

HUNGRY HORSE, LLC

3709 S. Eunice HWY
P.O. Box 1058
Hobbs, NM 88241
Office: 575-393-3386
Fax: 575-391-4585
info@hungry-horse.com

DIRT WORK * ON-SITE REMEDIATION
SOIL TESTING * EXCAVATION * ELECTRICAL

25Jan16

To: Heather Patterson, New Mexico Oil Conservation Division, District II
Reference: Remediation Work Plan
Operator: Devon Energy Production Company
Location: Peridot 13 St 3H
API: 30-015-40778
Legals: UL. H, Sec. 12, T 19S, R29E, Eddy County
GPS: 32.6782 -104.0237
NM OCD: 2RP 3456

Site Information

This location is west of Highway 360 approximately two miles west of the intersection of Highway 360 and Grubbs Road. The area has very defined sand dunes with sparse vegetation present. The depth to groundwater is 150' based upon the Eddy County Depth to Ground Water. The New Mexico Office of the State Engineer's website list no groundwater data for the area.

The release is the result of a failed gauge. All released fluid remained on the caliche pad. The impacted area is 65' x 140'.

Work Conducted to Date

A delineation was conducted using a hand auger and soil samples were obtained from two sample points and field tested for chlorides. Laboratory analysis for Chlorides, TPH and BTEX was conducted on surface and 2' BGS samples (See attached results).

Proposal

Due to the hydrocarbon contamination being contained to the top few inches of soil. I propose to remediate the impacted using the in-situ method using MicroBlaze. A liberal application of 1.5 gallons of MicroBlaze to 10 cubic yards of soil, mixed to a 10% solution, will be applied to the impacted area.

Confirmation samples will be obtained from the same sample points 60-90 days after application and analyzed. Results will be presented for closure request.

Vernon K. Black, Hungry Horse, LLC

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

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

Form C-141
Revised August 8, 2011

Submit 1 Copy to appropriate District Office in
accordance with 19.15.29 NMAC.

Release Notification and Corrective Action

NA131535131213 60137 OPERATOR ☒ Initial Report ☐ Final Report

Name of Company	Devon Energy Production Company	Contact	Rudy Zuniga Production Foreman
Address	6488 Seven Rivers Hwy Artesia, NM 88210	Telephone No.	575-390-5435
Facility Name	Peridot 13 State 3H	Facility Type	Oil
Surface Owner State	Mineral Owner State	API No 30-015-40778	

LOCATION OF RELEASE

Unit Letter	Section	Township	Range	Feet from the	North/South Line	Feet from the	East/West Line	County
H	12	19S	29E	1475	North	1245	East	Eddy

Latitude: N 32°67'78.95"

Longitude: W -104°02'38.22"

32.6782

NATURE OF RELEASE

-104.02374

Type of Release Spill	Produced water and oil	Volume of Release	1 bbl oil and 5 bbls produced water	Volume Recovered	1 bbl oil and 2 bbls produced water
Source of Release	1" tubing	Date and Hour of Occurrence	12.11.15 @ 12:00 pm	Date and Hour of Discovery	12.11.15 @ 12:00 pm
Was Immediate Notice Given?	<input checked="" type="checkbox"/> Yes <input type="checkbox"/> No <input type="checkbox"/> Not Required	If YES, To Whom?	Heather @ OCD		
By Whom?	Jesse Armendariz Assistant Production Foreman	Date and Hour	12.11.15 @ 12:55 pm		
Was a Watercourse Reached?	<input type="checkbox"/> Yes <input checked="" type="checkbox"/> No	If YES, Volume Impacting the Watercourse	N/A		

NM OIL CONSERVATION
ARTESIA DISTRICT

DEC 16 2015

RECEIVED

If a Watercourse was Impacted, Describe Fully.*
N/A

Describe Cause of Problem and Remedial Action Taken.*

Gauging on 1" tubing blew out causing a 6 bbl oil and produced water release. Well was shut in to prevent further release. The gauge was replaced.

Describe Area Affected and Cleanup Action Taken.*

1 bbl oil and 5 bbl produced water was released on the North, Northwest of the facility. 1 bbl oil and 2 bbl produced water was recovered via vac truck. The affected area was 25"x35". All released fluid remained on the location. Environmental agency to be contacted for remediation.

I hereby certify that the information given above is true and complete to the best of my knowledge and understand that pursuant to NMOCD 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 NMOCD marked as "Final Report" does not relieve the operator of liability should their operations have failed to adequately investigate and remediate contamination that pose a threat to ground water, surface water, human health or the environment. In addition, NMOCD 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.

OIL CONSERVATION DIVISION

Signature: <u>Corina Moya</u>	Approved by Environmental Specialist: <u>[Signature]</u>	
Printed Name: Corina Moya	Approval Date: <u>12/17/15</u>	Expiration Date: <u>NA</u>
Title: Field Admin Support	Conditions of Approval:	
E-mail Address: <u>corina.moya@dvn.com</u>	Attached <input type="checkbox"/>	
Date: 12.14.2015 Phone: 575.746.5559	Remediation per O.C.D. Rules & Guidelines	
SUBMIT REMEDIATION PROPOSAL NO <u>117116</u>		
LATER THAN: <u>11/1/16</u>		

* Attach Additional Sheets If Necessary

2RP-3456

Devon Energy Production Company-Peridot 13 St #3H





New Mexico Office of the State Engineer **Water Column/Average Depth to Water**

No records found.

PLSS Search:

Section(s): 12

Township: 19S

Range: 29E

The data is furnished by the NMOSE/ISC and is accepted by the recipient with the expressed understanding that the OSE/ISC make no warranties, expressed or implied, concerning the accuracy, completeness, reliability, usability, or suitability for any particular purpose of the data.

1/25/16 12:47 PM

Page 1 of 1

WATER COLUMN/ AVERAGE
DEPTH TO WATER

Analytical Summary

Operator: Devon Energy Production Company

Location: Peridot 13 St 3 H

Summary of Remediation Sampling Analytical Results as Parts Per Million (PPM)

BTEX

Sample Point	Depth	LAB
SP #1	Surface	65
	2'BGS	ND
SP #2	Surface	146
	2' BGS	0.81

Chlorides

Sample Point	Depth	LAB	Field Test
SP #1	Surface	32	ND
	1' BGS	not analyzed	78
	2'BGS	160	78
SP #2	Surface	128	78
	1' BGS	not analyzed	122
	2' BGS	64	122

TPH

Sample Point	Depth	LAB
SP #1	Surface	10,388
	1' BGS	not analyzed
	2' BGS	ND
SP #2	Surface	11496
	1' BGS	not analyzed
	2' BGS	66

January 25, 2016

VERNON BLACK

Hungry Horse Environmental

P.O. Box 1058

Hobbs, NM 88240

RE: PERIDOT 13 STATE 3H

Enclosed are the results of analyses for samples received by the laboratory on 01/19/16 14:40.

Cardinal Laboratories is accredited through Texas NELAP under certificate number T104704398-15-7. Accreditation applies to drinking water, non-potable water and solid and chemical materials. All accredited analytes are denoted by an asterisk (*). For a complete list of accredited analytes and matrices visit the TCEQ website at www.tceq.texas.gov/field/qa/lab_accred_certif.html.

Cardinal Laboratories is accredited through the State of Colorado Department of Public Health and Environment for:

Method EPA 552.2	Haloacetic Acids (HAA-5)
Method EPA 524.2	Total Trihalomethanes (TTHM)
Method EPA 524.4	Regulated VOCs (V1, V2, V3)

Accreditation applies to public drinking water matrices.

This report meets NELAP requirements and is made up of a cover page, analytical results, and a copy of the original chain-of-custody. If you have any questions concerning this report, please feel free to contact me.

Sincerely,



Celey D. Keene

Lab Director/Quality Manager

Analytical Results For:

Hungry Horse Environmental
VERNON BLACK
P.O. Box 1058
Hobbs NM, 88240
Fax To: (505) 391-4585

Received: 01/19/2016
Reported: 01/25/2016
Project Name: PERIDOT 13 STATE 3H
Project Number: NONE GIVEN
Project Location: NOT GIVEN

Sampling Date: 01/19/2016
Sampling Type: Soil
Sampling Condition: ** (See Notes)
Sample Received By: Amanda Ponce

Sample ID: SP1 SURFACE (H600109-01)

BTX 8021B		mg/kg		Analyzed By: MS					
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
Benzene*	<1.00	1.00	01/20/2016	ND	1.77	88.3	2.00	1.48	
Toluene*	13.6	1.00	01/20/2016	ND	1.75	87.7	2.00	0.520	
Ethylbenzene*	13.5	1.00	01/20/2016	ND	1.61	80.4	2.00	1.16	
Total Xylenes*	37.5	3.00	01/20/2016	ND	4.99	83.2	6.00	1.16	
Total BTX	64.5	6.00	01/20/2016	ND					

Surrogate: 4-Bromofluorobenzene (PIE) 102 % 73.6-140

Chloride, SM4500Cl-B		mg/kg		Analyzed By: AP					
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
Chloride	32.0	16.0	01/20/2016	ND	448	112	400	0.00	

TPH 8015M		mg/kg		Analyzed By: MS					
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
GRO C6-C10	778	50.0	01/19/2016	ND	194	96.9	200	3.69	
DRO >C10-C28	9610	50.0	01/19/2016	ND	179	89.5	200	4.37	

Surrogate: 1-Chlorooctane 138 % 35-147

Surrogate: 1-Chlorooctadecane 214 % 28-171

*=Accredited Analyte

Cardinal Laboratories

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Celey D. Keene, Lab Director/Quality Manager

Analytical Results For:

Hungry Horse Environmental
VERNON BLACK
P.O. Box 1058
Hobbs NM, 88240
Fax To: (505) 391-4585

Received: 01/19/2016
Reported: 01/25/2016
Project Name: PERIDOT 13 STATE 3H
Project Number: NONE GIVEN
Project Location: NOT GIVEN

Sampling Date: 01/19/2016
Sampling Type: Soil
Sampling Condition: ** (See Notes)
Sample Received By: Amanda Ponce

Sample ID: SP1 @ 2' (H600109-02)

mg/kg			Analyzed By: MS						
BTEX 8021B									
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
Benzene*	<0.050	0.050	01/21/2016	ND	1.83	91.4	2.00	10.6	
Toluene*	<0.050	0.050	01/21/2016	ND	1.80	89.8	2.00	8.52	
Ethylbenzene*	<0.050	0.050	01/21/2016	ND	1.65	82.3	2.00	7.09	
Total Xylenes*	<0.150	0.150	01/21/2016	ND	5.11	85.1	6.00	6.58	
Total BTEX	<0.300	0.300	01/21/2016	ND					

Surrogate: 4-Bromofluorobenzene (PIC) 100 % 73.6-140

Chloride, SM4500Cl-B			mg/kg							Analyzed By: AP	
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier		
Chloride	160	16.0	01/20/2016	ND	448	112	400	0.00			

TPH 8015M			mg/kg							Analyzed By: MS	
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier		
GRO C6-C10	<10.0	10.0	01/19/2016	ND	194	96.9	200	3.69			
DRO >C10-C28	<10.0	10.0	01/19/2016	ND	179	89.5	200	4.37			

Surrogate: 1-Chlorooctane 93.9 % 35-147

Surrogate: 1-Chlorooctadecane 98.7 % 28-171

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Celey D. Keene, Lab Director/Quality Manager

Analytical Results For:

 Hungry Horse Environmental
 VERNON BLACK
 P.O. Box 1058
 Hobbs NM, 88240
 Fax To: (505) 391-4585

 Received: 01/19/2016
 Reported: 01/25/2016
 Project Name: PERIDOT 13 STATE 3H
 Project Number: NONE GIVEN
 Project Location: NOT GIVEN

 Sampling Date: 01/19/2016
 Sampling Type: Soil
 Sampling Condition: ** (See Notes)
 Sample Received By: Amanda Ponce

Sample ID: SP2 SURFACE (H600109-03)

BTX 8021B		mg/kg		Analyzed By: MS					
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
Benzene*	0.739	0.500	01/25/2016	ND	1.83	91.4	2.00	10.6	
Toluene*	27.8	0.500	01/25/2016	ND	1.80	89.8	2.00	8.52	
Ethylbenzene*	31.1	0.500	01/25/2016	ND	1.65	82.3	2.00	7.09	
Total Xylenes*	86.2	1.50	01/25/2016	ND	5.11	85.1	6.00	6.58	
Total BTX	146	3.00	01/25/2016	ND					

Surrogate: 4-Bromofluorobenzene (PIE) 112 % 73.6-140

Chloride, SM4500Cl-B		mg/kg		Analyzed By: AP					
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
Chloride	128	16.0	01/20/2016	ND	448	112	400	0.00	

TPH 8015M		mg/kg		Analyzed By: MS					
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
GRO C6-C10	996	50.0	01/19/2016	ND	194	96.9	200	3.69	
DRO >C10-C28	10500	50.0	01/19/2016	ND	179	89.5	200	4.37	

Surrogate: 1-Chlorooctane 140 % 35-147

Surrogate: 1-Chlorooctadecane 239 % 28-171

*=Accredited Analyte

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Analytical Results For:

Hungry Horse Environmental
VERNON BLACK
P.O. Box 1058
Hobbs NM, 88240
Fax To: (505) 391-4585

Received: 01/19/2016
Reported: 01/25/2016
Project Name: PERIDOT 13 STATE 3H
Project Number: NONE GIVEN
Project Location: NOT GIVEN

Sampling Date: 01/19/2016
Sampling Type: Soil
Sampling Condition: ** (See Notes)
Sample Received By: Amanda Ponce

Sample ID: SP2 @ 2' (H600109-04)

BTEx 8021B		mg/kg		Analyzed By: MS					
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
Benzene*	<0.050	0.050	01/21/2016	ND	1.83	91.4	2.00	10.6	
Toluene*	0.182	0.050	01/21/2016	ND	1.80	89.8	2.00	8.52	
Ethylbenzene*	0.151	0.050	01/21/2016	ND	1.65	82.3	2.00	7.09	
Total Xylenes*	0.476	0.150	01/21/2016	ND	5.11	85.1	6.00	6.58	
Total BTEx	0.809	0.300	01/21/2016	ND					

Surrogate: 4-Bromofluorobenzene (PIL) 103 % 73.6-140

Chloride, SM4500Cl-B		mg/kg		Analyzed By: AP					
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
Chloride	64.0	16.0	01/20/2016	ND	448	112	400	0.00	

TPH 8015M		mg/kg		Analyzed By: MS					
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
GRO C6-C10	<10.0	10.0	01/20/2016	ND	191	95.3	200	1.65	
DRO >C10-C28	66.2	10.0	01/20/2016	ND	197	98.7	200	9.16	

Surrogate: 1-Chlorooctane 94.5 % 35-147

Surrogate: 1-Chlorooctadecane 102 % 28-171

*=Accredited Analyte

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Celey D. Keene, Lab Director/Quality Manager

Notes and Definitions

S-06	The recovery of this surrogate is outside control limits due to sample dilution required from high analyte concentration and/or matrix interference's.
ND	Analyte NOT DETECTED at or above the reporting limit
RPD	Relative Percent Difference
**	Samples not received at proper temperature of 6°C or below.
***	Insufficient time to reach temperature.
-	Chloride by SM4500Cl-B does not require samples be received at or below 6°C
	Samples reported on an as received basis (wet) unless otherwise noted on report

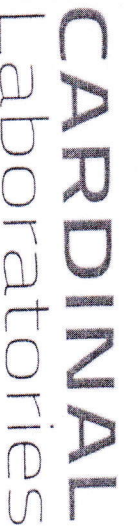
* = Accredited Analyte

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Celey D. Keene, Lab Director/Quality Manager



CHAIN-OF-CUSTODY AND ANALYSIS REQUEST

101 East Marland, Hobbs, NM 88240

(575) 393-2326 FAX (575) 393-2476

Company Name: **Hungry Horse, LLC**

Project Manager: **Vernon K. Black**

Address: **PO Box 1058**

City: **Hobbs** State: **NM** Zip: **88241**

Phone #: **575-631-2253** Fax #: **575-391-4585**

Project #: _____

Project Name: **peridot 13state 3h**

Project Location: _____

Sampler Name: **Vernon K Black**

P.O. #: _____

Company: _____

Attn: _____

Address: _____

City: _____

State: _____ Zip: _____

Phone #: _____

Fax #: _____

FOR LAB USE ONLY

Lab I.D.	Sample I.D.	(G)RAB OR (C)OMP	# CONTAINERS	GROUNDWATER	WASTEWATER	MATRIX	PRESERV	SAMPLING	ANALYSIS REQUEST
H000109	peridot 13state SP1 surf					SOIL		DATE: 1/19/16 TIME: 12:30	Chlorides
	peridot 13state SP1 2'					SOIL		DATE: 1/19/16 TIME: 1:00	BTEX
	peridot 13state 3h SP2 surf					SOIL		DATE: 1/19/16 TIME: 1:15	TPH
	peridot 13state 3h SP2 2'					SOIL		DATE: 1/19/16 TIME: 1:30	

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Relinquished By: _____

Relinquished By: _____

Time: _____

Date: 1/19/16

Date: 2:40

Received By: _____

Delivered By: (Circle One)

Sample - UPS - Bus - Other: 210°C #54

Sample Condition

Cool ☒ Intact ☒

Yes ☐ No ☐

CHECKED BY (Initials)

Phone Result: ☐ Yes ☐ No Add'l Phone #: _____

Fax Result: ☐ Yes ☐ No Add'l Fax #: _____

REMARKS: _____