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	NVF1908732743
District RP	
Facility ID	
Application ID	

Release Notification

Responsible Party

Responsible Party Hilcorp Energy Company	OGRID 372171
Contact Name Jennifer Deal	Contact Telephone 505-801-6517
Contact email jdeal@hilcorp.com	Incident # NVF1908732743
Contact mailing address 382 Road 3100, Aztec NM 87410	

Location of Release Source

Latitude 36.8154221 Longitude -107.8779297

(NAD 83 in decimal degrees to 5 decimal places)

Site Name Sunray B 1A	Site Type Gas Well
Date Release Discovered 3/25/2019 @ 11:45am	API# *30-045-23166*

Unit Letter	Section	Township	Range	County
E	15	30N	10W	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)	Volume Recovered (bbls)
	Is the concentration of dissolved chloride in the produced water >10,000 mg/l?	☐ Yes ☐ No
☒ Condensate	Volume Released (bbls) 10.44	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
A release of 10.44bbls of oil/condensate was released due to a water level controller micro-switch pulled away from open/close tabs causing water dump to stay closed. The water carried over to the condensate tank causing the tank to overfill. Nothing was recovered. Switch is being fixed. Release remained inside the berm.

State of New Mexico
Oil Conservation Division

Incident ID	NVF1908732743
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	NVF1908732743
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: __5/10/2019_____

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

OCD Only

Received by: _____ Date**:** _____

State of New Mexico
Oil Conservation Division

Incident ID	NVF1908732743
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: 5/10/2019

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

OCD Only

Received by: OCD Date: 7/1/19

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: 7/11/19

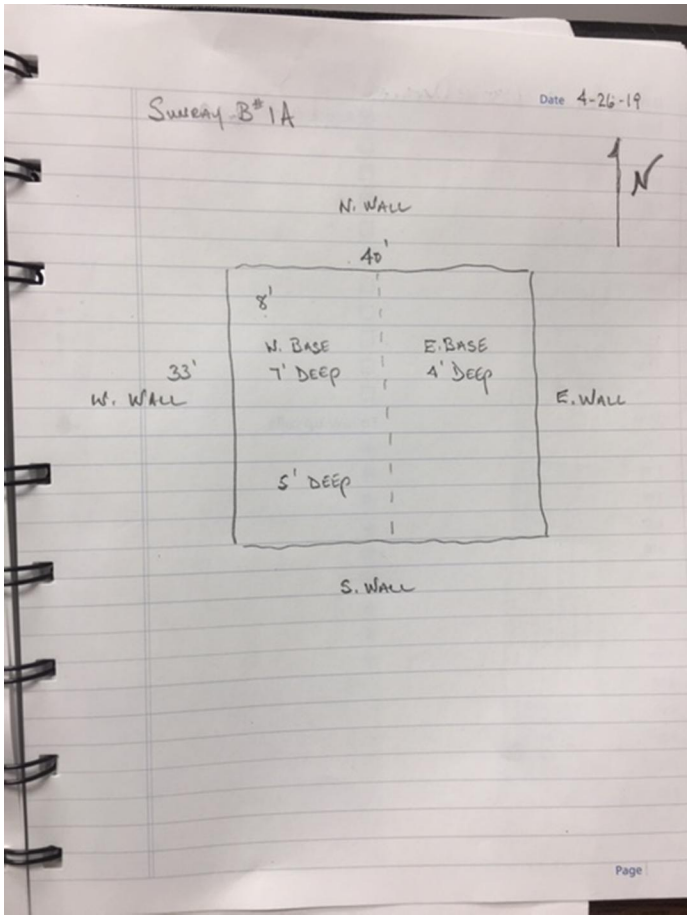
Printed Name: Cory Title: Environmental Specalist

Site layout

N

Photographs – Impacted Area (3/25/19)

Field Data


Survey B#1A
Date 4-26-19
N
N. WALL
40'
8'
W. BASE
7' DEEP
E. BASE
4' DEEP
33'
W. WALL
E. WALL
5' DEEP
S. WALL
Page

Data table of soil contaminant concentration data

TABLE 1

SOIL ANALYTICAL RESULTS
SUNRAY B 1A
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)
W Wall	4/26/2019		<0.000505	<0.00505	<0.000505	<0.00152	<0.00505	12.1	<0.101	<4.0	<4.0	<4.0	<4.0
W Base	4/26/2019		<0.0005	<0.005	<0.0005	<0.0015	<0.005	14	<0.1	<4.0	<4.0	<4.0	<4.0
N Wall	4/26/2019		<0.0005	<0.005	<0.0005	<0.0015	<0.005	<10	<0.1	6.14	<4.0	6.14	6.14
E Wall	4/26/2019		<0.0005	<0.005	<0.0005	<0.0015	<0.005	13	<0.1	74.00	24	98.00	98.00
S Wall	4/26/2019		<0.0005	<0.005	<0.0005	<0.0015	<0.005	11	<0.1	<4.0	<4.0	<4.0	<4.0
E Base	4/26/2019		<0.0005	<0.005	<0.0005	<0.0015	<0.005	10.2	<0.1	28.00	8.15	36.15	36.15
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): 15 **Township:** 30N **Range:** 10W

Depth to water determination

Info pulled from NMOCD Website for Sunray A 3 (Full permit is attached)

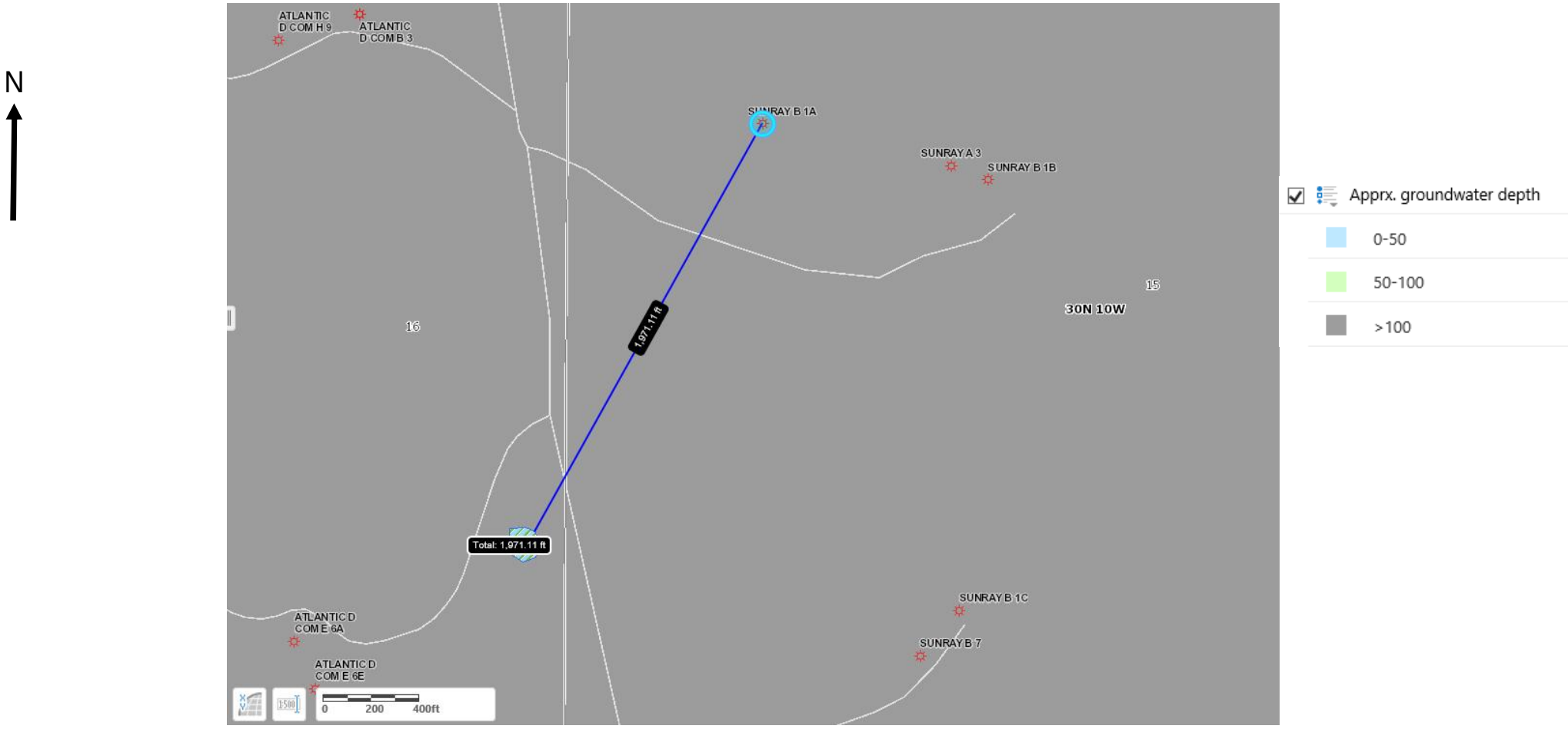
SUNRAY A 3

Site Specific Hydrogeology

A visual site inspection confirming the information contained herein was performed on the well 'SUNRAY A 3', which is located at 36.81462 degrees North latitude and 107.87393 degrees West longitude. This location is located on the Turley 7.5' USGS topographic quadrangle. This location is in section 15 of Township 30 North Range 10 West of the Public Land Survey System (New Mexico Principal Meridian). This location is located in San Juan County, New Mexico. The nearest town is Aztec, located 6.7 miles to the west. The nearest large town (population greater than 10,000) is Farmington, located 19.2 miles to the west (National Atlas). The nearest highway is State Highway 173, located 1.1 miles to the south. The location is on BLM land and is 1,739 feet from the edge of the parcel as notated in the BLM land status layer updated January 2008. This location is in the Animas. Colorado, New Mexico, Sub-basin. This location is located 1984 meters or 6507 feet above sea level and receives 14.5 inches of rain each year. The vegetation at this location is classified as Colorado Plateau Mixed Bedrock Canyon and Tableland as per the Southwest Regional Gap Analysis Program.

The estimated depth to ground water at this point is 446 feet. This estimation is based on the data published on the New Mexico Engineer's iWaters Database website and water depth data from ConocoPhillips' Cathodic wells. Groundwater data available from the NM State Engineer's iWaters Database for wells near the proposed site are attached. The nearest stream is 192 feet to the northwest and is classified by the USGS as an intermittent stream. The nearest perrenial stream is 2,660 feet to the southwest. The nearest water body is 2,570 feet to the southwest. It is classified by the USGS as an intermittent lake and is 0.3 acres in size. The nearest spring is 8,148 feet to the east. All stream, river, water body and spring information was determined as per the USGS Hydrographic Dataset (High Resolution), downloaded 3/2008. The nearest water well is 8,116 feet to the west. The nearest wetland is a 0.3 acre other located 2,560 feet to the southwest. The slope at this location is 10 degrees to the southwest as calculated from USGS 30M National Elevation Dataset. This information is also discerned from the aerial and topographic map included. The surface geology at this location is SAN JOSE FORMATION--Siltstone, shale, and sandstone with a Sandstone dominated formations of all ages substrate. The soil at this location is 'Rock outcrop-Travessilla-Weska complex, extremely steep' and is well drained and not hydric with severe erosion potential as taken from the NRCS SSURGO map unit, downloaded January 2008. The nearest underground mine is 10.3 miles to the north as indicated on the Mines, Mills and Quarries Map of New Mexico provided.

Depth to water determination



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

N

Photographs – 4/26/19 Sampling Event

including date and GIS information

South Wall

East Wall and East Base

Photographs – 4/26/19 Sampling Event

including date and GIS information

West Base

East Base and East Wall

North Wall and North Base

Photographs – 4/26/19 Sampling Event

including date and GIS information

North Wall

East Wall

West Base

Topographic/Aerial Maps

N

Sunray B 1A

- During the period of 4/10 – 4/15, 2019, Hilcorp hauled a total of ~340 yds of soil to IEI and brought in about 340 yds of clean soil
- Excavation size was approximately 33’x40’x6’ deep
- Confirmation sampling occurred on April 26, 2019 at 9:00am. Emmanuel with BLM was onsite with Kurt and directed sampling

Jennifer Deal

From:	Jennifer Deal
Sent:	Tuesday, April 23, 2019 8:10 AM
To:	Cory Minton; Powell, Brandon, EMNRD; whitney thomas (l1thomas@blm.gov); Abiodun Adeloye
Cc:	Kurt Hoekstra; Bobby Spearman; Davin LeBoeuf
Subject:	Confirmation Sampling - Sunray B 1A

Good morning,

Hilcorp is providing 48 hour notice of confirmation sampling to occur at the Sunray B 1A on Friday, April 26, 2019 at 9:00am. Please let me know if you have any questions.

Thanks,

Jennifer Deal
Environmental Specialist
Hilcorp Energy – L48 West
jdeal@hilcorp.com
382 Road 3100
Aztec, NM 87410
Office: (505) 324-5128
Cell: (505) 801-6517

Pace Analytical®
National Center for Testing & Innovation

ANALYTICAL REPORT

May 06, 2019

HilCorp-Farmington, NM

Sample Delivery Group:	L1093382
Samples Received:	04/27/2019
Project Number:	SUN RAY B #1A
Description:	SUN RAY B #1A
Site:	SUN RAY B #1A
Report To:	Jennifer Deal 382 Road 3100 Aztec, NM 87401

Entire Report Reviewed By:

Daphne R Richards

Daphne Richards
Project Manager

TABLE OF CONTENTS

W WALL L1093382-01 Solid

Collected by: Kurt | Collected date/time: 04/26/19 09:08 | Received date/time: 04/27/19 08:45

Method	Batch	Dilution	Preparation date/time	Analysis date/time	Analyst	Location
Wet Chemistry by Method 9056A	WG1274268	1	05/03/19 09:40	05/03/19 14:12	ELN	Mt. Juliet, TN
Volatile Organic Compounds (GC) by Method 8015/8021	WG1273392	1.01	04/29/19 00:18	04/30/19 17:15	JHH	Mt. Juliet, TN
Semi-Volatile Organic Compounds (GC) by Method 8015	WG1274151	1	05/02/19 05:10	05/02/19 19:09	TJD	Mt. Juliet, TN

W BASE L1093382-02 Solid

Collected by: Kurt | Collected date/time: 04/26/19 09:12 | Received date/time: 04/27/19 08:45

Method	Batch	Dilution	Preparation date/time	Analysis date/time	Analyst	Location
Wet Chemistry by Method 9056A	WG1274268	1	05/03/19 09:40	05/03/19 14:20	ELN	Mt. Juliet, TN
Volatile Organic Compounds (GC) by Method 8015/8021	WG1273392	1	04/29/19 00:18	04/30/19 17:39	JHH	Mt. Juliet, TN
Semi-Volatile Organic Compounds (GC) by Method 8015	WG1274151	1	05/02/19 05:10	05/02/19 19:25	TJD	Mt. Juliet, TN

N WALL L1093382-03 Solid

Collected by: Kurt | Collected date/time: 04/26/19 09:15 | Received date/time: 04/27/19 08:45

Method	Batch	Dilution	Preparation date/time	Analysis date/time	Analyst	Location
Wet Chemistry by Method 9056A	WG1274268	1	05/03/19 09:40	05/03/19 14:29	ELN	Mt. Juliet, TN
Volatile Organic Compounds (GC) by Method 8015/8021	WG1273392	1	04/29/19 00:18	04/30/19 18:03	JHH	Mt. Juliet, TN
Semi-Volatile Organic Compounds (GC) by Method 8015	WG1274151	1	05/02/19 05:10	05/02/19 19:41	TJD	Mt. Juliet, TN

E BASE L1093382-04 Solid

Collected by: Kurt | Collected date/time: 04/26/19 09:23 | Received date/time: 04/27/19 08:45

Method	Batch	Dilution	Preparation date/time	Analysis date/time	Analyst	Location
Wet Chemistry by Method 9056A	WG1274268	1	05/03/19 09:40	05/03/19 14:37	ELN	Mt. Juliet, TN
Volatile Organic Compounds (GC) by Method 8015/8021	WG1273392	1	04/29/19 00:18	04/30/19 18:27	JHH	Mt. Juliet, TN
Semi-Volatile Organic Compounds (GC) by Method 8015	WG1274151	1	05/02/19 05:10	05/02/19 19:57	TJD	Mt. Juliet, TN

S WALL L1093382-05 Solid

Collected by: Kurt | Collected date/time: 04/26/19 09:26 | Received date/time: 04/27/19 08:45

Method	Batch	Dilution	Preparation date/time	Analysis date/time	Analyst	Location
Wet Chemistry by Method 9056A	WG1274268	1	05/03/19 09:40	05/03/19 14:46	ELN	Mt. Juliet, TN
Volatile Organic Compounds (GC) by Method 8015/8021	WG1273392	1	04/29/19 00:18	04/30/19 18:50	JHH	Mt. Juliet, TN
Semi-Volatile Organic Compounds (GC) by Method 8015	WG1274151	1	05/02/19 05:10	05/02/19 20:14	TJD	Mt. Juliet, TN

E WALL L1093382-06 Solid

Collected by: Kurt | Collected date/time: 04/26/19 09:30 | Received date/time: 04/27/19 08:45

Method	Batch	Dilution	Preparation date/time	Analysis date/time	Analyst	Location
Wet Chemistry by Method 9056A	WG1274268	1	05/03/19 09:40	05/03/19 15:11	ELN	Mt. Juliet, TN
Volatile Organic Compounds (GC) by Method 8015/8021	WG1273392	1	04/29/19 00:18	04/30/19 19:14	JHH	Mt. Juliet, TN
Semi-Volatile Organic Compounds (GC) by Method 8015	WG1274151	1	05/02/19 05:10	05/02/19 20:30	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	Qualifier	RDL	Dilution	Analysis	Batch
	mg/kg		mg/kg		date / time	
Chloride	12.1		10.0	1	05/03/2019 14:12	WG1274268

Volatile Organic Compounds (GC) by Method 8015/8021

Analyte	Result	Qualifier	RDL	Dilution	Analysis	Batch
	mg/kg		mg/kg		date / time	
Benzene	ND		0.000505	1.01	04/30/2019 17:15	WG1273392
Toluene	ND		0.00505	1.01	04/30/2019 17:15	WG1273392
Ethylbenzene	ND		0.000505	1.01	04/30/2019 17:15	WG1273392
Total Xylene	ND		0.00152	1.01	04/30/2019 17:15	WG1273392
TPH (GC/FID) Low Fraction	ND		0.101	1.01	04/30/2019 17:15	WG1273392
(S) a,a,a-Trifluorotoluene(FID)	*95.4*		*77.0-120*		*04/30/2019 17:15*	WG1273392
(S) a,a,a-Trifluorotoluene(PID)	*98.4*		*72.0-128*		*04/30/2019 17:15*	WG1273392

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	05/02/2019 19:09	WG1274151
C28-C40 Oil Range	ND		4.00	1	05/02/2019 19:09	WG1274151
(S) o-Terphenyl	*79.0*		*18.0-148*		*05/02/2019 19:09*	WG1274151

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	14.0		10.0	1	05/03/2019 14:20	WG1274268

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	04/30/2019 17:39	WG1273392
Toluene	ND		0.00500	1	04/30/2019 17:39	WG1273392
Ethylbenzene	ND		0.000500	1	04/30/2019 17:39	WG1273392
Total Xylene	ND		0.00150	1	04/30/2019 17:39	WG1273392
TPH (GC/FID) Low Fraction	ND		0.100	1	04/30/2019 17:39	WG1273392
(S) a,a,a-Trifluorotoluene(FID)	*97.5*		*77.0-120*		*04/30/2019 17:39*	WG1273392
(S) a,a,a-Trifluorotoluene(PID)	*102*		*72.0-128*		*04/30/2019 17:39*	WG1273392

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	05/02/2019 19:25	WG1274151
C28-C40 Oil Range	ND		4.00	1	05/02/2019 19:25	WG1274151
(S) o-Terphenyl	*86.0*		*18.0-148*		*05/02/2019 19:25*	WG1274151

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	ND		10.0	1	05/03/2019 14:29	WG1274268

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	04/30/2019 18:03	WG1273392
Toluene	ND		0.00500	1	04/30/2019 18:03	WG1273392
Ethylbenzene	ND		0.000500	1	04/30/2019 18:03	WG1273392
Total Xylene	ND		0.00150	1	04/30/2019 18:03	WG1273392
TPH (GC/FID) Low Fraction	ND		0.100	1	04/30/2019 18:03	WG1273392
(S) a,a,a-Trifluorotoluene(FID)	*96.6*		*77.0-120*		*04/30/2019 18:03*	WG1273392
(S) a,a,a-Trifluorotoluene(PID)	*101*		*72.0-128*		*04/30/2019 18:03*	WG1273392

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	6.14		4.00	1	05/02/2019 19:41	WG1274151
C28-C40 Oil Range	ND		4.00	1	05/02/2019 19:41	WG1274151
(S) o-Terphenyl	*80.0*		*18.0-148*		*05/02/2019 19:41*	WG1274151

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	10.2		10.0	1	05/03/2019 14:37	WG1274268

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	04/30/2019 18:27	WG1273392
Toluene	ND		0.00500	1	04/30/2019 18:27	WG1273392
Ethylbenzene	ND		0.000500	1	04/30/2019 18:27	WG1273392
Total Xylene	ND		0.00150	1	04/30/2019 18:27	WG1273392
TPH (GC/FID) Low Fraction	ND		0.100	1	04/30/2019 18:27	WG1273392
(S) a,a,a-Trifluorotoluene(FID)	*97.1*		*77.0-120*		*04/30/2019 18:27*	WG1273392
(S) a,a,a-Trifluorotoluene(PID)	*100*		*72.0-128*		*04/30/2019 18:27*	WG1273392

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	28.0		4.00	1	05/02/2019 19:57	WG1274151
C28-C40 Oil Range	8.15		4.00	1	05/02/2019 19:57	WG1274151
(S) o-Terphenyl	*77.4*		*18.0-148*		*05/02/2019 19:57*	WG1274151

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	10.8		10.0	1	05/03/2019 14:46	WG1274268

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	04/30/2019 18:50	WG1273392
Toluene	ND		0.00500	1	04/30/2019 18:50	WG1273392
Ethylbenzene	ND		0.000500	1	04/30/2019 18:50	WG1273392
Total Xylene	ND		0.00150	1	04/30/2019 18:50	WG1273392
TPH (GC/FID) Low Fraction	ND		0.100	1	04/30/2019 18:50	WG1273392
(S) a,a,a-Trifluorotoluene(FID)	*98.8*		*77.0-120*		*04/30/2019 18:50*	WG1273392
(S) a,a,a-Trifluorotoluene(PID)	*103*		*72.0-128*		*04/30/2019 18:50*	WG1273392

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	05/02/2019 20:14	WG1274151
C28-C40 Oil Range	ND		4.00	1	05/02/2019 20:14	WG1274151
(S) o-Terphenyl	*83.0*		*18.0-148*		*05/02/2019 20:14*	WG1274151

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	13.4		10.0	1	05/03/2019 15:11	WG1274268

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	04/30/2019 19:14	WG1273392
Toluene	ND		0.00500	1	04/30/2019 19:14	WG1273392
Ethylbenzene	ND		0.000500	1	04/30/2019 19:14	WG1273392
Total Xylene	ND		0.00150	1	04/30/2019 19:14	WG1273392
TPH (GC/FID) Low Fraction	ND		0.100	1	04/30/2019 19:14	WG1273392
(S) a,a,a-Trifluorotoluene(FID)	*97.0*		*77.0-120*		*04/30/2019 19:14*	WG1273392
(S) a,a,a-Trifluorotoluene(PID)	*101*		*72.0-128*		*04/30/2019 19:14*	WG1273392

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	74.0		4.00	1	05/02/2019 20:30	WG1274151
C28-C40 Oil Range	24.0		4.00	1	05/02/2019 20:30	WG1274151
(S) o-Terphenyl	*94.0*		*18.0-148*		*05/02/2019 20:30*	WG1274151

Method Blank (MB)

(MB) R3408105-1 05/03/19 11:48

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

Laboratory Control Sample (LCS)

(LCS) R3408105-2 05/03/19 11:56

Analyte	Spike Amount mg/kg	LCS Result mg/kg	LCS Rec. %	Rec. Limits %	LCS Qualifier
Chloride	200	195	97.6	80.0-120	

L1093382-06 Original Sample (OS) • Matrix Spike (MS) • Matrix Spike Duplicate (MSD)

(OS) L1093382-06 05/03/19 15:11 • (MS) R3408105-4 05/03/19 15:20 • (MSD) R3408105-5 05/03/19 15:28

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	511	523	99.5	102	1	80.0-120			2.38	15

Method Blank (MB)

(MB) R3406920-5 04/30/19 11:02

Analyte	MB Result mg/kg	MB Qualifier	MB MDL mg/kg	MB RDL mg/kg
Benzene	U		0.000120	0.000500
Toluene	U		0.000150	0.00500
Ethylbenzene	U		0.000110	0.000500
Total Xylene	U		0.000460	0.00150
TPH (GC/FID) Low Fraction	U		0.0217	0.100
(S) a,a,a-Trifluorotoluene(FID)	*98.1*			*77.0-120*
(S) a,a,a-Trifluorotoluene(PID)	*102*			*72.0-128*

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

(LCS) R3406920-1 04/30/19 09:01 • (LCSD) R3406920-2 04/30/19 09:26

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	0.0452	0.0530	90.5	106	76.0-121			15.9	20
Toluene	0.0500	0.0464	0.0535	92.7	107	80.0-120			14.4	20
Ethylbenzene	0.0500	0.0470	0.0546	94.1	109	80.0-124			15.0	20
Total Xylene	0.150	0.138	0.159	91.7	106	37.0-160			14.8	20
(S) a,a,a-Trifluorotoluene(FID)				*97.6*	*98.3*	*77.0-120*				
(S) a,a,a-Trifluorotoluene(PID)				*101*	*101*	*72.0-128*				

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

(LCS) R3406920-3 04/30/19 09:50 • (LCSD) R3406920-4 04/30/19 10:14

Analyte	Spike Amount mg/kg	LCS Result mg/kg	LCSD Result mg/kg	LCS Rec. %	LCSD Rec. %	Rec. Limits %	LCS Qualifier	LCSD Qualifier	RPD %	RPD Limits %
TPH (GC/FID) Low Fraction	5.50	5.16	5.84	93.9	106	72.0-127			12.2	20
(S) a,a,a-Trifluorotoluene(FID)				*104*	*105*	*77.0-120*				
(S) a,a,a-Trifluorotoluene(PID)				*107*	*108*	*72.0-128*				

Method Blank (MB)

(MB) R3407730-1 05/02/19 17:49

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	*86.9*			*18.0-148*

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

(LCS) R3407730-2 05/02/19 18:06 • (LCSD) R3407730-3 05/02/19 18:19

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	34.4	34.5	68.8	69.0	50.0-150			0.290	20
C10-C28 Diesel Range	50.0	37.3	37.4	74.6	74.8	50.0-150			0.268	20
(S) o-Terphenyl				*105*	*101*	*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

The remainder of this page intentionally left blank, there are no qualifiers applied to this SDG.

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

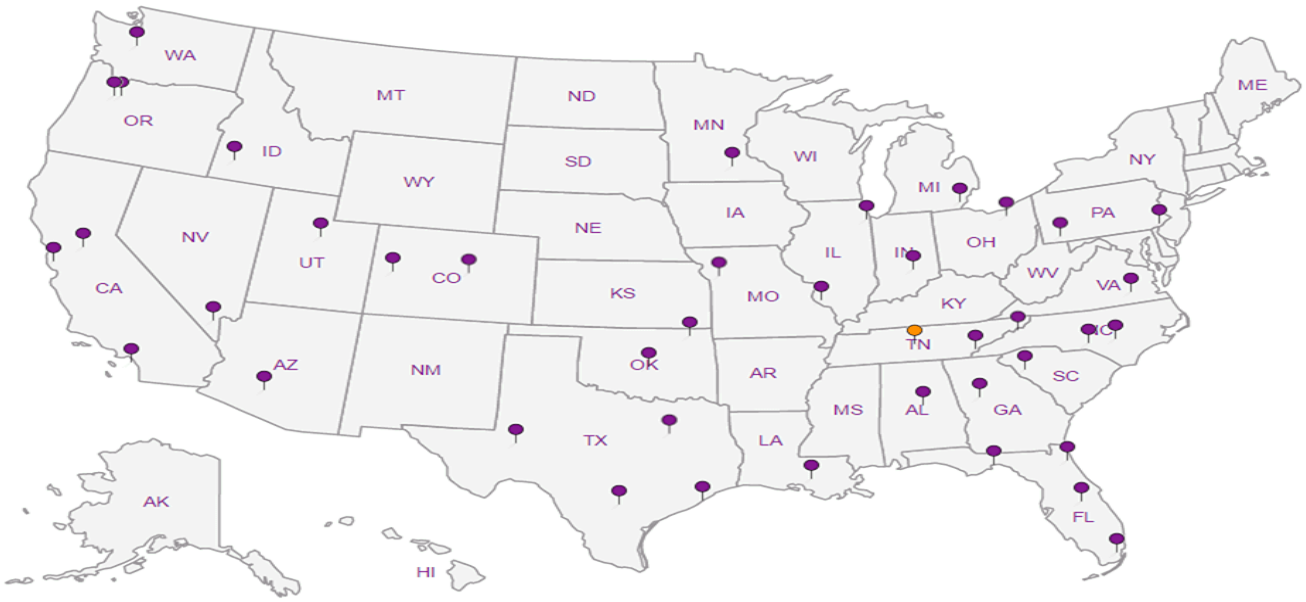
Third Party Federal Accreditations

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 # SUNRAY B# 1A

P.O. #

Collected by (signature): Kurt Hoekstra

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

Pres Chk

Sample ID	Comp/Grab	Matrix *	Depth	Date	Time	No. of Cntrs	TPH 8015 - DRO, GRO, MRO	BTEX 8021	CHLORIDE
W. WALL	Comp	Soil		4-26	9:08	1	X	X	X
W. BASE	"	"		"	9:12	1	X	X	X
N. WALL	"	"		"	9:15	1	X	X	X
E. BASE	"	"		"	9:23	1	X	X	X
S. WALL	"	"		"	9:26	1	X	X	X
E. WALL	"	"		"	9:30	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# 1093382

Table # F070

Acctnum: HILCORANM

Template:

Prelogin:

TSR: 288 - Daphne Richards

PB:

Shipped Via:

Remarks | Sample # (lab only)

* 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 # 7305 8947 5010

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)	Trip Blank Received: Yes / No HCL / MeoH TBR
Kurt Hoekstra	4-26-19	3:12		
Relinquished by : (Signature)	Date:	Time:	Received by: (Signature)	Temp: °C Bottles Received: 4.2 I=O=d. FAAS 6
Relinquished by : (Signature)	Date:	Time:	Received for lab by: (Signature) KWillis	Date: 4/27/19 Time: 845

If preservation required by Login: Date/Time

Hold:

Condition: NCF / OK

1093382

Pyrene	1,000 mg/kg2
Organic Compounds in Ground Water	
Benzene	<5 µg/l[3]
Toluene	<560 µg/l[3]
Ethylbenzene	<700 µg/l[3]
Xylenes (Total)	<1,400 µg/l[3,4]
Inorganics in Soils	
Electrical Conductivity (EC)	< 1.1x background
Sodium Adsorption Ratio (SAR)	<12[5]
pH	6-9
Inorganics in Ground Water	
Total Dissolved Solids (TDS)	<1.25 x background[3]
Chlorides	<1.25 x background[3]
Sulfates	<1.25 x background[3]
Metals in Soils	
Arsenic	0.39 mg/kg[2]
Barium (LDNR True Total Barium)	15,000 mg/kg[2]
Boron (Hot Water Soluble)	2 mg/l[3]
Cadmium	70 mg/kg[3,6]
Chromium (III)	120,000 mg/kg[2]
Chromium (VI)	23 mg/kg[2,6]
Copper	3,100 mg/kg[2]
Lead (inorganic)	400 mg/kg[2]
Mercury	23 mg/kg[2]
Nickel (soluble salts)	1,600 mg/kg[2,6]
Selenium	390 mg/kg[2,6]
Silver	390 mg/kg[2]
Zinc	23,000 mg/kg[2,6]
Liquid Hydrocarbons in Soils and Ground Water	
Liquid hydrocarbons including condensate and oil	Below detection level

SUNRAY A 3

Site Specific Hydrogeology

A visual site inspection confirming the information contained herein was performed on the well 'SUNRAY A 3', which is located at 36.81462 degrees North latitude and 107.87393 degrees West longitude. This location is located on the Turley 7.5' USGS topographic quadrangle. This location is in section 15 of Township 30 North Range 10 West of the Public Land Survey System (New Mexico Principal Meridian). This location is located in San Juan County, New Mexico. The nearest town is Aztec, located 6.7 miles to the west. The nearest large town (population greater than 10,000) is Farmington, located 19.2 miles to the west (National Atlas). The nearest highway is State Highway 173, located 1.1 miles to the south. The location is on BLM land and is 1,739 feet from the edge of the parcel as notated in the BLM land status layer updated January 2008. This location is in the Animas. Colorado, New Mexico, Sub-basin. This location is located 1984 meters or 6507 feet above sea level and receives 14.5 inches of rain each year. The vegetation at this location is classified as Colorado Plateau Mixed Bedrock Canyon and Tableland as per the Southwest Regional Gap Analysis Program.

The estimated depth to ground water at this point is 446 feet. This estimation is based on the data published on the New Mexico Engineer's iWaters Database website and water depth data from ConocoPhillips' Cathodic wells. Groundwater data available from the NM State Engineer's iWaters Database for wells near the proposed site are attached. The nearest stream is 192 feet to the northwest and is classified by the USGS as an intermittent stream. The nearest perrenial stream is 2,660 feet to the southwest. The nearest water body is 2,570 feet to the southwest. It is classified by the USGS as an intermittent lake and is 0.3 acres in size. The nearest spring is 8,148 feet to the east. All stream, river, water body and spring information was determined as per the USGS Hydrographic Dataset (High Resolution), downloaded 3/2008. The nearest water well is 8,116 feet to the west. The nearest wetland is a 0.3 acre other located 2,560 feet to the southwest. The slope at this location is 10 degrees to the southwest as calculated from USGS 30M National Elevation Dataset. This information is also discerned from the aerial and topographic map included. The surface geology at this location is SAN JOSE FORMATION--Siltstone, shale, and sandstone with a Sandstone dominated formations of all ages substrate. The soil at this location is 'Rock outcrop-Travessilla-Weska complex, extremely steep' and is well drained and not hydric with severe erosion potential as taken from the NRCS SSURGO map unit, downloaded January 2008. The nearest underground mine is 10.3 miles to the north as indicated on the Mines, Mills and Quarries Map of New Mexico provided.

Regional Hydrogeological context:

The San Jose Formation of Eocene age occurs in New Mexico and Colorado, and its outcrop forms the land surface over much of the eastern half of the central basin. It overlies the Nacimiento Formation in the area generally south of the Colorado-New Mexico State line and overlies the Animas Formation in the area generally north of the State line. The San Jose Formation was deposited in various fluvial-type environments. In general, the unit consists of an interbedded sequence of sandstone, siltstone, and variegated shale. Thickness of the San Jose Formation generally increases from west to east (200 feet in the west and south to almost 2,700 feet in the center of the structural basin). Ground water is associated with alluvial and fluvial sandstone aquifers. Thus, the occurrence of ground water is mainly controlled by the distribution of sandstone in the formation. The distribution of such sandstone is the result of original depositional extent plus any post-depositional modifications, namely erosion and structural deformation. Transmissivity data for San Jose Formation are minimal. Values of 40 and 120 feet squared per day were determined from two aquifer tests (Stone et al, 1983, table 5). The reported or measured discharge from 46 water wells completed in San Jose Formation ranges from 0.15 to 61 gallons per minute and the median is 5 gallons per minute. Most of the wells provide water for livestock and domestic use. The San Jose Formation is a very suitable unit for recharge from precipitation because soils that form on the unit are sandy and highly permeable and therefore readily adsorb precipitation. However, low annual precipitation, relatively high transpiration and evaporation rates, and deep dissection of the San Jose Formation by the San Juan River and its tributaries all tend to reduce the effective recharge to the unit.

Stone et al., 1983, Hydrogeology and Water Resources of the San Juan Basin, New Mexico: Socorro, New Mexico Bureau of Mines and Mineral Resources Hydrologic Report 6, 70 p.

New Mexico Office of the State Engineer
POD Reports and Downloads

Township: 30N Range: 10W Sections:

NAD27 X: Y: Zone: Search Radius:

County: Basin: Number: Suffix:

Owner Name: (First) (Last) ○ Non-Domestic ○ Domestic ◉ All

POD / Surface Data Report | Avg Depth to Water Report | Water Column Report

Clear Form | iWATERS Menu | Help

WATER COLUMN REPORT 08/21/2008

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

POD Number	Tws	Rng	Sec	q	q	q	Zone	X	Y	Depth Well	Depth Water	Water Column (in feet)
SJ 00050	30N	10W	02	1	3	2				520	306	214
SJ 03460	30N	10W	02	1	3	2				520	500	20
SJ 03230	30N	10W	03	1	2	1				120	70	50
SJ 03113	30N	10W	05	4	1	4				42	30	12
SJ 00589	30N	10W	08	1	1	1				175	150	25
SJ 00774	30N	10W	08	1	2	1				195	160	35
SJ 02316	30N	10W	08	1	3					210	98	112
SJ 02102	30N	10W	08	1	3	4				190	90	100
SJ 01527	30N	10W	08	2	2					120	60	60
SJ 01193	30N	10W	08	2	2					100	70	30
SJ 02808	30N	10W	08	2	3	4				165	105	60
SJ 01102	30N	10W	08	2	4					200	159	41
SJ 02998	30N	10W	08	3	3	1				260	117	143
SJ 02772	30N	10W	08	4	2	2				200	160	40
SJ 00523	30N	10W	08	4	4					160	120	40
SJ 01362	30N	10W	20	1	3	3				238	190	48
SJ 03442	30N	10W	20	1	4	1				200		
SJ 02782	30N	10W	20	1	4	4				250		
SJ 02797	30N	10W	20	2	4	1				70		
SJ 00024	30N	10W	23	2	4	2				305		
SJ 00051	30N	10W	23	2	4	2				305		
SJ 00197	30N	10W	23	4	2					975	500	475
SJ 00010	30N	10W	24	2						292		
SJ 01116	30N	10W	33	2	1					105	45	60
SJ 01059	30N	10W	34	1	2	4				115	75	40
SJ 01182	30N	10W	34	1	3	3				235	125	110

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