## APPROVED Conditional

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

HOKSE, 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

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

60ct15

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

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

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

Form C-141

Revised August 8, 2011

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

			Rele	ase Notific	eation	n and Co	rrective A	ction					
						OPERAT	ГOR		⊠ Initia	al Report		Final Repo	
Name of Co	ompany D	evon Energy	Producti	on		Contact D				1			
Address 64	88 Seven	Rivers Hwy	Artesia, N	M 88220		Telephone 1	No. 575.390.585	50					
Facility Na	me Tomca	at 21 Batter	у			Facility Typ	pe Gas						
Surface Ov	vner Fede	ral		Mineral (	Owner	Federal			API No	0. 30-025-	33356		
				LOCA	TIOI	N OF REI	LEASE						
Unit Letter F	Letter Section Township Range Feet from the Nor						h/South Line Feet from the FNL 1880		East/West Line FWL		County LEA		
			Latit	ude: 32.29	1774	Long	gitude:103.6	81603					
				NAT	URE	OF RELI							
Type of Rele	ase Spill	Produced Wa	ater			Volume of 135 BBL	Recovered						
Source of Re	lease Wate	er ran over th	e tops of t	he tank after the	e	Date and H	130 BBL Date and	Hour of Discovery					
SCADA pac						4.12.15 at 9	t 9:00 AM						
Was Immedi	ate Notice		Vac 🗆	No. D Not Do	i d	If YES, To							
			Yes	No Not Re	equirea	d Jeff Robertson BLM Tomas Oberding OCD							
By Whom? I	Randy Glad	lden	Date and Hour										
						4.13.15 2:00 PM BLM 4.13.15 3:00PM OCD							
Was a Water	course Re	ached?				If YES, Volume Impacting the Watercourse							
			Yes 🛛	No									
If a Waterco	urse was I	mpacted, Des	cribe Fully	v.*									
	cat 21 Batt	ery Devon Le	ase Opera	tor arrived on l			nat 135 Bbls of pi vacuum truck. S						
Describe Are It was all co					nvironn	nental group	will be called to	evaluate	eimpacte	d area.			
regulations al public health should their o	l operators or the envir perations had ment. In a	are required to conment. The ave failed to a ddition, NMO	report and acceptance dequately i	l/or file certain re of a C-141 reponvestigate and re	elease no rt by the emediate	otifications and NMOCD made contamination	knowledge and ur d perform correct irked as "Final Re on that pose a thre the operator of re	rive action eport" do eat to gro esponsib	ns for rele es not reli- und water ility for co	eases which eve the oper s, surface was compliance w	may er ator of ter, hun ith any	idanger Tliability man health	
C:	a a ctt	D or reserve				OIL CONSERVATION DIVISION							
Signature: <b>Je</b>	unette	barron											
Printed Name: Jeanette Barron							Approved by Environmental Specialist:						
Title: Field A	dmin Supp	ort			A	Approval Date:			Expiration Date:				
E-mail Address: Jeanette.barron@dvn.com						Conditions of Approval:				Attached			
Date: 6/1	/15	P	none: 575.	748.1813									
Attach Addit	ional Shee	ts If Necessa											



## 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

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

closed)

(quarters are smallest to largest) (NAD83 UTM in meters) (In feet)

POD

Sub-

CUB LE

QQQ

Depth DepthWater Well WaterColumn

185

**POD Number** C 02216

Code basin County 64 16 4 Sec Tws Rng

2 2 4 21 23S 32E

625035 3573261\* 585

Average Depth to Water:

400 feet

Minimum Depth: Maximum Depth: 400 feet 400 feet

Record Count: 1

PLSS Search:

Section(s): 21

Township: 23S

Range: 32E

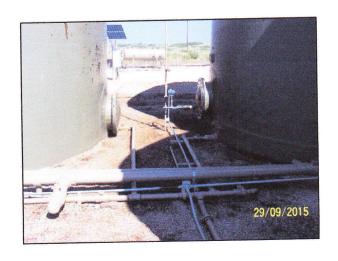
## DEVON ENERGY PRODUCTION- Tomcat 21 Fed 1













Devon Energy Production-Tomcat 21 Fed 1 Battery



## Lab Results

Operator: Devon Energy Production

Location: Tomcat 21 Fed 1 Battery

Sample Date: 29Sept15

## CHLORIDES

SB(		00	736	5760			
2' BGS 3' BGS	+	)69 09/					
1' RGS	200		576	576			
Curface	Saliace	4880	128	3040			
			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 <a href="https://www.tceq.texas.gov/field/qa/lab">www.tceq.texas.gov/field/qa/lab</a> accred 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.

Celes & Keens

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:

09/29/2015

Reported:

10/01/2015

Project Name:

TOMCAT 21 BATTERY

Project Number:

Analyte

Analyte

Analyte

Analyte

NONE GIVEN

Project Location:

LEA COUNTY

Sampling Date:

Sampling Type:

\*\* (See Notes)

09/29/2015

Sampling Condition: Sample Received By:

Judy Garcia

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

Chloride, SM4500CI-B

mg/kg

Analyzed By: HM

Result

Reporting Limit

Analyzed

Method Blank

% Recovery

True Value QC

RPD 0.00 Qualifier

Chloride

4880

16.0

Reporting Limit

09/30/2015

Analyzed

ND

BS 416

104

400

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

Chloride, SM4500CI-B

mg/kg

Analyzed By: HM

Method Blank

BS

416

True Value QC % Recovery

RPD

0.00

Qualifier

Chloride

Result 13200

16.0

09/30/2015

ND

104

400

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

Chloride, SM4500CI-B

Analyzed By: HM

Chloride

Result 7760

16.0

Analyzed Reporting Limit 09/30/2015 Method Blank

ND

BS 416 % Recovery

104

% Recovery

104

True Value QC 400

RPD 0.00 Qualifier

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

Chloride, SM4500Cl-B

mg/kg

Analyzed By: HM

Method Blank

BS

RPD

0.00

Qualifier

Chloride

Result 6900 Reporting Limit 16.0

Analyzed 09/30/2015

ND

416

True Value QC 400

\*=Accredited Analyte

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Celey D. Keene, Lab Director/Quality Manager

Page 2 of 7



## Analytical Results For:

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

Fax To:

(505) 391-4585

Received:

09/29/2015

Reported:

10/01/2015

Project Name:

TOMCAT 21 BATTERY

Project Number: Project Location:

Analyte

NONE GIVEN LEA COUNTY Sampling Date:

09/29/2015

Sampling Type:

Soil

Sampling Condition: Sample Received By: \*\* (See Notes)

Judy Garcia

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

Chloride, SM4500CI-B

mg/kg

Analyzed By: HM

Method Blank

BS

% Recovery

True Value QC

Qualifier

Chloride

Result 128

Result

576

16.0

Reporting Limit

Reporting Limit

16.0

Reporting Limit

16.0

Reporting Limit

16.0

09/30/2015

Analyzed

Analyzed

09/30/2015

Analyzed

416

ND

104

400

Analyte

Analyte

Analyte

Analyte

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

Chloride, SM4500CI-B

Analyzed By: HM

Method Blank BS

True Value QC % Recovery

RPD

0.00

RPD

0.00

Qualifier

104

400

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

Chloride, SM4500Cl-B

Analyzed By: HM

BS

416

% Recovery True Value QC

Qualifier

Chloride

Chloride

Chloride

Chloride

Result 736

Result

736

Result

3040

16.0 09/30/2015 Method Blank ND

ND

416

RPD

Analyzed By: HM

104

400

0.00

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

09/30/2015

Analyzed

09/30/2015

Chloride, SM4500Cl-B

mg/kg

Analyzed Reporting Limit

Method Blank ND

BS 416 % Recovery 104

True Value QC

RPD

Qualifier

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

Chloride, SM4500Cl-B

mg/kg

Analyzed By: HM

Method Blank

ND

RS

416

% Recovery

104

400

True Value QC

400

0.00

RPD

0.00

Qualifier

Cardinal Laboratories

\*=Accredited Analyte

All claims, including those for negligence and in contract or tort, shall be limited to the amount paid by client for analyses. PLEASE NUTE: Liability and Damages, Lardinars liability and clients 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.

Celeg to Kreene

Celey D. Keene, Lab Director/Quality Manager



## Analytical Results For:

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

Received:

09/29/2015

Reported:

10/01/2015

Project Name:

TOMCAT 21 BATTERY

Project Number:

Analyte

Project Location:

NONE GIVEN

LEA COUNTY

Sampling Date:

Sampling Type: Sampling Condition: Soil

Sample Received By:

\*\* (See Notes)

09/29/2015

Judy Garcia

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

Chloride, SM4500CI-B

mg/kg

Analyzed By: HM

Analyzed By: HM

Result

Reporting Limit

Analyzed

Method Blank

% Recovery

True Value QC

**RPD** 0.00 Qualifier

Chloride

Chloride

Chloride

576

16.0

09/30/2015

ND

BS 416

104

400

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

Chloride, SM4500CI-B Analyte

Result

240

Result

5760

Analyzed Reporting Limit 09/30/2015 16.0

Method Blank ND

BS 416

416

% Recovery 104

True Value QC

400

RPD 0.00

Qualifier

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

Chloride, SM4500CI-B

Analyte

Reporting Limit

16.0

Analyzed By: HM

Analyzed 09/30/2015 Method Blank ND

% Recovery 104

True Value QC 400

RPD 0.00

Qualifier

Cardinal Laboratories

\*=Accredited Analyte

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## **Notes and Definitions**

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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Celley to Freene



CHAIN-OF-CUSTODY AND ANALYSIS REQUEST

ANALYSIS REQUEST										Yes   No Add'l Phone #: Yes   No Add'l Fax #:		
BILL TO	P.O. #: Company:	Attn: Address:	State: Zip:	Fax #:  X PRESERV. SAMPLING	. 88 38 SE: 1000			2845 1100 X	Frontierd or tool, shall be limited to the amounts pash by the clearl for the writing and received by Cardinals whiten 30 days after completion of the applicability	of use or less of profits meaning by cleent this standardness, used upon any of the above stated research or otherwise.  Phone Result: Fax Result: REMARKS:	Marcia.	Of Condition Checker 51.
(575) 393-2476	Stack	State: NVM Zip: Fax #: 575-39	Project Owners & Con 2   Axstery	Bleck MATRIX	D B OR (C)OMP ITAINERS INDWATER	AS(9) ()			17	Course whoststower shall be deeper equipment and administrative and services hereunder by Carlotte and Timps.	Time 100	Sample Sample Cool
5 15	Name: handger:	Address: 10 80 A 1038 City: //Obb5 Phone #: 575-63(-2253		Project Location: Sampler Name: PCACA K. Beneve Name: PCACA K. Beneve Name: PCACA K. Beneve Name Name Name Name Name Name Name Nam	Lab I.D. Sample I.D.	HSOSSI SOFTER	77 1,005 72 065 73 065	Space 5 Surface	SAS 12 S	hed	Relinquished By:	Delivered By: (Circle One)

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



101 East Marland, Hobbs, NM 88240

# CHAIN-OF-CUSTODY AND ANALYSIS REQUEST

ANALYSIS REQUEST □ No Add'l Phone #: Phone Result: Fax Result: REMARKS: SAMPLING DATE BILL TO Zip: ЯЗНТО ICE / COOF Company: Address: Phone #: State: Fax #: ACID/BASE P.O. #: Attn: City: OTHER SCUDGE MATRIX OIL Prest Received By State: NM Zip: 8834 Fax #: 575-3911-4585 **MASTEWATER** Project Owner: Dec w RECOUNDWATER (G)RAB OR (C)OMP. (575) 393-2326 FAX (575) 393-2476 Sample I.D. Project Name: Tomcot & 21 HUNDEY HOUSE Coalcont Sampler - UPS - Bus - Other: Delivered By: (Circle One) Phone #: 575-631-2253 Relinquished By: Project Location: Address: PO City: Hobb Company Name: Project Manager: Sampler Name: FOR LAB USE ONLY Lab I.D. PLEASE NOTE: UR Project #:

+ Cardinal cannot accept verbal changes. Please fax written changes to 505,093-2476