District I
1625 N. French Dr., Hobbs, NM 88240
District II
811 S. First St., Artesia, NM 88210
District III
1000 Rio Brazos Road, Aztec, NM 87410
District IV
1220 S. St. Francis Dr., Santa Fe, NM 87505

State of New Mexico
Energy Minerals and Natural Resources Department

Oil Conservation Division
1220 South St. Francis Dr.
Santa Fe, NM 87505

Form C-141
Revised August 24, 2018
Submit to appropriate OCD District office

Incident ID	
District RP	
Facility ID	
Application ID	

Release Notification

Responsible Party

Responsible Party: Hilcorp Energy Company	OGRID 372171
Contact Name: Lindsay Dumas	Contact Telephone: 832-839-4585
Contact email: Ldumas@hilcorp.com	Incident # *(assigned by OCD)* NCS1913733507
Contact mailing address: 1111 Travis St. Houston, TX 77002	

Location of Release Source

Latitude 36.59323 Longitude -107.35965
(NAD 83 in decimal degrees to 5 decimal places)

Site Name: San Juan 27-5 Unit 83	Site Type: Gas Well
Date Release Discovered: 3/26/19	API# *(if applicable)* 30-039-20208

Unit Letter	Section	Township	Range	County
B	09	027N	005W	Rio Arriba

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) 5 bbls	Volume Recovered (bbls) 0 bbls
	Is the concentration of dissolved chloride in the produced water >10,000 mg/l?	☐ Yes ☐ No
☐ Condensate	Volume Released (bbls)	Volume Recovered (bbls)
☐ Natural Gas	Volume Released (Mcf)	Volume Recovered (Mcf)
☐ Other (describe)	Volume/Weight Released (provide units)	Volume/Weight Recovered (provide units)

Cause of Release

Storm water runoff filled cribbing to a level that allowed precipitation to overflow and fill the pit.

State of New Mexico
Oil Conservation Division

Incident ID	
District RP	
Facility ID	
Application ID	

Was this a major release as defined by 19.15.29.7(A) NMAC? ☐ Yes ☒ No	If YES, for what reason(s) does the responsible party consider this a major release?
If YES, was immediate notice given to the OCD? By whom? To whom? When and by what means (phone, email, etc)?	

Initial Response

The responsible party must undertake the following actions immediately unless they could create a safety hazard that would result in injury

☒ The source of the release has been stopped.
☒ The impacted area has been secured to protect human health and the environment.
☒ Released materials have been contained via the use of berms or dikes, absorbent pads, or other containment devices.
☒ All free liquids and recoverable materials have been removed and managed appropriately.

If all the actions described above have not been undertaken, explain why:

Per 19.15.29.8 B. (4) NMAC the responsible party may commence remediation immediately after discovery of a release. If remediation has begun, please attach a narrative of actions to date. If remedial efforts have been successfully completed or if the release occurred within a lined containment area (see 19.15.29.11(A)(5)(a) NMAC), please attach all information needed for closure evaluation.

I hereby certify that the information given above is true and complete to the best of my knowledge and understand that pursuant to OCD rules and regulations all operators are required to report and/or file certain release notifications and perform corrective actions for releases which may endanger public health or the environment. The acceptance of a C-141 report by the OCD does not relieve the operator of liability should their operations have failed to adequately investigate and remediate contamination that pose a threat to groundwater, surface water, human health or the environment. In addition, OCD acceptance of a C-141 report does not relieve the operator of responsibility for compliance with any other federal, state, or local laws and/or regulations.

Printed Name: _Lindsay Dumas_____ Title: ____Environmental Specialist _____

Signature: Lindsay Dumas Digitally signed by Lindsay Dumas DN: cn=Lindsay Dumas, ou=Users Date: 2019.11.06 11:26:28 -06'00' Date: _6/10/19_____

email: _Ldumas@hilcorp.com_____ Telephone: _832-839-4585_____

OCD Only

Received by: _____ Date: _____

Incident ID	
District RP	
Facility ID	
Application ID	

Site Assessment/Characterization

This information must be provided to the appropriate district office no later than 90 days after the release discovery date.

What is the shallowest depth to groundwater beneath the area affected by the release?	>100' (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.

Form C-141
Page 4

State of New Mexico
Oil Conservation Division

Incident ID	
District RP	
Facility ID	
Application ID	

I hereby certify that the information given above is true and complete to the best of my knowledge and understand that pursuant to OCD rules and regulations all operators are required to report and/or file certain release notifications and perform corrective actions for releases which may endanger public health or the environment. The acceptance of a C-141 report by the OCD does not relieve the operator of liability should their operations have failed to adequately investigate and remediate contamination that pose a threat to groundwater, surface water, human health or the environment. In addition, OCD acceptance of a C-141 report does not relieve the operator of responsibility for compliance with any other federal, state, or local laws and/or regulations.

Printed Name: Lindsay Dumas_____ Title: _Environmental Specialist_____

Signature: Lindsay Dumas Digitally signed by Lindsay Dumas DN: cn=Lindsay Dumas, ou=Users Date: 2019.11.06 11:27:06 -06'00' Date: 11-6-19_____

email: Ldumas@hilcorp.com_____ Telephone: _832-839-4585_____

OCD Only

Received by: _____ Date: _____

Incident ID	
District RP	
Facility ID	
Application ID	

Closure

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

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

☒ A scaled site and sampling diagram as described in 19.15.29.11 NMAC

☒ Photographs of the remediated site prior to backfill or photos of the liner integrity if applicable (Note: appropriate OCD District office must be notified 2 days prior to liner inspection)

☒ Laboratory analyses of final sampling (Note: appropriate ODC District office must be notified 2 days prior to final sampling)

☒ Description of remediation activities

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

Printed Name: _Lindsay Dumas_____ Title: Environmental Specialist_____

Signature: Lindsay Dumas Digitally signed by Lindsay Dumas DN: cn=Lindsay Dumas, ou=Users Date: 2019.11.06 11:25:24 -06'00' Date: _11-6-19_____

email: Ldumas@hilcorp.com_____ Telephone: _832-839-4585_____

OCD Only

Received by: _____ Date: _____

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: Nelson Velez Date: 03/29/2022

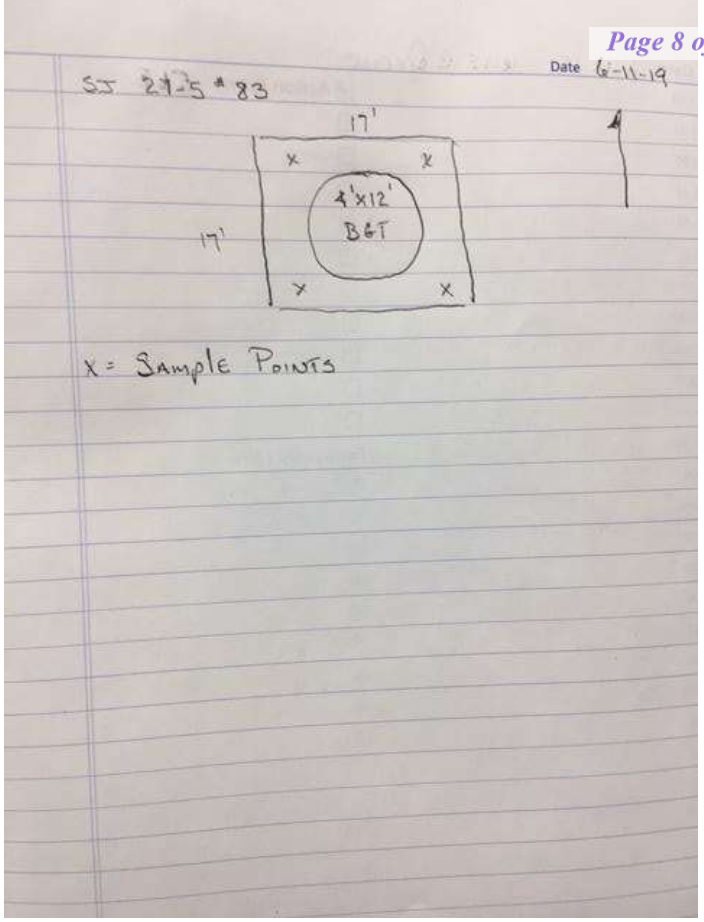
Printed Name: Nelson Velez Title: Environmental Specialist – Adv

Topographic/Aerial Maps

Scaled Map

Field Data

6-11-19 Confirmation Sampling



SOIL ANALYTICAL RESULTS
SJ 27-5 #83
HILCORP ENERGY - L48 WEST

Soil Sample Identification	Sample Date	Chloride (mg/kg)	Benzene (mg/kg)	Toluene (mg/kg)	Ethylbenzene (mg/kg)	Total Xylenes (mg/kg)	Total BTEX (mg/kg)	GRO (mg/kg)	DRO (mg/kg)	GRO+DRO (mg/kg)	MRO (mg/kg)	TPH (mg/kg)
BGT Celler	6/11/2019	24	ND	ND	ND	ND	0.00	0	0	0	172	172
NMOCD Standards		**20,000**	**10**				**50**			**1000**		**2,500**

The lab results for the release at the San Juan 27-5 #83 were below all regulatory limits. No remediation required.

Lindsay Dumas

From: Clayton Hamilton
Sent: Tuesday, May 14, 2019 11:59 AM
To: 'l1thomas@blm.gov'; 'aadeloye@blm.gov'; 'jjmiller@fs.fed.us'; 'cory.smith@state.nm.us'; 'Vanessa.fields@state.nm.us'
Cc: Lindsay Dumas; Nick Kunze; Matt Henderson
Subject: Agency Reportable – OPS – SJE – Area 13 – Run 1310 – SJ 7-5 #83 – Spill Report

At some point during this past winter, Hilcorp Energy had a release at the San Juan 27-5 #83, API 3003920208, 09Twn: 027N Rng: 005W.

A release of produced water over 5bbls occurred. Over the course of the wet winter, the pit at the subject location was getting close to being full. Snow started melting and water ran down into the BGT cribbing. This pit is located right below a steep clay hillside, which exacerbated the run off. At some point, the cribbing filled up with storm run off to a level which allowed the precipitation to overflow and fill up the pit.

Hilcorp Environmental will submit an Initial C-141 within 15 days, and follow up with spill assessment.

Clayton Hamilton
Area 13 Production Foreman
Hilcorp Energy Company – San Juan East
Office – 505-324-5137
Cell – 505-419-3455

"Looking back is a bad habit" ~Rooster Cogburn

Lindsay Dumas

From: Smith, Cory, EMNRD <Cory.Smith@state.nm.us>
Sent: Monday, June 10, 2019 2:08 PM
To: Lindsay Dumas; 'Adeloye, Abiodun'; l1thomas@blm.gov; jjmiller@fs.fed.us
Cc: Kurt Hoekstra
Subject: RE: [EXTERNAL] Agency Reportable – OPS – SJE – Area 13 – Run 1310 – SJ 7-5 #83 – Spill Report

Lindsay,

Ok please follow 19.15.29 NMAC for sampling procedures.

Thanks

Cory Smith
Environmental Specialist
Oil Conservation Division
Energy, Minerals, & Natural Resources
1000 Rio Brazos, Aztec, NM 87410
(505)334-6178 ext 115
cory.smith@state.nm.us

From: Lindsay Dumas <ldumas@hilcorp.com>
Sent: Monday, June 10, 2019 12:07 PM
To: Smith, Cory, EMNRD <Cory.Smith@state.nm.us>; 'Adeloye, Abiodun' <aadeloye@blm.gov>; l1thomas@blm.gov; jjmiller@fs.fed.us
Cc: Kurt Hoekstra <khoekstra@hilcorp.com>
Subject: [EXT] RE: [EXTERNAL] Agency Reportable – OPS – SJE – Area 13 – Run 1310 – SJ 7-5 #83 – Spill Report

Hi Cory – Thanks for letting me know. HEC will proceed with sampling tomorrow, beginning at the San Juan 27-5 #83 BGT sampling at 8am and proceeding to the San Juan 27-5 #89 confirmation sampling and finishing at the San Juan 27-4 #18 confirmation sampling. HEC will have field notes and pictures from each sampling event. Thanks!

Kind regards,

Lindsay Dumas
Environmental Specialist
Hilcorp Energy – L48 West
Office: 832-839-4585
Mobile: 281-794-9159

From: Smith, Cory, EMNRD [mailto:Cory.Smith@state.nm.us]
Sent: Monday, June 10, 2019 11:39 AM
To: Lindsay Dumas <ldumas@hilcorp.com>; 'Adeloye, Abiodun' <aadeloye@blm.gov>; l1thomas@blm.gov; jjmiller@fs.fed.us

Cc: Kurt Hoekstra <khoekstra@hilcorp.com>
Subject: RE: [EXTERNAL] Agency Reportable – OPS – SJE – Area 13 – Run 1310 – SJ 7-5 #83 – Spill Report

Lindsay,

Just got out of a meeting and Santa Fe has given us a high priority task that I have to complete by Wednesday so there is a low chance that I will beable to spend all day in the field sampling with HEC Tomorrow. I know you had discussed wanting OCD present for your sampling events that were all in the same area. The earliest day this week I would have is Thursday If the rescheduled time does not work I may beable to get an inspector to go or HEC can continue on per 19.15.29. 12 NMAC.

Cory Smith
Environmental Specialist
Oil Conservation Division
Energy, Minerals, & Natural Resources
1000 Rio Brazos, Aztec, NM 87410
(505)334-6178 ext 115
cory.smith@state.nm.us

From: Lindsay Dumas <ldumas@hilcorp.com>
Sent: Friday, June 7, 2019 2:00 PM
To: 'Adeloye, Abiodun' <aadeloye@blm.gov>; l1thomas@blm.gov; jjmiller@fs.fed.us; Smith, Cory, EMNRD <Cory.Smith@state.nm.us>
Subject: [EXT] RE: [EXTERNAL] Agency Reportable – OPS – SJE – Area 13 – Run 1310 – SJ 7-5 #83 – Spill Report

This location will be sampled on Tuesday June 11. I will send the time out on Monday. Thank you!

Kind regards,

Lindsay Dumas
Environmental Specialist
Hilcorp Energy – L48 West
Office: 832-839-4585
Mobile: 281-794-9159

From: Adeloye, Abiodun [mailto:aadeloye@blm.gov]
Sent: Tuesday, May 14, 2019 3:51 PM
To: Clayton Hamilton <clhamilton@hilcorp.com>
Cc: l1thomas@blm.gov; jjmiller@fs.fed.us; cory.smith@state.nm.us; Lindsay Dumas <ldumas@hilcorp.com>; Nick Kunze <nkunze@hilcorp.com>; Matt Henderson <mhenderson@hilcorp.com>
Subject: Re: [EXTERNAL] Agency Reportable – OPS – SJE – Area 13 – Run 1310 – SJ 7-5 #83 – Spill Report

Thank yo Clayton for the notification.

On Tue, May 14, 2019 at 10:59 AM Clayton Hamilton <clhamilton@hilcorp.com> wrote:

At some point during this past winter, Hilcorp Energy had a release at the San Juan 27-5 #83, API 3003920208, 09Twn: 027N Rng: 005W.

A release of produced water over 5bbls occurred. Over the course of the wet winter, the pit at the subject location was getting close to being full. Snow started melting and water ran down into the BGT cribbing. This pit is located right below a steep clay hillside, which exacerbated the run off. At some point, the cribbing filled up with storm run off to a level which allowed the precipitation to overflow and fill up the pit.

Hilcorp Environmental will submit an Initial C-141 within 15 days, and follow up with spill assessment.

Clayton Hamilton
Area 13 Production Foreman
Hilcorp Energy Company – San Juan East
Office – 505-324-5137
Cell – 505-419-3455

"Looking back is a bad habit" ~Rooster Cogburn

--

Abiodun Adeloye (Emmanuel)
Natural Resource Specialist
6251 College Blvd. Suite A
BLM - FFO
Phone: 505-564-7665
Cell #: 505-635-0984

Depth to water determination

New Mexico Office of the State Engineer

Point of Diversion Summary

Well Tag	POD Number	(quarters are 1=NW 2=NE 3=SW 4=SE) (quarters are smallest to largest) Q64	Q16	Q4	Sec	Twn	Rng	(NAD83 UTM in meters) X	Y
	SJ 00046	4	4		04	27N	05W	289133	4052788*

Driller License:		**Driller Company:**			
Driller Name:					
Drill Start Date:	01/13/1954	**Drill Finish Date:**	01/13/1954	**Plug Date:**	
Log File Date:	01/13/1954	**PCW Rcv Date:**		**Source:**	Shallow
Pump Type:		**Pipe Discharge Size:**		**Estimated Yield:**	10 GPM
Casing Size:	5.00	**Depth Well:**	506 feet	**Depth Water:**	260 feet

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

Depth to water determination – distance to POD

POD elevation: 6576’
POD GW depth: 260’

GW Depth: 6316’

SJ 27-5 unit 83 elevation: 6779’

Location >463’ above GW

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

Photographs – 6/11/19 Sampling Event

Well Sign

Southwest View

Photographs – 6/11/19 Sampling Event

Sample Corner 1

Sample Corner 2

Photographs – 6/11/19 Sampling Event

Sample Corner 3

Sample Corner 4

Pace Analytical®
National Center for Testing & Innovation

ANALYTICAL REPORT

June 24, 2019

HilCorp-Farmington, NM

Sample Delivery Group:	L1109387
Samples Received:	06/13/2019
Project Number:	S.J. 28-4#83
Description:	S.J. 28-4#83
Site:	S.J. 28-4#83
Report To:	Lindsay Dumas 382 Road 3100 Aztec, NM 87401

Entire Report Reviewed By: Daphne R Richards

Daphne Richards
Project Manager

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

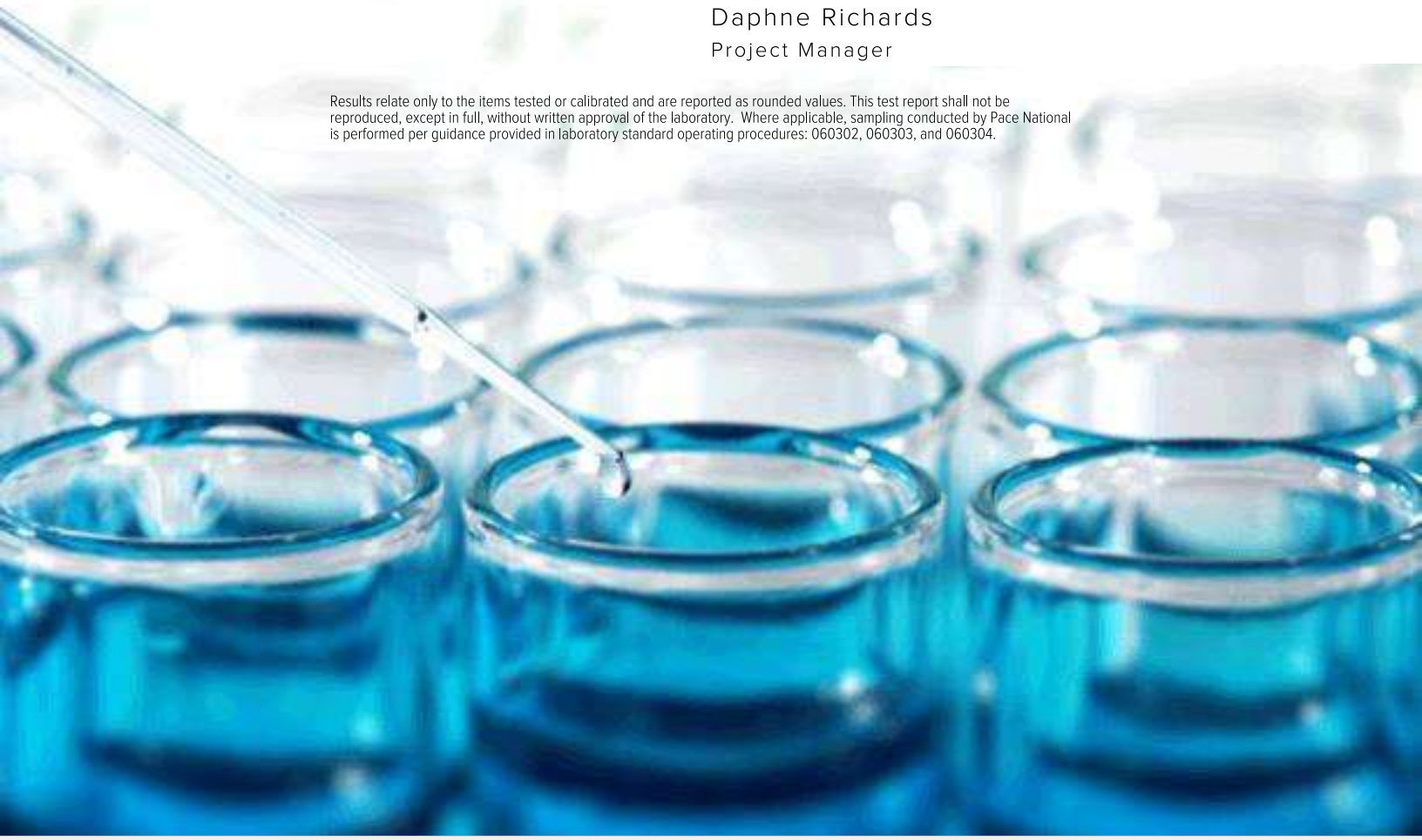


TABLE OF CONTENTS

SAMPLE SUMMARY

BGT CELLAR L1109387-01 Solid

Collected by	Collected date/time	Received date/time
Kurt	06/11/19 10:55	06/13/19 08:45

Method	Batch	Dilution	Preparation date/time	Analysis date/time	Analyst	Location
Wet Chemistry by Method 9056A	WG1297159	1	06/18/19 21:50	06/19/19 03:52	ELN	Mt. Juliet, TN
Volatile Organic Compounds (GC) by Method 8015/8021	WG1298410	1	06/18/19 16:59	06/19/19 21:47	DWR	Mt. Juliet, TN
Semi-Volatile Organic Compounds (GC) by Method 8015	WG1298631	10	06/20/19 08:02	06/21/19 17:36	FM	Mt. Juliet, TN

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

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	24.2		10.0	1	06/19/2019 03:52	WG1297159

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	06/19/2019 21:47	WG1298410
Toluene	ND		0.00500	1	06/19/2019 21:47	WG1298410
Ethylbenzene	ND		0.000500	1	06/19/2019 21:47	WG1298410
Total Xylene	ND		0.00150	1	06/19/2019 21:47	WG1298410
TPH (GC/FID) Low Fraction	0.112	B	0.100	1	06/19/2019 21:47	WG1298410
(S) a,a,a-Trifluorotoluene(FID)	*103*		*77.0-120*		*06/19/2019 21:47*	WG1298410
(S) a,a,a-Trifluorotoluene(PID)	*100*		*72.0-128*		*06/19/2019 21:47*	WG1298410

Semi-Volatile Organic Compounds (GC) by Method 8015

Analyte	Result mg/kg	Qualifier	RDL mg/kg	Dilution	Analysis date / time	Batch
C10-C28 Diesel Range	ND		40.0	10	06/21/2019 17:36	WG1298631
C28-C40 Oil Range	172		40.0	10	06/21/2019 17:36	WG1298631
(S) o-Terphenyl	*73.0*		*18.0-148*		*06/21/2019 17:36*	WG1298631

Sample Narrative:

L1109387-01 WG1298631: Dilution due to matrix.

Method Blank (MB)

(MB) R3422292-1 06/18/19 23:10

Analyte	MB Result mg/kg	MB Qualifier	MB MDL mg/kg	MB RDL mg/kg
Chloride	1.78	J	0.795	10.0

L1108021-01 Original Sample (OS) • Duplicate (DUP)

(OS) L1108021-01 06/19/19 00:53 • (DUP) R3422292-3 06/19/19 01:02

Analyte	Original Result (dry) mg/kg	DUP Result (dry) mg/kg	Dilution	DUP RPD %	DUP Qualifier	DUP RPD Limits %
Chloride	6.67	7.13	1	6.64	J	15

L1109583-01 Original Sample (OS) • Duplicate (DUP)

(OS) L1109583-01 06/19/19 04:01 • (DUP) R3422292-6 06/19/19 04:09

Analyte	Original Result (dry) mg/kg	DUP Result (dry) mg/kg	Dilution	DUP RPD %	DUP Qualifier	DUP RPD Limits %
Chloride	28.7	48.2	1	50.8	P1	15

Laboratory Control Sample (LCS)

(LCS) R3422292-2 06/18/19 23:19

Analyte	Spike Amount mg/kg	LCS Result mg/kg	LCS Rec. %	Rec. Limits %	LCS Qualifier
Chloride	200	200	99.8	80.0-120	

L1108021-03 Original Sample (OS) • Matrix Spike (MS) • Matrix Spike Duplicate (MSD)

(OS) L1108021-03 06/19/19 01:19 • (MS) R3422292-4 06/19/19 01:27 • (MSD) R3422292-5 06/19/19 01:36

Analyte	Spike Amount (dry) mg/kg	Original Result (dry) mg/kg	MS Result (dry) mg/kg	MSD Result (dry) mg/kg	MS Rec. %	MSD Rec. %	Dilution	Rec. Limits %	MS Qualifier	MSD Qualifier	RPD %	RPD Limits %
Chloride	743	32.6	819	828	106	107	1	80.0-120			1.06	15

Method Blank (MB)

(MB) R3422741-3 06/19/19 20:40

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	0.0758	J	0.0217	0.100
(S) α,α,α-Trifluorotoluene(FID)	*105*			*77.0-120*
(S) α,α,α-Trifluorotoluene(PID)	*102*			*72.0-128*

Laboratory Control Sample (LCS)

(LCS) R3422741-1 06/19/19 19:34

Analyte	Spike Amount mg/kg	LCS Result mg/kg	LCS Rec. %	Rec. Limits %	LCS Qualifier
Benzene	0.0500	0.0466	93.2	76.0-121	
Toluene	0.0500	0.0475	94.9	80.0-120	
Ethylbenzene	0.0500	0.0455	90.9	80.0-124	
Total Xylene	0.150	0.129	86.0	37.0-160	
(S) α,α,α-Trifluorotoluene(FID)			*102*	*77.0-120*	
(S) α,α,α-Trifluorotoluene(PID)			*99.8*	*72.0-128*	

Laboratory Control Sample (LCS)

(LCS) R3422741-2 06/19/19 19:56

Analyte	Spike Amount mg/kg	LCS Result mg/kg	LCS Rec. %	Rec. Limits %	LCS Qualifier
TPH (GC/FID) Low Fraction	5.50	5.72	104	72.0-127	
(S) α,α,α-Trifluorotoluene(FID)			*100*	*77.0-120*	
(S) α,α,α-Trifluorotoluene(PID)			*106*	*72.0-128*	

L1108308-01 Original Sample (OS) • Matrix Spike (MS) • Matrix Spike Duplicate (MSD)

(OS) L1108308-01 06/20/19 00:00 • (MS) R3422741-4 06/20/19 04:50 • (MSD) R3422741-5 06/20/19 05:12

Analyte	Spike Amount mg/kg	Original Result mg/kg	MS Result mg/kg	MSD Result mg/kg	MS Rec. %	MSD Rec. %	Dilution	Rec. Limits %	MS Qualifier	MSD Qualifier	RPD %	RPD Limits %
Benzene	0.0500	ND	1.34	1.20	107	96.0	25	10.0-155			11.1	32
Toluene	0.0500	ND	1.37	1.36	110	109	25	10.0-160			0.955	34
Ethylbenzene	0.0500	ND	1.32	1.18	106	94.4	25	10.0-160			11.1	32
Total Xylene	0.150	ND	3.61	3.26	96.3	86.9	25	10.0-160			10.2	32
(S) α,α,α-Trifluorotoluene(FID)					*91.2*	*96.1*		*77.0-120*				
(S) α,α,α-Trifluorotoluene(PID)					*106*	*106*		*72.0-128*				

L1108308-01 Original Sample (OS) • Matrix Spike (MS) • Matrix Spike Duplicate (MSD)

(OS) L1108308-01 06/20/19 00:00 • (MS) R3422741-6 06/20/19 05:34 • (MSD) R3422741-7 06/20/19 05:56

Analyte	Spike Amount mg/kg	Original Result mg/kg	MS Result mg/kg	MSD Result mg/kg	MS Rec. %	MSD Rec. %	Dilution	Rec. Limits %	MS Qualifier	MSD Qualifier	RPD %	RPD Limits %
TPH (GC/FID) Low Fraction	5.50	37.3	160	172	89.6	97.9	25	10.0-151			6.93	28
(S) α,α,α-Trifluorotoluene(FID)					*109*	*111*		*77.0-120*				
(S) α,α,α-Trifluorotoluene(PID)					*110*	*111*		*72.0-128*				

Method Blank (MB)

(MB) R3423439-1 06/21/19 13:49

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	0.298	J	0.274	4.00
(S) o-Terphenyl	*67.0*			*18.0-148*

Laboratory Control Sample (LCS)

(LCS) R3423439-2 06/21/19 14:03

Analyte	Spike Amount mg/kg	LCS Result mg/kg	LCS Rec. %	Rec. Limits %	LCS Qualifier
C10-C28 Diesel Range	50.0	42.6	85.2	50.0-150	
(S) o-Terphenyl			*70.4*	*18.0-148*	

L1109221-06 Original Sample (OS) • Matrix Spike (MS) • Matrix Spike Duplicate (MSD)

(OS) L1109221-06 06/21/19 15:42 • (MS) R3423439-3 06/21/19 15:57 • (MSD) R3423439-4 06/21/19 16:11

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	72.2	U	ND	ND	0.000	0.000	1	50.0-150	J6	J6	0.000	20
(S) o-Terphenyl					*63.4*	*62.6*		*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.
J6	The sample matrix interfered with the ability to make any accurate determination; spike value is low.
P1	RPD value not applicable for sample concentrations less than 5 times the reporting limit.

ACCREDITATIONS & LOCATIONS

ONE LAB. NATIONWIDE.

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

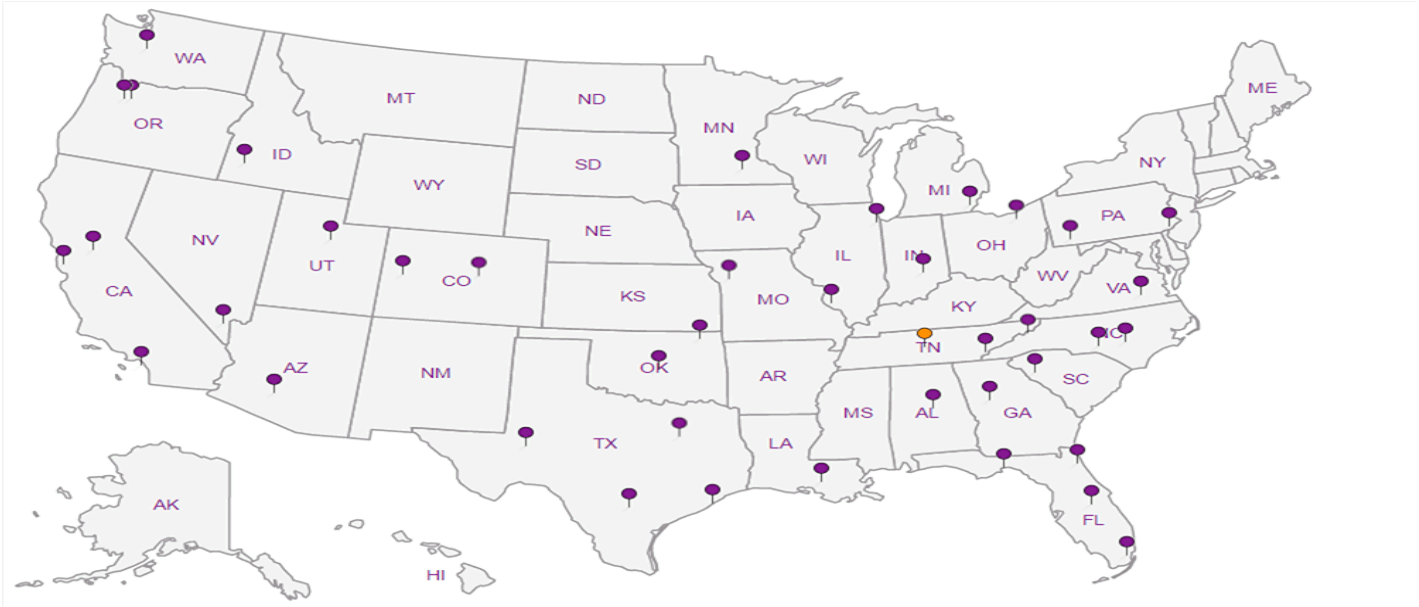
Third Party Federal Accreditations

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.



ACCOUNT:	PROJECT:	SDG:	DATE/TIME:	PAGE:
HilCorp-Farmington, NM	S.J. 28-4#83	L1109387	06/24/19 09:07	11 of 13

HilCorp-Farmington, NM

382 Road 3100
Aztec, NM 87401

Report to: LINDSAY DUMAS

Billing Information:
PO Box 61529
Houston, TX 77208
khoekstra@hilcorp.com

Email To: ldumas@hilcorp.com

Project Description:

City/State Collected:

Phone:
Fax:

Client Project #

Lab Project #

Collected by (print): KURT

Site/Facility ID # S.J. 27-5 #83

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

Pres Chk

Analysis / Container / Preservative

Sample ID	Comp/Grab	Matrix *	Depth	Date	Time	No. of Cntrs	TPH 8015 - DRO, GRO, MRO	BTEX 8021	CHLORIDE							Remarks	Sample # (lab only)
BGT CELLAR	Comp	SS		6-11-19	10:55	1	X	X	X								-01

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# L1109387
1002

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 # 1882 8626 3537

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
Kurt Hoekstra	6-12-19	7:15			
Relinquished by : (Signature)	Date:	Time:	Received by: (Signature)	Temp: A38F °C 12.4+.2=12.6 Bottles Received: 1	
Relinquished by : (Signature)	Date:	Time:	Received for lab by: (Signature)	Date: 6/13/19 Time: 8:45	Hold: Condition: (NCF) OK

Login #: L1109387	Client: HILCORANM	Date: 6/13/19	Evaluated by: Jeremy

Non-Conformance (check applicable items)

	Sample Integrity		Chain of Custody Clarification		
	Parameter(s) past holding time		Login Clarification Needed		**If Broken Container:**
x	Temperature not in range		Chain of custody is incomplete		Insufficient packing material around container
	Improper container type		Please specify Metals requested.		Insufficient packing material inside cooler
	pH not in range.		Please specify TCLP requested.		Improper handling by carrier (FedEx / UPS / Courie
	Insufficient sample volume.		Received additional samples not listed on coc.		Sample was frozen
	Sample is biphasic.		Sample ids on containers do not match ids on coc		Container lid not intact
	Vials received with headspace.		Trip Blank not received.		**If no Chain of Custody:**
	Broken container		Client did not "X" analysis.		Received by:
	Broken container:		Chain of Custody is missing		Date/Time:
	Sufficient sample remains				Temp./Cont. Rec./pH:
					Carrier:
					Tracking#

Login Comments: Received at 12.6 Deg C. All ice Melted.

Client informed by:		Call		Email	X	Voice Mail		Date: 6/14	Time: 954
TSR Initials: DR	Client Contact:KH								

Login Instructions:

Qualify for temperature and proceed with analysis

District I
1625 N. French Dr., Hobbs, NM 88240
Phone:(575) 393-6161 Fax:(575) 393-0720
District II
811 S. First St., Artesia, NM 88210
Phone:(575) 748-1283 Fax:(575) 748-9720
District III
1000 Rio Brazos Rd., Aztec, NM 87410
Phone:(505) 334-6178 Fax:(505) 334-6170
District IV
1220 S. St Francis Dr., Santa Fe, NM 87505
Phone:(505) 476-3470 Fax:(505) 476-3462

State of New Mexico
Energy, Minerals and Natural Resources
Oil Conservation Division
1220 S. St Francis Dr.
Santa Fe, NM 87505

CONDITIONS

Action 93181

CONDITIONS

Operator: HILCORP ENERGY COMPANY 1111 Travis Street Houston, TX 77002	OGRID: 372171
	Action Number: 93181
	Action Type: [C-141] Release Corrective Action (C-141)

CONDITIONS

Created By	Condition	Condition Date
nvelez	None	3/29/2022