Analytical Method: EPA 300.0 Preparation Method: EPA 300.0							
Chloride	ND	mg/kg	99.6	10	08/23/17 10:45	08/23/17 16:40	16887-00-6	

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## ANALYTICAL RESULTS

Project: 212C-MD-00940/EVGSU Vac Abo

Pace Project No.: 7572003

Sample: COP Vac Abo Unit SB-1 (9-10') Lab ID: 7572003005 Collected: 08/07/17 00:01 Received: 08/15/17 08:50 Matrix: Solid

**Results reported on a "dry weight" basis and are adjusted for percent moisture, sample size and any dilutions.**

Parameters	Results	Units	Report Limit	DF	Prepared	Analyzed	CAS No.	Qual
<b>8015B Diesel Range Organics</b>	Analytical Method: EPA 8015B Preparation Method: EPA 3546							
TPH-DRO (C10-C28)	14.0	mg/kg	10.2	1	08/21/17 07:51	08/23/17 01:56		
TPH-ORO (C28-C35)	14.4	mg/kg	10.2	1	08/21/17 07:51	08/23/17 01:56		
<b>Surrogates</b>								
n-Tetracosane (S)	91	%	65-119	1	08/21/17 07:51	08/23/17 01:56	646-31-1	
p-Terphenyl (S)	84	%	41-131	1	08/21/17 07:51	08/23/17 01:56	92-94-4	
<b>Gasoline Range Organics</b>	Analytical Method: EPA 8015B Preparation Method: EPA 5035A/5030B							
TPH-GRO	ND	mg/kg	10.3	1	08/17/17 00:00	08/18/17 17:14		
<b>Surrogates</b>								
4-Bromofluorobenzene (S)	98	%	64-122	1	08/17/17 00:00	08/18/17 17:14	460-00-4	
<b>8260/5035A Volatile Organics</b>	Analytical Method: EPA 8260							
Benzene	ND	ug/kg	5.2	1		08/19/17 02:40	71-43-2	
Ethylbenzene	ND	ug/kg	5.2	1		08/19/17 02:40	100-41-4	
Toluene	ND	ug/kg	5.2	1		08/19/17 02:40	108-88-3	
Xylene (Total)	ND	ug/kg	5.2	1		08/19/17 02:40	1330-20-7	
<b>Surrogates</b>								
Toluene-d8 (S)	101	%	87-112	1		08/19/17 02:40	2037-26-5	
4-Bromofluorobenzene (S)	107	%	87-115	1		08/19/17 02:40	460-00-4	
1,2-Dichloroethane-d4 (S)	102	%	85-115	1		08/19/17 02:40	17060-07-0	
<b>300.0 IC Anions 28 Days</b>	Analytical Method: EPA 300.0 Preparation Method: EPA 300.0							
Chloride	ND	mg/kg	102	10	08/23/17 10:45	08/23/17 17:18	16887-00-6	

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## ANALYTICAL RESULTS

Project: 212C-MD-00940/EVGSU Vac Abo

Pace Project No.: 7572003

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**Sample:** COP Vac Abo Unit SB-2 (0-1')    **Lab ID:** 7572003006    **Collected:** 08/07/17 00:01    **Received:** 08/15/17 08:50    **Matrix:** Solid

*Results reported on a "dry weight" basis and are adjusted for percent moisture, sample size and any dilutions.*

Parameters	Results	Units	Report Limit	DF	Prepared	Analyzed	CAS No.	Qual
<b>8015B Diesel Range Organics</b>	Analytical Method: EPA 8015B Preparation Method: EPA 3546							
TPH-DRO (C10-C28)	<b>380</b>	mg/kg	10.6	1	08/21/17 07:51	08/23/17 02:06		
TPH-ORO (C28-C35)	<b>93.0</b>	mg/kg	10.6	1	08/21/17 07:51	08/23/17 02:06		
<b>Surrogates</b>								
n-Tetracosane (S)	144	%	65-119	1	08/21/17 07:51	08/23/17 02:06	646-31-1	S5
p-Terphenyl (S)	91	%	41-131	1	08/21/17 07:51	08/23/17 02:06	92-94-4	
<b>Gasoline Range Organics</b>	Analytical Method: EPA 8015B Preparation Method: EPA 5035A/5030B							
TPH-GRO	ND	mg/kg	10.6	1	08/17/17 00:00	08/18/17 02:09		
<b>Surrogates</b>								
4-Bromofluorobenzene (S)	102	%	64-122	1	08/17/17 00:00	08/18/17 02:09	460-00-4	
<b>8260/5035A Volatile Organics</b>	Analytical Method: EPA 8260							
Benzene	ND	ug/kg	5.4	1		08/19/17 02:55	71-43-2	
Ethylbenzene	ND	ug/kg	5.4	1		08/19/17 02:55	100-41-4	
Toluene	ND	ug/kg	5.4	1		08/19/17 02:55	108-88-3	
Xylene (Total)	ND	ug/kg	5.4	1		08/19/17 02:55	1330-20-7	
<b>Surrogates</b>								
Toluene-d8 (S)	98	%	87-112	1		08/19/17 02:55	2037-26-5	
4-Bromofluorobenzene (S)	100	%	87-115	1		08/19/17 02:55	460-00-4	
1,2-Dichloroethane-d4 (S)	101	%	85-115	1		08/19/17 02:55	17060-07-0	
<b>300.0 IC Anions 28 Days</b>	Analytical Method: EPA 300.0 Preparation Method: EPA 300.0							
Chloride	<b>951</b>	mg/kg	107	10	08/23/17 10:45	08/23/17 17:31	16887-00-6	

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## ANALYTICAL RESULTS

Project: 212C-MD-00940/EVGSU Vac Abo

Pace Project No.: 7572003

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Sample: COP Vac Abo Unit SB-2 (2-3') Lab ID: 7572003007 Collected: 08/07/17 00:01 Received: 08/15/17 08:50 Matrix: Solid

**Results reported on a "wet-weight" basis**

Parameters	Results	Units	Report Limit	DF	Prepared	Analyzed	CAS No.	Qual
<b>300.0 IC Anions 28 Days</b>	Analytical Method: EPA 300.0 Preparation Method: EPA 300.0							
Chloride	1060	mg/kg	98.8	10	08/23/17 10:45	08/23/17 17:44	16887-00-6	

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## ANALYTICAL RESULTS

Project: 212C-MD-00940/EVGSU Vac Abo  
Pace Project No.: 7572003

Sample: COP Vac Abo Unit SB-2 (4-5') Lab ID: 7572003008 Collected: 08/07/17 00:01 Received: 08/15/17 08:50 Matrix: Solid

**Results reported on a "dry weight" basis and are adjusted for percent moisture, sample size and any dilutions.**

Parameters	Results	Units	Report Limit	DF	Prepared	Analyzed	CAS No.	Qual
<b>8015B Diesel Range Organics</b>	Analytical Method: EPA 8015B Preparation Method: EPA 3546							
TPH-DRO (C10-C28)	ND	mg/kg	12.6	1	08/21/17 07:51	08/23/17 02:15		
TPH-ORO (C28-C35)	ND	mg/kg	12.6	1	08/21/17 07:51	08/23/17 02:15		
<b>Surrogates</b>								
n-Tetracosane (S)	89	%	65-119	1	08/21/17 07:51	08/23/17 02:15	646-31-1	
p-Terphenyl (S)	91	%	41-131	1	08/21/17 07:51	08/23/17 02:15	92-94-4	
<b>Gasoline Range Organics</b>	Analytical Method: EPA 8015B Preparation Method: EPA 5035A/5030B							
TPH-GRO	ND	mg/kg	12.4	1	08/17/17 00:00	08/18/17 02:26		
<b>Surrogates</b>								
4-Bromofluorobenzene (S)	101	%	64-122	1	08/17/17 00:00	08/18/17 02:26	460-00-4	
<b>8260/5035A Volatile Organics</b>	Analytical Method: EPA 8260							
Benzene	ND	ug/kg	6.4	1		08/19/17 03:11	71-43-2	
Ethylbenzene	ND	ug/kg	6.4	1		08/19/17 03:11	100-41-4	
Toluene	ND	ug/kg	6.4	1		08/19/17 03:11	108-88-3	
Xylene (Total)	ND	ug/kg	6.4	1		08/19/17 03:11	1330-20-7	
<b>Surrogates</b>								
Toluene-d8 (S)	100	%	87-112	1		08/19/17 03:11	2037-26-5	
4-Bromofluorobenzene (S)	106	%	87-115	1		08/19/17 03:11	460-00-4	
1,2-Dichloroethane-d4 (S)	101	%	85-115	1		08/19/17 03:11	17060-07-0	
<b>300.0 IC Anions 28 Days</b>	Analytical Method: EPA 300.0 Preparation Method: EPA 300.0							
Chloride	ND	mg/kg	125	10	08/23/17 10:45	08/23/17 17:57	16887-00-6	

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## ANALYTICAL RESULTS

Project: 212C-MD-00940/EVGSU Vac Abo

Pace Project No.: 7572003

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Sample: COP Vac Abo Unit SB-2 (6-7') Lab ID: 7572003009 Collected: 08/07/17 00:01 Received: 08/15/17 08:50 Matrix: Solid

**Results reported on a "wet-weight" basis**

Parameters	Results	Units	Report Limit	DF	Prepared	Analyzed	CAS No.	Qual
<b>300.0 IC Anions 28 Days</b>	Analytical Method: EPA 300.0 Preparation Method: EPA 300.0							
Chloride	ND	mg/kg	99.2	10	08/23/17 10:45	08/23/17 18:10	16887-00-6	

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## ANALYTICAL RESULTS

Project: 212C-MD-00940/EVGSU Vac Abo

Pace Project No.: 7572003

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Sample: COP Vac Abo Unit SB-2 (9-10') Lab ID: 7572003010 Collected: 08/07/17 00:01 Received: 08/15/17 08:50 Matrix: Solid

**Results reported on a "wet-weight" basis**

Parameters	Results	Units	Report Limit	DF	Prepared	Analyzed	CAS No.	Qual
<b>300.0 IC Anions 28 Days</b>	Analytical Method: EPA 300.0 Preparation Method: EPA 300.0							
Chloride	ND	mg/kg	98.0	10	08/23/17 10:45	08/23/17 18:23	16887-00-6	

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## ANALYTICAL RESULTS

Project: 212C-MD-00940/EVGSU Vac Abo

Pace Project No.: 7572003

**Sample: COP Vac Abo Unit SB-2      Lab ID: 7572003011      Collected: 08/07/17 00:01      Received: 08/15/17 08:50      Matrix: Solid  
(14-15')**

**Results reported on a "dry weight" basis and are adjusted for percent moisture, sample size and any dilutions.**

Parameters	Results	Units	Report Limit	DF	Prepared	Analyzed	CAS No.	Qual
<b>8015B Diesel Range Organics</b>	Analytical Method: EPA 8015B Preparation Method: EPA 3546							
TPH-DRO (C10-C28)	ND	mg/kg	12.1	1	08/21/17 07:51	08/23/17 02:25		
TPH-ORO (C28-C35)	ND	mg/kg	12.1	1	08/21/17 07:51	08/23/17 02:25		
<b>Surrogates</b>								
n-Tetracosane (S)	93	%	65-119	1	08/21/17 07:51	08/23/17 02:25	646-31-1	
p-Terphenyl (S)	91	%	41-131	1	08/21/17 07:51	08/23/17 02:25	92-94-4	
<b>Gasoline Range Organics</b>	Analytical Method: EPA 8015B Preparation Method: EPA 5035A/5030B							
TPH-GRO	ND	mg/kg	12.1	1	08/17/17 00:00	08/18/17 02:42		
<b>Surrogates</b>								
4-Bromofluorobenzene (S)	99	%	64-122	1	08/17/17 00:00	08/18/17 02:42	460-00-4	
<b>8260/5035A Volatile Organics</b>	Analytical Method: EPA 8260							
Benzene	ND	ug/kg	6.2	1		08/19/17 03:26	71-43-2	
Ethylbenzene	ND	ug/kg	6.2	1		08/19/17 03:26	100-41-4	
Toluene	ND	ug/kg	6.2	1		08/19/17 03:26	108-88-3	
Xylene (Total)	ND	ug/kg	6.2	1		08/19/17 03:26	1330-20-7	
<b>Surrogates</b>								
Toluene-d8 (S)	100	%	87-112	1		08/19/17 03:26	2037-26-5	
4-Bromofluorobenzene (S)	105	%	87-115	1		08/19/17 03:26	460-00-4	
1,2-Dichloroethane-d4 (S)	101	%	85-115	1		08/19/17 03:26	17060-07-0	
<b>300.0 IC Anions 28 Days</b>	Analytical Method: EPA 300.0 Preparation Method: EPA 300.0							
Chloride	ND	mg/kg	122	10	08/23/17 10:45	08/23/17 18:36	16887-00-6	

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## ANALYTICAL RESULTS

Project: 212C-MD-00940/EVGSU Vac Abo

Pace Project No.: 7572003

Sample: COP Vac Abo Unit SB-3 (0-1') Lab ID: 7572003012 Collected: 08/07/17 00:01 Received: 08/15/17 08:50 Matrix: Solid

**Results reported on a "dry weight" basis and are adjusted for percent moisture, sample size and any dilutions.**

Parameters	Results	Units	Report Limit	DF	Prepared	Analyzed	CAS No.	Qual
<b>8015B Diesel Range Organics</b>	Analytical Method: EPA 8015B Preparation Method: EPA 3546							
TPH-DRO (C10-C28)	<b>84.5</b>	mg/kg	10.2	1	08/21/17 07:51	08/23/17 02:34		
TPH-ORO (C28-C35)	<b>25.9</b>	mg/kg	10.2	1	08/21/17 07:51	08/23/17 02:34		
<b>Surrogates</b>								
n-Tetracosane (S)	116	%	65-119	1	08/21/17 07:51	08/23/17 02:34	646-31-1	
p-Terphenyl (S)	94	%	41-131	1	08/21/17 07:51	08/23/17 02:34	92-94-4	
<b>Gasoline Range Organics</b>	Analytical Method: EPA 8015B Preparation Method: EPA 5035A/5030B							
TPH-GRO	ND	mg/kg	10.2	1	08/17/17 00:00	08/18/17 02:58		
<b>Surrogates</b>								
4-Bromofluorobenzene (S)	101	%	64-122	1	08/17/17 00:00	08/18/17 02:58	460-00-4	
<b>8260/5035A Volatile Organics</b>	Analytical Method: EPA 8260							
Benzene	ND	ug/kg	5.1	1		08/19/17 03:42	71-43-2	
Ethylbenzene	ND	ug/kg	5.1	1		08/19/17 03:42	100-41-4	
Toluene	ND	ug/kg	5.1	1		08/19/17 03:42	108-88-3	
Xylene (Total)	ND	ug/kg	5.1	1		08/19/17 03:42	1330-20-7	
<b>Surrogates</b>								
Toluene-d8 (S)	98	%	87-112	1		08/19/17 03:42	2037-26-5	
4-Bromofluorobenzene (S)	106	%	87-115	1		08/19/17 03:42	460-00-4	
1,2-Dichloroethane-d4 (S)	97	%	85-115	1		08/19/17 03:42	17060-07-0	
<b>300.0 IC Anions 28 Days</b>	Analytical Method: EPA 300.0 Preparation Method: EPA 300.0							
Chloride	<b>150</b>	mg/kg	103	10	08/23/17 10:45	08/23/17 18:49	16887-00-6	

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## ANALYTICAL RESULTS

Project: 212C-MD-00940/EVGSU Vac Abo

Pace Project No.: 7572003

Sample: COP Vac Abo Unit SB-3 (2-3') Lab ID: 7572003013 Collected: 08/07/17 00:01 Received: 08/15/17 08:50 Matrix: Solid

**Results reported on a "dry weight" basis and are adjusted for percent moisture, sample size and any dilutions.**

Parameters	Results	Units	Report Limit	DF	Prepared	Analyzed	CAS No.	Qual
<b>8015B Diesel Range Organics</b>	Analytical Method: EPA 8015B Preparation Method: EPA 3546							
TPH-DRO (C10-C28)	ND	mg/kg	11.8	1	08/21/17 07:51	08/23/17 02:44		
TPH-ORO (C28-C35)	ND	mg/kg	11.8	1	08/21/17 07:51	08/23/17 02:44		
<b>Surrogates</b>								
n-Tetracosane (S)	82	%	65-119	1	08/21/17 07:51	08/23/17 02:44	646-31-1	
p-Terphenyl (S)	79	%	41-131	1	08/21/17 07:51	08/23/17 02:44	92-94-4	
<b>Gasoline Range Organics</b>	Analytical Method: EPA 8015B Preparation Method: EPA 5035A/5030B							
TPH-GRO	ND	mg/kg	12.0	1	08/18/17 00:00	08/18/17 18:33		
<b>Surrogates</b>								
4-Bromofluorobenzene (S)	88	%	64-122	1	08/18/17 00:00	08/18/17 18:33	460-00-4	
<b>8260/5035A Volatile Organics</b>	Analytical Method: EPA 8260							
Benzene	ND	ug/kg	6.0	1		08/19/17 03:57	71-43-2	
Ethylbenzene	ND	ug/kg	6.0	1		08/19/17 03:57	100-41-4	
Toluene	ND	ug/kg	6.0	1		08/19/17 03:57	108-88-3	
Xylene (Total)	ND	ug/kg	6.0	1		08/19/17 03:57	1330-20-7	
<b>Surrogates</b>								
Toluene-d8 (S)	100	%	87-112	1		08/19/17 03:57	2037-26-5	
4-Bromofluorobenzene (S)	102	%	87-115	1		08/19/17 03:57	460-00-4	
1,2-Dichloroethane-d4 (S)	101	%	85-115	1		08/19/17 03:57	17060-07-0	
<b>300.0 IC Anions 28 Days</b>	Analytical Method: EPA 300.0 Preparation Method: EPA 300.0							
Chloride	ND	mg/kg	117	10	08/23/17 10:45	08/23/17 19:02	16887-00-6	

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## ANALYTICAL RESULTS

Project: 212C-MD-00940/EVGSU Vac Abo  
 Pace Project No.: 7572003

Sample: COP Vac Abo Unit SB-3 (4-5') Lab ID: 7572003014 Collected: 08/07/17 00:01 Received: 08/15/17 08:50 Matrix: Solid

**Results reported on a "wet-weight" basis**

Parameters	Results	Units	Report Limit	DF	Prepared	Analyzed	CAS No.	Qual
<b>300.0 IC Anions 28 Days</b>	Analytical Method: EPA 300.0 Preparation Method: EPA 300.0							
Chloride	ND	mg/kg	99.2	10	08/23/17 10:45	08/23/17 19:14	16887-00-6	

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## ANALYTICAL RESULTS

Project: 212C-MD-00940/EVGSU Vac Abo

Pace Project No.: 7572003

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Sample: COP Vac Abo Unit SB-3 (6-7') Lab ID: 7572003015 Collected: 08/07/17 00:01 Received: 08/15/17 08:50 Matrix: Solid

**Results reported on a "wet-weight" basis**

Parameters	Results	Units	Report Limit	DF	Prepared	Analyzed	CAS No.	Qual
<b>300.0 IC Anions 28 Days</b>	Analytical Method: EPA 300.0 Preparation Method: EPA 300.0							
Chloride	ND	mg/kg	96.7	10	08/23/17 10:45	08/23/17 19:53	16887-00-6	

## REPORT OF LABORATORY ANALYSIS

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## ANALYTICAL RESULTS

Project: 212C-MD-00940/EVGSU Vac Abo

Pace Project No.: 7572003

Sample: COP Vac Abo Unit SB-3 (9-10') Lab ID: 7572003016 Collected: 08/07/17 00:01 Received: 08/15/17 08:50 Matrix: Solid

**Results reported on a "dry weight" basis and are adjusted for percent moisture, sample size and any dilutions.**

Parameters	Results	Units	Report Limit	DF	Prepared	Analyzed	CAS No.	Qual
<b>8015B Diesel Range Organics</b>	Analytical Method: EPA 8015B Preparation Method: EPA 3546							
TPH-DRO (C10-C28)	ND	mg/kg	12.5	1	08/21/17 07:51	08/23/17 02:53		
TPH-ORO (C28-C35)	ND	mg/kg	12.5	1	08/21/17 07:51	08/23/17 02:53		
<b>Surrogates</b>								
n-Tetracosane (S)	78	%	65-119	1	08/21/17 07:51	08/23/17 02:53	646-31-1	
p-Terphenyl (S)	71	%	41-131	1	08/21/17 07:51	08/23/17 02:53	92-94-4	
<b>Gasoline Range Organics</b>	Analytical Method: EPA 8015B Preparation Method: EPA 5035A/5030B							
TPH-GRO	ND	mg/kg	12.7	1	08/18/17 00:00	08/18/17 19:21		
<b>Surrogates</b>								
4-Bromofluorobenzene (S)	100	%	64-122	1	08/18/17 00:00	08/18/17 19:21	460-00-4	
<b>8260/5035A Volatile Organics</b>	Analytical Method: EPA 8260							
Benzene	ND	ug/kg	6.4	1		08/19/17 04:13	71-43-2	
Ethylbenzene	ND	ug/kg	6.4	1		08/19/17 04:13	100-41-4	
Toluene	ND	ug/kg	6.4	1		08/19/17 04:13	108-88-3	
Xylene (Total)	ND	ug/kg	6.4	1		08/19/17 04:13	1330-20-7	
<b>Surrogates</b>								
Toluene-d8 (S)	97	%	87-112	1		08/19/17 04:13	2037-26-5	
4-Bromofluorobenzene (S)	102	%	87-115	1		08/19/17 04:13	460-00-4	
1,2-Dichloroethane-d4 (S)	100	%	85-115	1		08/19/17 04:13	17060-07-0	
<b>300.0 IC Anions 28 Days</b>	Analytical Method: EPA 300.0 Preparation Method: EPA 300.0							
Chloride	127	mg/kg	127	10	08/23/17 10:45	08/23/17 20:06	16887-00-6	

## REPORT OF LABORATORY ANALYSIS

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## QUALITY CONTROL DATA

Project: 212C-MD-00940/EVGSU Vac Abo

Pace Project No.: 7572003

QC Batch: 490296 Analysis Method: EPA 8015B

QC Batch Method: EPA 5035A/5030B Analysis Description: Gasoline Range Organics

Associated Lab Samples: 7572003001, 7572003002, 7572003005, 7572003006, 7572003008, 7572003011, 7572003012

METHOD BLANK: 2008151 Matrix: Solid

Associated Lab Samples: 7572003001, 7572003002, 7572003005, 7572003006, 7572003008, 7572003011, 7572003012

Parameter	Units	Blank Result	Reporting Limit	Analyzed	Qualifiers
TPH-GRO	mg/kg	ND	10.0	08/18/17 11:34	
4-Bromofluorobenzene (S)	%	108	64-122	08/18/17 11:34	

LABORATORY CONTROL SAMPLE: 2007133

Parameter	Units	Spike Conc.	LCS Result	LCS % Rec	% Rec Limits	Qualifiers
TPH-GRO	mg/kg	50	55.7	111	85-130	
4-Bromofluorobenzene (S)	%			100	64-122	

LABORATORY CONTROL SAMPLE: 2008152

Parameter	Units	Spike Conc.	LCS Result	LCS % Rec	% Rec Limits	Qualifiers
TPH-GRO	mg/kg	50	54.1	108	85-130	
4-Bromofluorobenzene (S)	%			100	64-122	

MATRIX SPIKE &amp; MATRIX SPIKE DUPLICATE: 2007134 2007135

Parameter	Units	7572002001 Result	MS Spike Conc.	MSD Spike Conc.	MS Result	MSD Result	MS % Rec	MSD % Rec	% Rec Limits	RPD	RPD	Max Qual
TPH-GRO	mg/kg	ND	60.5	60.5	63.5	65.6	103	106	85-125	3	12	
4-Bromofluorobenzene (S)	%						104	109	64-122			

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## REPORT OF LABORATORY ANALYSIS

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## QUALITY CONTROL DATA

Project: 212C-MD-00940/EVGSU Vac Abo

Pace Project No.: 7572003

QC Batch:	490358	Analysis Method:	EPA 8015B
QC Batch Method:	EPA 5035A/5030B	Analysis Description:	Gasoline Range Organics
Associated Lab Samples:	7572003013, 7572003016		

METHOD BLANK: 2007289 Matrix: Solid

Associated Lab Samples: 7572003013, 7572003016

Parameter	Units	Blank Result	Reporting Limit	Analyzed	Qualifiers
TPH-GRO	mg/kg	ND	10	08/18/17 18:18	
4-Bromofluorobenzene (S)	%	102	64-122	08/18/17 18:18	

METHOD BLANK: 2009097 Matrix: Solid

Associated Lab Samples: 7572003013, 7572003016

Parameter	Units	Blank Result	Reporting Limit	Analyzed	Qualifiers
TPH-GRO	mg/kg	ND	10.0	08/20/17 13:10	
4-Bromofluorobenzene (S)	%	96	64-122	08/20/17 13:10	

METHOD BLANK: 2009805 Matrix: Solid

Associated Lab Samples: 7572003013, 7572003016

Parameter	Units	Blank Result	Reporting Limit	Analyzed	Qualifiers
TPH-GRO	mg/kg	ND	10.0	08/21/17 11:30	
4-Bromofluorobenzene (S)	%	103	64-122	08/21/17 11:30	

LABORATORY CONTROL SAMPLE: 2007290

Parameter	Units	Spike Conc.	LCS Result	LCS % Rec	% Rec Limits	Qualifiers
TPH-GRO	mg/kg	49.9	52.2	105	85-130	
4-Bromofluorobenzene (S)	%	103	64-122	100	64-122	

LABORATORY CONTROL SAMPLE: 2009098

Parameter	Units	Spike Conc.	LCS Result	LCS % Rec	% Rec Limits	Qualifiers
TPH-GRO	mg/kg	50	51.9	104	85-130	
4-Bromofluorobenzene (S)	%			94	64-122	

LABORATORY CONTROL SAMPLE: 2009806

Parameter	Units	Spike Conc.	LCS Result	LCS % Rec	% Rec Limits	Qualifiers
TPH-GRO	mg/kg	50	55.8	112	85-130	

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## QUALITY CONTROL DATA

Project: 212C-MD-00940/EVGSU Vac Abo  
Pace Project No.: 7572003

LABORATORY CONTROL SAMPLE: 2009806

Parameter	Units	Spike Conc.	LCS Result	LCS % Rec	% Rec Limits	Qualifiers
4-Bromofluorobenzene (S)	%			102	64-122	

MATRIX SPIKE & MATRIX SPIKE DUPLICATE: 2007291 2007292

Parameter	Units	7572003013 Result	MS Spike Conc.	MSD Spike Conc.	MS Result	MSD Result	MS % Rec	MSD % Rec	% Rec Limits	Max RPD	Max RPD	Qual
TPH-GRO	mg/kg	ND	60	60	64.5	63.9	106	105	85-125	1	12	
4-Bromofluorobenzene (S)	%						99	91	64-122			

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## QUALITY CONTROL DATA

Project: 212C-MD-00940/EVGSU Vac Abo

Pace Project No.: 7572003

QC Batch: 490534 Analysis Method: EPA 8260

QC Batch Method: EPA 8260 Analysis Description: 8260 MSV 5035A Volatile Organics

Associated Lab Samples: 7572003001, 7572003002, 7572003005, 7572003006, 7572003008, 7572003011, 7572003012, 7572003013, 7572003016

METHOD BLANK: 2008099 Matrix: Solid

Associated Lab Samples: 7572003001, 7572003002, 7572003005, 7572003006, 7572003008, 7572003011, 7572003012, 7572003013, 7572003016

Parameter	Units	Blank Result	Reporting Limit	Analyzed	Qualifiers
Benzene	ug/kg	ND	5.0	08/18/17 23:50	
Ethylbenzene	ug/kg	ND	5.0	08/18/17 23:50	
Toluene	ug/kg	ND	5.0	08/18/17 23:50	
Xylene (Total)	ug/kg	ND	5.0	08/18/17 23:50	
1,2-Dichloroethane-d4 (S)	%	104	85-115	08/18/17 23:50	
4-Bromofluorobenzene (S)	%	113	87-115	08/18/17 23:50	
Toluene-d8 (S)	%	103	87-112	08/18/17 23:50	

LABORATORY CONTROL SAMPLE: 2008100

Parameter	Units	Spike Conc.	LCS Result	LCS % Rec	% Rec Limits	Qualifiers
Benzene	ug/kg	100	98.9	99	81-115	
Ethylbenzene	ug/kg	100	92.6	93	76-119	
Toluene	ug/kg	100	95.8	96	77-116	
Xylene (Total)	ug/kg	300	272	91	76-121	
1,2-Dichloroethane-d4 (S)	%			115	85-115	
4-Bromofluorobenzene (S)	%			113	87-115	
Toluene-d8 (S)	%			102	87-112	

MATRIX SPIKE &amp; MATRIX SPIKE DUPLICATE: 2008101 2008102

Parameter	Units	MS 7572004001		MSD Spike Conc.		MS 7572004001		MSD % Rec		MSD % Rec		% Rec Limits	RPD	RPD	Max Qual
		Result	Conc.	Result	Conc.	Result	% Rec	Result	% Rec	Result	% Rec				
Benzene	ug/kg	ND	120	119	111	119	93	100	30-139	7	28				
Ethylbenzene	ug/kg	ND	120	119	102	112	85	95	10-147	10	32				
Toluene	ug/kg	ND	120	119	110	125	91	104	22-138	12	39				
Xylene (Total)	ug/kg	ND	360	356	304	346	84	97	10-152	13	35				
1,2-Dichloroethane-d4 (S)	%						101	94	85-115						
4-Bromofluorobenzene (S)	%						101	97	87-115						
Toluene-d8 (S)	%						99	101	87-112						

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## REPORT OF LABORATORY ANALYSIS

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## QUALITY CONTROL DATA

Project: 212C-MD-00940/EVGSU Vac Abo  
Pace Project No.: 7572003

QC Batch:	490646	Analysis Method:	EPA 8015B
QC Batch Method:	EPA 3546	Analysis Description:	EPA 8015B
Associated Lab Samples:	7572003001, 7572003002, 7572003005, 7572003006, 7572003008, 7572003011, 7572003012, 7572003013, 7572003016		

METHOD BLANK: 2008548 Matrix: Solid

Associated Lab Samples: 7572003001, 7572003002, 7572003005, 7572003006, 7572003008, 7572003011, 7572003012, 7572003013, 7572003016

Parameter	Units	Blank Result	Reporting Limit	Analyzed	Qualifiers
TPH-DRO (C10-C28)	mg/kg	ND	9.9	08/23/17 12:02	
TPH-ORO (C28-C35)	mg/kg	ND	9.9	08/23/17 12:02	
n-Tetracosane (S)	%	83	65-119	08/23/17 12:02	
p-Terphenyl (S)	%	84	41-131	08/23/17 12:02	

LABORATORY CONTROL SAMPLE: 2008549

Parameter	Units	Spike Conc.	LCS Result	LCS % Rec	% Rec Limits	Qualifiers
TPH-DRO (C10-C28)	mg/kg	82	73.1	89	80-112	
n-Tetracosane (S)	%			89	65-119	
p-Terphenyl (S)	%			88	41-131	

MATRIX SPIKE & MATRIX SPIKE DUPLICATE: 2008550 2008551

Parameter	Units	MS Result	MS Spike Conc.	MS Result	MS Spike Conc.	MS Result	MS % Rec	MS % Rec	% Rec Limits	RPD	RPD	Max Qual
TPH-DRO (C10-C28)	mg/kg	78.6	92	90.8	228	234	162	171	10-180	2	39	
n-Tetracosane (S)	%						90	82	65-119		58	
p-Terphenyl (S)	%						82	77	41-131		56	

Results presented on this page are in the units indicated by the "Units" column except where an alternate unit is presented to the right of the result.

## REPORT OF LABORATORY ANALYSIS

## QUALITY CONTROL DATA

Project: 212C-MD-00940/EVGSU Vac Abo  
Pace Project No.: 7572003

QC Batch:	490485	Analysis Method:	EPA 300.0
QC Batch Method:	EPA 300.0	Analysis Description:	300.0 IC Anions
Associated Lab Samples: 7572003001			

METHOD BLANK: 2007886 Matrix: Solid

Associated Lab Samples: 7572003001

Parameter	Units	Blank Result	Reporting Limit	Analyzed	Qualifiers
Chloride	mg/kg	ND	100	08/23/17 15:50	

LABORATORY CONTROL SAMPLE: 2007887

Parameter	Units	Spike Conc.	LCS Result	LCS % Rec	% Rec Limits	Qualifiers
Chloride	mg/kg	500	476	95	90-110	

MATRIX SPIKE & MATRIX SPIKE DUPLICATE: 2007888 2007889

Parameter	Units	7572014011 Result	MS Spike Conc.	MSD Spike Conc.	MS Result	MSD Result	MS % Rec	MSD % Rec	% Rec Limits	Max RPD	Max RPD	Max Qual
Chloride	mg/kg	567	506	499	1040	1040	94	95	80-120	0	15	

MATRIX SPIKE SAMPLE: 2007890

Parameter	Units	7572014020 Result	Spike Conc.	MS Result	MS % Rec	% Rec Limits	Qualifiers
Chloride	mg/kg	107	504	139	6	80-120	M1

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## REPORT OF LABORATORY ANALYSIS

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## QUALITY CONTROL DATA

Project: 212C-MD-00940/EVGSU Vac Abo  
Pace Project No.: 7572003

QC Batch:	490610	Analysis Method:	EPA 300.0
QC Batch Method:	EPA 300.0	Analysis Description:	300.0 IC Anions
Associated Lab Samples:	7572003002, 7572003003, 7572003004, 7572003005, 7572003006, 7572003007, 7572003008, 7572003009, 7572003010, 7572003011, 7572003012, 7572003013, 7572003014, 7572003015, 7572003016		

METHOD BLANK: 2008467 Matrix: Solid

Associated Lab Samples: 7572003002, 7572003003, 7572003004, 7572003005, 7572003006, 7572003007, 7572003008, 7572003009,  
7572003010, 7572003011, 7572003012, 7572003013, 7572003014, 7572003015, 7572003016

Parameter	Units	Blank	Reporting	Analyzed	Qualifiers
		Result	Limit		
Chloride	mg/kg	ND	100	08/23/17 14:56	

LABORATORY CONTROL SAMPLE: 2008468

Parameter	Units	Spike	LCS	LCS	% Rec	Qualifiers
		Conc.	Result	% Rec	Limits	
Chloride	mg/kg	500	477	95	90-110	

MATRIX SPIKE & MATRIX SPIKE DUPLICATE: 2008469 2008470

Parameter	Units	MS	MSD	MS	MSD	MS	MSD	% Rec	% Rec	% Rec	RPD	Max
		7572002021	Spike	Spike	Result	Result	% Rec	% Rec	% Rec	RPD	RPD	Qual
Chloride	mg/kg	ND	544	552	544	553	89	90	80-120	2	15	

MATRIX SPIKE SAMPLE: 2008471

Parameter	Units	7572003002		Spike	MS	MS	% Rec	Qualifiers
		Result	Conc.	Conc.	Result	% Rec	Limits	
Chloride	mg/kg	ND	563	561	641	97	80-120	

Results presented on this page are in the units indicated by the "Units" column except where an alternate unit is presented to the right of the result.

## REPORT OF LABORATORY ANALYSIS

## QUALIFIERS

Project: 212C-MD-00940/EVGSU Vac Abo  
Pace Project No.: 7572003

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### DEFINITIONS

DF - Dilution Factor, if reported, represents the factor applied to the reported data due to dilution of the sample aliquot.

ND - Not Detected at or above adjusted reporting limit.

TNTC - Too Numerous To Count

J - Estimated concentration above the adjusted method detection limit and below the adjusted reporting limit.

MDL - Adjusted Method Detection Limit.

PQL - Practical Quantitation Limit.

RL - Reporting Limit.

S - Surrogate

1,2-Diphenylhydrazine decomposes to and cannot be separated from Azobenzene using Method 8270. The result for each analyte is a combined concentration.

Consistent with EPA guidelines, unrounded data are displayed and have been used to calculate % recovery and RPD values.

LCS(D) - Laboratory Control Sample (Duplicate)

MS(D) - Matrix Spike (Duplicate)

DUP - Sample Duplicate

RPD - Relative Percent Difference

NC - Not Calculable.

SG - Silica Gel - Clean-Up

U - Indicates the compound was analyzed for, but not detected.

N-Nitrosodiphenylamine decomposes and cannot be separated from Diphenylamine using Method 8270. The result reported for each analyte is a combined concentration.

Pace Analytical is TNI accredited. Contact your Pace PM for the current list of accredited analytes.

TNI - The Nelac Institute

### LABORATORIES

PASI-K Pace Analytical Services - Kansas City

### BATCH QUALIFIERS

Batch: 490996

[M5] A matrix spike/matrix spike duplicate was not performed for this batch due to insufficient sample volume.

### ANALYTE QUALIFIERS

M1 Matrix spike recovery exceeded QC limits. Batch accepted based on laboratory control sample (LCS) recovery.

S5 Surrogate recovery outside control limits due to matrix interferences (not confirmed by re-analysis).

## REPORT OF LABORATORY ANALYSIS

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**QUALITY CONTROL DATA CROSS REFERENCE TABLE**

Project: 212C-MD-00940/EVGSU Vac Abo

Pace Project No.: 7572003

Lab ID	Sample ID	QC Batch Method	QC Batch	Analytical Method	Analytical Batch
7572003001	COP Vac Abo Unit SB-1 (0-1')	EPA 3546	490646	EPA 8015B	491023
7572003002	COP Vac Abo Unit SB-1 (2-3')	EPA 3546	490646	EPA 8015B	491023
7572003005	COP Vac Abo Unit SB-1 (9-10')	EPA 3546	490646	EPA 8015B	491023
7572003006	COP Vac Abo Unit SB-2 (0-1')	EPA 3546	490646	EPA 8015B	491023
7572003008	COP Vac Abo Unit SB-2 (4-5')	EPA 3546	490646	EPA 8015B	491023
7572003011	COP Vac Abo Unit SB-2 (14-15')	EPA 3546	490646	EPA 8015B	491023
7572003012	COP Vac Abo Unit SB-3 (0-1')	EPA 3546	490646	EPA 8015B	491023
7572003013	COP Vac Abo Unit SB-3 (2-3')	EPA 3546	490646	EPA 8015B	491023
7572003016	COP Vac Abo Unit SB-3 (9-10')	EPA 3546	490646	EPA 8015B	491023
7572003001	COP Vac Abo Unit SB-1 (0-1')	EPA 5035A/5030B	490296	EPA 8015B	490559
7572003002	COP Vac Abo Unit SB-1 (2-3')	EPA 5035A/5030B	490296	EPA 8015B	490559
7572003005	COP Vac Abo Unit SB-1 (9-10')	EPA 5035A/5030B	490296	EPA 8015B	490559
7572003006	COP Vac Abo Unit SB-2 (0-1')	EPA 5035A/5030B	490296	EPA 8015B	490558
7572003008	COP Vac Abo Unit SB-2 (4-5')	EPA 5035A/5030B	490296	EPA 8015B	490558
7572003011	COP Vac Abo Unit SB-2 (14-15')	EPA 5035A/5030B	490296	EPA 8015B	490558
7572003012	COP Vac Abo Unit SB-3 (0-1')	EPA 5035A/5030B	490296	EPA 8015B	490558
7572003013	COP Vac Abo Unit SB-3 (2-3')	EPA 5035A/5030B	490358	EPA 8015B	490786
7572003016	COP Vac Abo Unit SB-3 (9-10')	EPA 5035A/5030B	490358	EPA 8015B	490786
7572003001	COP Vac Abo Unit SB-1 (0-1')	EPA 8260	490534		
7572003002	COP Vac Abo Unit SB-1 (2-3')	EPA 8260	490534		
7572003005	COP Vac Abo Unit SB-1 (9-10')	EPA 8260	490534		
7572003006	COP Vac Abo Unit SB-2 (0-1')	EPA 8260	490534		
7572003008	COP Vac Abo Unit SB-2 (4-5')	EPA 8260	490534		
7572003011	COP Vac Abo Unit SB-2 (14-15')	EPA 8260	490534		
7572003012	COP Vac Abo Unit SB-3 (0-1')	EPA 8260	490534		
7572003013	COP Vac Abo Unit SB-3 (2-3')	EPA 8260	490534		
7572003016	COP Vac Abo Unit SB-3 (9-10')	EPA 8260	490534		
7572003001	COP Vac Abo Unit SB-1 (0-1')	EPA 300.0	490485	EPA 300.0	491036
7572003002	COP Vac Abo Unit SB-1 (2-3')	EPA 300.0	490610	EPA 300.0	491159
7572003003	COP Vac Abo Unit SB-1 (4-5')	EPA 300.0	490610	EPA 300.0	491159
7572003004	COP Vac Abo Unit SB-1 (6-7')	EPA 300.0	490610	EPA 300.0	491159
7572003005	COP Vac Abo Unit SB-1 (9-10')	EPA 300.0	490610	EPA 300.0	491159
7572003006	COP Vac Abo Unit SB-2 (0-1')	EPA 300.0	490610	EPA 300.0	491159
7572003007	COP Vac Abo Unit SB-2 (2-3')	EPA 300.0	490610	EPA 300.0	491159
7572003008	COP Vac Abo Unit SB-2 (4-5')	EPA 300.0	490610	EPA 300.0	491159
7572003009	COP Vac Abo Unit SB-2 (6-7')	EPA 300.0	490610	EPA 300.0	491159
7572003010	COP Vac Abo Unit SB-2 (9-10')	EPA 300.0	490610	EPA 300.0	491159
7572003011	COP Vac Abo Unit SB-2 (14-15')	EPA 300.0	490610	EPA 300.0	491159
7572003012	COP Vac Abo Unit SB-3 (0-1')	EPA 300.0	490610	EPA 300.0	491159
7572003013	COP Vac Abo Unit SB-3 (2-3')	EPA 300.0	490610	EPA 300.0	491159
7572003014	COP Vac Abo Unit SB-3 (4-5')	EPA 300.0	490610	EPA 300.0	491159
7572003015	COP Vac Abo Unit SB-3 (6-7')	EPA 300.0	490610	EPA 300.0	491159
7572003016	COP Vac Abo Unit SB-3 (9-10')	EPA 300.0	490610	EPA 300.0	491159

**REPORT OF LABORATORY ANALYSIS**

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	Document Name: Sample Condition Upon Receipt	Document Revised: 7/25/16 Page 1 of 1
	Document No.: F-DAL-C-001-rev.06	Issuing Authority: Pace Dallas Quality Office

### Sample Condition Upon Receipt

Dallas     Ft Worth

San Angelo

WO# : 7572003

Client Name: Tetra Tech Project Work order:



Courier: FedEx  UPS  USPS  Client  Courier  LSO  PACE  Other:

Tracking#: 7420 89791910 / 7420 8979 1909

Custody Seal on Cooler/Box: Yes  No  Seals Intact: Yes  No  NA

Packing Material: Bubble Wrap  Bubble Bags  Foam  None  Other

Thermometer Used: IR-CS4 Type of Ice: Wet  Blue  None  Sample Received on ice, cooling process has begun

Cooler Temp °C: 4.3, 4.0 (Recorded) 0.2 (Correction Factor) 4.5, 4.2 (Actual) Temp should be above freezing to 6°C

Chain of Custody Present	Yes <input checked="" type="checkbox"/> No <input type="checkbox"/> NA <input type="checkbox"/> 1	
Chain of Custody filled out	Yes <input checked="" type="checkbox"/> No <input type="checkbox"/> NA <input type="checkbox"/> 2	
Chain of Custody relinquished	Yes <input checked="" type="checkbox"/> No <input type="checkbox"/> NA <input type="checkbox"/> 3	
Sampler name & signature on COC	Yes <input checked="" type="checkbox"/> No <input type="checkbox"/> NA <input type="checkbox"/> 4	
Sample received within HT	Yes <input checked="" type="checkbox"/> No <input type="checkbox"/> NA <input type="checkbox"/> 5	
Short HT analyses (<72 hrs)	Yes <input type="checkbox"/> No <input checked="" type="checkbox"/> NA <input type="checkbox"/> 6	
Rush TAT requested	Yes <input type="checkbox"/> No <input checked="" type="checkbox"/> NA <input type="checkbox"/> 7	
Sufficient Volume received	Yes <input checked="" type="checkbox"/> No <input type="checkbox"/> NA <input type="checkbox"/> 8	
Correct Container used	Yes <input type="checkbox"/> No <input type="checkbox"/> NA <input type="checkbox"/> 9	
Pace Container used	Yes <input checked="" type="checkbox"/> No <input type="checkbox"/> NA <input type="checkbox"/> 10	
Container Intact	Yes <input checked="" type="checkbox"/> No <input type="checkbox"/> NA <input type="checkbox"/> 10	
Unpreserved 5035A soil frozen within 48 hrs	Yes <input type="checkbox"/> No <input type="checkbox"/> NA <input checked="" type="checkbox"/> 11	
Filtered volume received for Dissolved tests	Yes <input type="checkbox"/> No <input type="checkbox"/> NA <input checked="" type="checkbox"/> 12	
Sample labels match COC	Yes <input type="checkbox"/> No <input type="checkbox"/> NA <input type="checkbox"/> 13	
Include date/time/ID/analyses Matrix:	<u>SOC1B</u>	
All containers needing preservation have been checked	Yes <input type="checkbox"/> No <input type="checkbox"/> NA <input type="checkbox"/>	14a. Lot# of pH strip: Original pH: < <input type="checkbox"/> or > <input type="checkbox"/> 2 <input type="checkbox"/> 9 <input type="checkbox"/> 12 <input type="checkbox"/> or received Neutral <input type="checkbox"/> Lot# of Iodine strip: Lot# of Lead Acetate strip:
Do containers require preservation at the lab	Yes <input type="checkbox"/> No <input type="checkbox"/> NA <input checked="" type="checkbox"/>	14b. Preservation: Lot# and adjusted pH: pH<2 <input type="checkbox"/> pH>9 <input type="checkbox"/> pH>12 <input type="checkbox"/>
All containers needing preservation are found to be in Compliance with EPA recommendation Exception: VOA, coliform, O&G	Yes <input type="checkbox"/> No <input checked="" type="checkbox"/> NA <input type="checkbox"/>	14c.
Are soil samples (volatiles) received in Bulk <input type="checkbox"/> Terracore <input type="checkbox"/> EnCore <input type="checkbox"/> NA <input type="checkbox"/>	15.	
Trip Blank present	Yes <input type="checkbox"/> No <input type="checkbox"/> NA <input type="checkbox"/>	16.
Trip Blank Custody Seals Intact	Yes <input type="checkbox"/> No <input type="checkbox"/> NA <input type="checkbox"/>	
Pace Trip Blank Lot# (if purchased):		
Headspace in VOA (>6mm)	Yes <input type="checkbox"/> No <input type="checkbox"/> NA <input type="checkbox"/>	17.
Project sampled in USDA Regulated Area:	Yes <input checked="" type="checkbox"/> No <input type="checkbox"/> NA <input type="checkbox"/>	18. List State <u>TX</u>

Client Notification/Resolution/Comments:

Person Contacted: \_\_\_\_\_ Date: \_\_\_\_\_  
Comments/Resolution: \_\_\_\_\_

Person Examining Contents: 26 Date: 8/15/17 Project Manager Review: \_\_\_\_\_ mm

## Analysis Request of Chain of Custody Record

7572003

Page 1 of 2



## Tetra Tech, Inc.

4000 N. Big Spring Street, Ste  
401 Midland, Texas 79705  
Tel (432) 682-4559  
Fax (432) 682-3946

Client Name: Conoco Phillips		Site Manager: Ike Tavarez		ANALYSIS REQUEST (Circle or Specify Method No.)																															
Project Name: EVGSAU Vac Abo Unit 14-02																																			
Project Location: (county, state) Lea Co NM		Project #: 212C-MD-00940																																	
Invoice to:																																			
Receiving Laboratory: Pace Analytical		Sampler Signature: Clint Merritt																																	
Comments: If TPH exceeds 1,000 mg/kg, run deeper sample. If Benzene exceeds 10mg/kg or total BTEX exceeds 50 mg/kg, run deeper sample																																			
LAB # (LAB USE ONLY)	SAMPLE IDENTIFICATION	SAMPLING		WATER	SOIL	HCL	HNO <sub>3</sub>	ICE	# CONTAINERS	FILTERED (Y/N)	BTEX	8021B	BTEX	8260B	TPH TX1005 (Exit 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	Chloride	Sulfate	TDS	General Water Chemistry (see attached list)	Anion/Cation Balance	Hold
		YEAR:	DATE								TIME																								
001	COP Vac Abo Unit SB-1 (0'-1')	8/7/2017		X			X		1	X	X																								
002	COP Vac Abo Unit SB-1 (2'-3')	8/7/2017		X			X		1	X	X																								
003	COP Vac Abo Unit SB-1 (4'-5')	8/7/2017		X			X		1																										
004	COP Vac Abo Unit SB-1 (6'-7')	8/7/2017		X			X		1																										
005	COP Vac Abo Unit SB-1 (9'-10')	8/7/2017		X			X		1	X	X																								
006	COP Vac Abo Unit SB-2 (0'-1')	8/7/2017		X			X		1	X	X																								
007	COP Vac Abo Unit SB-2 (2'-3')	8/7/2017		X			X		1																										
008	COP Vac Abo Unit SB-2 (4'-5')	8/7/2017		X			X		1	X	X																								
009	COP Vac Abo Unit SB-2 (6'-7')	8/7/2017		X			X		1																										
010	COP Vac Abo Unit SB-2 (9'-10')	8/7/2017		X			X		1																										
Relinquished by: Clint Merritt		Date: 8/14/17	Time: 17:00	Received by: <i>Clint Merritt</i> 8/15/17 0850		Date: 8/15/17		Time: 0850		LAB USE ONLY Sample Temperature 4.5 4.6, 4.2 TMS 8/15/17	REMARKS:																								
Relinquished by:		Date:	Time:	Received by:		Date:		Time:			<input type="checkbox"/> RUSH: Same Day 24 hr 48 hr 72 hr																								
Relinquished by:		Date:	Time:	Received by:		Date:		Time:			<input type="checkbox"/> Rush Charges Authorized																								

(Circle) HAND DELIVERED  FEDEX  UPS Tracking #: *7420 8979 1409**7420 8979 1409*

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## Tetra Tech, Inc.

4000 N. Big Spring Street, Ste  
401 Midland, Texas 79705  
Tel (432) 682-4559  
Fax (432) 682-3946

7572003

Client Name: Conoco Phillips		Site Manager: Ike Tavarez		ANALYSIS REQUEST (Circle or Specify Method No.)																																											
Project Name: EVGSAU Vac Abo Unit 14-02																																															
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LAB # ( LAB USE ONLY )	SAMPLE IDENTIFICATION	SAMPLING		MATRIX		PRESERVATIVE METHOD		# CONTAINERS	FILTERED (Y/N)	BTEX 8280B		TPH TX1005 (Ext to C55)		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		RCI		GC/MS Vol. 8280B / 624		GC/MS Semi. Vol. 8270C/625		PCB's 8082 / 608		NORM		PLM (Asbestos)		Chloride		Sulfate		TDS		General Water Chemistry (see attached list)		Anion/Cation Balance		Hold	
		YEAR:		DATE	TIME	WATER	SOIL			HCL	HNO <sub>3</sub>	ICE																																			
		O11	COP Vac Abo Unit SB-2 (14'-15')	8/7/2017		X					X			1	X	X																															
O12	COP Vac Abo Unit SB-3 (0'-1')	8/7/2017		X			X			1	X	X																																			
O13	COP Vac Abo Unit SB-3 (2'-3')	8/7/2017		X			X			1	X	X																																			
O14	COP Vac Abo Unit SB-3 (4'-5')	8/7/2017		X			X			1																																					
O15	COP Vac Abo Unit SB-3 (6'-7')	8/7/2017		X			X			1																																					
O16	COP Vac Abo Unit SB-3 (9'-10')	8/7/2017		X			X			1	X	X																																			
Relinquished by: Clint Merritt		Date: 8/14/17	Time: 17:00	Received by: <i>Clint Merritt</i> Pace 3/15/17 0850		Date: Time:		LAB USE ONLY		REMARKS:																																					
Relinquished by:		Date:	Time:	Received by:		Date: Time:				<input type="checkbox"/> RUSH: Same Day 24 hr 48 hr 72 hr <input type="checkbox"/> Rush Charges Authorized <input type="checkbox"/> Special Report Limits or TRRP Report																																					
Relinquished by:		Date:	Time:	Received by:		Date: Time:																																									

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(Circle) HAND DELIVERED  FEDEX UPS Tracking #: 7420 8979 1910

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