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	NCS1909251923
District RP	
Facility ID	
Application ID	

Release Notification

RCVD 6/19/19

Responsible Party

Responsible Party Hilcorp Energy Company	OGRID 372171
Contact Name Jennifer Deal	Contact Telephone 505-801-6517
Contact email jdeal@hilcorp.com	Incident # NCS1909251923
Contact mailing address 382 Road 3100, Aztec NM 87410	

Location of Release Source

Latitude 36.8151093 Longitude -108.180275

(NAD 83 in decimal degrees to 5 decimal places)

Site Name Foothills C 3	Site Type Gas Well
Date Release Discovered 3/28/2019 @ 11:15am	API# *30-045-33658*

Unit Letter	Section	Township	Range	County
E	14	30N	13W	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)	Volume Recovered (bbls)
☒ Produced Water	Volume Released (bbls) 16.5	Volume Recovered (bbls) 16 bbl
	Is the concentration of dissolved chloride in the produced water >10,000 mg/l?	☐ Yes ☐ No
☐ Condensate	Volume Released (bbls)	Volume Recovered (bbls) 0
☐ Natural Gas	Volume Released (Mcf)	Volume Recovered (Mcf)
☐ Other (describe)	Volume/Weight Released (provide units)	Volume/Weight Recovered (provide units)

Cause of Release
~16.5 bbls of produced water was released due Pit tank being overfilled. Well was shut in and transporter was called to empty pit and cribbing. ~16 bbls was recovered. Release remained inside the berm.

State of New Mexico
Oil Conservation Division

Incident ID	NCS1909251923
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	NCS1909251923
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: __6/17/2019_____

email: ___jdeal@hilcorp.com_____ Telephone: ___(505) 324-5128_____

OCD Only

Received by: _____ Date**:** _____

State of New Mexico
Oil Conservation Division

Incident ID	NCS1909251923
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 Specialist

Signature: Jennifer Deal Date: 6/17/2019

email: jdeal@hilcorp.com Telephone: 505-801-6517

OCD Only

Received by: OCD Date: 6/19/19

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: Date: 7/10/19

Printed Name: Cory Title: Environmental Specalist

Scaled Map

N


FOOTHILLS C 3
NW
30N 13W
NAD83 LatLong (BLM)
Lat: 36.814702° N
Lon: 108.179364° W
Scale 1: 391
Go
0 15 30ft

Photographs – Initial Release 3/28/19

Excavation data

- Confirmation sampling occurred on April 22 at 9am where one composite sample was taken but came back above standards for TPH
- Additional excavation occurred and confirmation sampling was rescheduled for June 5 at 9am and lab results were below standards
- Excavation is 17x15x8ft deep with a total of 40 yards of contaminated soil hauled off *(original BGT cellar was 15x15x4ft deep prior to excavation)*

Data table of soil contaminant concentration data

TABLE 1

SOIL ANALYTICAL RESULTS
FOOTHILLS C 3
HILCORP ENERGY - L48 WEST

Soil Sample Identification	Sample Date	Field Headspace	Benzene (mg/kg)	Toluene (mg/kg)	Ethylbenzene (mg/kg)	Total Xylenes	Total BTEX	Chlorides (mg/kg)	GRO (mg/kg)	DRO (mg/kg)	MRO (mg/kg)	MRO+DRO (mg/kg)	TPH (mg/kg)
BGT Cellar	4/22/2019		<0.0005	<0.005	<0.0005	<0.0015	<0.005	374	<0.1	447	3020	3467	3467
North Wall (Comp)	6/5/2019		<0.0005	<0.005	<0.0005	<0.0015	<0.005	24.8	<0.1	7.17	13.10	7.17	20.27
South Wall (Comp)	6/5/2019		<0.0005	<0.005	<0.0005	<0.0015	<0.005	14.2	<0.1	31.90	54.30	86.20	86.20
East Wall (Comp)	6/5/2019		<0.0005	<0.005	<0.0005	<0.0015	<0.005	30.8	<0.1	9.68	13.4	23.08	23.08
West Wall (Comp)	6/5/2019		<0.0005	<0.005	<0.0005	<0.0015	<0.005	27.8	<0.1	4.34	7.36	11.70	11.70
Base (Comp)	6/5/2019		<0.0005	<0.005	<0.0005	<0.0015	<0.005	28.6	<0.1	<4.0	6.82	6.82	6.82
NMOCD Standards		**NE**	**10**	**NE**	**NE**	**NE**	**50**	**10,000**	**NE**	**NE**	**NE**	**1,000**	**2,500**

Depth to water determination

New Mexico Office of the State Engineer

Water Column/Average Depth to Water

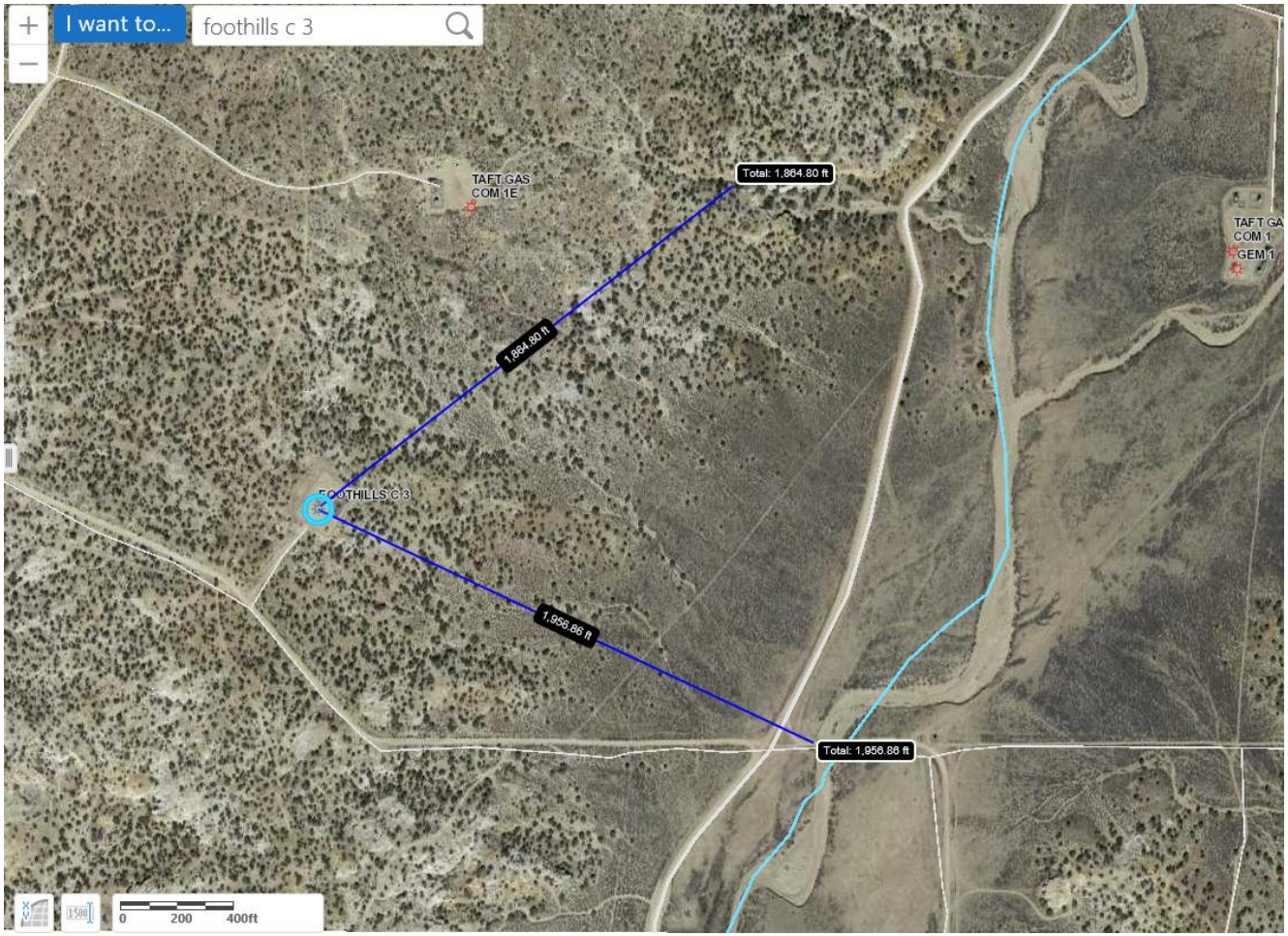
(quarters are 1=NW 2=NE 3=SW 4=SE)
(quarters are smallest to largest) (NAD83 UTM in meters)

No records found.

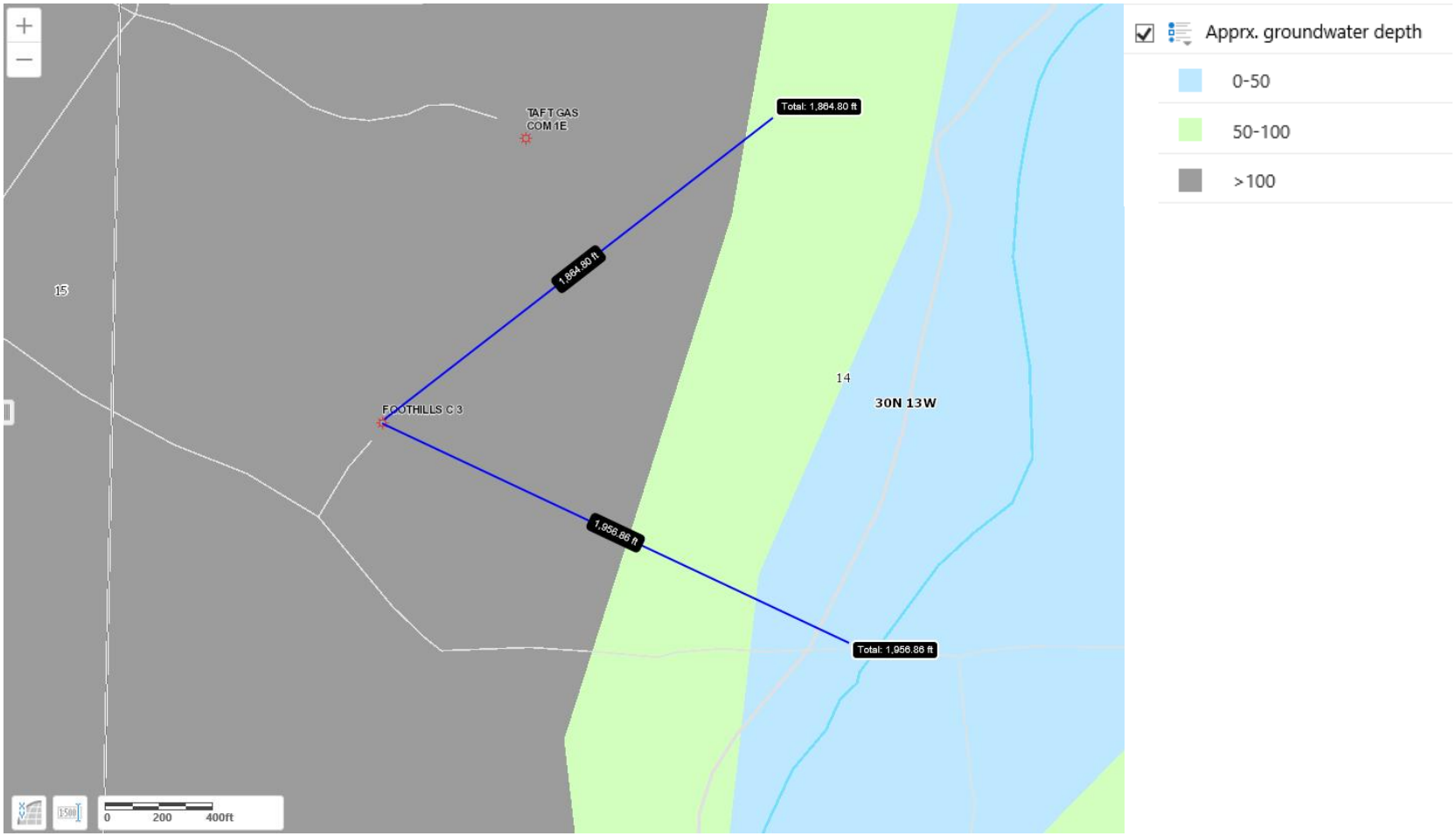
PLSS Search:

Section(s): 14 **Township:** 30N **Range:** 13W

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



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



Photographs – 4/22/19 Sampling Event

BGT Cellar Composite Sample

Photographs – 6/5/19 Sampling Event - Base

West Base

Base

East Base

Photographs – 6/5/19 Sampling Event – North Wall

Northeast corner of North Wall

North Wall

North Wall

Photographs – 6/5/19 Sampling Event – West Wall

Northwest Corner of West Wall

Middle of West Wall

Southwest Corner of West Wall

Photographs – 6/5/19 Sampling Event – East Wall

Northeast Corner of East Wall

Southeast Corner of East Wall

Photographs – 6/5/19 Sampling Event – South Wall

Southeast Corner of South Wall

Southwest Corner of South Wall

Topographic/Aerial Maps

N

Pace Analytical®
National Center for Testing & Innovation

ANALYTICAL REPORT

April 30, 2019

HilCorp-Farmington, NM

Sample Delivery Group:	L1092063
Samples Received:	04/24/2019
Project Number:	FOOTHILLS C#3
Description:	FOOTHILLS C#3
Site:	FOOTHILLS C#3
Report To:	Jennifer Deal 382 Road 3100 Aztec, NM 87401

Entire Report Reviewed By:

Daphne R Richards

Daphne Richards
Project Manager

TABLE OF CONTENTS

BGT CELLAR L1092063-01 Solid

Collected by: Kurt
Collected date/time: 04/22/19 09:10
Received date/time: 04/24/19 08:45

Method	Batch	Dilution	Preparation date/time	Analysis date/time	Analyst	Location
Wet Chemistry by Method 9056A	WG1271552	1	04/26/19 10:45	04/26/19 15:08	ELN	Mt. Juliet, TN
Volatile Organic Compounds (GC) by Method 8015/8021	WG1271517	1	04/24/19 16:28	04/26/19 13:44	JAH	Mt. Juliet, TN
Semi-Volatile Organic Compounds (GC) by Method 8015	WG1273356	25	04/29/19 07:10	04/29/19 13:43	KME	Mt. Juliet, TN
Semi-Volatile Organic Compounds (GC) by Method 8015	WG1273356	5	04/29/19 07:10	04/29/19 12:39	KME	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.

Daphne R Richards

Daphne Richards
Project Manager

Wet Chemistry by Method 9056A

Analyte	Result	Qualifier	RDL	Dilution	Analysis	Batch
	mg/kg		mg/kg		date / time	
Chloride	374		10.0	1	04/26/2019 15:08	WG1271552

Volatile Organic Compounds (GC) by Method 8015/8021

Analyte	Result	Qualifier	RDL	Dilution	Analysis	Batch
	mg/kg		mg/kg		date / time	
Benzene	ND		0.000500	1	04/26/2019 13:44	WG1271517
Toluene	ND		0.00500	1	04/26/2019 13:44	WG1271517
Ethylbenzene	ND		0.000500	1	04/26/2019 13:44	WG1271517
Total Xylene	ND		0.00150	1	04/26/2019 13:44	WG1271517
TPH (GC/FID) Low Fraction	ND		0.100	1	04/26/2019 13:44	WG1271517
(S) a,a,a-Trifluorotoluene(FID)	*90.7*		*77.0-120*		*04/26/2019 13:44*	WG1271517
(S) a,a,a-Trifluorotoluene(PID)	*94.9*		*72.0-128*		*04/26/2019 13:44*	WG1271517

Semi-Volatile Organic Compounds (GC) by Method 8015

Analyte	Result	Qualifier	RDL	Dilution	Analysis	Batch
	mg/kg		mg/kg		date / time	
C10-C28 Diesel Range	447		20.0	5	04/29/2019 12:39	WG1273356
C28-C40 Oil Range	3020		100	25	04/29/2019 13:43	WG1273356
(S) o-Terphenyl	*0.000*	J2	*18.0-148*		*04/29/2019 12:39*	WG1273356
(S) o-Terphenyl	*64.7*	J7	*18.0-148*		*04/29/2019 13:43*	WG1273356

Sample Narrative:

L1092063-01 WG1273356: Surrogate failure due to matrix interference

Method Blank (MB)

(MB) R3406013-1 04/26/19 11:48

Analyte	MB Result mg/kg	MB Qualifier	MB MDL mg/kg	MB RDL mg/kg
Chloride	4.97	J	0.795	10.0

L1092027-02 Original Sample (OS) • Duplicate (DUP)

(OS) L1092027-02 04/26/19 14:08 • (DUP) R3406013-5 04/26/19 14:17

Analyte	Original Result mg/kg	DUP Result mg/kg	Dilution	DUP RPD %	DUP Qualifier	DUP RPD Limits %
Chloride	ND	7.37	1	0.000		15

L1092204-10 Original Sample (OS) • Duplicate (DUP)

(OS) L1092204-10 04/26/19 16:50 • (DUP) R3406013-6 04/26/19 16:59

Analyte	Original Result mg/kg	DUP Result mg/kg	Dilution	DUP RPD %	DUP Qualifier	DUP RPD Limits %
Chloride	3640	3060	5	17.2	J3	15

Laboratory Control Sample (LCS)

(LCS) R3406013-2 04/26/19 11:59

Analyte	Spike Amount mg/kg	LCS Result mg/kg	LCS Rec. %	Rec. Limits %	LCS Qualifier
Chloride	200	193	96.5	80.0-120	

L1092027-01 Original Sample (OS) • Matrix Spike (MS) • Matrix Spike Duplicate (MSD)

(OS) L1092027-01 04/26/19 13:43 • (MS) R3406013-3 04/26/19 13:51 • (MSD) R3406013-4 04/26/19 14:00

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	ND	502	484	98.9	95.3	1	80.0-120			3.58	15

Method Blank (MB)

(MB) R3406115-5 04/26/19 11:13

Analyte	MB Result mg/kg	MB Qualifier	MB MDL mg/kg	MB RDL mg/kg
Benzene	U		0.000120	0.000500
Toluene	0.000196	J	0.000150	0.00500
Ethylbenzene	0.000158	J	0.000110	0.000500
Total Xylene	U		0.000460	0.00150
TPH (GC/FID) Low Fraction	0.0218	J	0.0217	0.100
(S) a,a,a-Trifluorotoluene(FID)	*91.9*			*77.0-120*
(S) a,a,a-Trifluorotoluene(PID)	*96.3*			*72.0-128*

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

(LCS) R3406115-1 04/26/19 09:29 • (LCSD) R3406115-2 04/26/19 09:50

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	0.0417	0.0453	83.5	90.6	76.0-121			8.24	20
Toluene	0.0500	0.0410	0.0433	82.0	86.6	80.0-120			5.45	20
Ethylbenzene	0.0500	0.0427	0.0443	85.3	88.7	80.0-124			3.89	20
Total Xylene	0.150	0.128	0.140	85.2	93.3	37.0-160			9.04	20
(S) a,a,a-Trifluorotoluene(FID)				*89.2*	*91.0*	*77.0-120*				
(S) a,a,a-Trifluorotoluene(PID)				*94.8*	*94.6*	*72.0-128*				

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

(LCS) R3406115-3 04/26/19 10:11 • (LCSD) R3406115-4 04/26/19 10:32

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	5.59	5.56	102	101	72.0-127			0.565	20
(S) a,a,a-Trifluorotoluene(FID)				*106*	*105*	*77.0-120*				
(S) a,a,a-Trifluorotoluene(PID)				*103*	*104*	*72.0-128*				

Method Blank (MB)

(MB) R3406570-1 04/29/19 10:43

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	*107*			*18.0-148*

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

(LCS) R3406570-2 04/29/19 10:55 • (LCSD) R3406570-3 04/29/19 11:08

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 %
Extractable Petroleum Hydrocarbon	50.0	42.8	39.1	85.6	78.2	50.0-150			9.04	20
C10-C28 Diesel Range	50.0	45.2	41.2	90.4	82.4	50.0-150			9.26	20
(S) o-Terphenyl				*99.4*	*88.3*	*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

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.
J2	Surrogate recovery limits have been exceeded; values are outside lower control limits.
J3	The associated batch QC was outside the established quality control range for precision.
J7	Surrogate recovery cannot be used for control limit evaluation due to dilution.

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

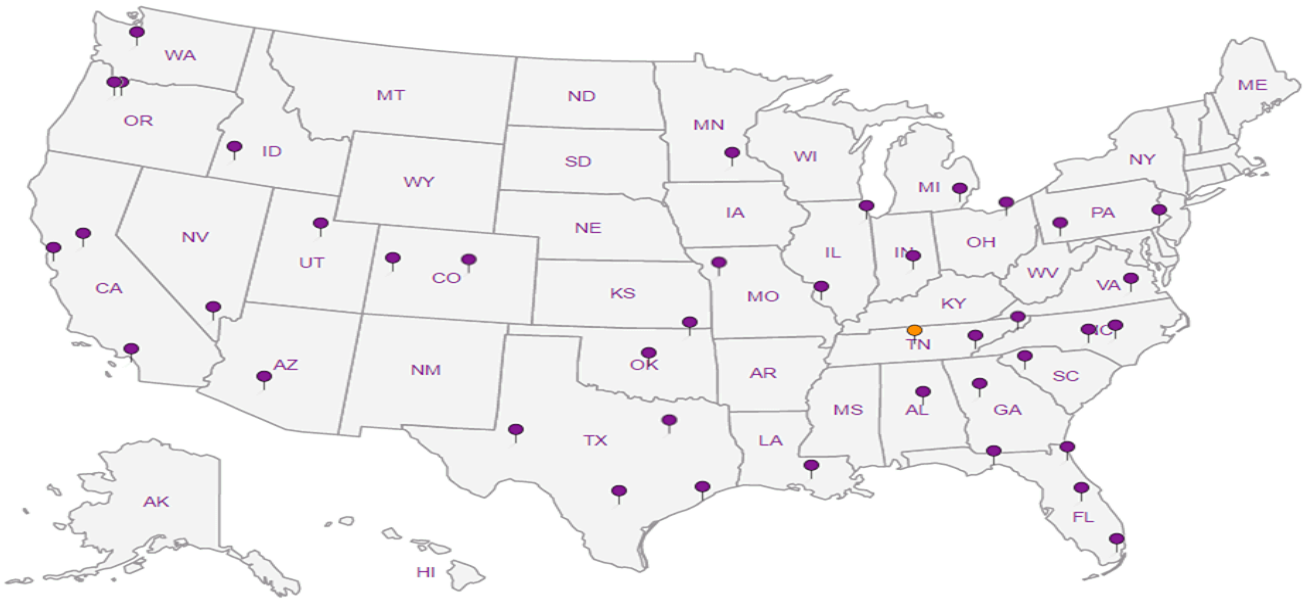
Third Party Federal Accreditations

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.



HilCorp-Farmington, NM

382 Road 3100
Aztec, NM 87401

Billing Information:

PO Box 61529
Houston, TX 77208

khoekstra@hilcorp.com

Report to: JENNIFER DEAL

Email To: jdeal@hilcorp.com

Project Description:

City/State Collected:

Phone: 505-486-9543
Fax:

Client Project #

Lab Project #

Collected by (print): KURT

Site/Facility ID # FOOTHILLS C# 3

P.O. #

Collected by (signature): Kurt Hoekstra

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

Immediately
Packed on Ice N ___ Y X

Pres Chk

Analysis / Container / Preservative

Sample ID	Comp/Grab	Matrix *	Depth	Date	Time	No. of Cntrs	TPH 8015 - DRO, GRO, MRO	BTEX 8021	CHLORIDE
BGT CELLAR	Comp	Soil		4-22-19	9:10	1	X	X	X

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# 1092063

F174

Acctnum: HILCORANM
Template:
Prelogin:
TSR: 288 - Daphne Richards
PB:
Shipped Via:

Remarks	Sample # (lab only)
	-01

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

Remarks: RAD SCREEN .5 mR/hr

pH ___ Temp ___
Flow ___ Other ___

Samples returned via:
UPS __ FedEx __ Courier __ ___

Tracking # 4882 8826 2872

Sample Receipt Checklist
COC Seal Present/Intact: NP Y N
COC Signed/Accurate: Y N
Bottles arrive intact: Y N
Correct bottles used: Y N
Sufficient volume sent: Y N
If Applicable
VOA Zero Headspace: Y N
Preservation Correct/Checked: Y N

Relinquished by : (Signature)	Date:	Time:	Received by: (Signature)
Kurt Hoekstra	4-23-19	1:40	
Relinquished by : (Signature)	Date:	Time:	Received by: (Signature)
Relinquished by : (Signature)	Date:	Time:	Received for lab by: (Signature)
			KWillis

Trip Blank Received: Yes (No)
HCL / MeoH
TBR

Temp: °C Bottles Received:
3.5-0.1=3, 4 bags 1

Date: 4/25/19 Time: 845

If preservation required by Login: Date/Time

Hold:

Condition: NCF (OK)

Pace Analytical®
National Center for Testing & Innovation

ANALYTICAL REPORT

June 11, 2019

HilCorp-Farmington, NM

Sample Delivery Group:	L1105942
Samples Received:	06/06/2019
Project Number:	FOOTHILLS C3
Description:	FOOTHILLS C3
Site:	FOOTHILLS C3
Report To:	Jennifer Deal 382 Road 3100 Aztec, NM 87401

Entire Report Reviewed By: Daphne R Richards

Daphne Richards
Project Manager

TABLE OF CONTENTS

NORTH WALL L1105942-01 Solid

Collected by: J. Deal | Collected date/time: 06/05/19 09:09 | Received date/time: 06/06/19 08:45

Method	Batch	Dilution	Preparation date/time	Analysis date/time	Analyst	Location
Wet Chemistry by Method 9056A	WG1292557	1	06/08/19 12:30	06/08/19 18:17	ST	Mt. Juliet, TN
Volatile Organic Compounds (GC) by Method 8015/8021	WG1292862	1	06/06/19 17:38	06/07/19 18:53	BMB	Mt. Juliet, TN
Semi-Volatile Organic Compounds (GC) by Method 8015	WG1292361	1	06/09/19 17:03	06/10/19 08:01	KME	Mt. Juliet, TN
Semi-Volatile Organic Compounds (GC) by Method 8015	WG1292361	1	06/09/19 17:03	06/10/19 15:16	TJD	Mt. Juliet, TN

SOUTH WALL L1105942-02 Solid

Collected by: J. Deal | Collected date/time: 06/05/19 08:59 | Received date/time: 06/06/19 08:45

Method	Batch	Dilution	Preparation date/time	Analysis date/time	Analyst	Location
Wet Chemistry by Method 9056A	WG1292557	1	06/08/19 12:30	06/08/19 18:25	ST	Mt. Juliet, TN
Volatile Organic Compounds (GC) by Method 8015/8021	WG1292862	1	06/06/19 17:38	06/07/19 19:13	BMB	Mt. Juliet, TN
Semi-Volatile Organic Compounds (GC) by Method 8015	WG1292361	1	06/09/19 17:03	06/10/19 08:15	KME	Mt. Juliet, TN
Semi-Volatile Organic Compounds (GC) by Method 8015	WG1292361	1	06/09/19 17:03	06/10/19 15:32	TJD	Mt. Juliet, TN

EAST WALL L1105942-03 Solid

Collected by: J. Deal | Collected date/time: 06/05/19 08:47 | Received date/time: 06/06/19 08:45

Method	Batch	Dilution	Preparation date/time	Analysis date/time	Analyst	Location
Wet Chemistry by Method 9056A	WG1292557	1	06/08/19 12:30	06/08/19 18:34	ST	Mt. Juliet, TN
Volatile Organic Compounds (GC) by Method 8015/8021	WG1292862	1	06/06/19 17:38	06/07/19 19:34	BMB	Mt. Juliet, TN
Semi-Volatile Organic Compounds (GC) by Method 8015	WG1292361	1	06/09/19 17:03	06/10/19 14:43	TJD	Mt. Juliet, TN

WEST WALL L1105942-04 Solid

Collected by: J. Deal | Collected date/time: 06/05/19 08:40 | Received date/time: 06/06/19 08:45

Method	Batch	Dilution	Preparation date/time	Analysis date/time	Analyst	Location
Wet Chemistry by Method 9056A	WG1292557	1	06/08/19 12:30	06/08/19 18:59	ST	Mt. Juliet, TN
Volatile Organic Compounds (GC) by Method 8015/8021	WG1292862	1	06/06/19 17:38	06/07/19 19:55	BMB	Mt. Juliet, TN
Semi-Volatile Organic Compounds (GC) by Method 8015	WG1292361	1	06/09/19 17:03	06/10/19 08:43	KME	Mt. Juliet, TN
Semi-Volatile Organic Compounds (GC) by Method 8015	WG1292361	1	06/09/19 17:03	06/10/19 15:48	TJD	Mt. Juliet, TN

BASE L1105942-05 Solid

Collected by: J. Deal | Collected date/time: 06/05/19 08:31 | Received date/time: 06/06/19 08:45

Method	Batch	Dilution	Preparation date/time	Analysis date/time	Analyst	Location
Wet Chemistry by Method 9056A	WG1292557	1	06/08/19 12:30	06/08/19 19:08	ST	Mt. Juliet, TN
Volatile Organic Compounds (GC) by Method 8015/8021	WG1292862	1	06/06/19 17:38	06/07/19 20:15	BMB	Mt. Juliet, TN
Semi-Volatile Organic Compounds (GC) by Method 8015	WG1292361	1	06/09/19 17:03	06/10/19 07:33	KME	Mt. Juliet, TN
Semi-Volatile Organic Compounds (GC) by Method 8015	WG1292361	1	06/09/19 17:03	06/10/19 15:00	TJD	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.

Daphne R Richards

Daphne Richards
Project Manager

Wet Chemistry by Method 9056A

Analyte	Result mg/kg	Qualifier	RDL mg/kg	Dilution	Analysis date / time	Batch
Chloride	24.8	B	10.0	1	06/08/2019 18:17	WG1292557

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	06/07/2019 18:53	WG1292862
Toluene	ND		0.00500	1	06/07/2019 18:53	WG1292862
Ethylbenzene	ND		0.000500	1	06/07/2019 18:53	WG1292862
Total Xylene	ND		0.00150	1	06/07/2019 18:53	WG1292862
TPH (GC/FID) Low Fraction	ND		0.100	1	06/07/2019 18:53	WG1292862
(S) a,a,a-Trifluorotoluene(FID)	*91.3*		*77.0-120*		*06/07/2019 18:53*	WG1292862
(S) a,a,a-Trifluorotoluene(PID)	*94.6*		*72.0-128*		*06/07/2019 18:53*	WG1292862

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	7.17		4.00	1	06/10/2019 08:01	WG1292361
C28-C40 Oil Range	13.1		4.00	1	06/10/2019 15:16	WG1292361
(S) o-Terphenyl	*71.1*		*18.0-148*		*06/10/2019 15:16*	WG1292361
(S) o-Terphenyl	*53.8*		*18.0-148*		*06/10/2019 08:01*	WG1292361

Wet Chemistry by Method 9056A

Analyte	Result mg/kg	Qualifier	RDL mg/kg	Dilution	Analysis date / time	Batch
Chloride	14.2	B	10.0	1	06/08/2019 18:25	WG1292557

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	06/07/2019 19:13	WG1292862
Toluene	ND		0.00500	1	06/07/2019 19:13	WG1292862
Ethylbenzene	ND		0.000500	1	06/07/2019 19:13	WG1292862
Total Xylene	ND		0.00150	1	06/07/2019 19:13	WG1292862
TPH (GC/FID) Low Fraction	ND		0.100	1	06/07/2019 19:13	WG1292862
(S) a,a,a-Trifluorotoluene(FID)	*92.0*		*77.0-120*		*06/07/2019 19:13*	WG1292862
(S) a,a,a-Trifluorotoluene(PID)	*93.8*		*72.0-128*		*06/07/2019 19:13*	WG1292862

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	31.9		4.00	1	06/10/2019 08:15	WG1292361
C28-C40 Oil Range	54.3		4.00	1	06/10/2019 15:32	WG1292361
(S) o-Terphenyl	*50.8*		*18.0-148*		*06/10/2019 08:15*	WG1292361
(S) o-Terphenyl	*78.8*		*18.0-148*		*06/10/2019 15:32*	WG1292361

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

Wet Chemistry by Method 9056A

Analyte	Result	Qualifier	RDL	Dilution	Analysis	Batch
	mg/kg		mg/kg		date / time	
Chloride	30.8	B	10.0	1	06/08/2019 18:34	WG1292557

Volatile Organic Compounds (GC) by Method 8015/8021

Analyte	Result	Qualifier	RDL	Dilution	Analysis	Batch
	mg/kg		mg/kg		date / time	
Benzene	ND		0.000500	1	06/07/2019 19:34	WG1292862
Toluene	ND		0.00500	1	06/07/2019 19:34	WG1292862
Ethylbenzene	ND		0.000500	1	06/07/2019 19:34	WG1292862
Total Xylene	ND		0.00150	1	06/07/2019 19:34	WG1292862
TPH (GC/FID) Low Fraction	ND		0.100	1	06/07/2019 19:34	WG1292862
(S) a,a,a-Trifluorotoluene(FID)	*91.2*		*77.0-120*		*06/07/2019 19:34*	WG1292862
(S) a,a,a-Trifluorotoluene(PID)	*94.0*		*72.0-128*		*06/07/2019 19:34*	WG1292862

Semi-Volatile Organic Compounds (GC) by Method 8015

Analyte	Result	Qualifier	RDL	Dilution	Analysis	Batch
	mg/kg		mg/kg		date / time	
C10-C28 Diesel Range	9.68		4.00	1	06/10/2019 14:43	WG1292361
C28-C40 Oil Range	13.4		4.00	1	06/10/2019 14:43	WG1292361
(S) o-Terphenyl	*69.5*		*18.0-148*		*06/10/2019 14:43*	WG1292361

Wet Chemistry by Method 9056A

Analyte	Result mg/kg	Qualifier	RDL mg/kg	Dilution	Analysis date / time	Batch
Chloride	27.8	B	10.0	1	06/08/2019 18:59	WG1292557

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	06/07/2019 19:55	WG1292862
Toluene	ND		0.00500	1	06/07/2019 19:55	WG1292862
Ethylbenzene	ND		0.000500	1	06/07/2019 19:55	WG1292862
Total Xylene	ND		0.00150	1	06/07/2019 19:55	WG1292862
TPH (GC/FID) Low Fraction	ND		0.100	1	06/07/2019 19:55	WG1292862
(S) a,a,a-Trifluorotoluene(FID)	*91.0*		*77.0-120*		*06/07/2019 19:55*	WG1292862
(S) a,a,a-Trifluorotoluene(PID)	*93.3*		*72.0-128*		*06/07/2019 19:55*	WG1292862

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	4.34		4.00	1	06/10/2019 08:43	WG1292361
C28-C40 Oil Range	7.36		4.00	1	06/10/2019 15:48	WG1292361
(S) o-Terphenyl	*73.2*		*18.0-148*		*06/10/2019 15:48*	WG1292361
(S) o-Terphenyl	*55.6*		*18.0-148*		*06/10/2019 08:43*	WG1292361

Wet Chemistry by Method 9056A

Analyte	Result	Qualifier	RDL	Dilution	Analysis	Batch
	mg/kg		mg/kg		date / time	
Chloride	28.6	B	10.0	1	06/08/2019 19:08	WG1292557

Volatile Organic Compounds (GC) by Method 8015/8021

Analyte	Result	Qualifier	RDL	Dilution	Analysis	Batch
	mg/kg		mg/kg		date / time	
Benzene	ND		0.000500	1	06/07/2019 20:15	WG1292862
Toluene	ND		0.00500	1	06/07/2019 20:15	WG1292862
Ethylbenzene	ND		0.000500	1	06/07/2019 20:15	WG1292862
Total Xylene	ND		0.00150	1	06/07/2019 20:15	WG1292862
TPH (GC/FID) Low Fraction	ND		0.100	1	06/07/2019 20:15	WG1292862
(S) a,a,a-Trifluorotoluene(FID)	*90.9*		*77.0-120*		*06/07/2019 20:15*	WG1292862
(S) a,a,a-Trifluorotoluene(PID)	*93.8*		*72.0-128*		*06/07/2019 20:15*	WG1292862

Semi-Volatile Organic Compounds (GC) by Method 8015

Analyte	Result	Qualifier	RDL	Dilution	Analysis	Batch
	mg/kg		mg/kg		date / time	
C10-C28 Diesel Range	ND		4.00	1	06/10/2019 07:33	WG1292361
C28-C40 Oil Range	6.82		4.00	1	06/10/2019 15:00	WG1292361
(S) o-Terphenyl	*65.5*		*18.0-148*		*06/10/2019 07:33*	WG1292361
(S) o-Terphenyl	*74.8*		*18.0-148*		*06/10/2019 15:00*	WG1292361

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

Method Blank (MB)

(MB) R3419314-1 06/08/19 14:59

Analyte	MB Result mg/kg	MB Qualifier	MB MDL mg/kg	MB RDL mg/kg
Chloride	3.14	J	0.795	10.0

L1105455-02 Original Sample (OS) • Duplicate (DUP)

(OS) L1105455-02 06/08/19 16:17 • (DUP) R3419314-5 06/08/19 16:26

Analyte	Original Result mg/kg	DUP Result mg/kg	Dilution	DUP RPD %	DUP Qualifier	DUP RPD Limits %
Chloride	ND	7.60	1	0.000		15

L1106329-03 Original Sample (OS) • Duplicate (DUP)

(OS) L1106329-03 06/08/19 19:33 • (DUP) R3419314-6 06/08/19 19:42

Analyte	Original Result mg/kg	DUP Result mg/kg	Dilution	DUP RPD %	DUP Qualifier	DUP RPD Limits %
Chloride	179	178	1	0.853		15

Laboratory Control Sample (LCS)

(LCS) R3419314-2 06/08/19 15:08

Analyte	Spike Amount mg/kg	LCS Result mg/kg	LCS Rec. %	Rec. Limits %	LCS Qualifier
Chloride	200	204	102	80.0-120	

L1105455-01 Original Sample (OS) • Matrix Spike (MS) • Matrix Spike Duplicate (MSD)

(OS) L1105455-01 06/08/19 15:52 • (MS) R3419314-3 06/08/19 16:00 • (MSD) R3419314-4 06/08/19 16:09

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	13.4	581	574	113	112	1	80.0-120			1.08	15

Method Blank (MB)

(MB) R3419225-3 06/07/19 13:45

Analyte	MB Result mg/kg	MB Qualifier	MB MDL mg/kg	MB RDL mg/kg
Benzene	0.000141	J	0.000120	0.000500
Toluene	0.000221	J	0.000150	0.00500
Ethylbenzene	0.000170	J	0.000110	0.000500
Total Xylene	U		0.000460	0.00150
TPH (GC/FID) Low Fraction	0.0511	J	0.0217	0.100
(S) a,a,a-Trifluorotoluene(FID)	*94.2*			*77.0-120*
(S) a,a,a-Trifluorotoluene(PID)	*97.1*			*72.0-128*

Laboratory Control Sample (LCS)

(LCS) R3419225-1 06/07/19 12:44

Analyte	Spike Amount mg/kg	LCS Result mg/kg	LCS Rec. %	Rec. Limits %	LCS Qualifier
TPH (GC/FID) Low Fraction	5.50	6.16	112	72.0-127	
(S) a,a,a-Trifluorotoluene(FID)			*109*	*77.0-120*	
(S) a,a,a-Trifluorotoluene(PID)			*105*	*72.0-128*	

Laboratory Control Sample (LCS)

(LCS) R3419225-2 06/07/19 13:04

Analyte	Spike Amount mg/kg	LCS Result mg/kg	LCS Rec. %	Rec. Limits %	LCS Qualifier
Benzene	0.0500	0.0447	89.5	76.0-121	
Toluene	0.0500	0.0456	91.2	80.0-120	
Ethylbenzene	0.0500	0.0472	94.3	80.0-124	
Total Xylene	0.150	0.144	95.8	37.0-160	
(S) a,a,a-Trifluorotoluene(FID)			*91.8*	*77.0-120*	
(S) a,a,a-Trifluorotoluene(PID)			*93.7*	*72.0-128*	

Method Blank (MB)

(MB) R3419359-1 06/10/19 02:39

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	*56.9*			*18.0-148*

Laboratory Control Sample (LCS)

(LCS) R3419359-2 06/10/19 02:52

Analyte	Spike Amount mg/kg	LCS Result mg/kg	LCS Rec. %	Rec. Limits %	LCS Qualifier
C10-C28 Diesel Range	50.0	38.2	76.4	50.0-150	
(S) o-Terphenyl			*59.0*	*18.0-148*	

L1105919-06 Original Sample (OS) • Matrix Spike (MS) • Matrix Spike Duplicate (MSD)

(OS) L1105919-06 06/10/19 04:08 • (MS) R3419359-3 06/10/19 04:22 • (MSD) R3419359-4 06/10/19 04:35

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 %
C10-C28 Diesel Range	59.1	U	45.2	43.6	76.6	73.8	1	50.0-150			3.72	20
(S) o-Terphenyl					*57.2*	*54.4*		*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
B	The same analyte is found in the associated blank.
J	The identification of the analyte is acceptable; the reported value is an estimate.

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

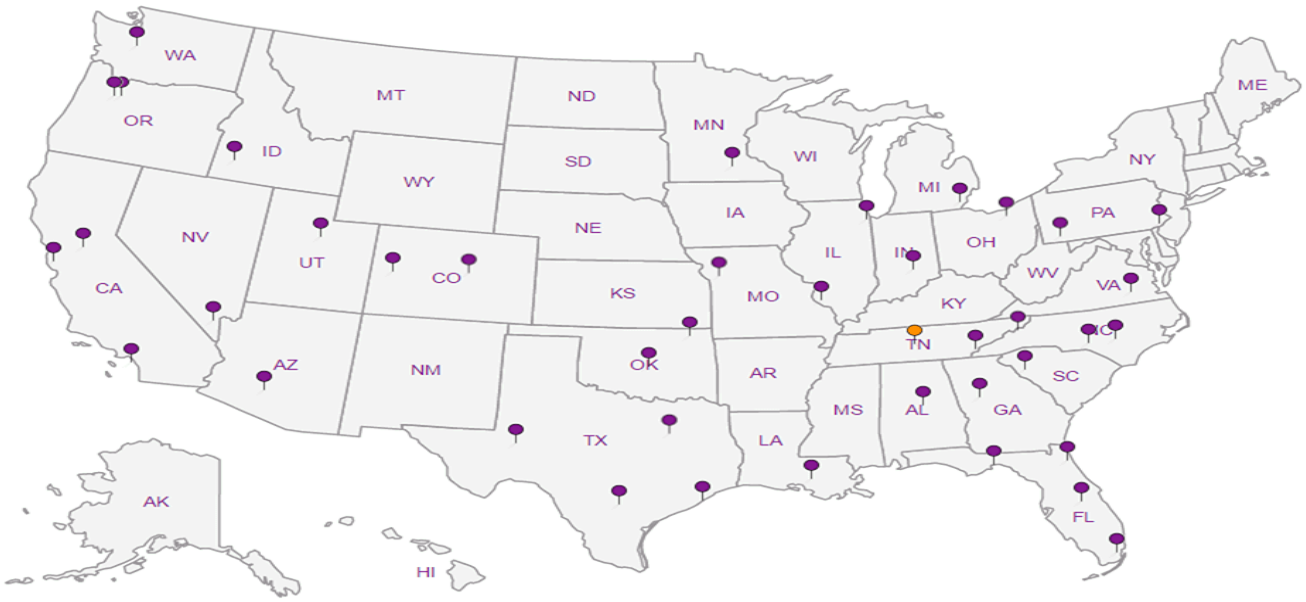
Third Party Federal Accreditations

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.



HilCorp-Farmington, NM

382 Road 3100
Aztec, NM 87401

Billing Information:

PO Box 61529
Houston, TX 77208

Report to: Jennifer Deal

Email To: jdeal@hilcorp.com

Project Description:

City/State Collected:

Phone:
Fax:

Client Project #

Lab Project #

Collected by (print): J. Deal

Site/Facility ID # Foothills C 3

P.O. #

Collected by (signature): Jennifer Deal

Immediately Packed on Ice N ___ Y X

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

Quote #

Date Results Needed

Pres Chk

Analysis / Container / Preservative

Sample ID	Comp/Grab	Matrix *	Depth	Date	Time	No. of Cntrs	TPH 8015-MRO, DRO, GRO	BTEX 8021	Chlorides								Remarks	Sample # (lab only)
North Wall		SS		6/5/19	9:09am	1	X	X	X									-01
South Wall		SS		6/5/19	8:59am		X	X	X									02
East Wall		SS		6/5/19	8:47am		X	X	X									03
West Wall		SS		6/5/19	8:40am		X	X	X									04
Base		SS		6/5/19	8:31am		X	X	X									05
						6/6/19												

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# L1105542
J125

Acctnum: HILCORANM

Template:

Prelogin:

TSR: Daphne Richards

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 # 4882 8606 8250

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

RAD SCREEN: <0.5 mR/hr

Relinquished by : (Signature)	Date:	Time:	Received by: (Signature)	Trip Blank Received: Yes / No HCL / MeoH TBR	If preservation required by Login: Date/Time
Jennifer Deal	6/5/19	11:00am		∅	
Relinquished by : (Signature)	Date:	Time:	Received by: (Signature)	Temp: .8+.1=.9 °C Bottles Received: 5 4oz.	
Relinquished by : (Signature)	Date:	Time:	Received for lab by: (Signature)	Date: 6/6/19 Time: 0845	Hold: Condition: NCF / OK