APPROVED
By Olivia Yu at 9:30 am, Sep 26, 2018

NMOCD approves 1RP-5165 for closure.

September 12, 2018

Reference No.11181914

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

Dear Ms. Yu:

Re: Site Assessment and Remediation Summary Report
Phillips66 Jal Truck Station Crude Release
NMOCD #1RP-5165
Lea County, New Mexico

On behalf of Phillips 66 Pipeline, LLC (Phillips66), GHD Services Inc. (GHD) is providing this Site Assessment and Remediation Summary letter report for the above-referenced site. The Jal Truck Station site (hereafter referred to as the "Site") is located on Federal land within Unit Letter A, Section 6, Township 24S, and Range 37E in Lea County, New Mexico. Geographical coordinates for the Site are 32.25327° North, 103.19699° West (**Figure 1**). The Site consists of two approximately 300 barrel (bbl) above ground storage tanks (ASTs) inside a containment berm, a truck dump station and pipeline pumping equipment (**Figure 2**). Across Deep Wells Road, to the north of the Site, is the Jal 4 Booster Station.

1. Introduction

Site assessment and concurrent remediation (removal of soils/rock) were performed in order to address impacts from an August 15, 2018 release of approximately 88 barrels bbls of crude oil from an ASTvalve. The release was contained completely within the bermed area and 254 bbls were recovered. Notification of the release via Form C-141 (Initial, Attachment 1) was provided to the New Mexico Oil Conservation Division (NMOCD) on August 16, 2018 The Site is located on private land. Remediation case number 1RP-5165 has been assigned to the Site by the NMOCD.

2. Regulatory Framework

The nearest well to the Site, as determined by a well record search on the New Mexico Office of the State Engineer's (OSE) online database, is located approximately 884 feet from the release with a listed depth to water of 124 feet below ground surface (ft bgs) was (See Attachment 2). A list of additional wells within ½-mile of the Site is included in Attachment 2. There is no *significant watercourse* as defined in 19.15.17.7 NMAC within ½ mile of the Site (see Figure 2). The facility across Deep Wells Rd. to the north includes some plant process water ponds, but these are not sources of fresh water. Based on a >100 foot depth to water beneath the Site, as per Table 1 of 19.15.29 NMAC, closure criteria for chloride are 600 milligrams

per kilogram (mg/kg); 2,500 mg/kg for TPH (total petroleum hydrocarbons); 50 mg/kg for BTEX (benzene, toluene, ethylbenzene and xylenes) and 10 mg/kg for benzene. Table 1 of 19.15.29 NMAC is presented below:

Table 2.1 Table 1: Closure Criteria for Soils Impacted by Release

Depth below bottom of release to ground water less than 10,000 mg/l TDS	Constituent	Method*	Limit**
≤ 50 feet	Chloride***	EPA 300.0	600 mg/kg
	TPH	EPA SW-846 Method 8015M	100 mg/kg
	BTEX	EPA SW-846 Method 8021B or 8260B	50 mg/kg
	Benzene	EPA SW-846 Method 8021B or 8015M	10 mg/kg
51 feet-100 feet	Chloride***	EPA 300.0	10,000 mg/kg
	TPH	EPA SW-846 Method 8015M	2,500 mg/kg
	GRO+DRO	EPA SW-846 Method 8015M	1,000 mg/kg
	BTEX	EPA SW-846 Method 8021B or 8260B	50 mg/kg
	Benzene	EPA SW-846 Method 8021B or 8260B	10 g/kg
Greater than 100 feet	Chloride***	EPA 300.0	20,000 mg/kg
	TPH	EPA SW-846 Method 8015M	2,500 mg/kg
	GRO+DRO	EPA SW-846 Method 8015M	1,000 mg/kg
	BTEX	EPA SW-846 Method 8021B or 8260B	50 mg/kg
	Benzene	EPA SW-846 Method 8021B or 8015M	10 mg/kg

3. Release Assessment

3.1 Impact Assessment/Soils Excavation

Phillips 66 field personnel were on Site August 16, 2018 to begin removing oil stained soils from around the ASTs and to assess lateral and vertical extent. (see Photo 2). The excavation of visibly stained soils/rock proceeded until an excavation with dimensions of approximately 77 ft x 30 ft x 1.5 to 2.5 ft deep (see Figure 2). Removed soils and rock are stockpiled on site in a plastic-lined and bermed area. Upon notification of Site closure/no further action by NMOCD, Phillips 66 will haul this material away for off Site disposal in a licensed landfarm facility.

3.2 Assessment/Confirmation Sampling

GHD mobilized to the Site on August 20, 2018 to collect field screening and Site assessment/confirmation samples from the exposed excavation. Three bottom of excavation samples (BS-1, BS-2 and BS-3) were collected (see Figure 2) and field screened for total petroleum hydrocarbons (TPH) using a Petroflag® Test Kit. These results ranged from 84 parts per million (ppm-equal to milligrams per kilogram) to 168 ppm (see Table 1). Six sidewall samples (SW-1 through SW-6) were also collected-two samples each from the north and south walls (SW-1-2, SW-2-2 and SW-4-2 and SW-5-2, respectively, and one sample each from the west and east walls (SW-3-2 and SW-6-2). All samples collected were discrete samples collected in "fresh" soils several inches in (down) from the exposed surface. All samples were submitted to Pace Laboratories of Lenexa, KS (Pace) for analyses of BTEX by EPA Method 8260; for GRO, DRO and MRO (gasoline range, diesel range and motor oil range organics-TPH) by EPA Method 8015 and for chloride by EPA Method 300.

A summary of sample locations and analytical results is depicted in Figure 3. Sample locations were not geo-referenced at the time of collection, however, the locations are marked out on the photos (taken on July 20 and July 27, 2018) with approximate GPS coordinates and sample date indicated (see Figure 4).

3.3 Sample Results

Concentrations of BTEX constituents were not detected in all samples except for the SW-3-2 sample (east sidewall) where toluene, ethylbenzene and xylenes were detected just above laboratory reporting limits. Benzene was non detect in this same sample and the total BTEX concentration was well below the Table 1 clean up level of 50 mg/kg. TPH was detected at concentrations (total TPH) ranging from non-detect (BS-2-3, BS-3-3, SW-4-2, SW-5-2 and SW-6-2) to 253.6 mg/kg (SW-3-2). All TPH results were below the Table 1 Closure level of 2500 mg.kg. Chloride concentrations were below the laboratory reporting limit (non-detect) for all tested samples Soil laboratory analytical reports are included as Attachment 4 and summarized on Table 1.

4. Summary and Recommendations

A summary of the events and findings from the remediation activities performed at the Site are as follows:

- A release of 88 bbl of crude oil occurred at the Site on August 4, 2018; 25 bbls were recovered by vacuum truck.
- Removal of impacted soils has resulted in an excavation of approximate dimensions of 77 ft x 30 ft x 2.5 ft. Impacted soils are stockpiled on site awaiting disposition.
- Three bottom of excavation samples were collected and field screened using Petroflag with results less than 200 ppm. These bottom samples and six sidewall samples were collected from the excavation and were tested for BTEX constituents, full range TPH and chloride.
- Trace concentrations of BTEX constituents were detected in the sample collected from the east sidewall of the excavation, SW-3-2. All other samples for BTEX were non-detect. TPH was detected in

concentrations at concentrations below the Table 1 cleanup value of 2,500 kg/mg. Chloride was not detected in any bottom or sidewall sample at a concentration above laboratory reporting limits.

Based on the results of field and laboratory soil sampling and soil removal/remedial efforts to date, GHD no further action status and Site closure be granted for this Site. A Form C-141 Final is included and part of this letter report as Attachment 5.

If you have any questions or comments with regards to this report, please do not hesitate to contact GHD's Albuquerque office at (505) 884-0672.

Sincerely,

GHD

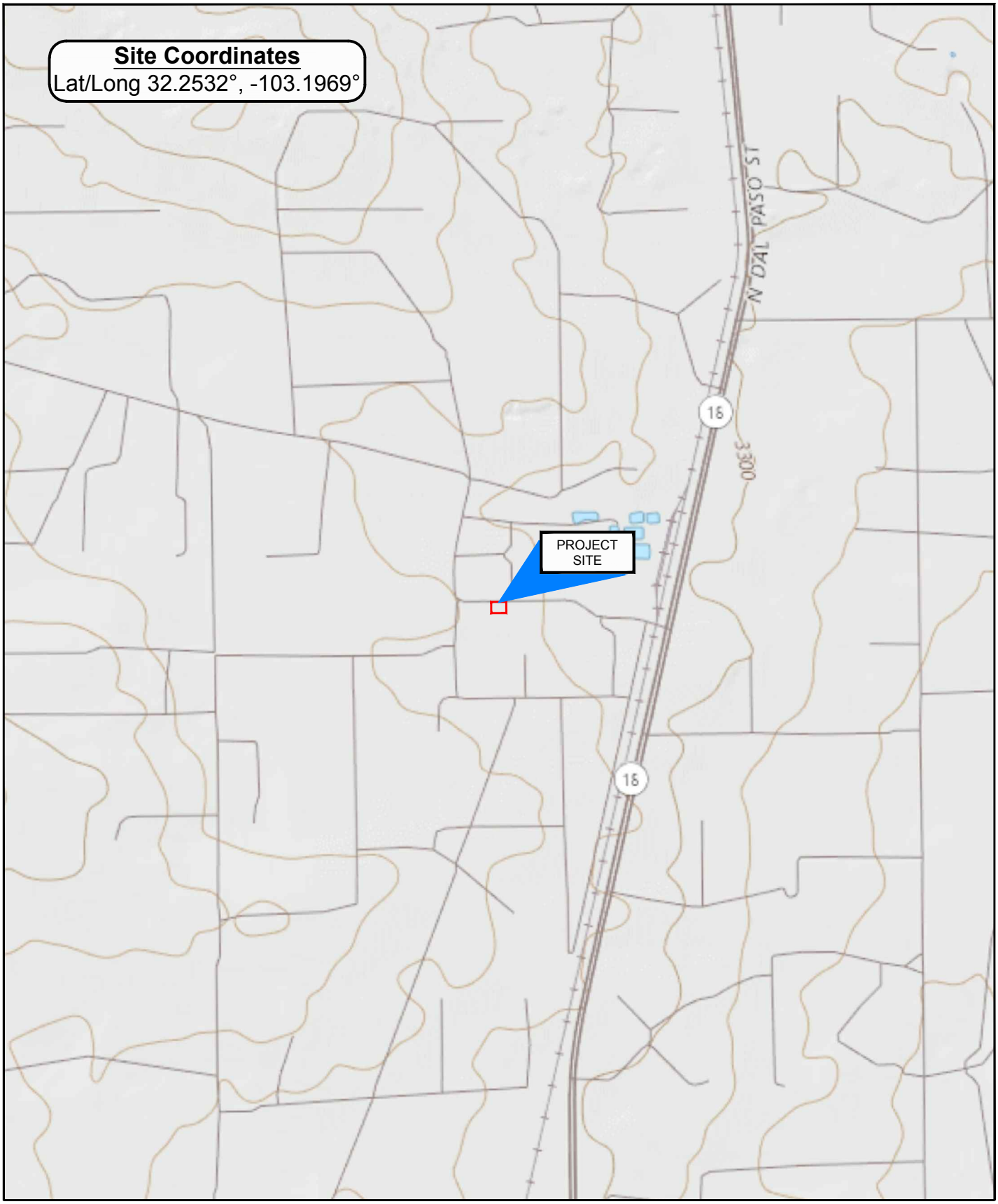
Jeff Walker
Geologist

Christina Ruby
Senior Project Manager

JW/ji/1

Encl. Figure 1
Figure 2
Figure 3
Figure 4
Table 1
Attachment 1 – Form C-141-Initial
Attachment 2 – OSE Well Report
Attachment 3 – Field Screening Summary
Attachment 4 – Pace Laboratory Report
Attachment 5 – Form C-141-Final

cc: Aly Batt, P66 Environmental Specialist – P66 Midstream



Source: USGS 7.5 MINUTE QUADS "RATTLESNAKE CANYON AND JAL NW, NEW MEXICO"

0 1000 2000ft

Coordinate System:
STATE PLANE -
NEW MEXICO EAST

PHILLIPS 66
JAL TRUCK STATION
JAL, LEA COUNTY, NEW MEXICO

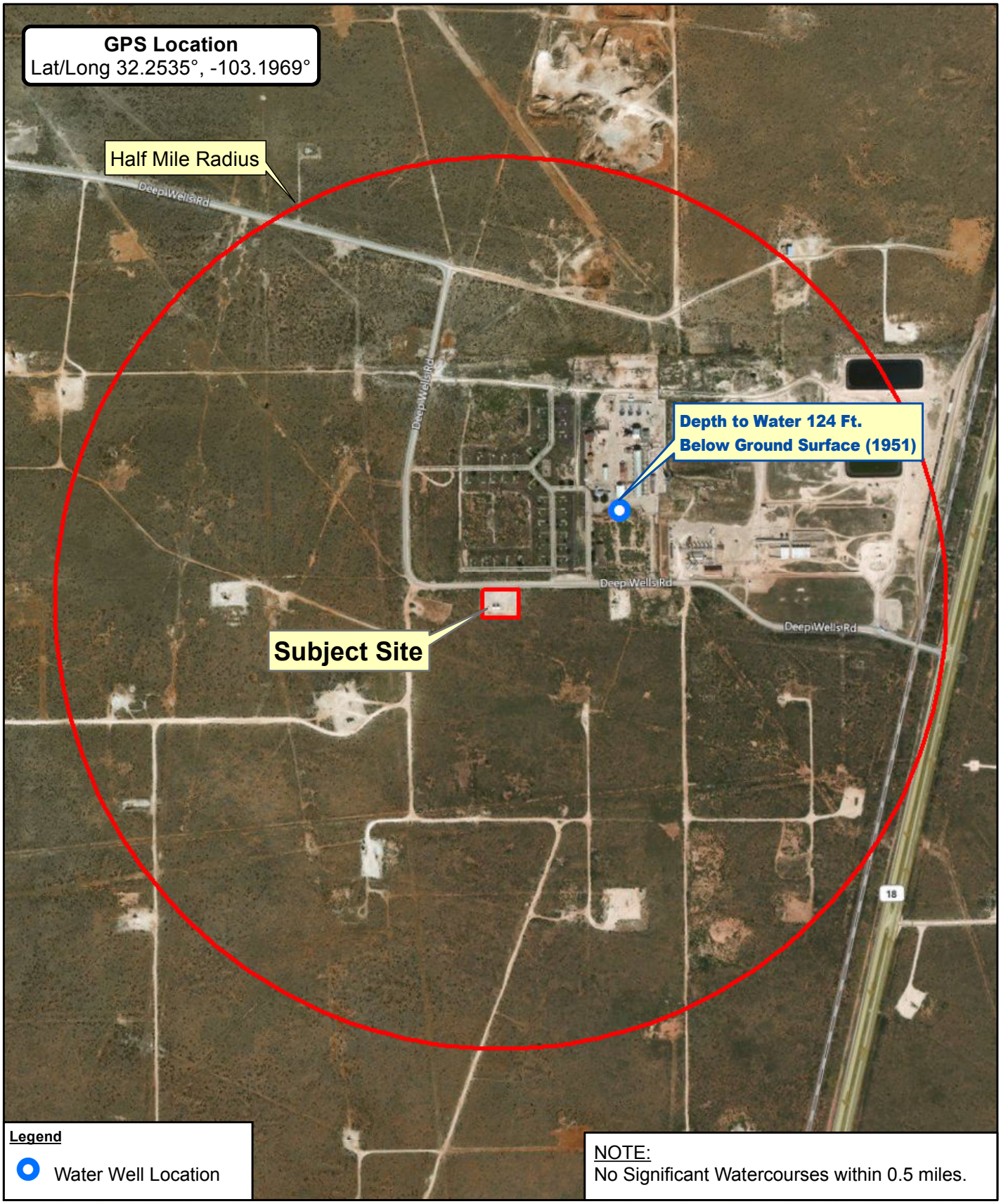
11181914-00

Aug 24, 2018

SITE LOCATION MAP

FIGURE 1

CAD File: I:\CAD\Files\Eight Digit Job Numbers\1118----\11181914-P66_Jal Truck Station\11181914-00(000)GN-DL001.dwg



Source: MICROSOFT CORPORATION AND AFFILIATED DATA PROVIDERS

0 410 820
Feet
1 inch = 800 feet

Coordinate System:
NAD 1983 2011 StatePlane New Mexico East FIPS 3001 Ft US

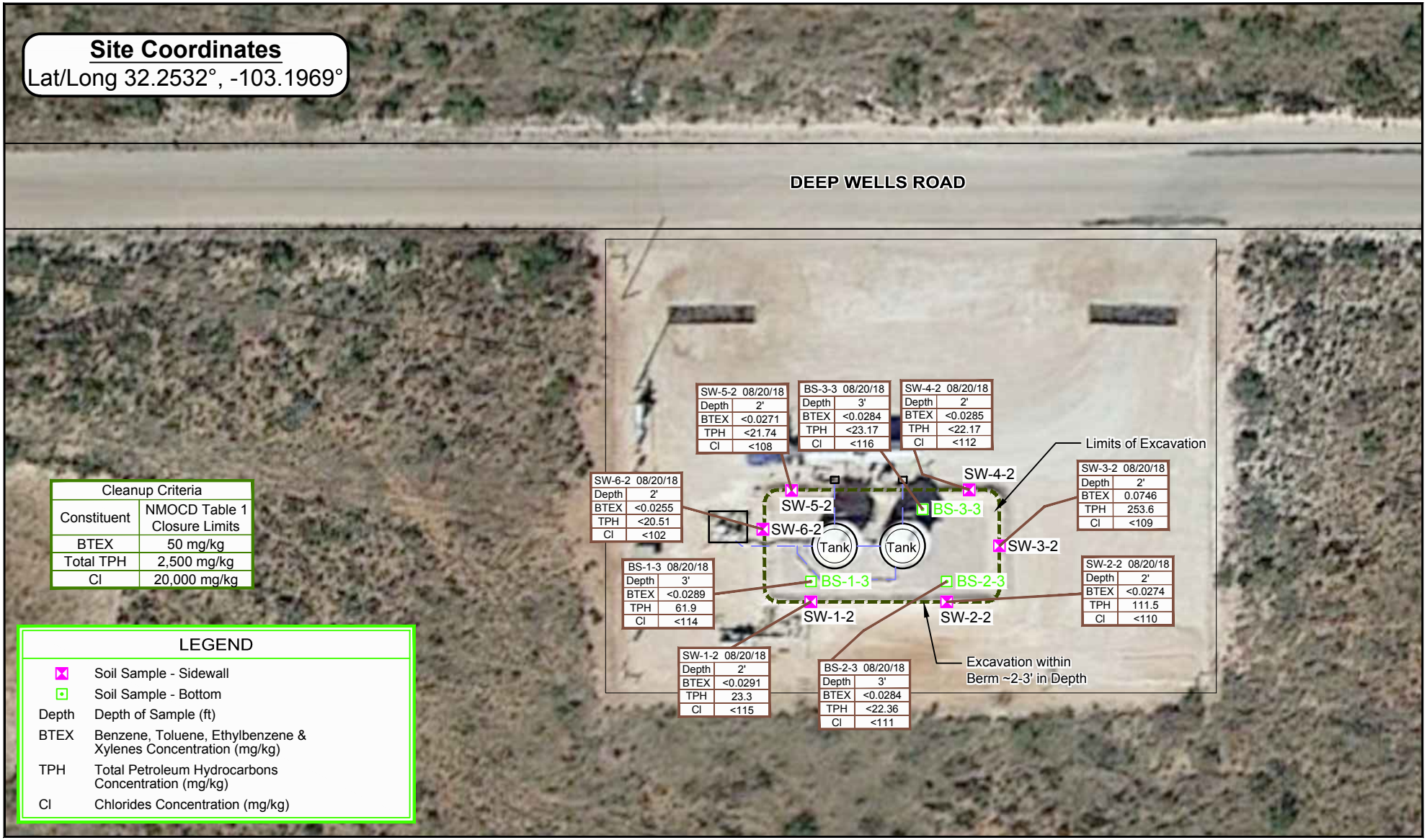
PHILLIPS 66
JAL TRUCK STATION
JAL, LEA COUNTY, NEW MEXICO

11181914-00
Sep 7, 2018

WATER SOURCES MAP

FIGURE 2

GIS File: I:\GIS\Projects\8 digits\1118---\11181914-P66 Jal Station\11181914-00(000)GIS-DL001_WaterWell.mxd



Source: GOOGLE EARTH AERIAL IMAGE DATED OCTOBER 2017

0 20 50ft

Coordinate System:
STATE PLANE -
NEW MEXICO EAST

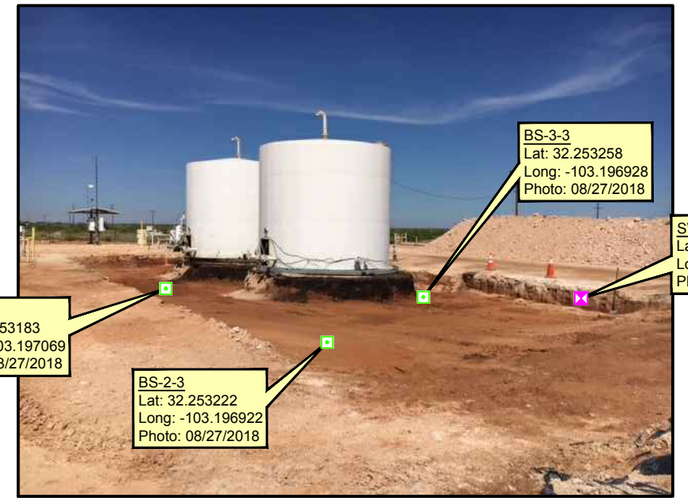
PHILLIPS 66
JAL TRUCK STATION
JAL, LEA COUNTY, NEW MEXICO

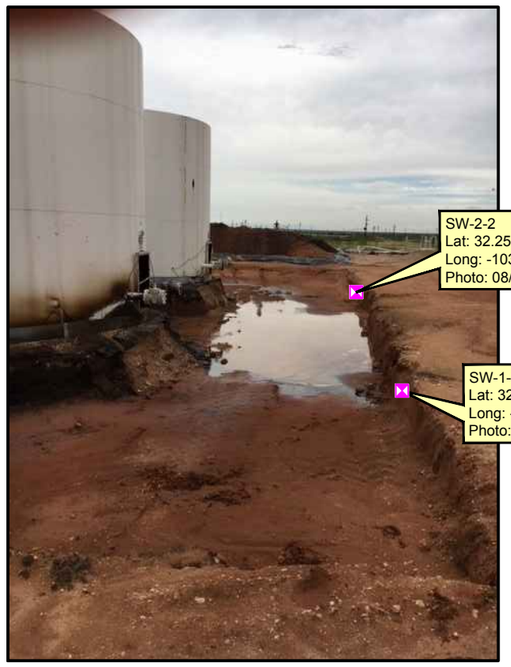
11181914-00
Sep 4, 2018

SAMPLE LOCATION MAP

FIGURE 3

CAD File: I:\CAD\Files\Eight Digit Job Numbers\1118----\11181914-P66_Jal Truck Station\11181914-00(000)GN-DL001.dwg





NOTES:
1. ALL SAMPLES COLLECTED AUGUST 20, 2018.

2. PHOTOS TAKEN ON DATES NOTED.

PHILLIPS 66
JAL TRUCK STATION
JAL, LEA COUNTY, NEW MEXICO

PHOTO LOG OF SAMPLE LOCATIONS

11181914-00
Sep 7, 2018

FIGURE 4

CAD File: I:\CAD\Files\Eight Digit Job Numbers\1118----\11181914-P66_Jal Truck Station\11181914-00(000)GN-DL001.dwg

Table 1

P66 Jal Truck Station - Summary of Soil Analytical Data

Sample ID	Depth (feet)	Date	Benzene	Toluene	Ethyl-benzene	Xylenes	BTEX	TPH (GRO)	TPH (DRO)	TPH (ORO)	Total TPH	TPH Field Screen	Chloride
S-111181914-082018-JP-BS-1-3	3	8/20/2018	<0.0058	<0.0058	<0.0058	<0.0115	<0.0289	<0.058	46.4	15.5	61.9	168	<114
S-111181914-082018-JP-BS-2-3	3	8/20/2018	<0.0056	<0.0056	<0.0056	<0.0112	<0.0284	<0.56	<10.9	<10.9	<22.36	84	<111
S-111181914-082018-JP-BS-3-3	3	8/20/2018	<0.0057	<0.0057	<0.0057	<0.0113	<0.0284	<0.57	<11.3	<11.3	<23.17	162	<116
S-111181914-082018-JP-SW-1-2	2	8/20/2018	<0.0058	<0.0058	<0.0058	<0.0117	<0.029.1	<0.58	23.3	<11.0	23.3	--	<115
S-111181914-082018-JP-SW-2-2	2	8/20/2018	<0.0055	<0.0055	<0.0055	<0.0109	<0.0274	<0.55	85.6	25.9	111.5	--	<110
S-111181914-082018-JP-SW-3-2	2	8/20/2018	<0.0055	0.0113	0.0233	0.040	0.0746	2.2	198	53.4	253.6	--	<109
S-111181914-082018-JP-SW-4-2	2	8/20/2018	<0.0057	<0.0057	<0.0057	<0.0114	<0.0285	<0.57	<10.8	<10.8	<22.17	--	<112
S-111181914-082018-JP-SW-5-2	2	8/20/2018	<0.0054	<0.0054	<0.0054	<0.0109	<0.0271	<0.54	<10.6	<10.6	<21.74	--	<108
S-111181914-082018-JP-SW-6-2	2	8/20/2018	<0.0051	<0.0051	<0.0051	<0.0102	<0.0255	<0.51	<10.0	<10.0	<20.51	--	<102
NMOCD Table 1 Closure Limits			**10**	**Total BTEX: 50**				**Total TPH: 2,500**					**20,000**

Notes:

All sample results are in milligrams per kilogram
NMOCD = New Mexico Oil Conservation Division
Table 1 Closure Limits = In accordance with 19.15.29 Release Rule
BTEX = Benzene, Toluene, Ethylbenzene, Xylenes
TPH = Total Petroleum Hydrocarbons
GRO = Gasoline Range Organics
DRO = Diesel Range Organics-C10-C28
MRO = Oil Range Organics-C28-C35

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 April 3, 2017

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: Phillips 66 Pipeline LLC	Contact: Spencer Cave
Address: 411 S. Keeler Ave., AB-1204-02, Bartlesville, OK 74003	Telephone No. (918) 977-4317
Facility Name: Jal Truck Station	Facility Type: Crude Storage & Truck Offloading

Surface Owner: Deep Wells Ranch Inc.	Mineral Owner Federal	API No. N/A

LOCATION OF RELEASE

Unit Letter	Section	Township	Range	Feet from the	North/South Line	Feet from the	East/West Line	County
A	06	24S	37E					Lea

Latitude 32.25327 **Longitude** -103.19699 NAD83

NATURE OF RELEASE

Type of Release: Crude Oil	Volume of Release:88 BBLs	Volume Recovered: 25 BBLs
Source of Release: Tank 4	Date and Hour of Occurrence: 08-15-2018, 09:55 a.m.	Date and Hour of Discovery 08-15-2018, 09:55 a.m.
Was Immediate Notice Given? ☒ Yes ☐ No ☐ Not Required	If YES, To Whom? Maxey Brown	
By Whom? Spencer Cave	Date and Hour: 08-15-2018 – 10:55 a.m.	
Was a Watercourse Reached? ☐ Yes ☒ No	If YES, Volume Impacting the Watercourse. N/A	

If a Watercourse was Impacted, Describe Fully.*

N/A

RECEIVED
By Olivia Yu at 12:37 pm, Aug 21, 2018

Describe Cause of Problem and Remedial Action Taken.*
Response and cleanup efforts are still underway. An investigation will be performed after the spill response is complete. Information will be provided in the subsequent report.

Describe Area Affected and Cleanup Action Taken.*
Soil and rock within the tank impoundment area at the facility. The estimated total surface area of impacted soil is approximately 1800 sq ft. Currently the depth of impact to soil based on excavation activities is approximately 17 inches. Soil and rock are being excavated for analysis and disposal. Once impacted material around the tanks has been removed clean fill will be brought in to replace the excavated material.

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:

Printed Name: Spencer Cave

Title: Environmental Specialist

E-mail Address: spencer.cave1@p66.com

Date: 8/16/2018 Phone: (918) 977-4317

OIL CONSERVATION DIVISION

Approved by Environmental Specialist:

Approval Date: 8/21/2018 Expiration Date:

Conditions of Approval:

NMAC 19.15.29 effective August 14, 2018. Complete release characterization before any significant remediation.

Attached ☐

* Attach Additional Sheets If Necessary

fOY1823346317 nOY1823346680

1RP-5165

pOY1823346539

New Mexico Office of the State Engineer

Point of Diversion Summary

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

Well Tag	POD Number	Q64	Q16	Q4	Sec	Twn	Rng	X	Y
	CP 00038 POD1	4	4	4	31	23S	37E	670070	3570075*

Driller License: **Driller Company:**

Driller Name: ROBERTS DRILLING CO.

Drill Start Date:	10/24/1951	**Drill Finish Date:**	12/01/1951	**Plug Date:**	
Log File Date:	11/17/1953	**PCW Rcv Date:**		**Source:**	Shallow
Pump Type:		**Pipe Discharge Size:**		**Estimated Yield:**	
Casing Size:	12.50	**Depth Well:**	180 feet	**Depth Water:**	124 feet

Water Bearing Stratifications:	Top	Bottom	Description
	133	172	Sandstone/Gravel/Conglomerate

Casing Perforations:	Top	Bottom
	133	172

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

New Mexico Office of the State Engineer

Active & Inactive Points of Diversion

(with Ownership Information)

(acre ft per annum) | (R=POD has been replaced and no longer serves this file, C=the file is closed) | (quarters are 1=NW 2=NE 3=SW 4=SE) (quarters are smallest to largest) | (NAD83 UTM in meters)

WR File Nbr	Sub basin	Use	Diversion	Owner	County	POD Number	Code	Grant	Source	q 64	q 16	q 4	Sec	Twn	Rng	X	Y	Distance
CP 00037	CP	IND	18.6	EL PASO NATURAL GAS CORP.	LE	CP 00038 POD1			Shallow	4	4	4	31	23S	37E	670070	3570075*	270
CP 00038	CP	PPP	0	EL PASO NATURAL GAS COMPANY	LE	CP 00038 POD1			Shallow	4	4	4	31	23S	37E	670070	3570075*	270
CP 00037	CP	IND	18.6	EL PASO NATURAL GAS CORP.	LE	CP 00037 POD1			Shallow	2	4	4	31	23S	37E	670070	3570275*	409
					LE	CP 00042 POD1			Shallow	1	1	1	05	24S	37E	670279	3569885*	446
CP 00042	CP	PPP	0	EL PASO NATURAL GAS COMPANY	LE	CP 00042 POD1			Shallow	1	1	1	05	24S	37E	670279	3569885*	446
CP 00037	CP	IND	18.6	EL PASO NATURAL GAS CORP.	LE	CP 00041 POD1			Shallow	3	1	1	05	24S	37E	670279	3569685*	510
CP 00041	CP	PPP	0	EL PASO NATURAL GAS COMPANY	LE	CP 00041 POD1			Shallow	3	1	1	05	24S	37E	670279	3569685*	510
CP 01431	CP	MON	0	ARCADIS US	LE	CP 01431 POD2			Shallow	3	3	3	32	23S	37E	670378	3570148	581
CP 00037	CP	IND	18.6	EL PASO NATURAL GAS CORP.	LE	CP 00040 POD1			Shallow	4	4	3	31	23S	37E	669266	3570062*	583
CP 00040	CP	PPP	0	EL PASO NATURAL GAS COMPANY	LE	CP 00040 POD1			Shallow	4	4	3	31	23S	37E	669266	3570062*	583
CP 01240	CP	MON	0	TALON/LPE	LE	CP 01240 POD3				4	2	4	31	23S	37E	670021	3570512	602
CP 01154	CP	MON	0	SOUTHERN UNION GAS SERVICES	LE	CP 01154 POD3							31	23S	37E	670022	3570513	603
					LE	CP 01154 POD1							31	23S	37E	670009	3570523	610
CP 01240	CP	MON	0	S0UTHERN UNION GAS SERVICES	LE	CP 01240 POD1				4	2	4	31	23S	37E	670010	3570524	611
CP 01154	CP	MON	0	SOUTHERN UNION GAS SERVICES	LE	CP 01154 POD2							31	23S	37E	670021	3570524	613
CP 01240	CP	MON	0	S0UTHERN UNION GAS SERVICES	LE	CP 01240 POD5				4	2	4	31	23S	37E	670045	3570516	613
CP 01154	CP	MON	0	STRAUB CORPORATION	LE	CP 01154 POD5							31	23S	37E	670044	3570516	614
CP 01240	CP	MON	0	S0UTHERN UNION GAS SERVICES	LE	CP 01240 POD2				4	2	4	31	23S	37E	670021	3570524	614
CP 01154	CP	MON	0	SOUTHERN UNION GAS SERVICES	LE	CP 01154 POD4							31	23S	37E	670009	3570533	619
CP 01240	CP	MON	0	TALON/LPE	LE	CP 01240 POD4				4	2	4	31	23S	37E	670008	3570533	619
CP 00037	CP	IND	18.6	EL PASO NATURAL GAS CORP.	LE	CP 00039 POD1			Shallow	4	3	3	32	23S	37E	670472	3570082*	652
CP 00037 E	CP	POL	25	IAN G. YANAGISAWA	LE	CP 00037 POD6				4	3	3	32	23S	37E	670472	3570082*	652
CP 00037 F	CP	POL	35	IAN G. YANAGISAWA	LE	CP 00037 POD6				4	3	3	32	23S	37E	670472	3570082*	652
					LE	CP 00037 POD7			Shallow	4	3	3	32	23S	37E	670472	3570082*	652
CP 00037 G	CP	POL	20	EL PASO NATURAL GAS COMPANY	LE	CP 00037 POD6				4	3	3	32	23S	37E	670472	3570082*	652
					LE	CP 00037 POD7			Shallow	4	3	3	32	23S	37E	670472	3570082*	652
					LE	CP 00037 POD8			Shallow	4	3	3	32	23S	37E	670472	3570082*	652
CP 00039	CP	PPP	0	EL PASO NATURAL GAS COMPANY	LE	CP 00039 POD1			Shallow	4	3	3	32	23S	37E	670472	3570082*	652
CP 01431	CP	MON	0	EL PASO NATURAL GAS CO. LLC	LE	CP 01431 POD1			Shallow	3	1	3	32	23S	37E	670322	3570379	655
					LE	CP 01431 POD6			Shallow	1	2	1	05	24S	37E	670586	3569906	751
CP 00104	CP	PDL	3	DEEP WELLS RANCH, INC.	LE	CP 00104 POD1				2	1	4	31	23S	37E	669662	3570671*	752
CP 01431	CP	MON	0	EL PASO NATURAL GAS CO. LLC	LE	CP 01431 POD11			Shallow	3	4	3	32	23S	37E	670587	3570044	758
					LE	CP 01431 POD5			Shallow	3	4	3	32	23S	37E	670592	3570057	765
					LE	CP 01431 POD4			Shallow	3	4	3	32	23S	37E	670594	3570057	767

Record Count: 34

UTMNAD83 Radius Search (in meters):

Easting (X): 669835.87 **Northing (Y):** 3569938.93 **Radius:** 810

Sorted by: Distance

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

8-20-18 Jal Tank Station P66 J. Pigg

cloudy 72°F Page 1

Equipment: H_2S monitor 07496

Personnel: Chad,

1025 Arrive onsite to collect 2 base samples from excavation and take pictures.

1030 Talk to Chad about excavation

1035 BS-1-3' collected

1038 BS-2-3' collected

1048 BS-3-3' collected.

1110 Take pictures of excavation

1125 Mike arrives onsite to deliver Petroflag

1145 BS-1-3 screened TPH @ 168 ppm

1147 BS-2-3 screened TPH @ 84 ppm

1150 BS-3-3 screened TPH @ 142 ppm

1205 offsite

1215 Called Jeff when I was in signal

1255 back onsite to collect side wall samples

1305 SW-1-2' collected S-082018-SW-1-2'?

1307 SW-2-2' collected S-082018-SW-2-2

1310 SW-3-2' collected

1315 SW-3-3' collected

1320 SW-4-2' collected

1321 SW-5-2' Collected

1324 SW-6-2' Collected.

1335 offsite to Carlsbad.

Pace Analytical Services, LLC
9608 Loiret Blvd.
Lenexa, KS 66219
(913)599-5665

August 29, 2018

Arthur Greeley
GHD
1755 Wittington Place
Ste 500
Dallas, TX 75234

RE: Project: 11181914 P66 Jal Truck Station
Pace Project No.: 60278351

Dear Arthur Greeley:
Enclosed are the analytical results for sample(s) received by the laboratory on August 22, 2018. 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,

Jamie Church
jamie.church@pacelabs.com
314-838-7223
Project Manager

Enclosures

cc: Christina Ruby, GHD Services
Jeffrey Walker, GHD Services, Inc.

Pace Analytical Services, LLC
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CERTIFICATIONS

Project: 11181914 P66 Jal Truck Station
Pace Project No.: 60278351

Kansas Certification IDs

9608 Loiret Boulevard, Lenexa, KS 66219
Missouri Certification Number: 10090
Arkansas Drinking Water
WY STR Certification #: 2456.01
Arkansas Certification #: 18-016-0
Arkansas Drinking Water
Illinois Certification #: 004455
Iowa Certification #: 118
Kansas/NELAP Certification #: E-10116
Louisiana Certification #: 03055
Nevada Certification #: KS000212018-1
Oklahoma Certification #: 9205/9935
Texas Certification #: T104704407
Utah Certification #: KS00021
Kansas Field Laboratory Accreditation: # E-92587
Missouri Certification: 10070
Missouri Certification Number: 10090

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SAMPLE SUMMARY

Project: 11181914 P66 Jal Truck Station
Pace Project No.: 60278351

Lab ID	Sample ID	Matrix	Date Collected	Date Received
60278351001	**S-111181914-082018-JP-BS-1-3**	Solid	08/20/18 10:35	08/22/18 06:55
60278351002	**S-111181914-082018-JP-BS-2-3**	Solid	08/20/18 10:38	08/22/18 06:55
60278351003	**S-111181914-082018-JP-BS-3-3**	Solid	08/20/18 10:48	08/22/18 06:55
60278351004	**S-111181914-082018-JP-SW-1-2**	Solid	08/20/18 13:05	08/22/18 06:55
60278351005	**S-111181914-082018-JP-SW-2-2**	Solid	08/20/18 13:07	08/22/18 06:55
60278351006	**S-111181914-082018-JP-SW-3-2**	Solid	08/20/18 13:10	08/22/18 06:55
60278351007	**S-111181914-082018-JP-SW-4-2**	Solid	08/20/18 13:20	08/22/18 06:55
60278351008	**S-111181914-082018-JP-SW-5-2**	Solid	08/20/18 13:21	08/22/18 06:55
60278351009	**S-111181914-082018-JP-SW-6-2**	Solid	08/20/18 13:24	08/22/18 06:55

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SAMPLE ANALYTE COUNT

Project: 11181914 P66 Jal Truck Station
Pace Project No.: 60278351

Lab ID	Sample ID	Method	Analysts	Analytes Reported	Laboratory
60278351001	**S-111181914-082018-JP-BS-1-3**	EPA 8015B	AHS	4	PASI-K
		EPA 5035A/8260	CJW	8	PASI-K
		ASTM D2974	DWC	1	PASI-K
		EPA 300.0	WNM	1	PASI-K
60278351002	**S-111181914-082018-JP-BS-2-3**	EPA 8015B	AHS	4	PASI-K
		EPA 5035A/8260	CJW	8	PASI-K
		ASTM D2974	DWC	1	PASI-K
		EPA 300.0	WNM	1	PASI-K
60278351003	**S-111181914-082018-JP-BS-3-3**	EPA 8015B	AHS	4	PASI-K
		EPA 5035A/8260	CJW	8	PASI-K
		ASTM D2974	DWC	1	PASI-K
		EPA 300.0	WNM	1	PASI-K
60278351004	**S-111181914-082018-JP-SW-1-2**	EPA 8015B	AHS	4	PASI-K
		EPA 5035A/8260	CJW	8	PASI-K
		ASTM D2974	DWC	1	PASI-K
		EPA 300.0	WNM	1	PASI-K
60278351005	**S-111181914-082018-JP-SW-2-2**	EPA 8015B	AHS	4	PASI-K
		EPA 5035A/8260	CJW	8	PASI-K
		ASTM D2974	DWC	1	PASI-K
		EPA 300.0	WNM	1	PASI-K
60278351006	**S-111181914-082018-JP-SW-3-2**	EPA 8015B	AHS	4	PASI-K
		EPA 5035A/8260	CJW	8	PASI-K
		ASTM D2974	DWC	1	PASI-K
		EPA 300.0	WNM	1	PASI-K
60278351007	**S-111181914-082018-JP-SW-4-2**	EPA 8015B	AHS	4	PASI-K
		EPA 5035A/8260	CJW	8	PASI-K
		ASTM D2974	DWC	1	PASI-K
		EPA 300.0	WNM	1	PASI-K
60278351008	**S-111181914-082018-JP-SW-5-2**	EPA 8015B	AHS	4	PASI-K
		EPA 5035A/8260	CJW	8	PASI-K
		ASTM D2974	DWC	1	PASI-K
		EPA 300.0	WNM	1	PASI-K
60278351009	**S-111181914-082018-JP-SW-6-2**	EPA 8015B	AHS	4	PASI-K
		EPA 5035A/8260	CJW	8	PASI-K
		ASTM D2974	DWC	1	PASI-K
		EPA 300.0	WNM	1	PASI-K

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ANALYTICAL RESULTS

Project: 11181914 P66 Jal Truck Station
Pace Project No.: 60278351

Sample: S-111181914-082018-JP-BS-1-3 **Lab ID: 60278351001** Collected: 08/20/18 10:35 Received: 08/22/18 06:55 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)	**46.4**	mg/kg	10.8	1	08/23/18 15:00	08/24/18 10:05		
TPH-ORO (C28-C35)	**15.5**	mg/kg	10.8	1	08/23/18 15:00	08/24/18 10:05		
Surrogates								
n-Tetracosane (S)	99	%	64-130	1	08/23/18 15:00	08/24/18 10:05	646-31-1	
p-Terphenyl (S)	81	%	58-119	1	08/23/18 15:00	08/24/18 10:05	92-94-4	
8260 MSV GRO and Oxygenates	Analytical Method: EPA 5035A/8260							
Benzene	ND	ug/kg	5.8	1		08/27/18 12:25	71-43-2	
Ethylbenzene	ND	ug/kg	5.8	1		08/27/18 12:25	100-41-4	
Toluene	ND	ug/kg	5.8	1		08/27/18 12:25	108-88-3	
TPH-GRO	ND	mg/kg	0.58	1		08/27/18 12:41		
Xylene (Total)	ND	ug/kg	11.5	1		08/27/18 12:25	1330-20-7	
Surrogates								
Toluene-d8 (S)	97	%	78-122	1		08/27/18 12:25	2037-26-5	
4-Bromofluorobenzene (S)	102	%	69-133	1		08/27/18 12:25	460-00-4	
1,2-Dichloroethane-d4 (S)	107	%	80-123	1		08/27/18 12:25	17060-07-0	
Percent Moisture	Analytical Method: ASTM D2974							
Percent Moisture	**12.3**	%	0.50	1		08/23/18 00:00		
300.0 IC Anions 28 Days	Analytical Method: EPA 300.0 Preparation Method: EPA 300.0							
Chloride	ND	mg/kg	114	10	08/27/18 14:47	08/27/18 18:08	16887-00-6	

REPORT OF LABORATORY ANALYSIS

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ANALYTICAL RESULTS

Project: 11181914 P66 Jal Truck Station
Pace Project No.: 60278351

Sample: S-111181914-082018-JP-BS-2-3 **Lab ID: 60278351002** Collected: 08/20/18 10:38 Received: 08/22/18 06:55 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	08/23/18 15:00	08/24/18 10:13		
TPH-ORO (C28-C35)	ND	mg/kg	10.9	1	08/23/18 15:00	08/24/18 10:13		
Surrogates								
n-Tetracosane (S)	90	%	64-130	1	08/23/18 15:00	08/24/18 10:13	646-31-1	
p-Terphenyl (S)	72	%	58-119	1	08/23/18 15:00	08/24/18 10:13	92-94-4	
8260 MSV GRO and Oxygenates	Analytical Method: EPA 5035A/8260							
Benzene	ND	ug/kg	5.6	1		08/23/18 15:02	71-43-2	
Ethylbenzene	ND	ug/kg	5.6	1		08/23/18 15:02	100-41-4	
Toluene	ND	ug/kg	5.6	1		08/23/18 15:02	108-88-3	
TPH-GRO	ND	mg/kg	0.56	1		08/23/18 15:02		
Xylene (Total)	ND	ug/kg	11.2	1		08/23/18 15:02	1330-20-7	
Surrogates								
Toluene-d8 (S)	98	%	78-122	1		08/23/18 15:02	2037-26-5	
4-Bromofluorobenzene (S)	102	%	69-133	1		08/23/18 15:02	460-00-4	
1,2-Dichloroethane-d4 (S)	114	%	80-123	1		08/23/18 15:02	17060-07-0	
Percent Moisture	Analytical Method: ASTM D2974							
Percent Moisture	**9.3**	%	0.50	1		08/23/18 00:00		
300.0 IC Anions 28 Days	Analytical Method: EPA 300.0 Preparation Method: EPA 300.0							
Chloride	ND	mg/kg	111	10	08/27/18 14:47	08/27/18 18:22	16887-00-6	

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ANALYTICAL RESULTS

Project: 11181914 P66 Jal Truck Station
Pace Project No.: 60278351

Sample: S-111181914-082018-JP-BS-3-3 **Lab ID: 60278351003** Collected: 08/20/18 10:48 Received: 08/22/18 06:55 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	11.3	1	08/23/18 15:00	08/24/18 10:21		
TPH-ORO (C28-C35)	ND	mg/kg	11.3	1	08/23/18 15:00	08/24/18 10:21		
Surrogates								
n-Tetracosane (S)	91	%	64-130	1	08/23/18 15:00	08/24/18 10:21	646-31-1	
p-Terphenyl (S)	74	%	58-119	1	08/23/18 15:00	08/24/18 10:21	92-94-4	
8260 MSV GRO and Oxygenates	Analytical Method: EPA 5035A/8260							
Benzene	ND	ug/kg	5.7	1		08/23/18 15:18	71-43-2	
Ethylbenzene	ND	ug/kg	5.7	1		08/23/18 15:18	100-41-4	
Toluene	ND	ug/kg	5.7	1		08/23/18 15:18	108-88-3	
TPH-GRO	ND	mg/kg	0.57	1		08/23/18 15:18		
Xylene (Total)	ND	ug/kg	11.3	1		08/23/18 15:18	1330-20-7	
Surrogates								
Toluene-d8 (S)	98	%	78-122	1		08/23/18 15:18	2037-26-5	
4-Bromofluorobenzene (S)	100	%	69-133	1		08/23/18 15:18	460-00-4	
1,2-Dichloroethane-d4 (S)	108	%	80-123	1		08/23/18 15:18	17060-07-0	
Percent Moisture	Analytical Method: ASTM D2974							
Percent Moisture	**13.0**	%	0.50	1		08/23/18 00:00		
300.0 IC Anions 28 Days	Analytical Method: EPA 300.0 Preparation Method: EPA 300.0							
Chloride	ND	mg/kg	116	10	08/27/18 14:47	08/27/18 18:37	16887-00-6	

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ANALYTICAL RESULTS

Project: 11181914 P66 Jal Truck Station
Pace Project No.: 60278351

Sample: S-111181914-082018-JP-SW-1-2 **Lab ID: 60278351004** Collected: 08/20/18 13:05 Received: 08/22/18 06:55 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)	**23.3**	mg/kg	11.0	1	08/23/18 15:00	08/24/18 10:29		
TPH-ORO (C28-C35)	ND	mg/kg	11.0	1	08/23/18 15:00	08/24/18 10:29		
Surrogates								
n-Tetracosane (S)	94	%	64-130	1	08/23/18 15:00	08/24/18 10:29	646-31-1	
p-Terphenyl (S)	78	%	58-119	1	08/23/18 15:00	08/24/18 10:29	92-94-4	
8260 MSV GRO and Oxygenates	Analytical Method: EPA 5035A/8260							
Benzene	ND	ug/kg	5.8	1		08/23/18 15:33	71-43-2	
Ethylbenzene	ND	ug/kg	5.8	1		08/23/18 15:33	100-41-4	
Toluene	ND	ug/kg	5.8	1		08/23/18 15:33	108-88-3	
TPH-GRO	ND	mg/kg	0.58	1		08/23/18 15:33		
Xylene (Total)	ND	ug/kg	11.7	1		08/23/18 15:33	1330-20-7	
Surrogates								
Toluene-d8 (S)	98	%	78-122	1		08/23/18 15:33	2037-26-5	
4-Bromofluorobenzene (S)	100	%	69-133	1		08/23/18 15:33	460-00-4	
1,2-Dichloroethane-d4 (S)	108	%	80-123	1		08/23/18 15:33	17060-07-0	
Percent Moisture	Analytical Method: ASTM D2974							
Percent Moisture	**13.2**	%	0.50	1		08/23/18 00:00		
300.0 IC Anions 28 Days	Analytical Method: EPA 300.0 Preparation Method: EPA 300.0							
Chloride	ND	mg/kg	115	10	08/27/18 14:47	08/27/18 18:51	16887-00-6	

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ANALYTICAL RESULTS

Project: 11181914 P66 Jal Truck Station
Pace Project No.: 60278351

Sample: S-111181914-082018-JP-SW-2-2 **Lab ID: 60278351005** Collected: 08/20/18 13:07 Received: 08/22/18 06:55 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)	**85.6**	mg/kg	10.9	1	08/23/18 15:00	08/24/18 11:43		
TPH-ORO (C28-C35)	**25.9**	mg/kg	10.9	1	08/23/18 15:00	08/24/18 11:43		
Surrogates								
n-Tetracosane (S)	122	%	64-130	1	08/23/18 15:00	08/24/18 11:43	646-31-1	
p-Terphenyl (S)	96	%	58-119	1	08/23/18 15:00	08/24/18 11:43	92-94-4	
8260 MSV GRO and Oxygenates	Analytical Method: EPA 5035A/8260							
Benzene	ND	ug/kg	5.5	1		08/23/18 15:49	71-43-2	
Ethylbenzene	ND	ug/kg	5.5	1		08/23/18 15:49	100-41-4	
Toluene	ND	ug/kg	5.5	1		08/23/18 15:49	108-88-3	
TPH-GRO	ND	mg/kg	0.55	1		08/23/18 15:49		
Xylene (Total)	ND	ug/kg	10.9	1		08/23/18 15:49	1330-20-7	
Surrogates								
Toluene-d8 (S)	99	%	78-122	1		08/23/18 15:49	2037-26-5	
4-Bromofluorobenzene (S)	100	%	69-133	1		08/23/18 15:49	460-00-4	
1,2-Dichloroethane-d4 (S)	109	%	80-123	1		08/23/18 15:49	17060-07-0	
Percent Moisture	Analytical Method: ASTM D2974							
Percent Moisture	**9.5**	%	0.50	1		08/23/18 00:00		
300.0 IC Anions 28 Days	Analytical Method: EPA 300.0 Preparation Method: EPA 300.0							
Chloride	ND	mg/kg	110	10	08/27/18 14:47	08/27/18 19:33	16887-00-6	

REPORT OF LABORATORY ANALYSIS

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ANALYTICAL RESULTS

Project: 11181914 P66 Jal Truck Station
Pace Project No.: 60278351

Sample: S-111181914-082018-JP-SW-3-2 **Lab ID: 60278351006** Collected: 08/20/18 13:10 Received: 08/22/18 06:55 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)	**198**	mg/kg	10.2	1	08/23/18 15:00	08/24/18 11:50		
TPH-ORO (C28-C35)	**53.4**	mg/kg	10.2	1	08/23/18 15:00	08/24/18 11:50		
Surrogates								
n-Tetracosane (S)	113	%	64-130	1	08/23/18 15:00	08/24/18 11:50	646-31-1	
p-Terphenyl (S)	81	%	58-119	1	08/23/18 15:00	08/24/18 11:50	92-94-4	
8260 MSV GRO and Oxygenates	Analytical Method: EPA 5035A/8260							
Benzene	ND	ug/kg	5.5	1		08/23/18 16:04	71-43-2	
Ethylbenzene	**23.3**	ug/kg	5.5	1		08/23/18 16:04	100-41-4	
Toluene	**11.3**	ug/kg	5.5	1		08/23/18 16:04	108-88-3	
TPH-GRO	**2.2**	mg/kg	0.55	1		08/23/18 16:04		
Xylene (Total)	**40.0**	ug/kg	11.0	1		08/23/18 16:04	1330-20-7	
Surrogates								
Toluene-d8 (S)	100	%	78-122	1		08/23/18 16:04	2037-26-5	
4-Bromofluorobenzene (S)	100	%	69-133	1		08/23/18 16:04	460-00-4	
1,2-Dichloroethane-d4 (S)	104	%	80-123	1		08/23/18 16:04	17060-07-0	
Percent Moisture	Analytical Method: ASTM D2974							
Percent Moisture	**8.3**	%	0.50	1		08/23/18 00:00		
300.0 IC Anions 28 Days	Analytical Method: EPA 300.0 Preparation Method: EPA 300.0							
Chloride	ND	mg/kg	109	10	08/27/18 14:47	08/27/18 19:47	16887-00-6	

REPORT OF LABORATORY ANALYSIS

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ANALYTICAL RESULTS

Project: 11181914 P66 Jal Truck Station
Pace Project No.: 60278351

Sample: S-111181914-082018-JP-SW-4-2 **Lab ID: 60278351007** Collected: 08/20/18 13:20 Received: 08/22/18 06:55 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	10.8	1	08/23/18 15:00	08/24/18 11:59		
TPH-ORO (C28-C35)	ND	mg/kg	10.8	1	08/23/18 15:00	08/24/18 11:59		
Surrogates								
n-Tetracosane (S)	85	%	64-130	1	08/23/18 15:00	08/24/18 11:59	646-31-1	
p-Terphenyl (S)	71	%	58-119	1	08/23/18 15:00	08/24/18 11:59	92-94-4	
8260 MSV GRO and Oxygenates	Analytical Method: EPA 5035A/8260							
Benzene	ND	ug/kg	5.7	1		08/23/18 16:20	71-43-2	
Ethylbenzene	ND	ug/kg	5.7	1		08/23/18 16:20	100-41-4	
Toluene	ND	ug/kg	5.7	1		08/23/18 16:20	108-88-3	
TPH-GRO	ND	mg/kg	0.57	1		08/23/18 16:20		
Xylene (Total)	ND	ug/kg	11.4	1		08/23/18 16:20	1330-20-7	
Surrogates								
Toluene-d8 (S)	96	%	78-122	1		08/23/18 16:20	2037-26-5	
4-Bromofluorobenzene (S)	96	%	69-133	1		08/23/18 16:20	460-00-4	
1,2-Dichloroethane-d4 (S)	102	%	80-123	1		08/23/18 16:20	17060-07-0	
Percent Moisture	Analytical Method: ASTM D2974							
Percent Moisture	**11.0**	%	0.50	1		08/23/18 00:00		
300.0 IC Anions 28 Days	Analytical Method: EPA 300.0 Preparation Method: EPA 300.0							
Chloride	ND	mg/kg	112	10	08/27/18 14:47	08/27/18 20:01	16887-00-6	

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ANALYTICAL RESULTS

Project: 11181914 P66 Jal Truck Station
Pace Project No.: 60278351

Sample: S-111181914-082018-JP-SW-5-2 **Lab ID: 60278351008** Collected: 08/20/18 13:21 Received: 08/22/18 06:55 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	08/23/18 15:00	08/24/18 12:07		
TPH-ORO (C28-C35)	ND	mg/kg	10.6	1	08/23/18 15:00	08/24/18 12:07		
Surrogates								
n-Tetracosane (S)	90	%	64-130	1	08/23/18 15:00	08/24/18 12:07	646-31-1	
p-Terphenyl (S)	78	%	58-119	1	08/23/18 15:00	08/24/18 12:07	92-94-4	
8260 MSV GRO and Oxygenates	Analytical Method: EPA 5035A/8260							
Benzene	ND	ug/kg	5.4	1		08/23/18 16:36	71-43-2	
Ethylbenzene	ND	ug/kg	5.4	1		08/23/18 16:36	100-41-4	
Toluene	ND	ug/kg	5.4	1		08/23/18 16:36	108-88-3	
TPH-GRO	ND	mg/kg	0.54	1		08/23/18 16:36		
Xylene (Total)	ND	ug/kg	10.9	1		08/23/18 16:36	1330-20-7	
Surrogates								
Toluene-d8 (S)	100	%	78-122	1		08/23/18 16:36	2037-26-5	
4-Bromofluorobenzene (S)	100	%	69-133	1		08/23/18 16:36	460-00-4	
1,2-Dichloroethane-d4 (S)	103	%	80-123	1		08/23/18 16:36	17060-07-0	
Percent Moisture	Analytical Method: ASTM D2974							
Percent Moisture	**8.4**	%	0.50	1		08/23/18 00:00		
300.0 IC Anions 28 Days	Analytical Method: EPA 300.0 Preparation Method: EPA 300.0							
Chloride	ND	mg/kg	108	10	08/27/18 14:47	08/27/18 20:29	16887-00-6	

REPORT OF LABORATORY ANALYSIS

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ANALYTICAL RESULTS

Project: 11181914 P66 Jal Truck Station
Pace Project No.: 60278351

Sample: S-111181914-082018-JP-SW-6-2 **Lab ID: 60278351009** Collected: 08/20/18 13:24 Received: 08/22/18 06:55 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	10.0	1	08/23/18 15:00	08/24/18 12:15		
TPH-ORO (C28-C35)	ND	mg/kg	10.0	1	08/23/18 15:00	08/24/18 12:15		
Surrogates								
n-Tetracosane (S)	86	%	64-130	1	08/23/18 15:00	08/24/18 12:15	646-31-1	
p-Terphenyl (S)	70	%	58-119	1	08/23/18 15:00	08/24/18 12:15	92-94-4	
8260 MSV GRO and Oxygenates	Analytical Method: EPA 5035A/8260							
Benzene	ND	ug/kg	5.1	1		08/29/18 12:35	71-43-2	
Ethylbenzene	ND	ug/kg	5.1	1		08/29/18 12:35	100-41-4	
Toluene	ND	ug/kg	5.1	1		08/29/18 12:35	108-88-3	
TPH-GRO	ND	mg/kg	0.51	1		08/29/18 12:35		
Xylene (Total)	ND	ug/kg	10.2	1		08/29/18 12:35	1330-20-7	
Surrogates								
Toluene-d8 (S)	99	%	78-122	1		08/29/18 12:35	2037-26-5	
4-Bromofluorobenzene (S)	103	%	69-133	1		08/29/18 12:35	460-00-4	
1,2-Dichloroethane-d4 (S)	97	%	80-123	1		08/29/18 12:35	17060-07-0	
Percent Moisture	Analytical Method: ASTM D2974							
Percent Moisture	**3.2**	%	0.50	1		08/23/18 00:00		
300.0 IC Anions 28 Days	Analytical Method: EPA 300.0 Preparation Method: EPA 300.0							
Chloride	ND	mg/kg	102	10	08/27/18 14:47	08/27/18 20:43	16887-00-6	

REPORT OF LABORATORY ANALYSIS

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QUALITY CONTROL DATA

Project: 11181914 P66 Jal Truck Station
Pace Project No.: 60278351

QC Batch: 541079 Analysis Method: EPA 5035A/8260
QC Batch Method: EPA 5035A/8260 Analysis Description: 8260 MSV GRO and Oxygenates
Associated Lab Samples: 60278351002, 60278351003, 60278351004, 60278351005, 60278351006, 60278351007, 60278351008

METHOD BLANK: 2216895 Matrix: Solid
Associated Lab Samples: 60278351002, 60278351003, 60278351004, 60278351005, 60278351006, 60278351007, 60278351008

Parameter	Units	Blank Result	Reporting Limit	Analyzed	Qualifiers
Benzene	ug/kg	ND	5.0	08/23/18 11:09	
Ethylbenzene	ug/kg	ND	5.0	08/23/18 11:09	
Toluene	ug/kg	ND	5.0	08/23/18 11:09	
TPH-GRO	mg/kg	ND	0.50	08/23/18 11:09	
Xylene (Total)	ug/kg	ND	10.0	08/23/18 11:09	
1,2-Dichloroethane-d4 (S)	%	106	80-123	08/23/18 11:09	
4-Bromofluorobenzene (S)	%	102	69-133	08/23/18 11:09	
Toluene-d8 (S)	%	100	78-122	08/23/18 11:09	

LABORATORY CONTROL SAMPLE: 2216896

Parameter	Units	Spike Conc.	LCS Result	LCS % Rec	% Rec Limits	Qualifiers
Benzene	ug/kg	100	117	117	77-122	
Ethylbenzene	ug/kg	100	112	112	74-126	
Toluene	ug/kg	100	103	103	76-122	
TPH-GRO	mg/kg	4	4.5	112	61-140	
Xylene (Total)	ug/kg	300	332	111	75-123	
1,2-Dichloroethane-d4 (S)	%			96	80-123	
4-Bromofluorobenzene (S)	%			97	69-133	
Toluene-d8 (S)	%			98	78-122	

MATRIX SPIKE & MATRIX SPIKE DUPLICATE: 2216897 2216898

Parameter	Units	60278041001 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	98.4	102	110	100	112	99	45-130	9	32	
Ethylbenzene	ug/kg	ND	98.4	102	110	98.4	112	97	30-135	11	35	
Toluene	ug/kg	ND	98.4	102	101	90.9	103	89	42-130	11	34	
Xylene (Total)	ug/kg	ND	295	305	329	287	112	94	25-139	14	36	
1,2-Dichloroethane-d4 (S)	%						105	99	80-123			
4-Bromofluorobenzene (S)	%						97	98	69-133			
Toluene-d8 (S)	%						99	100	78-122			

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REPORT OF LABORATORY ANALYSIS

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QUALITY CONTROL DATA

Project: 11181914 P66 Jal Truck Station
Pace Project No.: 60278351

QC Batch: 541589
QC Batch Method: EPA 5035A/8260
Analysis Method: EPA 5035A/8260
Analysis Description: 8260 MSV GRO and Oxygenates
Associated Lab Samples: 60278351001

METHOD BLANK: 2219485 Matrix: Solid
Associated Lab Samples: 60278351001

Parameter	Units	Blank Result	Reporting Limit	Analyzed	Qualifiers
Benzene	ug/kg	ND	5.0	08/27/18 11:54	
Ethylbenzene	ug/kg	ND	5.0	08/27/18 11:54	
Toluene	ug/kg	ND	5.0	08/27/18 11:54	
TPH-GRO	mg/kg	ND	0.50	08/27/18 11:54	
Xylene (Total)	ug/kg	ND	10.0	08/27/18 11:54	
1,2-Dichloroethane-d4 (S)	%	102	80-123	08/27/18 11:54	
4-Bromofluorobenzene (S)	%	102	69-133	08/27/18 11:54	
Toluene-d8 (S)	%	97	78-122	08/27/18 11:54	

LABORATORY CONTROL SAMPLE: 2219486

Parameter	Units	Spike Conc.	LCS Result	LCS % Rec	% Rec Limits	Qualifiers
Benzene	ug/kg	100	112	112	77-122	
Ethylbenzene	ug/kg	100	109	109	74-126	
Toluene	ug/kg	100	104	104	76-122	
TPH-GRO	mg/kg	4	4.4	109	61-140	
Xylene (Total)	ug/kg	300	325	108	75-123	
1,2-Dichloroethane-d4 (S)	%			99	80-123	
4-Bromofluorobenzene (S)	%			98	69-133	
Toluene-d8 (S)	%			100	78-122	

MATRIX SPIKE & MATRIX SPIKE DUPLICATE: 2219487 2219488

Parameter	Units	60278739001 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	99.6	101	61.9	62.9	62	62	45-130	2	32	
Ethylbenzene	ug/kg	ND	99.6	101	35.4	34.2	36	34	30-135	4	35	
Toluene	ug/kg	ND	99.6	101	45.9	46.5	46	46	42-130	1	34	
Xylene (Total)	ug/kg	ND	299	304	98.9	98.1	33	32	25-139	1	36	
1,2-Dichloroethane-d4 (S)	%						111	105	80-123			
4-Bromofluorobenzene (S)	%						115	105	69-133			
Toluene-d8 (S)	%						102	102	78-122			

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REPORT OF LABORATORY ANALYSIS

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QUALITY CONTROL DATA

Project: 11181914 P66 Jal Truck Station
Pace Project No.: 60278351

QC Batch: 542002
QC Batch Method: EPA 5035A/8260
Analysis Method: EPA 5035A/8260
Analysis Description: 8260 MSV GRO and Oxygenates
Associated Lab Samples: 60278351009

METHOD BLANK: 2221046
Matrix: Solid
Associated Lab Samples: 60278351009

Parameter	Units	Blank Result	Reporting Limit	Analyzed	Qualifiers
Benzene	ug/kg	ND	5.0	08/29/18 12:20	
Ethylbenzene	ug/kg	ND	5.0	08/29/18 12:20	
Toluene	ug/kg	ND	5.0	08/29/18 12:20	
TPH-GRO	mg/kg	ND	0.50	08/29/18 12:20	
Xylene (Total)	ug/kg	ND	10.0	08/29/18 12:20	
1,2-Dichloroethane-d4 (S)	%	95	80-123	08/29/18 12:20	
4-Bromofluorobenzene (S)	%	104	69-133	08/29/18 12:20	
Toluene-d8 (S)	%	102	78-122	08/29/18 12:20	

LABORATORY CONTROL SAMPLE: 2221047

Parameter	Units	Spike Conc.	LCS Result	LCS % Rec	% Rec Limits	Qualifiers
Benzene	ug/kg	100	122	122	77-122	
Ethylbenzene	ug/kg	100	122	122	74-126	
Toluene	ug/kg	100	117	117	76-122	
TPH-GRO	mg/kg	4	5.1	127	61-140	
Xylene (Total)	ug/kg	300	358	119	75-123	
1,2-Dichloroethane-d4 (S)	%			90	80-123	
4-Bromofluorobenzene (S)	%			100	69-133	
Toluene-d8 (S)	%			102	78-122	

MATRIX SPIKE & MATRIX SPIKE DUPLICATE: 2221048 2221049

Parameter	Units	60278351009 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	103	103	95.9	107	93	104	45-130	11	32	
Ethylbenzene	ug/kg	ND	103	103	91.0	107	88	103	30-135	16	35	
Toluene	ug/kg	ND	103	103	90.4	100	87	97	42-130	10	34	
Xylene (Total)	ug/kg	ND	310	310	278	311	90	100	25-139	11	36	
1,2-Dichloroethane-d4 (S)	%						98	99	80-123			
4-Bromofluorobenzene (S)	%						98	103	69-133			
Toluene-d8 (S)	%						102	105	78-122			

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QUALITY CONTROL DATA

Project: 11181914 P66 Jal Truck Station
Pace Project No.: 60278351

QC Batch: 541019 Analysis Method: EPA 8015B
QC Batch Method: EPA 3546 Analysis Description: EPA 8015B
Associated Lab Samples: 60278351001, 60278351002, 60278351003, 60278351004, 60278351005, 60278351006, 60278351007, 60278351008, 60278351009

METHOD BLANK: 2216551 Matrix: Solid
Associated Lab Samples: 60278351001, 60278351002, 60278351003, 60278351004, 60278351005, 60278351006, 60278351007, 60278351008, 60278351009

Parameter	Units	Blank Result	Reporting Limit	Analyzed	Qualifiers
TPH-DRO (C10-C28)	mg/kg	ND	9.8	08/24/18 09:33	
TPH-ORO (C28-C35)	mg/kg	ND	9.8	08/24/18 09:33	
n-Tetracosane (S)	%	93	64-130	08/24/18 09:33	
p-Terphenyl (S)	%	100	58-119	08/24/18 09:33	

LABORATORY CONTROL SAMPLE: 2216552

Parameter	Units	Spike Conc.	LCS Result	LCS % Rec	% Rec Limits	Qualifiers
TPH-DRO (C10-C28)	mg/kg	82	70.3	86	74-122	
TPH-ORO (C28-C35)	mg/kg		ND			
n-Tetracosane (S)	%			93	64-130	
p-Terphenyl (S)	%			85	58-119	

MATRIX SPIKE & MATRIX SPIKE DUPLICATE: 2217054 2217055

Parameter	Units	60277572004 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	27.1	94.4	97.1	137	93.4	116	68	11-160	38	31	R1
TPH-ORO (C28-C35)	mg/kg	ND			ND	ND						
n-Tetracosane (S)	%						103	78	64-130			
p-Terphenyl (S)	%						116	59	58-119			

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REPORT OF LABORATORY ANALYSIS

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QUALITY CONTROL DATA

Project: 11181914 P66 Jal Truck Station
Pace Project No.: 60278351

QC Batch: 541022 Analysis Method: ASTM D2974
QC Batch Method: ASTM D2974 Analysis Description: Dry Weight/Percent Moisture
Associated Lab Samples: 60278351001, 60278351002, 60278351003, 60278351004, 60278351005, 60278351006, 60278351007, 60278351008, 60278351009

METHOD BLANK: 2216562 Matrix: Solid
Associated Lab Samples: 60278351001, 60278351002, 60278351003, 60278351004, 60278351005, 60278351006, 60278351007, 60278351008, 60278351009

Parameter	Units	Blank Result	Reporting Limit	Analyzed	Qualifiers
Percent Moisture	%	ND	0.50	08/23/18 00:00	

SAMPLE DUPLICATE: 2216563

Parameter	Units	60278151001 Result	Dup Result	RPD	Max RPD	Qualifiers
Percent Moisture	%	43.8	44.6	2	20	

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QUALITY CONTROL DATA

Project: 11181914 P66 Jal Truck Station
Pace Project No.: 60278351

QC Batch: 541601 Analysis Method: EPA 300.0
QC Batch Method: EPA 300.0 Analysis Description: 300.0 IC Anions
Associated Lab Samples: 60278351001, 60278351002, 60278351003, 60278351004, 60278351005, 60278351006, 60278351007, 60278351008, 60278351009

METHOD BLANK: 2219530 Matrix: Solid
Associated Lab Samples: 60278351001, 60278351002, 60278351003, 60278351004, 60278351005, 60278351006, 60278351007, 60278351008, 60278351009

Parameter	Units	Blank Result	Reporting Limit	Analyzed	Qualifiers
Chloride	mg/kg	ND	100	08/27/18 16:02	

LABORATORY CONTROL SAMPLE: 2219531

Parameter	Units	Spike Conc.	LCS Result	LCS % Rec	% Rec Limits	Qualifiers
Chloride	mg/kg	500	466	93	90-110	

MATRIX SPIKE & MATRIX SPIKE DUPLICATE: 2219532 2219533

Parameter	Units	60277743001 Result	MS Spike Conc.	MSD Spike Conc.	MS Result	MSD Result	MS % Rec	MSD % Rec	% Rec Limits	RPD	Max RPD	Qual
Chloride	mg/kg	14000	16700	16600	28600	26700	87	76	80-120	7	15	M1

MATRIX SPIKE SAMPLE: 2219534

Parameter	Units	60278351007 Result	Spike Conc.	MS Result	MS % Rec	% Rec Limits	Qualifiers
Chloride	mg/kg	ND	562	534	95	80-120	

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REPORT OF LABORATORY ANALYSIS

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QUALIFIERS

Project: 11181914 P66 Jal Truck Station
Pace Project No.: 60278351

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 - The lowest concentration value that meets project requirements for quantitative data with known precision and bias for a specific analyte in a specific matrix.

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.

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TNI - The NELAC Institute.

LABORATORIES

PASI-K	Pace Analytical Services - Kansas City

ANALYTE QUALIFIERS

M1	Matrix spike recovery exceeded QC limits. Batch accepted based on laboratory control sample (LCS) recovery.
R1	RPD value was outside control limits.

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QUALITY CONTROL DATA CROSS REFERENCE TABLE

Project: 11181914 P66 Jal Truck Station
Pace Project No.: 60278351

Lab ID	Sample ID	QC Batch Method	QC Batch	Analytical Method	Analytical Batch
60278351001	**S-111181914-082018-JP-BS-1-3**	EPA 3546	541019	EPA 8015B	541206
60278351002	**S-111181914-082018-JP-BS-2-3**	EPA 3546	541019	EPA 8015B	541206
60278351003	**S-111181914-082018-JP-BS-3-3**	EPA 3546	541019	EPA 8015B	541206
60278351004	**S-111181914-082018-JP-SW-1-2**	EPA 3546	541019	EPA 8015B	541206
60278351005	**S-111181914-082018-JP-SW-2-2**	EPA 3546	541019	EPA 8015B	541206
60278351006	**S-111181914-082018-JP-SW-3-2**	EPA 3546	541019	EPA 8015B	541206
60278351007	**S-111181914-082018-JP-SW-4-2**	EPA 3546	541019	EPA 8015B	541206
60278351008	**S-111181914-082018-JP-SW-5-2**	EPA 3546	541019	EPA 8015B	541206
60278351009	**S-111181914-082018-JP-SW-6-2**	EPA 3546	541019	EPA 8015B	541206
60278351001	**S-111181914-082018-JP-BS-1-3**	EPA 5035A/8260	541589		
60278351002	**S-111181914-082018-JP-BS-2-3**	EPA 5035A/8260	541079		
60278351003	**S-111181914-082018-JP-BS-3-3**	EPA 5035A/8260	541079		
60278351004	**S-111181914-082018-JP-SW-1-2**	EPA 5035A/8260	541079		
60278351005	**S-111181914-082018-JP-SW-2-2**	EPA 5035A/8260	541079		
60278351006	**S-111181914-082018-JP-SW-3-2**	EPA 5035A/8260	541079		
60278351007	**S-111181914-082018-JP-SW-4-2**	EPA 5035A/8260	541079		
60278351008	**S-111181914-082018-JP-SW-5-2**	EPA 5035A/8260	541079		
60278351009	**S-111181914-082018-JP-SW-6-2**	EPA 5035A/8260	542002		
60278351001	**S-111181914-082018-JP-BS-1-3**	ASTM D2974	541022		
60278351002	**S-111181914-082018-JP-BS-2-3**	ASTM D2974	541022		
60278351003	**S-111181914-082018-JP-BS-3-3**	ASTM D2974	541022		
60278351004	**S-111181914-082018-JP-SW-1-2**	ASTM D2974	541022		
60278351005	**S-111181914-082018-JP-SW-2-2**	ASTM D2974	541022		
60278351006	**S-111181914-082018-JP-SW-3-2**	ASTM D2974	541022		
60278351007	**S-111181914-082018-JP-SW-4-2**	ASTM D2974	541022		
60278351008	**S-111181914-082018-JP-SW-5-2**	ASTM D2974	541022		
60278351009	**S-111181914-082018-JP-SW-6-2**	ASTM D2974	541022		
60278351001	**S-111181914-082018-JP-BS-1-3**	EPA 300.0	541601	EPA 300.0	541631
60278351002	**S-111181914-082018-JP-BS-2-3**	EPA 300.0	541601	EPA 300.0	541631
60278351003	**S-111181914-082018-JP-BS-3-3**	EPA 300.0	541601	EPA 300.0	541631
60278351004	**S-111181914-082018-JP-SW-1-2**	EPA 300.0	541601	EPA 300.0	541631
60278351005	**S-111181914-082018-JP-SW-2-2**	EPA 300.0	541601	EPA 300.0	541631
60278351006	**S-111181914-082018-JP-SW-3-2**	EPA 300.0	541601	EPA 300.0	541631
60278351007	**S-111181914-082018-JP-SW-4-2**	EPA 300.0	541601	EPA 300.0	541631
60278351008	**S-111181914-082018-JP-SW-5-2**	EPA 300.0	541601	EPA 300.0	541631
60278351009	**S-111181914-082018-JP-SW-6-2**	EPA 300.0	541601	EPA 300.0	541631

Pace Analytical
www.pacelabs.com

Sample Condition Upon Receipt

WO# : 60278351

60278351

Client Name: GHD

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

Tracking #: 8132 2225 0219 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: T300 **Type of Ice:** (Wet) Blue None

JLS

Date and initials of person examining contents: 8/22/18 QS

Cooler Temperature (°C): **As-read** 4.0 **Corr. Factor** +0.2 **Corrected** 4.2

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	3 DAY
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	List sample IDs, volumes, lot #'s of preservative and the date/time added.
Cyanide water sample checks: Lead acetate strip turns dark? (Record only)	☐Yes ☐No	
Potassium iodide test strip turns blue/purple? (Preserve)	☐Yes ☐No	
Trip Blank present:	☐Yes ☐No ☒N/A	
Headspace in VOA vials (>6mm):	☐Yes ☐No ☒N/A	
Samples from USDA Regulated Area: State: NM	☐Yes ☒No ☐N/A	
Additional labels attached to 5035A / TX1005 vials in the field?	☐Yes ☐No ☒N/A	

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

Person Contacted: _____ Date/Time: _____

Comments/ Resolution: _____

Project Manager Review: Jann Chunk Date: 8/22/18

CHAIN OF CUSTODY RECORD

COC NO.: 55512

Address: 6021 Indian School Rd NE Suite 200 Albuquerque NM 87110 PAGE 1 OF 1

Phone: 505 884 4932 Fax:

Project No/ Phase/Task Code:	Laboratory Name: Pace Analytical	Lab Location: 9608 Loiret Blvd. Lenexa, KS 66219	SSOW ID:
Project Name:	Lab Contact:		Cooler No:
Project Location: Lea			Carrier:
GHD Chemistry Contact: Jeffrey Walker			Airbill No:
Sampler(s): Joshua Pigg			Total # of Containers: 9

Item	SAMPLE IDENTIFICATION (Containers for each sample may be combined on one line)	DATE (mm/dd/yy)	TIME (hh:mm)	Matrix Code (see back of COC)	Grab (G) or Comp (C)	Filtered (Y/N)	BTEX/TPH-Gcw 8260			TPH-DRO/ORO 8015			Chlorides EPA 300						Total Containers/sample	MS/MSD Request	COMMENTS/ SPECIAL INSTRUCTIONS:
	PRESERVATION - (SEE BACK OF COC FOR ABBREVIATIONS)																				60278351
1	S-111819.4 -082018-JP-BS-1-3	08/20/18	1035	S	G		X			X			X						1		WGFU
2	S-111819.4 -082018-JP-BS-2-3	"	1038	"	"		X			X			X						1		
3	S-111819.4 -082018-JP-BS-3-3		1048				X			X			X						1		
4	S-111819.4 -082018-JP-SW-1-2		1305				X			X			X						1		
5	S-111819.4 -082018-JP-SW-2-2		1307				X			X			X						1		
6	S-111819.4 -082018-JP-SW-3-2		1310				X			X			X						1		
7	S-111819.4 -082018-JP-SW-4-2		1320				X			X			X						1		
8	S-111819.4 -082018-JP-SW-5-2		1321				X			X			X						1		
9	S-111819.4 -082018-JP-SW-6-2		1324				X			X			X						1		
10																					
11																					
12																					

TAT Required in business days (use separate COCs for different TATs):

☐ 1 Day ☐ 2 Days ☑ 3 Days ☐ 1 Week ☐ 2 Week ☐ Other:

Notes/ Special Requirements: 4.2 Y Y Y

	Relinquished By	Company	Date	Time	Received By	Company	Date	Time
1.		GHD	8-21-18		1. UPS		8/22/18	0655
2.		GHD	8/21/18	1500	2.			
3.					3.			

THE CHAIN OF CUSTODY IS A LEGAL DOCUMENT – ALL FIELDS MUST BE COMPLETED ACCURATELY

Distribution: WHITE – Fully Executed Copy (CRA) YELLOW – Receiving Laboratory Copy PINK – Shipper GOLDENROD – Sampling Crew

GHD Form: COC-10B (20110804)

District I
1625 N. French Dr., Hobbs, NM 88240
District II
811 S. First St., Artesia, NM 88210
District III
1000 Rio Brazos Road, Aztec, NM 87410
District IV
1220 S. St. Francis Dr., Santa Fe, NM 87505

State of New Mexico
Energy Minerals and Natural Resources Department

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

Form C-141
Revised August 24, 2018
Submit to appropriate OCD District office

Incident ID	
District RP	
Facility ID	
Application ID	

Release Notification

Responsible Party

Responsible Party Phillips 66 Pipeline LLC	OGRID
Contact Name Spencer Cave	Contact Telephone918-977-4317
Contact email Spencer.Cave1@p66.com	Incident # *(assigned by OCD)*
Contact mailing address411 S. Keeler Ave. AB-1204-02, Bartlesville, OK 74003	

Location of Release Source

Latitude 32.25327 Longitude -103.19699

(NAD 83 in decimal degrees to 5 decimal places)

Site Name Jal Truck Station	Site Type Crde Storage & Truck Offloading
Date Release Discovered 08-15-2018	API# *(if applicable)*

Unit Letter	Section	Township	Range	County
L	06	24S	37E	Lea

Surface Owner: ☐ State ☐ Federal ☐ Tribal ☒ Private (*Name:* Deep Wells Ranch Inc.

Nature and Volume of Release

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

☒ Crude Oil	Volume Released (bbls) 88	Volume Recovered (bbls) 25
☐ Produced Water	Volume Released (bbls)	Volume Recovered (bbls)
	Is the concentration of dissolved chloride in the produced water >10,000 mg/l?	☐ Yes ☐ No
☐ Condensate	Volume Released (bbls)	Volume Recovered (bbls)
☐ Natural Gas	Volume Released (Mcf)	Volume Recovered (Mcf)
☐ Other (describe)	Volume/Weight Released (provide units)	Volume/Weight Recovered (provide units)
Cause of Release Tank 4		

State of New Mexico
Oil Conservation Division

Incident ID	
District RP	
Facility ID	
Application ID	

Was this a major release as defined by 19.15.29.7(A) NMAC? ☒ Yes ☐ No	If YES, for what reason(s) does the responsible party consider this a major release? 19.15.29.7 A.(1) an unauthorized release of a volume of 25 barrels or more
If YES, was immediate notice given to the OCD? By whom? To whom? When and by what means (phone, email, etc)? Yes, by Cave Spencer to Maxey Brown on 08-15-2018 by phone.	

Initial Response

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

☒ The source of the release has been stopped.

☒ The impacted area has been secured to protect human health and the environment.

☒ Released materials have been contained via the use of berms or dikes, absorbent pads, or other containment devices.

☒ All free liquids and recoverable materials have been removed and managed appropriately.

If all the actions described above have not been undertaken, explain why: N/A

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

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

Printed Name: Jeff Walker Title: Geologist/Sr,Project Manager as Agent for P 66

Signature:  Date: 09/07/2018

email: jeff.walker@ghd.com Telephone: 505-884-0672

OCD Only

Received by: _____ Date: _____

State of New Mexico
Oil Conservation Division

Incident ID	
District RP	
Facility ID	
Application ID	

Site Assessment/Characterization

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

What is the shallowest depth to groundwater beneath the area affected by the release?	124 (ft bgs)
Did this release impact groundwater or surface water?	☐ Yes ☒ No
Are the lateral extents of the release within 300 feet of a continuously flowing watercourse or any other significant watercourse?	☐ Yes ☒ No
Are the lateral extents of the release within 200 feet of any lakebed, sinkhole, or playa lake (measured from the ordinary high-water mark)?	☐ Yes ☒ No
Are the lateral extents of the release within 300 feet of an occupied permanent residence, school, hospital, institution, or church?	☐ Yes ☒ No
Are the lateral extents of the release within 500 horizontal feet of a spring or a private domestic fresh water well used by less than five households for domestic or stock watering purposes?	☐ Yes ☒ No
Are the lateral extents of the release within 1000 feet of any other fresh water well or spring?	☒ Yes ☐ No
Are the lateral extents of the release within incorporated municipal boundaries or within a defined municipal fresh water well field?	☐ Yes ☒ No
Are the lateral extents of the release within 300 feet of a wetland?	☐ Yes ☒ No
Are the lateral extents of the release overlying a subsurface mine?	☐ Yes ☒ No
Are the lateral extents of the release overlying an unstable area such as karst geology?	☐ Yes ☒ No
Are the lateral extents of the release within a 100-year floodplain?	☐ Yes ☒ No
Did the release impact areas **not** on an exploration, development, production, or storage site?	☐ Yes ☒ No

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

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

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

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

State of New Mexico
Oil Conservation Division

Incident ID	
District RP	
Facility ID	
Application ID	

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

Printed Name: Jeff Walker Title: Geologist-Sr. PM as Agent for P66

Signature: Jeff Walker Date: 9/7/18

email: jeff.walker@ghd.com Telephone: 505-884-0672

OCD Only

Received by: _____ Date: _____

State of New Mexico
Oil Conservation Division

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Closure

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

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

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

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

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

☒ Description of remediation activities

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

Printed Name: Jeff Walker Title: Geologist-Sr. PM as Agent for Plains

Signature: Jeff Walker Date: 9/7/18

email: jeff.walker@ghd.com Telephone: 505-884-0672

OCD Only

Received by: _____ Date: _____

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

Closure Approved by: _____ Date: _____

Printed Name: _____ Title: _____