By Kellie Jones at 11:16 am, Oct 08, 2015

By Kellie Jones at 11:17 am, Oct 08, 2015

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 Please to vertical delineate SP1 to 250 ppm chlorides.
 Ensure BLM approval/ concurrence.

60ct15

RECEIVED

To: Kellie Jones, New Mexico Oil Conservation Division Shelly Tucker, Bureau of Land Management
Reference: Remediation Work Plan
Operator: Devon Energy Production Company
Location: Tomcat 21 Fed 1
API: 30-025-33356
Legals: UL. F, Sec. 21, T23S, R32E
GPS: 32.2927 -103.6815

Site Information

This site is located in Lea County, New Mexico approximately 3.6 miles north of the intersection of New Mexico Highway 128 and Red Road and 3.5 miles east of Red Road. Based upon the New Mexico State Engineer's website, there is one water well in the area with a depth to groundwater of 400'. The Lea County Depth to Groundwater Map indicates the same depth to groundwater.

This battery is an active and working site. The produced water release that occurred on 12Apr15, had no impact outside the berms of the battery. All fluid released, remained inside the earthen berms.

Work Conducted to Date

A delineation was conducted by use of hand tools on 29Sept15. Due to safety concerns, no mechanical equipment was used. Soil samples were obtained at three sample points from the surface to 3' below ground surface (BGS). Lab analysis was conducted for Chlorides. (See attached map with sample points and lab results.)

Proposed Remediation

Based upon the delineation results, depth to ground water, and the safety concerns of working inside a battery, I propose to hand excavate 2' of impacted material from the area of Sample Point #1 and 1' from the area of Sample Point #3. This encompasses the area between and on both side of the tanks. A complete delineation and remediation will be conducted at the time the facility is shut in and taken out of service.

All impacted material will be transported to a division approved facility for disposal. The battery will then be backfilled with fresh material.

Sincerely,

Vernon K. Black, Hungry Horse, LLC

Form C-141 Revised August 8, 2011

Oil Conservation Division 1220 South St. Francis Dr. Santa Fe, NM 87505 Submit 1 Copy to appropriate District Office in accordance with 19.15.29 NMAC.

1210 51 51 111	iens ori, oun			Sa	inta F	e, NM 875	05						
			Rele	ease Notific	catio	n and Co	orrective A	ction					
						OPERA '	ГOR	🖂 Initi	al Report		Final Report		
Name of C	ompany D	Devon Energy	y Product	ion		Contact D		1					
and the second se		Rivers Hwy		NM 88220		Telephone No. 575.390.5850							
Facility Na	me Tome	at 21 Batter	у			Facility Ty	pe Gas						
Surface Ov	wner Fede	ral		Mineral	Owner	r Federal		API N	o. 30-025	33356			
				LOC	TIO	N OF RE	LEASE						
Unit Letter	Section	Township	Range	Feet from the	1	h/South Line	Feet from the	East/West Line	County				
F	21	238	32E	1980		FNL	1880	FWL	LEA				
			Latit	ude: <u>32.29</u>	1774	Lon	gitude: <u>103.6</u>	81603					
				NAT	URE	OF REL	EASE						
Type of Rele	ease Spill	Produced W	ater			Volume of 135 BBL	Release	Volume 130 BBL	Recovered				
Source of Re	elease Wate	er ran over th	tops of	the tank after th	e		Hour of Occurre		Hour of Di	iscover	y		
SCADA pac	k failed					4.12.15 at	9:00 AM		t 9:00 AM				
Was Immed	iate Notice	Given?				If YES, To	Whom?						
			Yes	No 🗌 Not Re	equired	Jeff Rober	tson BLM						
By Whom?	Pandy Cla	ddan				Tomas Ob Date and	erding OCD						
by whom.	Kanuy Gia	uuen				4.13.15 2:00 PM BLM							
NV	De					and the second division of the second divisio	00PM OCD	the Watersource					
Was a Wate	rcourse Re		Yes 🛛	No		II YES, VO	fume impacting	the Watercourse					
If a Waterco	urse was I	mpacted, Des	cribe Full	V.*									
		olem and Ren			ocation	and found t	hat 135 Bbls of p	roduced water ha	d ran over	the ton	s of the		
								pilled – 135 bbl p					
130 bbls													
		and Cleanup			nviron	mental group	will be called to	evaluate impacte	daraa				
It was an co	intamed ins	side unimed c	ontainine	int 40x40 area. E	nviron	inentai group	will be called to	evaluate impacte	u alca.				
The local	6 1 4 1	6	1	:	1 - 4 - 4 - 4	he heat of any	In suladas and u	denote and the strange	want to NIM	000	lag and		
								nderstand that purs tive actions for rele					
public health	or the envir	ronment. The	acceptanc	e of a C-141 repo	rt by th	e NMOCD m	arked as "Final Re	eport" does not reli	eve the oper	ator of	liability		
								eat to ground water responsibility for co					
		ws and/or regu			epone	ioes not renev	e the operator of r	esponsionity for es	Shiphanee w	itil ally	other		
-		() and ()					OIL CONS	SERVATION	DIVISIC	DN			
Signature: Je	eanette	Barron											
Printed Name	: Jeanette	Barron				Approved by	Environmental Sp	pecialist:					
The Parts	dente C					Annuaral D		Exmination	Data				
Title: Field A	amin Supp	port				Approval Dat	e:	Expiration	Date:				
E-mail Addre	ss: Jeanett	e.barron@dv	n.com	Contractor Contractor Contractor		Conditions of	Approval:		Attached				
Date: 6/1	1/15	Р	hone: 575.	748.1813									

* Attach Additional Sheets If Necessary



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)	(quai	ters :	are 1: are si	=NW 2= mallest	NE 3=SV	√ 4=SE) (NAD83	UTM in meters)	(In feet)		
POD Number	POD Sub- Code basin Co CUB LE			64 \$	Sec Tw 1 23S		X 625035	and the second		DepthWa WaterCo 400	
									to Water: m Depth: m Depth:	400 fee	t

Record Count: 1

PLSS Search:

Section(s): 21

Township: 23S

Range: 32E

*UTM location was derived from PLSS - see Help

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.

DEVON ENERGY PRODUCTION- Tomcat 21 Fed 1













Devon Energy Production- Tomcat 21 Fed 1 Battery



Lab Results

Operator: Devon Energy Production Location: Tomcat 21 Fed 1 Battery Sample Date: 29Sept15

CHLORIDES

3' BGS	0069	736	5760			
2' BGS	7760	736	240			
Surface 1' BGS	13200	576	576	2		
Surface	4880	128	3040			-
	SP #1	SP #2	SP #3			

Note: Results are represented as parts per million (ppm)



October 01, 2015

VERNON BLACK Hungry Horse Environmental P.O. Box 1058 Hobbs, NM 88240

RE: TOMCAT 21 BATTERY

Enclosed are the results of analyses for samples received by the laboratory on 09/29/15 14:00.

Cardinal Laboratories is accredited through Texas NELAP under certificate number T104704398-13-5. 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 accredited certif.html.

Cardinal Laboratories is accreditated 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 B. Keine

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:09/29/2015Reported:10/01/2015Project Name:TOMCAT 21 BATTERYProject Number:NONE GIVENProject Location:LEA COUNTY	Sampling Date: Sampling Type: Sampling Condition: Sample Received By:	09/29/2015 Soil ** (See Notes) Judy Garcia
--	--	---

Sample ID: SP #1 SURFACE (H502574-01)

Chloride, SM4500Cl-B	hloride, SM4500Cl-B mg/kg				Analyzed By: HM				
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
Chloride	4880	16.0	09/30/2015	ND	416	104	400	0.00	

Sample ID: SP #1 1' BGS (H502574-02)

Chloride, SM4500Cl-B	Analyze	d By: HM							
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
Chloride	13200	16.0	09/30/2015	ND	416	104	400	0.00	
Chioride	10100								

Sample ID: SP #1 2' BGS (H502574-03)

Chloride, SM4500Cl-B	mg	/kg	Analyze	Analyzed By: HM					
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
Chloride	7760	16.0	09/30/2015	ND	416	104	400	0.00	

Sample ID: SP #1 3' BGS (H502574-04)

, SM4500CI-B mg/kg								
Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
6900	16.0	09/30/2015	ND	416	104	400	0.00	
	Result	Result Reporting Limit	Result Reporting Limit Analyzed	Result Reporting Limit Analyzed Method Blank	Result Reporting Limit Analyzed Method Blank BS	Result Reporting Limit Analyzed Method Blank BS % Recovery	Result Reporting Limit Analyzed Method Blank BS % Recovery True Value QC	Result Reporting Limit Analyzed Method Blank BS % Recovery True Value QC RPD

Cardinal Laboratories

*=Accredited Analyte

PLEASE NOTE: Liability and Damages. Cardinal's liability and client's exclusive remedy for any claim ansing, whether based in contract or tort, shall be limited to the amount paid by client for analyses. All claims, including those for negligence and any other cause whatsoever shall be deemed waived unless made in writing and received by Cardinal within thirty (30) days after completion of the applicable service. In no event shall Cardinal be liable for incidental or consequential damages, including, without limitation, business interruptions, loss of use, or loss of profits incurred by client, its subsidiantes, affiliates or successors arising out of or related to the performance of the services hereunder by Cardinal, regardless of whether such claim is based upon any of the above stated reasons or otherwise. Results relate only to the samples identified above. This report shall not be reproduced except in full with written approval of Cardinal Laboratories.

Celleg & theme-

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: Reported: Project Name: Project Number: Project Location:	09/29/2015 10/01/2015 TOMCAT 21 BATTERY NONE GIVEN LEA COUNTY	Sampling Date: Sampling Type: Sampling Condition: Sample Received By:	09/29/2015 Soil ** (See Notes) Judy Garcia
---	---	--	---

Sample ID: SP #2 SURFACE (H502574-05)

Chloride, SM4500Cl-B	mg,	/kg	Analyze	а ву: нм					
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
Chloride	128	16.0	09/30/2015	ND	416	104	400	0.00	

Sample ID: SP #2 1' BGS (H502574-06)

Chloride, SM4500Cl-B	Analyzed By: HM								
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
Analyte			00/20/2015	ND	416	104	400	0.00	
Chloride	576	16.0	09/30/2015	ND	410	101			

Sample ID: SP #2 2' BGS (H502574-07)

Chloride, SM4500Cl-B	mg/kg		Analyzed By: HM						
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
Chloride	736	16.0	09/30/2015	ND	416	104	400	0.00	

Sample ID: SP #2 3' BGS (H502574-08)

Chloride, SM4500CI-B	mg	/kg	Analyzed By: HM						
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
Chloride	736	16.0	09/30/2015	ND	416	104	400	0.00	

Sample ID: SP #3 SURFACE (H502574-09)

Chloride, SM4500Cl-B	500Cl-B mg/kg			Analyzed By: HM					
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
Chloride	3040	16.0	09/30/2015	ND	416	104	400	0.00	

Cardinal Laboratories

*=Accredited Analyte

PLEASE NOTE: Liability and Damages, Cardinal's liability and client's exclusive remedy for any claim arising, whether based in contract or tort, shall be limited to the amount paid by client for analyses. All claims, including those for negligence and any other cause whatsoever shall be deemed waived unless made in writing and received by Cardinal within thirty (30) days after completion of the applicable service. In no event shall Cardinal be liable for incidental or consequential damages, including, without limitation, business interruptions, loss of use, or loss of profits incurred by client, its subsidiaries, affiliates or successors arising out of or related to the performance of the services hereunder by Cardinal, regardless of whether such claim is based upon any of the above stated reasons or otherwise. Results relate only to the samples identified above. This report shall not be reproduced except in full with written approval of Cardinal Laboratories.

Celeg to Keene

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: Reported: Project Name: Project Number: Project Location:	09/29/2015 10/01/2015 TOMCAT 21 BATTERY NONE GIVEN LEA COUNTY	Sampling Date: Sampling Type: Sampling Condition: Sample Received By:	09/29/2015 Soil ** (See Notes) Judy Garcia
---	---	--	---

Sample ID: SP #3 1' BGS (H502574-10)

Chloride, SM4500Cl-B	mg/kg		Analyze	а ву: пм					
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
Chloride	576	16.0	09/30/2015	ND	416	104	400	0.00	

I Down LIMA

Sample ID: SP #3 2' BGS (H502574-11)

Chloride, SM4500Cl-B mg/kg			Analyzed By: HM				and the second		
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
Chloride	240	16.0	09/30/2015	ND	416	104	400	0.00	

Sample ID: SP #3 3' BGS (H502574-12)

Chloride, SM4500CI-B	mg/kg		Analyzed By: HM		Carlos and the second				
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
Chloride	5760	16.0	09/30/2015	ND	416	104	400	0.00	

Cardinal Laboratories

*=Accredited Analyte

PLEASE NOTE: Liability and Damages. Cardinal's liability and client's exclusive remedy for any claim arising, whether based in contract or tort, shall be limited to the amount paid by client for analyses. All claims, including those for negligence and any other cause whatsoever shall be deemed waived unless made in writing and received by Cardinal within thirty (30) days after completion of the applicable service. In no event shall Cardinal be liable for incidental or consequential damages, including, without limitation, business interruptions, loss of use, or loss of profits incurred by client; its subsidiaries, affiliates or successors arising out of or related to the performance of the services hereunder by Cardinal, regardless of whether such claim is based upon any of the above stated reasons or otherwise. Results relate only to the samples identified above. This report shall not be reproduced except in full with written approval of Cardinal Laboratories.

Celeg to theme -

Celey D. Keene, Lab Director/Quality Manager



Notes and Definitions

Analyte NOT DETECTED at or above the reporting limit ND **Relative Percent Difference** RPD Samples not received at proper temperature of 6°C or below. ** Insufficient time to reach temperature. *** Chloride by SM4500CI-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

Cardinal Laboratories

*=Accredited Analyte

PLEASE NOTE: Liability and Damages. Cardinal's liability and client's exclusive remedy for any claim ansing, whether based in contract or tort, shall be limited to the amount paid by client for analyses. All claims, including those for negligence and any other cause whatsoever shall be deemed waived unless made in writing and received by Cardinal within thirty (30) days after completion of the applicable service. In no event shall Cardinal be liable for incidental or consequential damages, including, without limitation, business interruptions, loss of use, or loss of profits incurred by client, its subsidiaries, affiliates or successors arising out of or related to the performance of the services hereunder by Cardinal, regardless of whether such claim is based upon any of the above stated reasons or otherwise. Results relate only to the samples identified above. This report shall not be reproduced except in full with written approval of Cardinal Laboratories.

Celley to Keine

Celey D. Keene, Lab Director/Quality Manager

Page 5 of 7



CHAIN-OF-CUSTODY AND ANALYSIS REQUEST

Page 6 of 7

101 East Marland, Hobbs, NM 88240 (575) 393-2326 FAX (575) 393-2476



Cardinal cannot accept verbal changes. Please fax written changes to 505-393-2476



CHAIN-OF-CUSTODY AND ANALYSIS REQUEST

-4

101 East Marland, Hobbs, NM 88240 (575) 393-2326 FAX (575) 393-2476



Page 7 of 7