



October 9, 2015

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Amarillo, Texas 79107
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ARTESIA
408 West Texas Ave.
Artesia, New Mexico 88210
Phone 575.746.8768
Fax 575.746.8905

HOBBS
318 East Taylor Street
Hobbs, New Mexico 88240
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MIDLAND
2901 State Hwy 349
Midland, Texas 79706
Phone 432.522.2133
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7700 North Hudson Avenue
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Oklahoma City, Oklahoma 73116
Phone 405.486.7030
Fax 806.467.0622

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11 Commercial Place
Schertz, Texas 78154
Phone 210.265.8025
Fax 210.568.2191

ENVIRONMENTAL CONSULTING
ENGINEERING
DRILLING
CONSTRUCTION
SPILL MANAGEMENT
GENERAL CONTRACTING

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

Subject: **Soil Assessment and Remediation Work Plan**
Devon Energy Corporation
Cotton Draw No. 89
API # 30-015-31381 -- 2RP-3198

Dear Mr. Bratcher,

Devon Energy Corporation (Devon) has contracted Talon/LPE (Talon) to perform soil assessment and remediation services at the referenced Cotton Draw No. 89 location. The results of our soil assessment and proposed remediation activities consist of the following:

Incident Date

August 6, 2015

Background Information

The Cotton Draw No. 89 is located approximately forty-six (46) miles southeast of Carlsbad, New Mexico. The legal location for the site is Section 3, Township 25 South and Range 31 East in Eddy County, New Mexico. More Specifically the latitude and longitude for the release are 32.15263 North and - 103.7634 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 Berino complex with 0 to 3 percent slopes. Per the New Mexico Bureau of Geology and Mineral Resources, the local surface and shallow geology is Holocene to Pleistocene in age and is comprised of eolian sands and piedmont deposits which include silty soils underlain with hard caliche. According to the New Mexico Office of the State Engineer there are 8 wells in the vicinity and they all appear to be dry wells. See [Appendix II](#) for the referenced groundwater data.

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

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

Incident Description

On August 6, 2015 Black River Trucking was loading out produced water when a high pressure 4-inch connecting hose blew apart causing a release of 35 barrels of fluids onto the location. The well was immediately shut-in and the truck behind him on location recovered 25 barrels of fluid. The area affected was in front of the load-out. See the site plan in [Appendix I](#).

Actions Taken

On July 21, 2015 Talon mobilized personnel to begin the site assessment and soil sampling activities for the construction of a work plan. Grab soil samples were collected utilizing a backhoe to a depth from 4-feet below ground surface. Laboratory results from the soil sampling event are summarized in the table below.

All soil samples were collected by Talon personnel wearing clean nitrile gloves. The soil samples were placed in laboratory provided sample containers and transported to Cardinal Laboratories in Hobbs, New Mexico for analysis. The samples were tested for chlorides and analyzed per Method SM4500Cl-B.

Laboratory Results

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

September 18, 2015

Sample ID	Depth (feet)	BTEX (mg/kg)	Chlorides (mg/kg)	TPH (mg/kg) GRO	TPH (mg/kg) DRO
S-1	1'	--	2800	--	--
	2'	--	160	--	--
S-2	3'	--	144	--	--
	4'	--	64	--	--

--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.


Proposed Remedial Actions


- The impact area will be excavated to a depth of 1-foot deep. All contaminated soil will be transported to Lea Land, LLC disposal facility.
- Once the backfill activities are complete the work area will be compacted and re-contoured to match the surrounding location.
- A final closure report documenting all remedial actions and analytical results will be provided to the NMOCD Artesia Office along with a Final C-141 Form.

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,

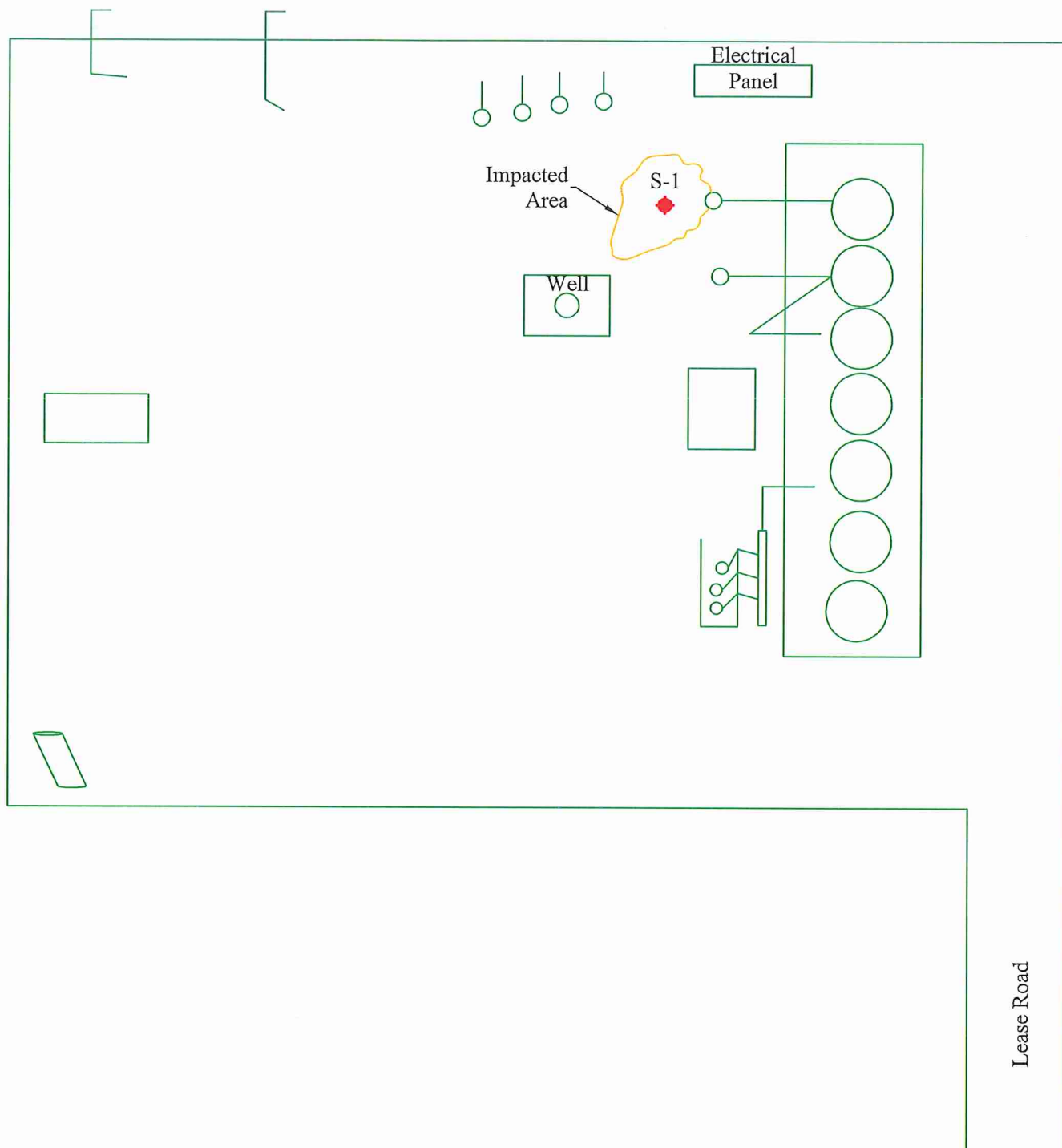
TALON/LPE


Kimberly M. Wilson
Project Manager


David J. Adkins
District Manager

APPENDIX I

SITE MAP



0 25 50
Scale in Feet

Legend
◆ - Sample Location



Date: 10/07/2015

Scale: NTS

Drawn By: TJS

Cotton Draw #89
Devon Energy Corporation
Eddy County, New Mexico
Figure 1 - Site Plan

APPENDIX II
GROUNDWATER DATA
INITIAL C-141



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	Water Column
C 03830 POD1	CUB	ED		4	2	4	02	25S	31E	618632	3558432	1773	450	
C 02571		ED		4	1	2	02	25S	31E	618292	3559294*	1851	860	
C 02574		ED		1	1	2	02	25S	31E	618092	3559494*	1853		
C 02570		ED		4	2	4	02	25S	31E	618704	3558489*	1855	895	
C 02573		ED		1	4	2	02	25S	31E	618499	3559091*	1896		
C 02569		ED		4	4	2	02	25S	31E	618699	3558891*	1978	1016	
C 02572		ED		4	2	2	02	25S	31E	618695	3559294*	2171	852	
C 02568		ED		4	3	1	01	25S	31E	619103	3558892*	2353	1025	

Average Depth to Water: --

Minimum Depth: --

Maximum Depth: --

Record Count: 8

UTMNAD83 Radius Search (in meters):

Easting (X): 616894

Northing (Y): 3558080

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.

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

WAB1522442205 **6137**

Name of Company Devon Energy Production	Contact Garry Michael	<input checked="" type="checkbox"/> Initial Report	<input type="checkbox"/> Final Report
Address 6488 Seven Rivers Hwy Artesia, NM 88220	Telephone No. 575-513-4895		
Facility Name Cotton Draw Unit 89	Facility Type SWD		
Surface Owner Federal	Mineral Owner Federal	API No. 30-015-31381	

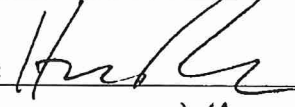
LOCATION OF RELEASE

Unit Letter	Section	Township	Range	Feet from the	North/South Line	Feet from the	East/West Line	County
O	3	25S	31E	250'	FSL	1980'	FEL	Eddy

Latitude: 32.1528893

Longitude: -103.7636414

NATURE OF RELEASE

Type of Release Spill	Volume of Release 35bbl	Volume Recovered 25bbl
Source of Release 4" high pressure hose	Date and Hour of Occurrence August 6, 2015 5:04 PM	Date and Hour of Discovery August 6, 2015 5:04 PM
Was Immediate Notice Given? <input checked="" type="checkbox"/> Yes <input type="checkbox"/> No <input type="checkbox"/> Not Required	If YES, To Whom? Jim Amos, BLM Mike Bratcher, OCD	
By Whom? Hubert Perry, Production Foreman	Date and Hour Jim Amos, August 6, 2015 7:35 PM Mike Bratcher, August 6, 2015 7:37 PM	
Was a Watercourse Reached? <input type="checkbox"/> Yes <input checked="" type="checkbox"/> No	If YES, Volume Impacting the Watercourse N/A	
If a Watercourse was Impacted, Describe Fully.* N/A		
Describe Cause of Problem and Remedial Action Taken.* On August 6, 2015 5:04 at the Cotton Draw Unit 89 Truck Driver for Black River Trucking was loading produced water when the connecting high pressure 4" hose blew apart releasing 35bbls onto location. The well was immediately shut in and the next truck in line was Standard Trucking so they started recovering the released produced water immediately.		
Describe Area Affected and Cleanup Action Taken.* The affected area was approximately 80' x 120' x 50' all contained on location with 25bbls produced water recovered. The broken hose will be repaired. And environmental company will be contacted to determine the extent of clean up.		
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.		
Signature: Sheila Fisher	OIL CONSERVATION DIVISION	
Printed Name: Sheila Fisher	Approved by Environmental Specialist: 	
Title: Field Admin Support	Approval Date: 8/11/15	Expiration Date: N/A
E-mail Address: Sheila.Fisher@dvn.com	Conditions of Approval: Remediation per O.C.D. Rules & Guidelines Attached <input type="checkbox"/>	
Date: 8/11/15 Phone: 575.748.1829	SUBMIT REMEDIATION PROPOSAL NO	

* Attach Additional Sheets If Necessary

LATER THAN: 9/11/15

2RP-3198

APPENDIX III
LABORATORY RESULTS



PHONE (575) 393-2326 • 101 E. MARLAND • HOBBS, NM 88240

September 18, 2015

KIMBERLY WILSON

TALON LPE

408 W. TEXAS AVE.

ARTESIA, NM 88210

RE: COTTON DRAW NO. 89

Enclosed are the results of analyses for samples received by the laboratory on 09/17/15 15:20.

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_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:

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

Received:	09/17/2015	Sampling Date:	09/16/2015
Reported:	09/18/2015	Sampling Type:	Soil
Project Name:	COTTON DRAW NO. 89	Sampling Condition:	** (See Notes)
Project Number:	700794.165.01	Sample Received By:	Jodi Henson
Project Location:	EDDY CTY.		

Sample ID: S-1 1' (H502452-01)

Chloride, SM4500Cl-B		mg/kg		Analyzed By: HM						
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier	
Chloride	2800	16.0	09/18/2015	ND	432	108	400	3.77		

Sample ID: S-1 2' (H502452-02)

Chloride, SM4500Cl-B		mg/kg		Analyzed By: HM					
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
Chloride	160	16.0	09/18/2015	ND	432	108	400	3.77	

Sample ID: S-1 3' (H502452-03)

Chloride, SM4500Cl-B		mg/kg		Analyzed By: HM					
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
Chloride	144	16.0	09/18/2015	ND	432	108	400	3.77	

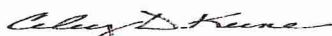
Sample ID: S-1 4' (H502452-04)

Chloride, SM4500Cl-B		mg/kg		Analyzed By: HM					
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
Chloride	64.0	16.0	09/18/2015	ND	432	108	400	3.77	

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.



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

Cardinal Laboratories

*=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

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