



February 4, 2016

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Phone 575.746.8768

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2301 State Hwy 349
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Phone 405.486.7030

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13111 Lookout Way
San Antonio, Texas 78233
Phone 210.265.8025

WOODWARD

1211 34th Street
Suite 13
Woodward, Oklahoma 73801
Phone 580.377.1194

Mr. Mike Bratcher
NMOCD District 2
811 S. 1st Street
Artesia, NM 88210

Subject: **Remediation and Closure Report**
Devon Energy
Cotton Draw Unit #153
30-015-38535 2RP-3241

Dear Mr. Bratcher,

Devon Energy has contracted Talon/LPE (Talon) to perform soil assessment and remediation services at the above referenced location. The incident description, soil sampling results, remediation activities and closure request are submitted herein.

Incident Date

July 19, 2015

Background Information

The Cotton Draw Unit #153 is located approximately forty-five (45) miles southeast of Carlsbad, New Mexico. The legal location for this site is Unit Letter B, Section 3, Township 25 South, and Range 31 East in Eddy County, New Mexico. More specifically the latitude and longitude for the release are 32.166176° North and -103.763611° West. See the site plan in [Appendix I](#).

According to the soil survey provided by the United States Department of Agriculture Natural Resources Conservation Service, the soil in this area is made up of the Berino complex with 0 to 3 percent slopes, eroded. Drainage courses in this area are normally dry. Ground water in the project vicinity is greater than 100' according to the Chevron Texaco Water Trend map. No groundwater data is provided by the New Mexico Office of the State Engineers office. See [Appendix II](#).

The ranking for this site is **0** based on the following:

Depth to ground water	>100'
Wellhead Protection Area	>1000'
Distance to surface water body	>1000'

ENVIRONMENTAL CONSULTING
ENGINEERING
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GENERAL CONTRACTING

Toll Free 866.742.0742
www.talonlpe.com

Incident Description

On July 19, 2015 the suction lines on the circulation pumps were not closed which caused a release of 40 barrels of oil on the Cotton Draw #153 location. A vac truck was immediately called to the location and recovered 35 barrels of oil. All oil stayed on location. See site plan in [Appendix I](#).

This Remediation Plan and Closure Report was specifically generated for the release of oil on July 19, 2015. The existing chloride contamination is from a previous event, which will be handled on a separate C-141 and remediated at a future date.

Remedial Actions Taken

- The hydrocarbon impacted area in the vicinity of sample point S-1 was hand excavated to a depth of 2-feet deep. Per NMOCD stipulations, a confirmation soil sample was taken at sample location S-1. The analytical result from that sampling event is presented below.

Laboratory Results, See [Appendix III](#) for complete report of laboratory results.

January 25, 2016, confirmation sample

Sample ID	Depth (feet)	BTEX (mg/kg)	Chlorides (mg/kg)	TPH (mg/kg) GRO	TPH (mg/kg) DRO
S-1	2'	<0.300	--	<10	<10

--Analyte Not Tested

Based upon the site ranking of 0, NMOCD Recommended Remedial Action Levels (RRAL) are 50 mg/kg for BTEX, 10 mg/kg for Benzene, and 5,000 mg/kg for TPH. The chloride standard is considered to be 1,000 mg/kg.

- The impacted areas remaining on location were excavated to a depth of 1-foot deep. All contaminated soil was transported to Lea Land, LLC. The excavated areas were backfilled with new caliche, machine compacted and re-contoured to match the surrounding location.

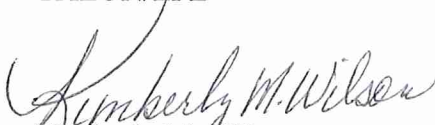
Closure


On behalf of Devon Energy we respectfully request that no further actions be required and that closure with respect to this release be granted. A Final C-141 is also attached. See [Appendix IV](#).

Should you have any questions or if further information is required, please do not hesitate to contact our office at (575)-746-8768

Respectfully submitted,

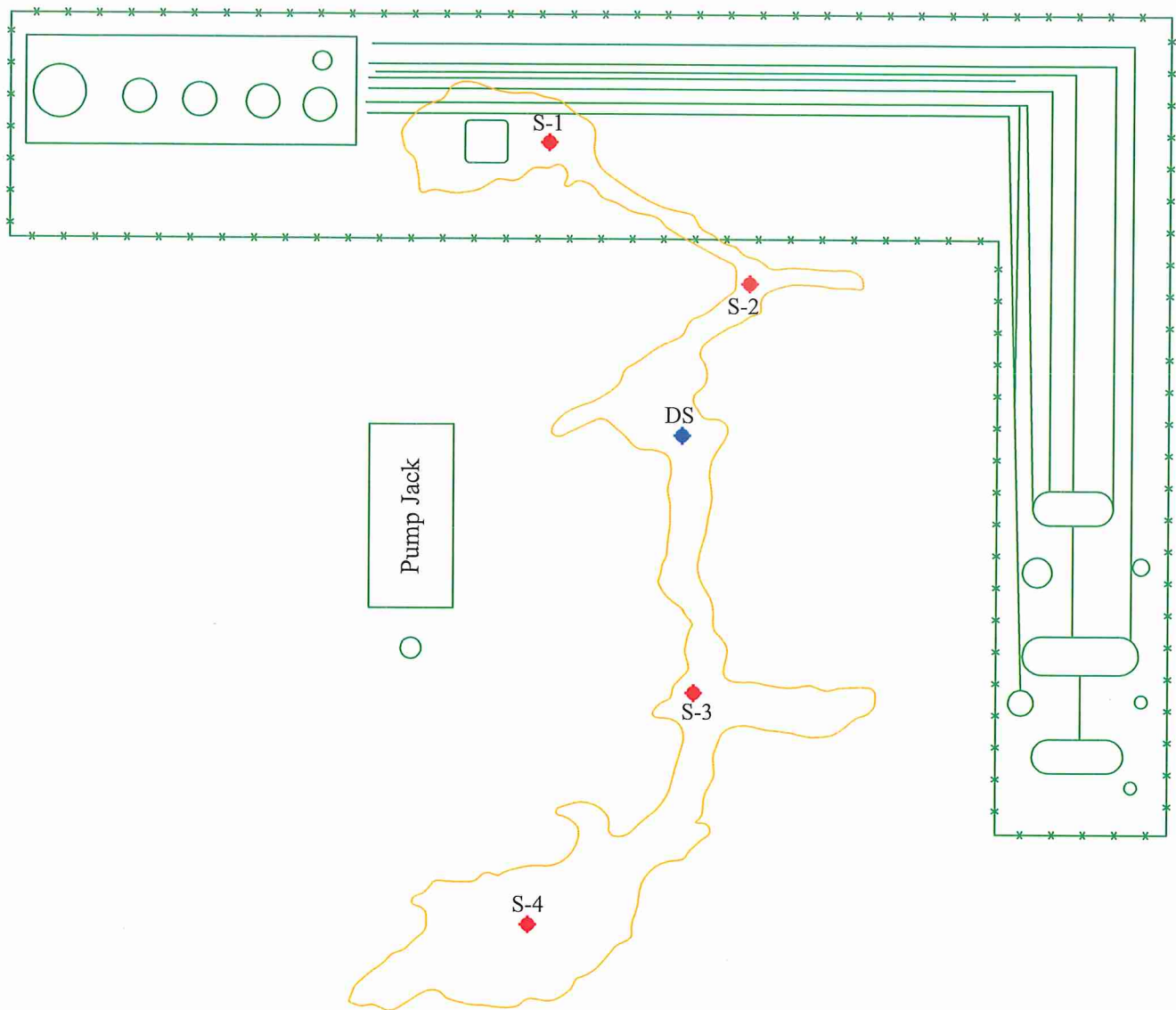
TALON/LPE


Kimberly M. Wilson
Project Manager


David J. Adkins
District Manager

APPENDIX I

SITE MAP



NTS



Scale in Feet

Legend

- ◆ - Sample Location
- ◆ - Delineation Sample Location
- - Impacted Area



Date: 10/08/2015

Scale: NTS

Drawn By: TJS

Cotton Draw #153
Devon Energy Corporation
Eddy County, New Mexico
Figure 1 - Site Plan

APPENDIX II
GROUNDWATER DATA



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	POD Sub- Code	basin	County	Q 64	Q 16	Q 4	Sec	Tws	Rng	X	Y	Distance	Depth Well	Depth Water	Water Column
C 02258	C		ED	3	2	26	23S	31E		618055	3571853*	425	662		
C 02348	C		ED	1	4	3	26	23S	31E	617648	3571068	1298	700	430	270

Average Depth to Water: **430 feet**

Minimum Depth: **430 feet**

Maximum Depth: **430 feet**

Record Count: 2

UTMNAD83 Radius Search (in meters):

Easting (X): 618351

Northing (Y): 3572159

Radius: 3000

*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.

APPENDIX III
LABORATORY RESULTS

January 25, 2016

KIMBERLY WILSON

TALON LPE

408 W. TEXAS AVE.

ARTESIA, NM 88210

RE: COTTON DRAW #153

Enclosed are the results of analyses for samples received by the laboratory on 01/20/16 14:00.

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,



Caley D. Keene

Lab Director/Quality Manager

Analytical Results For:

 TALON LPE
 KIMBERLY WILSON
 408 W. TEXAS AVE.
 ARTESIA NM, 88210
 Fax To: (575) 745-8905

 Received: 01/20/2016
 Reported: 01/25/2016
 Project Name: COTTON DRAW #153
 Project Number: 70079416201
 Project Location: EDDY CTY

 Sampling Date: 01/19/2016
 Sampling Type: Soil
 Sampling Condition: Cool & Intact
 Sample Received By: Jodi Henson

Sample ID: S-1 2' (H600131-01)

BTX 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	01/22/2016	ND	1.71	85.6	2.00	6.03	
Toluene*	<0.050	0.050	01/22/2016	ND	1.83	91.6	2.00	5.89	
Ethylbenzene*	<0.050	0.050	01/22/2016	ND	1.70	85.2	2.00	5.40	
Total Xylenes*	<0.150	0.150	01/22/2016	ND	5.26	87.7	6.00	5.81	
Total BTX	<0.300	0.300	01/22/2016	ND					

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

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	01/21/2016	ND	186	92.9	200	7.25	
DRO >C10-C28	<10.0	10.0	01/21/2016	ND	189	94.3	200	4.86	

Surrogate: 1-Chlorooctane 79.5 % 35-147

Surrogate: 1-Chlorooctadecane 83.1 % 28-171

Cardinal Laboratories

* = Accredited Analyte

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Celey D. Keene, Lab Director/Quality Manager

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

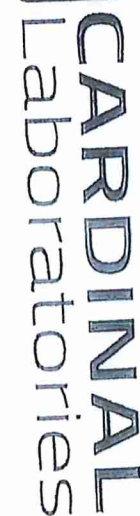
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*—Accredited Analyte

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Page 4 of 4

ANALYSIS REQUEST

† Cardinal cannot accept verbal changes. Please fax written changes to (312) 555-2272.

FINAL C-141