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 Hilcorp Energy	OGRID 372171
Contact Name Clara Cardoza	Contact Telephone 505.564.0733
Contact email ccardoza@hilcorp.com	Incident # *(assigned by OCD)* NCS1916850253
Contact mailing address 382 CR 3100, Aztec NM 87410	

Location of Release Source

Latitude 36.5264854 Longitude -107.6287537
(NAD 83 in decimal degrees to 5 decimal places)

Site Name Brookhaven COM 7A	Site Type Well
Date Release Discovered 5/30/2019	API# *(if applicable)* 30-045-29400

Unit Letter	Section	Township	Range	County
I	36	27N	8W	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)

☒ Crude Oil	Volume Released (bbls) 1	Volume Recovered (bbls)
☒ Produced Water	Volume Released (bbls) 10	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 Corrosion on the bottom of tank.

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?
If YES, was immediate notice given to the OCD? By whom? To whom? When and by what means (phone, email, etc)?	

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:

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: Clara Cardoza Title: Environmental Specialist

Signature: Clara D. Cardoza Date: 5/20/2019

email: ccardoza@hilcorp.com Telephone: 505.564.0733

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?	< 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 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: Clara Cardoza Title: Environmental Specialist

Signature: Clara Cardoza Date: 10/07/2019

email: ccardoza@hilcorp.com Telephone: 505.564.0733

OCD Only

Received by: _____ Date: _____

State of New Mexico
Oil Conservation Division

Incident ID	
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: Clara Cardoza Title: Environmental Specialist

Signature: Clara Cardoza Date: 10/07/2019

email: ccardoza@hilcorp.com Telephone: 505.564.0733

OCD Only

Received by: OCD Date: 10/8/19

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: Cory Date: 12/10/19

Printed Name: Cory Title: Environmental Specalist

Executive Summary

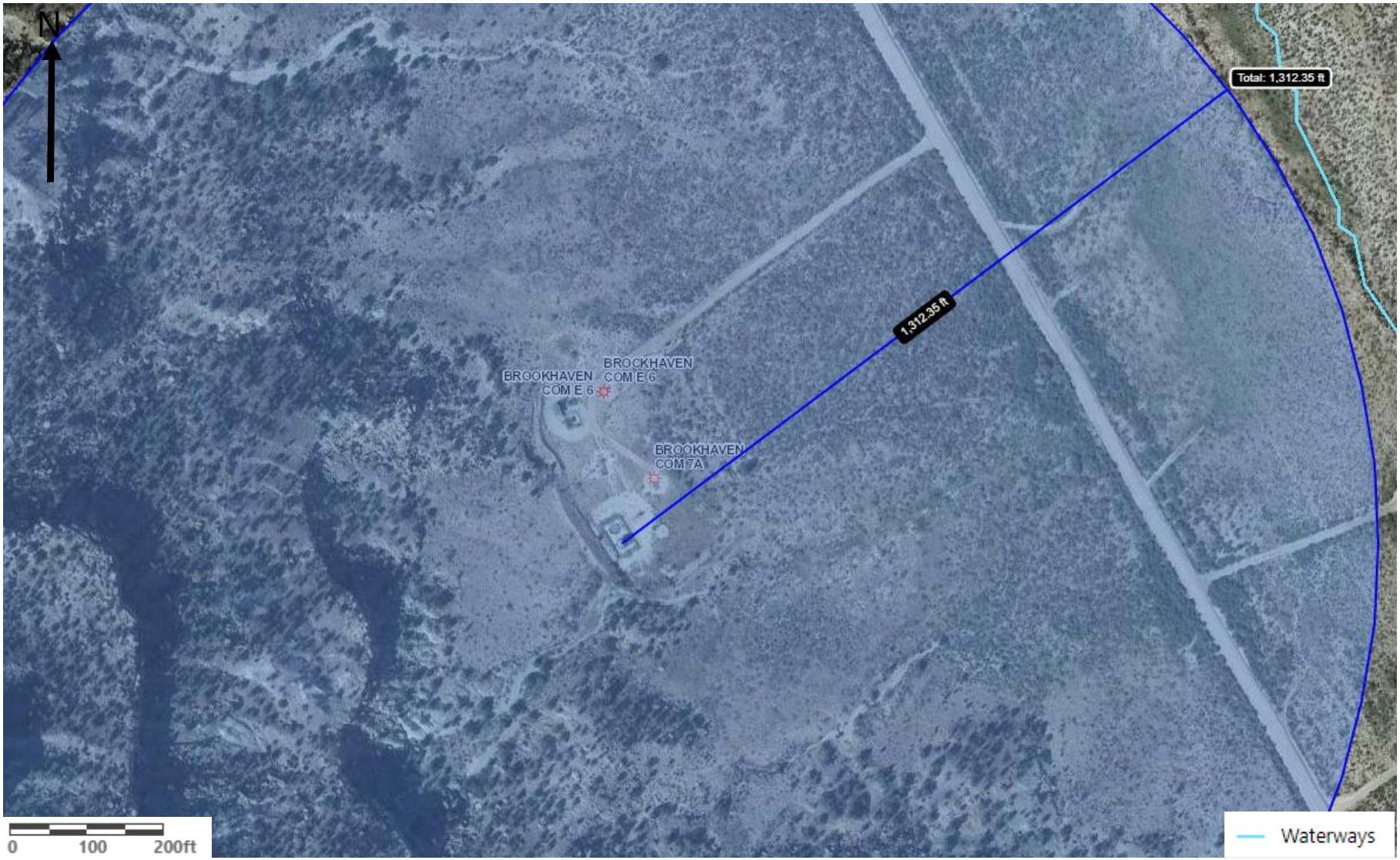
On 5/30/19 Hilcorp Energy had a release of 10 bbls of produced water and 1 bbl of condensate at the Brookhaven Com 7A. The release was due to corrosion at the bottom of the tank. The liquids were contained in the berm and impacted soil below the tank.

Confirmation sampling was conducted on June 19, 2017 in accordance with NMAC 19.15.29.12.D. The site ranking was ambiguous to determine so the most stringent standard was used for this release per NMAC 19.15.29.12.E. Six samples were taken north, south, east, west, area between the tank and BGT (labeled middle) and a composite around the tank (origin of the spill). Samples all came back in compliance with clean up action levels.


N
BROOKHAVEN
ROOM 7A
0
15
30ft
Release Area

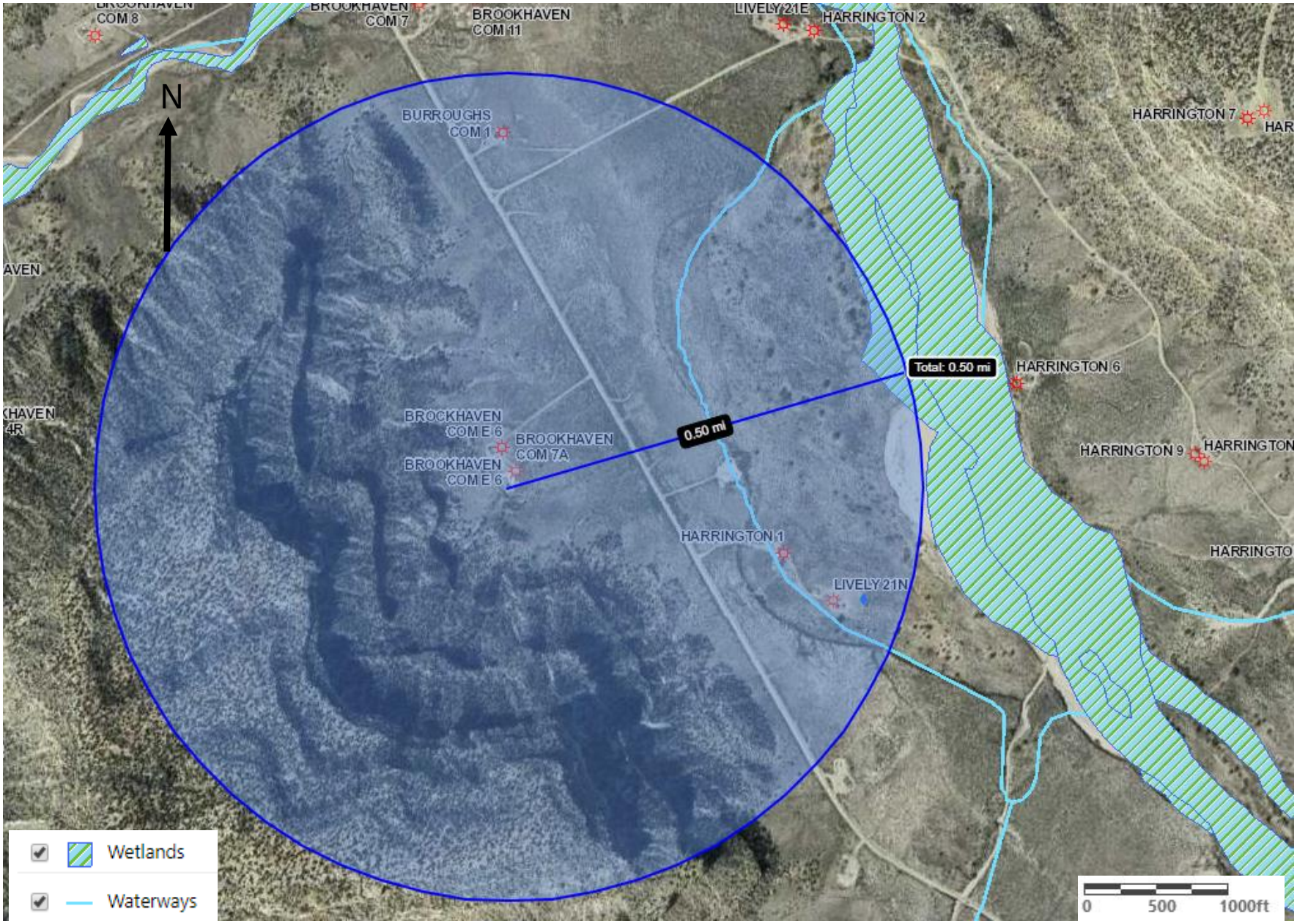
Pipelines in Area

Distance to watercourse

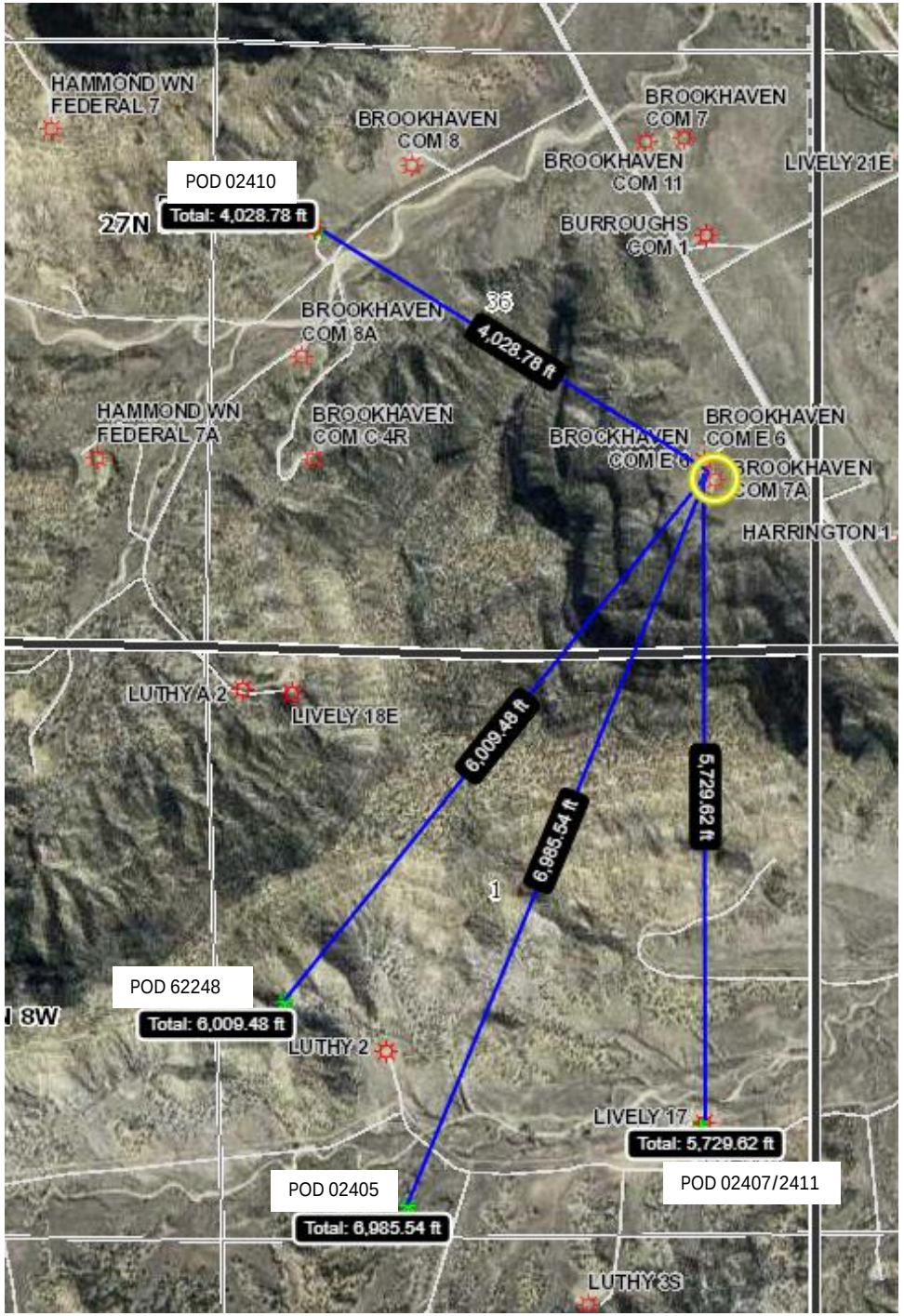


Distance to watercourse approximately 1,312 ft

Water sources or courses within ½ mile



Depth to groundwater



0 500 1000ft

POD Waters

Depth to groundwater

New Mexico Office of the State Engineer

Point of Diversion Summary

Well Tag	POD Number	(quarters are 1=NW 2=NE 3=SW 4=SE) (quarters are smallest to largest) Q64	Q16	Q4	Sec	Tws	Rng	(NAD83 UTM in meters) X	Y
	SJ 02410	2	3	1	36	27N	08W	263593	4046261*

Driller License: **Driller Company:**
Driller Name: EL PASO NATURAL GAS

Drill Start Date: **Drill Finish Date:** 12/31/1956 **Plug Date:**
Log File Date: **PCW Rcv Date:** **Source:**
Pump Type: **Pipe Discharge Size:** **Estimated Yield:**
Casing Size: **Depth Well:** 2200 feet **Depth Water:**

*UTM location was derived from PLSS - see Help

New Mexico Office of the State Engineer

Point of Diversion Summary

Well Tag	POD Number	(quarters are 1=NW 2=NE 3=SW 4=SE) (quarters are smallest to largest) Q64	Q16	Q4	Sec	Tws	Rng	(NAD83 UTM in meters) X	Y
	RG 62248							446293	4041814

Driller License: 523 **Driller Company:** VIGIL'S WELL DRILLING
Driller Name: VIGIL, GILL

Drill Start Date: 05/22/1995 **Drill Finish Date:** 05/25/1995 **Plug Date:**
Log File Date: 07/24/1995 **PCW Rcv Date:** **Source:** Shallow
Pump Type: **Pipe Discharge Size:** **Estimated Yield:**
Casing Size: **Depth Well:** 240 feet **Depth Water:** 147 feet

Water Bearing Stratifications:	Top	Bottom	Description
	147	240	Other/Unknown

Casing Perforations:	Top	Bottom
	60	240

New Mexico Office of the State Engineer

Point of Diversion Summary

Well Tag	POD Number	(quarters are 1=NW 2=NE 3=SW 4=SE) (quarters are smallest to largest) Q64	Q16	Q4	Sec	Tws	Rng	(NAD83 UTM in meters) X	Y
	SJ 02405	3	4	3	01	26N	08W	263754	4043631*

Driller License: **Driller Company:**
Driller Name: KAIME, JOE

Drill Start Date: **Drill Finish Date:** 12/31/1947 **Plug Date:**
Log File Date: **PCW Rcv Date:** **Source:**
Pump Type: **Pipe Discharge Size:** **Estimated Yield:**
Casing Size: **Depth Well:** 180 feet **Depth Water:** 100 feet

*UTM location was derived from PLSS - see Help

New Mexico Office of the State Engineer

Point of Diversion Summary

Well Tag	POD Number	(quarters are 1=NW 2=NE 3=SW 4=SE) (quarters are smallest to largest) Q64	Q16	Q4	Sec	Tws	Rng	(NAD83 UTM in meters) X	Y
	SJ 02407	1	4	4	01	26N	08W	264553	4043817*

Driller License: **Driller Company:**
Driller Name: EL PASO NATURAL GAS

Drill Start Date: **Drill Finish Date:** 12/31/1952 **Plug Date:**
Log File Date: **PCW Rcv Date:** **Source:**
Pump Type: **Pipe Discharge Size:** **Estimated Yield:**
Casing Size: **Depth Well:** 2200 feet **Depth Water:**

*UTM location was derived from PLSS - see Help

Depth to groundwater

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
	SJ 02411	1	4	4	01	26N	08W	264553	4043817*

Driller License: **Driller Company:**

Driller Name: EL PASO NATURAL GAS

Drill Start Date:	**Drill Finish Date:**	12/31/1970	**Plug Date:**
Log File Date:	**PCW Rcv Date:**		**Source:**
Pump Type:	**Pipe Discharge Size:**		**Estimated Yield:**
Casing Size:	**Depth Well:**	6000 feet	**Depth Water:**

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

Because most of the water depths are omitted from the nearby POD data obtained on the NMOSE website for this reporting instance Hilcorp will follow the most stringent clean-up closure criteria. For any future reporting and/or closures this will be revisited or approved BGT permit applications will be followed.

Sample locations/field notes

North Sample

Sample locations/field notes

Middle Sample

Sample locations/field notes

South Sample

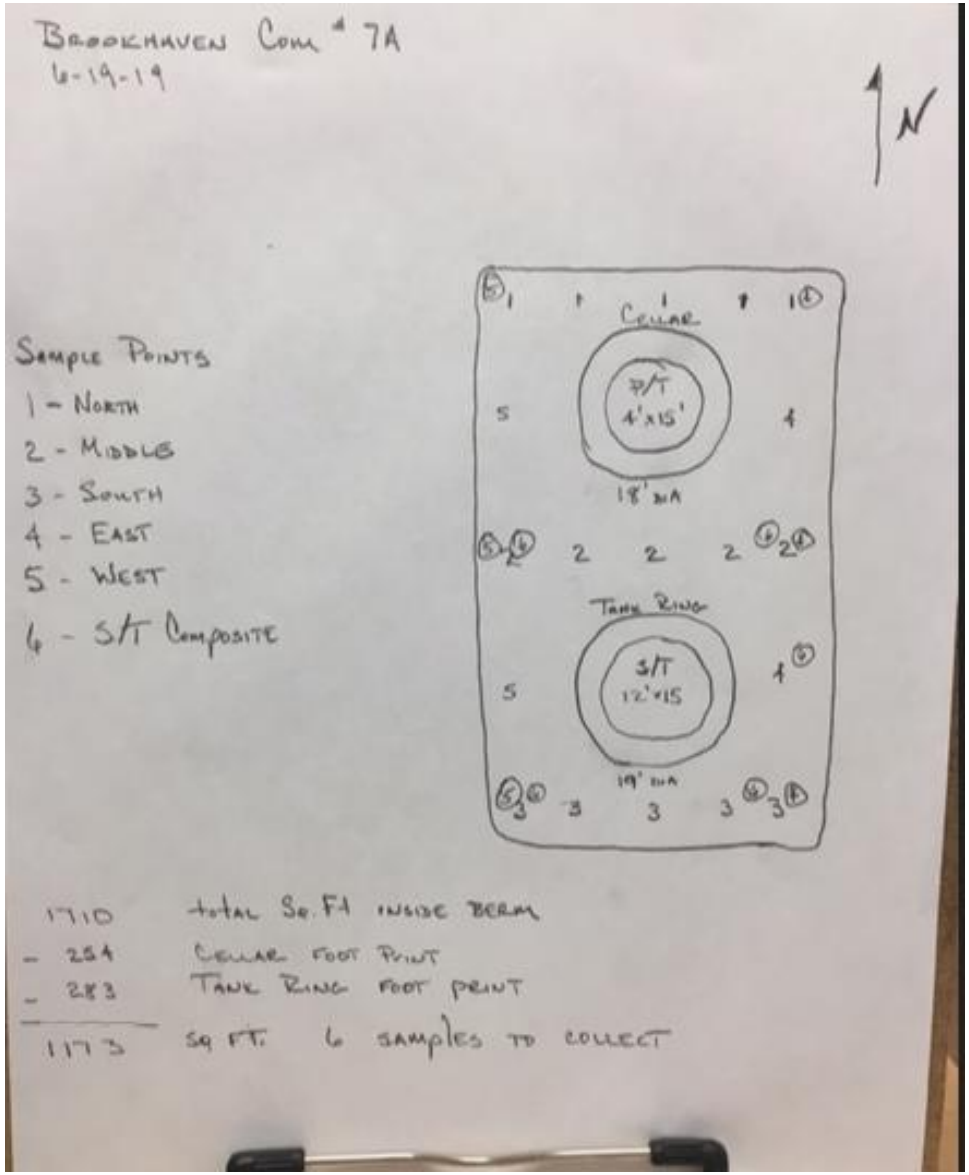
Sample locations/field notes

East Sample

Sample locations/field notes

West Samples

Sample locations/field notes



Data table of soil contaminant concentration data

Sample Name	Date	Field VOCs by PID (ppm)	Laboratory Results										
			Chloride (mg/kg)	TPH as DRO (mg/kg)	TPH as GRO (mg/kg)	TPH as MRO (mg/kg)	Total TPH (mg/kg)	TPH as GRO + DRO (mg/kg)	Benzene (mg/kg)	Toluene (mg/kg)	Ethylbenzene (mg/kg)	Total Xylene (mg/kg)	Total BTEX (mg/kg)
NMOCD Action Level		-	600	-	-	-	100		10				50
North	06/19/19	n/a	164	9.77	ND	16.80	26.57	9.77	ND	ND	ND	ND	ND
Middle	06/19/19	n/a	63.8	4.48	ND	11.40	15.88	4.48	ND	ND	ND	ND	ND
South	06/19/19	n/a	33.3	7.59	ND	12.70	20.29	7.59	ND	ND	ND	ND	ND
East	06/19/19	n/a	25.3	9.68	ND	29.60	39.28	9.68	ND	ND	ND	ND	ND
West	06/19/19	n/a	30.5	8.14	ND	14.30	22.44	8.14	ND	ND	ND	ND	ND
S/T Comp	06/19/19	n/a	27.1	12.00	ND	28.60	40.60	12.00	ND	ND	ND	ND	ND

Confirmation samples were taken on 6/19/2019. All of the samples passed in accordance with Table 1 of NMAC 19.15.29.12.

Agency Communications

Clara Cardoza

From: Clara Cardoza
Sent: Wednesday, June 12, 2019 10:47 AM
To: cory.smith@state.nm.us; 'foley brandon (bfoley@slo.state.nm.us)'
Subject: Hilcorp Brookhaven COM 7A - API 30-045-29400
Attachments: Initial C-141.pdf

Attached please find the initial spill report for the Hilcorp Brookhaven COM 7A.

Cory, I will send a hard copy via mail.

Brandon, would you like a hard copy as well? If so please let me know where to mail it.

Thank you,

Clara M Cardoza
Environmental Specialist
505-564-0733 (O)
505-793-2784 (C)

Clara Cardoza

From: Clara Cardoza
Sent: Monday, June 17, 2019 10:03 AM
To: 'cory.smith@state.nm.us'; 'djohnson@slo.state.nm.us'
Cc: Kurt Hoekstra
Subject: RE: Hilcorp Brookhaven COM 7A - API 30-045-29400

Cory/David, please let this serve as 48 hour notice for confirmation sampling at the Brookhaven Com 7A. Hilcorp would like to sample on Wednesday June 19th at 1 p.m. Please let me know if you have any question or concerns.

Thank you,
Clara

Pace Analytical®
National Center for Testing & Innovation

ANALYTICAL REPORT

June 28, 2019

HilCorp-Farmington, NM

Sample Delivery Group:	L1111534
Samples Received:	06/21/2019
Project Number:	Brookhaven Com 7A
Description:	Brookhaven Com 7A
Site:	BROOKHAVEN COM 7A
Report To:	Clara Cardoza 382 Road 3100 Aztec, NM 87401

Entire Report Reviewed By: Daphne R Richards

Daphne Richards
Project Manager

TABLE OF CONTENTS

NORTH L1111534-01 Solid

Collected by: Kurt Hoekstra | Collected date/time: 06/19/19 14:05 | Received date/time: 06/21/19 08:45

Method	Batch	Dilution	Preparation date/time	Analysis date/time	Analyst	Location
Wet Chemistry by Method 300.0	WG1300150	1	06/26/19 21:15	06/27/19 03:54	ELN	Mt. Juliet, TN
Volatile Organic Compounds (GC) by Method 8015D/GRO	WG1303185	1	06/24/19 20:33	06/28/19 05:33	BMB	Mt. Juliet, TN
Volatile Organic Compounds (GC/MS) by Method 8260B	WG1301715	1	06/24/19 20:33	06/26/19 01:36	JAH	Mt. Juliet, TN
Semi-Volatile Organic Compounds (GC) by Method 8015	WG1302027	1	06/27/19 07:31	06/28/19 00:03	TJD	Mt. Juliet, TN

MIDDLE L1111534-02 Solid

Collected by: Kurt Hoekstra | Collected date/time: 06/19/19 14:10 | Received date/time: 06/21/19 08:45

Method	Batch	Dilution	Preparation date/time	Analysis date/time	Analyst	Location
Wet Chemistry by Method 300.0	WG1301538	1	06/25/19 19:15	06/25/19 22:16	ELN	Mt. Juliet, TN
Volatile Organic Compounds (GC) by Method 8015D/GRO	WG1303185	1	06/24/19 20:33	06/28/19 05:53	BMB	Mt. Juliet, TN
Volatile Organic Compounds (GC/MS) by Method 8260B	WG1301715	1	06/24/19 20:33	06/26/19 01:58	JHH	Mt. Juliet, TN
Semi-Volatile Organic Compounds (GC) by Method 8015	WG1302027	1	06/27/19 07:31	06/28/19 00:17	TJD	Mt. Juliet, TN

SOUTH L1111534-03 Solid

Collected by: Kurt Hoekstra | Collected date/time: 06/19/19 14:20 | Received date/time: 06/21/19 08:45

Method	Batch	Dilution	Preparation date/time	Analysis date/time	Analyst	Location
Wet Chemistry by Method 300.0	WG1301538	1	06/25/19 19:15	06/25/19 22:33	ELN	Mt. Juliet, TN
Volatile Organic Compounds (GC) by Method 8015D/GRO	WG1303185	1	06/24/19 20:33	06/28/19 06:14	BMB	Mt. Juliet, TN
Volatile Organic Compounds (GC/MS) by Method 8260B	WG1301715	1	06/24/19 20:33	06/26/19 02:21	JHH	Mt. Juliet, TN
Semi-Volatile Organic Compounds (GC) by Method 8015	WG1302027	1	06/27/19 07:31	06/28/19 00:59	TJD	Mt. Juliet, TN

EAST L1111534-04 Solid

Collected by: Kurt Hoekstra | Collected date/time: 06/19/19 14:27 | Received date/time: 06/21/19 08:45

Method	Batch	Dilution	Preparation date/time	Analysis date/time	Analyst	Location
Wet Chemistry by Method 300.0	WG1301538	1	06/25/19 19:15	06/25/19 22:41	ELN	Mt. Juliet, TN
Volatile Organic Compounds (GC) by Method 8015D/GRO	WG1303185	1	06/24/19 20:33	06/28/19 06:34	BMB	Mt. Juliet, TN
Volatile Organic Compounds (GC/MS) by Method 8260B	WG1301715	1	06/24/19 20:33	06/26/19 02:43	JHH	Mt. Juliet, TN
Semi-Volatile Organic Compounds (GC) by Method 8015	WG1302027	1	06/27/19 07:31	06/28/19 01:13	TJD	Mt. Juliet, TN

WEST L1111534-05 Solid

Collected by: Kurt Hoekstra | Collected date/time: 06/19/19 14:35 | Received date/time: 06/21/19 08:45

Method	Batch	Dilution	Preparation date/time	Analysis date/time	Analyst	Location
Wet Chemistry by Method 300.0	WG1301538	1	06/25/19 19:15	06/25/19 22:50	ELN	Mt. Juliet, TN
Volatile Organic Compounds (GC) by Method 8015D/GRO	WG1303185	1	06/24/19 20:33	06/28/19 06:55	BMB	Mt. Juliet, TN
Volatile Organic Compounds (GC/MS) by Method 8260B	WG1301715	1	06/24/19 20:33	06/26/19 03:05	JHH	Mt. Juliet, TN
Semi-Volatile Organic Compounds (GC) by Method 8015	WG1302027	1	06/27/19 07:31	06/28/19 01:27	TJD	Mt. Juliet, TN

S/T COMP L1111534-06 Solid

Collected by: Kurt Hoekstra | Collected date/time: 06/19/19 14:42 | Received date/time: 06/21/19 08:45

Method	Batch	Dilution	Preparation date/time	Analysis date/time	Analyst	Location
Wet Chemistry by Method 300.0	WG1301538	1	06/25/19 19:15	06/25/19 23:15	ELN	Mt. Juliet, TN
Volatile Organic Compounds (GC) by Method 8015D/GRO	WG1303185	1	06/24/19 20:33	06/28/19 07:15	BMB	Mt. Juliet, TN
Volatile Organic Compounds (GC/MS) by Method 8260B	WG1301715	1	06/24/19 20:33	06/26/19 03:28	JHH	Mt. Juliet, TN
Semi-Volatile Organic Compounds (GC) by Method 8015	WG1302027	1	06/27/19 07:31	06/28/19 01:42	TJD	Mt. Juliet, TN

1 Cp
2 Tc
3 Ss
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.

Daphne R Richards

Daphne Richards
Project Manager

Wet Chemistry by Method 300.0

Analyte	Result mg/kg	Qualifier	RDL mg/kg	Dilution	Analysis date / time	Batch
Chloride	164		10.0	1	06/27/2019 03:54	WG1300150

Volatile Organic Compounds (GC) by Method 8015D/GRO

Analyte	Result mg/kg	Qualifier	RDL mg/kg	Dilution	Analysis date / time	Batch
TPH (GC/FID) Low Fraction	ND		0.100	1	06/28/2019 05:33	WG1303185
(S) a,a,a-Trifluorotoluene(FID)	*91.8*		*77.0-120*		*06/28/2019 05:33*	WG1303185

Volatile Organic Compounds (GC/MS) by Method 8260B

Analyte	Result mg/kg	Qualifier	RDL mg/kg	Dilution	Analysis date / time	Batch
Benzene	ND		0.00100	1	06/26/2019 01:36	WG1301715
Toluene	ND		0.00500	1	06/26/2019 01:36	WG1301715
Ethylbenzene	ND		0.00250	1	06/26/2019 01:36	WG1301715
Total Xylenes	ND		0.00650	1	06/26/2019 01:36	WG1301715
(S) Toluene-d8	*100*		*75.0-131*		*06/26/2019 01:36*	WG1301715
(S) 4-Bromofluorobenzene	*92.5*		*67.0-138*		*06/26/2019 01:36*	WG1301715
(S) 1,2-Dichloroethane-d4	*90.6*		*70.0-130*		*06/26/2019 01:36*	WG1301715

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	9.77		4.00	1	06/28/2019 00:03	WG1302027
C28-C40 Oil Range	16.8		4.00	1	06/28/2019 00:03	WG1302027
(S) o-Terphenyl	*43.4*		*18.0-148*		*06/28/2019 00:03*	WG1302027

Wet Chemistry by Method 300.0

Analyte	Result mg/kg	Qualifier	RDL mg/kg	Dilution	Analysis date / time	Batch
Chloride	63.8	J3	10.0	1	06/25/2019 22:16	WG1301538

Volatile Organic Compounds (GC) by Method 8015D/GRO

Analyte	Result mg/kg	Qualifier	RDL mg/kg	Dilution	Analysis date / time	Batch
TPH (GC/FID) Low Fraction	ND		0.100	1	06/28/2019 05:53	WG1303185
(S) a,a,a-Trifluorotoluene(FID)	*92.0*		*77.0-120*		*06/28/2019 05:53*	WG1303185

Volatile Organic Compounds (GC/MS) by Method 8260B

Analyte	Result mg/kg	Qualifier	RDL mg/kg	Dilution	Analysis date / time	Batch
Benzene	ND		0.00100	1	06/26/2019 01:58	WG1301715
Toluene	ND		0.00500	1	06/26/2019 01:58	WG1301715
Ethylbenzene	ND		0.00250	1	06/26/2019 01:58	WG1301715
Total Xylenes	ND		0.00650	1	06/26/2019 01:58	WG1301715
(S) Toluene-d8	*102*		*75.0-131*		*06/26/2019 01:58*	WG1301715
(S) 4-Bromofluorobenzene	*91.0*		*67.0-138*		*06/26/2019 01:58*	WG1301715
(S) 1,2-Dichloroethane-d4	*90.7*		*70.0-130*		*06/26/2019 01:58*	WG1301715

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	4.48		4.00	1	06/28/2019 00:17	WG1302027
C28-C40 Oil Range	11.4		4.00	1	06/28/2019 00:17	WG1302027
(S) o-Terphenyl	*57.2*		*18.0-148*		*06/28/2019 00:17*	WG1302027

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

Wet Chemistry by Method 300.0

Analyte	Result mg/kg	Qualifier	RDL mg/kg	Dilution	Analysis date / time	Batch
Chloride	33.3		10.0	1	06/25/2019 22:33	WG1301538

Volatile Organic Compounds (GC) by Method 8015D/GRO

Analyte	Result mg/kg	Qualifier	RDL mg/kg	Dilution	Analysis date / time	Batch
TPH (GC/FID) Low Fraction	ND		0.100	1	06/28/2019 06:14	WG1303185
(S) a,a,a-Trifluorotoluene(FID)	*91.7*		*77.0-120*		*06/28/2019 06:14*	WG1303185

Volatile Organic Compounds (GC/MS) by Method 8260B

Analyte	Result mg/kg	Qualifier	RDL mg/kg	Dilution	Analysis date / time	Batch
Benzene	ND		0.00100	1	06/26/2019 02:21	WG1301715
Toluene	ND		0.00500	1	06/26/2019 02:21	WG1301715
Ethylbenzene	ND		0.00250	1	06/26/2019 02:21	WG1301715
Total Xylenes	ND		0.00650	1	06/26/2019 02:21	WG1301715
(S) Toluene-d8	*102*		*75.0-131*		*06/26/2019 02:21*	WG1301715
(S) 4-Bromofluorobenzene	*91.9*		*67.0-138*		*06/26/2019 02:21*	WG1301715
(S) 1,2-Dichloroethane-d4	*92.7*		*70.0-130*		*06/26/2019 02:21*	WG1301715

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	7.59		4.00	1	06/28/2019 00:59	WG1302027
C28-C40 Oil Range	12.7		4.00	1	06/28/2019 00:59	WG1302027
(S) o-Terphenyl	*53.7*		*18.0-148*		*06/28/2019 00:59*	WG1302027

Wet Chemistry by Method 300.0

Analyte	Result mg/kg	Qualifier	RDL mg/kg	Dilution	Analysis date / time	Batch
Chloride	25.3		10.0	1	06/25/2019 22:41	WG1301538

Volatile Organic Compounds (GC) by Method 8015D/GRO

Analyte	Result mg/kg	Qualifier	RDL mg/kg	Dilution	Analysis date / time	Batch
TPH (GC/FID) Low Fraction	ND		0.100	1	06/28/2019 06:34	WG1303185
(S) a,a,a-Trifluorotoluene(FID)	*91.8*		*77.0-120*		*06/28/2019 06:34*	WG1303185

Volatile Organic Compounds (GC/MS) by Method 8260B

Analyte	Result mg/kg	Qualifier	RDL mg/kg	Dilution	Analysis date / time	Batch
Benzene	ND		0.00100	1	06/26/2019 02:43	WG1301715
Toluene	ND		0.00500	1	06/26/2019 02:43	WG1301715
Ethylbenzene	ND		0.00250	1	06/26/2019 02:43	WG1301715
Total Xylenes	ND		0.00650	1	06/26/2019 02:43	WG1301715
(S) Toluene-d8	*99.6*		*75.0-131*		*06/26/2019 02:43*	WG1301715
(S) 4-Bromofluorobenzene	*92.2*		*67.0-138*		*06/26/2019 02:43*	WG1301715
(S) 1,2-Dichloroethane-d4	*88.4*		*70.0-130*		*06/26/2019 02:43*	WG1301715

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	9.68		4.00	1	06/28/2019 01:13	WG1302027
C28-C40 Oil Range	29.6		4.00	1	06/28/2019 01:13	WG1302027
(S) o-Terphenyl	*58.2*		*18.0-148*		*06/28/2019 01:13*	WG1302027

Wet Chemistry by Method 300.0

Analyte	Result mg/kg	Qualifier	RDL mg/kg	Dilution	Analysis date / time	Batch
Chloride	30.5		10.0	1	06/25/2019 22:50	WG1301538

Volatile Organic Compounds (GC) by Method 8015D/GRO

Analyte	Result mg/kg	Qualifier	RDL mg/kg	Dilution	Analysis date / time	Batch
TPH (GC/FID) Low Fraction	ND		0.100	1	06/28/2019 06:55	WG1303185
(S) a,a,a-Trifluorotoluene(FID)	*91.8*		*77.0-120*		*06/28/2019 06:55*	WG1303185

Volatile Organic Compounds (GC/MS) by Method 8260B

Analyte	Result mg/kg	Qualifier	RDL mg/kg	Dilution	Analysis date / time	Batch
Benzene	ND		0.00100	1	06/26/2019 03:05	WG1301715
Toluene	ND		0.00500	1	06/26/2019 03:05	WG1301715
Ethylbenzene	ND		0.00250	1	06/26/2019 03:05	WG1301715
Total Xylenes	ND		0.00650	1	06/26/2019 03:05	WG1301715
(S) Toluene-d8	*102*		*75.0-131*		*06/26/2019 03:05*	WG1301715
(S) 4-Bromofluorobenzene	*96.2*		*67.0-138*		*06/26/2019 03:05*	WG1301715
(S) 1,2-Dichloroethane-d4	*92.5*		*70.0-130*		*06/26/2019 03:05*	WG1301715

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	8.14		4.00	1	06/28/2019 01:27	WG1302027
C28-C40 Oil Range	14.3		4.00	1	06/28/2019 01:27	WG1302027
(S) o-Terphenyl	*66.4*		*18.0-148*		*06/28/2019 01:27*	WG1302027

Wet Chemistry by Method 300.0

Analyte	Result mg/kg	Qualifier	RDL mg/kg	Dilution	Analysis date / time	Batch
Chloride	27.1		10.0	1	06/25/2019 23:15	WG1301538

Volatile Organic Compounds (GC) by Method 8015D/GRO

Analyte	Result mg/kg	Qualifier	RDL mg/kg	Dilution	Analysis date / time	Batch
TPH (GC/FID) Low Fraction	ND		0.100	1	06/28/2019 07:15	WG1303185
(S) a,a,a-Trifluorotoluene(FID)	*91.8*		*77.0-120*		*06/28/2019 07:15*	WG1303185

Volatile Organic Compounds (GC/MS) by Method 8260B

Analyte	Result mg/kg	Qualifier	RDL mg/kg	Dilution	Analysis date / time	Batch
Benzene	ND		0.00100	1	06/26/2019 03:28	WG1301715
Toluene	ND		0.00500	1	06/26/2019 03:28	WG1301715
Ethylbenzene	ND		0.00250	1	06/26/2019 03:28	WG1301715
Total Xylenes	ND		0.00650	1	06/26/2019 03:28	WG1301715
(S) Toluene-d8	*98.9*		*75.0-131*		*06/26/2019 03:28*	WG1301715
(S) 4-Bromofluorobenzene	*89.0*		*67.0-138*		*06/26/2019 03:28*	WG1301715
(S) 1,2-Dichloroethane-d4	*90.6*		*70.0-130*		*06/26/2019 03:28*	WG1301715

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	12.0		4.00	1	06/28/2019 01:42	WG1302027
C28-C40 Oil Range	28.6		4.00	1	06/28/2019 01:42	WG1302027
(S) o-Terphenyl	*53.4*		*18.0-148*		*06/28/2019 01:42*	WG1302027

Method Blank (MB)

(MB) R3425144-1 06/26/19 23:14

Analyte	MB Result mg/kg	MB Qualifier	MB MDL mg/kg	MB RDL mg/kg
Chloride	1.56	J	0.795	10.0

L1111213-05 Original Sample (OS) • Duplicate (DUP)

(OS) L1111213-05 06/26/19 23:56 • (DUP) R3425144-3 06/27/19 00:04

Analyte	Original Result (dry) mg/kg	DUP Result (dry) mg/kg	Dilution	DUP RPD %	DUP Qualifier	DUP RPD Limits %
Chloride	4040	3970	10	1.76		20

L1111221-13 Original Sample (OS) • Duplicate (DUP)

(OS) L1111221-13 06/27/19 03:37 • (DUP) R3425144-6 06/27/19 03:46

Analyte	Original Result (dry) mg/kg	DUP Result (dry) mg/kg	Dilution	DUP RPD %	DUP Qualifier	DUP RPD Limits %
Chloride	5000	4260	10	15.9		20

Laboratory Control Sample (LCS)

(LCS) R3425144-2 06/26/19 23:23

Analyte	Spike Amount mg/kg	LCS Result mg/kg	LCS Rec. %	Rec. Limits %	LCS Qualifier
Chloride	200	202	101	90.0-110	

L1111213-06 Original Sample (OS) • Matrix Spike (MS) • Matrix Spike Duplicate (MSD)

(OS) L1111213-06 06/27/19 00:13 • (MS) R3425144-4 06/27/19 00:21 • (MSD) R3425144-5 06/27/19 00:30

Analyte	Spike Amount (dry) mg/kg	Original Result (dry) mg/kg	MS Result (dry) mg/kg	MSD Result (dry) mg/kg	MS Rec. %	MSD Rec. %	Dilution	Rec. Limits %	MS Qualifier	MSD Qualifier	RPD %	RPD Limits %
Chloride	592	18000	16900	17200	0.000	0.000	1	80.0-120	E V	E V	1.39	20

Method Blank (MB)

(MB) R3424728-1 06/25/19 21:03

Analyte	MB Result mg/kg	MB Qualifier	MB MDL mg/kg	MB RDL mg/kg
Chloride	1.16	J	0.795	10.0

L1111534-02 Original Sample (OS) • Duplicate (DUP)

(OS) L1111534-02 06/25/19 22:16 • (DUP) R3424728-5 06/25/19 22:24

Analyte	Original Result mg/kg	DUP Result mg/kg	Dilution	DUP RPD %	DUP Qualifier	DUP RPD Limits %
Chloride	63.8	78.2	1	20.3	J3	20

L1112332-05 Original Sample (OS) • Duplicate (DUP)

(OS) L1112332-05 06/26/19 01:32 • (DUP) R3424728-6 06/26/19 01:40

Analyte	Original Result mg/kg	DUP Result mg/kg	Dilution	DUP RPD %	DUP Qualifier	DUP RPD Limits %
Chloride	113	112	1	0.917		20

Laboratory Control Sample (LCS)

(LCS) R3424728-2 06/25/19 21:12

Analyte	Spike Amount mg/kg	LCS Result mg/kg	LCS Rec. %	Rec. Limits %	LCS Qualifier
Chloride	200	191	95.7	90.0-110	

L1109532-19 Original Sample (OS) • Matrix Spike (MS) • Matrix Spike Duplicate (MSD)

(OS) L1109532-19 06/25/19 21:51 • (MS) R3424728-3 06/25/19 21:59 • (MSD) R3424728-4 06/25/19 22:07

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 %
Chloride	500	649	1170	1230	105	117	1	80.0-120	E	E	5.08	20

Method Blank (MB)

(MB) R3425610-2 06/28/19 00:46

Analyte	MB Result mg/kg	MB Qualifier	MB MDL mg/kg	MB RDL mg/kg
TPH (GC/FID) Low Fraction	U		0.0217	0.100
(S) a,a,a-Trifluorotoluene(FID)	*92.9*			*77.0-120*

Laboratory Control Sample (LCS)

(LCS) R3425610-1 06/27/19 23:39

Analyte	Spike Amount mg/kg	LCS Result mg/kg	LCS Rec. %	Rec. Limits %	LCS Qualifier
TPH (GC/FID) Low Fraction	5.50	4.40	79.9	72.0-127	
(S) a,a,a-Trifluorotoluene(FID)			*93.6*	*77.0-120*	

L1111236-05 Original Sample (OS) • Matrix Spike (MS) • Matrix Spike Duplicate (MSD)

(OS) L1111236-05 06/28/19 07:36 • (MS) R3425610-3 06/28/19 08:17 • (MSD) R3425610-4 06/28/19 08:37

Analyte	Spike Amount (dry) mg/kg	Original Result (dry) mg/kg	MS Result (dry) mg/kg	MSD Result (dry) mg/kg	MS Rec. %	MSD Rec. %	Dilution	Rec. Limits %	MS Qualifier	MSD Qualifier	RPD %	RPD Limits %
TPH (GC/FID) Low Fraction	6.17	58.9	685	496	101	70.9	100	10.0-151		J3	32.0	28
(S) a,a,a-Trifluorotoluene(FID)					*105*	*102*		*77.0-120*				

Method Blank (MB)

(MB) R3424986-2 06/26/19 00:56

Analyte	MB Result mg/kg	MB Qualifier	MB MDL mg/kg	MB RDL mg/kg
Benzene	U		0.000400	0.00100
Ethylbenzene	U		0.000530	0.00250
Toluene	0.00125	J	0.00125	0.00500
Xylenes, Total	U		0.00478	0.00650
(S) Toluene-d8	*103*			*75.0-131*
(S) 4-Bromofluorobenzene	*94.6*			*67.0-138*
(S) 1,2-Dichloroethane-d4	*88.7*			*70.0-130*

Laboratory Control Sample (LCS)

(LCS) R3424986-1 06/25/19 23:49

Analyte	Spike Amount mg/kg	LCS Result mg/kg	LCS Rec. %	Rec. Limits %	LCS Qualifier
Benzene	0.125	0.122	97.7	70.0-123	
Ethylbenzene	0.125	0.121	96.6	74.0-126	
Toluene	0.125	0.120	95.7	75.0-121	
Xylenes, Total	0.375	0.372	99.2	72.0-127	
(S) Toluene-d8			*95.4*	*75.0-131*	
(S) 4-Bromofluorobenzene			*95.4*	*67.0-138*	
(S) 1,2-Dichloroethane-d4			*96.1*	*70.0-130*	

L1111534-01 Original Sample (OS) • Matrix Spike (MS) • Matrix Spike Duplicate (MSD)

(OS) L1111534-01 06/26/19 01:36 • (MS) R3424986-3 06/26/19 17:14 • (MSD) R3424986-4 06/26/19 17:37

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	0.125	ND	0.138	0.122	110	97.3	1	10.0-149			12.6	37
Ethylbenzene	0.125	ND	0.156	0.124	125	99.2	1	10.0-160			22.8	38
Toluene	0.125	ND	0.148	0.122	119	97.8	1	10.0-156			19.3	38
Xylenes, Total	0.375	ND	0.447	0.383	119	102	1	10.0-160			15.4	38
(S) Toluene-d8					*105*	*101*		*75.0-131*				
(S) 4-Bromofluorobenzene					*95.9*	*93.7*		*67.0-138*				
(S) 1,2-Dichloroethane-d4					*90.3*	*92.1*		*70.0-130*				

Method Blank (MB)

(MB) R3425472-1 06/27/19 16:43

Analyte	MB Result mg/kg	MB Qualifier	MB MDL mg/kg	MB RDL mg/kg
C10-C28 Diesel Range	U		1.61	4.00
C28-C40 Oil Range	U		0.274	4.00
(S) o-Terphenyl	*67.3*			*18.0-148*

Laboratory Control Sample (LCS)

(LCS) R3425472-2 06/27/19 17:00

Analyte	Spike Amount mg/kg	LCS Result mg/kg	LCS Rec. %	Rec. Limits %	LCS Qualifier
C10-C28 Diesel Range	50.0	41.4	82.8	50.0-150	
(S) o-Terphenyl			*91.7*	*18.0-148*	

L1111534-02 Original Sample (OS) • Matrix Spike (MS) • Matrix Spike Duplicate (MSD)

(OS) L1111534-02 06/28/19 00:17 • (MS) R3425554-1 06/28/19 00:31 • (MSD) R3425554-2 06/28/19 00:45

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 %
C10-C28 Diesel Range	50.0	4.48	44.7	47.4	80.4	85.8	1	50.0-150			5.86	20
(S) o-Terphenyl					*79.6*	*110*		*18.0-148*				

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

(dry)	Results are reported based on the dry weight of the sample. [this will only be present on a dry report basis for soils].
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
E	The analyte concentration exceeds the upper limit of the calibration range of the instrument established by the initial calibration (ICAL).
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.
V	The sample concentration is too high to evaluate accurate spike recoveries.

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	LAO00356
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	TN00003
Massachusetts	M-TN003	Vermont	VT2006
Michigan	9958	Virginia	460132
Minnesota	047-999-395	Washington	C847
Mississippi	TN00003	West Virginia	233
Missouri	340	Wisconsin	9980939910
Montana	CERT0086	Wyoming	A2LA

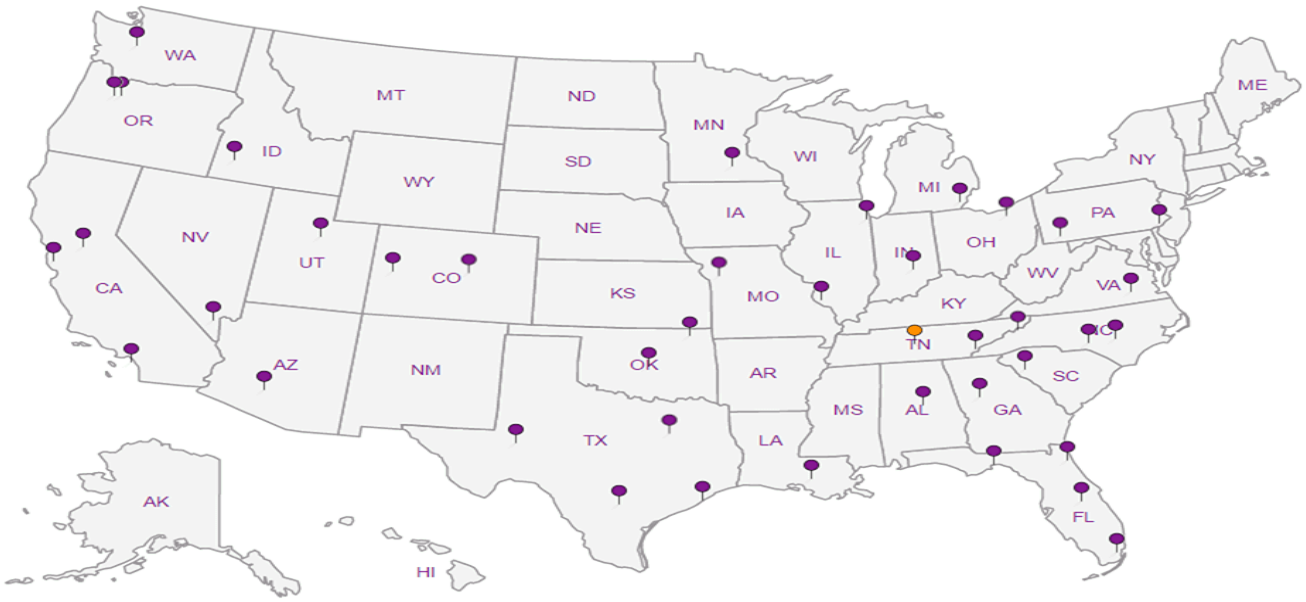
Third Party Federal Accreditations

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	TN00003		

[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.



Billing Information:
ATTN: Clara Cardoza

Pres Chk

Report to: Clara Cardoza

Email To: ccardoza@hilcorp.com;

Project Description: Brookhaven Com 7A

City/State Collected: Aztec, NM

Phone: 5055640733
Fax:

Client Project #

Lab Project #

Collected by (print): K Hoekstra

Site/Facility ID # Brookhaven Com 7A

P.O. #

Collected by (signature):

Immediately Packed on Ice N ___ Y X

Rush? (Lab MUST Be Notified)
___ Same Day X Five Day
___ Next Day ___ 5 Day (Rad Only)
___ Two Day ___ 10 Day (Rad Only)
___ Three Day

Quote #

Date Results Needed

Analysis / Container / Preservative

Sample ID	Comp/Grab	Matrix *	Depth	Date	Time	No. of Cntrs	TPH - MRO/GRO/DRO 8015	BTEX 8260B	Chlorides 300	Remarks	Sample # (lab only)
North	Comp	SS		6/19/19	2:05 pm	1	X	X	X		-01
Middle	Comp	SS		6/19/19	2:10 pm	1	X	X	X		02
South	Comp	SS		6/19/19	2:20 pm	1	X	X	X		03
East	Comp	SS		6/19/19	2:27 pm	1	X	X	X		04
West	Comp	SS		6/19/19	2:35 pm	1	X	X	X		05
S/T Comp	Comp	SS		6/19/19	2:42 pm	1	X	X	X		06

Chain of Custody Page ___ of ___

Pace Analytical®
National Center for Testing & Innovation

12065 Lebanon Rd
Mount Juliet, TN 37122
Phone: 615-758-5858
Phone: 800-767-5859
Fax: 615-758-5859

L # L1111534

J049

Acctnum: HILCORANM

Template:

Prelogin:

TSR:

PB:

Shipped Via:

* Matrix:
SS - Soil AIR - Air F - Filter
GW - Groundwater B - Bioassay
WW - WasteWater
DW - Drinking Water
OT - Other_____

Remarks:

pH _____ Temp _____

Flow _____ Other _____

Samples returned via:
__ UPS ✓ FedEx __ Courier __ _____

Tracking # 4179 4882 9634

RAD SCREEN: <0.5 mR/hr

Sample Receipt Checklist
COC Seal Present/Intact: __NP __Y __N
COC Signed/Accurate: ✓ __N
Bottles arrive intact: ✓ __N
Correct bottles used: ✓ __N
Sufficient volume sent: ✓ __N
If Applicable
VOA Zero Headspace: __Y __N
Preservation Correct/Checked: __Y __N

Trip Blank Received: Yes / No
HCL / MeoH
TBR

Temp: 4.3+0.3=4.6 °C Bottles Received: 6 402.

If preservation required by Login: Date/Time

Hold:

Condition: NCF / OK

Relinquished by : (Signature)	Date:	Time:	Received by: (Signature)
Clara Cardoza	6/20/19	1:51 pm	
Relinquished by : (Signature)	Date:	Time:	Received by: (Signature)
Relinquished by : (Signature)	Date:	Time:	Received for lab by: (Signature)
			Date: 6/21/19 Time: 0845