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

State of New Mexico
Energy Minerals and Natural Resources Department

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

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

Incident ID	
District RP	
Facility ID	
Application ID	

Release Notification

Responsible Party

Responsible Party Hilcorp Energy	OGRID 372171
Contact Name Clara Cardoza	Contact Telephone 505.564.0733
Contact email ccardoza@hilcorp.com	Incident # *(assigned by OCD)* NCS1909331514
Contact mailing address 382 CR 3100, Aztec NM 87410	

DENIED

BY: Cory Smith
DATE: 7/9/19 (505) 334-6178 Ext. 115

RCVD After 7/1/19 No Post Mark Hand Delivered must Be Sent through Fee's Portal.

Location of Release Source

Latitude 36.7374039 Longitude -107.9133835
(NAD 83 in decimal degrees to 5 decimal places)

Site Name San Juan Nye Federal 1	Site Type Gas Well
Date Release Discovered 4/2/2019	API# *(if applicable)* 30-045-11994

Unit Letter	Section	Township	Range	County
L	08	29N	10W	San Juan

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

DISTRICT III
JUL 09 2019
BROWN

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) 85	Volume Recovered (bbls) 0
	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
Release due to corrosion at the bottom of the BGT

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? An unauthorized release of a volume, excluding gases, of 25 barrels or more

If YES, was immediate notice given to the OCD? By whom? To whom? When and by what means (phone, email, etc)?
4/3/19 to Cory Smith at 8:45 a.m. and 4/3/2019 to Emmanuel Adeloye at 8:40 a.m. by Clara Cardoza via phone to both.
Email follow-up to Cory Smith, Emmanuel Adeloye and Jim Griswold 4/3/2019 @ 9:11 a.m.

Initial Response

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

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

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

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

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

Printed Name: Clara Cardoza Title: Environmental Specialist

Signature: Clara Cardoza Date: 5/20/2019

email: ccardoza@hilcorp.com Telephone: 505.564.0733

OCD Only

Received by: Date:

State of New Mexico
Oil Conservation Division

Incident ID	
District RP	
Facility ID	
Application ID	

Site Assessment/Characterization

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

What is the shallowest depth to groundwater beneath the area affected by the release?	>100 ft (ft bgs)
Did this release impact groundwater or surface water?	☐ Yes ☒ No
Are the lateral extents of the release within 300 feet of a continuously flowing watercourse or any other significant watercourse?	☐ Yes ☒ No
Are the lateral extents of the release within 200 feet of any lakebed, sinkhole, or playa lake (measured from the ordinary high-water mark)?	☐ Yes ☒ No
Are the lateral extents of the release within 300 feet of an occupied permanent residence, school, hospital, institution, or church?	☐ Yes ☒ No
Are the lateral extents of the release within 500 horizontal feet of a spring or a private domestic fresh water well used by less than five households for domestic or stock watering purposes?	☐ Yes ☒ No
Are the lateral extents of the release within 1000 feet of any other fresh water well or spring?	☐ Yes ☒ No
Are the lateral extents of the release within incorporated municipal boundaries or within a defined municipal fresh water well field?	☐ Yes ☒ No
Are the lateral extents of the release within 300 feet of a wetland?	☐ Yes ☒ No
Are the lateral extents of the release overlying a subsurface mine?	☐ Yes ☒ No
Are the lateral extents of the release overlying an unstable area such as karst geology?	☐ Yes ☒ No
Are the lateral extents of the release within a 100-year floodplain?	☐ Yes ☒ No
Did the release impact areas **not** on an exploration, development, production, or storage site?	☐ Yes ☒ No

Attach a comprehensive report (electronic submittals in .pdf format are preferred) demonstrating the lateral and vertical extents of soil contamination associated with the release have been determined. Refer to 19.15.29.11 NMAC for specifics.

Characterization Report Checklist: ***Each of the following items must be included in the report.***

- ☒ Scaled site map showing impacted area, surface features, subsurface features, delineation points, and monitoring wells.
- ☒ Field data
- ☒ Data table of soil contaminant concentration data
- ☒ Depth to water determination
- ☒ Determination of water sources and significant watercourses within ½-mile of the lateral extents of the release
- ☐ Boring or excavation logs
- ☒ Photographs including date and GIS information
- ☒ Topographic/Aerial maps
- ☒ Laboratory data including chain of custody

If the site characterization report does not include completed efforts at remediation of the release, the report must include a proposed remediation plan. That plan must include the estimated volume of material to be remediated, the proposed remediation technique, proposed sampling plan and methods, anticipated timelines for beginning and completing the remediation. The closure criteria for a release are contained in Table 1 of 19.15.29.12 NMAC, however, use of the table is modified by site- and release-specific parameters.

State of New Mexico
Oil Conservation Division

Incident ID	
District RP	
Facility ID	
Application ID	

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

Printed Name: Clara Cardoza Title: Environmental Specialist

Signature: Clara Cardoza Date: 5/20/2019

email: ccardoza@hilcorp.com Telephone: 505.564.0733

OCD Only

Received by: Date:

State of New Mexico
Oil Conservation Division

Incident ID	
District RP	
Facility ID	
Application ID	

Closure

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

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

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

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

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

☐ Description of remediation activities

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

Printed Name: Clara Cardoza Title: Environmental Specialist

Signature: Clara Cardoza Date: 5/20/2019

email: ccardoza@hilcorp.com Telephone: 505.564.0733

OCD Only

Received by: OCD Date: 7/9/19

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:

Printed Name: Title:

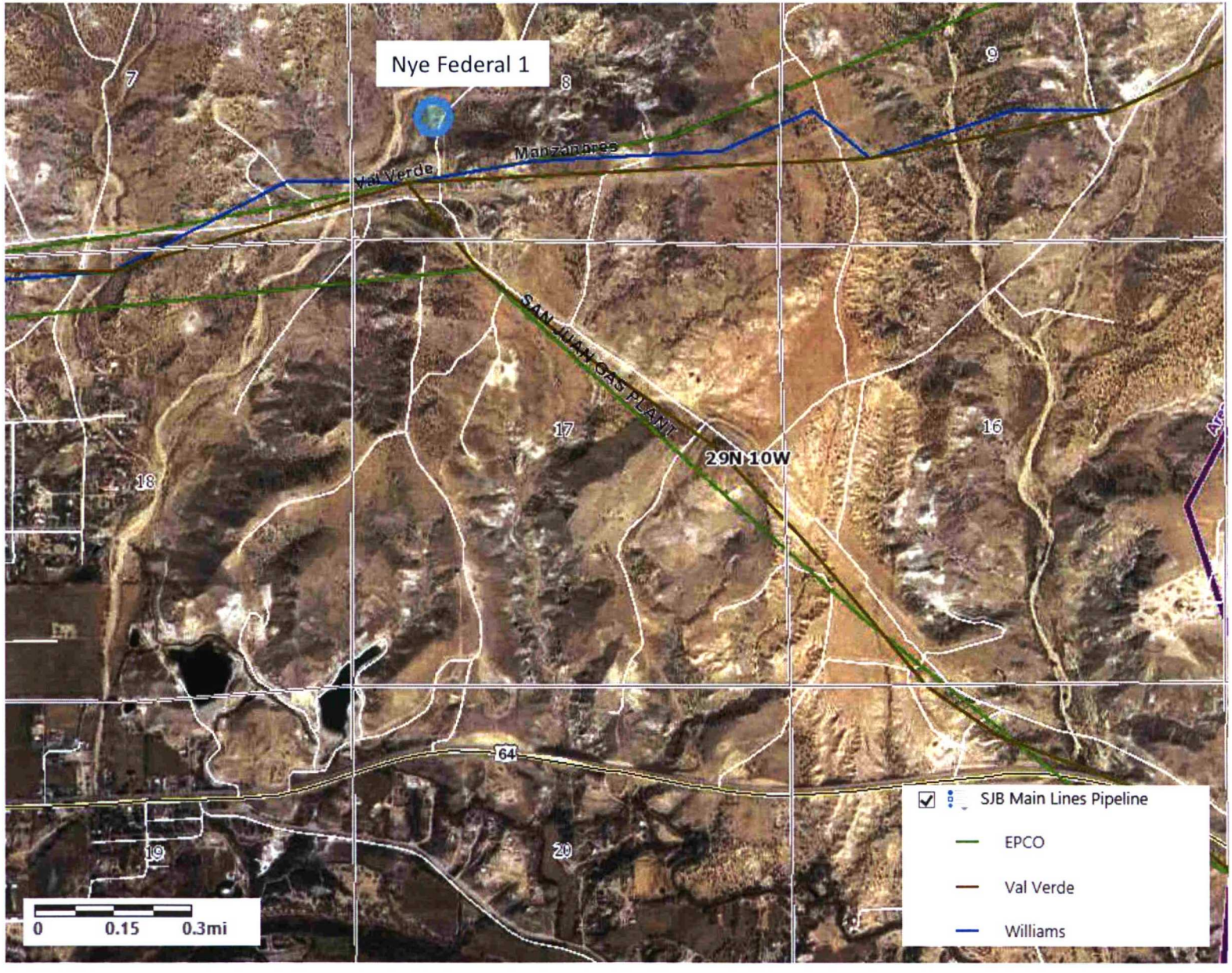
Executive Summary

On April 2, 2019 Hilcorp Energy had a release of 85 bbls of produced water at the Nye Federal 1. The release was due to corrosion at the bottom of the below grade tank. The produced water was contained within the area of the pit tank. Repairs were made to the tank in place. The BGT was also brought to 2013 standards per NMAC 19.15.17.11.I.(4).

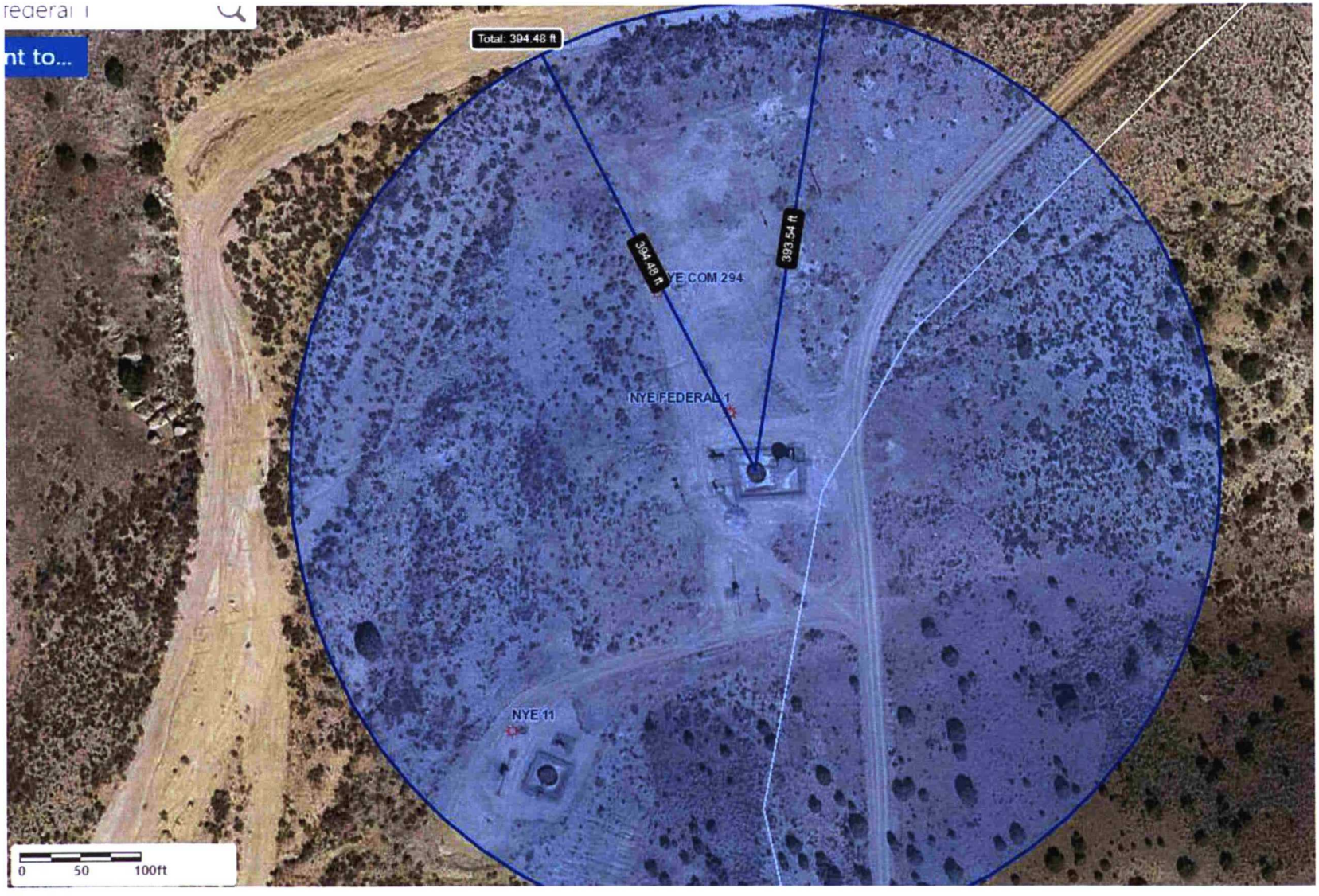
Confirmation sampling was conducted on April 12th at 10:00 a.m. in accordance with NMAC 19.15.29.12.D.

This site is ranked >100 ft per NMAC 19.15.29.12.E. Lab results came back below NMOCD action levels. Because this is a BGT there will be 4 ft of non-waste containing, uncontaminated, earthen material with chloride concentrations less than 600 mg/kg upon P&Aing the facility in accordance with NMAC19.15.29.13.D.(1).


N
NYE COM 294
8
NYE FEDERAL 1
29N 10W
0
30
60ft
Sample Area
Sample Location


Nye Federal 1
7
8
9
Manzanares
Val Verde
SAN JUAN GAS PLANT
29N 10W
17
16
18
64
19
29
0
0.15
0.3mi
SJB Main Lines Pipeline
EPCO
Val Verde
Williams

Distance to watercourse



Depth to groundwater

New Mexico Office of the State Engineer

Water Column/Average Depth to Water

(A CLW##### in the POD suffix indicates the POD has been replaced & no longer serves a water right file.)

(R=POD has been replaced, O=orphaned, C=the file is closed)

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

(NAD83 UTM in meters)

(In feet)

POD Number	Code	POD Sub-basin	County	Q 64	Q 16	Q 4	Sec	Twn	Rng	X	Y	Depth Well	Depth Water	Water Column
SJ 00785 S		SJ	SJ	2	4	2	04	29N	10W	242705	4071829*	20		
SJ 03023		SJM2	SJ	1	3	1	18	29N	10W	238077	4068756*	90	65	25
SJ 03081		SJM2	SJ	4	1	3	18	29N	10W	238263	4068158*	20		
SJ 03502		SJM2	SJ	1	3	1	18	29N	10W	238077	4068756*	150		

Average Depth to Water: **65 feet**

Minimum Depth: **65 feet**

Maximum Depth: **65 feet**

Record Count: 4

PLSS Search:

Section(s): 4, 5, 6, 7, 8, 9, 16, 17, 18 **Township:** 29N **Range:** 10W

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

6/26/19 9:56 AM

WATER COLUMN/ AVERAGE DEPTH TO WATER

Approximate elevation of SJ 03023 is 5644 ft. Nye Fed 1 elevation is 5681 ft. Since groundwater at the SJ 03023 is at 65 ft, the approximate groundwater depth at the Nye Fed 1 is 102 ft.

Depth to groundwater

#5E 30-045-24056
#2 30-045-08405

DATA SHEET FOR DEEP GROUND BED CATHODIC PROTECTION WELLS
NORTHWESTERN NEW MEXICO

Operator Meridian Oil Inc. Location: Unit E Sec. 17 Twp 29 Rng 10

Name of Well/Wells or Pipeline Serviced Hubbell #5E, Hubbell #2

Elevation 5760 Completion Date 7-18-95 Total Depth 392 Land Type F

Casing Strings, Sizes, Types & Depths 100' of 8" P.V.C

If Casing Strings are cemented, show amounts & types used 21 bags of type II

If Cement or Bentonite Plugs have been placed, show depths & amounts used no plugs

Depths & thickness of water zones with description of water: Fresh, Clear, Salty, Sulphur, Etc. 140' and was clear

Depths gas encountered: no gas

Ground bed depth with type & amount of coke breeze used: 392' with 113 (5016) sacks of Asbury 2118R

Depths anodes placed: #1 is at 360' and #15 is at 165'

Depths vent pipes placed: Bottom to Surface

Vent pipe perforations: Up to 130'

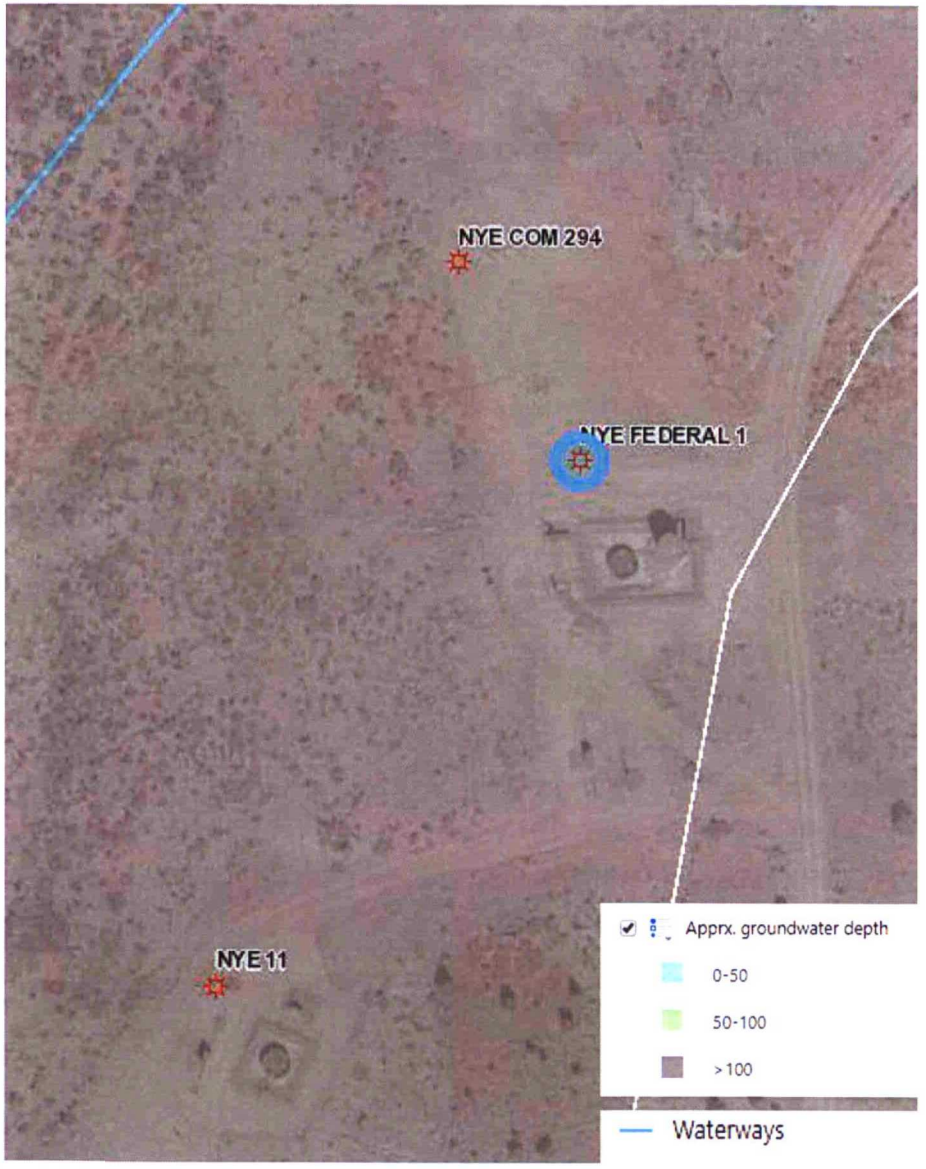
RECEIVED
JAN 1 1 1996
OIL CON. DIV.
DIST. 3

Remarks:

If any of the above data is unavailable, please indicate so. Copies of all logs, including Drillers Log, Water Analyses & Well Bore Schematics should be submitted when available. Unplugged abandoned wells are to be included.

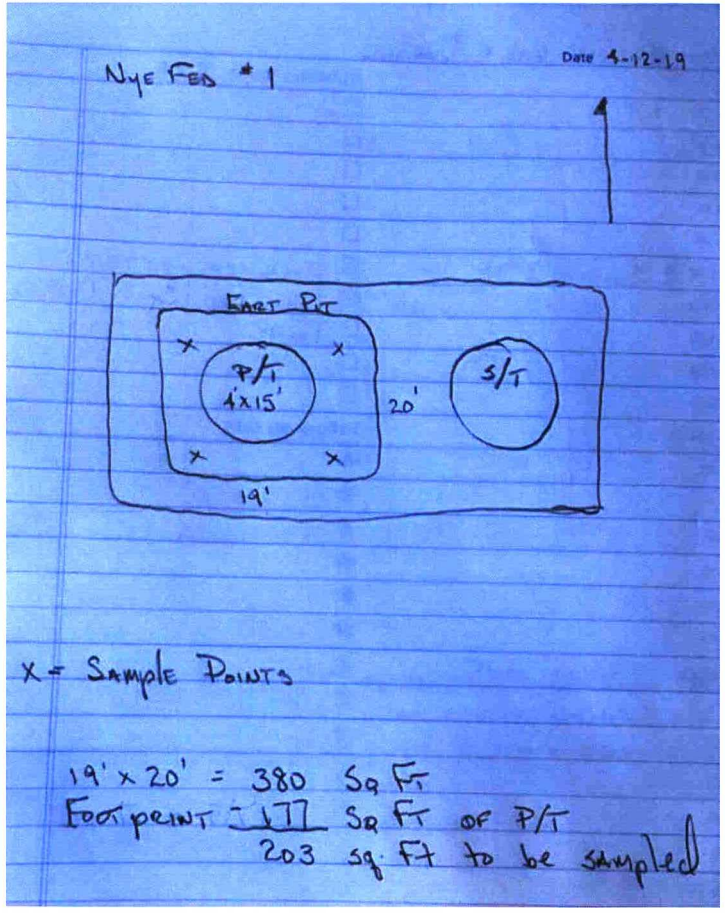
Land Type may be shown: F-Federal; I-Indian; S-State; P-Fee.
If Federal or Indian, add Lease Number.

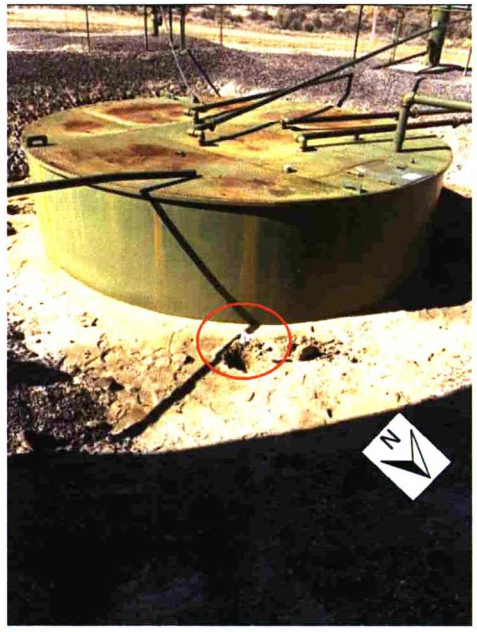
- Cathodic info from a nearby Hubbell 2/5E. Elevation at Hubbell 2 is 5713 ft and Nye Fed 1 is 5681 ft which puts groundwater at Nye Federal 1 approximately 108 ft.

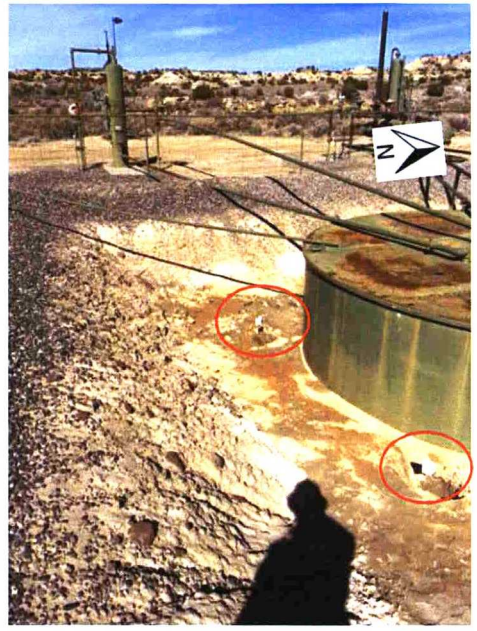


- Internal mapping system which shows groundwater at > 100ft.

Sample locations/field notes







- In accordance with NMAC 19.15.29.12.D (1) and NMAC 19.15.19.12.D (1)(c) – one composite sample was taken within the bermed area.

Clara Cardoza

From: Clara Cardoza
Sent: Wednesday, April 10, 2019 9:59 AM
To: cory.smith@state.nm.us; Abiodun Adeloye
Cc: Kurt Hoekstra; Patrick Hudman; whitney thomas (l1thomas@blm.gov)
Subject: NCS1909331514 Nye Federal 1 - Confirmation Sampling

Cory/Emmanuel – please let this serve as 48 hour notification for confirmation sampling at the Nye Federal 1 for Friday April 12th at 10:00 a.m. Let me know if you have any questions or concerns.

Thank you,

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

					Laboratory Results									
Sample Name	Date	Sample Location	Field VOCs by PID (ppm)	Chloride (mg/kg)	TPH as DRO (mg/kg)	TPH as GRO (mg/kg)	TPH as MRO (mg/kg)	Total TPH (mg/kg)	GRO + DRO (mg/kg)	Benzene (mg/kg)	Toluene (mg/kg)	Ethylbenzene (mg/kg)	Total Xylene (mg/kg)	Total BTEX (mg/kg)
NMOCD Action Level				20,000	-	-	-	2,500	1,000	10	-	-	-	50
BGT PIT	4/12/19	Nye Fed 1	n/a	748	8.38	ND	7.71	16.1	8.38	0.000839	ND	ND	0.00469	0.005529

Pace Analytical®
National Center for Testing & Innovation

ANALYTICAL REPORT

April 18, 2019

HilCorp-Farmington, NM

Sample Delivery Group:	L1088864
Samples Received:	04/13/2019
Project Number:	
Description:	NYE FEDERAL #1
Site:	NYE FEDERAL #1
Report To:	Clara Cardoza 382 Road 3100 Aztec, NM 87401

Entire Report Reviewed By: Daphne R Richards

Daphne Richards
Project Manager

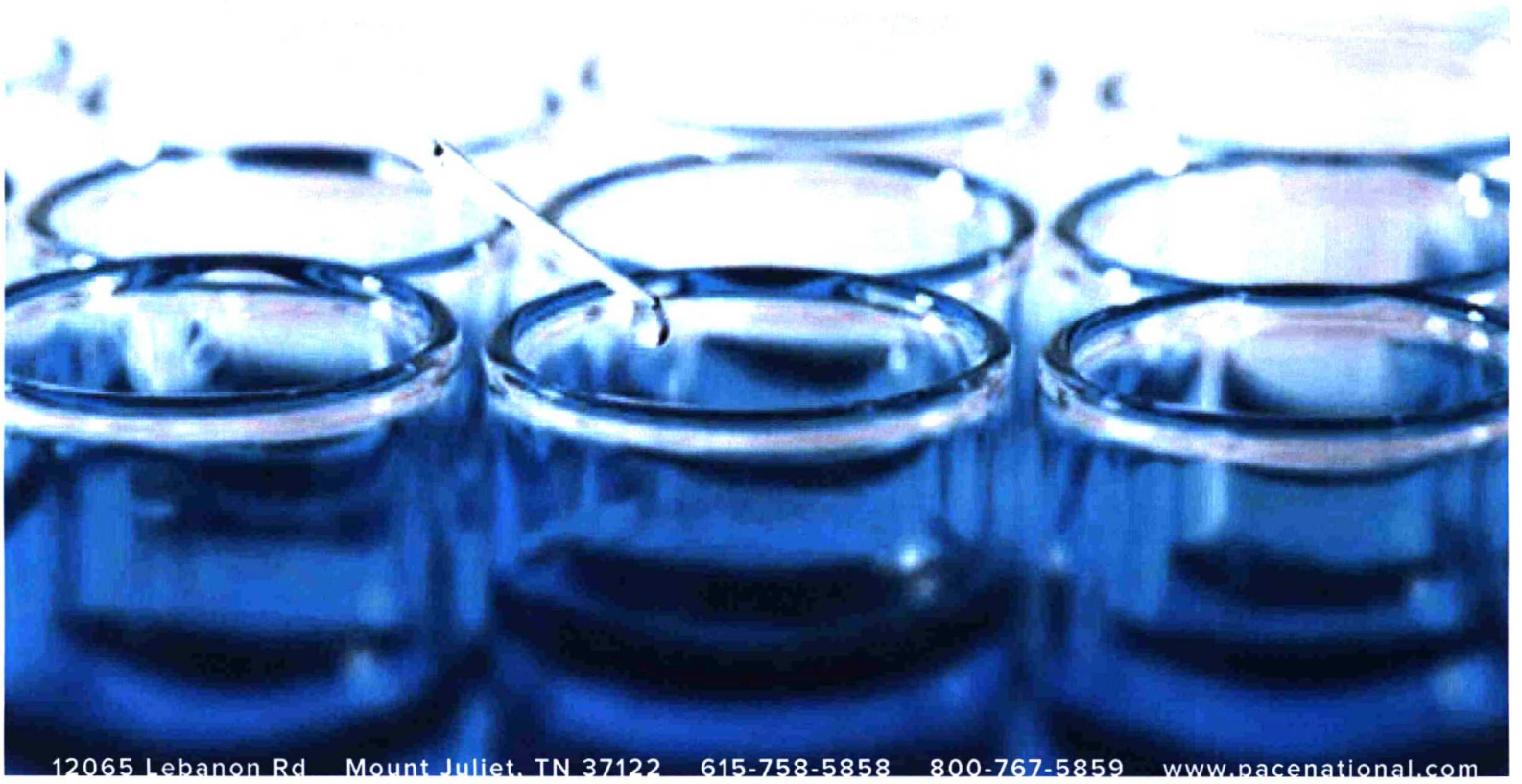


TABLE OF CONTENTS

SAMPLE SUMMARY

ONE LAB. NATIONWIDE.

BGT PIT L1088864-01 Solid

Collected by	Collected date/time	Received date/time
Kurt Hoekstra	04/12/19 10:11	04/13/19 08:45

Method	Batch	Dilution	Preparation date/time	Analysis date/time	Analyst	Location
Wet Chemistry by Method 9056A	WG1266108	1	04/17/19 09:45	04/17/19 14:24	ELN	Mt. Juliet, TN
Volatile Organic Compounds (GC) by Method 8015/8021	WG1265882	1	04/14/19 08:39	04/14/19 13:16	DWR	Mt. Juliet, TN
Semi-Volatile Organic Compounds (GC) by Method 8015	WG1266271	1	04/15/19 07:53	04/15/19 14:58	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

	Result	Qualifier	RDL	Dilution	Analysis	Batch
Analyte	mg/kg		mg/kg		date / time	
Chloride	748		10.0	1	04/17/2019 14:24	WG1266108

Volatile Organic Compounds (GC) by Method 8015/8021

	Result	Qualifier	RDL	Dilution	Analysis	Batch
Analyte	mg/kg		mg/kg		date / time	
Benzene	0.000839		0.000500	1	04/14/2019 13:16	WG1265882
Toluene	ND		0.00500	1	04/14/2019 13:16	WG1265882
Ethylbenzene	ND		0.000500	1	04/14/2019 13:16	WG1265882
Total Xylene	0.00469		0.00150	1	04/14/2019 13:16	WG1265882
TPH (GC/FID) Low Fraction	ND		0.100	1	04/14/2019 13:16	WG1265882
(S) a,a,a-Trifluorotoluene(FID)	*98.8*		*77.0-120*		*04/14/2019 13:16*	WG1265882
(S) a,a,a-Trifluorotoluene(PID)	*92.7*		*72.0-128*		*04/14/2019 13:16*	WG1265882

Semi-Volatile Organic Compounds (GC) by Method 8015

	Result	Qualifier	RDL	Dilution	Analysis	Batch
Analyte	mg/kg		mg/kg		date / time	
C10-C28 Diesel Range	8.38		4.00	1	04/15/2019 14:58	WG1266271
C28-C40 Oil Range	7.71		4.00	1	04/15/2019 14:58	WG1266271
(S) o-Terphenyl	*58.9*		*18.0-148*		*04/15/2019 14:58*	WG1266271

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

Method Blank (MB)

(MB) R3402649-1 04/17/19 13:34

Analyte	MB Result	MB Qualifier	MB MDL	MB RDL
	mg/kg		mg/kg	mg/kg
Chloride	3.60	J	0.795	10.0

L1088805-83 Original Sample (OS) • Duplicate (DUP)

(OS) L1088805-83 04/17/19 16:05 • (DUP) R3402649-6 04/17/19 16:14

Analyte	Original Result	DUP Result	Dilution	DUP RPD	DUP Qualifier	DUP RPD Limits
	mg/kg	mg/kg		%		%
Chloride	14.6	13.4	1	8.88		15

L1088879-09 Original Sample (OS) • Duplicate (DUP)

(OS) L1088879-09 04/17/19 17:48 • (DUP) R3402649-7 04/17/19 17:56

Analyte	Original Result	DUP Result	Dilution	DUP RPD	DUP Qualifier	DUP RPD Limits
	mg/kg	mg/kg		%		%
Chloride	638	637	1	0.246		15

Laboratory Control Sample (LCS)

(LCS) R3402649-3 04/17/19 14:00

Analyte	Spike Amount	LCS Result	LCS Rec.	Rec. Limits	LCS Qualifier
	mg/kg	mg/kg	%	%	
Chloride	200	196	98.0	80.0-120	

L1088864-01 Original Sample (OS) • Matrix Spike (MS) • Matrix Spike Duplicate (MSD)

(OS) L1088864-01 04/17/19 14:24 • (MS) R3402649-4 04/17/19 14:32 • (MSD) R3402649-5 04/17/19 14:40

Analyte	Spike Amount	Original Result	MS Result	MSD Result	MS Rec.	MSD Rec.	Dilution	Rec. Limits	MS Qualifier	MSD Qualifier	RPD	RPD Limits
	mg/kg	mg/kg	mg/kg	mg/kg	%	%		%			%	%
Chloride	500	748	1310	1240	112	98.9	1	80.0-120	E	E	5.00	15

Method Blank (MB)

(MB) R3401729-5 04/14/19 12:15

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	0.0219	J	0.0217	0.100
(S) a,a,a-Trifluorotoluene(FID)	*106*			*77.0-120*
(S) a,a,a-Trifluorotoluene(PID)	*99.8*			*72.0-128*

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

(LCS) R3401729-1 04/14/19 10:33 • (LCSD) R3401729-2 04/14/19 10:53

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	0.0500	0.0517	99.9	103	76.0-121			3.44	20
Toluene	0.0500	0.0482	0.0501	96.5	100	80.0-120			3.78	20
Ethylbenzene	0.0500	0.0535	0.0558	107	112	80.0-124			4.14	20
Total Xylene	0.150	0.157	0.163	105	109	37.0-160			3.50	20
(S) a,a,a-Trifluorotoluene(FID)				*105*	*105*	*77.0-120*				
(S) a,a,a-Trifluorotoluene(PID)				*99.5*	*98.9*	*72.0-128*				

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

(LCS) R3401729-3 04/14/19 11:13 • (LCSD) R3401729-4 04/14/19 11:34

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	4.90	5.08	89.1	92.3	72.0-127			3.59	20
(S) a,a,a-Trifluorotoluene(FID)				*93.6*	*93.8*	*77.0-120*				
(S) a,a,a-Trifluorotoluene(PID)				*100*	*101*	*72.0-128*				

L1088390-07 Original Sample (OS) • Matrix Spike (MS) • Matrix Spike Duplicate (MSD)

(OS) L1088390-07 04/14/19 18:23 • (MS) R3401729-6 04/14/19 19:24 • (MSD) R3401729-7 04/14/19 19:45

Analyte	Spike Amount mg/kg	Original Result mg/kg	MS Result mg/kg	MSD Result mg/kg	MS Rec. %	MSD Rec. %	Dilution	Rec. Limits %	MS Qualifier	MSD Qualifier	RPD %	RPD Limits %
Benzene	0.0500	4.16	29.6	27.7	102	94.1	500	10.0-155			6.79	32
Toluene	0.0500	21.5	44.2	41.5	90.7	79.7	500	10.0-160			6.41	34
Ethylbenzene	0.0500	ND	54.8	51.2	219	205	500	10.0-160	J5	J5	6.78	32
Total Xylene	0.150	33.6	125	119	122	113	500	10.0-160	J5	J5 J6	5.41	32
(S) a,a,a-Trifluorotoluene(FID)					*104*	*103*		*77.0-120*				
(S) a,a,a-Trifluorotoluene(PID)					*103*	*102*		*72.0-128*				

L1088390-07 Original Sample (OS) • Matrix Spike (MS) • Matrix Spike Duplicate (MSD)

(OS) L1088390-07 04/14/19 18:23 • (MS) R3401729-8 04/14/19 20:05 • (MSD) R3401729-9 04/14/19 20:26

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	3150	4490	4760	48.8	58.5	500	10.0-151			5.78	28
(S) a,a,a-Trifluorotoluene(FID)					*105*	*106*		*77.0-120*				
(S) a,a,a-Trifluorotoluene(PID)					*106*	*107*		*72.0-128*				

Method Blank (MB)

(MB) R3401835-1 04/15/19 12:49

Analyte	MB Result	MB Qualifier	MB MDL	MB RDL
	mg/kg		mg/kg	mg/kg
C10-C28 Diesel Range	U		1.61	4.00
C28-C40 Oil Range	U		0.274	4.00
(S) o-Terphenyl	*71.6*			*18.0-148*

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

(LCS) R3401835-2 04/15/19 13:05 • (LCSD) R3401835-3 04/15/19 13:21

Analyte	Spike Amount	LCS Result	LCSD Result	LCS Rec.	LCSD Rec.	Rec. Limits	LCS Qualifier	LCSD Qualifier	RPD	RPD Limits
	mg/kg	mg/kg	mg/kg	%	%	%			%	%
Extractable Petroleum Hydrocarbon	50.0	33.2	29.4	66.4	58.8	50.0-150			12.1	20
C10-C28 Diesel Range	50.0	35.9	31.9	71.8	63.8	50.0-150			11.8	20
(S) o-Terphenyl				*82.4*	*70.7*	*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
E	The analyte concentration exceeds the upper limit of the calibration range of the instrument established by the initial calibration (ICAL).
J	The identification of the analyte is acceptable; the reported value is an estimate.
J5	The sample matrix interfered with the ability to make any accurate determination; spike value is high.
J6	The sample matrix interfered with the ability to make any accurate determination; spike value is low.

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

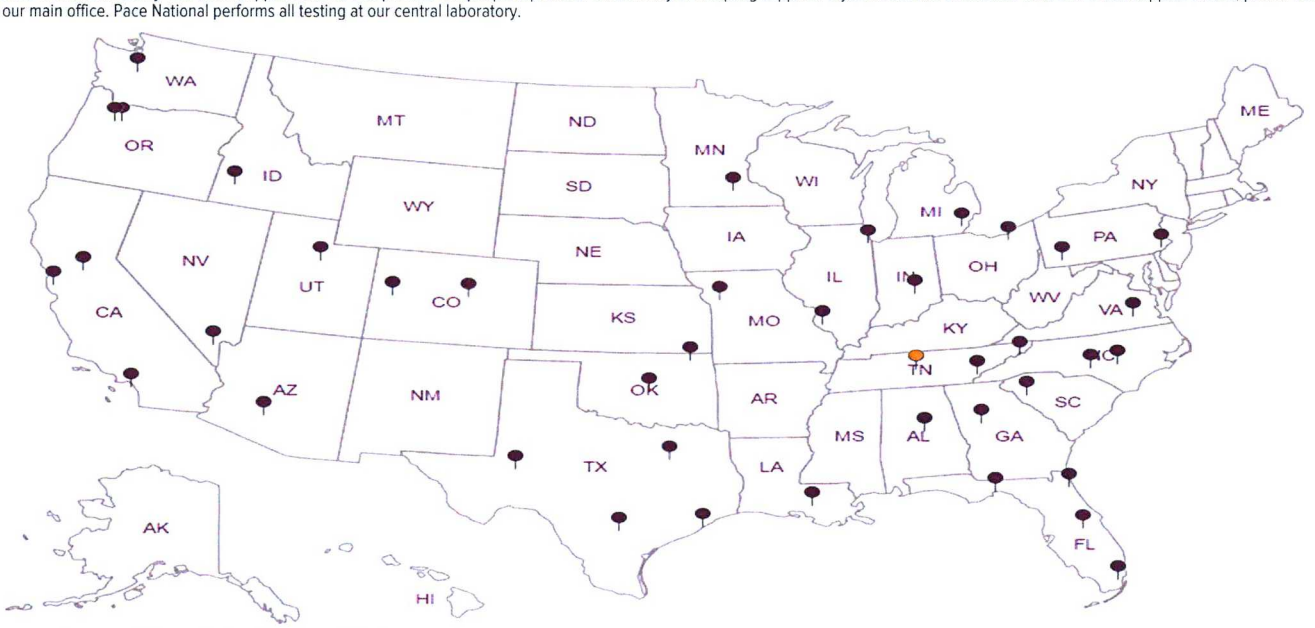
Third Party Federal Accreditations

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.



HilCorp-Farmington, NM

382 Road 3100
Aztec, NM 87401

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

Report to: Clara Cardoza
Email To: ccardoza@hilcorp.com

Project Description:
City/State Collected:

Phone: 505-486-9543
Fax:

Client Project #
Lab Project #

Collected by (print): Kurt
Collected by (signature): Kurt Boekstra
Immediately Packed on Ice N ___ Y X

Site/Facility ID #: NYE FEDERAL #1
P.O. #
Quote #

Rush? (Lab MUST Be Notified)
___ Same Day ___ Five Day
___ Next Day ___ 5 Day (Rad Only)
X Two Day ___ 10 Day (Rad Only)
___ Three Day
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
BGT Pit	Comp	Soil		4-12-19	10:11	1	X	X	X

Chain of Custody

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# L1088864
E215

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:

pH _____ Temp _____
Flow _____ Other _____

Samples returned via:
__ UPS __ FedEx __ Courier _____

Tracking # 7305 8947 4941

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
Kurt Boekstra	4-12-19	11:00		
Relinquished by: (Signature)	Date:	Time:	Received by: (Signature)	Temp: °C Bottles Received: 0.2-0.3 2 1.9 4 1
				If preservation required by Login: Date/Time
Relinquished by: (Signature)	Date:	Time:	Received for lab by: (Signature)	Date: 4/13/19 Time: 8:45
				Hold:
				Condition: NCF / OK