SITE INFORMATION

Report Type: Work Plan 1RP No. 4593

General Site Information:						
Site:	**EVGSAU 2923-001**					
Company:	**ConocoPhillips**					
Section, Township and Range		**Sec. 29**	**T 17S**	**R 35E**		
Lease Number:	**API No. 30-025-26577**					
County:	**Lea**					
Release GPS:	**32.8096695**			**-103.475914**		
Surface Owner:	State					
Mineral Owner:						
Directions:	From the intersection of Buckeye Road and Hwy 238 , go east on Buckeye Rd for 1 mile. Turn left and head north for 75 feet to the 'Y' intersection and take the right road. Continue north 1 mile to the site.					

Release Data:	
Date Released:	1/17/2017
Type Release:	Oil/Produced Water
Source of Contamination:	Flow line
Fluid Released:	1 bbl / 20.03 bbls
Fluids Recovered:	15 bbls

Official Communication:			
Name:	Neal Goates		Greg Pope
Company:	ConocoPhillips		Tetra Tech
Address:	600 N Dairy Ashford Road		4000 N. Big Spring
			Ste 401
City:	Houston, TX 77079		Midland, Texas
Phone number:	(281) 293-1000		(432) 687-8134
Fax:			
Email:	N.Goates@conocophillips.com		Greg.Pope@tetratech.com

Ranking Criteria		
Depth to Groundwater:	***Ranking Score***	***Site Data***
<50 ft	20	
50-99 ft	***10***	Approximately 70 feet
>100 ft.	0	
WellHead Protection:	***Ranking Score***	***Site Data***
Water Source <1,000 ft., Private <200 ft.	*20*	
Water Source >1,000 ft., Private >200 ft.	***0***	*0*
Surface Body of Water:	***Ranking Score***	***Site Data***
<200 ft.	*20*	
200 ft - 1,000 ft.	10	
>1,000 ft.	***0***	0
Total Ranking Score:	***10***	

Acceptable Soil RRAL (mg/kg)		
Benzene	***Total BTEX***	***TPH***
10	50	1,000

APPROVED
By Olivia Yu at 3:46 pm, Apr 04, 2018

NMOCD approves of the delineation completed and proposed remediation plan for 1RP-4593 with these conditions:
1) Sidewall confirmation samples for the proposed excavation represented by SB-4.
2) If proposed depth of excavation cannot be obtained, NMOCD and NMSLO must be informed to conduct a site evaluation.

TETRA TECH

March 6, 2018

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

Re: Work Plan for the ConocoPhillips Company, EVGSAU 2923-001, Section 29, Township 17S, Range 35E, Lea County, New Mexico. 1 RP #4593

Ms. Yu:

Tetra Tech, Inc. (Tetra Tech) was contacted by ConocoPhillips Company (Conoco) to assess a release that occurred at the EVGSAU 2923-001 (site) located in Section 29, Township 17 South, Range 35 East, Lea County, New Mexico, approximately 12 miles southwest of the town of Lovington and 21 miles northwest of Hobbs in southeastern Lea County. The spill site coordinates are 32.8096695, -103.475914. 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 January 18, 2017, and released 21.03 barrels of produced water due to a failed flowline. Emergency response action included recovering free standing fluids with a vacuum truck. As a result, approximately fifteen (15) barrels of produced water were recovered, leaving approximately seven (7) barrels unrecovered. The release impacted approximately 130' x 520' of adjacent pasture east to southeast of the release. The C-141 form is included in Appendix A.

Groundwater

According to New Mexico Office of State Engineer's (NMOSE) Water Rights Reporting System, there are two (2) water wells are located within Section 29, Township 17 South (T17S), Range 35 East (R35E). Of these wells, the shallowest depth to water was reported at 55 feet below ground surface, and the average depth to water was reported at 72 feet below surface. According to the Chevron Texaco Groundwater Trend map, the average depth to groundwater in this area is less than 100 feet below surface. The groundwater data is shown in Appendix B.

Tetra Tech
4000 North Big Spring, Suite 401, Midland, TX 79705
Tel 432.682.4559 Fax 432.682.3946 www.tetratech.com

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 evaluate and sample the release area. A total of four (4) soil borings (SB-1, SB-2, SB-3, and SB-4) were installed in the spill area to assess and define the extent of the impacted soil. Soil samples were collected and field screened with a PID and for chlorides. Three (3) soil samples were collected from each soil boring location for analysis of TPH by EPA method 8015B modified and BTEX by EPA Method 8260. All of the samples collected were analyzed for chloride by EPA method 300.0. The soil analytical results are summarized in Table 1, and a copy of the laboratory analytical report and chain-of-custody document is included in Appendix C.

Referring to Table 1, the BTEX and TPH concentrations were below the laboratory reporting limits. Chlorides concentrations did not exceed the recommended 600 mg/kg for any intervals in SB-1 and SB-2. However, elevated chloride concentrations were reported in the following intervals: SB-3 (0-1') 657 mg/kg, SB-4 (0-1') 2,870 mg/kg, SB-4 (2-3') 2,320 mg/kg, SB-4 (4-5') 2,580 mg/kg, SB-4 (6-7') 1,400 mg/kg, and SB-4 (9-10') 930 mg/kg.

Work Plan

The site area 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 area of soil boring SB-3 had an insignificant chloride in the shallow interval of 0-1' below ground surface. However, the area of soil boring SB-4 showed chloride impacts to the subsurface. Based on the results and site knowledge, ConocoPhillips proposes to use rock removal equipment to attempt to excavate to a depth of 3' below ground surface and install a 40 mil liner in the soil boring area of SB-4 to cap the remaining chlorides in the preferential pathways. Due to the shallow dense formation, the removal of the material may not be feasible. The site will be returned to surface grade with clean backfill material.

The proposed excavation depths may not be reached due to site conditions. In addition, impacted soil around oil and gas equipment, structures or lines may not be feasible or practicable to be removed due to safely concerns for onsite personnel. As such, ConocoPhillips will excavate the impacted soils to the maximum extent practicable.

Revegetation Plan

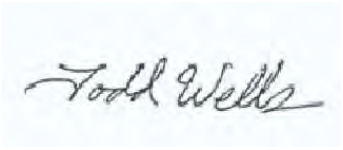
The backfilled areas will be seeded in June 2018 in order to coincide with the rainy season in Southeastern New Mexico to aid in revegetation. Based on the soils at the site, the New Mexico State Land Office (NMSLO) Shallow (SH) Sites Seed Mixture will be used for seeding and will be planted in the amount specified in the pounds pure live seed (PLS) per acre. The seed mixture will be spread by a drill equipped with a depth regulator or a hand-held broadcaster and raked. If a hand-held broadcaster is used for dispersal, the pounds pure live seed per acre will be doubled.

Site inspections will be performed to assess the revegetation progress and evaluate the site for the presence of primary or secondary noxious weeds. If noxious weeds are identified, the NMSLO will be contacted to determine an effective method for eradication. If the site does not show revegetation after one growing season, the area will be reseeded as appropriate. The NMSLO seed mixture details and corresponding pounds pure live seed per acre are included in Appendix D.

Conclusion

Upon excavation completion, a final report detailing the remediation activities will be submitted to the NMOCD. If excavation is not feasible, a Final C-141 report will be submitted. If you have any questions or comments concerning the assessment or the proposed remediation activities for this site, please call at (432) 682-4559.

Respectfully submitted,
TETRA TECH

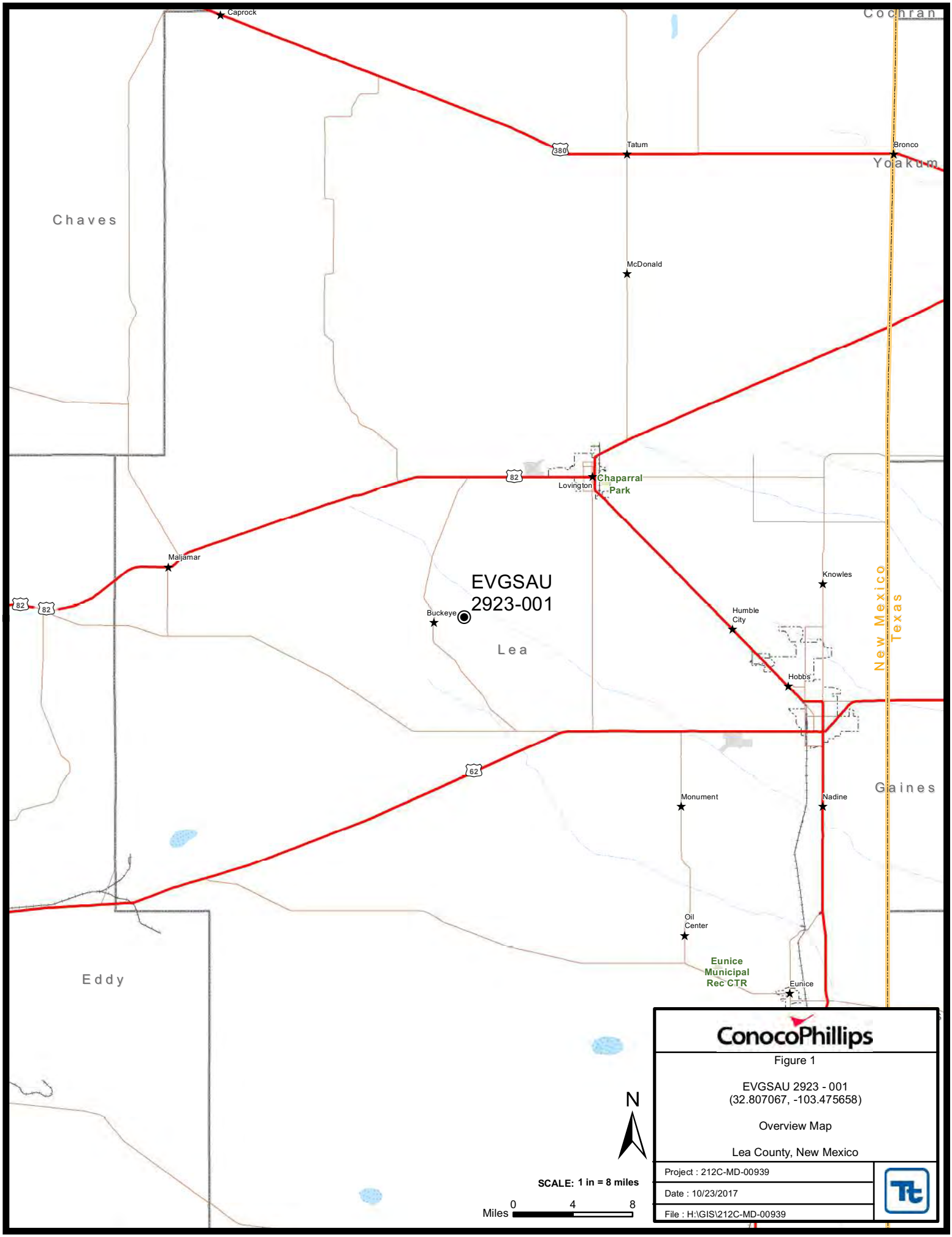


Todd Wells,
Project Manager

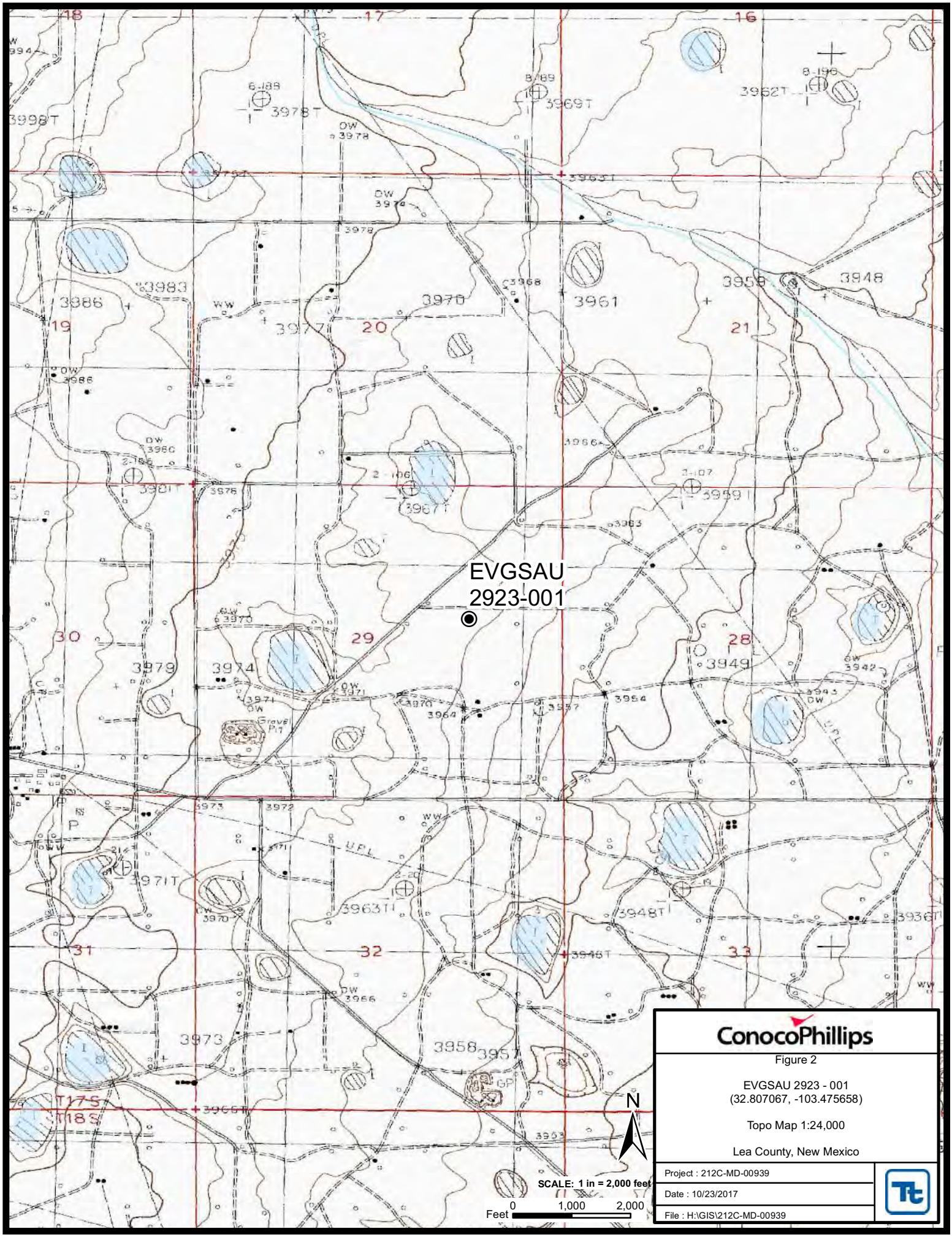
Greg W. Pope, P.G.
Senior Project Manager

cc: Neal Goates – ConocoPhillips

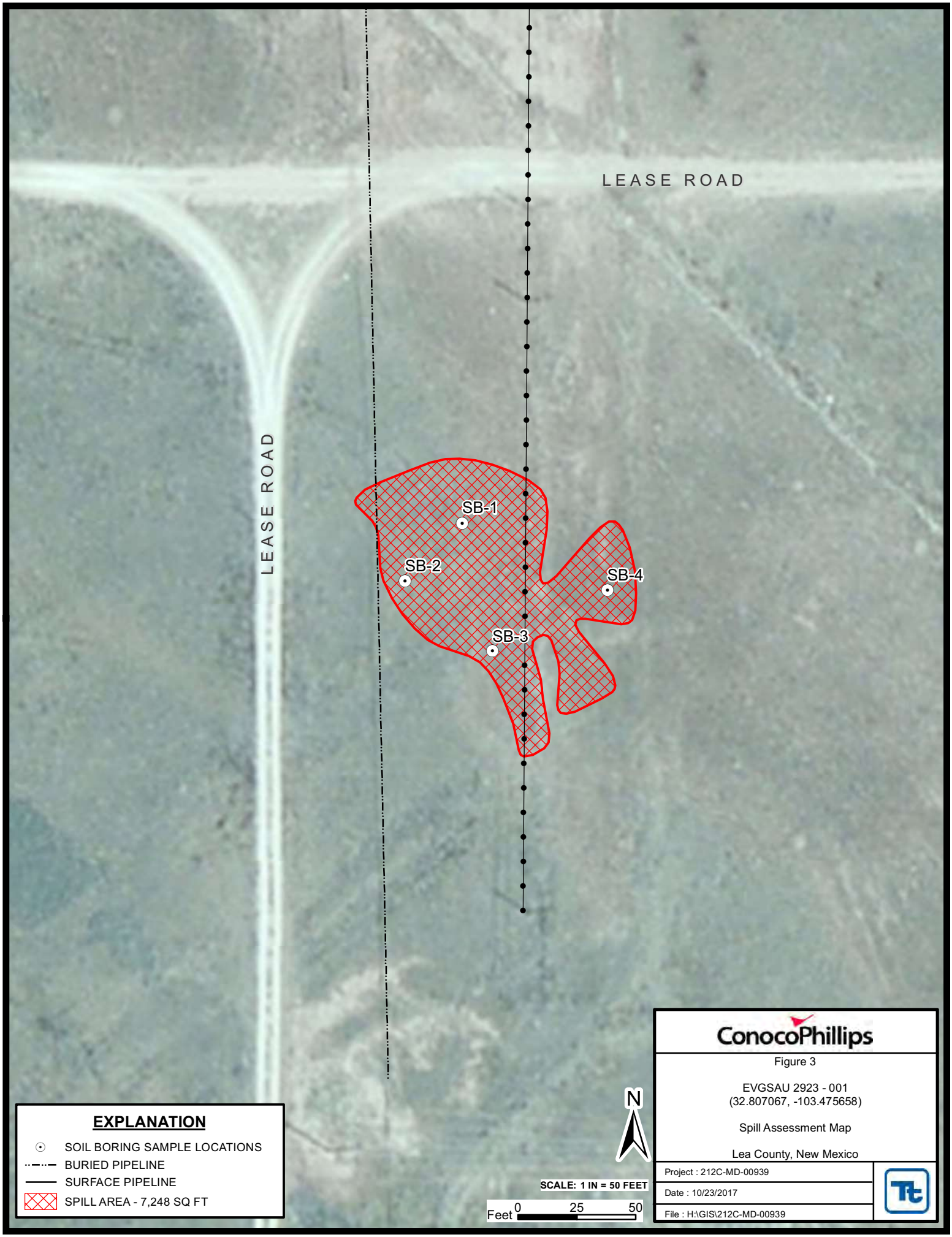
Figures

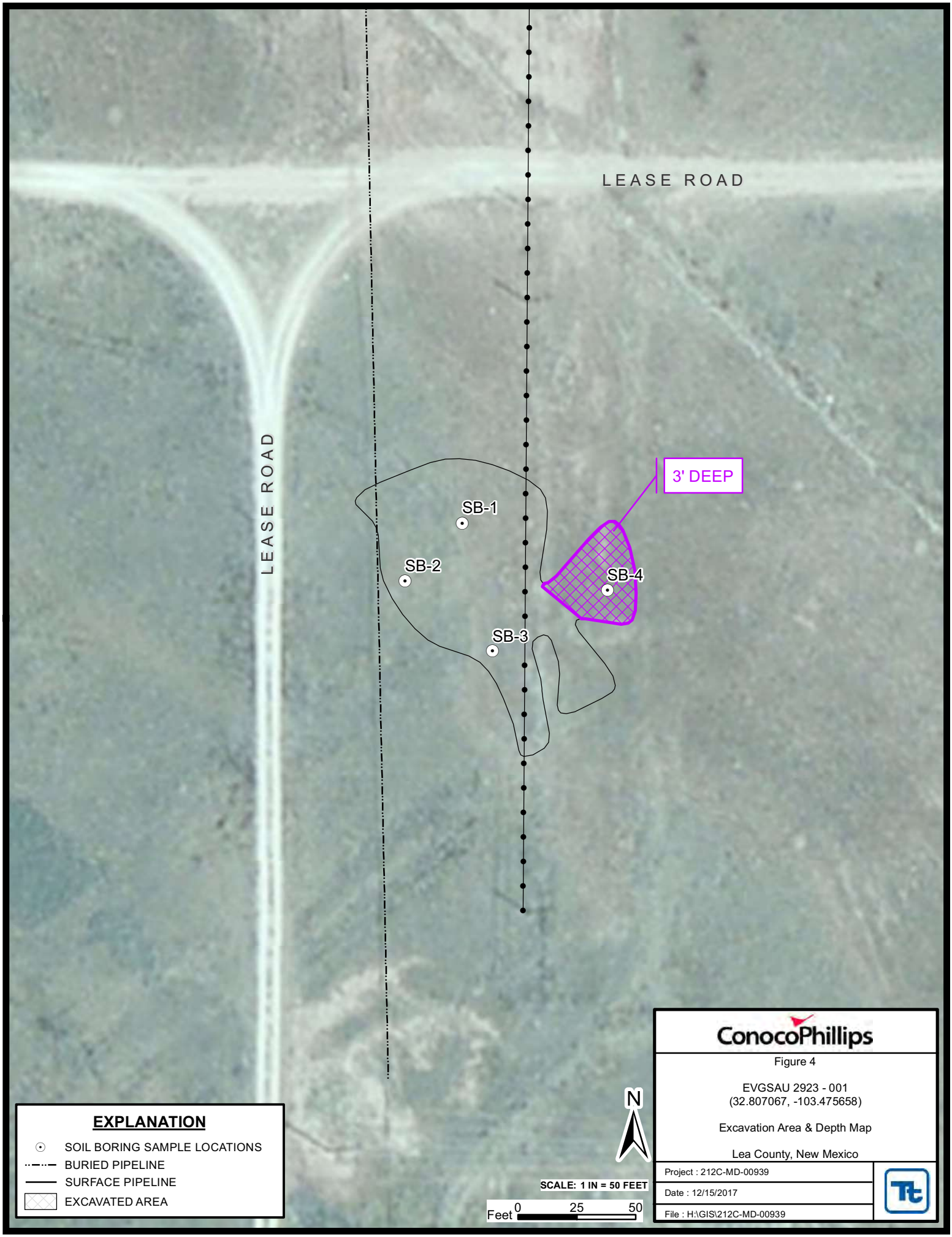


Mapped By: Isabel Marmolejo



Mapped By: Isabel Marmolejo


LEASE ROAD
LEASE ROAD
SB-1
SB-2
SB-3
SB-4
EXPLANATION
SOIL BORING SAMPLE LOCATIONS
BURIED PIPELINE
SURFACE PIPELINE
SPILL AREA - 7,248 SQ FT
N
SCALE: 1 IN = 50 FEET
Feet 0 25 50
ConocoPhillips
Figure 3
EVGSAU 2923 - 001
(32.807067, -103.475658)
Spill Assessment Map
Lea County, New Mexico
Project : 212C-MD-00939
Date : 10/23/2017
File : H:\GIS\212C-MD-00939
Mapped By: Isabel Marmolejo


LEASE ROAD
LEASE ROAD
3' DEEP
SB-1
SB-2
SB-3
SB-4
EXPLANATION
SOIL BORING SAMPLE LOCATIONS
BURIED PIPELINE
SURFACE PIPELINE
EXCAVATED AREA
N
SCALE: 1 IN = 50 FEET
Feet 0 25 50
ConocoPhillips
Figure 4
EVGSAU 2923 - 001
(32.807067, -103.475658)
Excavation Area & Depth Map
Lea County, New Mexico
Project : 212C-MD-00939
Date : 12/15/2017
File : H:\GIS\212C-MD-00939
Mapped By: Isabel Marmolejo

Tables

Table 1
ConocoPhillips
EVGSAU 2923-001
Lea County, New Mexico

Sample ID	Sample Date	Sample Depth (ft)	Soil Status			TPH				BTEX					
			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)	Chlorides (mg/kg)
SB-1 - Cuttings	08/07/17	0-1	X		0.4	<11.8	<11.7	<11.7	<11.8	<5.9	<5.9	<5.9	<5.9	<5.9	232
Cuttings	"	2-3	X		0.1	<11.2	<10.6	<10.6	<11.2	<5.5	<5.5	<5.5	<5.5	<5.5	196
Cuttings	"	4-5	X		0.1	-	-	-	-	-	-	-	-	-	<101
Cuttings	"	6-7	X		0.1	-	-	-	-	-	-	-	-	-	<101
Cuttings	"	9-10	X		0.1	<10.8	<10.7	<10.7	<10.8	<5.5	<5.5	<5.5	<5.5	<5.5	<109
SB-2 - Cuttings	08/07/17	0-1	X		0.1	<10.4	<10.2	<10.2	<10.4	<5.2	<5.2	<5.2	<5.2	<5.2	123
Cuttings	"	2-3	X		0.0	<11.2	<10.9	<10.9	<10.9	<5.7	<5.7	<5.7	<5.7	<5.7	<115
Cuttings	"	4-5	X		0.0	-	-	-	-	-	-	-	-	-	<99.0
Cuttings	"	6-7	X		0.0	-	-	-	-	-	-	-	-	-	<100
Cuttings	"	9-10	X		0.0	<10.6	<10.3	<10.3	<10.6	<5.4	<5.4	<5.4	<5.4	<5.4	<103
SB-3 - Cuttings	08/08/17	0-1	X		0.4	<10.6	<10.6	<10.6	<10.6	<5.4	<5.4	<5.4	<5.4	<5.4	657
Cuttings	"	2-3	X		0.0	<12.3	<12.1	<12.1	<12.3	<6.2	<6.2	<6.2	<6.2	<6.2	255
Cuttings	"	4-5	X		0.0	-	-	-	-	-	-	-	-	-	<100
Cuttings	"	6-7	X		0.0	-	-	-	-	-	-	-	-	-	<94.5
Cuttings	"	9-10	X		0.0	-	-	-	-	-	-	-	-	-	<98.2
Cuttings	"	14-15	X		0.0	<11.7	<11.7	<11.7	<11.7	<5.9	<5.9	<5.9	<5.9	<5.9	<119
SB-4 - Cuttings	08/08/17	0-1	X		0.3	-	-	-	-	-	-	-	-	-	2,870
Cuttings	"	2-3	X		79.6	-	<12.2	<12.2	<12.2	<6.3	<6.3	<6.3	<6.3	<6.3	2,320
Cuttings	"	4-5	X		54.8	-	-	-	-	-	-	-	-	-	2,580
Cuttings	"	6-7	X		56.3	-	-	-	-	-	-	-	-	-	1,400
Cuttings	"	9-10	X		52.3	-	-	-	-	-	-	-	-	-	930
Cuttings	"	14-15	X		48.0	-	-	-	-	-	-	-	-	-	358
Cuttings	"	19-20	X		50.4	<12.5	<12.4	<12.4	<12.5	<6.2	<6.2	<6.2	<6.2	<6.2	253
Cuttings	"	24-25	X		50.7	-	-	-	-	-	-	-	-	-	<97.8
Cuttings	"	29-30	X		32.2	<13.7	<13.6	<13.6	<13.6	<6.7	<6.7	<6.7	<6.7	<6.7	<133

(-) Not Analyzed
Proposed Excavation Depths
Liner Installation

Photos

ConocoPhillips
EVGSAU 2923-001
Lea County, New Mexico

View Southeast Area of SB-1

View Northeast– Area of SB-2

ConocoPhillips
EVGSAU 2923-001
Lea County, New Mexico

View Northeast– Area of SB-3

View Northwest– Area of SB-4

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: **Cullen**
Address: **29 Vacuum Complex Lane**	Telephone No. **575-391-3133**
Facility Name: **EVGSAU 2923-001**	Facility Type: **Flow line**

Surface Owner: State	Mineral Owner: N/A	API No. 30-025-26577

LOCATION OF RELEASE

Unit Letter	Section	Township	Range	Feet from the	North/South Line	Feet from the	East/West Line	County
G	29	17S	35E					**Lea**

Latitude 32.8096695 **Longitude** -103.475914

NATURE OF RELEASE

Type of Release: **Oil/Produced Water**	Volume of Release: 21.03	Volume Recovered: 15 BBL
Source of Release: **Flow line**	Date and Hour of Occurrence **1-17-2017 10:30 AM**	Date and Hour of Discovery **1-18-2017 10:30 AM**
Was Immediate Notice Given? ☒ Yes ☐ No ☐ Not Required	If YES, To Whom? Kristen Lynch	
By Whom? **Cullen Rosine**	Date and Hour: **1-19-2017 via phone/email**	
Was a Watercourse Reached? ☐ Yes ☒ No	If YES, Volume Impacting the Watercourse.	

RECEIVED
By Olivia Yu at 12:14 pm, Feb 09, 2017

If a Watercourse was Impacted, Describe Fully.*

N/A

Describe Cause of Problem and Remedial Action Taken. On January 18, 2017 at 1030 hours there was a total discharge of 21.03 BBLs from a flow line. 1 BBL of oil and 20.03 BPW. 15 BBLs were recovered. Spill site will be remediated per NMOCD guidelines.

Describe Area Affected and Cleanup Action Taken. *
Area 1 – 130' X520' X 1" 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.

Signature: *Cullen Rosine*

Printed Name: Cullen Rosine

Title: HSE Specialist

E-mail Address: **Cullen.J.Rosine@conocophillips.com**

Date: 01/19/2016 Phone: 575-391-3133

OIL CONSERVATION DIVISION

Approved by Environmental Specialist:

Approval Date: 2/9/2017 Expiration Date:

Conditions of Approval:

see attached directive

Attached ☑

* Attach Additional Sheets If Necessary

1RP-4593

nOY1704044285

pOY1704044501

Appendix B

Water Well Data
Average Depth to Groundwater (ft)
Conoco Phillips - EVGSAU 2923-001
Lea County, New Mexico

16 South 34 East

6	5	4	3	2	1
7	8 Artesia	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

16 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

16 South 36 East

6	5	4	3	2	1
7	8	9 Lovington	10	11	12
18 54	17	16	15	14	13
19	20 70	21 70	22 63 63	23 70 61	24 55
30 82	29	28	27	26 63	25 68
31 74	32 65	33	34	35 41	36 60

17 South 34 East

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

17 South 35 East

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

17 South 36 East

6 50	5	4 65	3 60	2 60 69	1 83 74
7	8	9	10 43	11	12 44 46
18	17	16	15	14 48	13
19	20	21	22	23	24
30	29	28	27	26	25
31	32	33	34	35	36

18 South 34 East

6 130	5 105	4	3 87	2 102	1 107
7 83	8 148	9	10 148	11 110	12 115 92
18 125	17	16 108	15 114 110	14 103	13 96
19 105	20 125	21	22	23	24
30	29	28	27 112	26	25 117
31	32	33	34	35 118	36

18 South 35 East

6 89 Buckeye	5 69	4 58	3 62	2 55 51	1
7 85	8	9 72	10 49	11 59 48	12
18 90	17 90 124	16 75	15	14 90	13 135
19 74 70	20 85 50	21	22 70	23	24
30	29 95	28	27 68	26 60	25
31	32 58	33 80	34	35 58	36

18 South 36 East

6 45	5 35	4 65	3	2 60	1 50
7 65	8	9 85	10	11 38	12 40
18 25	17	16	15 53	14 55	13
19	20 59	21 58	22 60	23 39	24 28
30	29 55	28 45	27 55	26 55	25 62
31	32	33	34 70	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 Code	Sub-basin	County	Q 64	Q 16	Q 4	Sec	Tws	Rng	X	Y	Depth Well	Depth Water	Water Column
L 01919 POD2		L	LE	1	1	2	29	17S	35E	642410	3631507*	209	55	154
L 04829 S4		L	LE		2	3	29	17S	35E	642121	3630598*	200	90	110

Average Depth to Water: **72 feet**

Minimum Depth: **55 feet**

Maximum Depth: **90 feet**

Record Count: 2

PLSS Search:

Section(s): 29 Township: 17S Range: 35E

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

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 Code	Sub-basin	County	Q 64	Q 16	Q 4	Sec	Tws	Rng	X	Y	Depth Well	Depth Water	Water Column
L 01694 POD1		L	LE	4	4	2	22	17S	35E	646220	3632554*	105	48	57
L 01919 POD2		L	LE	1	1	2	29	17S	35E	642410	3631507*	209	55	154
L 02101		L	LE		3	3	09	17S	35E	643261	3635044*	112	67	45
L 02341		L	LE	1	4	2	03	17S	35E	646040	3637535	80	48	32
L 02834		L	LE		2	2	18	17S	35E	641253	3634622*	100	40	60
L 02943		L	LE	4	1	1	20	17S	35E	641780	3632913*	110	60	50
L 03059		L	LE		1	1	11	17S	35E	646465	3636286*	128	75	53
L 03873		L	LE	3	2	1	31	17S	35E	640421	3629674*	230	88	142
L 03874		L	LE	3	1	2	31	17S	35E	640823	3629678*	229	90	139
L 03875		L	LE	3	3	4	30	17S	35E	640818	3630082*	147		
L 03875 POD6		L	LE		3	4	30	17S	35E	640919	3630183*	140	104	36
L 03875 POD7		L	LE		3	4	30	17S	35E	640919	3630183*	140	104	36
L 03875 POD8		L	LE		3	4	30	17S	35E	640919	3630183*	140	104	36
L 03875 S	R	L	LE		3	4	30	17S	35E	640919	3630183*	120	96	24
L 03875 S2	R	L	LE			2	31	17S	35E	641131	3629576*	120	95	25
L 03875 S3	R	L	LE		3	4	30	17S	35E	640919	3630183*	120	95	25
L 03875 S4		L	LE			2	31	17S	35E	641131	3629576*	120		
L 03876		L	LE	3	3	4	30	17S	35E	640818	3630082*	141		
L 03992		L	LE	3	2	2	28	17S	35E	644426	3631327*	125	65	60
L 04066		L	LE		4	2	30	17S	35E	641309	3630994*	116	70	46
L 04247 POD5		L	LE	3	1	3	31	17S	35E	640040	3628781	235	95	140
L 04247 POD6		L	LE	2	1	3	31	17S	35E	640299	3629074	232	117	115
L 04247 POD7		L	LE	1	3	3	31	17S	35E	640054	3628747		240	
L 04287		L	LE		2	1	25	17S	35E	648559	3631469*	105	80	25
L 04490		L	LE		4	2	30	17S	35E	641309	3630994*	110	70	40
L 04503		L	LE			2	24	17S	35E	649145	3632884*	90	43	47

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

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

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

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

(NAD83 UTM in meters)

(In feet)

POD Number	POD Sub-basin Code	County	Q 64	Q 16	Q 4	Sec	Tws	Rng	X	Y	Depth Well	Depth Water	Water Column
L 04553	L	LE	1	1	3	36	17S	35E	648093	3629147*	110	60	50
L 04578	L	LE				33	17S	35E	643962	3629198*	126	60	66
L 04586	L	LE	3	3	4	33	17S	35E	644065	3628502*	125	50	75
L 04603	L	LE		3	1	36	17S	35E	648188	3629450*	120	40	80
L 04618	L	LE		3	3	34	17S	35E	644973	3628611*	128	55	73
L 04632	L	LE		3	2	35	17S	35E	647382	3629443*	130	40	90
L 04633	L	LE		2	4	33	17S	35E	644564	3629010*	130	65	65
L 04710	L	LE				36	17S	35E	648803	3629248*	121	50	71
L 04727	L	LE				34	17S	35E	645576	3629214*	120	45	75
L 04775	L	LE		4	1	34	17S	35E	645365	3629421*	133	68	65
L 04793	L	LE				34	17S	35E	645576	3629214*	150	50	100
L 04829	L	LE		1	4	20	17S	35E	642499	3632215*	192	60	132
L 04829 POD7	L	LE	3	3	3	19	17S	35E	640012	3631688*	210	70	140
L 04829 S	L	LE		3	4	32	17S	35E	642554	3628586*	198	85	113
L 04829 S2	L	LE		4	3	27	17S	35E	645352	3630227*	220	90	130
L 04829 S3	L	LE	1	3	1	28	17S	35E	643222	3631111*	215	70	145
L 04829 S4	L	LE		2	3	29	17S	35E	642121	3630598*	200	90	110
L 04829 S5	L	LE		3	1	33	17S	35E	643347	3629400*	220	90	130
L 04859	L	LE	4	4	4	27	17S	35E	646258	3630135*	145	85	60
L 04875	L	LE	1	1	2	25	17S	35E	648863	3631572*	130	71	59
L 04880	L	LE		2	3	33	17S	35E	643757	3629002*	145	90	55
L 04881	L	LE		1	3	26	17S	35E	646556	3630644*	137	50	87
L 04951	L	LE	2	2	2	26	17S	35E	647851	3631560*	137	50	87
L 05207	L	LE				27	17S	35E	645552	3630825*	140	60	80
L 05249 X2	L	LE	4	1	3	24	17S	35E	648242	3632170*	105	85	20
L 05362	L	LE	3	4	4	28	17S	35E	644444	3630117*	140	80	60
L 05381	L	LE	3	3	3	23	17S	35E	646436	3631752*	95	45	50
L 05392	L	LE		1	3	30	17S	35E	640132	3630579*	145	80	65
L 05394	L	LE	3	2	4	35	17S	35E	647690	3628943*	120	62	58

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

(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 Code	Sub-basin	County	Q 64	Q 16	Q 4	Sec	Tws	Rng	X	Y	Depth Well	Depth Water	Water Column
L 05394 S		L	LE	3	1	3	36	17S	35E	648093	3628947*	130	55	75
L 05439		L	LE	2	3	3	19	17S	35E	640212	3631888*	135	85	50
L 05514		L	LE		2	2	12	17S	35E	649291	3636316*	124	80	44
L 05744		L	LE	3	3	2	30	17S	35E	640806	3630889*	122	75	47
L 05834	R	L	LE	2	2	4	33	17S	35E	644663	3629109*	160	70	90
L 05834 POD5		L	LE	2	2	4	33	17S	35E	644663	3629109*	234	65	169
L 05834 POD6		L	LE	1	1	4	34	17S	35E	645673	3629122*	234	65	169
L 05834 POD7		L	LE	1	1	3	35	17S	35E	646481	3629131*	220	64	156
L 05834 POD8		L	LE	4	1	4	36	17S	35E	649102	3628955*	214	62	152
L 05850		L	LE	2	2	2	19	17S	35E	641377	3633109*	230		
L 06357		L	LE	1	1	1	06	17S	35E	639916	3637933*	220	80	140
L 06357 S		L	LE		1	1	30	17S	35E	640119	3631386*	163	85	78
L 06357 S2		L	LE	3	1	1	30	17S	35E	640018	3631285*	230	130	100
L 06878		L	LE		1	1	07	17S	35E	640045	3636225*	125	60	65
L 06940		L	LE	1	4	3	20	17S	35E	642001	3631907*	135	85	50
L 07012		L	LE	2	3	3	08	17S	35E	641749	3635127*	135	75	60
L 07024		L	LE	2	2	2	20	17S	35E	642988	3633124*	130	80	50
L 07380		L	LE	4	4	1	06	17S	35E	640416	3636630	152	80	72
L 07481		L	LE		3	3	30	17S	35E	640138	3630176*	145	105	40
L 07481 S		L	LE		3	3	30	17S	35E	640138	3630176*	200	80	120
L 07481 S	R	L	LE		3	3	30	17S	35E	640138	3630176*	200	80	120
L 07831		L	LE	4	1	1	03	17S	35E	644930	3637777*	161	75	86
L 09901		L	LE		4	3	23	17S	35E	646940	3631857*	120		
L 09953		L	LE	3	2	4	01	17S	35E	649177	3637021*	150	50	100
L 09998		L	LE		2	4	16	17S	35E	644489	3633847*	160	90	70
L 10062		L	LE		2	4	22	17S	35E	646127	3632252*	142	50	92
L 10067 POD1		L	LE			3	17	17S	35E	642088	3633892	175	55	120
L 10297		L	LE		1	1	34	17S	35E	644955	3629819*	150	42	108
L 10404		L	LE	4	4	4	34	17S	35E	646283	3628523*	115	115	0

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

(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 Code	Sub-basin	County	Q 64	Q 16	Q 4	Sec	Tws	Rng	X	Y	Depth Well	Depth Water	Water Column
L 13291 POD1		L	LE	2	4	3	07	17S	35E	640512	3635098	210	86	124
L 13479 POD1		L	LE	2	2	1	34	17S	35E	645495	3630015	80	70	10
L 13479 POD2		L	LE	2	2	1	34	17S	35E	645480	3629941	80	70	10
L 13479 POD3		L	LE	4	4	3	27	17S	35E	645448	3630066	76	70	6
L 13804 POD1		L	LE	2	2	1	31	17S	35E	640572	3629790	157	115	42
L 13804 POD2		L	LE	2	2	1	31	17S	35E	640532	3629826	130	115	15
L 14183 POD1		L	LE	3	2	2	31	17S	35E	641266	3629667	229	106	123
L 14183 POD2		L	LE	3	2	2	31	17S	35E	641304	3629691	227	105	122
L 14183 POD3		L	LE	3	2	2	31	17S	35E	641213	3629731	227	104	123

Average Depth to Water: **76 feet**

Minimum Depth: **40 feet**

Maximum Depth: **240 feet**

Record Count: 93

PLSS Search:

Township: 17S Range: 35E

Appendix C

Pace Analytical Services, LLC
400 West Bethany Drive - Suite 190
Allen, TX 75013
(972)727-1123

September 07, 2017

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

RE: Project: 212C-MD-00939/EVGSAU 2923-001
Pace Project No.: 7572004

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: Todd Wells, TetraTech

Pace Analytical Services, LLC
400 West Bethany Drive - Suite 190
Allen, TX 75013
(972)727-1123

CERTIFICATIONS

Project: 212C-MD-00939/EVGSAU 2923-001
Pace Project No.: 7572004

Kansas Certification IDs

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

REPORT OF LABORATORY ANALYSIS

Pace Analytical Services, LLC
400 West Bethany Drive - Suite 190
Allen, TX 75013
(972)727-1123

SAMPLE SUMMARY

Project: 212C-MD-00939/EVGSAU 2923-001
Pace Project No.: 7572004

Lab ID	Sample ID	Matrix	Date Collected	Date Received
7572004001	**EVGSAU 2923-001 SB-1 (0-1')**	Solid	08/07/17 00:01	08/15/17 08:50
7572004002	**EVGSAU 2923-001 SB-1 (2-3')**	Solid	08/07/17 00:01	08/15/17 08:50
7572004003	**EVGSAU 2923-001 SB-1 (4-5')**	Solid	08/07/17 00:01	08/15/17 08:50
7572004004	**EVGSAU 2923-001 SB-1 (6-7')**	Solid	08/07/17 00:01	08/15/17 08:50
7572004005	**EVGSAU 2923-001 SB-1 (9-10')**	Solid	08/07/17 00:01	08/15/17 08:50
7572004006	**EVGSAU 2923-001 SB-2 (0-1')**	Solid	08/07/17 00:01	08/15/17 08:50
7572004007	**EVGSAU 2923-001 SB-2 (2-3')**	Solid	08/07/17 00:01	08/15/17 08:50
7572004008	**EVGSAU 2923-001 SB-2 (4-5')**	Solid	08/07/17 00:01	08/15/17 08:50
7572004009	**EVGSAU 2923-001 SB-2 (6-7')**	Solid	08/07/17 00:01	08/15/17 08:50
7572004010	**EVGSAU 2923-001 SB-2 (9-10')**	Solid	08/07/17 00:01	08/15/17 08:50
7572004011	**EVGSAU 2923-001 SB-3 (0-1')**	Solid	08/08/17 09:30	08/15/17 08:50
7572004012	**EVGSAU 2923-001 SB-3 (2-3')**	Solid	08/08/17 09:30	08/15/17 08:50
7572004013	**EVGSAU 2923-001 SB-3 (4-5')**	Solid	08/08/17 09:30	08/15/17 08:50
7572004014	**EVGSAU 2923-001 SB-3 (6-7')**	Solid	08/08/17 09:30	08/15/17 08:50
7572004015	**EVGSAU 2923-001 SB-3 (9-10')**	Solid	08/08/17 09:30	08/15/17 08:50
7572004016	**EVGSAU 2923-001 SB-3 (14-15')**	Solid	08/08/17 09:30	08/15/17 08:50
7572004017	**EVGSAU 2923-001 SB-4 (0-1')**	Solid	08/08/17 09:30	08/15/17 08:50
7572004018	**EVGSAU 2923-001 SB-4 (2-3')**	Solid	08/08/17 09:30	08/15/17 08:50
7572004019	**EVGSAU 2923-001 SB-4 (4-5')**	Solid	08/08/17 09:30	08/15/17 08:50
7572004020	**EVGSAU 2923-001 SB-4 (6-7')**	Solid	08/08/17 09:30	08/15/17 08:50
7572004021	**EVGSAU 2923-001 SB-4 (9-10')**	Solid	08/07/17 09:30	08/15/17 08:50
7572004022	**EVGSAU 2923-001 SB-4 (14-15')**	Solid	08/07/17 09:30	08/15/17 08:50
7572004023	**EVGSAU 2923-001 SB-4 (19-20')**	Solid	08/07/17 09:30	08/15/17 08:50
7572004024	**EVGSAU 2923-001 SB-4 (24-25')**	Solid	08/07/17 09:30	08/15/17 08:50
7572004025	**EVGSAU 2923-001 SB-4 (29-30')**	Solid	08/07/17 09:30	08/15/17 08:50

Pace Analytical Services, LLC
400 West Bethany Drive - Suite 190
Allen, TX 75013
(972)727-1123

SAMPLE ANALYTE COUNT

Project: 212C-MD-00939/EVGSAU 2923-001
Pace Project No.: 7572004

Lab ID	Sample ID	Method	Analysts	Analytes Reported	Laboratory
7572004001	**EVGSAU 2923-001 SB-1 (0-1')**	EPA 8015B	AJM	4	PASI-K
		EPA 8015B	JTK	2	PASI-K
		EPA 8260	CJW	7	PASI-K
		ASTM D2974	DWC	1	PASI-K
		EPA 300.0	OL	1	PASI-K
7572004002	**EVGSAU 2923-001 SB-1 (2-3')**	EPA 8015B	AJM	4	PASI-K
		EPA 8015B	JTK	2	PASI-K
		EPA 8260	CJW	7	PASI-K
		ASTM D2974	DWC	1	PASI-K
		EPA 300.0	OL	1	PASI-K
7572004003	**EVGSAU 2923-001 SB-1 (4-5')**	EPA 300.0	OL	1	PASI-K
7572004004	**EVGSAU 2923-001 SB-1 (6-7')**	EPA 300.0	OL	1	PASI-K
7572004005	**EVGSAU 2923-001 SB-1 (9-10')**	EPA 8015B	AJM	4	PASI-K
		EPA 8015B	JTK	2	PASI-K
		EPA 8260	CJW	7	PASI-K
		ASTM D2974	DWC	1	PASI-K
		EPA 300.0	OL	1	PASI-K
7572004006	**EVGSAU 2923-001 SB-2 (0-1')**	EPA 8015B	AJM	4	PASI-K
		EPA 8015B	JTK	2	PASI-K
		EPA 8260	CJW	7	PASI-K
		ASTM D2974	DWC	1	PASI-K
		EPA 300.0	OL	1	PASI-K
7572004007	**EVGSAU 2923-001 SB-2 (2-3')**	EPA 8015B	AJM	4	PASI-K
		EPA 8015B	JTK	2	PASI-K
		EPA 8260	CJW	7	PASI-K
		ASTM D2974	DWC	1	PASI-K
		EPA 300.0	OL	1	PASI-K
7572004008	**EVGSAU 2923-001 SB-2 (4-5')**	EPA 300.0	OL	1	PASI-K
7572004009	**EVGSAU 2923-001 SB-2 (6-7')**	EPA 300.0	OL	1	PASI-K
7572004010	**EVGSAU 2923-001 SB-2 (9-10')**	EPA 8015B	AJM	4	PASI-K
		EPA 8015B	JTK	2	PASI-K
		EPA 8260	CJW	7	PASI-K
		ASTM D2974	DWC	1	PASI-K
		EPA 300.0	OL	1	PASI-K
7572004011	**EVGSAU 2923-001 SB-3 (0-1')**	EPA 8015B	AJM	4	PASI-K
		EPA 8015B	JTK	2	PASI-K
		EPA 8260	CJW	7	PASI-K

REPORT OF LABORATORY ANALYSIS

Pace Analytical Services, LLC
400 West Bethany Drive - Suite 190
Allen, TX 75013
(972)727-1123

SAMPLE ANALYTE COUNT

Project: 212C-MD-00939/EVGSAU 2923-001
Pace Project No.: 7572004

Lab ID	Sample ID	Method	Analysts	Analytes Reported	Laboratory
		ASTM D2974	DWC	1	PASI-K
		EPA 300.0	OL	1	PASI-K
7572004012	**EVGSAU 2923-001 SB-3 (2-3')**	EPA 8015B	AJM	4	PASI-K
		EPA 8015B	JTK	2	PASI-K
		EPA 8260	CJW	7	PASI-K
		ASTM D2974	DWC	1	PASI-K
		EPA 300.0	OL	1	PASI-K
7572004013	**EVGSAU 2923-001 SB-3 (4-5')**	EPA 300.0	OL	1	PASI-K
7572004014	**EVGSAU 2923-001 SB-3 (6-7')**	EPA 300.0	OL	1	PASI-K
7572004015	**EVGSAU 2923-001 SB-3 (9-10')**	EPA 300.0	OL	1	PASI-K
7572004016	**EVGSAU 2923-001 SB-3 (14-15')**	EPA 8015B	AJM	4	PASI-K
		EPA 8015B	JTK	2	PASI-K
		EPA 8260	CJW	7	PASI-K
		ASTM D2974	DWC	1	PASI-K
		EPA 300.0	OL	1	PASI-K
7572004017	**EVGSAU 2923-001 SB-4 (0-1')**	EPA 300.0	OL	1	PASI-K
7572004018	**EVGSAU 2923-001 SB-4 (2-3')**	EPA 8015B	AJM	4	PASI-K
		EPA 8260	CJW	7	PASI-K
		EPA 300.0	OL	1	PASI-K
7572004019	**EVGSAU 2923-001 SB-4 (4-5')**	EPA 300.0	OL	1	PASI-K
7572004020	**EVGSAU 2923-001 SB-4 (6-7')**	EPA 300.0	OL	1	PASI-K
7572004021	**EVGSAU 2923-001 SB-4 (9-10')**	EPA 300.0	OL	1	PASI-K
7572004022	**EVGSAU 2923-001 SB-4 (14-15')**	EPA 300.0	OL	1	PASI-K
7572004023	**EVGSAU 2923-001 SB-4 (19-20')**	EPA 8015B	AJM	4	PASI-K
		EPA 8015B	JTK	2	PASI-K
		EPA 8260	CJW	7	PASI-K
		ASTM D2974	DWC	1	PASI-K
		EPA 300.0	OL	1	PASI-K
7572004024	**EVGSAU 2923-001 SB-4 (24-25')**	EPA 300.0	OL	1	PASI-K
7572004025	**EVGSAU 2923-001 SB-4 (29-30')**	EPA 8015B	AJM	4	PASI-K
		EPA 8015B	JTK	2	PASI-K
		EPA 8260	CJW	7	PASI-K
		ASTM D2974	DWC	1	PASI-K
		EPA 300.0	OL	1	PASI-K

REPORT OF LABORATORY ANALYSIS

Pace Analytical Services, LLC
400 West Bethany Drive - Suite 190
Allen, TX 75013
(972)727-1123

ANALYTICAL RESULTS

Project: 212C-MD-00939/EVGSAU 2923-001
Pace Project No.: 7572004

Sample: EVGSAU 2923-001 SB-1 (0-1') **Lab ID: 7572004001** 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
8015B Diesel Range Organics	Analytical Method: EPA 8015B Preparation Method: EPA 3546							
TPH-DRO (C10-C28)	ND	mg/kg	11.7	1	08/21/17 07:51	08/23/17 03:02		
TPH-ORO (C28-C35)	ND	mg/kg	11.7	1	08/21/17 07:51	08/23/17 03:02		
Surrogates								
n-Tetracosane (S)	77	%	65-119	1	08/21/17 07:51	08/23/17 03:02	646-31-1	
p-Terphenyl (S)	76	%	41-131	1	08/21/17 07:51	08/23/17 03:02	92-94-4	
Gasoline Range Organics	Analytical Method: EPA 8015B Preparation Method: EPA 5035A/5030B							
TPH-GRO	ND	mg/kg	11.8	1	08/17/17 00:00	08/18/17 14:50		
Surrogates								
4-Bromofluorobenzene (S)	102	%	64-122	1	08/17/17 00:00	08/18/17 14:50	460-00-4	
8260/5035A Volatile Organics	Analytical Method: EPA 8260							
Benzene	ND	ug/kg	5.9	1		08/19/17 00:06	71-43-2	
Ethylbenzene	ND	ug/kg	5.9	1		08/19/17 00:06	100-41-4	
Toluene	ND	ug/kg	5.9	1		08/19/17 00:06	108-88-3	
Xylene (Total)	ND	ug/kg	5.9	1		08/19/17 00:06	1330-20-7	
Surrogates								
Toluene-d8 (S)	101	%	87-112	1		08/19/17 00:06	2037-26-5	
4-Bromofluorobenzene (S)	110	%	87-115	1		08/19/17 00:06	460-00-4	
1,2-Dichloroethane-d4 (S)	104	%	85-115	1		08/19/17 00:06	17060-07-0	
Percent Moisture	Analytical Method: ASTM D2974							
Percent Moisture	**15.3**	%	0.50	1		08/21/17 00:00		
300.0 IC Anions 28 Days	Analytical Method: EPA 300.0 Preparation Method: EPA 300.0							
Chloride	**232**	mg/kg	118	10	08/18/17 11:00	08/18/17 22:15	16887-00-6	

REPORT OF LABORATORY ANALYSIS

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ANALYTICAL RESULTS

Project: 212C-MD-00939/EVGSAU 2923-001
Pace Project No.: 7572004

Sample: EVGSAU 2923-001 SB-1 (2-3') **Lab ID: 7572004002** 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
8015B Diesel Range Organics	Analytical Method: EPA 8015B Preparation Method: EPA 3546							
TPH-DRO (C10-C28)	ND	mg/kg	10.6	1	08/21/17 07:51	08/23/17 03:12		
TPH-ORO (C28-C35)	ND	mg/kg	10.6	1	08/21/17 07:51	08/23/17 03:12		
Surrogates								
n-Tetracosane (S)	84	%	65-119	1	08/21/17 07:51	08/23/17 03:12	646-31-1	
p-Terphenyl (S)	82	%	41-131	1	08/21/17 07:51	08/23/17 03:12	92-94-4	
Gasoline Range Organics	Analytical Method: EPA 8015B Preparation Method: EPA 5035A/5030B							
TPH-GRO	ND	mg/kg	11.2	1	08/17/17 00:00	08/18/17 15:07		
Surrogates								
4-Bromofluorobenzene (S)	106	%	64-122	1	08/17/17 00:00	08/18/17 15:07	460-00-4	
8260/5035A Volatile Organics	Analytical Method: EPA 8260							
Benzene	ND	ug/kg	5.5	1		08/19/17 00:52	71-43-2	
Ethylbenzene	ND	ug/kg	5.5	1		08/19/17 00:52	100-41-4	
Toluene	ND	ug/kg	5.5	1		08/19/17 00:52	108-88-3	
Xylene (Total)	ND	ug/kg	5.5	1		08/19/17 00:52	1330-20-7	
Surrogates								
Toluene-d8 (S)	100	%	87-112	1		08/19/17 00:52	2037-26-5	
4-Bromofluorobenzene (S)	106	%	87-115	1		08/19/17 00:52	460-00-4	
1,2-Dichloroethane-d4 (S)	98	%	85-115	1		08/19/17 00:52	17060-07-0	
Percent Moisture	Analytical Method: ASTM D2974							
Percent Moisture	**10.5**	%	0.50	1		08/21/17 00:00		
300.0 IC Anions 28 Days	Analytical Method: EPA 300.0 Preparation Method: EPA 300.0							
Chloride	**196**	mg/kg	112	10	08/18/17 11:00	08/18/17 22:28	16887-00-6	

REPORT OF LABORATORY ANALYSIS

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ANALYTICAL RESULTS

Project: 212C-MD-00939/EVGSAU 2923-001
Pace Project No.: 7572004

Sample: EVGSAU 2923-001 SB-1 (4-5') **Lab ID: 7572004003** 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
300.0 IC Anions 28 Days	Analytical Method: EPA 300.0 Preparation Method: EPA 300.0							
Chloride	ND	mg/kg	101	10	08/18/17 11:00	08/18/17 22:41	16887-00-6	

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ANALYTICAL RESULTS

Project: 212C-MD-00939/EVGSAU 2923-001
Pace Project No.: 7572004

Sample: EVGSAU 2923-001 SB-1 (6-7') **Lab ID: 7572004004** 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
300.0 IC Anions 28 Days	Analytical Method: EPA 300.0 Preparation Method: EPA 300.0							
Chloride	ND	mg/kg	101	10	08/18/17 11:00	08/18/17 22:54	16887-00-6	

REPORT OF LABORATORY ANALYSIS

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ANALYTICAL RESULTS

Project: 212C-MD-00939/EVGSAU 2923-001
Pace Project No.: 7572004

Sample: EVGSAU 2923-001 SB-1 (9-10') **Lab ID: 7572004005** 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
8015B Diesel Range Organics	Analytical Method: EPA 8015B Preparation Method: EPA 3546							
TPH-DRO (C10-C28)	ND	mg/kg	10.7	1	08/21/17 07:51	08/23/17 03:21		
TPH-ORO (C28-C35)	ND	mg/kg	10.7	1	08/21/17 07:51	08/23/17 03:21		
Surrogates								
n-Tetracosane (S)	77	%	65-119	1	08/21/17 07:51	08/23/17 03:21	646-31-1	
p-Terphenyl (S)	75	%	41-131	1	08/21/17 07:51	08/23/17 03:21	92-94-4	
Gasoline Range Organics	Analytical Method: EPA 8015B Preparation Method: EPA 5035A/5030B							
TPH-GRO	ND	mg/kg	10.8	1	08/17/17 00:00	08/18/17 15:22		
Surrogates								
4-Bromofluorobenzene (S)	95	%	64-122	1	08/17/17 00:00	08/18/17 15:22	460-00-4	
8260/5035A Volatile Organics	Analytical Method: EPA 8260							
Benzene	ND	ug/kg	5.5	1		08/19/17 01:07	71-43-2	
Ethylbenzene	ND	ug/kg	5.5	1		08/19/17 01:07	100-41-4	
Toluene	ND	ug/kg	5.5	1		08/19/17 01:07	108-88-3	
Xylene (Total)	ND	ug/kg	5.5	1		08/19/17 01:07	1330-20-7	
Surrogates								
Toluene-d8 (S)	100	%	87-112	1		08/19/17 01:07	2037-26-5	
4-Bromofluorobenzene (S)	109	%	87-115	1		08/19/17 01:07	460-00-4	
1,2-Dichloroethane-d4 (S)	104	%	85-115	1		08/19/17 01:07	17060-07-0	
Percent Moisture	Analytical Method: ASTM D2974							
Percent Moisture	**8.1**	%	0.50	1		08/21/17 00:00		
300.0 IC Anions 28 Days	Analytical Method: EPA 300.0 Preparation Method: EPA 300.0							
Chloride	ND	mg/kg	109	10	08/18/17 11:00	08/18/17 23:07	16887-00-6	

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ANALYTICAL RESULTS

Project: 212C-MD-00939/EVGSAU 2923-001
Pace Project No.: 7572004

Sample: EVGSAU 2923-001 SB-2 (0-1') **Lab ID: 7572004006** 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
8015B Diesel Range Organics	Analytical Method: EPA 8015B Preparation Method: EPA 3546							
TPH-DRO (C10-C28)	ND	mg/kg	10.2	1	08/22/17 14:43	08/23/17 03:31		H2
TPH-ORO (C28-C35)	ND	mg/kg	10.2	1	08/22/17 14:43	08/23/17 03:31		H2
Surrogates								
n-Tetracosane (S)	73	%	65-119	1	08/22/17 14:43	08/23/17 03:31	646-31-1	
p-Terphenyl (S)	71	%	41-131	1	08/22/17 14:43	08/23/17 03:31	92-94-4	
Gasoline Range Organics	Analytical Method: EPA 8015B Preparation Method: EPA 5035A/5030B							
TPH-GRO	ND	mg/kg	10.4	1	08/17/17 00:00	08/18/17 15:37		
Surrogates								
4-Bromofluorobenzene (S)	89	%	64-122	1	08/17/17 00:00	08/18/17 15:37	460-00-4	
8260/5035A Volatile Organics	Analytical Method: EPA 8260							
Benzene	ND	ug/kg	5.2	1		08/19/17 01:23	71-43-2	
Ethylbenzene	ND	ug/kg	5.2	1		08/19/17 01:23	100-41-4	
Toluene	ND	ug/kg	5.2	1		08/19/17 01:23	108-88-3	
Xylene (Total)	ND	ug/kg	5.2	1		08/19/17 01:23	1330-20-7	
Surrogates								
Toluene-d8 (S)	97	%	87-112	1		08/19/17 01:23	2037-26-5	
4-Bromofluorobenzene (S)	108	%	87-115	1		08/19/17 01:23	460-00-4	
1,2-Dichloroethane-d4 (S)	104	%	85-115	1		08/19/17 01:23	17060-07-0	
Percent Moisture	Analytical Method: ASTM D2974							
Percent Moisture	**3.7**	%	0.50	1		08/21/17 00:00		
300.0 IC Anions 28 Days	Analytical Method: EPA 300.0 Preparation Method: EPA 300.0							
Chloride	**123**	mg/kg	102	10	08/18/17 11:00	08/18/17 23:33	16887-00-6	

REPORT OF LABORATORY ANALYSIS

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ANALYTICAL RESULTS

Project: 212C-MD-00939/EVGSAU 2923-001
Pace Project No.: 7572004

Sample: EVGSAU 2923-001 SB-2 (2-3') **Lab ID: 7572004007** 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
8015B Diesel Range Organics	Analytical Method: EPA 8015B Preparation Method: EPA 3546							
TPH-DRO (C10-C28)	ND	mg/kg	10.9	1	08/21/17 07:51	08/23/17 03:40		
TPH-ORO (C28-C35)	ND	mg/kg	10.9	1	08/21/17 07:51	08/23/17 03:40		
Surrogates								
n-Tetracosane (S)	89	%	65-119	1	08/21/17 07:51	08/23/17 03:40	646-31-1	
p-Terphenyl (S)	88	%	41-131	1	08/21/17 07:51	08/23/17 03:40	92-94-4	
Gasoline Range Organics	Analytical Method: EPA 8015B Preparation Method: EPA 5035A/5030B							
TPH-GRO	ND	mg/kg	11.2	1	08/17/17 00:00	08/18/17 15:54		
Surrogates								
4-Bromofluorobenzene (S)	88	%	64-122	1	08/17/17 00:00	08/18/17 15:54	460-00-4	
8260/5035A Volatile Organics	Analytical Method: EPA 8260							
Benzene	ND	ug/kg	5.7	1		08/19/17 01:38	71-43-2	
Ethylbenzene	ND	ug/kg	5.7	1		08/19/17 01:38	100-41-4	
Toluene	ND	ug/kg	5.7	1		08/19/17 01:38	108-88-3	
Xylene (Total)	ND	ug/kg	5.7	1		08/19/17 01:38	1330-20-7	
Surrogates								
Toluene-d8 (S)	99	%	87-112	1		08/19/17 01:38	2037-26-5	
4-Bromofluorobenzene (S)	104	%	87-115	1		08/19/17 01:38	460-00-4	
1,2-Dichloroethane-d4 (S)	100	%	85-115	1		08/19/17 01:38	17060-07-0	
Percent Moisture	Analytical Method: ASTM D2974							
Percent Moisture	**11.8**	%	0.50	1		08/21/17 00:00		
300.0 IC Anions 28 Days	Analytical Method: EPA 300.0 Preparation Method: EPA 300.0							
Chloride	ND	mg/kg	115	10	08/18/17 11:00	08/18/17 23:45	16887-00-6	

REPORT OF LABORATORY ANALYSIS

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ANALYTICAL RESULTS

Project: 212C-MD-00939/EVGSAU 2923-001
Pace Project No.: 7572004

Sample: EVGSAU 2923-001 SB-2 (4-5') **Lab ID: 7572004008** 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
300.0 IC Anions 28 Days	Analytical Method: EPA 300.0 Preparation Method: EPA 300.0							
Chloride	ND	mg/kg	99.0	10	08/18/17 11:00	08/19/17 00:24	16887-00-6	

REPORT OF LABORATORY ANALYSIS

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ANALYTICAL RESULTS

Project: 212C-MD-00939/EVGSAU 2923-001
Pace Project No.: 7572004

Sample: EVGSAU 2923-001 SB-2 (6-7') **Lab ID: 7572004009** 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
300.0 IC Anions 28 Days	Analytical Method: EPA 300.0 Preparation Method: EPA 300.0							
Chloride	ND	mg/kg	100	10	08/18/17 11:00	08/19/17 00:37	16887-00-6	

REPORT OF LABORATORY ANALYSIS

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ANALYTICAL RESULTS

Project: 212C-MD-00939/EVGSAU 2923-001
Pace Project No.: 7572004

Sample: EVGSAU 2923-001 SB-2 (9-10') **Lab ID: 7572004010** 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
8015B Diesel Range Organics	Analytical Method: EPA 8015B Preparation Method: EPA 3546							
TPH-DRO (C10-C28)	ND	mg/kg	10.3	1	08/21/17 07:51	08/23/17 03:50		
TPH-ORO (C28-C35)	ND	mg/kg	10.3	1	08/21/17 07:51	08/23/17 03:50		
Surrogates								
n-Tetracosane (S)	74	%	65-119	1	08/21/17 07:51	08/23/17 03:50	646-31-1	
p-Terphenyl (S)	72	%	41-131	1	08/21/17 07:51	08/23/17 03:50	92-94-4	
Gasoline Range Organics	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 16:09		
Surrogates								
4-Bromofluorobenzene (S)	88	%	64-122	1	08/17/17 00:00	08/18/17 16:09	460-00-4	
8260/5035A Volatile Organics	Analytical Method: EPA 8260							
Benzene	ND	ug/kg	5.4	1		08/21/17 16:28	71-43-2	
Ethylbenzene	ND	ug/kg	5.4	1		08/21/17 16:28	100-41-4	
Toluene	ND	ug/kg	5.4	1		08/21/17 16:28	108-88-3	
Xylene (Total)	ND	ug/kg	5.4	1		08/21/17 16:28	1330-20-7	
Surrogates								
Toluene-d8 (S)	97	%	87-112	1		08/21/17 16:28	2037-26-5	
4-Bromofluorobenzene (S)	108	%	87-115	1		08/21/17 16:28	460-00-4	
1,2-Dichloroethane-d4 (S)	98	%	85-115	1		08/21/17 16:28	17060-07-0	
Percent Moisture	Analytical Method: ASTM D2974							
Percent Moisture	**6.9**	%	0.50	1		08/21/17 00:00		
300.0 IC Anions 28 Days	Analytical Method: EPA 300.0 Preparation Method: EPA 300.0							
Chloride	ND	mg/kg	103	10	08/18/17 11:00	08/19/17 00:50	16887-00-6	

REPORT OF LABORATORY ANALYSIS

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ANALYTICAL RESULTS

Project: 212C-MD-00939/EVGSAU 2923-001
Pace Project No.: 7572004

Sample: EVGSAU 2923-001 SB-3 (0-1') **Lab ID: 7572004011** Collected: 08/08/17 09:30 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
8015B Diesel Range Organics	Analytical Method: EPA 8015B Preparation Method: EPA 3546							
TPH-DRO (C10-C28)	ND	mg/kg	10.6	1	08/22/17 08:15	08/23/17 19:47		
TPH-ORO (C28-C35)	ND	mg/kg	10.6	1	08/22/17 08:15	08/23/17 19:47		
Surrogates								
n-Tetracosane (S)	84	%	65-119	1	08/22/17 08:15	08/23/17 19:47	646-31-1	
p-Terphenyl (S)	82	%	41-131	1	08/22/17 08:15	08/23/17 19:47	92-94-4	
Gasoline Range Organics	Analytical Method: EPA 8015B Preparation Method: EPA 5035A/5030B							
TPH-GRO	ND	mg/kg	10.6	1	08/20/17 00:00	08/21/17 17:19		
Surrogates								
4-Bromofluorobenzene (S)	93	%	64-122	1	08/20/17 00:00	08/21/17 17:19	460-00-4	
8260/5035A Volatile Organics	Analytical Method: EPA 8260							
Benzene	ND	ug/kg	5.4	1		08/22/17 06:28	71-43-2	
Ethylbenzene	ND	ug/kg	5.4	1		08/22/17 06:28	100-41-4	
Toluene	ND	ug/kg	5.4	1		08/22/17 06:28	108-88-3	
Xylene (Total)	ND	ug/kg	5.4	1		08/22/17 06:28	1330-20-7	
Surrogates								
Toluene-d8 (S)	97	%	87-112	1		08/22/17 06:28	2037-26-5	
4-Bromofluorobenzene (S)	105	%	87-115	1		08/22/17 06:28	460-00-4	
1,2-Dichloroethane-d4 (S)	104	%	85-115	1		08/22/17 06:28	17060-07-0	
Percent Moisture	Analytical Method: ASTM D2974							
Percent Moisture	**6.3**	%	0.50	1		08/22/17 00:00		
300.0 IC Anions 28 Days	Analytical Method: EPA 300.0 Preparation Method: EPA 300.0							
Chloride	**657**	mg/kg	105	10	08/18/17 11:00	08/19/17 01:03	16887-00-6	

REPORT OF LABORATORY ANALYSIS

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ANALYTICAL RESULTS

Project: 212C-MD-00939/EVGSAU 2923-001
Pace Project No.: 7572004

Sample: EVGSAU 2923-001 SB-3 (2-3') **Lab ID: 7572004012** Collected: 08/08/17 09:30 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
8015B Diesel Range Organics	Analytical Method: EPA 8015B Preparation Method: EPA 3546							
TPH-DRO (C10-C28)	ND	mg/kg	12.1	1	08/22/17 08:15	08/23/17 20:16		
TPH-ORO (C28-C35)	ND	mg/kg	12.1	1	08/22/17 08:15	08/23/17 20:16		
Surrogates								
n-Tetracosane (S)	77	%	65-119	1	08/22/17 08:15	08/23/17 20:16	646-31-1	
p-Terphenyl (S)	80	%	41-131	1	08/22/17 08:15	08/23/17 20:16	92-94-4	
Gasoline Range Organics	Analytical Method: EPA 8015B Preparation Method: EPA 5035A/5030B							
TPH-GRO	ND	mg/kg	12.3	1	08/20/17 00:00	08/21/17 17:35		
Surrogates								
4-Bromofluorobenzene (S)	87	%	64-122	1	08/20/17 00:00	08/21/17 17:35	460-00-4	
8260/5035A Volatile Organics	Analytical Method: EPA 8260							
Benzene	ND	ug/kg	6.2	1		08/22/17 06:43	71-43-2	
Ethylbenzene	ND	ug/kg	6.2	1		08/22/17 06:43	100-41-4	
Toluene	ND	ug/kg	6.2	1		08/22/17 06:43	108-88-3	
Xylene (Total)	ND	ug/kg	6.2	1		08/22/17 06:43	1330-20-7	
Surrogates								
Toluene-d8 (S)	100	%	87-112	1		08/22/17 06:43	2037-26-5	
4-Bromofluorobenzene (S)	106	%	87-115	1		08/22/17 06:43	460-00-4	
1,2-Dichloroethane-d4 (S)	99	%	85-115	1		08/22/17 06:43	17060-07-0	
Percent Moisture	Analytical Method: ASTM D2974							
Percent Moisture	**18.2**	%	0.50	1		08/22/17 00:00		
300.0 IC Anions 28 Days	Analytical Method: EPA 300.0 Preparation Method: EPA 300.0							
Chloride	**255**	mg/kg	123	10	08/18/17 11:00	08/19/17 01:16	16887-00-6	

REPORT OF LABORATORY ANALYSIS

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ANALYTICAL RESULTS

Project: 212C-MD-00939/EVGSAU 2923-001
Pace Project No.: 7572004

Sample: EVGSAU 2923-001 SB-3 (4-5') **Lab ID: 7572004013** Collected: 08/08/17 09:30 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
300.0 IC Anions 28 Days	Analytical Method: EPA 300.0 Preparation Method: EPA 300.0							
Chloride	ND	mg/kg	100	10	08/18/17 11:00	08/19/17 01:29	16887-00-6	

REPORT OF LABORATORY ANALYSIS

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ANALYTICAL RESULTS

Project: 212C-MD-00939/EVGSAU 2923-001
Pace Project No.: 7572004

Sample: EVGSAU 2923-001 SB-3 (6-7') **Lab ID: 7572004014** Collected: 08/08/17 09:30 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
300.0 IC Anions 28 Days	Analytical Method: EPA 300.0 Preparation Method: EPA 300.0							
Chloride	ND	mg/kg	94.5	10	08/18/17 11:00	08/19/17 01:42	16887-00-6	

REPORT OF LABORATORY ANALYSIS

Pace Analytical Services, LLC
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ANALYTICAL RESULTS

Project: 212C-MD-00939/EVGSAU 2923-001
Pace Project No.: 7572004

Sample: EVGSAU 2923-001 SB-3 (9-10') **Lab ID: 7572004015** Collected: 08/08/17 09:30 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
300.0 IC Anions 28 Days	Analytical Method: EPA 300.0 Preparation Method: EPA 300.0							
Chloride	ND	mg/kg	98.2	10	08/18/17 11:00	08/19/17 01:55	16887-00-6	

REPORT OF LABORATORY ANALYSIS

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ANALYTICAL RESULTS

Project: 212C-MD-00939/EVGSAU 2923-001
Pace Project No.: 7572004

Sample: EVGSAU 2923-001 SB-3 (14-15') **Lab ID: 7572004016** Collected: 08/08/17 09:30 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
8015B Diesel Range Organics	Analytical Method: EPA 8015B Preparation Method: EPA 3546							
TPH-DRO (C10-C28)	ND	mg/kg	11.7	1	08/22/17 08:15	08/23/17 20:26		
TPH-ORO (C28-C35)	ND	mg/kg	11.7	1	08/22/17 08:15	08/23/17 20:26		
Surrogates								
n-Tetracosane (S)	85	%	65-119	1	08/22/17 08:15	08/23/17 20:26	646-31-1	
p-Terphenyl (S)	82	%	41-131	1	08/22/17 08:15	08/23/17 20:26	92-94-4	
Gasoline Range Organics	Analytical Method: EPA 8015B Preparation Method: EPA 5035A/5030B							
TPH-GRO	ND	mg/kg	11.7	1	08/20/17 00:00	08/21/17 17:50		
Surrogates								
4-Bromofluorobenzene (S)	92	%	64-122	1	08/20/17 00:00	08/21/17 17:50	460-00-4	
8260/5035A Volatile Organics	Analytical Method: EPA 8260							
Benzene	ND	ug/kg	5.9	1		08/22/17 06:59	71-43-2	
Ethylbenzene	ND	ug/kg	5.9	1		08/22/17 06:59	100-41-4	
Toluene	ND	ug/kg	5.9	1		08/22/17 06:59	108-88-3	
Xylene (Total)	ND	ug/kg	5.9	1		08/22/17 06:59	1330-20-7	
Surrogates								
Toluene-d8 (S)	99	%	87-112	1		08/22/17 06:59	2037-26-5	
4-Bromofluorobenzene (S)	99	%	87-115	1		08/22/17 06:59	460-00-4	
1,2-Dichloroethane-d4 (S)	101	%	85-115	1		08/22/17 06:59	17060-07-0	
Percent Moisture	Analytical Method: ASTM D2974							
Percent Moisture	**14.8**	%	0.50	1		08/22/17 00:00		
300.0 IC Anions 28 Days	Analytical Method: EPA 300.0 Preparation Method: EPA 300.0							
Chloride	ND	mg/kg	119	10	08/18/17 11:24	08/18/17 14:05	16887-00-6	M1

REPORT OF LABORATORY ANALYSIS

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ANALYTICAL RESULTS

Project: 212C-MD-00939/EVGSAU 2923-001
Pace Project No.: 7572004

Sample: EVGSAU 2923-001 SB-4 (0-1') **Lab ID: 7572004017** Collected: 08/08/17 09:30 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
300.0 IC Anions 28 Days	Analytical Method: EPA 300.0 Preparation Method: EPA 300.0							
Chloride	**2870**	mg/kg	196	20	08/18/17 11:24	08/19/17 08:49	16887-00-6	

REPORT OF LABORATORY ANALYSIS

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ANALYTICAL RESULTS

Project: 212C-MD-00939/EVGSAU 2923-001
Pace Project No.: 7572004

Sample: EVGSAU 2923-001 SB-4 (2-3') **Lab ID: 7572004018** Collected: 08/08/17 09:30 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
8015B Diesel Range Organics	Analytical Method: EPA 8015B Preparation Method: EPA 3546							
TPH-DRO (C10-C28)	ND	mg/kg	12.2	1	08/22/17 08:15	08/23/17 20:35		
TPH-ORO (C28-C35)	ND	mg/kg	12.2	1	08/22/17 08:15	08/23/17 20:35		
Surrogates								
n-Tetracosane (S)	70	%	65-119	1	08/22/17 08:15	08/23/17 20:35	646-31-1	
p-Terphenyl (S)	73	%	41-131	1	08/22/17 08:15	08/23/17 20:35	92-94-4	
8260/5035A Volatile Organics	Analytical Method: EPA 8260							
Benzene	ND	ug/kg	6.3	1		08/22/17 07:14	71-43-2	
Ethylbenzene	ND	ug/kg	6.3	1		08/22/17 07:14	100-41-4	
Toluene	ND	ug/kg	6.3	1		08/22/17 07:14	108-88-3	
Xylene (Total)	ND	ug/kg	6.3	1		08/22/17 07:14	1330-20-7	
Surrogates								
Toluene-d8 (S)	101	%	87-112	1		08/22/17 07:14	2037-26-5	
4-Bromofluorobenzene (S)	96	%	87-115	1		08/22/17 07:14	460-00-4	
1,2-Dichloroethane-d4 (S)	103	%	85-115	1		08/22/17 07:14	17060-07-0	
300.0 IC Anions 28 Days	Analytical Method: EPA 300.0 Preparation Method: EPA 300.0							
Chloride	**2320**	mg/kg	124	10	08/18/17 11:24	08/18/17 14:56	16887-00-6	

REPORT OF LABORATORY ANALYSIS

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ANALYTICAL RESULTS

Project: 212C-MD-00939/EVGSAU 2923-001
Pace Project No.: 7572004

Sample: EVGSAU 2923-001 SB-4 (4-5') **Lab ID: 7572004019** Collected: 08/08/17 09:30 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
300.0 IC Anions 28 Days	Analytical Method: EPA 300.0 Preparation Method: EPA 300.0							
Chloride	**2580**	mg/kg	200	20	08/18/17 11:24	08/19/17 09:02	16887-00-6	

REPORT OF LABORATORY ANALYSIS

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ANALYTICAL RESULTS

Project: 212C-MD-00939/EVGSAU 2923-001
Pace Project No.: 7572004

Sample: EVGSAU 2923-001 SB-4 (6-7') **Lab ID: 7572004020** Collected: 08/08/17 09:30 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
300.0 IC Anions 28 Days	Analytical Method: EPA 300.0 Preparation Method: EPA 300.0							
Chloride	**1400**	mg/kg	98.4	10	08/18/17 11:24	08/18/17 15:22	16887-00-6	

REPORT OF LABORATORY ANALYSIS

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ANALYTICAL RESULTS

Project: 212C-MD-00939/EVGSAU 2923-001
Pace Project No.: 7572004

Sample: EVGSAU 2923-001 SB-4 (9-10') **Lab ID: 7572004021** Collected: 08/07/17 09:30 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
300.0 IC Anions 28 Days	Analytical Method: EPA 300.0 Preparation Method: EPA 300.0							
Chloride	**930**	mg/kg	102	10	08/18/17 11:24	08/18/17 15:35	16887-00-6	

REPORT OF LABORATORY ANALYSIS

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ANALYTICAL RESULTS

Project: 212C-MD-00939/EVGSAU 2923-001
Pace Project No.: 7572004

Sample: EVGSAU 2923-001 SB-4 (14-15') **Lab ID: 7572004022** Collected: 08/07/17 09:30 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
300.0 IC Anions 28 Days	Analytical Method: EPA 300.0 Preparation Method: EPA 300.0							
Chloride	**358**	mg/kg	100	10	08/18/17 11:24	08/18/17 15:48	16887-00-6	

REPORT OF LABORATORY ANALYSIS

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ANALYTICAL RESULTS

Project: 212C-MD-00939/EVGSAU 2923-001
Pace Project No.: 7572004

Sample: EVGSAU 2923-001 SB-4 (19-20') **Lab ID: 7572004023** Collected: 08/07/17 09:30 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
8015B Diesel Range Organics	Analytical Method: EPA 8015B Preparation Method: EPA 3546							
TPH-DRO (C10-C28)	ND	mg/kg	12.4	1	08/22/17 08:15	08/23/17 20:44		
TPH-ORO (C28-C35)	ND	mg/kg	12.4	1	08/22/17 08:15	08/23/17 20:44		
Surrogates								
n-Tetracosane (S)	77	%	65-119	1	08/22/17 08:15	08/23/17 20:44	646-31-1	
p-Terphenyl (S)	73	%	41-131	1	08/22/17 08:15	08/23/17 20:44	92-94-4	
Gasoline Range Organics	Analytical Method: EPA 8015B Preparation Method: EPA 5035A/5030B							
TPH-GRO	ND	mg/kg	12.5	1	08/20/17 00:00	08/21/17 18:39		
Surrogates								
4-Bromofluorobenzene (S)	96	%	64-122	1	08/20/17 00:00	08/21/17 18:39	460-00-4	
8260/5035A Volatile Organics	Analytical Method: EPA 8260							
Benzene	ND	ug/kg	6.2	1		08/22/17 07:30	71-43-2	
Ethylbenzene	ND	ug/kg	6.2	1		08/22/17 07:30	100-41-4	
Toluene	ND	ug/kg	6.2	1		08/22/17 07:30	108-88-3	
Xylene (Total)	ND	ug/kg	6.2	1		08/22/17 07:30	1330-20-7	
Surrogates								
Toluene-d8 (S)	96	%	87-112	1		08/22/17 07:30	2037-26-5	
4-Bromofluorobenzene (S)	103	%	87-115	1		08/22/17 07:30	460-00-4	
1,2-Dichloroethane-d4 (S)	107	%	85-115	1		08/22/17 07:30	17060-07-0	
Percent Moisture	Analytical Method: ASTM D2974							
Percent Moisture	**19.9**	%	0.50	1		08/22/17 00:00		
300.0 IC Anions 28 Days	Analytical Method: EPA 300.0 Preparation Method: EPA 300.0							
Chloride	**253**	mg/kg	121	10	08/18/17 11:24	08/18/17 16:01	16887-00-6	

REPORT OF LABORATORY ANALYSIS

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ANALYTICAL RESULTS

Project: 212C-MD-00939/EVGSAU 2923-001
Pace Project No.: 7572004

Sample: EVGSAU 2923-001 SB-4 (24-25') **Lab ID: 7572004024** Collected: 08/07/17 09:30 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
300.0 IC Anions 28 Days	Analytical Method: EPA 300.0 Preparation Method: EPA 300.0							
Chloride	ND	mg/kg	97.8	10	08/18/17 11:24	08/18/17 16:40	16887-00-6	

REPORT OF LABORATORY ANALYSIS

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ANALYTICAL RESULTS

Project: 212C-MD-00939/EVGSAU 2923-001
Pace Project No.: 7572004

Sample: EVGSAU 2923-001 SB-4 (29-30') **Lab ID: 7572004025** Collected: 08/07/17 09:30 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
8015B Diesel Range Organics	Analytical Method: EPA 8015B Preparation Method: EPA 3546							
TPH-DRO (C10-C28)	ND	mg/kg	13.6	1	08/22/17 08:15	08/23/17 20:54		
TPH-ORO (C28-C35)	ND	mg/kg	13.6	1	08/22/17 08:15	08/23/17 20:54		
Surrogates								
n-Tetracosane (S)	78	%	65-119	1	08/22/17 08:15	08/23/17 20:54	646-31-1	
p-Terphenyl (S)	68	%	41-131	1	08/22/17 08:15	08/23/17 20:54	92-94-4	
Gasoline Range Organics	Analytical Method: EPA 8015B Preparation Method: EPA 5035A/5030B							
TPH-GRO	ND	mg/kg	13.7	1	08/20/17 00:00	08/21/17 18:54		
Surrogates								
4-Bromofluorobenzene (S)	89	%	64-122	1	08/20/17 00:00	08/21/17 18:54	460-00-4	
8260/5035A Volatile Organics	Analytical Method: EPA 8260							
Benzene	ND	ug/kg	6.7	1		08/22/17 15:05	71-43-2	L1
Ethylbenzene	ND	ug/kg	6.7	1		08/22/17 15:05	100-41-4	
Toluene	ND	ug/kg	6.7	1		08/22/17 15:05	108-88-3	L1
Xylene (Total)	ND	ug/kg	6.7	1		08/22/17 15:05	1330-20-7	
Surrogates								
Toluene-d8 (S)	100	%	87-112	1		08/22/17 15:05	2037-26-5	
4-Bromofluorobenzene (S)	103	%	87-115	1		08/22/17 15:05	460-00-4	
1,2-Dichloroethane-d4 (S)	103	%	85-115	1		08/22/17 15:05	17060-07-0	
Percent Moisture	Analytical Method: ASTM D2974							
Percent Moisture	**26.7**	%	0.50	1		08/22/17 00:00		
300.0 IC Anions 28 Days	Analytical Method: EPA 300.0 Preparation Method: EPA 300.0							
Chloride	ND	mg/kg	133	10	08/18/17 11:24	08/18/17 16:52	16887-00-6	M1

REPORT OF LABORATORY ANALYSIS

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QUALITY CONTROL DATA

Project: 212C-MD-00939/EVGSAU 2923-001
Pace Project No.: 7572004

QC Batch: 490296 Analysis Method: EPA 8015B
QC Batch Method: EPA 5035A/5030B Analysis Description: Gasoline Range Organics
Associated Lab Samples: 7572004001, 7572004002, 7572004005, 7572004006, 7572004007, 7572004010

METHOD BLANK: 2008151 Matrix: Solid
Associated Lab Samples: 7572004001, 7572004002, 7572004005, 7572004006, 7572004007, 7572004010

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: 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 & 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	Max RPD	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-00939/EVGSAU 2923-001
Pace Project No.: 7572004

QC Batch: 490632 Analysis Method: EPA 8015B
QC Batch Method: EPA 5035A/5030B Analysis Description: Gasoline Range Organics
Associated Lab Samples: 7572004011, 7572004012, 7572004016, 7572004023, 7572004025

METHOD BLANK: 2008512 Matrix: Solid
Associated Lab Samples: 7572004011, 7572004012, 7572004016, 7572004023, 7572004025

Parameter	Units	Blank Result	Reporting Limit	Analyzed	Qualifiers
TPH-GRO	mg/kg	ND	10.0	08/21/17 15:45	
4-Bromofluorobenzene (S)	%	112	64-122	08/21/17 15:45	

LABORATORY CONTROL SAMPLE: 2008513

Parameter	Units	Spike Conc.	LCS Result	LCS % Rec	% Rec Limits	Qualifiers
TPH-GRO	mg/kg	50	48.4	97	85-130	
4-Bromofluorobenzene (S)	%			109	64-122	

MATRIX SPIKE & MATRIX SPIKE DUPLICATE: 2008514 2008515

Parameter	Units	7572002014 Result	MS Spike Conc.	MSD Spike Conc.	MS Result	MSD Result	MS % Rec	MSD % Rec	% Rec Limits	RPD	Max RPD	Qual
TPH-GRO	mg/kg	ND	56	56	58.0	56.0	102	98	85-125	4	12	
4-Bromofluorobenzene (S)	%						101	87	64-122			

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QUALITY CONTROL DATA

Project: 212C-MD-00939/EVGSAU 2923-001
Pace Project No.: 7572004

QC Batch: 490534 Analysis Method: EPA 8260
QC Batch Method: EPA 8260 Analysis Description: 8260 MSV 5035A Volatile Organics
Associated Lab Samples: 7572004001, 7572004002, 7572004005, 7572004006, 7572004007

METHOD BLANK: 2008099 Matrix: Solid
Associated Lab Samples: 7572004001, 7572004002, 7572004005, 7572004006, 7572004007

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 & MATRIX SPIKE DUPLICATE: 2008101 2008102

Parameter	Units	7572004001 Result	MS Spike Conc.	MSD Spike Conc.	MS Result	MSD Result	MS % Rec	MSD % Rec	% Rec Limits	RPD	Max RPD	Qual
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-00939/EVGSAU 2923-001
Pace Project No.: 7572004

QC Batch: 490748 Analysis Method: EPA 8260
QC Batch Method: EPA 8260 Analysis Description: 8260 MSV 5035A Volatile Organics
Associated Lab Samples: 7572004010

METHOD BLANK: 2008981 Matrix: Solid
Associated Lab Samples: 7572004010

Parameter	Units	Blank Result	Reporting Limit	Analyzed	Qualifiers
Benzene	ug/kg	ND	5.0	08/21/17 13:40	
Ethylbenzene	ug/kg	ND	5.0	08/21/17 13:40	
Toluene	ug/kg	ND	5.0	08/21/17 13:40	
Xylene (Total)	ug/kg	ND	5.0	08/21/17 13:40	
1,2-Dichloroethane-d4 (S)	%	97	85-115	08/21/17 13:40	
4-Bromofluorobenzene (S)	%	105	87-115	08/21/17 13:40	
Toluene-d8 (S)	%	100	87-112	08/21/17 13:40	

LABORATORY CONTROL SAMPLE: 2008982

Parameter	Units	Spike Conc.	LCS Result	LCS % Rec	% Rec Limits	Qualifiers
Benzene	ug/kg	100	101	101	81-115	
Ethylbenzene	ug/kg	100	103	103	76-119	
Toluene	ug/kg	100	107	107	77-116	
Xylene (Total)	ug/kg	300	314	105	76-121	
1,2-Dichloroethane-d4 (S)	%			104	85-115	
4-Bromofluorobenzene (S)	%			98	87-115	
Toluene-d8 (S)	%			100	87-112	

MATRIX SPIKE & MATRIX SPIKE DUPLICATE: 2008983 2008984

Parameter	Units	7572004010 Result	MS Spike Conc.	MSD Spike Conc.	MS Result	MSD Result	MS % Rec	MSD % Rec	% Rec Limits	RPD	Max RPD	Qual
Benzene	ug/kg	ND	107	106	106	96.6	99	91	30-139	9	28	
Ethylbenzene	ug/kg	ND	107	106	107	98.8	100	93	10-147	8	32	
Toluene	ug/kg	ND	107	106	111	103	104	97	22-138	8	39	
Xylene (Total)	ug/kg	ND	320	318	322	302	101	95	10-152	7	35	
1,2-Dichloroethane-d4 (S)	%						103	100	85-115			
4-Bromofluorobenzene (S)	%						98	98	87-115			
Toluene-d8 (S)	%						99	100	87-112			

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REPORT OF LABORATORY ANALYSIS

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QUALITY CONTROL DATA

Project: 212C-MD-00939/EVGSAU 2923-001
Pace Project No.: 7572004

QC Batch: 490807 Analysis Method: EPA 8260
QC Batch Method: EPA 8260 Analysis Description: 8260 MSV 5035A Volatile Organics
Associated Lab Samples: 7572004011, 7572004012, 7572004016, 7572004018, 7572004023

METHOD BLANK: 2009110 Matrix: Solid
Associated Lab Samples: 7572004011, 7572004012, 7572004016, 7572004018, 7572004023

Parameter	Units	Blank Result	Reporting Limit	Analyzed	Qualifiers
Benzene	ug/kg	ND	5.0	08/22/17 02:50	
Ethylbenzene	ug/kg	ND	5.0	08/22/17 02:50	
Toluene	ug/kg	ND	5.0	08/22/17 02:50	
Xylene (Total)	ug/kg	ND	5.0	08/22/17 02:50	
1,2-Dichloroethane-d4 (S)	%	103	85-115	08/22/17 02:50	
4-Bromofluorobenzene (S)	%	105	87-115	08/22/17 02:50	
Toluene-d8 (S)	%	99	87-112	08/22/17 02:50	

LABORATORY CONTROL SAMPLE: 2009111

Parameter	Units	Spike Conc.	LCS Result	LCS % Rec	% Rec Limits	Qualifiers
Benzene	ug/kg	100	101	101	81-115	
Ethylbenzene	ug/kg	100	99.6	100	76-119	
Toluene	ug/kg	100	98.6	99	77-116	
Xylene (Total)	ug/kg	300	301	100	76-121	
1,2-Dichloroethane-d4 (S)	%			99	85-115	
4-Bromofluorobenzene (S)	%			102	87-115	
Toluene-d8 (S)	%			100	87-112	

MATRIX SPIKE & MATRIX SPIKE DUPLICATE: 2009112 2009113

Parameter	Units	7572007013 Result	MS Spike Conc.	MSD Spike Conc.	MS Result	MSD Result	MS % Rec	MSD % Rec	% Rec Limits	RPD	Max RPD	Qual
Benzene	ug/kg	ND	160	156	126	151	79	97	30-139	18	28	
Ethylbenzene	ug/kg	ND	160	156	130	140	81	90	10-147	8	32	
Toluene	ug/kg	ND	160	156	117	146	73	94	22-138	22	39	
Xylene (Total)	ug/kg	ND	481	468	364	423	76	90	10-152	15	35	
1,2-Dichloroethane-d4 (S)	%						103	100	85-115			
4-Bromofluorobenzene (S)	%						101	98	87-115			
Toluene-d8 (S)	%						100	99	87-112			

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REPORT OF LABORATORY ANALYSIS

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QUALITY CONTROL DATA

Project: 212C-MD-00939/EVGSAU 2923-001
Pace Project No.: 7572004

QC Batch: 490927 Analysis Method: EPA 8260
QC Batch Method: EPA 8260 Analysis Description: 8260 MSV 5035A Volatile Organics
Associated Lab Samples: 7572004025

METHOD BLANK: 2009586 Matrix: Solid
Associated Lab Samples: 7572004025

Parameter	Units	Blank Result	Reporting Limit	Analyzed	Qualifiers
Benzene	ug/kg	ND	5.0	08/22/17 14:18	
Ethylbenzene	ug/kg	ND	5.0	08/22/17 14:18	
Toluene	ug/kg	ND	5.0	08/22/17 14:18	
Xylene (Total)	ug/kg	ND	5.0	08/22/17 14:18	
1,2-Dichloroethane-d4 (S)	%	99	85-115	08/22/17 14:18	
4-Bromofluorobenzene (S)	%	100	87-115	08/22/17 14:18	
Toluene-d8 (S)	%	98	87-112	08/22/17 14:18	

LABORATORY CONTROL SAMPLE: 2009587

Parameter	Units	Spike Conc.	LCS Result	LCS % Rec	% Rec Limits	Qualifiers
Benzene	ug/kg	100	120	120	81-115	L1
Ethylbenzene	ug/kg	100	116	116	76-119	
Toluene	ug/kg	100	124	124	77-116	L1
Xylene (Total)	ug/kg	300	376	125	76-121	LS
1,2-Dichloroethane-d4 (S)	%			99	85-115	
4-Bromofluorobenzene (S)	%			101	87-115	
Toluene-d8 (S)	%			103	87-112	

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QUALITY CONTROL DATA

Project: 212C-MD-00939/EVGSAU 2923-001
Pace Project No.: 7572004

QC Batch: 490646 Analysis Method: EPA 8015B
QC Batch Method: EPA 3546 Analysis Description: EPA 8015B
Associated Lab Samples: 7572004001, 7572004002, 7572004005, 7572004006, 7572004007, 7572004010

METHOD BLANK: 2008548 Matrix: Solid
Associated Lab Samples: 7572004001, 7572004002, 7572004005, 7572004006, 7572004007, 7572004010

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	60251267011 Result	MS Spike Conc.	MSD Spike Conc.	MS Result	MSD Result	MS % Rec	MSD % Rec	% Rec Limits	RPD	Max RPD	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	

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QUALITY CONTROL DATA

Project: 212C-MD-00939/EVGSAU 2923-001
Pace Project No.: 7572004

QC Batch: 490838 Analysis Method: EPA 8015B
QC Batch Method: EPA 3546 Analysis Description: EPA 8015B
Associated Lab Samples: 7572004011, 7572004012, 7572004016, 7572004018, 7572004023, 7572004025

METHOD BLANK: 2009200 Matrix: Solid
Associated Lab Samples: 7572004011, 7572004012, 7572004016, 7572004018, 7572004023, 7572004025

Parameter	Units	Blank Result	Reporting Limit	Analyzed	Qualifiers
TPH-DRO (C10-C28)	mg/kg	ND	10	08/23/17 19:29	
TPH-ORO (C28-C35)	mg/kg	ND	10	08/23/17 19:29	
n-Tetracosane (S)	%	85	65-119	08/23/17 19:29	
p-Terphenyl (S)	%	83	41-131	08/23/17 19:29	

LABORATORY CONTROL SAMPLE: 2009201

Parameter	Units	Spike Conc.	LCS Result	LCS % Rec	% Rec Limits	Qualifiers
TPH-DRO (C10-C28)	mg/kg	83.2	77.4	93	80-112	
n-Tetracosane (S)	%			89	65-119	
p-Terphenyl (S)	%			88	41-131	

MATRIX SPIKE & MATRIX SPIKE DUPLICATE: 2009202 2009203

Parameter	Units	7572004011 Result	MS Spike Conc.	MSD Spike Conc.	MS Result	MSD Result	MS % Rec	MSD % Rec	% Rec Limits	RPD	Max RPD	Qual
TPH-DRO (C10-C28)	mg/kg	ND	87.2	87.6	86.8	86.9	95	94	10-180	0	39	
n-Tetracosane (S)	%						91	91	65-119		58	
p-Terphenyl (S)	%						89	89	41-131		56	

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REPORT OF LABORATORY ANALYSIS

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QUALITY CONTROL DATA

Project: 212C-MD-00939/EVGSAU 2923-001
Pace Project No.: 7572004

QC Batch: 490662 Analysis Method: ASTM D2974
QC Batch Method: ASTM D2974 Analysis Description: Dry Weight/Percent Moisture
Associated Lab Samples: 7572004001, 7572004002, 7572004005, 7572004006, 7572004007, 7572004010

METHOD BLANK: 2008591 Matrix: Solid
Associated Lab Samples: 7572004001, 7572004002, 7572004005, 7572004006, 7572004007, 7572004010

Parameter	Units	Blank Result	Reporting Limit	Analyzed	Qualifiers
Percent Moisture	%	ND	0.50	08/21/17 00:00	

SAMPLE DUPLICATE: 2008592

Parameter	Units	60251274033 Result	Dup Result	RPD	Max RPD	Qualifiers
Percent Moisture	%	11.1	11.0	0	20	

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REPORT OF LABORATORY ANALYSIS

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QUALITY CONTROL DATA

Project: 212C-MD-00939/EVGSAU 2923-001
Pace Project No.: 7572004

QC Batch: 490856 Analysis Method: ASTM D2974
QC Batch Method: ASTM D2974 Analysis Description: Dry Weight/Percent Moisture
Associated Lab Samples: 7572004011, 7572004012, 7572004016, 7572004023, 7572004025

METHOD BLANK: 2009245 Matrix: Solid
Associated Lab Samples: 7572004011, 7572004012, 7572004016, 7572004023, 7572004025

Parameter	Units	Blank Result	Reporting Limit	Analyzed	Qualifiers
Percent Moisture	%	ND	0.50	08/22/17 00:00	

SAMPLE DUPLICATE: 2009246

Parameter	Units	7572389003 Result	Dup Result	RPD	Max RPD	Qualifiers
Percent Moisture	%	10.9	13.0	18	20	

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QUALITY CONTROL DATA

Project: 212C-MD-00939/EVGSAU 2923-001
Pace Project No.: 7572004

QC Batch: 490440 Analysis Method: EPA 300.0
QC Batch Method: EPA 300.0 Analysis Description: 300.0 IC Anions
Associated Lab Samples: 7572004001, 7572004002, 7572004003, 7572004004, 7572004005, 7572004006, 7572004007, 7572004008, 7572004009, 7572004010, 7572004011, 7572004012, 7572004013, 7572004014, 7572004015

METHOD BLANK: 2007661 Matrix: Solid
Associated Lab Samples: 7572004001, 7572004002, 7572004003, 7572004004, 7572004005, 7572004006, 7572004007, 7572004008, 7572004009, 7572004010, 7572004011, 7572004012, 7572004013, 7572004014, 7572004015

Parameter	Units	Blank Result	Reporting Limit	Analyzed	Qualifiers
Chloride	mg/kg	ND	100	08/18/17 19:53	

LABORATORY CONTROL SAMPLE: 2007662

Parameter	Units	Spike Conc.	LCS Result	LCS % Rec	% Rec Limits	Qualifiers
Chloride	mg/kg	500	487	97	90-110	

MATRIX SPIKE & MATRIX SPIKE DUPLICATE: 2007663 2007664

Parameter	Units	7572007041 Result	MS Spike Conc.	MSD Spike Conc.	MS Result	MSD Result	MS % Rec	MSD % Rec	% Rec Limits	RPD	Max RPD	Qual
Chloride	mg/kg	1470	556	569	2000	2300	96	146	80-120	14	15	M1

MATRIX SPIKE SAMPLE: 2007665

Parameter	Units	7572004005 Result	Spike Conc.	MS Result	MS % Rec	% Rec Limits	Qualifiers
Chloride	mg/kg	ND	534	522	90	80-120	

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QUALITY CONTROL DATA

Project: 212C-MD-00939/EVGSAU 2923-001
Pace Project No.: 7572004

QC Batch: 490442 Analysis Method: EPA 300.0
QC Batch Method: EPA 300.0 Analysis Description: 300.0 IC Anions
Associated Lab Samples: 7572004016, 7572004017, 7572004018, 7572004019, 7572004020, 7572004021, 7572004022, 7572004023, 7572004024, 7572004025

METHOD BLANK: 2007674 Matrix: Solid
Associated Lab Samples: 7572004016, 7572004017, 7572004018, 7572004019, 7572004020, 7572004021, 7572004022, 7572004023, 7572004024, 7572004025

Parameter	Units	Blank Result	Reporting Limit	Analyzed	Qualifiers
Chloride	mg/kg	ND	100	08/19/17 08:23	

LABORATORY CONTROL SAMPLE: 2007675

Parameter	Units	Spike Conc.	LCS Result	LCS % Rec	% Rec Limits	Qualifiers
Chloride	mg/kg	500	485	97	90-110	

MATRIX SPIKE & MATRIX SPIKE DUPLICATE: 2007676 2007677

Parameter	Units	7572004016 Result	MS Spike Conc.	MSD Spike Conc.	MS Result	MSD Result	MS % Rec	MSD % Rec	% Rec Limits	RPD	Max RPD	Qual
Chloride	mg/kg	ND	585	590	559	ND	89	3	80-120		15	M1

MATRIX SPIKE SAMPLE: 2007678

Parameter	Units	7572004025 Result	Spike Conc.	MS Result	MS % Rec	% Rec Limits	Qualifiers
Chloride	mg/kg	ND	687	139	5	80-120	M1

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REPORT OF LABORATORY ANALYSIS

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QUALIFIERS

Project: 212C-MD-00939/EVGSAU 2923-001
Pace Project No.: 7572004

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

ANALYTE QUALIFIERS

H2	Extraction or preparation conducted outside EPA method holding time.
L1	Analyte recovery in the laboratory control sample (LCS) was above QC limits. Results for this analyte in associated samples may be biased high.
LS	Analyte recovery in the laboratory control sample (LCS) was outside QC limits for one or more of the constituent analytes used in the calculated result.
M1	Matrix spike recovery exceeded QC limits. Batch accepted based on laboratory control sample (LCS) recovery.

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QUALITY CONTROL DATA CROSS REFERENCE TABLE

Project: 212C-MD-00939/EVGSAU 2923-001
Pace Project No.: 7572004

Lab ID	Sample ID	QC Batch Method	QC Batch	Analytical Method	Analytical Batch
7572004001	**EVGSAU 2923-001 SB-1 (0-1')**	EPA 3546	490646	EPA 8015B	491023
7572004002	**EVGSAU 2923-001 SB-1 (2-3')**	EPA 3546	490646	EPA 8015B	491023
7572004005	**EVGSAU 2923-001 SB-1 (9-10')**	EPA 3546	490646	EPA 8015B	491023
7572004006	**EVGSAU 2923-001 SB-2 (0-1')**	EPA 3546	490646	EPA 8015B	491023
7572004007	**EVGSAU 2923-001 SB-2 (2-3')**	EPA 3546	490646	EPA 8015B	491023
7572004010	**EVGSAU 2923-001 SB-2 (9-10')**	EPA 3546	490646	EPA 8015B	491023
7572004011	**EVGSAU 2923-001 SB-3 (0-1')**	EPA 3546	490838	EPA 8015B	491192
7572004012	**EVGSAU 2923-001 SB-3 (2-3')**	EPA 3546	490838	EPA 8015B	491192
7572004016	**EVGSAU 2923-001 SB-3 (14-15')**	EPA 3546	490838	EPA 8015B	491192
7572004018	**EVGSAU 2923-001 SB-4 (2-3')**	EPA 3546	490838	EPA 8015B	491192
7572004023	**EVGSAU 2923-001 SB-4 (19-20')**	EPA 3546	490838	EPA 8015B	491192
7572004025	**EVGSAU 2923-001 SB-4 (29-30')**	EPA 3546	490838	EPA 8015B	491192
7572004001	**EVGSAU 2923-001 SB-1 (0-1')**	EPA 5035A/5030B	490296	EPA 8015B	490559
7572004002	**EVGSAU 2923-001 SB-1 (2-3')**	EPA 5035A/5030B	490296	EPA 8015B	490559
7572004005	**EVGSAU 2923-001 SB-1 (9-10')**	EPA 5035A/5030B	490296	EPA 8015B	490559
7572004006	**EVGSAU 2923-001 SB-2 (0-1')**	EPA 5035A/5030B	490296	EPA 8015B	490559
7572004007	**EVGSAU 2923-001 SB-2 (2-3')**	EPA 5035A/5030B	490296	EPA 8015B	490559
7572004010	**EVGSAU 2923-001 SB-2 (9-10')**	EPA 5035A/5030B	490296	EPA 8015B	490559
7572004011	**EVGSAU 2923-001 SB-3 (0-1')**	EPA 5035A/5030B	490632	EPA 8015B	490997
7572004012	**EVGSAU 2923-001 SB-3 (2-3')**	EPA 5035A/5030B	490632	EPA 8015B	490997
7572004016	**EVGSAU 2923-001 SB-3 (14-15')**	EPA 5035A/5030B	490632	EPA 8015B	490997
7572004023	**EVGSAU 2923-001 SB-4 (19-20')**	EPA 5035A/5030B	490632	EPA 8015B	490997
7572004025	**EVGSAU 2923-001 SB-4 (29-30')**	EPA 5035A/5030B	490632	EPA 8015B	490997
7572004001	**EVGSAU 2923-001 SB-1 (0-1')**	EPA 8260	490534		
7572004002	**EVGSAU 2923-001 SB-1 (2-3')**	EPA 8260	490534		
7572004005	**EVGSAU 2923-001 SB-1 (9-10')**	EPA 8260	490534		
7572004006	**EVGSAU 2923-001 SB-2 (0-1')**	EPA 8260	490534		
7572004007	**EVGSAU 2923-001 SB-2 (2-3')**	EPA 8260	490534		
7572004010	**EVGSAU 2923-001 SB-2 (9-10')**	EPA 8260	490748		
7572004011	**EVGSAU 2923-001 SB-3 (0-1')**	EPA 8260	490807		
7572004012	**EVGSAU 2923-001 SB-3 (2-3')**	EPA 8260	490807		
7572004016	**EVGSAU 2923-001 SB-3 (14-15')**	EPA 8260	490807		
7572004018	**EVGSAU 2923-001 SB-4 (2-3')**	EPA 8260	490807		
7572004023	**EVGSAU 2923-001 SB-4 (19-20')**	EPA 8260	490807		
7572004025	**EVGSAU 2923-001 SB-4 (29-30')**	EPA 8260	490927		
7572004001	**EVGSAU 2923-001 SB-1 (0-1')**	ASTM D2974	490662		
7572004002	**EVGSAU 2923-001 SB-1 (2-3')**	ASTM D2974	490662		
7572004005	**EVGSAU 2923-001 SB-1 (9-10')**	ASTM D2974	490662		
7572004006	**EVGSAU 2923-001 SB-2 (0-1')**	ASTM D2974	490662		
7572004007	**EVGSAU 2923-001 SB-2 (2-3')**	ASTM D2974	490662		
7572004010	**EVGSAU 2923-001 SB-2 (9-10')**	ASTM D2974	490662		
7572004011	**EVGSAU 2923-001 SB-3 (0-1')**	ASTM D2974	490856		
7572004012	**EVGSAU 2923-001 SB-3 (2-3')**	ASTM D2974	490856		
7572004016	**EVGSAU 2923-001 SB-3 (14-15')**	ASTM D2974	490856		

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QUALITY CONTROL DATA CROSS REFERENCE TABLE

Project: 212C-MD-00939/EVGSAU 2923-001
Pace Project No.: 7572004

Lab ID	Sample ID	QC Batch Method	QC Batch	Analytical Method	Analytical Batch
7572004023	**EVGSAU 2923-001 SB-4 (19-20')**	ASTM D2974	490856		
7572004025	**EVGSAU 2923-001 SB-4 (29-30')**	ASTM D2974	490856		
7572004001	**EVGSAU 2923-001 SB-1 (0-1')**	EPA 300.0	490440	EPA 300.0	490563
7572004002	**EVGSAU 2923-001 SB-1 (2-3')**	EPA 300.0	490440	EPA 300.0	490563
7572004003	**EVGSAU 2923-001 SB-1 (4-5')**	EPA 300.0	490440	EPA 300.0	490563
7572004004	**EVGSAU 2923-001 SB-1 (6-7')**	EPA 300.0	490440	EPA 300.0	490563
7572004005	**EVGSAU 2923-001 SB-1 (9-10')**	EPA 300.0	490440	EPA 300.0	490563
7572004006	**EVGSAU 2923-001 SB-2 (0-1')**	EPA 300.0	490440	EPA 300.0	490563
7572004007	**EVGSAU 2923-001 SB-2 (2-3')**	EPA 300.0	490440	EPA 300.0	490563
7572004008	**EVGSAU 2923-001 SB-2 (4-5')**	EPA 300.0	490440	EPA 300.0	490563
7572004009	**EVGSAU 2923-001 SB-2 (6-7')**	EPA 300.0	490440	EPA 300.0	490563
7572004010	**EVGSAU 2923-001 SB-2 (9-10')**	EPA 300.0	490440	EPA 300.0	490563
7572004011	**EVGSAU 2923-001 SB-3 (0-1')**	EPA 300.0	490440	EPA 300.0	490563
7572004012	**EVGSAU 2923-001 SB-3 (2-3')**	EPA 300.0	490440	EPA 300.0	490563
7572004013	**EVGSAU 2923-001 SB-3 (4-5')**	EPA 300.0	490440	EPA 300.0	490563
7572004014	**EVGSAU 2923-001 SB-3 (6-7')**	EPA 300.0	490440	EPA 300.0	490563
7572004015	**EVGSAU 2923-001 SB-3 (9-10')**	EPA 300.0	490440	EPA 300.0	490563
7572004016	**EVGSAU 2923-001 SB-3 (14-15')**	EPA 300.0	490442	EPA 300.0	490562
7572004017	**EVGSAU 2923-001 SB-4 (0-1')**	EPA 300.0	490442	EPA 300.0	490573
7572004018	**EVGSAU 2923-001 SB-4 (2-3')**	EPA 300.0	490442	EPA 300.0	490562
7572004019	**EVGSAU 2923-001 SB-4 (4-5')**	EPA 300.0	490442	EPA 300.0	490573
7572004020	**EVGSAU 2923-001 SB-4 (6-7')**	EPA 300.0	490442	EPA 300.0	490562
7572004021	**EVGSAU 2923-001 SB-4 (9-10')**	EPA 300.0	490442	EPA 300.0	490562
7572004022	**EVGSAU 2923-001 SB-4 (14-15')**	EPA 300.0	490442	EPA 300.0	490562
7572004023	**EVGSAU 2923-001 SB-4 (19-20')**	EPA 300.0	490442	EPA 300.0	490562
7572004024	**EVGSAU 2923-001 SB-4 (24-25')**	EPA 300.0	490442	EPA 300.0	490562
7572004025	**EVGSAU 2923-001 SB-4 (29-30')**	EPA 300.0	490442	EPA 300.0	490562

Pace Analytical®	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# : 7572004

7572004

Client Name: Tetra Tech Project Work order:

Courier: FedEX ☑ UPS ☐ USPS ☐ Client ☐ Courier ☐ LSO ☐ PACE ☐ Other:

Tracking#: 7420 8979 1910 / 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-154 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 ☑ No ☐ NA ☐	1
Chain of Custody filled out	Yes ☑ No ☐ NA ☐	2
Chain of Custody relinquished	Yes ☑ No ☐ NA ☐	3
Sampler name & signature on COC	Yes ☑ No ☐ NA ☐	4
Sample received within HT	Yes ☑ No ☐ NA ☐	5
Short HT analyses (<72 hrs)	Yes ☐ No ☑ NA ☐	6
Rush TAT requested	Yes ☐ No ☑ NA ☐	7
Sufficient Volume received	Yes ☑ No ☐ NA ☐	8
Correct Container used Pace Container used	Yes ☑ No ☐ NA ☐ Yes ☑ No ☐ NA ☐	9
Container Intact	Yes ☑ No ☐ NA ☐	10
Unpreserved 5035A soil frozen within 48 hrs	Yes ☐ No ☐ NA ☑	11
Filtered volume received for Dissolved tests	Yes ☐ No ☐ NA ☑	12
Sample labels match COC Include date/time/ID/analyses Matrix: SOIL	Yes ☑ No ☐ NA ☐	13
All containers needing preservation have been checked	Yes ☐ No ☐ NA ☑	14a. Lot# of pH strip: Original pH: <☐ or >☐ 2☐ 9☐ 12☐ or received Neutral ☐ Lot# of Iodine strip: Lot# of Lead Acetate strip:
Do containers require preservation at the lab	Yes ☐ No ☐ NA ☑	14b. Preservation: / Lot# and adjusted pH: pH<2 ☐ pH>9 ☐ pH>12 ☐
All containers needing preservation are found to be in Compliance with EPA recommendation **Exception:** VOA, coliform, O&G	Yes ☐ No ☐ NA ☑ Yes ☐ No ☐	14c.
Are soil samples (volatiles) received in Bulk ☐ Terracore ☐ EnCore ☐ NA ☑		15.
Trip Blank present Trip Blank Custody Seals Intact Pace Trip Blank Lot# (if purchased):	Yes ☐ No ☐ NA ☑ Yes ☐ No ☐ NA ☑	16.
Headspace in VOA (>6mm)	Yes ☐ No ☐ NA ☑	17.
Project sampled in USDA Regulated Area:	Yes ☑ No ☐ NA ☐	18. List State TX

Client Notification/Resolution/Comments:

Person Contacted: Date:

Comments/Resolution:

Person Examining Contents: Date: 8/15/17 Project Manager Review: MM

7572004

Analysis Request of Chain of Custody Record

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
Project Name: EVGSAU 2923-001	
Project Location: (county, state) Lea Co NM	**Project #:** 212C-MD-00939
Invoice to: Tetra Tech, Inc.	
Receiving Laboratory: Pace Analytical	**Sampler Signature:** Clint Merritt

Comments: If TPH exceeds 1,000 mg/kg, run deeper sample. If Benzene exceeds 10 mg/kg or Total BTEX exceeds 50 mg/kg, run deeper sample.

ANALYSIS REQUEST
(Circle or Specify Method No.)

LAB # (LAB USE ONLY)	SAMPLE IDENTIFICATION	SAMPLING DATE	SAMPLING TIME	MATRIX WATER	MATRIX SOIL	MATRIX	PRESERVATIVE METHOD HCL	PRESERVATIVE METHOD HNO_3	PRESERVATIVE METHOD ICE	PRESERVATIVE METHOD	PRESERVATIVE METHOD	# CONTAINERS	FILTERED (Y/N)	BTEX 8021B BTEX 8260B	TPH TX1005 (Ext to C35)	TPH 8015M (GRO - DRO - ORO ~~- MRO~~)	PAH 8270C	Total Metals Ag As Ba Cd Cr Pb Se Hg	TCLP Metals Ag As Ba Cd Cr Pb Se Hg	TCLP Volatiles	TCLP Semi Volatiles	RCI	GC/MS Vol. 8260B / 624	GC/MS Semi. Vol. 8270C/625	PCB's 8082 / 608	NORM	PLM (Asbestos)	Chloride	Chloride Sulfate TDS	General Water Chemistry (see attached list)	Anion/Cation Balance				Hold
001	EVGSAU 2923-001 SB-1 (0-1')	8/7/2017			X				X			1		X		X												X							
002	EVGSAU 2923-001 SB-1 (2'-3')	8/7/2017			X				X			1		X		X												X							
003	EVGSAU 2923-001 SB-1 (4'-5')	8/7/2017			X				X			1																X							
004	EVGSAU 2923-001 SB-1 (6'-7')	8/7/2017			X				X			1																X							
005	EVGSAU 2923-001 SB-1 (9'-10')	8/7/2017			X				X			1		X		X												X							
006	EVGSAU 2923-001 SB-2 (0-1')	8/7/2017			X				X			1		X		X												X							
007	EVGSAU 2923-001 SB-2 (2'-3')	8/7/2017			X				X			1		X		X												X							
008	EVGSAU 2923-001 SB-2 (4'-5')	8/7/2017			X				X			1																X							
009	EVGSAU 2923-001 SB-2 (6'-7')	8/7/2017			X				X			1																X							
010	EVGSAU 2923-001 SB-2 (9'-10')	8/7/2017			X				X			1		X		X												X							

Relinquished by: Clint Merritt	Date: 8/14/17	Time: 17:00	Received by: Pace
Relinquished by:	Date:	Time:	Received by:
Relinquished by:	Date:	Time:	Received by:

Date: 8/15/17 Time: 0850

LAB USE ONLY

Sample Temperature: 4.2, 4.5

REMARKS:

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

(Circle) HAND DELIVERED (FEDEX) UPS Tracking #: 7420 8979 1910
7420 8979 1909

ORIGINAL COPY

1572004

Analysis Request of Chain of Custody Record

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
Project Name: EVGSAU 2923-001	
Project Location: (county, state) Lea Co NM	**Project #:** 212C-MD-00939
Invoice to: Tetra Tech, Inc.	
Receiving Laboratory: Pace Analytical	**Sampler Signature:** Clint Merritt

Comments: If TPH exceeds 1,000 mg/kg, run deeper sample. If Benzene exceeds 10 mg/kg or Total BTEX exceeds 50 mg/kg, run deeper sample.

ANALYSIS REQUEST
(Circle or Specify Method No.)

LAB # (LAB USE ONLY)	SAMPLE IDENTIFICATION	SAMPLING YEAR: DATE	SAMPLING TIME	MATRIX: WATER	MATRIX: SOIL	MATRIX:	PRESERVATIVE METHOD: HCL	PRESERVATIVE METHOD: HNO_3	PRESERVATIVE METHOD: ICE	PRESERVATIVE METHOD:	PRESERVATIVE METHOD:	# CONTAINERS	FILTERED (Y/N)	BTEX 8021B BTEX 8260B	TPH TX1005 (Ext to C35)	TPH 8015M (GRO - DRO - ORO - ~~MRO~~)	PAH 8270C	Total Metals Ag As Ba Cd Cr Pb Se Hg	TCLP Metals Ag As Ba Cd Cr Pb Se Hg	TCLP Volatiles	TCLP Semi Volatiles	RCI	GC/MS Vol. 8260B / 624	GC/MS Semi. Vol. 8270C/625	PCB's 8082 / 608	NORM	PLM (Asbestos)	Chloride	Chloride Sulfate TDS	General Water Chemistry (see attached list)	Anion/Cation Balance					Hold
011	EVGSAU 2923-001 SB-3 (0-1')	8/8/2017	9:30		X				X			1		X		X												X								
012	EVGSAU 2923-001 SB-3 (2'-3')	8/8/2017	9:30		X				X			1		X		X												X								
013	EVGSAU 2923-001 SB-3 (4'-5')	8/8/2017	9:30		X				X			1																X								
014	EVGSAU 2923-001 SB-3 (6'-7')	8/8/2017	9:30		X				X			1																X								
015	EVGSAU 2923-001 SB-3 (9'-10')	8/8/2017	9:30		X				X			1																X								
016	EVGSAU 2923-001 SB-3 (14'-15")	8/8/2017	9:30		X				X			1		X		X												X								
017	EVGSAU 2923-001 SB-4 (0'-1')	8/8/2017	9:30		X				X			1																X								
018	EVGSAU 2923-001 SB-4 (2'-3')	8/8/2017	9:30		X				X			1		X		X												X								
019	EVGSAU 2923-001 SB-4 (4'-5')	8/8/2017	9:30		X				X			1																X								
020	EVGSAU 2923-001 SB-4 (6'-7')	8/8/2017	9:30		X				X			1																X								

Relinquished by: Clint Merritt	Date: 8/14/17	Time: 17:00	Received by:	Date: 8/15/17	Time: 0850
Relinquished by:	Date:	Time:	Received by:	Date:	Time:
Relinquished by:	Date:	Time:	Received by:	Date:	Time:

LAB USE ONLY

Sample Temperature: 4.5, 4.2

REMARKS:

☐ RUSH: Same Day 24 hr 48 hr 72 hr

☐ Rush Charges Authorized

☐ Special Report Limits or TRRP Report

(Circle) HAND DELIVERED (FEDEX) UPS Tracking #: 7420 8979 1910
7420 8979 1909

ORIGINAL COPY

7572004

Analysis Request of Chain of Custody Record

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
Project Name: EVGSAU 2923-001	
Project Location: (county, state) Lea Co NM	**Project #:** 212C-MD-00939
Invoice to: Tetra Tech, Inc.	
Receiving Laboratory: Pace Analytical	**Sampler Signature:** Clint Merritt

Comments: If TPH exceeds 1,000 mg/kg, run deeper sample. If Benzene exceeds 10 mg/kg or Total BTEX exceeds 50 mg/kg, run deeper sample.

ANALYSIS REQUEST
(Circle or Specify Method No.)

LAB # (LAB USE ONLY)	SAMPLE IDENTIFICATION	SAMPLING YEAR: DATE	SAMPLING TIME	MATRIX: WATER	MATRIX: SOIL	MATRIX:	PRESERVATIVE METHOD: HCL	PRESERVATIVE METHOD: HNO_3	PRESERVATIVE METHOD: ICE	PRESERVATIVE METHOD:	PRESERVATIVE METHOD:	# CONTAINERS	FILTERED (Y/N)	BTEX 8021B BTEX 8260B	TPH TX1005 (Ext to C35)	TPH 8015M (GRO - DRO - ORO - MRO)	PAH 8270C	Total Metals Ag As Ba Cd Cr Pb Se Hg	TCLP Metals Ag As Ba Cd Cr Pb Se Hg	TCLP Volatiles	TCLP Semi Volatiles	RCI	GC/MS Vol. 8260B / 624	GC/MS Semi. Vol. 8270C/625	PCB's 8082 / 608	NORM	PLM (Asbestos)	Chloride	Chloride Sulfate TDS	General Water Chemistry (see attached list)	Anion/Cation Balance					Hold
021	EVGSAU 2923-001 SB-4 (9'-10') *	8/7/2017	9:30		X				X			1																X								
022	EVGSAU 2923-001 SB-4 (14'-15')	8/7/2017	9:30		X				X			1																X								
023	EVGSAU 2923-001 SB-4 (19'-20')	8/7/2017	9:30		X				X			1		X		X												X								
024	EVGSAU 2923-001 SB-4 (24'-25')	8/7/2017	9:30		X				X			1																X								
025	EVGSAU 2923-001 SB-4 (29'-30')	8/7/2017	9:30		X				X			1		X		X												X								

Relinquished by: Clint Merritt	Date: 8/11/17	Time: 17:00
Received by: Pace	Date: 8/15/17	Time: 0850
Relinquished by:	Date:	Time:
Received by:	Date:	Time:
Relinquished by:	Date:	Time:
Received by:	Date:	Time:

LAB USE ONLY

Sample Temperature: 4.2, 4.5

REMARKS:

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

(Circle) HAND DELIVERED FEDEX UPS Tracking #: 7420 8979 1910
7420 8979 1909

* Dates per Jeanne mm 8-22-17

ORIGINAL COPY

Pace Analytical
www.pacelabs.com

Sample Condition Upon Receipt

WO#: 60251059

60251059

Client Name: Pace Dallas

Courier: FedEx ☑ UPS ☐ VIA ☐ Clay ☐ PEX ☐ ECI ☐ Pace ☐ Xroads ☐ Client ☐ Other ☐

Tracking #: _____ Pace Shipping Label Used? Yes ☐ No ☑

Custody Seal on Cooler/Box Present: Yes ☑ No ☐ Seals intact: Yes ☑ No ☐

Packing Material: Bubble Wrap ☐ Bubble Bags ☑ Foam ☐ None ☐ Other ☐

Thermometer Used: (CF 0.0) T-266 / (CF +0.3) T-239 **Type of Ice:** (Wet) Blue None

Cooler Temperature (°C): As-read 4.7/2.2/3.0 **Corr. Factor** (CF 0.0) CF +0.3 **Corrected** 4.7/2.2/3.0

BB 8/16/17

Date and initials of person examining contents:

Temperature should be above freezing to 6°C

Chain of Custody present:	☑Yes ☐No ☐N/A	
Chain of Custody relinquished:	☑Yes ☐No ☐N/A	
Samples arrived within holding time:	☑Yes ☐No ☐N/A	
Short Hold Time analyses (<72hr):	☐Yes ☑No ☐N/A	
Rush Turn Around Time requested:	☐Yes ☑No ☐N/A	
Sufficient volume:	☑Yes ☐No ☐N/A	
Correct containers used:	☑Yes ☐No ☐N/A	
Pace containers used:	☑Yes ☐No ☐N/A	
Containers intact:	☑Yes ☐No ☐N/A	
Unpreserved 5035A / TX1005/1006 soils frozen in 48hrs?	☐Yes ☐No ☑N/A	
Filtered volume received for dissolved tests?	☐Yes ☐No ☑N/A	
Sample labels match COC: Date / time / ID / analyses	☑Yes ☐No ☐N/A	
Samples contain multiple phases? Matrix: SL	☐Yes ☑No ☐N/A	
Containers requiring pH preservation in compliance? (HNO_3, H_2SO_4, HCl<2; NaOH>9 Sulfide, NaOH>10 Cyanide) (Exceptions: VOA, Micro, O&G, KS TPH, OK-DRO)	☐Yes ☐No ☑N/A	
Cyanide water sample checks: ☑N/A Lead acetate strip turns dark? (Record only) Potassium iodide test strip turns blue/purple? (Preserve)	☐Yes ☐No ☐Yes ☐No	
Trip Blank present:	☐Yes ☑No ☐N/A	
Headspace in VOA vials (>6mm):	☐Yes ☐No ☑N/A	
Samples from USDA Regulated Area: State: TX	☑Yes ☐No ☐N/A	
Additional labels attached to 5035A / TX1005 vials in the field?	☐Yes ☐No ☑N/A	

USDA Regulated Soil
Dispose of Sample and all Aliquots in Designated Containers

Client Notification/ Resolution: Copy COC to Client? Y / N Field Data Required? Y / N

Person Contacted: _____ Date/Time: _____

Comments/ Resolution: _____

Project Manager Review: JMS Date: 8/16/17

Chain of Custody

60251059

Pace Analytical
www.pacelabs.com

Workorder: 7572004 **Workorder Name:** 212C-MD-00939/EVGSAU 2923-001 **Owner Received Date:** 8/15/2017 **Results Requested By:** 8/22/2017

Report To	Subcontract To
Melissa McCullough Pace Analytical Dallas 400 West Bethany Drive Suite 190 Allen, TX 75013 Phone (972)727-1123	Pace Analytical Kansas 9608 Loiret Blvd. Lenexa, KS 66219 Phone (913)599-5665

Item	Sample ID	Sample Type	Collect Date/Time	Lab ID	Matrix	Preserved Containers: Unpreserved	Requested Analysis: Chloride 300	8015 GRO	8015 DRO DRO	BTEX 8260	Dry Weight	LAB USE ONLY
1	EVGSAU 2923-001 SB-1 (0-1')	PS	8/7/2017 00:01	7572004001	Solid	1	X	X	X	X	X	X		
2	EVGSAU 2923-001 SB-1 (2-3')	PS	8/7/2017 00:01	7572004002	Solid	1	X	X	X	X	X	X		
3	EVGSAU 2923-001 SB-1 (4-5')	PS	8/7/2017 00:01	7572004003	Solid	1	X	X						
4	EVGSAU 2923-001 SB-1 (6-7')	PS	8/7/2017 00:01	7572004004	Solid	1	X	X						
5	EVGSAU 2923-001 SB-1 (9-10')	PS	8/7/2017 00:01	7572004005	Solid	1	X	X	X	X	X	X		
6	EVGSAU 2923-001 SB-2 (0-1')	PS	8/7/2017 00:01	7572004006	Solid	1	X	X	X	X	X	X		
7	EVGSAU 2923-001 SB-2 (2-3')	PS	8/7/2017 00:01	7572004007	Solid	1	X	X	X	X	X	X		
8	EVGSAU 2923-001 SB-2 (4-5')	PS	8/7/2017 00:01	7572004008	Solid	1	X	X						
9	EVGSAU 2923-001 SB-2 (6-7')	PS	8/7/2017 00:01	7572004009	Solid	1	X	X						
10	EVGSAU 2923-001 SB-2 (9-10')	PS	8/7/2017 00:01	7572004010	Solid	1	X	X	X	X	X	X		
11	EVGSAU 2923-001 SB-3 (0-1')	PS	8/8/2017 09:30	7572004011	Solid	1	X	X	X	X	X	X		
12	EVGSAU 2923-001 SB-3 (2-3')	PS	8/8/2017 09:30	7572004012	Solid	1	X	X	X	X	X	X		
13	EVGSAU 2923-001 SB-3 (4-5')	PS	8/8/2017 09:30	7572004013	Solid	1	X	X						
14	EVGSAU 2923-001 SB-3 (6-7')	PS	8/8/2017 09:30	7572004014	Solid	1	X	X						
15	EVGSAU 2923-001 SB-3 (9-10')	PS	8/8/2017 09:30	7572004015	Solid	1	X	X						
16	EVGSAU 2923-001 SB-3 (14-15')	PS	8/8/2017 09:30	7572004016	Solid	1	X	X	X	X	X	X		
17	EVGSAU 2923-001 SB-4 (0-1')	PS	8/8/2017 09:30	7572004017	Solid	1	X	X						
18	EVGSAU 2923-001 SB-4 (2-3')	PS	8/8/2017 09:30	7572004018	Solid	1	X	X	X	X	X	X		
19	EVGSAU 2923-001 SB-4 (4-5')	PS	8/8/2017 09:30	7572004019	Solid	1	X	X						

Chain of Custody

Pace Analytical®
www.pacelabs.com

Workorder: 7572004 Workorder Name: 212C-MD-00939/EVGSAU 2923-001 Owner Received Date: 8/15/2017 Results Requested By: 8/22/2017

Report To	Subcontract To
Melissa McCullough Pace Analytical Dallas 400 West Bethany Drive Suite 190 Allen, TX 75013 Phone (972)727-1123	Pace Analytical Kansas 9608 Loiret Blvd. Lenexa, KS 66219 Phone (913)599-5665

Item	Sample ID	Sample Type	Collect Date/Time	Lab ID	Matrix	Preserved Containers: Unpreserved						Chloride 300	8015 6020	8015 D120 + 0120	BTEX 8260	Dry Weight								LAB USE ONLY
20	EVGSAU 2923-001 SB-4 (6-7')	PS	8/8/2017 09:30	7572004020	Solid	1						X	X											
21	EVGSAU 2923-001 SB-4 (9-10')	PS	8/7/2017 09:30	7572004021	Solid	1						X	X											
22	EVGSAU 2923-001 SB-4 (14-15')	PS	8/7/2017 09:30	7572004022	Solid	1						X	X											
23	EVGSAU 2923-001 SB-4 (19-20')	PS	8/7/2017 09:30	7572004023	Solid	1						X	X	X	X	X	X							
24	EVGSAU 2923-001 SB-4 (24-25')	PS	8/7/2017 09:30	7572004024	Solid	1						X	X											
25	EVGSAU 2923-001 SB-4 (29-30')	PS	8/7/2017 09:30	7572004025	Solid	1						X	X	X	X	X	X							

Comments

Transfers	Released By	Date/Time	Received By	Date/Time
1	Melissa McCullough Pace	8-17-17 1720		
2				
3				

Cooler Temperature on Receipt °C | Custody Seal Y or N | Received on Ice Y or N | Samples Intact Y or N

****In order to maintain client confidentiality, location/name of the sampling site, sampler's name and signature may not be provided on this COC document. This chain of custody is considered complete as is since this information is available in the owner laboratory.*

Appendix D

Lea County, New Mexico

KU—Kimbrough-Lea complex, dry, 0 to 3 percent slopes

Map Unit Setting

National map unit symbol: 2tw46
Elevation: 2,500 to 4,800 feet
Mean annual precipitation: 14 to 16 inches
Mean annual air temperature: 57 to 63 degrees F
Frost-free period: 180 to 220 days
Farmland classification: Not prime farmland

Map Unit Composition

Kimbrough and similar soils: 45 percent
Lea and similar soils: 25 percent
Minor components: 30 percent
Estimates are based on observations, descriptions, and transects of the mapunit.

Description of Kimbrough

Setting

Landform: Plains, playa rims
Down-slope shape: Linear, convex
Across-slope shape: Linear, concave
Parent material: Loamy eolian deposits derived from sedimentary rock

Typical profile

A - 0 to 3 inches: gravelly loam
Bw - 3 to 10 inches: loam
Bkkm1 - 10 to 16 inches: cemented material
Bkkm2 - 16 to 80 inches: cemented material

Properties and qualities

Slope: 0 to 3 percent
Depth to restrictive feature: 4 to 18 inches to petrocalcic
Natural drainage class: Well drained
Runoff class: High
Capacity of the most limiting layer to transmit water (Ksat): Very low to moderately low (0.00 to 0.01 in/hr)
Depth to water table: More than 80 inches
Frequency of flooding: None
Frequency of ponding: None
Calcium carbonate, maximum in profile: 95 percent
Salinity, maximum in profile: Nonsaline to very slightly saline (0.0 to 2.0 mmhos/cm)
Sodium adsorption ratio, maximum in profile: 1.0
Available water storage in profile: Very low (about 1.4 inches)

Interpretive groups

Land capability classification (irrigated): None specified

Land capability classification (nonirrigated): 7s
Hydrologic Soil Group: D
Ecological site: Very Shallow 12-17" PZ (R077DY049TX)
Hydric soil rating: No

Description of Lea

Setting

Landform: Plains
Down-slope shape: Convex
Across-slope shape: Linear
Parent material: Calcareous, loamy eolian deposits from the blackwater draw formation of pleistocene age over indurated caliche of pliocene age

Typical profile

A - 0 to 10 inches: loam
Bk - 10 to 18 inches: loam
Bkk - 18 to 26 inches: gravelly fine sandy loam
Bkkm - 26 to 80 inches: cemented material

Properties and qualities

Slope: 0 to 3 percent
Depth to restrictive feature: 22 to 30 inches to petrocalcic
Natural drainage class: Well drained
Runoff class: High
Capacity of the most limiting layer to transmit water (Ksat): Very low to moderately low (0.00 to 0.06 in/hr)
Depth to water table: More than 80 inches
Frequency of flooding: None
Frequency of ponding: None
Calcium carbonate, maximum in profile: 90 percent
Salinity, maximum in profile: Nonsaline to very slightly saline (0.0 to 2.0 mmhos/cm)
Sodium adsorption ratio, maximum in profile: 3.0
Available water storage in profile: Very low (about 2.9 inches)

Interpretive groups

Land capability classification (irrigated): None specified
Land capability classification (nonirrigated): 7s
Hydrologic Soil Group: D
Ecological site: Sandy Loam 12-17" PZ (R077DY047TX)
Hydric soil rating: No

Minor Components

Kenhill

Percent of map unit: 12 percent
Landform: Plains
Down-slope shape: Linear
Across-slope shape: Linear
Ecological site: Clay Loam 12-17" PZ (R077DY038TX)
Hydric soil rating: No

Douro

Percent of map unit: 12 percent
Landform: Plains
Down-slope shape: Linear
Across-slope shape: Linear
Ecological site: Sandy Loam 12-17" PZ (R077DY047TX)
Other vegetative classification: Unnamed (G077DH000TX)
Hydric soil rating: No

Spraberry

Percent of map unit: 6 percent
Landform: Plains, playa rims
Down-slope shape: Linear, convex
Across-slope shape: Linear
Ecological site: Very Shallow 12-17" PZ (R077DY049TX)
Other vegetative classification: Unnamed (G077DH000TX)
Hydric soil rating: No

Data Source Information

Soil Survey Area: Lea County, New Mexico
Survey Area Data: Version 14, Sep 10, 2017

NMSLO Seed Mix — Shallow (SH)

SHALLOW (SH) SITES SEED MIXTURE:

COMMON NAME	VARIETY	APPLICATION RATE (PLS/Acre)	DRILL BOX
Grasses:			
Sideoats grama	Vaughn, El Reno	4.0	F
Blue grama	Lovington, Hachita	3.0	D
Little bluestem	Pastura, Cimmaron	1.5	F
Green sprangletop	VNS, Southern	1.0	D
Plains bristlegrass	VNS, Southern	1.0	D
Forbs:			
Firewheel (*Gaillardia*)	VNS, Southern	1.0	D
Shrubs:			
Fourwing saltbush	Marana, Santa Rita	1.0	D
Common winterfat	VNS, Southern	0.5	F
	Total PLS/acre	**13.0**	

S = Small seed drill box, D = Standard seed drill box, F = Fluffy seed drill box
VNS = Variety Not Stated, PLS = Pure Live Seed

- Seed mixes should be provided in bags separating seed types into the three categories: small (S), standard (D) and fluffy (F).
- VNS, Southern – Seed should be from a southern latitude collection of this species.
- Double seed application rate for broadcast or hydroseeding.
- If one species is not available, contact the SLO for an approved substitute; alternatively the SLO may require other species proportionately increased.
- Additional information on these seed species can be found on the USDA Plants Database website at http://plants.usda.gov.