

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	nVF1831937257
District RP	
Facility ID	
Application ID	

## Release Notification

NMOC

NOV 29 2018

DISTRICT III

### Responsible Party

Responsible Party Hilcorp Energy Company	OGRID 372171
Contact Name Jennifer Deal	Contact Telephone 505-801-6517
Contact email jdeal@hilcorp.com	Incident # nVF1831937257
Contact mailing address 382 Road 3100, Aztec NM 87410	

### Location of Release Source

Latitude 36.9243279 Longitude -107.6854935  
(NAD 83 in decimal degrees to 5 decimal places)

Site Name Pipeline near SJ 32-8 242	Site Type Gas Well
Date Release Discovered 10/24/2018 @ 10:00am	API# 30-045-28415

Unit Letter	Section	Township	Range	County
F	06	30N	08W	San Juan

Surface Owner:  State  Federal  Tribal  Private (Name: \_\_\_\_\_)

### Nature and Volume of Release

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

<input type="checkbox"/> Crude Oil	Volume Released (bbls)	Volume Recovered (bbls)
<input checked="" type="checkbox"/> Produced Water	Volume Released (bbls) 15	Volume Recovered (bbls)
	Is the concentration of dissolved chloride in the produced water >10,000 mg/l?	<input type="checkbox"/> Yes <input type="checkbox"/> No
<input type="checkbox"/> Condensate	Volume Released (bbls)	Volume Recovered (bbls)
<input type="checkbox"/> Natural Gas	Volume Released (Mcf)	Volume Recovered (Mcf)
<input type="checkbox"/> Other (describe)	Volume/Weight Released (provide units)	Volume/Weight Recovered (provide units)

#### Cause of Release

A release of ~15bbls of produced water was released due to internal corrosion of the produced water pipeline. Pipeline Tech found leak while performing Cathodic Protection survey on pipeline. Leak occurred within a pipeline corridor and stayed in the Pipeline ROW. Operator hydrovac'd the pipeline to confirm where leak was coming from.

25

Incident ID	nVF1831937257
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## 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?	>100 (ft bgs)
Did this release impact groundwater or surface water?	<input type="checkbox"/> Yes <input checked="" type="checkbox"/> No
Are the lateral extents of the release within 300 feet of a continuously flowing watercourse or any other significant watercourse?	<input checked="" type="checkbox"/> Yes <input type="checkbox"/> 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)?	<input type="checkbox"/> Yes <input checked="" type="checkbox"/> No
Are the lateral extents of the release within 300 feet of an occupied permanent residence, school, hospital, institution, or church?	<input type="checkbox"/> Yes <input checked="" type="checkbox"/> 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?	<input type="checkbox"/> Yes <input checked="" type="checkbox"/> No
Are the lateral extents of the release within 1000 feet of any other fresh water well or spring?	<input type="checkbox"/> Yes <input checked="" type="checkbox"/> No
Are the lateral extents of the release within incorporated municipal boundaries or within a defined municipal fresh water well field?	<input type="checkbox"/> Yes <input checked="" type="checkbox"/> No
Are the lateral extents of the release within 300 feet of a wetland?	<input type="checkbox"/> Yes <input checked="" type="checkbox"/> No
Are the lateral extents of the release overlying a subsurface mine?	<input type="checkbox"/> Yes <input checked="" type="checkbox"/> No
Are the lateral extents of the release overlying an unstable area such as karst geology?	<input type="checkbox"/> Yes <input checked="" type="checkbox"/> No
Are the lateral extents of the release within a 100-year floodplain?	<input type="checkbox"/> Yes <input checked="" type="checkbox"/> No
Did the release impact areas <b>not</b> on an exploration, development, production, or storage site?	<input type="checkbox"/> Yes <input checked="" type="checkbox"/> 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

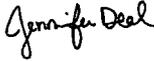
If the site characterization report does not include completed efforts at remediation of the release, the report must include a proposed remediation plan. That plan must include the estimated volume of material to be remediated, the proposed remediation technique, proposed sampling plan and methods, 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	nVF1831937257
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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: Jennifer Deal Title: Environmental Specialist

Signature:  Date: 11/27/2018

email: jdeal@hilcorp.com Telephone: (505) 324-5128

**OCD Only**

Received by: \_\_\_\_\_ Date: \_\_\_\_\_

Incident ID	nVF1831937257
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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: Jennifer Deal Title: Environmental Specialist  
 Signature: *Jennifer Deal* Date: 11/27/2018  
 email: jdeal@hilcorp.com Telephone: 505-801-6517

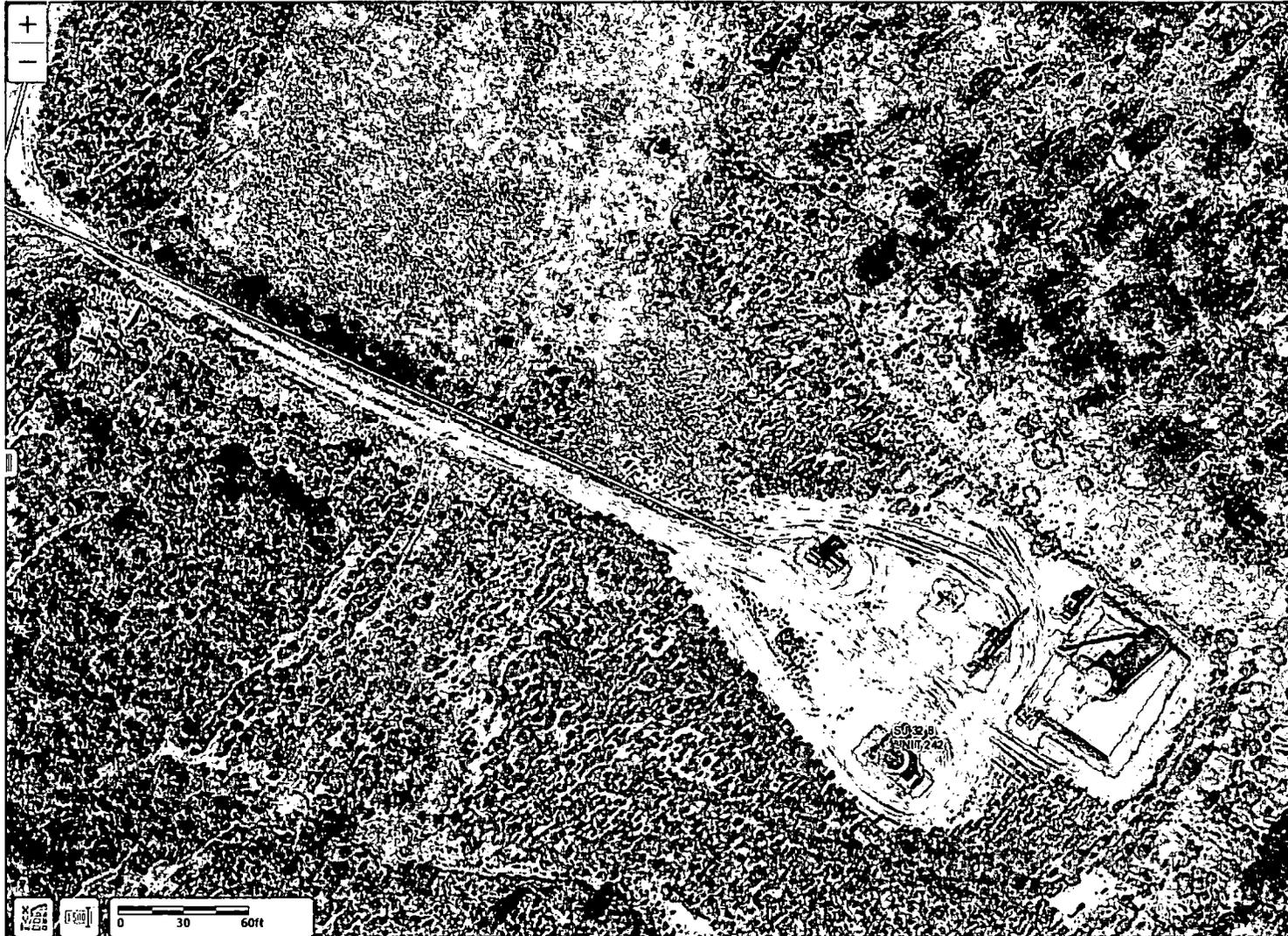
**OCD Only**

Received by: *Vanessa Fields* Date: *11/29/2018*

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: *[Signature]* Date: *11/29/2018*  
 Printed Name: *Vanessa Fields* Title: *Environmental Specialist*

# Aerial/Facility Layout



# Data table of soil contaminant concentration data

<b>SOIL ANALYTICAL RESULTS</b>											
<b>PIPELINE LEAK near SAN JUAN 32-8 242</b>											
<b>HILCORP ENERGY - L48 WEST</b>											
<b>Soil Sample Identification</b>	<b>Sample Date</b>	<b>Benzene (mg/kg)</b>	<b>Toluene (mg/kg)</b>	<b>Ethylbenzene (mg/kg)</b>	<b>Total Xylenes</b>	<b>Total BTEX</b>	<b>Chlorides (mg/kg)</b>	<b>GRO (mg/kg)</b>	<b>DRO (mg/kg)</b>	<b>MRO (mg/kg)</b>	<b>TPH (mg/kg)</b>
Pipeline Leak	11/9/2018	<0.0005	<0.005	<0.0005	<0.0015	<0.005	178	<0.10	4.80	<4.00	4
<b>NMOCD Standards</b>		<b>10</b>				<b>.50</b>	<b>600</b>				<b>1</b>

# Depth to water determination



## 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=opened.)

(C=the file is closed.)

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

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

(in feet)

POD Number	POD Sub-Code	Basin	County	Q1	Q2	Q3	Q4	Sec	Twp	Range	X	Y	Depth Well	Depth Water	Water Column
<u>SJ00012</u>	SJ	SJ	SJ	2	30	31N	08W				258218	4084189	1021	475	546
<u>SJ00198</u>	SJ	SJ	SJ	4	3	32	31N	08W			258895	4081451	2003		
<u>SJ01167</u>	SJ	SJ	SJ	3	4	24	31N	08W			266352	4084410	465	390	75
<u>SJ01822</u>	SJ	SJ	SJ	2	2	25	31N	08W			266540	4084216	550	500	50
<u>SJ03306</u>	SJ	SJ	SJ	4	4	1	25	31N	08W		265739	4083645	600	500	100

Average Depth to Water: 466 feet

Minimum Depth: 390 feet

Maximum Depth: 500 feet

Record Count: 5

**Basin/County Search:**

Basin: San Juan

Subbasin: San Juan

**PLSS Search:**

Township: 31N Range: 08W

\*UTM location was derived from PLSS - see Help

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

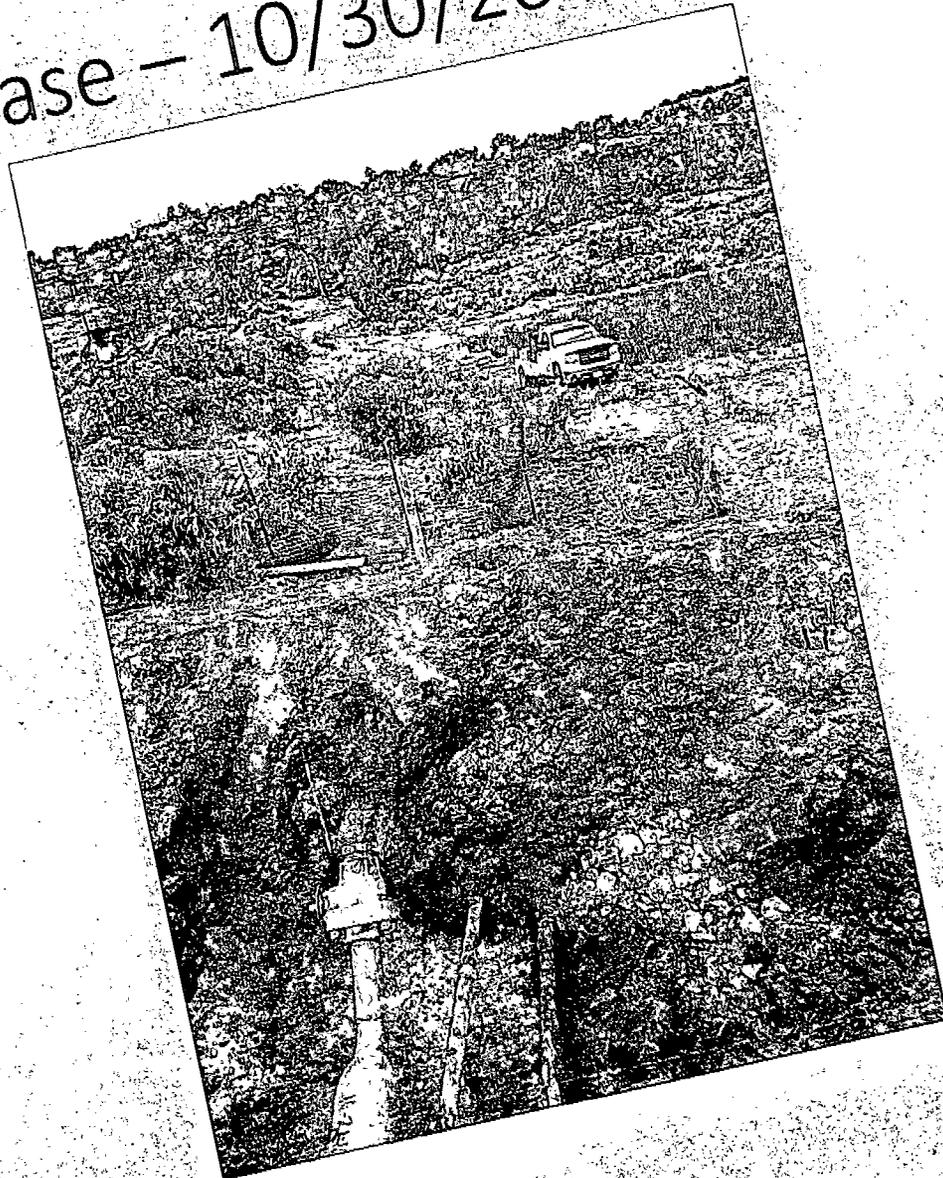
11/6/18 1:30 PM

WATER COLUMN/AVERAGE DEPTH TO WATER

# Determination of water sources



Picture of Release – 10/30/2018



# Photographs – 11/9/18 Sampling Event

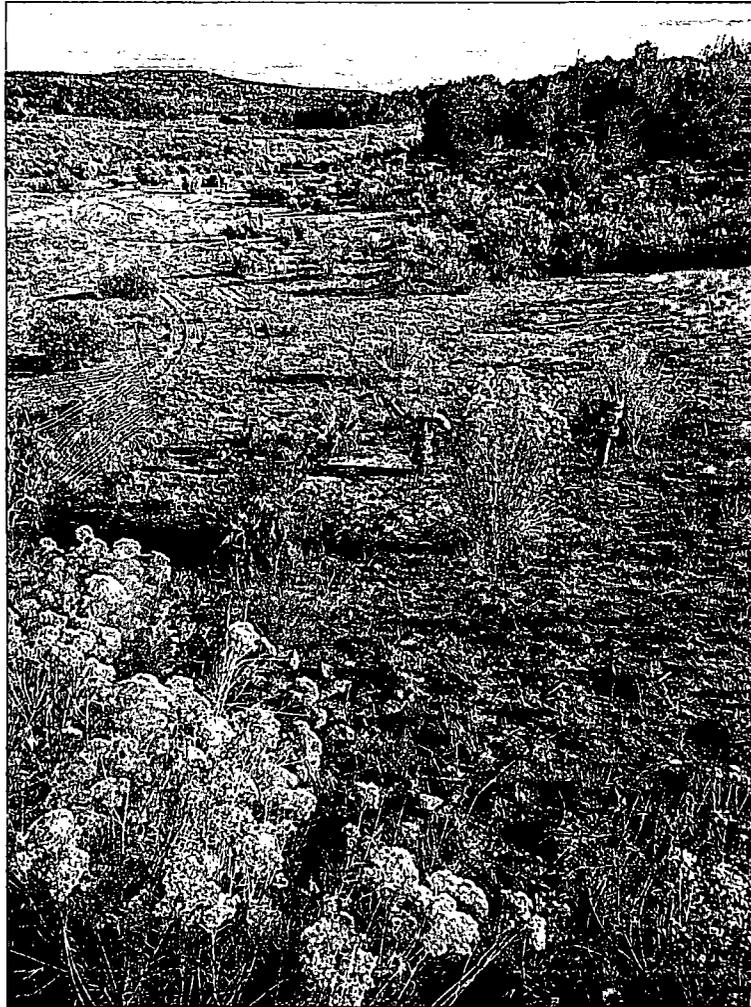
Four-point Composite Sample



# Map of Sampling event – 11/9/18



Photographs – After spill clean up and backfill



# Remediation

- Release stayed within Pipeline ROW
- Operator hydrovac'd the pipeline to confirm where leak was coming from
- Fixed leak
- Performed confirmation sampling on 11/9/2018 where one 4-point composite sample was taken

November 12, 2018

## HilCorp-Farmington, NM

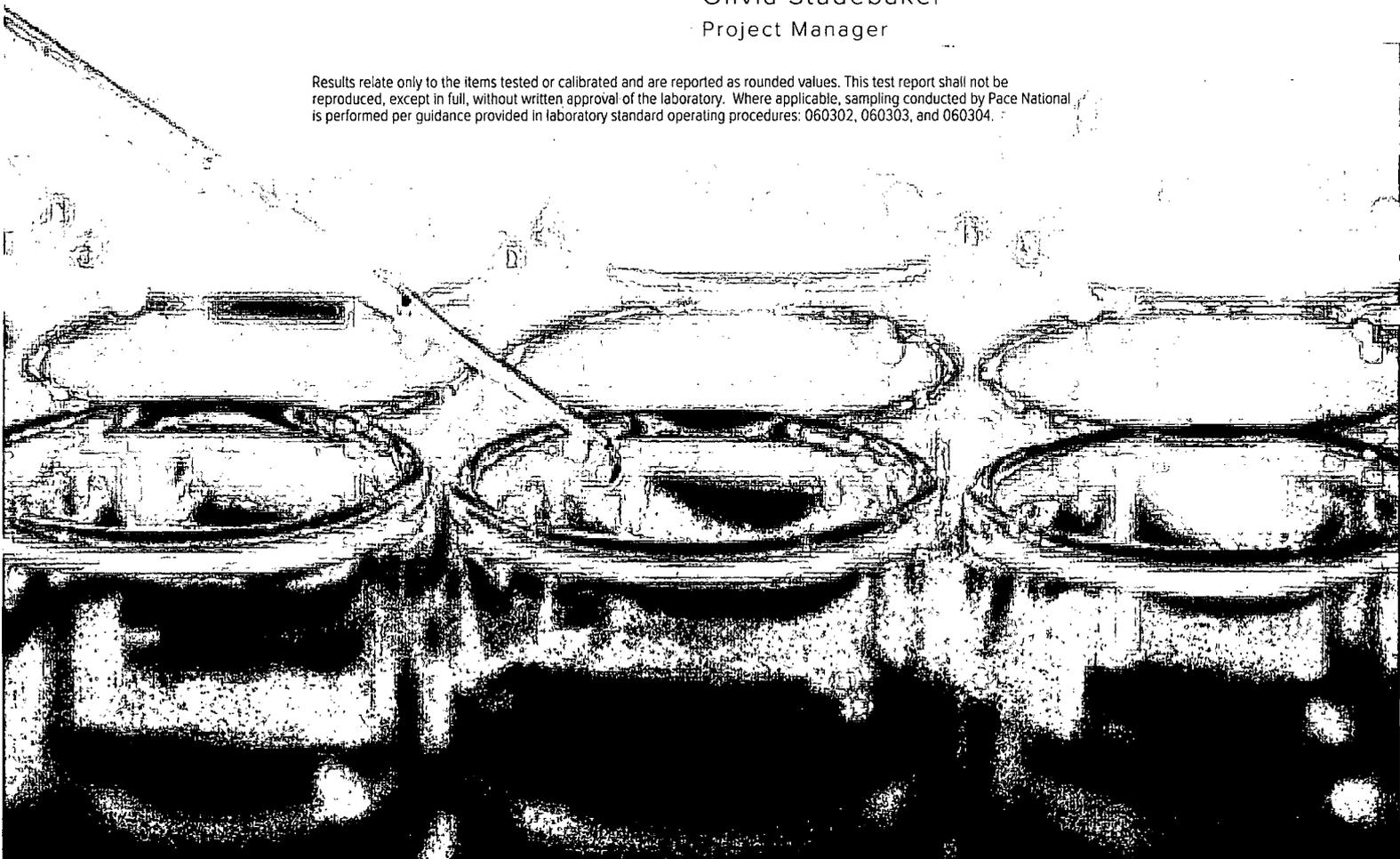
Sample Delivery Group: L1043094  
Samples Received: 11/10/2018  
Project Number:  
Description:  
Site: S.J. 32-8 UNIT 242  
Report To: Jennifer Deal  
382 Road 3100  
Aztec, NM 87401

Entire Report Reviewed By:



Olivia Studebaker  
Project Manager

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



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# SAMPLE SUMMARY

ONE LAB. NATIONWIDE.

PIPELINE LEAK L1043094-01 Solid

Collected by Kurt	Collected date/time 11/09/18 14:10	Received date/time 11/10/18 08:45
----------------------	---------------------------------------	--------------------------------------

Method	Batch	Dilution	Preparation date/time	Analysis date/time	Analyst
Wet Chemistry by Method 9056A	WG1194550	1	11/10/18 12:56	11/10/18 15:28	ELN
Volatile Organic Compounds (GC) by Method 8015/8021	WG1194876	1	11/10/18 11:54	11/11/18 19:15	ACG
Semi-Volatile Organic Compounds (GC) by Method 8015	WG1194745	1	11/10/18 16:50	11/12/18 00:56	AAT

1 Cp

2 Tc

4 Cn

5 Sr

6 Qc

7 Gl

8 Al

9 Sc



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

Olivia Studebaker  
Project Manager

<sup>1</sup> Cp

<sup>2</sup> Tc

<sup>3</sup> Ss

<sup>5</sup> Sr

<sup>6</sup> Qc

<sup>7</sup> Gl

<sup>8</sup> Al

<sup>9</sup> Sc

Wet Chemistry by Method 9056A

Analyte	Result mg/kg	Qualifier	RDL mg/kg	Dilution	Analysis date / time	Batch
Chloride	178		10.0	1	11/10/2018 15:28	WG1194550

Volatile Organic Compounds (GC) by Method 8015/8021

Analyte	Result mg/kg	Qualifier	RDL mg/kg	Dilution	Analysis date / time	Batch
Benzene	ND		0.000500	1	11/11/2018 19:15	WG1194876
Toluene	ND		0.00500	1	11/11/2018 19:15	WG1194876
Ethylbenzene	ND		0.000500	1	11/11/2018 19:15	WG1194876
Total Xylene	0.00527		0.00150	1	11/11/2018 19:15	WG1194876
TPH (GC/FID) Low Fraction	ND		0.100	1	11/11/2018 19:15	WG1194876
(S) <i>o,o</i> , <i>o</i> -Trifluorotoluene(FID)	101		77.0-120		11/11/2018 19:15	WG1194876
(S) <i>o,o</i> , <i>o</i> -Trifluorotoluene(PID)	99.6		72.0-128		11/11/2018 19:15	WG1194876

Semi-Volatile Organic Compounds (GC) by Method 8015

Analyte	Result mg/kg	Qualifier	RDL mg/kg	Dilution	Analysis date / time	Batch
C10-C28 Diesel Range	4.80		4.00	1	11/12/2018 00:56	WG1194745
C28-C40 Oil Range	ND		4.00	1	11/12/2018 00:56	WG1194745
(S) <i>o</i> -Terphenyl	65.5		18.0-148		11/12/2018 00:56	WG1194745

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



Method Blank (MB)

(MB) R3358758-1 11/10/18 14:38

Analyte	MB Result mg/kg	MB Qualifier	MB MDL mg/kg	MB RDL mg/kg
Chloride	1.48	↓	0.795	10.0

1 Cp

2 Tc

3 Ss

Laboratory Control Sample (LCS)

(LCS) R3358758-2 11/10/18 14:47

Analyte	Spike Amount mg/kg	LCS Result mg/kg	LCS Rec. %	Rec. Limits %	LCS Qualifier
Chloride	200	206	103	80.0-120	

4 Cn

5 Sr

6 Cc

7 Gl

8 Al

9 Sc

Method Blank (MB)

(MB) R3358963-5 11/11/18 12:56

Analyte	MB Result mg/kg	MB Qualifier	MB MDL mg/kg	MB RDL mg/kg
Benzene	0.000197	J	0.000120	0.000500
Toluene	0.000438	J	0.000150	0.00500
Ethylbenzene	0.000147	J	0.000110	0.000500
Total Xylene	U		0.000460	0.00150
TPH (GC/FID) Low Fraction	U		0.0217	0.100
(S) a,a,a-Trifluorotoluene(FID)	103			77.0-120
(S) a,a,a-Trifluorotoluene(PID)	100			72.0-128

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

(LCS) R3358963-1 11/11/18 11:10 • (LCSD) R3358963-2 11/11/18 11:31

Analyte	Spike Amount mg/kg	LCS Result mg/kg	LCSD Result mg/kg	LCS Rec. %	LCSD Rec. %	Rec. Limits %	LCS Qualifier	LCSD Qualifier	RPD %	RPD Limits %
Benzene	0.0500	0.0450	0.0442	90.0	88.4	76.0-121			1.83	20
Toluene	0.0500	0.0488	0.0487	97.6	97.4	80.0-120			0.270	20
Ethylbenzene	0.0500	0.0507	0.0506	101	101	80.0-124			0.188	20
Total Xylene	0.150	0.149	0.149	99.3	99.4	37.0-160			0.0671	20
(S) a,a,a-Trifluorotoluene(FID)				104	104	77.0-120				
(S) a,a,a-Trifluorotoluene(PID)				104	103	72.0-128				

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

(LCS) R3358963-3 11/11/18 11:52 • (LCSD) R3358963-4 11/11/18 12:14

Analyte	Spike Amount mg/kg	LCS Result mg/kg	LCSD Result mg/kg	LCS Rec. %	LCSD Rec. %	Rec. Limits %	LCS Qualifier	LCSD Qualifier	RPD %	RPD Limits %
TPH (GC/FID) Low Fraction	5.50	5.31	5.48	96.6	99.6	72.0-127			3.12	20
(S) a,a,a-Trifluorotoluene(FID)				91.8	92.8	77.0-120				
(S) a,a,a-Trifluorotoluene(PID)				108	108	72.0-128				

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

L1042478-02 Original Sample (OS) • Matrix Spike (MS) • Matrix Spike Duplicate (MSD)

(OS) L1042478-02 11/11/18 17:50 • (MS) R3358963-6 11/11/18 21:01 • (MSD) R3358963-7 11/11/18 21:22

Analyte	Spike Amount mg/kg	Original Result mg/kg	MS Result mg/kg	MSD Result mg/kg	MS Rec. %	MSD Rec. %	Dilution	Rec. Limits %	MS Qualifier	MSD Qualifier	RPD %	RPD Limits %
Benzene	0.0500	0.000749	0.0196	0.0152	37.6	28.9	1	10.0-155			25.1	32
Toluene	0.0500	ND	0.0163	0.0110	31.3	20.8	1	10.0-160		J3	38.3	34
Ethylbenzene	0.0500	ND	0.0111	0.00696	21.9	13.6	1	10.0-160		J3	46.1	32
Total Xylene	0.150	ND	0.0294	0.0175	18.9	11.0	1	10.0-160	J6	J3 J6	50.5	32
(S) a,a,a-Trifluorotoluene(FID)					100	100		77.0-120				
(S) a,a,a-Trifluorotoluene(PID)					98.8	99.0		72.0-128				

L1043123-04 Original Sample (OS) • Matrix Spike (MS) • Matrix Spike Duplicate (MSD)

(OS) L1043123-04 11/11/18 20:40 • (MS) R3358963-8 11/11/18 21:44 • (MSD) R3358963-9 11/11/18 22:05

Analyte	Spike Amount mg/kg	Original Result mg/kg	MS Result mg/kg	MSD Result mg/kg	MS Rec. %	MSD Rec. %	Dilution	Rec. Limits %	MS Qualifier	MSD Qualifier	RPD %	RPD Limits %
TPH (GC/FID) Low Fraction	5.50		102	114	74.1	82.7	25	10.0-151			10.9	28
(S) a,a,a-Trifluorotoluene(FID)					99.7	98.9		77.0-120				
(S) a,a,a-Trifluorotoluene(PID)					105	105		72.0-128				

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



Semi-Volatile Organic Compounds (GC) by Method 8015

L1043094-01

Method Blank (MB)

(MB) R3358915-1 11/11/18 19:29

Analyte	MB Result	MB Qualifier	MB MDL	MB RDL
	mg/kg		mg/kg	mg/kg
C10-C28 Diesel Range	U		1.61	4.00
C28-C40 Oil Range	U		0.274	4.00
(S) o-Terphenyl	80.0			18.0-148

1 Cp

2 Tc

3 Ss

4 Cn

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

(LCS) R3358915-2 11/11/18 19:41 • (LCSD) R3358915-3 11/11/18 19:54

Analyte	Spike Amount	LCS Result	LCSD Result	LCS Rec.	LCSD Rec.	Rec. Limits	LCS Qualifier	LCSD Qualifier	RPD	RPD Limits
	mg/kg	mg/kg	mg/kg	%	%	%			%	%
C10-C28 Diesel Range	50.0	28.1	29.5	56.2	59.0	50.0-150			4.86	20
(S) o-Terphenyl				94.1	96.2	18.0-148				

5 Sr

L1042106-01 Original Sample (OS) • Matrix Spike (MS) • Matrix Spike Duplicate (MSD)

(OS) L1042106-01 11/12/18 04:04 • (MS) R3358915-4 11/12/18 04:16 • (MSD) R3358915-5 11/12/18 04:28

Analyte	Spike Amount	Original Result	MS Result	MSD Result	MS Rec.	MSD Rec.	Dilution	Rec. Limits	MS Qualifier	MSD Qualifier	RPD	RPD Limits
	mg/kg	mg/kg	mg/kg	mg/kg	%	%		%			%	%
C10-C28 Diesel Range	50.0	ND	24.7	29.3	49.4	58.6	5	50.0-150	J6		17.0	20
(S) o-Terphenyl					82.1	93.5		18.0-148				

7 GI

8 AI

9 Sc

Sample Narrative:

OS: Cannot run at lower dilution due to viscosity of extract



Guide to Reading and Understanding Your Laboratory Report

The information below is designed to better explain the various terms used in your report of analytical results from the Laboratory. This is not intended as a comprehensive explanation, and if you have additional questions please contact your project representative.

Abbreviations and Definitions

MDL	Method Detection Limit.
ND	Not detected at the Reporting Limit (or MDL where applicable).
RDL	Reported Detection Limit.
Rec.	Recovery.
RPD	Relative Percent Difference.
SDG	Sample Delivery Group.
(S)	Surrogate (Surrogate Standard) - Analytes added to every blank, sample, Laboratory Control Sample/Duplicate and Matrix Spike/Duplicate; used to evaluate analytical efficiency by measuring recovery. Surrogates are not expected to be detected in all environmental media.
U	Not detected at the Reporting Limit (or MDL where applicable).
Analyte	The name of the particular compound or analysis performed. Some Analyses and Methods will have multiple analytes reported.
Dilution	If the sample matrix contains an interfering material, the sample preparation volume or weight values differ from the standard, or if concentrations of analytes in the sample are higher than the highest limit of concentration that the laboratory can accurately report, the sample may be diluted for analysis. If a value different than 1 is used in this field, the result reported has already been corrected for this factor.
Limits	These are the target % recovery ranges or % difference value that the laboratory has historically determined as normal for the method and analyte being reported. Successful QC Sample analysis will target all analytes recovered or duplicated within these ranges.
Original Sample	The non-spiked sample in the prep batch used to determine the Relative Percent Difference (RPD) from a quality control sample. The Original Sample may not be included within the reported SDG.
Qualifier	This column provides a letter and/or number designation that corresponds to additional information concerning the result reported. If a Qualifier is present, a definition per Qualifier is provided within the Glossary and Definitions page and potentially a discussion of possible implications of the Qualifier in the Case Narrative if applicable.
Result	The actual analytical final result (corrected for any sample specific characteristics) reported for your sample. If there was no measurable result returned for a specific analyte, the result in this column may state "ND" (Not Detected) or "BDL" (Below Detectable Levels). The information in the results column should always be accompanied by either an MDL (Method Detection Limit) or RDL (Reporting Detection Limit) that defines the lowest value that the laboratory could detect or report for this analyte.
Case Narrative (Cn)	A brief discussion about the included sample results, including a discussion of any non-conformances to protocol observed either at sample receipt by the laboratory from the field or during the analytical process. If present, there will be a section in the Case Narrative to discuss the meaning of any data qualifiers used in the report.
Quality Control Summary (Qc)	This section of the report includes the results of the laboratory quality control analyses required by procedure or analytical methods to assist in evaluating the validity of the results reported for your samples. These analyses are not being performed on your samples typically, but on laboratory-generated material.
Sample Chain of Custody (Sc)	This is the document created in the field when your samples were initially collected. This is used to verify the time and date of collection, the person collecting the samples, and the analyses that the laboratory is requested to perform. This chain of custody also documents all persons (excluding commercial shippers) that have had control or possession of the samples from the time of collection until delivery to the laboratory for analysis.
Sample Results (Sr)	This section of your report will provide the results of all testing performed on your samples. These results are provided by sample ID and are separated by the analyses performed on each sample. The header line of each analysis section for each sample will provide the name and method number for the analysis reported.
Sample Summary (Ss)	This section of the Analytical Report defines the specific analyses performed for each sample ID, including the dates and times of preparation and/or analysis.

Qualifier Description

J	The identification of the analyte is acceptable; the reported value is an estimate.
J3	The associated batch QC was outside the established quality control range for precision.
J6	The sample matrix interfered with the ability to make any accurate determination; spike value is low.

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

Pace National is the only environmental laboratory accredited/certified to support your work nationwide from one location. One phone call, one point of contact, one laboratory. No other lab is as accessible or prepared to handle your needs throughout the country. Our capacity and capability from our single location laboratory is comparable to the collective totals of the network laboratories in our industry. The most significant benefit to our one location design is the design of our laboratory campus. The model is conducive to accelerated productivity, decreasing turn-around time, and preventing cross contamination, thus protecting sample integrity. Our focus on premium quality and prompt service allows us to be YOUR LAB OF CHOICE.

\* Not all certifications held by the laboratory are applicable to the results reported in the attached report.  
 \* Accreditation is only applicable to the test methods specified on each scope of accreditation held by Pace National.

## State Accreditations

Alabama	40660
Alaska	17-026
Arizona	AZ0612
Arkansas	88-0469
California	2932
Colorado	TN00003
Connecticut	PH-0197
Florida	E87487
Georgia	NELAP
Georgia <sup>1</sup>	923
Idaho	TN00003
Illinois	200008
Indiana	C-TN-01
Iowa	364
Kansas	E-10277
Kentucky <sup>1,6</sup>	90010
Kentucky <sup>2</sup>	16
Louisiana	AI30792
Louisiana <sup>1</sup>	LA180010
Maine	TN0002
Maryland	324
Massachusetts	M-TN003
Michigan	9958
Minnesota	047-999-395
Mississippi	TN00003
Missouri	340
Montana	CERT0086

Nebraska	NE-OS-15-05
Nevada	TN-03-2002-34
New Hampshire	2975
New Jersey-NELAP	TN002
New Mexico <sup>1</sup>	n/a
New York	11742
North Carolina	Env375
North Carolina <sup>1</sup>	DW21704
North Carolina <sup>3</sup>	41
North Dakota	R-140
Ohio-VAP	CL0069
Oklahoma	9915
Oregon	TN200002
Pennsylvania	68-02979
Rhode Island	LA000356
South Carolina	84004
South Dakota	n/a
Tennessee <sup>1,4</sup>	2006
Texas	T 104704245-17-14
Texas <sup>5</sup>	LAB0152
Utah	TN00003
Vermont	VT2006
Virginia	460132
Washington	C847
West Virginia	233
Wisconsin	9980939910
Wyoming	A2LA

## Third Party Federal Accreditations

A2LA - ISO 17025	1461.01
A2LA - ISO 17025 <sup>5</sup>	1461.02
Canada	1461.01
EPA-Crypto	TN00003

AIHA-LAP, LLC EMLAP	100789
DOD	1461.01
USDA	P330-15-00234

<sup>1</sup> Drinking Water   <sup>2</sup> Underground Storage Tanks   <sup>3</sup> Aquatic Toxicity   <sup>4</sup> Chemical/Microbiological   <sup>5</sup> Mold   <sup>6</sup> Wastewater   n/a Accreditation not applicable

## Our Locations

Pace National has sixty-four client support centers that provide sample pickup and/or the delivery of sampling supplies. If you would like assistance from one of our support offices, please contact our main office. Pace National performs all testing at our central laboratory.



1 Cp

2 Tc

3 Ss

4 Cn

5 Sr

6 Qc

7 Gl

9 Sc

