

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	NRM2010836658
District RP	
Facility ID	
Application ID	

Release Notification

Responsible Party

Responsible Party	Hilcorp Energy Company	OGRID 372171
Contact Name	Jennifer Deal	Contact Telephone 505-801-6517
Contact email	jdeal@hilcorp.com	Incident # NRM2010836658
Contact mailing address	382 Road 3100, Aztec NM 87410	

Location of Release Source

Latitude 36.9816742 Longitude -108.0771255
(NAD 83 in decimal degrees to 5 decimal places)

Site Name	Hubbard 4A	Site Type	Well
Date Release Discovered	4/10/2020 @ 11:30am	API#	3004522858

Unit Letter	Section	Township	Range	County
P	15	32N	12W	San Juan

Surface Owner: ☐ State ☐ Federal ☐ Tribal ☒ Private (Name: *Bolack Trust*)

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)	Volume Recovered (bbls)		
☒ Produced Water	Volume Released (bbls) 5.6	Volume Recovered (bbls) 2bbls		
	Is the concentration of dissolved chloride in the produced water >10,000 mg/l?	☐ Yes ☐ No		
☒ Condensate	Volume Released (bbls) 0.2	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 A release of 5.6 bbls of produced water and 0.2 bbls of condensate was released due to corrosion on the tank. Operations had the liquids in the tank pulled. Release remained on location and inside the berm. 2 bbls was recovered. OCD will be notified 48 hours prior to sampling.

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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?	>50 ____ (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 1/2-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.

Incident ID	NRM2010836658
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: __Jennifer Deal__ Title: __Environmental Specialist__

Signature: __Jennifer Deal__ Date: __6/3/2020__

email: __jideal@hilcorp.com__ Telephone: __(505) 324-5128__

OCD Only

Received by: _____ Date: _____

Oil Conservation Division

Incident ID	NRM2010836658
District RP	
Facility ID	
Application ID	

Closure

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

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

- ☒ A scaled site and sampling diagram as described in 19.15.29.11 NMAC
- ☒ Photographs of the remediated site prior to backfill or photos of the liner integrity if applicable (Note: appropriate OCD District office must be notified 2 days prior to liner inspection)
- ☒ Laboratory analyses of final sampling (Note: appropriate ODC District office must be notified 2 days prior to final sampling)
- ☒ Description of remediation activities

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

Printed Name: Jennifer Deal Title: Environmental SpecialistSignature:  Date: 6/3/2020email: jdeal@hilcorp.com Telephone: 505-801-6517**OCDC Only**Received by: OCDC Date: 6/4/2020

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.

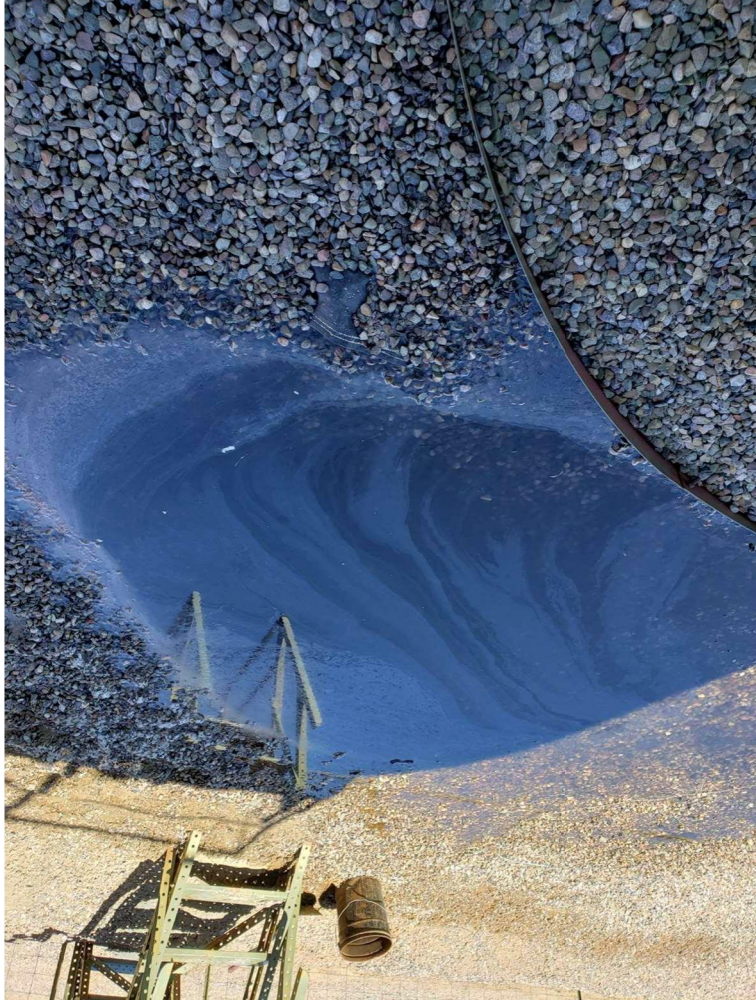
Closure Approved by:  Date: _____Printed Name: Cory Title: Environmental Specialist



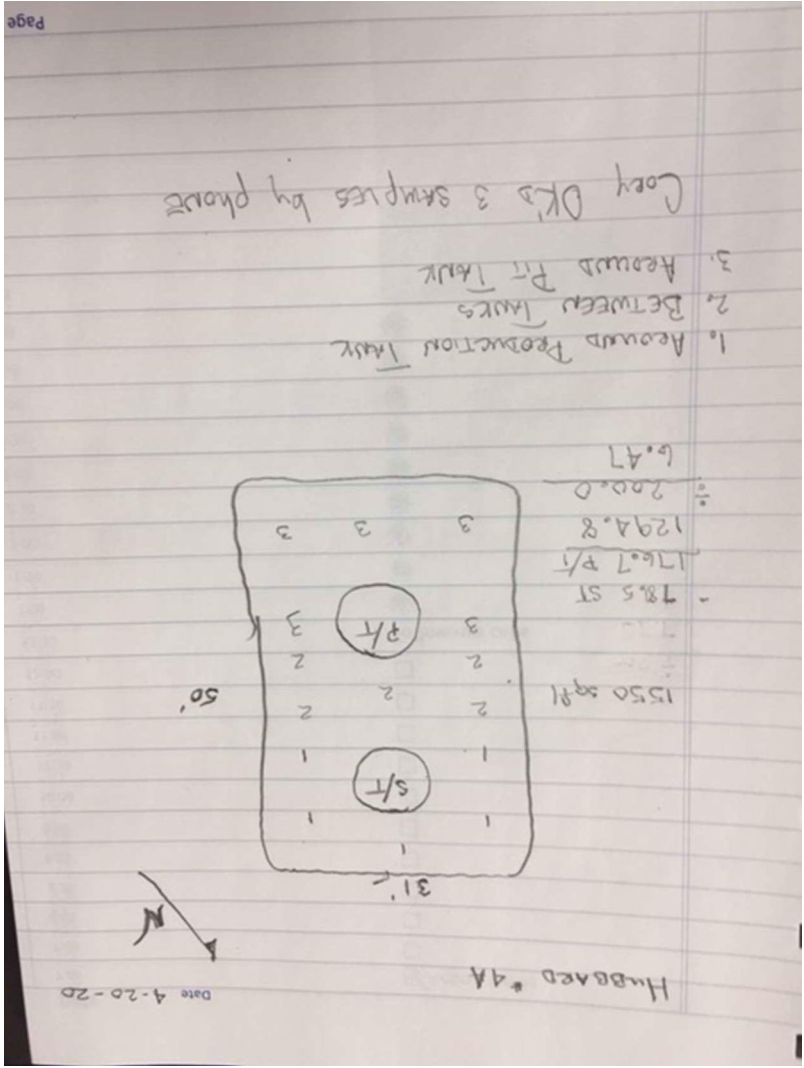
Scaled Map



Photographs – Initial Release 4/10/2020



Field Data



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=orphaned,
C=the file is
closed)

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

(In feet)

POD Number	Code	Sub-basin	County	64	16	4	Sec	Tws	Rng	X	Y	DepthWater	DepthWater	Column
SJ 03583	SJ			1	1	1	23	32N	12W	226477	4096872*	167	60	107
SJ 03933 POD1	SJ			1	4	1	22	32N	12W	225262	4096446			

Average Depth to Water: 60 feet
Minimum Depth: 60 feet
Maximum Depth: 60 feet

Record Count: 2
PLSS Search:

Section(s): 14, 15, 22, 23 Township: 32N Range: 12W

*UTM location was derived from PLSS - see Help

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

4/16/20 10:06 AM
WATER COLUMN/AVERAGE DEPTH
TO WATER

Determination of water sources and significant watercourses within ½ mile of the lateral extent of the release



N

Photographs – 4/20/20 Sampling Event

Northeast side of tank



North side of tank



Southeast side of tank



Photographs – 4/20/20 Sampling Event

North side of tank



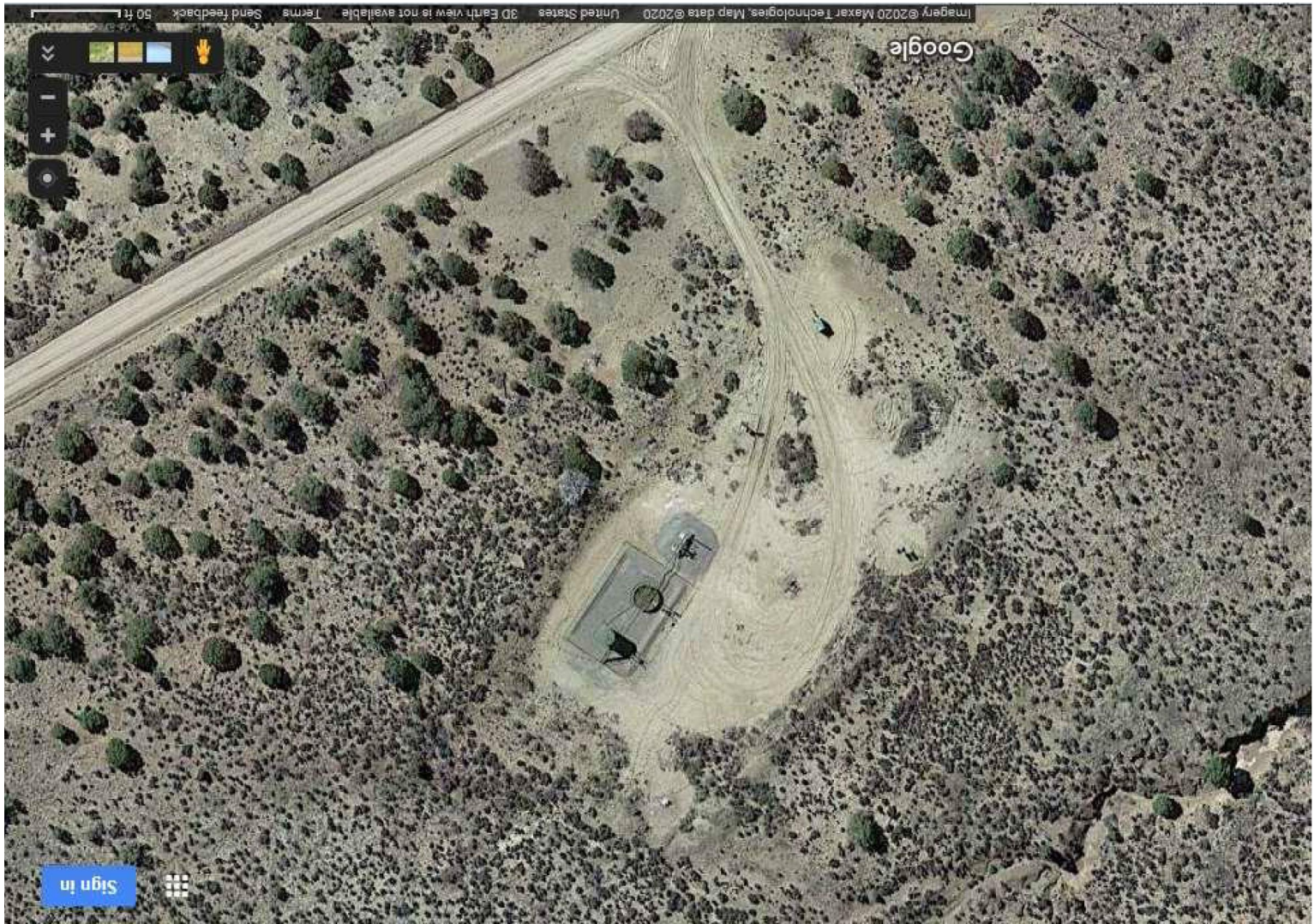
Southwest side of Pit tank



West side of pit tank



Topographic/Aerial Maps



Summary of events

- 4/10/20 Release of 5.6 bbls of Produced water & 0.2 bbls of condensate were released due to corrosion on tank
 - 2 bbls were recovered
 - Samples came back below standard so no remediation was required
- Confirmation sampling occurred on April 20, 2020 at 9:00am
 - Kurt performed sampling
 - Discussed sampling plan on phone with Cory Smith on 4/20/20
 - 3 composite samples submitted

Jennifer Deal

From: Jennifer Deal
Sent: Thursday, April 16, 2020 10:59 AM
To: cory.smith@state.nm.us
Cc: Kurt Hoekstra; Mike Murphy; Danny Roberts
Subject: Confirmation Sampling - Hubbard 4A

Good morning,

Hillcorp Energy is providing 48 hour notice of confirmation sampling to occur at the Hubbard 4A on Monday, April 20th at 9:00am. This site does not have an incident number yet. Let me know if you have any questions.

Thank you,

Jennifer Deal
Environmental Specialist
Hilcorp – L48-West
9a CR 5793
Farmington, NM 87401
C: (505) 801-6517
O: (505) 324-5124



ANALYTICAL REPORT

April 24, 2020

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

Sample Delivery Group: L1210685
Samples Received: 04/21/2020
Project Number:
Description: Hubbard #4A
Site: HUBBARD #4A
Report To: Jennifer Deal
382 Road 3100
Aztec, NM 87410

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 Analytical National is performed per guidance provided in laboratory standard operating procedures ENV-SOP-MTJL-0067 and ENV-SOP-MTJL-0068. Where sampling conducted by the customer, results relate to the accuracy of the information provided, and as the samples are received.



Cp: Cover Page	1	1 Cp
Tc: Table of Contents	2	2 Tc
Ss: Sample Summary	3	3 Ss
Cn: Case Narrative	4	4 Cn
Sr: Sample Results	5	5 Sr
AROUND PRODUCTION TANK L1210685-01	5	
BETWEEN TANKS L1210685-02	6	
AROUND PIT TANK L1210685-03	7	
Qc: Quality Control Summary	8	6 Qc
Wet Chemistry by Method 300.0	8	
Volatile Organic Compounds (GC) by Method 8015/8021	9	7 Gl
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Gl: Glossary of Terms	11	8 Al
Al: Accreditations & Locations	12	
Sc: Sample Chain of Custody	13	9 Sc

AROUND PRODUCTION TANK L1210685-01 Solid

1Cp

2Tc

3Ss

4Cn

5Sr

6Qc

7Gl

8Ai

9Sc

Collected by		Collected date/time		Received date/time	
K Hoekstra		04/20/20 09:45		04/21/20 08:45	
Method	Batch	Dilution	Preparation date/time	Analysis date/time	Analyst Location
Wet Chemistry by Method 300.0 Volatile Organic Compounds (GC) by Method 8015/8021 Semi-Volatile Organic Compounds (GC) by Method 8015	WG1464074	1	04/21/20 23:36	04/22/20 03:57	ELN Mt. Juliet, TN
	WG1464486	1	04/22/20 08:39	04/22/20 17:34	ADM Mt. Juliet, TN
	WG1464182	1	04/22/20 04:26	04/22/20 14:09	FM Mt. Juliet, TN
Collected by		Collected date/time		Received date/time	
K Hoekstra		04/20/20 09:53		04/21/20 08:45	

BETWEEN TANKS L1210685-02 Solid

Method	Batch	Dilution	Preparation date/time	Analysis date/time	Analyst Location
Wet Chemistry by Method 300.0 Volatile Organic Compounds (GC) by Method 8015/8021 Semi-Volatile Organic Compounds (GC) by Method 8015	WG1464074	1	04/21/20 23:36	04/22/20 04:26	ELN Mt. Juliet, TN
	WG1464486	1	04/22/20 08:39	04/22/20 17:56	ADM Mt. Juliet, TN
	WG1464182	1	04/22/20 04:26	04/22/20 12:11	FM Mt. Juliet, TN

AROUND PIT TANK L1210685-03 Solid

Collected by		Collected date/time		Received date/time	
K Hoekstra		04/20/20 09:58		04/21/20 08:45	
Method	Batch	Dilution	Preparation date/time	Analysis date/time	Analyst Location
Wet Chemistry by Method 300.0 Volatile Organic Compounds (GC) by Method 8015/8021 Semi-Volatile Organic Compounds (GC) by Method 8015	WG1464074	1	04/21/20 23:36	04/22/20 04:35	ELN Mt. Juliet, TN
	WG1464486	1	04/22/20 08:39	04/22/20 18:18	ADM Mt. Juliet, TN
	WG1464182	1	04/22/20 04:26	04/22/20 12:24	FM Mt. Juliet, TN

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

1

Cp

2

Tc

3

Ss

4

Cn

5

Sr

6

Qc

7

Gl

8

Al

9

Sc

Collected date/time: 04/20/20 09:45

L1210685

Wet Chemistry by Method 300.0

Analyte	Result mg/kg	Qualifier	RDL mg/kg	Dilution	Analysis date / time	Batch
Chloride	71.4		20.0	1	04/22/2020 03:57	WG1464074

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	04/22/2020 17:34	WG14644486
Toluene	ND		0.00500	1	04/22/2020 17:34	WG14644486
Ethylbenzene	ND		0.000500	1	04/22/2020 17:34	WG14644486
Total Xylene	0.00161		0.00150	1	04/22/2020 17:34	WG14644486
TPH (GC/FID) Low Fraction	ND		0.100	1	04/22/2020 17:34	WG14644486
(S) a,a,a-Trifluorotoluene(FID)	104		77.0-120		04/22/2020 17:34	WG14644486
(S) a,a,a-Trifluorotoluene(PID)	99.2		72.0-128		04/22/2020 17:34	WG14644486

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	191		4.00	1	04/22/2020 14:09	WG1464182
C28-C40 Oil Range	94.5		4.00	1	04/22/2020 14:09	WG1464182
(S) o-Terphenyl	61.5		18.0-148		04/22/2020 14:09	WG1464182

1

Cp

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Tc

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Ss

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Cn

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Sr

6

Qc

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Gl

8

Al

9

Sc

Collected date/time: 04/20/20 09:53

L1210685

Wet Chemistry by Method 300.0

Analyte	Result mg/kg	Qualifier	RDL mg/kg	Dilution	Analysis date / time	Batch
Chloride	20.9		20.0	1	04/22/2020 04:26	WG1464074

Volatile Organic Compounds (GC) by Method 8015/8021

Analyte	Result mg/kg	Qualifier	RDL mg/kg	Dilution	Analysis date / time	Batch
Benzene	0.000766		0.000500	1	04/22/2020 17:56	WG1464486
Toluene	ND		0.00500	1	04/22/2020 17:56	WG1464486
Ethylbenzene	ND		0.000500	1	04/22/2020 17:56	WG1464486
Total Xylene	ND		0.00150	1	04/22/2020 17:56	WG1464486
TPH (GC/FID) Low Fraction	ND		0.100	1	04/22/2020 17:56	WG1464486
(S) a,a,a-Trifluorobluene(FID)	104		77.0-120		04/22/2020 17:56	WG1464486
(S) a,a,a-Trifluorobluene(PID)	100		72.0-128		04/22/2020 17:56	WG1464486

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	ND		4.00	1	04/22/2020 12:11	WG1464182
C28-C40 Oil Range	ND		4.00	1	04/22/2020 12:11	WG1464182
(S) o-Terphenyl	54.7		18.0-148		04/22/2020 12:11	WG1464182

1

Cp

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Tc

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Ss

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Cn

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Sr

6

Qc

7

Gl

8

Al

9

Sc

Collected date/time: 04/20/20 09:58

L1210685

Wet Chemistry by Method 300.0

Analyte	Result mg/kg	Qualifier	RDL mg/kg	Dilution	Analysis date / time	Batch
Chloride	ND		20.0	1	04/22/2020 04:35	WG1464074

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	04/22/2020 18:18	WG1464486
Toluene	ND		0.00500	1	04/22/2020 18:18	WG1464486
Ethylbenzene	ND		0.000500	1	04/22/2020 18:18	WG1464486
Total Xylene	ND		0.00150	1	04/22/2020 18:18	WG1464486
TPH (GC/FID) Low Fraction	ND		0.100	1	04/22/2020 18:18	WG1464486
(S) a,a,a-Trifluorobutene(FID)	104		77.0-120		04/22/2020 18:18	WG1464486
(S) a,a,a-Trifluorobutene(PID)	100		72.0-128		04/22/2020 18:18	WG1464486

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	ND		4.00	1	04/22/2020 12:24	WG1464182
C28-C40 Oil Range	ND		4.00	1	04/22/2020 12:24	WG1464182
(S) o-Terphenyl	62.0		18.0-148		04/22/2020 12:24	WG1464182

1

Cp

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Ss

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Gl

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Sc



QUALITY CONTROL SUMMARY

[L1210685-01.02.03](#)

Volatile Organic Compounds (GC) by Method 8015/8021

WG1464486

Method Blank (MB)

(MB) R3521262-3 04/22/20 12:04

Analyte	MB Result	MB Qualifier	MB MDL	MB RDL
Benzene	U		0.000120	0.000500
Toluene	U		0.000150	0.00500
Ethylbenzene	U		0.000110	0.000500
Total Xylene	U		0.000460	0.00150
TPH (GC/FID) Low Fraction	0.0555	J	0.0217	0.100
(S) a,a,a-Trifluorotoluene(FID)	106		77.0-120	
(S) a,a,a-Trifluorotoluene(PID)	102		72.0-128	

Laboratory Control Sample (LCS)

(LCS) R3521262-1 04/22/20 10:57

Analyte	Spike Amount	LCS Result	LCS Rec.	Rec. Limits	LCS Qualifier
Benzene	mg/kg 0.0500	mg/kg 0.0492	% 98.4	% 76.0-121	
Toluene	0.0500	0.0514	103	80.0-120	
Ethylbenzene	0.0500	0.0529	106	80.0-124	
Total Xylene	0.150	0.146	97.3	37.0-160	
(S) a,a,a-Trifluorotoluene(FID)			105	77.0-120	
(S) a,a,a-Trifluorotoluene(PID)			102	72.0-128	

Laboratory Control Sample (LCS)

(LCS) R3521262-2 04/22/20 11:19

Analyte		mg/kg	LCS Result	LCS Rec.	Rec. Limits
Spike Amount		mg/kg	LCS Result	LCS Rec.	LCS Qualifier
TPH (GC/FID) Low Fraction		5.50	4.88	88.7	72.0-127
(S) a,a,a-Trifluorotoluene(FID)			106		77.0-120
(S) a,a,a-Trifluorotoluene(PID)			107		72.0-128

ACCOUNT:

HillCorp-Farmington, NM

PROJECT:

SDG:

L1210685

DATE/TIME:

04/24/20 14:47

PAGE:

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Received by OCD: 6/4/2020 2:49:35 PM

QC
GI
AI
Sc

QUALITY CONTROL SUMMARY



Received by OGD: 6/4/2020 2:49:35 PM

1
2
3
4
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6
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8
9

Method Blank (MB)

(MB) R3520755-1 04/22/20 08:34

Analyte	MB Result	MB Qualifier	MB MDL	MB RDL
C10-C28 Diesel Range	U	1.61	4.00	
C28-C40 Oil Range	U	0.274	4.00	
(S) o-Terphenyl	67.7		18.0-148	

Laboratory Control Sample (LCS)

(LCS) R3520755-2 04/22/20 08:47

Analyte	Spike Amount	LCS Result	LCS Rec.	Rec. Limits	LCS Qualifier
C10-C28 Diesel Range	50.0	36.5	73.0	50.0-150	
(S) o-Terphenyl		64.3		18.0-148	

L1210034-11 Original Sample (OS) • Matrix Spike Duplicate (MSD)

(OS) L1210034-11 04/22/20 13:29 • (MS) R3520755-3 04/22/20 13:42 • (MSD) R3520755-4 04/22/20 13:56

Analyte	Spike Amount	Original Result	MS Result	MSD Result	MS Rec.	MSD Rec.	Dilution	Rec. Limits	MS Qualifier	MSD Qualifier	RPD	RPD Limits
C10-C28 Diesel Range	49.4	50.3	69.3	73.9	38.5	48.9	1	50.0-150	J6	J6	6.57	20
(S) o-Terphenyl				54.1		61.8		18.0-148				

ACCOUNT:

HillCorp-Farmington, NM

PROJECT:

SDG:

L1210685

DATE/TIME:

04/24/20 14:47

PAGE:

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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.

Results Disclaimer - Information that may be provided by the customer, and contained within this report, include Permit Limits, Project Name, Sample ID, Sample Matrix, Sample Preservation, Field Blanks, Field Spikes, Field Duplicates, On-Site Data, Sampling Collection Dates/Times, and Sampling Location. Results relate to the accuracy of this information provided, and as the samples are received.

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.
Uncertainty (Radiochemistry)	Confidence level of 2 sigma.
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.
J6	The sample matrix interfered with the ability to make any accurate determination; spike value is low.

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

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

State Accreditations

Alabama	40660	Nebraska	NE-OS-15-05
Alaska	17-026	Nevada	TN-03-2002-34
Arizona	AZ0612	New Hampshire	2975
Arkansas	88-0469	New Jersey–NELAP	TN002
California	2932	New Mexico ¹	n/a
Colorado	TN00003	New York	11742
Connecticut	PH-0197	North Carolina	Env375
Florida	E87487	North Carolina ¹	DW21704
Georgia	NELAP	North Carolina ³	41
Georgia ¹	923	North Dakota	R-140
Idaho	TN00003	Ohio–VAP	CL0069
Illinois	200008	Oklahoma	9915
Indiana	C-TN-01	Oregon	TN200002
Iowa	364	Pennsylvania	68-02979
Kansas	E-10277	Rhode Island	LA000356
Kentucky ^{1 6}	90010	South Carolina	84004
Kentucky ²	16	South Dakota	n/a
Louisiana	AI30792	Tennessee ^{1 4}	2006
Louisiana ¹	LA180010	Texas	T104704245-18-15
Maine	TN0002	Texas ⁵	LAB0152
Maryland	324	Utah	TN000003
Massachusetts	M-TN003	Vermont	VT2006
Michigan	9958	Virginia	460132
Minnesota	047-999-395	Washington	C847
Mississippi	TN000003	West Virginia	233
Missouri	340	Wisconsin	9980939910
Montana	CERT0086	Wyoming	AZLA

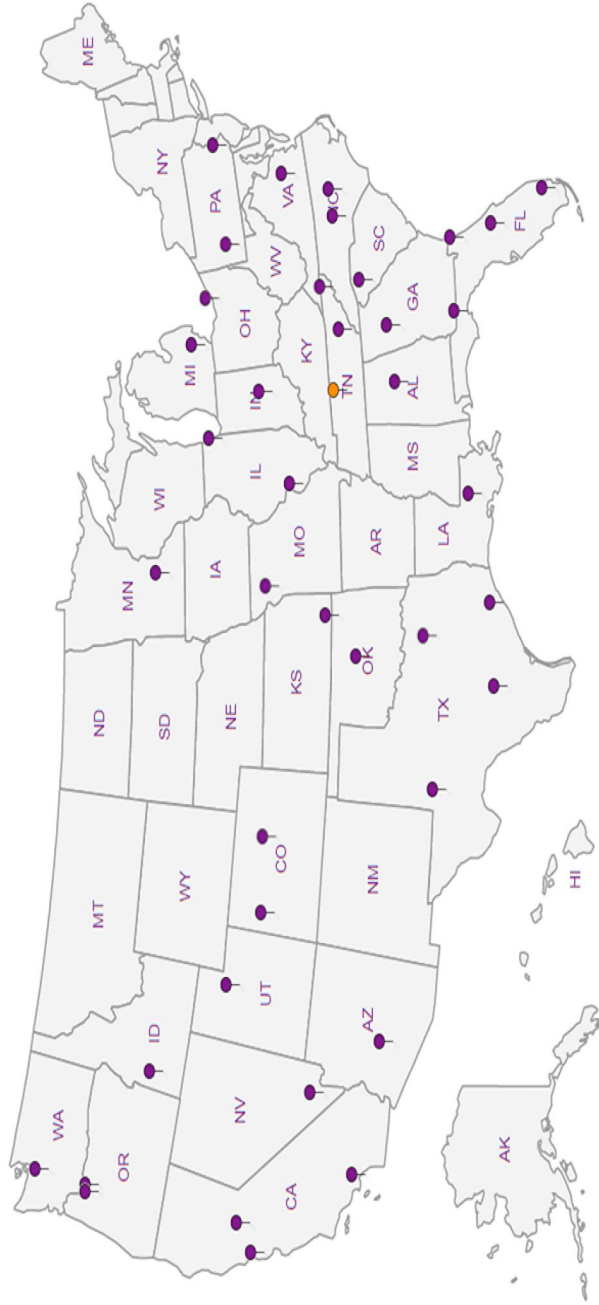
Third Party Federal Accreditations

A2LA – ISO 17025	1461.01	AIHA-LAP, LLC EMLAP	100789
A2LA – ISO 17025 ⁵	1461.02	DOD	1461.01
Canada	1461.01	USDA	P330-15-00234
EPA–Crypto	TN000003		

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

Our Locations

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



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